

CHINA'S INDUSTRIAL, INVESTMENT AND EXCHANGE RATE POLICIES: IMPACT ON THE UNITED STATES

HEARING

BEFORE THE

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

SEPTEMBER 25, 2003

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The Commission was created in October 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 sec. 1238, Public Law 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. sec. 7002 (2001)), as amended, and the "Consolidated Appropriations Resolution of 2003," Public Law 108-7, dated February 20, 2003. Public Law 108-7 changed the Commission's title to U.S.-China Economic and Security Review Commission.

The Commission's full charter is available via the World Wide Web: <http://www.uscc.gov>.

The Commission's Statutory Mandate begins on page 243.

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

OCTOBER 14, 2003

The Honorable TED STEVENS,
President Pro Tempore of the U.S. Senate, Washington, D.C. 20510
The Honorable J. DENNIS HASTERT,
Speaker of the House, Washington, D.C. 20515

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the record of our hearing on September 25, 2003, on "China's Industrial, Investment and Exchange Rate Policies: Impact on the United States." These issues are at the forefront of U.S.-China economic relations, particularly in light of the impact that China's exchange rate and industrial policies are having on global investment trends and on U.S. manufacturing and trade deficits. We are aware that both the Executive Branch and Congress are examining initiatives to address U.S. concerns in this area and therefore we outline here several of the Commission's key findings and recommendations arising from our hearing and research activities to help inform Congressional deliberations.

As you know, the Commission is mandated by law (P.L. 108-7, Division P) to examine, among other areas, China's economic policies and the United States trade and investment relationship with China, including assessing the qualitative and quantitative nature of the shift of United States production activities to China. This latter charge includes examining the relocation of high-technology, manufacturing and R&D facilities to China and the effect of these transfers on United States economic security, employment and the standard of living of the American people.

At our September 25 hearing, the Commission heard testimony from a number of Members of both the House and Senate, including the principal sponsors of various Congressional initiatives designed to address China's exchange rate practices. Representing bipartisan Congressional concerns, these Senators and House Members have introduced differing bills aimed at providing appropriate incentives to the Chinese government to end its apparent mercantilist trade policies, most particularly its artificially undervalued currency, as well as other unfair trade practices such as export subsidies, dumping, and other WTO-inconsistent practices. The Members testified that such practices by China amounted to a forced redistribution of trading and investment balances that violate the principles of free and fair trade embodied in China's WTO accession obligations as well as in its bilateral trade arrangements with the United States and other international agreements, such as the IMF charter. One result of China's unfair trade practices has been its rapid accumulation of foreign exchange reserves, now totaling some \$355 billion, the second highest in the world after Japan.

Exchange rate policies. Based on our examination of this issue, it appears clear that China continues to follow a policy of one-way market interventions by the government to maintain its currency at a level that economists estimate is between 15-40 percent undervalued. In this regard, China is purchasing U.S. dollars at an estimated rate of \$120 billion per year to prevent appreciation of its currency against the dollar. In assessing causes of the worsening U.S. trade deficit and loss of U.S. manufacturing jobs, some hearing witnesses argued that the lack of net new savings in the U.S. economy, the global mobility of factors of production and/or low labor costs in China were the principal factors. In any event, based on the evidence presented, we believe the inappropriate exchange rate between the Chinese yuan and the dollar is negatively impacting the competitiveness of U.S. manufactured goods and is contributing to a migration of world manufacturing capacity to China and an erosion of the U.S. manufacturing base.

Section 3004 of the Omnibus Trade and Competitiveness Act of 1988 (22 U.S.C. Sec. 5304) requires annual reports from the Department of Treasury on foreign countries' exchange rate policies and requires the Secretary to enter into negotiations on an expedited basis with countries found to be manipulating their currencies to gain an unfair competitive trade advantage. Past reports from the Treasury on China have sidestepped this conclusion, which appears now to be inescapable. The Commission believes it is clear that China, in violation of both its IMF and WTO obligations, is in fact manipulating its currency for trade advantage and therefore finds it imperative that the Treasury immediately and forcefully enter into negotiations with the Chinese government to resolve this matter. China's continued maintenance of an undervalued exchange rate with the U.S. dollar will continue to promote

major distortions in the flow of trade and investment, to the detriment of American companies and workers, and therefore requires decisive action by Washington.

Recommendation: The Treasury Department should make a determination in its foreign country exchange rate report to Congress that China is engaged in manipulating the rate of exchange between its currency and the U.S. dollar to gain an unfair competitive trade advantage and immediately enter into formal negotiations with the Chinese government over this matter. Should these efforts prove ineffective, the Commission urges the Congressional leadership to use its legislative powers to force action by the U.S. and Chinese governments to address this unfair and mercantilist trade practice. For the near future, continued vigorous development of such legislative initiatives as were outlined by Members of Congress during our hearing, linking China's performance on its exchange rate policies to its continued full access to the U.S. market, appears essential to ensure the appropriate level of effort by both governments to this matter.

China's Investment and Industrial Policies. China has attracted a total of over \$400 billion of foreign direct investment (FDI), most of it in the last six years. This compares with \$1.3 trillion for the U.S., \$497 billion for the U.K., \$482 billion for Belgium-Luxemburg, and \$480 billion for Germany. As FDI flows to China are now expanding by over \$50 billion per year, China will soon have accumulated the second largest stock of FDI in the world.

Our hearing indicated that China's undervalued currency is just one of several factors behind that country's success in attracting massive inflows of FDI, particularly into its manufacturing sector. Our hearing examined the extent to which China's industrial policies have played a role. In this regard, we learned that:

- China has pursued industrial policies that have catalyzed its growth as a manufacturing powerhouse, particularly in increasingly higher-technology production. The Chinese government has designated a number of "pillar industries" and pursued a strategy of "picking winners" among China's emerging high-tech or industrial enterprises.
- Manufacturers in China are supported through a wide range of national industrial policies, which include: tariffs; limitations on foreign firms' access to domestic marketing channels; requirements for technology transfer by foreign investors; government selection of partners for major international joint ventures; preferential loans from state banks; privileged access to listings on national and international stock markets; tax relief; privileged access to land; and direct support for R&D from the government budget.

Recommendation: The United States Trade Representative and the Department of Commerce should identify whether any of China's industrial policies are inconsistent with its WTO obligations and engage with the Chinese government to mitigate those that are significantly impacting U.S. market access. Appropriate Congressional Committees should be fully briefed on the actions the agencies are taking to resolve these issues.

Recommendation: The Commission believes it is essential that U.S. policymakers have a clearer, more comprehensive, and timely picture of global investment and R&D flows to China, particularly in the manufacturing sector. The Commission's 2002 Report to Congress urged Congress to consider establishing an enhanced, mandated corporate reporting system to capture better this information by requiring firms to report "their initial investments in China; any technology transfer, offset, or R&D cooperation agreed to as part of the investment; the shift of production capacity and job relocations resulting from the investment, both from within the United States to overseas and from one overseas location to another; and contracting relationships with Chinese firms." We believe the need for such a system has only increased in urgency since our 2002 Report and again urge Congress to consider taking such action.

Impact on U.S. Economy. In his September 15, 2003 prepared remarks at the Detroit Economic Club, Commerce Secretary Don Evans reports that "the President believes that our economic and national security require a stable, robust manufacturing sector that produces sophisticated and strategically significant goods here, in the United States." Manufacturing employs 14 percent of the American workforce, but has accounted for nearly 90 percent of all the job losses since total U.S. employment peaked in March 2001. Over 2.7 million American factory jobs have been lost over the past three years, roughly one in every six manufacturing jobs.

At our September 25th hearing the Commission heard testimony that supported a conclusion that China's undervalued currency and government investment strategies are having a deleterious effect on the competitiveness of U.S. manufactured

goods and contributing to a migration of world manufacturing capacity to China, with a concurrent erosion of the U.S. manufacturing base.

Recommendation: The Commission believes that the President's pending Manufacturing Initiative should include provisions that strengthen the competitiveness of U.S.-based manufacturers in light of the growing shift of production to China, especially high-tech and R&D. The Initiative should address de facto Chinese government subsidies, particularly those not covered under the WTO, such as tax incentives, preferential access to credit, capital, and materials, and investment conditions requiring technology transfers.

It is the hope of the Commission that the results of this hearing will contribute to the fashioning of legislation by the Congress which will help to illuminate the economic impact that China is having on U.S. producers, better identify unfair Chinese trade practices, and steer Chinese economic practice into more sustainable and fairer channels.

Yours truly,



Roger W. Robinson, Jr.
Chairman



C. Richard D'Amato
Vice Chairman

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CHINA'S INDUSTRIAL, INVESTMENT AND EXCHANGE RATE POLICIES: IMPACT ON THE UNITED STATES

THURSDAY, SEPTEMBER 25, 2003

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION,
Washington, D.C.

The Commission met in Room 124, Dirksen Senate Office Building, Washington, D.C. at 8:54 a.m., Commissioners Patrick A. Mulloy and June Teufel Dreyer (Hearing Co-Chairs), presiding.

OPENING REMARKS OF CHAIRMAN ROGER W. ROBINSON, JR.

Chairman ROBINSON. We would like to begin this morning at this time. This is the third hearing of our second year reporting cycle at the Commission. Today's subject, as you know, is China's Industrial Investment and Exchange Rate Policies: Impact on the United States.

We are delighted that Representative English is with us today, and we'd like to hear from him and other Members first. Accordingly, I'd like to turn it over to our Vice Chairman, Dick D'Amato and then to our Co-Chairs.

The Co-Chairs of our hearing today will be Commissioners Patrick Mulloy and Dr. June Teufel Dreyer. Commissioner Mulloy will preside over the morning session. Dr. Dreyer will be taking the gavel this afternoon.

I'm now pleased to turn over our deliberations to Commission Vice Chairman Dick D'Amato for a brief statement, and he in turn will move it to the Co-Chairs. Thank you.

[The statement follows:]

Prepared Statement of Chairman Roger W. Robinson, Jr.

Today the Commission holds the third in its series of hearings during the 108th Congress.

Our first two hearings, in June and July, focused on the important topics of media control in China—specifically how it played out during the SARS outbreak—and on China's behavior with respect to the critical issue of the proliferation of weapons of mass destruction and ballistic missiles, with a focus on China's pivotal role in the ongoing nuclear crisis with North Korea.

Today we will be examining issues on the economic security side of our portfolio, namely China's exchange rate policies and industrial and investment strategies and their impact on the U.S. economy, particularly our manufacturing sector. These issues are currently receiving substantial media attention, but have been in our mandate and on our research agenda from the first year of the Commission's establishment.

Indeed, in quoting one of the findings from our first annual report to the Congress in July 2002, "Continuing trade surpluses, vast investment inflows, and very high foreign exchange reserves are evidence that China is manipulating its currency by

holding down its value thereby gaining an unfair trade advantage that increases the U.S. trade deficit.”

In America, people in varying capacities—business, labor, academia, the media and government—have come to better understand the almost tectonic economic forces now shaping the U.S.-China economic relationship. With increasing sophistication, China has become a manufacturing powerhouse. Its central and local government policies have supported development of key industrial sectors. In the 1990’s, China became embedded in what has become a global supply chain for many traded products and saw its share of global trade in manufactured goods triple.

In the meantime, there is increasing unease in the U.S. over the declining share of manufacturing output and employment in our overall economy. And this is happening while China’s currency—the yuan—remains pegged to the U.S. dollar at a rate set by government fiat nine years ago. What are the causes and effects here? What are the key linkages? Are there steps the U.S. should be pursuing to remedy these challenging and, in some cases, debilitating circumstances?

Today we will be exploring these and other important questions with a distinguished group of panelists. We are particularly honored that we will be joined by several Members of the House and Senate, from both sides of the aisle, who will lead off the hearing by giving us their perspectives on these crucial matters. The Congress is profoundly concerned about the issues we are discussing today, and a number of Members have introduced thoughtful legislation to address these concerns. We look forward to working with the Congress as it moves forward in its consideration of appropriate remedies.

The co-chairs of our hearing today will be Commissioners Patrick Mulloy and Dr. June Teufel Dreyer. Commissioner Mulloy will preside over the morning session and Dr. Dreyer will take the gavel after lunch. I am now pleased to turn the hearing over to Commissioner Mulloy and our distinguished Congressional guests.

OPENING REMARKS OF VICE CHAIRMAN C. RICHARD D’AMATO

Vice Chairman D’AMATO. Thank you very much, Mr. Chairman, and I thank Commissioners Mulloy and Dreyer for organizing this important hearing.

I want to welcome Congressman English for coming before us this morning on this very important matter. I want to commend you for the legislative actions you are taking with others to address modern Chinese mercantilism, now pouring tens of billions of dollars of U.S. investment technology and manufacturing resource unfairly in many ways into China. This distorted transfer of U.S. economic treasury to Beijing is now so big that Congress has told this Commission to evaluate the implications for U.S. national security and identify what tools we have to put the brakes on this transfer. We look forward to your thoughts on what tools are now necessary to address this problem, as we explore the options that are available to us.

[The statement follows:]

Prepared Statement of Vice Chairman C. Richard D’Amato

Thank you, Mr. Chairman and I thank Commissioners Mulloy and Dreyer for organizing this important hearing today. I welcome Congressman English, Senators Schumer, Dorgan, and Graham, Congressmen Manzullo, Stenholm and Levin, other Members, and commend you for the legislative actions you are taking to address modern Chinese mercantilism, now pouring ten’s of billions of U.S. investment, technology and manufacturing resources unfairly into China. This distorted transfer of U.S. economic treasure to Beijing is now so big that Congress has told this Commission to evaluate the implications for U.S. national security, and identify what tools we have to put the brakes on it. We look forward to your thoughts on actions that are now necessary, and explore the options that are available to us.

The creation of this Commission in the winter of 2000, during the debate over giving China most favored trade status on a permanent basis was predicated on several important assertions. First, the Clinton Administration stated that granting such status and admission to the WTO was predicated on the assumption that China would play by the rules of the international trade game, certainly not promote permanent unfair subsidies or mercantilist practices. Second, the National Se-

curity Advisor, Sandy Berger, stated repeatedly that it was in America's "vital national security interests" for China to be granted these important trade concessions. A third assertion was that increased economic growth and higher standards of living in China would lead to democratic reforms, and the eventual extinction of widespread tyranny practiced at home by the Communist rulers.

So far, these assertions do not appear to be playing themselves out. China still has a poor record of honoring its promises and agreements, and this hearing focuses on one of the most important and glaring: artificially pegged exchange rates calculated to give China across the board highly unfair advantages vis-à-vis its so-called trading "partners." Second, this Commission has been created to examine the questions of the national security implications of the policies practiced by both the Clinton and Bush Administrations vis-à-vis China on trade. The large scale and increasing sophistication of U.S. resources being transferred, with increasingly important high technology components, is adversely effecting our basic economic foundations from a strategic perspective. Third, democratic reforms have been squelched in China, after some brief flicker of hope in connection with the SARS health crisis. Openness is still treated as an enemy of the governing regime. The regime maintains tyrannical practices in a widespread gulag against its own people.

Given these realities, the question today is what actions Congress should promote to push these trends in healthier directions for our own national interest.

**OPENING REMARKS OF COMMISSIONER JUNE TEUFEL DREYER
HEARING CO-CHAIR**

Co-Chairman DREYER. Our focus this morning is on the yuan's value, China's exchange rate policies, and relevant policy options for the U.S. Government.

This afternoon we will shift focus, first to look at the dynamics of China's strategies for attracting foreign investment and channeling both domestic and foreign resources into key industries and technologies. Many observers of China believe this topic, and not just the exchange rate question, is key to assessing the overall impact of China's economic policies and development on the U.S. economy.

I look forward to hearing the testimony of our panelists. Thank you.

[The statement follows:]

**Prepared Statement of Commissioner June Teufel Dreyer
Hearing Co-Chair**

Our focus this morning is on the yuan's value, China's exchange rate policies, and relevant policy options for the U.S. Government.

This afternoon we will shift focus, first to look at the dynamics of China's strategies for attracting foreign investment and channeling both domestic and foreign resources into key industries and technologies. Many observers of China believe this topic, and not just the exchange rate question, is key to assessing the overall impact of China's economic policies and development on the U.S. economy.

This afternoon we will be considering the factors behind the remarkable growth of manufacturing capacity in China, now labeled the "workshop of the world" for the 21st century, and what the implications are for the U.S. economy. One obvious driving force is the global search for low-cost production of quality goods, which has led to increased domestic and foreign investment in expanding such production capacity in China. Low-cost labor is often the determining factor here. But other factors in this growth in capacity may stem from the Chinese government's own industrial policies—for example its designation of so-called "pillar industries"—as well as policy and financial support for key manufacturing, infrastructure, S&T and R&D projects. Other factors may be more related to globalization in general than China in particular, such as the way transnational corporations operate globally integrated manufacturing and distribution networks with China as an important node embedded in this web of production. Another key factor at work here is the speed with which Chinese manufacturing and R&D are moving up the value chain to encompass more technologically advanced products and research.

We will first hear from three expert witnesses who have studied the development of China's export-oriented manufacturing sector and its connection to the global supply chain. Professor Peter Nolan of Cambridge University has written extensively

about China's connection to what he calls the Global Business Revolution. Professor Ed Steinfeld of MIT has researched China's industrial policy and done case studies of large Chinese firms' performance in the domestic and global marketplace. Kate Walsh, Senior Associate of the Stimson Center, has done field research and written a recent monograph on the growth of foreign-funded research and development activities in China. Each panelist comes at the question of China's industrial and investment priorities and strategies from a different angle, and I expect we will obtain a good three-dimensional picture from their testimony and follow-on discussion.

In the second and final panel of the afternoon, we will hear testimony from four witnesses with differing perspectives on the question of how the U.S. economy is being affected by China's exchange rate, industrial and investment policies and trends. Our panelists will be: Frank Vargo, of the National Association of Manufacturers; Thea Lee, of the AFL-CIO; Paul Craig Roberts, Chairman of the Institute for Political Economy and a former Assistant Secretary of the Treasury; and Willard Workman, of the U.S. Chamber of Commerce. I expect their statements and follow-up dialogue with Commissioners will reveal a broad range of views and different emphases on policy prescriptions.

**OPENING REMARKS OF COMMISSIONER PATRICK A. MULLOY
HEARING CO-CHAIR**

Co-Chairman MULLOY. Congressman English, thank you very much. As a fellow Pennsylvanian, I am delighted that you are here with us. Please go ahead.

[The statement follows:]

**Prepared Statement of Commissioner Patrick A. Mulloy
Hearing Co-Chair**

I am very pleased to have been asked by Chairman Robinson and Vice Chairman D'Amato to co-chair, along with Commissioner June Teufel Dreyer, a noted China scholar, this hearing on China's exchange rate, industrial, and investment strategies and their impact on the U.S. economy.

This bipartisan commission was created by the Congress in October 2000. It is composed of 12 Commissioners, three of whom were appointed by each of the Congressional leaders in both the House and Senate. It issued its first report to the Congress in July 2002 by a vote of 11-1, which signifies our bipartisan consensus on the key issues in U.S.-China relations within the Commission's mandate.

One of the tasks we have been given by the Congress is to "analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high technology, manufacturing, and R&D facilities." We were also asked to examine the effect of such transfers on United States economic security, employment, and the standard of living of the American people. In addition, Congress asked us to assess "the need for corporate reporting on United States investments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China."

In keeping with this mandate, today's hearing will focus on the increasingly complex and dynamic factors in the U.S.-China trade and investment relationship. These issues rise amidst concerns in our country over the large loss of manufacturing jobs in our economy in recent years, the continued shrinking of manufacturing output as a percentage of U.S. total production, and the ongoing shift of investment capital and manufacturing employment abroad, notably to China and other Asian countries.

We look at these issues in the context of Commerce Secretary Evans' statement of September 16 that "the President believes that our economic and national security require a stable, robust manufacturing sector that produces sophisticated goods here in the United States." The Commerce Department is leading the Administration's effort to craft a manufacturing strategy to help meet the current challenge posed by the ongoing erosion of our manufacturing sector, and we will be following these developments closely.

I would like to note that we extended invitations to both the Treasury and Commerce Departments to participate today and share their perspectives with us on the Administration's exchange rate discussions with China and its manufacturing sector initiatives. Unfortunately, the key officials on these matters were unable to attend, but both Departments will be submitting statements for the record. The Commerce Department has committed to testify before the Commission on its manufacturing strategy later this year and we hope to hear directly from the Treasury on its progress with China on exchange rates at a later date as well.

At today's hearing we are fortunate to be able to hear from a bipartisan group of distinguished Members from both Houses of Congress to give us Congressional perspectives on the issues before us. Among those we will hear from are Senators Dorgan of North Dakota, Schumer of New York, and Graham of South Carolina and Congressmen Manzullo of Illinois, Chairman of the House Small Business Committee, Levin of Michigan and Stenholm of Texas. We very much appreciate their taking time to be with us today and look forward to their testimony.

On our second panel this morning we will hear from some of the top experts in the country on China's exchange rate policies. We will hear differing and sometimes conflicting views on whether China's effort to peg its currency, the yuan, at about 8.3 to the dollar, constitutes an unfair trade practice, and whether such pegging has a positive or detrimental effect on the U.S. economy. These experts are:

C. Fred Bergsten, Director of the International Institute for Economics;
David Hale, Chief Economist and Founder, Hale Advisors, LLC;
Ernest Preeg, Adjunct Fellow, the Hudson Institute; and
Stephen Roach, Chief Economist, Morgan Stanley

My co-chair, Dr. Dreyer, will preside over and introduce the two afternoon panels, but let me provide a preview.

In the first panel after lunch we will hear from three noted experts on China's efforts to attract foreign investment to help build its industrial and research and development base: Prof. Peter Nolan of Cambridge University; Prof. Ed Steinfeld of MIT; and Kate Walsh, Senior Associate at the Stimson Center in Washington.

The last panel of the day will explore the concrete impact of our economic engagement with China on the U.S. economy. The four panelists will be: Frank Vargo, Vice President for International Economic Affairs at the National Association of Manufacturers; Thea Lee, Chief International Economist of the AFL-CIO; the Honorable Paul Craig Roberts, Chairman of the Institute for Political Economy and a former Assistant Secretary of the Treasury; and Willard Workman, Senior Vice President of the U.S. Chamber of Commerce.

We hope the knowledgeable views brought together in this hearing room today will contribute to the research and debate now taking place in America as we try to devise appropriate strategies to deal with the economic challenges presented by China's fast-growing economy.

CONGRESSIONAL PERSPECTIVES

STATEMENT OF PHIL ENGLISH A U.S. CONGRESSMAN FROM THE STATE OF PENNSYLVANIA

Congressman ENGLISH. I want to thank the Members of the Commission and the Co-Chairs. It is a real privilege to be able to appear today and offer my views on U.S.-China trade. This is perhaps the single largest economic issue in my district right now. It is an issue where I believe Americans, and particularly people who work for a living, demand a quick resolution and serious action from Washington.

Your hearing and the focus of this Commission are particularly important in that process and in that debate. The topics this hearing will assess are of critical importance to me and of my district in Northwestern Pennsylvania, which has a large concentration of manufacturing jobs.

When President Clinton approved China's entry into the WTO in 1999, many believed a new era of opportunity for U.S. businesses and workers had opened. Those in Congress like myself, who were a little skeptical, viewed this opportunity as potentially one fraught with risks. Yet we voted to grant permanent normal trade relations to China as our piece of moving that process forward, but only after insisting that special safeguards relating to Chinese imports be included. I want to particularly thank my colleague, Mr. Levin, for leading that fight and making sure those provisions were included.

Looking back to China's accession to the WTO, I want to deliver to you a very clear message. Few of the benefits that had been in-

tended for America have been realized because China has not abided by the terms of their international commitments. While the current Administration has developed some steps to develop a comprehensive strategy to ensure China plays by the rules, these steps must be broadened, accelerated and strengthened. This is where I believe Congress and the Administration must be prepared to work in unison. Congress has already provided many of the tools the Administration needs to apply leverage to encourage Chinese compliance with their international obligations. It is up to Congress to maintain a watchful eye so that those tools are fully and properly used, and every time they are needed in order to provide U.S. manufacturers and agricultural producers a level playing field.

Congress must strengthen the Administration's hand, but if the Administration does not act, we also need to move forward to force their hand.

The U.S. trade deficit, frankly, Commissioners, has doubled since 1998 vis-à-vis China and it has exceeded \$100 billion for the second year in a row. This is a serious concern to Congress because it reflects a large number of distortions that China employs to place U.S. employers and workers at a growing disadvantage.

I hear a lot of rhetoric in Washington about free trade, but I am here to say to you that Chinese State-sponsored mercantilism is not free trade, and we need to be prepared to act to make sure that in the international trading system China, as it enters, it enters it with the understanding that it must follow the rules. While I understand that participation in an open and fair global economic system is essential to U.S. economic growth and job opportunities, when China breaks the rules the U.S. suffers the consequences. There are many reasons I suspect domestically why China feels that they have to do the things that they do, but whatever problems China has in their economy they should not be permitted to export to our economy.

I would like to mention very briefly, Mr. Co-Chairman, a couple of the specifics that concern us about China. Under the heading of currency manipulation, this is widely seen as providing an unfair advantage to Chinese producers. Even though China joined the WTO and nominally embraced a rules-based regime, they still see it in their interest to pursue a policy of state-sponsored mercantilism that is most importantly grounded in a manipulation of their exchange rate.

To correct this destructive WTO illegal trade distortion I have introduced H.R. 3058, the China Act. While there have been three bills and one resolution introduced in Congress on this topic, this legislation enjoys the most robust co-sponsorship, currently it is co-sponsored by over 60 Members of the House of Representatives. The premise of the legislation is straightforward. It requires the Secretary of the Treasury to determine if China is manipulating its currency to gain an advantage in trade. If the Secretary finds manipulation is occurring, then he is directed to impose a tariff equal to the degree of distortion being imposed.

Chinese currency manipulation beggars Chinese consumers. It also beggars our producers. Ultimately it is something that economists will say is unsustainable, but in the short term, given the large foreign reserves that China is holding, they appear to be able

to get away with it, and at our expense. In other words, our bill would create a countervailing duty mechanism to deal with currency manipulation, an issue that is not dealt with adequately within the WTO dispute resolution process. This is a measure that actually levels the playing field. It strips China of their ability to give themselves an arbitrary advantage. It is a flexible tariff and it can be adjusted to meet the actual extent of the distortions from the artificial undervaluation of the yuan.

In addition we need to address the non-tariff barriers that China has been imposing on our products. China's non-tariff barriers contribute to the enormous trade imbalance by strangling U.S. exports to China. Chinese non-tariff barriers affect every sector of the U.S. economy. A complete lack of transparency exists as China transitions to a rules-based economy. China provides only fleeting windows for public comment if any at all. No uniformity exists between localities for licensing requirements or import permits.

Furthermore—and this is very important—China's value-added tax policies are designed to favor domestic products at the expense of imports, and China's border trade policy places U.S. producers at a disadvantage by providing a tax break to neighboring countries simply by virtue of being neighbors. This is a clear violation of the WTO standards.

Perhaps the most egregious non-tariff barrier is the complete disregard for intellectual property rights. U.S. licensed trademarks are routinely used illegally on Chinese manufactured goods, costing U.S. producers billions of dollars annually.

Also, I would note there is widespread evidence that subsidies are still a major part of China's means of doing business. State-owned enterprises engaged in the production of sensitive or strategic goods are particularly large beneficiaries of government subsidy. All of these issues have the effect of putting our products at a competitive disadvantage. I believe that it is critical that Congress and the Administration act now to address these problems.

I have further testimony, but I would like to submit it for the record. If I could field any questions, Mr. Co-Chairman?

Co-Chairman MULLOY. Congressman English, Senator Lindsey Graham is also here. If Senator Graham would want to come up and perhaps join you, and then if he wants to make his statement, and then if you both have time, we would open it up to a few questions.

**STATEMENT OF LINDSEY GRAHAM
A U.S. SENATOR FROM THE STATE OF SOUTH CAROLINA**

Senator GRAHAM. Thank you, Mr. Chairman.

I guess my comment would be amen to what Phil said. There is no use restating all the facts and figures given to you. You know those better than I. I just come here from South Carolina, and one thing I have learned in the last couple of years is that everywhere I go the manufacturing community at home keeps bringing up one topic, Chinese competition.

We have lost 2.7 million jobs in the last three years. 2.6 million of them have been manufacturing. Something is going on out there. I do not believe that our workforce is lazy. I do not believe that we

are intellectually inferior, and I certainly do not believe that about the Chinese people. We have a clash of theories here.

He has described to you the trade balance has doubled. The Chinese exports to the United States have doubled in the last five years. In '97 to 2002 they have gone from 62 billion to 125 billion. We have been able to increase our exports to China from 13 to 19. Something is going on.

Let me tell you what is going on at home. We have lost 250 textile plants. I know a lot of people say, well, that is high-intensive labor type production and you are just not going to make it in the 21st century. Well, if we do not make it, so be it. I just do not want to not make it because other people cheat. China cheats. We have a clash of theories here. The theory of free trade is a great theory. It only works if the other people will buy into that theory. We have a clash of theories of how you run your government. It is hard to have free trade if you do not believe in free speech. Somebody in our government has got to come to grips with the idea that we are dealing with a country that cheats. And it is a communist dictatorship, and what do you expect?

Other problems exist. The European Union I think unfairly restricts market access in the agricultural arena because of genetic manipulation arguments. In Mexico they do the same. Other countries play around with the rules, and maybe we do at time, but the difference between the European Union, Mexico and other parts of the world, and China, is that China is set up in a totally different manner. It is hard to get a government to buy into being a member of the world of nations when that government is so out of sync with everything else that goes around free trade. Democracies will be able to work these problems out. The only way you are going to get China's attention in my opinion is to be hard and to ask for one thing, fairness.

I have introduced a resolution with Senator Schumer, and if you got any doubt about the political spectrum this covers, Lindsey Graham and Chuck Schumer on the same bill.

That does not happen a lot in the Senate. Chuck and I see things very similar. South Carolina and New York are a world apart in many ways, but we buy into the basic value system that holds this country together, and we have come together to understand that our companies in this country will not be able to long survive if we do not deal with China in an aggressive fashion, and that is the only thing that country will understand.

Steel. There are two steel plants in my State that are about to go under. The Chinese steel market has doubled to 20 percent of the world market share in the last 10 years, and the way they have been able to do that is that the government subsidizes the steel industry. It is pretty hard to convince somebody in South Carolina they are going to be okay if they are competing with a Chinese competitor and the government in China pays the power bill, because we are not going to pay their power bill.

So I implore you to speak as freely and as openly as you can, call it as you see it. The currency valuation problem is what we are talking about with Chuck Schumer. It is only the tip of the iceberg. It is something that is readily obvious to most people who are a lot smarter than I am, that they are cheating when it comes to manip-

ulating their currency. But it goes deeper. The fundamental problem is that China is trying to get an advantage and they do not have many rules in their own country, and the rules that they do have are pretty harsh. To expect them to play by the rules without pushing back is going to be absolutely impossible to achieve, and the most disturbing thing is that the growth in the Chinese economy is not being shared by its people, because one of the reasons we are losing jobs is because you can build a plant in China and people work for a dollar a day. There is no OSHA. There are no minimum wages. China is taking advantage of trade regimes. They are cheating and they are taking the money to build up their military. It is lose-lose.

It is time for us to stand up and do something about it. We need your help. Thank you very much.

With that, I am going to have to leave, and Phil can answer the questions far better than I can anyway. Thank you.

Co-Chairman MULLOY. Senator, thank you very much.

Senator GRAHAM. Thank you.

Discussion, Questions and Answers

Co-Chairman MULLOY. Congressman English, both you and Senator Graham have introduced bills that would put tariffs on the Chinese if the Treasury determines that they are a currency manipulator.

Congressman ENGLISH. Yes.

Co-Chairman MULLOY. Senator Graham implied that the issues with China though are not just currency, that there are a lot broader things going on here. So even if the bills were passed and the tariffs were put on, what are the other priority issues that you think that the U.S. has to go after in terms of putting more balance in this economic relationship?

Congressman ENGLISH. Mr. Co-Chairman, I must tell you that I think even if China floats its currency, which many economists believe is absolutely essential for it to offer a level playing field, with what we calculate to be a 40 percent distortion in the price of Chinese products exported to the United States, a 40 percent undervaluation just because of the currency factor. Even if we were to deal with that and China were to accede to our wishes, they would still have a range of core issues that I think they would have to address even for a level playing field with the comparative disadvantages that Mr. Graham has described.

One of the issues that I do not think attracts enough attention has to do with distortions that are the result of China's tax regime, which has been evolving rather slowly. They have put in place a value-added tax that gives their products a competitive advantage because of the way it is applied. What is particularly disturbing is that that includes an explicit preference for neighbors.

For example, American chemical companies cannot compete with Russian chemical companies for products that are not specialized because we are talking about a product with a relatively thin profit margin typically, something that is generally available and is mass-produced, a typical manufactured product. With a product like that, a relatively modest price differential makes a huge difference, and for chemicals produced in the United States to be

shipped into China, they have imposed on them not only a substantial tariff structure, but also a layer of taxation that is not applied to competitors coming in from Russia. This puts many of our products, products that we expected to be able to sell in China at an enormous competitive disadvantage.

There are others. I mean there are tariff laws that China imposes on top of everything else that I think are unfair, but those are things typically that can be negotiated down over time.

I think, as Senator Graham pointed out, there is a real concern about intellectual property rights. Many American companies go into China—and a number have shared this concern with me—they find that if they sell their product to China, they are likely to face that product being produced as a knock-off in direct competition with them within a few years. There have been cases, we believe, where American products have been sold to China, and then through reverse engineering, the Chinese have been able to duplicate the production process, steal the technology and then sell those products in third markets in direct competition with the original U.S. producers.

For many U.S. companies there is no obvious remedy. Going into China and filing a lawsuit is simply not an option. For many of these companies competing in third markets and chasing down these competitor products is much too expensive a process. The level of protection to intellectual property rights, which is envisioned in the WTO simply does not exist in China, and without that it is very hard to picture our having a healthy trade relationship with them in the long term.

Those are just a couple of the very large concerns that I think would still be in place even if China were willing to float its currency.

Co-Chairman MULLOY. Do you have time to stay for another?

Congressman ENGLISH. I can certainly stay for a few minutes, and I appreciate the opportunity.

Co-Chairman MULLOY. Thank you, Congressman.

Commissioner Wessel, you had a question, and then Commissioner Dreyer.

Commissioner WESSEL. Yes. Thank you, Mr. English. It is a pleasure to have you here, and your insightful testimony and true leadership on this issue with Congressman Levin, as you mentioned, and many others.

This is not a partisan issue, as you and others have pointed out, and clearly this Administration and the past Administration had a somewhat similar approach on China in terms of embracing trade. You have talked about some of the tools, your legislation and other tools we might use. The Administration has many of these tools in its quiver right now, arrows in its quiver. The business community and the AFL-CIO are talking about a 301 action which could be self-initiated by the Administration. And there is some frustration I guess that many in the private sector, both business and labor, have that many of these tools are not being used.

As Senator Graham just said, the time is coming for us to act. When do we say that enough is enough and move forward on action, not just the rhetoric of all this, but how quickly do we need to act?

Congressman ENGLISH. Commissioner, I think we need to act very quickly. If Mr. Levin would point out, many of the anti-surge implements that were built into the enabling legislation that went along with the entry of China into the WTO have not been activated. There have been at least several instances where we believe the Administration could have stepped in and could have aggressively used these tools to confront the Chinese. I believe it's very, very important that the Administration, having clearly focused on a number of aspects of the problem, having recently directly engaged the Chinese on currency manipulation, I think it is very important that the Administration make clear that these mechanisms are not a dead letter and be prepared to use them aggressively against Chinese products where it is warranted, and we believe there have been a number of instances where it has already been warranted.

I think the Administration inherited a policy, which in turn the prior Administration had inherited, that has been a longstanding policy to encourage trade with China. But what we have discovered in recent years is that increasingly that relationship is lopsided. The volume of trade I think is requiring us to adjust our thinking, and I believe—and I have sought to engage the Administration on a number of different levels on this issue—I think it is very important that the Administration act quickly to signal a significant change in our attitude toward Chinese trade.

Beyond that, I think it is also very important that the Administration maintain the sort of relationship with China that will allow them to engage the Chinese and push them in the right direction. Whether we like it or not, China is now part of the WTO and is going to be part of this overall international apparatus. I think we have some obligation to make sure that they follow those rules, and that is going to take steady pressure from the Administration that is not—how do I want to put this—is not subject to veto by diplomatic concerns.

Co-Chairman MULLOY. Commissioner Dreyer.

Co-Chairman DREYER. Congressman, first let me congratulate you for that very diplomatic turn of phrase.

I have a concern. I spend a lot of time every day reading the Asian press, and also the American press speaking about Asia, and I have noticed that there is a clique within the United States of—I guess conservatives would call them “panda-huggers,” and also within the Asian press. And they say this is an unwanted attack. This is China bashing. And what can you expect? There is an election year coming up and these Members of Congress and the Administration are taking out on China the deficiencies of the American economy. We cannot keep up, yadda, yadda, yadda, and it is all going to go away after the election.

How would you answer the charge that, yes, in the United States we subsidize our agricultural producers among others, and that we are in fact attacking the Chinese for something we do, and furthermore, it is just election year hoopla?

Congressman ENGLISH. I think that is a very easy myth to knock down. We have the most open economy in the world. We clearly are engaged in protecting certain sectors. But I know Mr. Becker would agree with me, sometimes we wish that we provided the sort of

support for, say, the steel industry and other manufacturers that we do for some segments of our agricultural industry.

But having said that, I think the record is fairly clear on this, the U.S. has been a strong advocate of free trade. What we are combating here is not free trade. The practices I have outlined are unfair trade. The criticism here is coming from nontraditional sources. I have been in Congress for many years, and I have never been identified as a China basher. I come from a community, Erie, Pennsylvania, that going back to the late '70s has had a sister city on the Chinese mainland and has benefited from regular cultural exchanges. Yet in the downtown of our city on Labor Day this year, perhaps 400 people showed up for a rally against unfair Chinese trade practices. This is a dramatic change because we have seen more and more of our jobs at risk, not from fair competition, not from competition based on differences in the terms of trade of competitive advantage, but jobs potentially lost due to aggressive mercantilism on the part of the Chinese.

I would also say to those who are skeptical of criticisms of Chinese practices, that I do not think we do China or Chinese consumers any favors by pulling our punches on this issue. It is important that China evolve into a modern economy with property rights, with labor rights, with proper human rights, that we be prepared to engage them where they go astray. The policies that are being set here are maybe beneficial in the short term for some aspects of Chinese society, but by papering over China's problems and some of China's weaknesses, and creating a very unhealthy trade imbalance, I think in the long run the status quo is not where China needs to be, and I think we do them a favor by being frank with them at this point.

I do not believe that this is a phenomena that is associated with one election cycle. I think the pressure is building because of the imbalance in this trade relationship is going to be with us for many years.

And I fear also that it runs the risk of undercutting the arguments for our participation more broadly in the global trading system. I think unless we get trade with China right, we are very much at risk of seeing many of our other trade policies and trade relationships go sour as well. So I find that some of the editorial comments that I have seen that are similar to what you have described are I think particularly shortsighted.

Co-Chairman DREYER. Thank you.

Congressman ENGLISH. Thank you, Commissioner.

Co-Chairman MULLOY. Commissioner Reinsch.

Commissioner REINSCH. It is good to see you again, Mr. English.

Congressman ENGLISH. Thank you, sir.

Commissioner REINSCH. Let me say first, as someone who worked for John Heinz for a long time, I am delighted to see someone else from Pennsylvania pick up the trade portfolio as thoughtfully and articulately as you have.

We are going to have testimony later on today from some people on all sides of this issue, obviously, and some of them are going to say that the exchange rate issue may be a problem, and others will have different views on that, and will say that the real problem is investment, that is, the investment of U.S. multinational compa-

nies in China and the production that ensues, that then comes back here in the form of Chinese exports that both enlarge the trade deficit that we have and also moves jobs over there.

Have you considered that and thought about that, and if so, do you have a comment on the extent to which that is the problem?

Congressman ENGLISH. I think it is a very serious component of the problem. I began to focus on some aspects of this issue because of local problems. You will appreciate from your prior work how big a component of the American tool and die industry exists in Northwestern Pennsylvania.

We asked the ITC to do a 332 study, which they did, on what was going on with tool and die, and gave us a remarkable snapshot a couple of years ago of what was going on. The impression from a lot of producers was that they were under direct pressure from Chinese trade, direct foreign competition.

That turned out to be a less significant problem than the fact that their customers were shifting, along with a significant part of the U.S. manufacturing base, to China, based not merely on differences in the terms of trade, but also on the fact that China has contractual means by which it coerces companies that are seeking to do business in China into locating production facilities there. This is a significant part of the problem as well.

My insight is that this is a very broad problem. This again is classical mercantilism on the part of China, and my sense is that until we directly engage that and make it a part of our agenda as well, challenging China's right to pressure American companies directly to move jobs onto the mainland, then I think we are going to continue to see many of these other indirect effects, and I think we are going to continue to see a significant loss of our manufacturing base here.

Commissioner REINSCH. I see another victim has arrived, so I will not follow up, but thank you.

Co-Chairman MULLOY. Congressman Stenholm of Texas has joined us, Congressman English.

Congressman Stenholm, would it be appropriate for you to give your statement now and then if Congressman English can stay, fine. Otherwise, we will focus on what you have to say.

Congressman ENGLISH. Mr. Co-Chairman, if I might, I do have a couple of pending engagements on the House side. I would love to be excused, but would welcome another opportunity to engage in the future.

Co-Chairman MULLOY. Congressman English, thank you very much for sharing your thoughts with us.

Congressman ENGLISH. Thank you so much.

Co-Chairman MULLOY. Congressman Stenholm.

**STATEMENT OF CHARLES STENHOLM
A U.S. CONGRESSMAN FROM THE STATE OF TEXAS**

Congressman STENHOLM. Thank you, Mr. Chairman. I thank all of you for affording me this opportunity to be with you this morning and to share just a few ideas and views regarding the subject for which you are convened.

I had the privilege of visiting China for the first time with Congressman Don Manzullo, a CODEL in which we spent a fascinating

ten days in that country. It was an education for me. It shed a lot of new light on that country, China, and that whole area and this whole subject, which we are now talking about, and that is, competition in an international marketplace and what constitutes fair competition.

I also was in Cancun for four days and watched the WTO break up because of the inability of 148 nations to come together and to agree unanimously on anything.

But the subject today is China and currency manipulation. Let me put it in this perspective, if I might: I am the ranking Democrat on the House Agriculture Committee. I'm used to getting beat up about our farm subsidies. It's something that our own press delights in criticizing, that which we do. And there's always some merit in what they say. But as one of the prime architects of the 2002 farm bill, we said it was important for America to stand shoulder to shoulder with our producers in the international marketplace, with the full recognition that negotiations are necessary, that you have to sit down in the marketplace—if I'm buying and you're selling, we have to come to an agreement. And usually, if I'm asking a hundred and you're willing to give 50, you usually come together at 75. That's usually the way negotiations go.

But if you have an advantage, as certainly we use the Europeans as the biggest example, when they subsidize their farmers \$323 an acre and we subsidize 30, that's not a level playing field.

Now, there are other subsidies, and currency manipulation or having your currency cheaper gives you the direct effect of the same thing that a tariff would give you. And one of the messages that we attempted to deliver to our Chinese friends when we were there is I don't know how long America can continue to run \$500 billion fiscal deficits, \$500 billion trade deficits, without the law of economics or politics taking over. And we made the point. When you've got a currency advantage that's causing the problems that you're causing with American manufacturing, as we say in Texas, that dog won't hunt forever.

Therefore, we have to sit back and say, okay, it's important to take a look at it, and not just take a look at but deal realistically with that advantage. And so I was happy to join with Congressman Don Manzullo, Baron Hill, and Mike Rogers on the House resolution in which we're not suggesting protectionism; what we're suggesting is it is time to deal openly and honestly with, in this case, currency manipulation.

But as I said when the Ambassador from China came to my office after some of our comments, I said, when we voted—and I voted, and I am one that has voted for every trade bill, I believe, that has come in the House of Representatives for 25 years because I believe in trade. Trade is what will make the world a better place.

Free trade, I try to avoid that term because, being practical, I don't think we're going to see total free trade in my lifetime. But the closer we come to it, the better everyone will be.

And when I voted for trade promotional authority, passed by one vote—I can take the credit or get the blame for that, but with China's accession into the WTO, all we said to them and continue to say, when you agree to do certain things, it's important to live up

to it. And when you fudge on whether or not you are, in fact, going to do what we think you have agreed to do, that's creating problems. And then you have the currency manipulation factor on top of that, it becomes a real problem.

So I think you're seeing a growing indication in the House of Representatives, and I will conclude with this brief final statement. I think it is absolutely critical that we have the kind of negotiation, in this case specifically with the Chinese, but I say it with all countries of the world, that goes back to the practical effect of saying let's look at the issues as they are, let's realize we've all got problems. And I recognize the problems of China, et cetera. But we can't keep doing business like we're doing it and continue to destroy the manufacturing base in the United States. We can't do that.

So I appreciate the opportunity to be here and welcome any questions you might have.

Co-Chairman MULLOY. Congressman Stenholm, thank you.

We've been joined by Senators Dorgan and Schumer, and it would be my hope, if we could have Senator Dorgan's statement and then Senator Schumer's, and then if people have time, we could take questions across the board, if that would work for you, Congressman.

Senator Dorgan. And thank you very much for being here, Senator. We really appreciate it.

**STATEMENT OF BYRON L. DORGAN
A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA**

Senator DORGAN. Well, Commissioners, thank you very much. I don't know what has been said prior to my arrival, and I hope I don't duplicate it.

Let me make a couple of comments. You have the charge of holding a hearing on something that is incredibly important because it relates to the question of what kind of industrial base, what kind of a manufacturing base this country maintains in the years ahead.

China is a very large trading partner of ours. They have in recent years developed a very, very large trade surplus with us, or we a deficit with them. We've become a cash cow for China's hard currency needs, and we in this country are a market for their trinkets, their trousers, their shirts, their shoes, and all their production moving like a sponge into our marketplace. And yet we discover that even two years after we did a bilateral agreement with China, a trade agreement—which I would have voted against had we the opportunity to vote on it here in the Congress. Two years after that, in the areas that I'm especially keen to, that is, grain and wheat, for example, even then a short time after the bilateral agreement China was not abiding by the terms of that agreement.

There are several things that, it seems to me, you ought to consider. One you can't do a lot about, and that is that we negotiate fundamentally incompetent trade agreements. I don't know who negotiates them. I wish I could put a name and a face to the negotiators and put a jersey on them that says "USA" so they could occasionally look down and see who they work for.

But the negotiations have been fundamentally incompetent, and I'm talking then about you put a blindfold on, the murmurs coming

from these negotiators couldn't distinguish between one political party or the other. It's just incompetence, and that doesn't know partisanship.

Let me give you one example of that. Perhaps other expert witnesses can explain this. The bilateral with China said, by the way, after a lengthy phase-in, we would agree with respect to automobile trade for you to have a tariff that is ten times higher in China on U.S. cars going to China than we would have on any Chinese cars potentially sold in our marketplace.

Now, a country with a \$103 billion surplus with us, we say it's okay in the future for your 1.4 billion people to be treated to a tariff that is ten times higher on U.S. automobiles sold in their marketplace? I mean, excuse me, I think that's nuts. I don't know who negotiated it, but that's just the tip of the iceberg of the fundamental incompetence of the negotiators in these trade agreements.

But aside from that, you're going to talk today, I suspect, about currency fluctuations. I've talked about this for decades. In Congress, I've talked about trade for many, many years, both in the House and the Senate. I've always said you cannot have a trade agreement that is an effective instrument creating free and fair trade between countries unless you have a shock absorber dealing with currency fluctuations. If you don't have it, you lose.

We negotiated at great length with Mexico and reduced tariffs of Mexico somewhere in the 10 to 15 to 20 percent range, and then Mexico devalued the peso, 50 percent. So we're 30 percent farther behind. Does it pass the laugh test at some point for us to be doing all of this, albeit incompetently, but still doing it, and then discovering that currency fluctuations wipe out whatever minuscule gains you make in negotiating lower tariffs? The answer clearly is no. You must deal with this.

But in deference to my friend, Chuck Schumer from New York, while I support, I fully support the effort he makes dealing with the issue of the Chinese currency manipulation that is not the only issue, and perhaps not even the most significant issue. No matter what the value of the currency in China, at 3 cents an hour or 13 cents an hour for 12-year-old kids, for 7 days a week at 14 hours a day, it's hard to compete, probably impossible to compete.

My colleague the other day pointed out that the Huffly bicycles he used to buy made by 1,100 good workers in Indiana, you can still buy those Huffly bicycles—and, by the way, they still sell at the same price in American outlets, except those 1,100 people don't make them in Indiana. They're now made in China. That is symbolic of the movement of the manufacturing base.

You will have testimony—I see my friend Fred is about ready to testify, and he and I have discussed this over the years, not so recently but discussed this over many years. Look, I believe expanded trade is important to this country. I do not believe creating walls of protectionism enhances this country in any way. But I do believe this country has the economic strength to demand and insist on fair trade.

I want to just finish with this. Let me just get this through the lens of wheat because wheat is very important. Historically, it has always been important. Thomas Jefferson early on in the formation of this country suggested that legislators be paid in wheat. They

did not adopt that, but had that been the case, perhaps wheat prices would have been better for family farmers.

But wheat, China used to buy \$500 million worth of U.S. wheat 10 years ago, 12 years ago. Now \$25 million a year in wheat. The Chinese Agriculture Minister, after having an 8.5 million metric ton tariff rate quota on wheat, implying in the bilateral that that quantity of wheat could come into the Chinese marketplace at low tariffs, the Chinese Agriculture Minister went to southern China, I think Guangzhou, and I think in the South China Post or the South Asia Post was quoted as saying, "You know that 8.5 million metric tons?" Now, he was speaking to his constituency. "You know that 8.5 million metric tons? Don't worry about that. That's just theory. That doesn't mean that's what's going to come into China." And guess what? We've had two years of experience, and it ain't coming into China, not from this country.

I'm really glad you're doing what you're doing. I hope that you have an opportunity to listen to all sides and conclude what I have concluded, and I think what my colleague from Texas has concluded and my colleague from New York has concluded. This country needs a good, stiff vitamin B12 shot, industrial strength, that gives it the energy and also a backbone and some will to stand up and say this country demands and insists on fair trade relationships. And if not, send all your trinkets, trousers, shirts, and shoes to sell in Zambia and see what kind of market exists there.

There is no substitute for the American marketplace on the face of this Earth—none. And the fact is we have the capability to demand fair trade between us and our trading partners. We have never had the will or the backbone or the strength to do it. And I hope this Commission is able to sort through all this and come up with some recommendations that enhance the opportunities that those of us who are concerned about this have been talking about here in the Senate.

Thank you for taking the time this morning.

Co-Chairman MULLOY. Senator Dorgan, thank you very much for being here, and thank you for all your support of this Commission and its predecessor commission that was looking at the whole concept of the current balance of payments deficit as well, which was another thing that Congressman Stenholm mentioned. This is a huge \$500 billion problem, and it's growing at a very rapid rate.

Senator SCHUMER, thank you very much for being with us as well.

Senator SCHUMER. Thank you.

Congressman STENHOLM. Mr. Chairman, might I interrupt? I've got a meeting with Secretary Veneman and Ambassador Zoellick on this subject right now, so if I might be excused?

Co-Chairman MULLOY. Congressman Stenholm, thank you very much for sharing your time with us, and we hope to stay in touch with you and your staff as we go after these issues.

Senator DORGAN. Mr. Chairman, I, too, am going to depart. I'm going to leave for China with a bushel of wheat.

Seriously, thank you for the opportunity to address a very serious issue.

Co-Chairman MULLOY. Thank you.

Senator DORGAN. And my colleague speaks for many of us in the Senate with respect to this concern about currency fluctuations.

Co-Chairman MULLOY. And we'll keep you and your staff fully informed of what we're doing, Senator.

Senator DORGAN. Thank you very much.

**STATEMENT OF CHARLES E. SCHUMER
A U.S. SENATOR FROM THE STATE OF NEW YORK**

Senator SCHUMER. Commissioner, thank you, and I want to thank my colleagues here and every one of you who is serving your country, and I very much appreciate your being here and the talent and intelligence on this Commission, as well as the importance of it.

Now, I think first I would say to you, Commissioners, we've reached a crossroad in Congress on the issue of free trade, and I think these hearings could not come at a better time. I'm not going to address the broader issue, but I will tell you this: The consensus for free trade in this Congress is rapidly eroding.

I voted for every MFN for China. I lost the AFL-CIO endorsement when I was in the House a few times because of my views on free trade. And it's just getting us nowhere. And it's not just that we're losing low-end jobs. We're losing high-end jobs. When IBM, Intel, and Goldman Sachs say that they're moving their top-end people overseas, you've got to ask yourself: What's going to be left here? Manufacturing is leaving. Agriculture has left. Well, at least we had high-tech service jobs. They're going like that [snaps fingers].

I'm just going to share with you one story. A head of a major New York investment bank told me the following: He said, "We have 800 people in New York who do computer software programming." Very complicated stuff. These are derivatives and stuff like this. He said, "Over the next three years, those 800 will lose their jobs in New York." Oh, they make an average of \$180,000 a year. These are not middle-level or service jobs. He said that in the next three years they are all going to China and India. He said, "We can hire engineers just as capable, just as competent there for \$18,000 a year." Eighteen thousand.

Now, I'm not blaming his company. They're doing what a capitalist free market company does. But what's left here? What is going to be left here?

The theory of free trade is comparative advantage. If we don't have comparative advantage in computer software programmers who make \$180,000 a year, what do we have?

Someone else told me radiology will not be practiced in the United States in ten years, that because of instantaneous communications, a patient will walk in, a technician will take the picture here, and it will be sent to China or India because a radiologist there is capable, except maybe if it's very complicated, you'll have an expert here.

Interns will stay here, internists, because they have to look at you. But anything where they don't have to do it right to the customer is going there.

So I am wondering what's left. That's a general comment not related to this. But I hope the Commission will look at that.

The economists and the editorial boards stick to the doctrine of free trade from Ricardo—comparative advantage. It's worked for a long time. It's created discombobulation, but it's worked. But we have never had a situation where communication and transportation is instantaneous. And you have 200 million well educated, from an American point of view, highly underpaid people, mainly in China and India, who can take just about any job. And that's something we're all going to be grappling with. I've talked to some very smart people who are wondering about this.

When I talk to the economists—I don't know if we have any free trade economists on the Commission. But when I talk to them, they say, well, it will eventually adjust itself. It will, in about three generations when the wealth of America and the wealth of all these other countries is about even.

I ask you, I ask my colleagues, I ask our President, I ask the American people: Is that a good enough answer for us? No. Okay.

That's just the context here. Let's just talk within the context of free trade. Within the context of free trade, every economist will tell you part and parcel of free trade and open borders and comparative advantage is to let currencies float. China doesn't. Japan to an extent doesn't as well. But International Trade 101 teaches that an open and free system of trade demands that international exchange rates be set by the free flow of currency and goods between countries.

Government interference in the market by hoarding currency or pegging currency rates distorts the trade system and harms countries that play by the rules. That's why we have international agreements on free trade.

But, unfortunately, despite agreeing to play by these rules when it joined the WTO two years ago, China has shown itself to want all the advantages of free trade and none of the responsibilities. And their currency by general consensus is undervalued. Some put it as low as 15, some put it as high as 40.

Even if you still assume the theory of free trade, which I said I have my doubts about these days, even if you assume it, you've got to let the currency float. You can't undervalue it. It means that every American export to China costs 15 to 40 percent more than it should and every Chinese export to America costs 15 to 40 percent less than it should.

I have seen manufacturers of high-end, excellent products throughout New York, and they say, "We can even compete with the low-paid Chinese labor force. But you add another 40 percent on top of that and we're dead."

Now, the Chinese are thumbing their nose at us. It was amazing. Before Secretary Snow got off the plane in China and discussed this, the Chinese said, "We're not touching it." So we've tried diplomacy, and it is not working. And I have to tell you, the Bush Administration has shown a disappointing lack of leadership on this issue until recently, and now they're not doing enough either. They're beginning to talk about the issue. Talk isn't going to bring the jobs back that are unfairly lost and not coming back, and those are manufacturing jobs. We've heard about those losses, but it's also beginning to be service jobs.

I'll tell you one more thing. Why are the productivity numbers so high? Well, it may be in part because our companies here are more productive because they're sending all the jobs over there where you can do the same job at one-tenth the cost. Our productivity figures are through the roof. And I don't think it's just because they're applying more computers and technology and faxes here. It's just too high. I think a little bit of it and more and more in the future is going to be because of the export of even these high-end jobs.

So I'd say that this Administration has shown a disappointing lack of leadership. The rules of the WTO allow the U.S. to file a dispute against China for its unfair trade practices. The Administration refuses to do it. All the verbiage in the world will not satisfy most of us, a bipartisan coalition in Congress, until some action is taken.

There is word that labor and businesses together will file such a case, and that's good. But we need the Administration to do more.

So what we've seen on China is a lot of talk and no action. So that leaves us with only one option to save whatever's left of free and fair trade with China. And that is for us to take action in the Congress ourselves.

And so Senator Graham, Senator Dole, and Senator Bunning—Members of the Republican Party—Senator Bayh, Senator Durbin, and myself have filed a bill which would say that we will put a 27.5-percent tariff on every Chinese import, 27.5 because that is halfway between 40 and 15.

It is bipartisan. We don't want to politicize the issue—this is too important to give to one party or the other for advantage. We want to make this happen. And this does what the Chinese won't. It brings their currency to a right level. It would be better if they'd let their currency float.

Now, let me just say by the way, that maybe it won't—in fact I hope it doesn't pass. I hope by the time it starts moving—and it's going to move—China acts on its own. You mark my words. No one is paying attention now. When Senator Graham and I put this bill on the Senate floor, it's going to pass. And we're going to put it on the Senate floor before we leave. And it's going to send a shot across the bow around this world, and then maybe the Chinese will do something, and then maybe the rest of the world will help.

Now, there are a few arguments against it. There is no doctrinaire argument. They're all practical arguments.

One, the Chinese hold a huge amount of American currency, bonds, and if we do this, they'll let those go and it will hurt our bond rates. Who's going to buy them?

I heard this. I have experience in this. Japan would not open American markets for financial firms in the mid-1980s. That was very important to my city and State of New York. If you were Merrill Lynch, you couldn't get a seat on the Japanese stock exchange. If you were Citibank, you couldn't open up an ATM machine—even though we were much better at those things than the Japanese. And everyone said, well, we'll talk about it. And we talked and we talked and we talked.

Then I put in a bill that said they can't sell their stuff here if we can't sell our stuff there. It was horrible, all the economists said. They made the same argument. Japan won't buy our bonds. They had as many of the U.S. bonds and treasuries in the late 1980s as—China has more, I think—than China has now. And I said, forget it, they're not going to sell the bonds, cut their nose to spite their face, decrease the value of one of the largest assets they have. No country or businessperson would do that.

And they said it will create a trade war. Well, lo and behold. The bill passed the House. I was in the House then. And all of a sudden, Japan opened up its financial markets. They had said there was no space on the Tokyo stock exchange, and then suddenly they found space. They said there were all sorts of restrictions. And that's what I hope would happen with our legislation. I don't want it to pass. I'd rather it importune people to do the right thing. But I'll tell you, we'll keep pushing it if it doesn't—if it won't pass, because it's a better alternative.

And the other thing they say is the Chinese banking system is so weak that this will send it downward. Well, it's not going to get better by keeping a fixed rate. It's not going to get better. It will get worse as China gets bigger.

And I'll tell you this: When are we going to look out for the problems we have? The Chinese are screwing up their banking system. We should worry about that, but why should we make it more important than us losing all our jobs? Unfairly, not through any theory of comparative advantage.

So we're going to push this legislation. It's quiet now because the economists say—they're living in the old world. They don't see what's happening. And when I ask them what's going to take the place of these high-end service jobs that are leaving, they say, well, something will. Well, maybe it will. But no one has suggested anything yet.

And so this is indeed a shot across the bow. It's legislation that we believe will correct a real injustice. It will force China to live up to its responsibilities. It will make the Chinese banking system better. But it will also, if you believe in free trade—and I guess there's division on this panel—it'll save it, if it's worth saving. And, again, as I said, five years ago I would have said by all means it is. Today I'm not so sure.

So I hope you'll pay attention to what this legislation is all about. I'd be interested in your thoughts and comments on it, not today if that's not appropriate, but down the road. And I'd be interested in what solutions you come up with if this is no good, because so far there has been none.

Thank you.

Co-Chairman MULLOY. Senator Schumer, we very much appreciate the comments and your leadership. And I think, as you mentioned earlier in your testimony, this is a much broader issue than just the exchange rate issue, and this country has to do some very serious thinking about how we're engaged in the global economy. We're trying to do that somewhat today to get it going and think about it.

Senator SCHUMER. It's a great job you're doing, a great service.

Co-Chairman MULLOY. Congressman Manzullo, could you give us a chance to have one or two questions with Senator Schumer and then make your statement?

Congressman MANZULLO. Go ahead and finish.

Senator SCHUMER. Great. Thank you.

Discussion, Questions and Answers

Co-Chairman MULLOY. Commissioner Wortzel, you had a question.

Commissioner WORTZEL. Well, I did. One, of course, was answered by the Senator's explanation of how he arrived at 27.5 percent. I appreciate that.

Senator Schumer, I'm also interested in your views on the fact that China, whose citizens have such a high savings rate, doesn't allow the freedom to let those citizens put their money in any bank they want, and whether the freeing of capital controls in China, would also help address some of these problems.

Senator SCHUMER. The *Wall Street Journal* editorial page sort of knocked our legislation, or if not our specific legislation, they said it would be a lot better if the average Chinese citizen could buy a stock or buy a bond here in America. I agree. But when I look into the eyes of the hundreds every week of manufacturing jobs and now service jobs that are being lost, some of it, at least—not all; I don't want to overclaim, through this unfair advantage. I say why are we waiting—if the Chinese have a better solution, you know what I'd say? Pass this. Then maybe they'll do that.

They, again, want all the advantages and none of the liabilities.

Congressman MANZULLO. Or responsibilities.

Senator SCHUMER. Or responsibilities. That's a better word. Thank you, Congressman. That's what they want. You can't do it halfway.

And, by the way, if we stick to this system, it will screw up the world trade mechanism even worse, because it'll get so big it'll burst. And this legislation is intended to force some rational transition out of it, because my guess is, again, if it passes the Senate and begins to pass the House, maybe they'll come up with a plan and say let us get to where you're saying over five years. I'd look at something like that, although I even hate to admit that because five more years of unfair advantage, who knows what will happen? But, still, at least that's a light at the end of the tunnel. Right now there's no light at the end of the tunnel.

And it's easy for economists and editorial page writers to say, the Chinese should do this, it's a better solution. But I'm not a Chinese legislator. They don't have a Chinese legislator who has any power to do anything.

So what's the alternative? Yes, there are better ways to do it. I don't know any better way that we can control here in the United States. That's the question, not "are there better solutions." Are there better solutions that we, that the President, the Congress, the American people can implement?

Co-Chairman MULLOY. Commissioner D'Amato.

Vice Chairman D'AMATO. Senator, thank you very much for your testimony and the argumentation underlying it. I think the legislation that you've introduced is very important.

This Commission took the position last year that if we're going to change Chinese behavior, we have to at least threaten to take away some of the things they hold dearly, which, of course, in the case of your legislation is access to the American market.

Senator SCHUMER. Exactly.

Vice Chairman D'AMATO. We also suggested that they are beginning to hold dearly access to our equities market, another area where, if you were to impose some penalties, that would get their attention.

Senator SCHUMER. Yes.

Vice Chairman D'AMATO. I have two very quick questions. The letter that you sent with many of your colleagues to the President on July 31st, I just wondered if you have received an answer yet.

Senator SCHUMER. I think we've gotten an answer from Secretary Snow, but not from the President. We wrote to Snow as well, and he did send us a letter, but it was just, well, we're trying to do something.

Vice Chairman D'AMATO. Yes.

Senator SCHUMER. That was about the thrust of the letter. And they are talking about it more, which they didn't do six months ago. And maybe the Commission helped push them in that direction. But talk is not enough.

And when the Chinese—I mean, that was insulting that before the Treasury Secretary got off the plane, they said, "We're not changing our currency." You know what? That was the best thing that happened for my legislation.

Vice Chairman D'AMATO. One other question relating to the argument now being used to justify going soft on the Chinese in this area is the argument that for the first time the Chinese have been engaging actively on the diplomatic front on the North Korea issue.

Senator SCHUMER. Right.

Vice Chairman D'AMATO. And that in order to encourage them to continue to take a leadership role and support us there, we've got to go soft on the trade front.

Senator SCHUMER. Yes, you're right. That's outside the economic realm, and that's really the job for the President to sort of integrate. And if we pass through all these other arguments, we'll ultimately get to that one.

Well, if tomorrow North Korea announced that it was getting rid of nuclear weapons, well, then, maybe they'd have a discussion about it. Again, I still look into the eyes of workers in Syracuse who are losing their jobs through unfair advantage. It's hard to make the tradeoff, but that's what Presidents are paid to do. But I haven't seen the progress yet. I see the jobs being lost. I haven't seen the progress with North Korea, and I don't even think our Administration says we're making progress with North Korea.

Vice Chairman D'AMATO. Thank you, Senator.

Co-Chairman MULLOY. Commissioner Wessel, and then Commissioner Robinson, and then we'll probably let you go, Senator.

Commissioner WESSEL. Thank you. Thank you, Senator. I appreciate your being here, and Mr. Manzullo and the others who have been here. And while Mr. Stenholm was testifying earlier, I was thinking of a term he taught me many years ago, and it seems to

apply to the President, that he's all hat and no cattle, as we look at this problem—

Senator SCHUMER. We don't use that one much in Brooklyn, but I know what you mean.

Commissioner WESSEL. I'm from White Plains, so I understand.

You said earlier that the time for action is now. Clearly, the Chinese have not responded to our pleas for many years, and you have to admit they're pretty smart not to because they're winning the battle right now.

In your discussions with the Administration, have they taken a position on your legislation? Are they welcoming it? Are they ignoring it?

Senator SCHUMER. Well, publicly, they are not supporting it. I don't know if they've actually put out a letter in opposition yet, because, frankly, we're just starting. People are saying, oh, this is just some kind of—they don't realize how dead serious I am, and I just refer people to look at what happened with Japan. It's almost the same exact scenario. And I am dead serious, and the Senate gives you the ability to add legislation—Senator Graham and I—from the other party. Senator Graham and I have—so it's bipartisan. That's the only point I wish to make. We've agreed we're going to add this legislation to something in the Senate before we leave. So then we'll start getting some real talk about this. So far, not yet. But it's beginning to make—it's beginning to make its stir.

Commissioner WESSEL. Thank you.

Co-Chairman MULLOY. Commissioner Robinson.

Chairman ROBINSON. Senator, thank you so much. I think that your remarks have been provocative and thoughtful.

I just wanted to make a comment more than anything else, or an observation on the basis of what Vice Chairman D'Amato mentioned concerning the argument that Beijing's assistance, which is purported to be very substantial, in defusing the North Korean nuclear crisis is of such a critical nature that it has to supersede the very important issues that we're discussing today.

It might be interesting for you and others to have a look at the transcript of a hearing we held on July 24 on Chinese proliferation practices, and particularly their role, which is a pivotal one, on the Korean Peninsula. It turns out that in the extensive research done by our staff and the expert testimony we received in the course of that hearing, that, in fact, China, does have very substantial leverage.

Senator SCHUMER. It's the only country that does.

Chairman ROBINSON. Eighty to 100 percent of the oil, depending on which estimate you're listening to, and about 40 percent of the food. But as you know Beijing is focused on facilitating the six-party talks. Diplomacy is important and that is a net positive movement by the Chinese. But when you talk about serious leverage being exercised by them to defuse what could be the end of global nonproliferation regimes and reprocessing that could provide North Korea in the next year a nuclear arsenal of some 10 to 13 weapons that they can sell or test, and afford to do so because they have a sufficient number, many of us that have looked at Beijing's role are very skeptical as to how serious Chinese take this crisis.

So it's something to keep in mind when we hear that the currency valuation issue and the U.S. manufacturing job losses have to take a second seat. I think that policymakers need to take a hard look at the level of cooperation that, in fact, China is exhibiting in respect to the Korean nuclear crisis.

Senator SCHUMER. And it's also—I mean, they should be doing both. They want to be part of the family of nations. They're going to have a lot of advantages. Look at the prosperity and growth in China. They have to live up to the responsibilities. And it's responsible to deal with North Korea, and it's responsible to really be a free trader.

It's almost like if we have to make that choice, losing all our jobs or having a nuclear North Korea, it's like what they do in Utah, death by firing or hanging. It's not the kind of choice you want to have to make.

Co-Chairman MULLOY. Senator Schumer, thank you again for your time and your leadership.

Senator SCHUMER. Thank you.

Co-Chairman MULLOY. And we hope to stay in close touch with you and your staff.

Senator SCHUMER. I appreciate it very much.

Co-Chairman MULLOY. We're very privileged now to have the Chairman of the House Small Business Committee, who has played a leadership role in bringing to the attention of the country the crisis in manufacturing and the loss of manufacturing jobs and what that means for our total economy. We are also fortunate in having the Ranking Member of the Trade Subcommittee of the House Ways and Means Committee, Congressman Levin, with us, as well.

So, Chairman Manzullo, if you could give your remarks.

**STATEMENT OF DONALD A. MANZULLO
A U.S. CONGRESSMAN FROM THE STATE OF ILLINOIS, AND
CHAIRMAN, HOUSE SMALL BUSINESS COMMITTEE**

Congressman MANZULLO. Thank you very much for the opportunity to be here. The bottom line is this. We have been losing an average of 70,000 manufacturing jobs in this country for about the past 38 months, and there are about 40 to 50 Congressional districts out of the 435, plus the five territories and the District of Columbia, that really have a significant manufacturing base.

But it wasn't until an astounding article appeared in *Business Week* this past February that talked about the tremendous loss of high-value white-collar jobs. At that point, it brought in people such as Jerry Nadler, who doesn't have much manufacturing there in Manhattan but obviously has a lot of white-collar jobs. Jerry has become a member of the Manufacturing Caucus, which Congressman Tim Ryan and I founded just a few months ago, and we are already at over 50 members that belong to that.

But the problem that we have seen is the manipulation of the currency taking place in China.

Here is what it means in practical terms. For every item that an American manufacturer wishes to sell to China, it's the equivalent of a 15 to 40 percent tariff to get the goods into China. And it's also the equivalent of everything that the Chinese want to sell us, which they obviously do because of a low wages: it's the equivalent

of an additional 15 to 40 percent discount on the existing low price of what they're selling back to the United States.

I think that's how we have to couch the terms of the argument with regard to the significance of the pegging of the RMB to the U.S. dollar ever since 1994. When currencies do not float against each other, the currencies are rigged and rigged currencies do not evidence any indication that this is, in fact, a free trade situation that is taking place. That's the purpose of Senator Schumer's bill.

Now, I'm not on his bill. We sent out a joint letter that Senator Schumer and I signed to the Senators and the Representatives saying there are six bills out there that deal with this. Representative Jim Walsh from Syracuse, N.Y. has a bill that says unless a company has at least half their workers in the United States, they get no government contracts. That is Jim Walsh's bill. He is being murdered up there.

The bill that I'm on, working with NAM that says, look, there are several remedies out there that could be used. There's Section 14 of the WTO. There's the IMF. You could use the Equalization Stabilization Fund. There's Section 301. And there's just hard-nosed politics that, dang it, we should not be in the position of having to give away our jobs to the Chinese as some type of incentive for them to get moving on the North Korean issue.

You cannot tie in the loss of our manufacturing jobs with politics around the world, because guess who loses every single time on that. It is us. And as much respect as I have for Senator Schumer's bill, I'm opposed to the steel tariffs that were imposed because they were imposed politically. It killed manufacturers here in the United States, actually sent some of my manufacturers overseas.

That is one of the problems with tariffs. Tariffs should be imposed only in those situations where you've gone through an adjudicatory process, such as on a 301 case or the various stages of the WTO or the IMF. It's a more deliberative process. It's a little bit slower, but it follows a rule of law in there.

But what we did was, Senator Schumer and I sent out this "Dear Colleague" and said, look, you may feel comfortable with one or three of the bills that are out there. This is your particular choice depending on your particular philosophy. But what's important about it is that it's people of all philosophies may get on one or more of those bills to show how important this has come to the attention of the American people.

Now, NAM estimates China has over \$300 billion in foreign currency reserves, and here's the story on it. This is really shameful on what is taking place in the United States.

Number one, we lose manufacturing jobs to China all the time, and I'm at 11.3 percent unemployment in the second biggest city in Illinois. In 1981, Rockford led the nation at 24.9 percent. We know what it is like to take a hit. It's the tool and die center of the world. Whenever sales go down on tool and dies, that is the canary in the coal mine. For three years, I've been screaming that this economy is in the tubes and all we do is have people in Washington listen to the economists.

Listen to my machinists, not the economists. The economists don't know what a pink shop rag is that you use for wiping machine oil. And that's the barometer in this country as to the health.

If you don't have any orders for new tools and equipment, that means there's no new orders for new products that are being manufactured. That means the economy is going into the dumps.

And so we've been spending so much time on this Small Business Committee trying to educate Washington finally. The Financial Services Committee held an astounding hearing with Chairman Greenspan. I also sit on the Financial Services Committee. The Chinese have 450 million people in their employment force. They add ten million each year. They must grow their economy by 8.6 percent just to bring in the new people. Their manufacturing is up 16.9 percent and their exports are up by almost a third.

I said, in our country, if you listen to the NAM statement—NAM is a very responsible organization—they said, if we continue to lose manufacturing jobs at this pace, then we will lose the leverage we have in the world for innovation. Then Americans will have to get used to a lower standard of living.

I said, "Do you agree with that statement?" Chairman Greenspan said, "Misguided." I said, "Tell me why." He said, "Well, what you lose in the manufacturing sector, you gain in the high-end white-collar sector." I said, "Those jobs are leaving." What is it going to take Washington to wake up?

And then with these huge reserves, the Chinese come over and they manipulate our debt market by buying the Treasuries, and then their argument is, well, if you get hard on us with the trade imbalance and with the fixed RMB, we, because we buy so much of your bonds, can be responsible for you having to increase your interest rates and driving up the cost of living. No nation should be held hostage by that type of foreign currency manipulation.

And I want to tell you something. I've been working on this thing for years and I am hot that the United States economy is being bound by the Chinese and that is going to stop. It is going to stop now. The bleeding is oppressive in manufacturing.

If you don't have agriculture, manufacturing, and mining, you become a third-world nation. When you go back home—you know, what people want back home, Commissioner Bartholomew? Do you know what they want? They want to be able to live in the same town as their grandkids. What you've got going on in America today is six or seven centers in America where all the kids run off to the jobs and the beautiful little towns are desolated because the little shops could no longer compete because somebody says we can't criticize the Chinese too much because of the currency manipulation. It's got to come to an end.

And Senator Schumer is right over there. It's significant what he said. He introduced a bill that he doesn't want to pass because he knows it's the only way that you can gather the attention of the United States Congress and the people and the policymakers.

We found out about a year and a half ago that the Fed thought that the recession was over. I said, well, that's interesting, and, therefore, getting ready to raise interest rates. And I said, hello. So we held a hearing in the Small Business Committee and brought in Dr. Roger Ferguson, a marvelous man, deputy to Greenspan. And I said, "Dr. Ferguson," I said, "manufacturing is 16 percent of GDP." He said, "Well, it's only 16 percent." Now it's down to about

12 or 13 percent. Only ten percent of all the jobs in America are manufacturing now, we're losing them so fast.

And I said, "Have you ever smelled the sweet smell of machine oil on your hands?" He looked at me and he said, "No, but I will be there." And the next day his office called and he came out and we took him into a tool and die shop where you make the molds. We have a constituent back home, Don Metz, who actually makes the molds for the Oscars. Remember when a bunch of those got swiped or lost in Chicago? Well, they got a hold of Don and said, "You keep your mold. That's proprietary." And then he took it down and put solid gold in or whatever—it couldn't have been solid gold, but whatever it was, put some metal in there and made up these 20 or so Oscars that had been lifted overnight.

And we showed Dr. Ferguson and he said, this is the beginning. This is the first step from the mind of the inventor. And then we took him over to Dial Machine, and as a result of that, Eric Anderberg has gone on to the unofficial board of the Fed in Chicago as a manufacturing advisor to give testimony as to the Beige Book. We found out that the Fed was never using the machine tool index as an indicator to manufacturing in this country. Hello. You don't find machines within the beltway of Washington, D.C.

So we got involved in this and formed this coalition. We have been working with Treasury Secretary Snow, who is an absolute godsend to this country. This man understands exactly what is going on. He has a transportation background at CSX, and people that move things think differently. That's just the genre of their minds and it's been great.

From the beginning, in fact, it started with Secretary Evans a couple of months ago where he just let out a blast. He said, "We're going to send someone over there every month until you do something about it." And Snow went over there and raised all kinds of cain with China. Then he met in Dubai with the G-7 countries and they went in there and they started rattling the cages. Of course, the stock market went down.

But you know what? You could have interest rates at zero. It doesn't mean anything if the people don't have jobs. And as I go across my Congressional district, we are heavy into manufacturing, heavy into agriculture and value-added agriculture, and heavy into growth in the Chicago suburbs, and a lot of those people coming out of the Chicago suburbs into my Congressional district are working in the financial market.

So what are the suggestions that we have to do? First, is H. Con. Res. 285, which encourages the Administration to continue with these actions while pursuing other options, too. Currency moves by emotion. Don't ask me how that works, but it does. It works by pressure. We must vigorously enforce laws that provide remedies that counteract foreign currency manipulation. That's what's available in the WTO, the 301, the IMF.

Second, the U.S. must continue to encourage harmonization of an international exchange rate policy of freeing foreign exchange rates based on market forces. The G-7 said, look, what's more important to us than a stable currency rate is one that floats.

And third, the U.S. must enable the dollar and other currencies to move towards equilibrium rates by correcting market imperfec-

tions, countering foreign currency manipulations, and seeking cooperation within major countries, and seeking coordinated actions. And then, of course, again with 301.

But there are other problems that we have on our side. We have been working with different agencies to make it possible—listen to this—for the Chinese who want to buy our high-end stuff, just to get a visa to come to America to shop. Now, you think about that.

We complain about the fact that we have this trade imbalance, and then our own policies, and sometimes, excuse me, but the over-emphasis upon homeland security, that every Chinese person is somehow a terrorist and treated like one because it takes sometimes a year to get a visa, they just give up on us and they go to another country to buy their stuff.

So is that the Chinese's fault? No. That's our fault. And we held a hearing on this in the Small Business Committee, and that hearing, as a result of that, Matt Symanski, who is my Chief of Staff, who has been to China seven times in the past year and a half, has been trying to meet with the different agencies that are very reluctant because of orders coming from the top, and the great people we're working with, to work with the businesses.

So we sit here saying, Sandy, we have people in our districts that want to sell to the Chinese but we can't bring them over. So we pick up the phone every time and make a special request in order to get them in. That's pure stupidity on the part of the American government. Those are the things that we can do ourselves.

Well, I've spoken longer than I should have.

But you can tell our passion on this. Our people are desperate. They're desperate. They don't talk about the Iraq war at home. They come to hand me resumes, and they come up and say, "Congressman, can you help me get a job?" And you know what I do? And I know Sandy does the same thing, because his heart is just like mine.

I was at a Fourth of July parade and the young man ushering me around said, Don, four of our neighbors just got pink slips. Now, this is in wealthy McHenry County, a suburb of Chicago, where the unemployment rate is about seven percent. And I called those four individuals. And you talk about the spirit of America and what these people are doing. Just to follow up, how did you lose your job? What happened? What is the outsourcing? What exactly is involved in your situation?

I spend so much of my time helping people to get jobs individually, almost like an employment agency. These aren't government jobs, because there aren't government jobs out there to be gotten.

But we know firsthand what is happening to our people and how they are hurting. Again, if I could have my full statement be made part of the record, I would appreciate it.

Co-Chairman MULLOY. We will do that, Mr. Chairman.

Congressman MANZULLO. And if you want to curtail the questions in deference to Mr. Levin's testimony, that won't bother me one bit. It really won't.

Co-Chairman MULLOY. Okay. Mr. Chairman, we will stay in close touch—

Congressman MANZULLO. That would be fine.

Co-Chairman MULLOY. —and if we could have Congressman Levin, and then if you could stay around and we will have a couple questions and then we will—

Congressman MANZULLO. We can do that. Why don't you go with Sandy's testimony and maybe ask us questions together.

Co-Chairman MULLOY. Congressman Levin, thank you very much for taking time to come over here and share your thoughts with us.

**STATEMENT OF SANDER (SANDY) M. LEVIN
A U.S. CONGRESSMAN FROM THE STATE OF MICHIGAN, AND
RANKING DEMOCRAT, WAYS AND MEANS TRADE SUBCOMMITTEE**

Congressman LEVIN. Thank you for holding this hearing. I have a statement that also has attached a statement that I put forth yesterday at the hearing with the meeting of the Congressional Executive China Commission and I ask that it be part of the record.

Co-Chairman MULLOY. Yes, Mr. Congressman.

Congressman LEVIN. Let me spend a few minutes, if I might, trying to put this currency issue in perspective.

China was accepted, acceded to the WTO. There was a broad feeling that I shared that we needed to engage China and also pressure it, that isolation of China economically would never work because of its size.

So it went into the WTO. Actually, it would have gone in without approval of the U.S. But it went in as the U.S. Congress acted on the terms of their accession.

The terms of their accession included tariffs, and everybody seems to be comfortable about the issue of tariffs. Everybody acknowledges that is part of trade. Also, the accession covered non-tariff barriers and there remains controversy about that, but there were specific provisions placed in China's accession agreement regarding non-tariff barriers.

The same was true of subsidies. The accession agreement covered the issue of subsidies that is also a controversial issue as we go up the ladder of what is trade, what relates to trade, and what does not.

We also placed in the accession agreement a provision on safeguards. That has remained very controversial, but it's very much there, meaning that if there is a flood of imports from China in any sector, there was a provision for the U.S. to act. It was the strongest safeguard provision ever placed in American law.

There was no reference to currency and there was no reference directly to another controversial issue, and that relates to labor markets.

There was a provision for an annual review. We wanted the U.S. to work hard to make sure within the WTO there was an annual review of China's compliance, and that eventually happened. To date, China's compliance with the provisions that I mentioned, especially non-tariff barriers, subsidies, that compliance has not been satisfactory. There are many areas where China is complying, but many areas where they are not, and it is spelled out in my testimony.

For example, the imposition of quotas, import licensing, ways to get around opening their markets, limiting distribution opportunities. Written into that agreement was very clear terms regarding

distribution. The same was true as to non-tariff barriers like standards.

They are also not complying in the services area regarding, for example, high capital requirements, and also, they are making auto financing, which was critical for the U.S., exceptionally difficult by their capital requirements.

I don't think we have actively pursued—surely not enough—efforts to make sure that China complies with its promises. And the second annual review is now coming up through the WTO and I hope very much that the U.S. will be much more energetic and not complacent, and I spell this out in my testimony.

I'm also not satisfied with the use or the non-use of the safeguard provision, which we worked very hard on. The first two cases under that safeguard provision that came before the Administration, they decided, contrary to what was recommended by the ITC, not to utilize it.

So there are issues of compliance. I continue to think, especially because of China's size and importance, there has to be a combination of engagement and of pressure.

Now, let me talk about currency. Some of these other issues remain controversial and some people argue, don't worry. They focused tariffs all right, but on anything else, if a country doesn't follow the rules, it only hurts itself. It's protectionism to insist on China complying with what they agreed to, for example, on non-tariff barriers or on subsidies. And it's, in quotes, "protectionism" to utilize the safeguard mechanism. That's mind-boggling to me, since the purpose of it is to increase the flow of open trade, not to shut it down.

So now we come to the issue of currency. On this ladder, it perhaps is the most controversial because the minute it is raised, some people say, protectionism. What they ignore is that for decades, there's been a provision within the international rules relating to currency. Article 15, Paragraph 4 of the GATT, and this goes back before any of us were born, in the '40s—

Article 15, Paragraph 4, and I want to read it because it needs to be remembered. It prohibits WTO members from using, in quotes, "exchange action" to, in quotes, "frustrate the intent of the GATT, now WTO, provisions."

That hasn't been used, in part, I think, because currency manipulation on a broad scale is relatively new compared to these other trade issues. It isn't entirely new, because that's what Japan was doing in the '80s and into the '90s.

So what was the response? The response was to send Secretary Snow over to Japan and to China to jawbone. In Japan, as far as I can tell, the Secretary never raised the issue. And in China, as my friend Don has mentioned, it was raised. There was jawboning, but nothing else.

And I just quickly want to remind everybody of what Japan is doing. The two systems differ a bit. One has a peg and the other uses other forms of manipulation. This was a story in the *New York Times* not so long ago. Japan is spending heavily to pursue a weak yen policy, and what they're doing is spending billions of yen to buy many hundreds of millions of dollars to keep the dollar strong and the yen weak.

So what do we do about it? Jawboning hasn't worked with Japan. I understand the complexities. I don't want to make this a simple issue. But complexity should not lead to complacency, to doing nothing.

So some weeks ago, our office and I began to look at Section 301. Section 301, its utilization would be an effective prelude to possible action under Article 15, Paragraph 4. And here's what an investigation would do if it were self-initiated by the Administration.

It would provide an opportunity for a thorough examination of the issues, positions, and options. We would have, instead of a debate in a few newspapers, an open debate about what we do when currency manipulation or control is used to affect trade. Clearly, that is true in the case of Japan and China.

Secondly, if the USTR self-initiated an investigation in a 301, it would demonstrate the Administration's commitment to take this issue seriously. It would be a signal to other countries and a signal to American manufacturers and farmers and workers. There may be other solutions, but this self-initiation of 301 is there for USTR to utilize.

And I simply want to close with this. I hope we're beyond the issue of discussing trade basically in terms of protectionism versus free trade. When it comes to these issues whether it's subsidies, subsidies are a phony trade issue. I mean, Cancun broke down in part because of the failure to look seriously at subsidies in Agriculture.

Labor market conditions, we recognized with China that it was going to take time and we had to use other vehicles to raise these issues. But labor market issues are trade issues and currency, let no one scare off this Commission or anybody else from raising currency issues within a trade context. It's one of the three or five or seven or four or six, whether you like odd or even numbers, vehicles that are used by countries to determine the terms of trade, and it is foolish for this country to be scared off looking at these issues because of false cries of protectionism.

Many of us who are concerned about this have worked to expand trade, but under terms that are effective for the people of the United States of America, and that's what this currency issue is all about.

Thank you for having this hearing. I'm glad many of my colleagues have raised the flag. It should not simply be shot down because somebody cries a word. We need to look at it seriously. Thank you very much.

[The statement follows:]

**Prepared Statement of Sander (Sandy) M. Levin
A U.S. Congressman from the State of Michigan, and
Ranking Democrat, Ways and Means Trade Subcommittee**

The United States needs to both engage and pressure China. We must engage with China because the country is too important to ignore and we are better off if China is a part of the international system than if it is isolated. We must pressure China because our values demand that we help China to move in a positive direction and to prepare for a future based upon the rule of law, open markets, and respect for human rights. It continues to be vital that we carefully monitor and actively shape our relationship with China.

During the PNTR debate, it was often necessary to remind people to look at China not only as a potential market, but also as a competitor. And China's accession to

the WTO helped address both of those facets of the relationship—China agreed to open its markets to U.S. goods and services and at the same time it agreed to be bound by a thorough set of rules establishing acceptable terms of competition with the rest of the world.

I have taken an active interest in ensuring that China plays by the rules—that it complies with its WTO commitments and that U.S. manufacturers and producers have a fair shake in China. Over the past several months I have become increasingly concerned that China is not complying with its WTO commitments and is in fact trying to give itself an unfair advantage.

WTO Commitments, Industrial Policy, Investment Policy

A number of the concerns in our economic relationship with China relate to China's industrial and investment policy. Yesterday I had a chance to speak on China's WTO compliance at some length. I am attaching a copy of that testimony. To briefly summarize the points in these comments:

- China has used its quota administration and import licensing rules as ways of keeping out undesired imports.
- China has continued to limit trading rights and distribution rights, effectively limiting trade in U.S. products throughout China.
- China has used standards and other technical product regulations as a non-tariff barrier.
- In the services sector, China has set up barriers to establishment and expansion to keep out U.S. service providers, such as unreasonably high capital requirements in the financial services industry, including in the auto financing sector.
- China recently released a draft "Development Policy for Auto Industry" setting forth a proposed industrial policy that would use subsidies, product standards, technology transfer requirements, import barriers and other tools of state control to advantage domestic production of autos and auto parts.

China has moved toward compliance in some important respects, but in others, there is non-compliance and bending of the rules in support of what is essentially a mercantilist industrial policy to the detriment of U.S. workers, farmers, and businesses. It is necessary for America to adopt a more active approach.

It is remarkable that in the face of China's non-compliance, the Bush Administration has refused to use all of the tools that the U.S. bargained for. As part of the China PNTR deal, we included a special safeguard so that U.S. industries would not be injured by surges of imports from China. But, the Bush Administration has denied relief to two U.S. industries which the independent ITC found to be injured by Chinese imports.

The China PNTR bill also called for a special annual review in the WTO of China's commitments. The reason for this provision is that, unlike the normal WTO accession process, China was allowed to join before it had made the changes to its laws necessary to be in compliance with its WTO obligations. This fact, and the clear importance of China's economy, required an intensive review of China's WTO implementation. China has blocked effective use of this specially-negotiated review, refusing to provide written (and sometimes *any*) answers to questions or giving vague and evasive answers. The Bush Administration has essentially acted as if resigned to continuing uncooperativeness by China. The USTR has also failed to demonstrate any inclination to bring cases in the WTO against clear violations by China.

Currency Manipulation

This essentially passive approach has characterized the Administration's handling of the currency issue. Currency manipulation has characterized our relationship with Japan for years. The U.S. Government never took any concrete action to address this problem. The failure to address this problem had and continues to have a negative impact on the United States, limiting access of U.S. goods to Japan. It also had and continues to have a negative impact on Japan. Japan has maintained a protected domestic market too long, and has used export-led growth as a substitute for necessary domestic reforms.

China's undervalued currency now also poses a major problem. The China and Japan situations are not identical—China maintains a peg, while Japan actively intervenes to manipulate the level of its currency. However, many economists agree that the outcome is the same—undervalued currencies hurt U.S. exports and advantage Chinese and Japanese imports.

Just as we need to actively utilize all the tools available to engage and pressure China in other areas, we need to actively consider what action to take in response

to China's undervalued currency. And, we must act responsibly; this is an admittedly complicated issue.

Article XV, paragraph 4 of the GATT—the original WTO agreement—prohibits WTO members from using “exchange action” to “frustrate the intent of the [GATT] provisions.” To my knowledge, Article XV has never been used. The obligation has been in trade rules since the inception of the multilateral system in 1947 in recognition of the importance that exchange rates have on trade.

The Administration's current approach of “jaw-boning” has demonstrably failed. Secretary Snow's trip to China yielded only a re-statement of China's policy that calls for an exchange rate determined by market forces as an ultimate goal without any timetable, and with an attitude by the Chinese government that makes it unclear when, if ever, this might occur. Worse, he did not even mention currency when he visited Japan.

As a prelude to utilization of Article XV, paragraph 4, USTR has the power to self-initiate a “Section 301” investigation into the “exchange action” by China and Japan. A Section 301 investigation would provide an opportunity for a thorough examination of the issues, positions, and options. If the USTR self-initiated a Section 301 investigation, it would demonstrate the Administration's commitment to take this issue seriously—an issue so important to America's manufacturers, farmers, and workers.

If there are other reasonable approaches, they should also be considered. One way or another, we need to get serious and start taking concrete actions that yield results to address imbalances in our trade relationships.

These problems in our trade relationship with China demonstrate vividly the importance of expanded trade and the importance of vigorous efforts by Congress and the Administration to shape the terms of expansion. Thank you.

Discussion, Questions and Answers

Co-Chairman MULLOY. Congressman, could you both stay for just a couple of questions—

Congressman LEVIN. Sure.

Co-Chairman MULLOY. —and then we will move on to the next panel.

Congressman MANZULLO. That's fine.

Co-Chairman MULLOY. One, thank you very much, both of you, for your testimony.

Congressman MANZULLO. Could I make a comment on—

Co-Chairman MULLOY. Yes.

Congressman MANZULLO. —if I could, on the Section 421, on the surges.

Co-Chairman MULLOY. Yes.

Congressman MANZULLO. The problem that we have—I've got a manufacturer back home who makes brake rotors and drums. The ITC will not allow tracking of loss in product prior to the date of China coming into the WTO along with loss after that date. Are you with me on that? Even if it shows a tremendous drop going on, they say, well, no, no, no, under the law, we can only look at the loss that's occurred since China came into the WTO and we've essentially had to ignore losses before that date. That is an erroneous interpretation, Sandy, because you drew that legislation.

Congressman LEVIN. No, and now that you raise it, I will go back and look at the language, because the surge provision—there's also a separate one on textiles, but the surge provision was one of the three major ingredients of the amendments. The second one was the annual review and the third was the creation of this Commission, of the Commission, the Congressional Executive Commission.

So, Don, I'm glad you raised it. Let me go back. So far, the two cases that the ITC has handled, they've made clear their interpretation of that provision. We'll look at it.

Co-Chairman MULLOY. Commissioner Dreyer.

Co-Chairman DREYER. Yes. First of all, I thank both of you. Representative Manzullo, in a town where bland complacency seems to be the order of the day no matter what's happened, I congratulate you on the passion you bring to this.

I would also suggest that it's a bit worse than either of you have suggested in that, increasingly, Chinese are moving not only into jobs in high-tech sectors, but they're taking positions in academia, including, by the way, in the service academies. So when you are getting economic analysis, you are getting it through a Chinese perspective.

My question to you is, this challenge that's been raised, that China is currently the engine of world economic growth, it is doing better economically than anywhere else, and if they are forced to float their currency, to reduce their subsidies, things both of you have mentioned, this engine will stall, and when this engine stalls, it's going to create international financial instability with it and no one will win. How would you reply to that?

Congressman MANZULLO. Well, the U.S. isn't winning now. And we're Americans. We have to look after ourselves. If the leader leads responsibly, then that means that that type of leadership will bring with it the correct answers.

But I'm just tired of the American economists taking the side of the Chinese.

Co-Chairman DREYER. And it's going to happen more.

Congressman MANZULLO. Rockford, Illinois is at 11.3 percent unemployment. It's much bigger than that because the people give up. They go off the unemployment rolls. Look at it from the American perspective. How can you possibly lead if all you worry about is what the Chinese think. I know the Chinese Ambassador. I'm the Chairman of the American-Chinese Interparliamentary Exchange. I meet with him frequently.

You know what you've got to do? You have to take a textbook out of Henry Ford. Pay your people enough to buy your own stuff and not depend upon the United States buying 40 percent of your exports to bail you out. I said, have you ever thought about that? Duh. Well, they don't like that. You know why? Because they would be less competitive internationally. I care about what goes on in world trade, but I also care about the factories that are being shuttered and the people being unemployed, massive unemployment. How much more unemployment, Sandy, do we have to take in this country before people of both parties—this isn't a Republican or Democrat issue—wake up to the fact that we're losing on this thing?

Co-Chairman MULLOY. I guess he asked you the question—

Congressman LEVIN. So I'll respond.

Co-Chairman MULLOY. Yes.

Congressman LEVIN. There is clearly a major challenge to manufacturing in the United States, clearly. Now, we have to have an honest discussion about it because there are many in our midst, and they're not only economists, who think that there's a shifting going on from manufacturing to services and that is basically a very beneficial shift. We have to talk that through.

As some on the panel and I and others have pointed out, manufacturing is the major user of high-tech in this country. So when you diminish manufacturing, it's going to have an impact on high-tech.

We need to have a grand debate about the role of manufacturing. The auto industry, once again, has been the first engine pulling the United States out of a recession, and there are others, but they were the first. So there is a challenge, indeed, I think a crisis.

I want to put this, if I might, in the perspective I see. When we consider China's accession to the WTO, many of us said, look, it's not only a market and a greater one later, but it is now and will increasingly become a competitor, and that is happening way beyond where they were just five years ago. They're a competitor.

So this isn't a question of being pro- or anti-Chinese. It's a matter of China being integrated into the world economic community on the basis of rules that everybody abides by, including them. And because they are so large, it is especially important that they play by the rules. It's not quite as important if it's an economy one-twentieth the size of the United States. China is now arguably, or soon will be, the third-largest economy in the world. It depends how you calculate.

So now to your question about China and the engine of growth, and this is one of the arguments used by some, and it's not only economists. If you—and I read it in the *New York Times* this morning, if you get after them in terms of manipulation of their currency or their pegging the currency, and the same is said as to Japan, you're going to shut down economies that have been important to the world global—to the world economy.

I think there are a couple of answers to this. Number one, I don't think very many are suggesting a radical change tomorrow. We're talking about China floating its currency and doing so with some definite date in mind. All they're saying is some time in the future. And with Japan, also we need a policy, I think, that doesn't change it radically tomorrow. Lord, we would have accepted gradual change in the '80s in terms of their non-tariff barriers and their currency. But it's been 20 years and we're the same place as we were with Japan 20 years ago.

The second point is, China is large, but compared to the United States and Europe, it remains not as large, and to argue that they're playing by the rules in a responsible way would shut down the world economy, I think is a gross overstatement.

Co-Chairman MULLOY. Commissioner Becker.

Commissioner BECKER. Yes. Thank you, Mr. Chairman. I wanted to raise a couple of questions to Senator Schumer and Senator Dorgan. Of course, they're gone now, but your testimony has all been sort of the same, particularly from you.

Congressman MANZULLO. Yeah. We're all losing jobs.

Commissioner BECKER. Right. We're all in this together.

The first thing I wanted to mention was the reference to Cancun and the collapse. I think that was Senator Dorgan, or Stenholm, I'm not sure.

Congressman LEVIN. Probably Charlie Stenholm.

Congressman MANZULLO. Representative Stenholm.

Commissioner BECKER. He had mentioned that. I don't want to promote him here. I'll leave that for his constituencies. And he talked about the incompetencies of those who negotiate our trade agreements and how lopsided they are. I wanted to mention one thing in regards to that.

Congress has tried to give direction to USTR in a very strong way of how to deal with or how to handle attempts to weaken our trade laws, particularly the anti-dumping and the countervailing duties. But contrary to this, in Doha, the USTR put on the table as one of the modalities that was going to be worked out between then and Cancun just exactly those items, the anti-dumping and the countervailing duty. They would have been on the table at Cancun for negotiations had everything went much more smoothly, but that was not the case. I just wanted to mention that in spite of direction from Congress, they proceeded in an entirely different way.

The other point I wanted to make, though, was to ask for comments on, and it sort of goes to what Commissioner Dreyer had pointed out, was some of the testimony that we're going to hear this afternoon, I expect we will talk about the frailties of the economic system in China and that pursuing the change in the RMB could actually collapse the economic structure and perhaps even collapse the government.

This is of great concern to multinationals who have invested a lot of money and efforts into China and to the financial institutions that are developing a strong foothold into China and I was just wondering if you had any comments on that and the feeling as to whether that would be as drastic a response. It's sort of implied that, from what I've read, it's sort of implied that we have a responsibility for the stability of the Chinese government and that we should be very careful of what we're doing.

Congressman LEVIN. Should I comment first on the trade laws? I didn't agree with the trade promotion authority bill that passed. We had an alternative. But both of them were strong in terms of the trade laws.

I think, as you know, at Doha, a step was taken by our Trade Rep that opened the door to renegotiation, and at Doha, I expressed the belief that was a mistake. I think it turned out that it was opening the door, because if Cancun had proceeded, everything was going to be on the table on our trade laws and that was what we should be avoiding.

I was involved in the Uruguay Round and in the final negotiation of the anti-dumping and countervailing duty provisions. We negotiated hard. We reached an agreement, and that agreement should not be undone.

I might say that I think that whatever was the motivation of the Administration in terms of steel, and there was, I think, too large a political motivation, I think you need to look at the policy of it, and I think in terms of policy, the action of the Administration was correct and it's working out, as Mr. Becker knows better than anybody else here, I think, to have some reconstruction within the steel industry with everybody contributing, both management and labor, and I think we'll end up with a steel industry, while if no

action had been taken we would have ended up with a very tiny one, a diminishing one, in any event.

When the people come before you and make the argument that you suggested, and it was discussed a bit earlier, I suggest that you challenge them and don't let them paint the picture as if we're saying to the Chinese, float your currency without any limitations tomorrow, or the same with Japan, don't—just don't buy any more dollars. No. The question is whether the currency state of affairs is satisfactory, and I think the answer to that is no. The answer to that is no. Japan cannot continue on its course without continuing to injure American industry, its business, and its workers. And just talk to business people and they will tell you that.

And as to China, the same is true. If they continue to peg their currency and there is no change at all, it is going to have a considerable impact on U.S. industry and eventually on services. So don't let them paint you as suggesting a radical position when there are alternatives between doing nothing and a total change overnight.

And you challenge them. Don't let them make you a radical, because when we propose answering these trade issues, there is always an understanding that there has to be—you have to tailor it to the specific situation. But they don't even go to the sewing machine. They don't tailor anything. They just throw up their hands and say, the best trade policy is hands off, even if the other guy is rigging the system. That's what the basic issue is.

Co-Chairman MULLOY. Congressman Manzullo.

Congressman MANZULLO. I just want to say, with regard to hurting the multinationals, multinationals are in China for two reasons. One of the reasons is there's a huge market over there for their product to the people living in China itself, and you can understand why. It just makes sense in most occasions to continue to manufacture there.

But you can't have it both ways. You can't outsource from the United States, such as GM and Ford, to China and expect to have a guaranteed cheap source of labor by taking the position that having a fair system of currency exchange is somehow going to hurt the company. You can't do that any more than you can put on a price freeze.

I'm sure the unions in Detroit would not be agreeable to a price freeze on their labor. And essentially, this is what the multinationals have done. I'm not being critical, because these are our companies and they support a lot of our jobs here, too, but what the multinationals are saying is that they want a price freeze on Chinese labor, to be guaranteed a cheap supply of Chinese labor so they can do more and more outsourcing of parts coming into our automobiles, and I've got a Chrysler facility in my Congressional district—and you can't do that.

World trade does not depend upon a fixed guarantee system of labor being frozen. And when you convert it into those terms, then you can see how dramatically wrong it is to have a currency that does not float.

The second thing is you need an incentive—to keep manufacturing in the U.S. Let me tout our bill. You know, the FSC/ETI bill, the WTO held that it violated the WTO, and essentially, that was a blessing in disguise. So there is a bill out there now, Crane, Ran-

gel, Manzullo, Levin, which says that, with regard to C corporations, to the extent that they manufacture in the United States, their income tax will be lowered by up to ten percent.

So it answers the call, and there are a lot of companies that are multinationals that are on it. UTC is on it, the Boeing Corporation, and other big corporations. But their thinking is, if we do so much outsourcing around the world, who's going to have a job left in the United States to buy the stuff we're manufacturing overseas? Does anybody ever ask that question? And it has to be asked.

So when we've been working very diligently on this bill—Sandy, I think we have 150 cosponsors in the House—

Congressman LEVIN. Yes.

Congressman MANZULLO. The other side of the bill is Congressman Thomas, the Chairman of the Ways and Means Committee. He's got a bill out there. Senator Grassley just introduced a bill that really adopts the concepts of ours, and that is American companies would be rewarded for keeping manufacturing in the United States by a decrease in the taxes that they pay. The bill that we've been working on, Sandy, very diligently, that has a lot of steam, but it's up against the Chairman of the Ways and Means Committee.

But what we see going on in this city is that all of a sudden, that more and more people are cognizant to the issue of manufacturing—Sandy, you would agree on that—

Congressman LEVIN. Very much so.

Congressman MANZULLO. —because they see the bleeding. Now, we're creatures of our Congressional districts, it's obvious. We know what machine oil is. Chairman Thomas is a wonderful man, but he doesn't have the industrial base that we do. He has pistachios and pecans and lettuce and the high-end ag and tech. He's lost a lot of jobs. And we talked about garlic, both from my ethnic background and the fact that the Chinese are flooding the market with garlic and hurting many of his garlic growers.

It's been a very interesting discussion of public policy that's been very open. There's been no contention. We bring in the backgrounds of the Members of Congress with regard to these various bills, because as the Constitution envisions, we are creatures of our Congressional district and we represent our people.

And then Bill Thomas just, what, about two or three weeks ago, Sandy, added that massive manufacturing component to his bill on replacing that. So in a sense, we're encouraged that more and more people are waking up to the fact that we're losing this manufacturing base.

Co-Chairman MULLOY. Here's what we're going to do now. We're going to have one more question from a Commissioner, then two Commissioners want to make a brief comment to both of you, and then we're going to take a five-minute recess, and then we're going to have our next panel, which are exchange rate experts who have all different views on this issue to talk with us for a couple hours.

But Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you very much, and thank you to our witnesses, both for coming today and being so generous with your time. I know how difficult that is, to fit in so much time, and also for your leadership on behalf of the American people.

I, of course, had the good fortune of having worked for now Democratic Leader Nancy Pelosi for 15-and-a-half years and I know that she and a number of other people on both sides of the aisle started raising concerns about some of these trends in the U.S.-China relationship going back 13 years, concerns about the trade deficit, about manufacturing, about what was going to happen in the service sector and intellectual property rights, about tech transfer, in fact, all of these things that we're now talking about.

China's accession to the WTO, the whole PNTR debate, of course, one of the major selling points on Capitol Hill was that it was going to be providing an effective mechanism to address some of these concerns. And, in fact, as you both have testified, things have really gotten worse.

I was wondering if you just had thoughts on why those mechanisms haven't worked. Is it flaws in the mechanism? Is it lack of political will? Is it something else? Why are we where we are?

Congressman LEVIN. Quickly, the annual review can be very meaningful if everybody will work at it. The Chinese government position was they weren't going to actively participate in terms of back and forth, in terms of written communications. I think if the WTO is serious about it that the Chinese in this second round more likely will cooperate more.

It needs to be made clear. This wasn't anti-China. Why an annual review? It's because most countries come into the WTO already complying with WTO provisions. In the case of China, that wasn't true.

Secondly, China's size. The annual review should be and can be meaningful.

Thirdly, the surge provision is, as I said, the most tightly written surge provision ever placed in American law. We need much more vigorous use of it by the Administration. They ducked it the first two times, and they were small amounts of money, but the issue was a big one. The Commission that was created, the Executive Congressional Commission, along the lines of the Helsinki Commission, can become a very, and I think is becoming a more effective instrumentality.

So I think there are vehicles there that can be used to make sure that China abides by its commitments, plays by the rules. We need to more actively work with the Europeans and with others as well as the Chinese.

So in part, I think it's been the failure of the Administration to be vigorous enough in the utilization of the provisions that were put into the law.

Congressman MANZULLO. What we have here is a clash of two cultures. The Chinese have 6,000 years of history, 5,000 years of recorded history, and the Chinese think, not for their own generation, but for second and third generations down the line.

We in America, the longest long-range planning most corporations have is three months. It's true. It's the next quarterly estimate of profit. And we don't think long-range.

There's a book that's been written by an author by the name of Alan Kennedy called *The End of Shareholder Value*. I don't know if he's a "D" or an "R." I have no idea what his political philosophy

is. But he talks about the changing nature and the pressure put on corporations in this country, raise the value of the stock so that the retirement portfolio of the retirees will be something they can live on.

But on the other hand, raising the price of the stock isn't all there is, and what we've seen in America, and how American companies differ from Chinese companies. In America at one time, you were profitable if your company made a reasonable profit and you took care of your employees because employees were always considered to be capital assets. Today, the definition of profits has changed. You have to be more profitable than your competitor, as if there's only room in the economy for one person.

That has squashed long-range planning. It's made the inevitable estimates on the quarterly earnings to be paramount, and that's why you've seen, I believe it was AT&T who said, we're not going to do that any more. Warren Buffet at Coca-Cola said we're not going to comment on those quarterly earnings. Pepsi-Cola said you can't do that.

We're actually going to have a hearing on the changing nature of American corporations. And again, this is not fault. We're talking about sociological changes and financial changes that have made American companies think differently in terms of the long-range investment and the impact that it has because they're under so much pressure in order to bring these profits up.

No one wants to talk about that. And again, this is not anti-capitalism. This isn't corporation bashing. But it's an opportunity for revisiting to see what are we doing wrong in our culture in the terms that we raise our companies. That's quite an issue, but I think that stands at the root of it.

We've got a vote coming up shortly on the continuing resolution. Go ahead.

Co-Chairman MULLOY. Commissioner Reinsch, do you want to say one word, and then Dick, and then we'll move out of here.

Commissioner REINSCH. I just want to commend both of you for different reasons, if I may.

Mr. Levin, picking up on something that Commissioner Bartholomew said, I really appreciate your very thoughtful and nuanced statement that makes one very important point that others have not made, which is that there are existing structures and laws both in WTO and in U.S. law that are designed to address these problems. I think you're right, they haven't been fully or properly implemented, and that's something to work on. But I think it's very important to note that the structures exist. Some people like you work very hard to put them in place and I think we ought to look to them before we go off and create new ones.

Mr. Manzullo, I particularly want to commend you for a point you alluded to only in passing, and that is your work on the visa issue. I testified at your hearing. You are the only Chairman in the House or the Senate that has not been intimidated by the security people and has taken this issue on.

Congressman MANZULLO. Well, we have no jurisdiction. That doesn't mean anything to us.

Commissioner REINSCH. Well, your work is very important. I mean, whether or not there's an issue with the Chinese, we some-

times do shoot ourselves in the foot, and this is the classic case of having done that and it has prevented us from increasing our exports to China and other places, as you note. I wish you well on that and hope that your staff in the follow-on work that they're doing with my other hat organization and others bears some fruit, because we're not having a lot of luck with anybody else and I appreciate it. Thank you.

Congressman MANZULLO. Bill, if I could follow up on that for just a second. We got involved in this when I found out that the Army had ordered 2.5 million black berets for their soldiers, and they were going to be made in South Africa, Romania, Sri Lanka, India, China, Canada, and then some in the United States. And you know what I had to do? I had to subpoena in—I'm not proud of this, but I had to do it—the Chief of Staff of the Army, a four-star general, General Shinseki, a marvelous man, and two generals from the DLA and say, what are you doing? Have you ever made the connection between the loss of manufacturing jobs in this country and the giving away of our procurement?

Do you know what is going on now? DLA wants to order 30,000 flight jackets with Pakistani goat leather because they don't think there's enough U.S. goat leather around. Representative Charlie Stenholm is the goat king—and in working with him, I'm going to become an expert in goats. But I have to when you're around this place.

But we go one by one by one, and it carries over into other areas of procurement. We have an investigation going on of the F-35. It's important to bring it up. That's 90 percent American money where we're guaranteed to buy 3,000 of those plans. This is the joint strike force. The Brits put up about five percent of the money. They're guaranteed to buy 400 of them. Five other nations get a huge amount of the manufacturing and they're under no obligation to buy any of those aircraft. Now, you tell me that's right?

What has happened is that one of the subcontractors on the F-35, instead of buying a high-quality, high-end drilling machine from Ingersoll Milling Machine in Rockford, Illinois, bought it from the Spaniards, who are not part of that seven-nation consortium, based upon best value. It's cheaper to buy there because of the currency.

U.S. taxpayers' dollars for U.S. aircraft flown by men and women in U.S. uniforms, giving away the store in procurement. There's balance somewhere.

But that, again, it's a whole new area of the loss of our manufacturing base. We are all over it, had to order a GAO study. We get statements that say it would cost millions of dollars to monitor where these parts are coming from, but they're already bound by the Berry amendment and by the Buy American Act to follow those rules and they're not following existing rules and it's causing the loss of hundreds of thousands, if not millions, of manufacturing jobs in this country. That's where we can start, is with our own government's procurement policy.

We do have to go vote now, Sandy. It went off. Thank you.

Co-Chairman MULLOY. Thank you.

Congressman LEVIN. Thank you very much.

Co-Chairman MULLOY. We want to work with you and your staffs as we proceed on these issues. Thank you again, both of you.

Congressman MANZULLO. Thanks again.

Congressman LEVIN. Thank you so much.

Co-Chairman MULLOY. We're going to take a five-minute break and then we'll have our next panel.

[Off the record.]

PANEL I: EXCHANGE RATE ISSUES

Chairman ROBINSON. Excuse me. Time is tight for some of our witnesses. If we could all take our chairs, that would be very helpful. Thank you. If we could all take our seats, please.

Co-Chairman MULLOY. For this panel, I want to let our witnesses know how much we appreciate them taking time to be here, and also for the excellent testimony that has been submitted by the panelists. Mr. Roach, I found your testimony very interesting. A little different approach than we have been hearing so far.

And here is the other thing. Each witness will speak for 7 minutes. Dr. Bergsten has to be out of here by noon today. This panel, we are going to run it right on into 1 o'clock. So if we could have Dr. Bergsten deliver his statement, take some questions, and then, Dr., if you could stay around and listen to the others, fine, but if you have to be out of here by noon, we want to have an exchange with you. Then we will go through each of the others. Seven-minute opening statement.

The Commissioners, we are going to limit their question time to five minutes so that they can get in and out. When you are taking a question, if it is kind of wrapping up here, meaning their time is done, kind of finish up with your answer and do not extend it on. If we could do that, that would be enormously helpful.

On this panel we have Dr. C. Fred Bergsten, the Director of the International Institute for Economics. We have Mr. Stephen Roach, who is the Chief Economist with Morgan Stanley. We have Mr. David Hale, who is a friend of the Commission, been here with us before. He is the Chief Economist and Founder of Hale Advisors. And Dr. Ernie Preeg, who is an adjunct fellow at the Hudson Institute, and I believe you served in the Reagan Administration in a policy-level position in that Administration. I know Dr. Bergsten also served in a high-level position, Assistant Secretary of the Treasury.

So if we can start with you, Dr. Bergsten, and give your statement and then we will have a few questions to you.

STATEMENT OF C. FRED BERGSTEN, Ph.D. DIRECTOR, INTERNATIONAL INSTITUTE FOR ECONOMICS

Dr. BERGSTEN. Lots of topics have been raised this morning, but I take it our focus here is the exchange rate. I also take it that most people, not everyone, but most people agree that the renminbi is substantially undervalued and needs to be raised in terms of reducing China's surpluses and helping the U.S. reduce its deficit.

So I am going to address three issues: how much should the currency be changed? How should the mechanism of change be pursued? And why I believe it is in China's interest to do it, as we are suggesting they should.

First, how much? China has not been running a very large global surplus. A lot of people here focus on the bilateral surplus with the U.S. but that is wrong. We should focus on its global surplus, which normalized over the last few years, has been about 2 percent of its GDP. I believe we should seek a change in its exchange rate and other policies that would move it to a current account deficit of about 2 percent of its GDP. It can easily finance that from direct investment and other capital inflow. So the goal, I would submit, is a change in China's trade position by about a minus 4 percent of its GDP.

We have calculated, with trade elasticities and the like, how much that would take and our conclusion is that a revaluation of 20 to 25 percent of the renminbi would do the job. That, incidentally, should permit other Asian currencies, including Japan, Taiwan, Korea, to go up at least partway, maybe 10 percent or so, because with the renminbi appreciating, they would be willing to appreciate against the dollar since it would actually create a depreciation of their own currencies against the Chinese currency, their main competitor.

If you put all those currency changes together the result would be a reduction of about \$50 billion in the U.S. current account deficit, which in turn translates to something like 500,000 high-paying jobs, mainly in manufacturing in this country.

I am not going to spend time talking about our overall deficit. It is getting close to \$600 billion a year. We have to import \$4 billion of foreign capital a day to finance it, plus our own capital outflows. It was exactly right, as Senator Schumer and Congressman Manzullo both said, that the situation is unsustainable—in terms of both our domestic politics—and in terms of the capital markets and the risk of a dollar crash at a later point. We have a huge interest in changing the situation, and a 20 to 25 percent appreciation of the renminbi with follow-up changes by the other Asian currencies would be an essential part of that correction.

Point two, how to get it? This is a critical point because I believe Secretary Snow, the G-7 and all of the Congressmen who spoke this morning have it wrong. They are proposing that China float the renminbi, and that is a worthy long-term goal. We all believe in floating rates, markets and all that, but if we put our effort in that direction it will not happen for 5 years or more.

The Chinese are correct not to float their currency because to do so in a meaningful way they would have to eliminate their capital controls, and Secretary Snow was consistent in asking them to eliminate their capital controls as they go to a floating rate. The problem of course is that China has a bankrupt banking system, that the vagaries of international capital flows are such that no country wants to expose itself to those uncertainties when its internal financial system is not sound, and that it will take a long time to occur. To put it pragmatically, if China actually floated the currency and freed up its capital controls, the renminbi would probably go down in value, not up. The reason is because there is a huge amount of wealth in China, invested in China, which through the natural process of portfolio diversification would in the first few years, after freeing the capital account and floating exchange rate, go out. The rate would go down, their competitive position would

improve. The situation would get worse. So on both conceptual and pragmatic grounds, our government, and the Members of Congress who spoke today and the G-7 over the weekend in Dubai were asking for the wrong thing.

What they should be asking for, and what I believe is eminently doable, is for the Chinese to keep their fixed exchange rate system but to change the price: revalue the currency, as I said, by 20 to 25 percent on a one-shot basis. Tell the Chinese we respect their desire to maintain a fixed exchange rate and maintain some restrictions on the capital account as long as they have a bankrupt banking system, et al. Yes, move toward correction and reform of that over the long run. But, in the short run to deal with the problem we are all talking about here today, we want a one-shot revaluation of a substantial amount, as I have calculated, which would give a substantial improvement to our international position, convert them into a sustainable position, and I believe significantly dampen, though not of course eliminate, all the kinds of pressures we have talked about today.

Point three. I believe it is very much in China's interest to do this for half a dozen reasons. First, they are now experiencing huge inflows of speculative capital, which believe the renminbi is going to go up. That is further ballooning the Chinese money supply, adding to financial instability in the country. Indeed, the Central Bank has begun to raise reserve requirements to deal with an incipient bubble. The only way to choke off the capital inflow is a substantial revaluation of the currency to end the incentive for speculative capital flight in an inward direction.

Moreover, note that the worst thing to do would be to widen the band and permit the rate to go up by only 2 or 3 percent. That would say to the speculators, ah, they are going to move the exchange rate. We know 2 or 3 percent will not do it. We are going to pile in. It would intensify the speculative pressure. So widening the band, like asking them to float all of a sudden, are both non-remedies or worse. I come back to a one shot revaluation.

The Chinese will thus do it, one, because it will help dampen internal speculation, inflationary pressures and ballooning of the money supply, which worsen the situation of their already unstable financial system. Two: a higher currency, and therefore a shift of their external position from surplus to deficit, will stop the build up of reserves, which is a huge misallocation of Chinese resources. China is a country with a GDP of a trillion dollars, and \$350 billion of foreign exchange reserves is 35 percent of the GDP. If we did that, we would have foreign exchange reserves of \$3½ trillion as compared to the \$160 billion that we have. In other words, this is a massive misallocation of China's own resources, putting money in T-bills earning 2 percent when their own economy is growing at 7-8 percent a year and they could have a return of 10-20 percent on their internal investment.

There is a big debate on that in China. The government is under much criticism internally for such resource misallocation. A change in their exchange rate and external position would help enormously.

Third. The pressures that you are hearing in this discussion this morning. Call it protectionism, call it defending our industrial base,

call it what you want, the current situation is unsustainable. There will be very strong reaction, not only in U.S. incidentally but in other countries around the world, to a continued rapid build up of Chinese reserves, trade surpluses and the like. The Chinese have made a huge commitment to joining the WTO, joining the world system, and using trade liberalization—yes, I said trade liberalization in China, which is very profound—to promote their internal domestic reforms. If they wind up with a bunch of trade actions against them, their leadership will have massive egg on its face and be in very bad shape. For that reason too, they will want to avoid it.

Finally, China places a lot of importance on its role in East Asia and its role in the world. They got justified praise for not letting their currency depreciate and not devaluing in the Asian crisis and making it worse. Now they need to make an equally positive contribution to the world economy, global stability and avoidance of trade backsliding, by raising the value of their currency. It would be the best thing they could do for their neighbors, much better than the China-ASEAN free trade agreement that they are discussing in response to the concerns of their neighbors about their competitiveness. It would provide a major step in global leadership terms for the Chinese, which is also very important to them.

In short, we can see how much change is needed: 20–25 percent. There is a clear path to get it: a one-shot revaluation, not some chimerica of floating half a decade from now. The Chinese themselves have a major interest in doing it.

I would be happy to answer any questions if there is time to do that.

Discussion, Questions and Answers

Co-Chairman MULLOY. Are there any questions? Commissioner D'Amato.

Vice Chairman D'AMATO. Thank you very much for your very interesting comment, Mr. Bergsten. Do you think that there is a center of gravity in the Chinese economic elite that essentially not only understands but makes the same argument that you do and reaches the same conclusion? Is there authoritative evidence do you think in writing or at least in commentary that would lead us to think that they agree with your analysis?

Dr. BERGSTEN. I can personally testify that they agree with a lot of it. On my last trip I had dinner with the Minister of Finance, a long meeting with the Governor of the People's Bank of China, and they said explicitly: "We know that the currency is undervalued. We are not even sure it is a good thing that it is undervalued. We have a game plan to correct that situation. We have uncertainty about how much, how to do it, and the timing." In fact, when I asked about the timing, the answer I got was, "Well, maybe sometime around the Olympics" but of course they mean their Olympics, the Beijing Olympics in 2008. I suggested that was a bit too leisurely and one ought to think about doing it more quickly.

But again, to the extent we ask them to float and free the capital account, we are postponing likely action rather than promoting early response to the kind of problems that we are discussing here today.

Vice Chairman D'AMATO. I do think that the comments that Congressman Levin made indicates that he is more in agreement with you than you think. I mean in saying floating, he did not mean releasing it all together. He did say staging it. I think it is not that big a step from staging it to what you are saying.

I have a second question, and that is on your commentary on T-bills and the size of their buying on that account. Is it your understanding or your impression that they have reached a conclusion that they have done too much of that and they need to start curtailing it radically? And what would the impact be if they did start curtailing their purchase of T-bills radically? Or would they be willing to start selling off some of their stock? A lot of people are worried about this.

Dr. BERGSTEN. I think Chinese reserves are excessive. There is no rational basis for having \$350 billion of reserves in China so they should sell some off. But that is not going to kill our T-bill market. Someone will buy the T-bills. The price may change to some extent but, if we are talking about getting our trade deficit down, and realizing that we have to bring the exchange rate of the dollar down as the only mechanism to bring our trade deficit down, the prices are going to change. But it is fascinating how over the last 18 months the dollar has come down 40 percent against the Euro, down by a trade-related average of 10 percent, and U.S. interest rates have been at their lowest levels in 40 years. In short, it is not axiomatic that a decline of the dollar will push up interest rates.

If our economy goes to full employment, if we overheat, and if our friends in these buildings push the budget deficit not only to \$500 billion but keep going up of course interest rates are going to go up, but that is not the fault of the Chinese.

I agree with Chairman Manzullo that we should not be hostage to the decisions of other countries in operating our financial markets. But gentlemen and ladies, we are not. The Chinese did not create our trade deficit. We create our trade deficit. It is up to us to take action to correct our trade deficit. Part of that will be a lower exchange rate for the dollar. That is not good for our welfare but it will reduce the instabilities and unsustainabilities that I have talked about.

Co-Chairman MULLOY. If I could do this, if any of the other witnesses, even though you have not yet delivered your full statement, if you have comments on anything that Dr. Bergsten says in response to questions that he is taking now, feel free to do that.

Commissioner Wessel, and then Commissioner Ellsworth.

Commissioner WESSEL. Thank you. It is good to see you again, and I appreciate your coming before this panel.

Some weeks ago a number of articles appeared that the Chinese in fact might respond to this problem by freeing up the ability of Chinese interests to invest in the U.S. market, going through bonds, equities, in fact, to companies themselves. We saw just a couple of weeks ago, Magnequench, a defense concern in Indiana was purchased by the Chinese and moved all their production equipment to China. Are we possibly going to see a replay of the 1980s vis-à-vis Japan, where Japan with Rockefeller Center, with the investments they made here, decided to deal with some of their

trade problems by shifting production patterns, buying our equities, and in fact, I would argue in some ways neutering our political system at times by creating an investment network here in the country that limited our responses to some of our trade problems?

Dr. BERGSTEN. It is not only a replication of Japan in the 1980s but a replication of Germany in the 1960s, and indeed every surplus country who winds up with an undervalued currency and tries to carry out every kind of gyrations possible to resist revaluation of its currency. There will be efforts to manipulate export tax rebates, for example. The Chinese are talking about that. There will be moves on both capital inflows and capital outflows, all in an effort to fend off the evil day when they have to revalue the exchange rate. I have suggested it is actually in their interest to do so, and they should not view it as an evil day, but certain forces within the country certainly will, as in all other countries facing that situation.

The problem again is that the markets know that those are not effective substitutes and will not sustain a new equilibrium of a lasting nature and so those steps tend—as I mentioned with widening the currency band—to promote more speculative inflow and worsen the existing problem and indeed push it toward eventual resolution. As in the case of Japan you mentioned, remember the yen exchange rate eventually kept going up and up and it finally got to 80 yen to the dollar in 1995. I will also take the occasion to say that China today is not Japan in the 1980s.

Dr. ROACH. Can I just echo that? I think there is one huge misconception here, that China should be treated on a par with every other trading partner that the United States has, whether it is Germany or Japan. To Fred's point, there is one critical difference here. China is a poor country. At today's levels, Japan's per capita income is 40 times that of China. China is committed to the most extraordinary political and economic transformation that we will ever see in our lifetime. There is absolutely no credit being given to what China is attempting to do in order to transition its economy through tough reforms and to take the risk to join our rules-based system so then it can be subjected to accountability in hearings like this.

China does have huge issues that it is dealing with internally in managing its transition, none of which have been discussed here today. So far, this discussion makes it sound like China is the world's most powerful nation, bringing America to its knees, and I would say that you have got that one dead wrong.

Co-Chairman MULLOY. Let me just speak to that.

Dr. BERGSTEN. Could I say, Mr. Chairman, I had a different point in mind but it goes in the same direction. Steve's right about China of course being a relatively poor country. The point I was getting to is that China, for all the trade problems that were mentioned before, and correctly so, is an incredibly open economy. The share of imports in the Chinese economy is 2½ times what it is in Japan or in ours. The share of foreign investment contributing to value added is 25 times what it is in Japan, and China's exports, yes, are rising 30, 40 percent a year but note that its imports are rising 40 to 50 percent a year. Its imports are rising faster than its exports are rising. It is a very open economy, amazingly so for

a continental landmass like us at an early stage of development. It is a very different model than Japan.

One other key point. We have all noted how China pegged to the dollar in 1994. If they were trying to pursue a policy of competitive undervaluation, they were incredibly stupid because the dollar hit its all-time record low in 1995 and, as we know because that is the chief reason for our trade deficit, the dollar rose from 1995 until early 2002 by 40 percent, and the Chinese pegged to the dollar and rode the dollar up, not down, by 40 percent over a 6½ year period. It has ridden the dollar back down over the last 18 months. As I said, I believe it is undervalued and needs to be revalued. But the Chinese currency, vis-à-vis the rest of the world, is substantially stronger today than it was in 1994 when they pegged to the dollar because they rode us up. So again, being fair, balanced to the Chinese and others on this—and I am at the front of the queue of the hawks saying they should revalue the exchange rate, you know my *bonas fides* on that—they rode the dollar up a lot longer and a lot further than they have ridden it down.

Co-Chairman MULLOY. Let me say this, and then we will turn to Commissioner Ellsworth. We have a panel this afternoon, Dr. Roach, of Mr. Nolan, who is an expert on the Chinese society and economy coming in from Cambridge England. We have another Professor Steinfeld from MIT, who lay out some of the issues I think that you are concerned that we may get a misimpression of the total Chinese society and economy, and we have structured this hearing to guard against that effort.

Now, when you have a panel of people here, elected representatives of our people, you get a sense of the anguish going on in our heartland about some of the things that are going on. And that is what this hearing is about, what is happening here and what should we be thinking about and how to rectify it.

Dr. ROACH. Can I just comment on one thing about the anguish in the heartland?

Co-Chairman MULLOY. Sure.

Dr. ROACH. Fred alluded to this, and what I heard today sitting at this table, as well as from some of you, with all due respect, was that the economists do not get it. This is not about economists versus politicians, but just think for a second, please, about one simple macroeconomic accounting identity. America has no savings. Our national savings rate, if you add it up for businesses, consumers and the government sector, adjust it for depreciation, is now down to zero. The biggest swing factor in that has been the dramatic shift in our government sector savings position from surplus to deficit.

When we are saving short, we have to import surplus savings from abroad to grow our economy, and to get that capital we have to run current account and trade deficits. Is that China's fault? If we were not trading with China, close down everything with China, as Chuck Schumer wants to do, we would have to run trade deficits with somebody else. Those deficits would be with higher cost producers, and that would then represent a tax on the American consumer.

The anguish of the American people should be directed at the people in these halls that have given us these massive budget defi-

cits that have squandered our domestic savings. The job issue is directly tied to that, not to what China is doing to America. That is a huge disconnect between what I have heard here today and what I believe in my heart is a very important fact.

Commissioner WESSEL. If I could just reclaim the time that I lost earlier, we certainly understand that, Mr. Roach, that this is a jigsaw puzzle with a lot of pieces. Our job, our charge from Congress is to comment on the U.S.-China situation. Some of us served on the U.S. Federal Trade Deficit Review Commission some years ago and understand clearly the enormity of the problem. I could argue to you that if we were to repeal the Bush tax cuts, we would be taking a significant step towards resolving some of our problems.

That is not the issue before us today, so understand that as we look at this, we are simply addressing the U.S.-China bilateral relationship, understanding the enormity of the problem.

Dr. BERGSTEN. Could I make one analytical point on that because it is really critical for you all. I am sure you have heard it but I want to make sure. The U.S. bilateral trade deficit with China is huge. At my Institute for International Economics we have analyzed it in depth and our conclusion is that 70 or 80 percent of all the imports that we now bring in from China were previously brought in from other countries or would be brought in from other countries if somehow China disappeared from the face of the earth. They would not be substituted for by U.S. production. That is a critical analytical point to understand and really goes exactly, I think, Mike, to what you were saying, because it means the China dimension does have to be seen in that broader global context. But I just wanted to put it on the record.

Commissioner WESSEL. The Mexicans have made it very clear to us that NAFTA, they do not believe, is the problem any more, that the problem is China, and they are seeing jobs flowing to China as well, so clearly we have heard and we understand much of that.

Co-Chairman MULLOY. Let me turn to Commissioner Ellsworth.

Dr. Preeg, did you have a comment?

Dr. PREEG. Very briefly, I just wanted to say that even if I agreed with all of the wide-ranging comments and differing views, I still do not believe that justifies the fact that China has been in clear violation of its IMF Article IV commitments, which is a part of the issue and a part of the problem, and which I will try to explain later when my turn comes.

Co-Chairman MULLOY. Thank you.

Commissioner Ellsworth.

Commissioner ELLSWORTH. From reading the papers and from listening to the testimony this morning, I have gotten the impression, right or wrong, that our approach to China has been to say to them we have got a lot of pain and we are morally superior, and therefore, change your exchange rate.

Now, you took a different approach. You said it is in their interest to change their exchange rate, and you explained very clearly what it would do for China. My question to you—and I know you have had a lot of experience in this field in a practical way—if we were to go to China, clearly and unambiguously and say, “This is in your interest and here is why,” what do you think the chances

are of the Chinese understanding that and responding accordingly, just your gut feeling?

Dr. BERGSTEN. I hope that our representatives and negotiators are putting it in those terms since that is the most likely to achieve success. The Chinese are very smart people and they understand their interests. As I said, I have personally discussed it with them and found great understanding and some sympathy for moving in the direction we are talking about. There is always a delicate diplomatic question of course, do you help get what you want by bringing some pressure to bear or do you lead to push-back that undermines your own case?

I think, for all the reasons we are talking about today, it is totally legitimate for the U.S. to put this issue frontally on the table. Ernie Preeg is right that the Chinese have not lived up to their IMF obligations but the IMF has never asked them to do so. And the United States, as the chief shareholder of the IMF, has never asked them to do so. And the G-7, which is supposed to more or less steer the world economy, has not until this weekend in Dubai begun to do so.

So I have same forgiveness for the Chinese that I have had for other countries in the past when nobody called it to their attention what they were supposed to do. Nobody, in short, was minding the store at the center of the system as they were supposed to do.

So it is a blend of all these things. There are international obligations, both trade and financial. There is the role the U.S. inevitably has to play as the steward of the system. I think we are right to raise this. Indeed, without it, you probably would not get action. But I think if diplomacy can be done properly, there is a good chance that China and other countries in Asia will see it in their interest to move in the right direction.

Commissioner ELLSWORTH. Thank you.

Co-Chairman MULLOY. Commissioner Becker, did you have a question?

Commissioner BECKER. Yes, just very quickly.

I really appreciate your comments, and it is very well laid out. But in the end, in spite of the pleadings and in spite of the arguments, if we are unable to get the Chinese to voluntarily change a relationship between the RMB and the U.S. dollar, you yourself have said this is unsustainable. I have heard that word for the last 5, 7 years on deficits. What do you see as a result if we are unable to change that? What do you see as a result of the effect on our economy here in the United States?

Dr. BERGSTEN. I think two things inevitably occur, and that is why I say unsustainable in two senses: a domestic political sense and a financial market sense.

The domestic political sense is what we are talking about here today. I believe that if the U.S. current account deficit keeps rising and the dollars remains overpriced by 25, 30 percent in world markets, therefore undermining the competitiveness of American industry by those amounts, that we will get a sharp reversal of U.S. trade policy. Call it protection, call it defending the industrial base, call it what you wish, I think it will happen.

In 1985, when Reaganomics and high interest rates at the time pushed the U.S. for the first time into a huge trade deficit and be-

coming a debtor country and all that, my friends on the Ways and Means Committee said the Smoot–Hawley tariff itself would have passed if it had come to the floor at that time. Mike was there and tried to deal with it in a responsible way. But that was the pressure.

So trade policy will go up in smoke. That would be hugely costly to us and it could tear down the world economy.

The second thing that will happen is that, if we do not get a gradual orderly balanced correction of this exchange rate misalignment, which is, make no mistake, at the heart of the problem, at some point the dollar will crash. We have seen three sharp dollar crashes in the post-war period and they are very unpleasant. They lead to sharp increases in interest rates. They lead to significant inflationary pressures. They can be extremely disruptive of world capital markets.

So there is an international financial dimension which can hit us very hard. There is a domestic political dimension which will hit us I think even earlier, and I think those are the results, unless a constructive response is found to the problem. That is why I believe the gradual orderly decline of the dollar over the last 18 months was a hugely positive thing. But it only went about a third of the way necessary and, to get it the rest of the way, we cannot just keep depreciating the dollar against the Euro. It has got to bring in the Asian currencies with the big surpluses and the big reserve buildups. China is the key because its currency peg to the dollar means that the Koreans, the Taiwanese, even the Japanese, while they might grudgingly accept a rise in their currency against the dollar, hate the thought of a rise in their currency against the renminbi because China is their big competitor.

And that is why China is central to the global systemic correction of this whole set of problems centered on the U.S. deficit but radiating out to, and with profound effects on, the economies of Europe as well as the Asians themselves, and indeed the entire world.

Co-Chairman MULLOY. Ernie, Dr. Preeg.

Dr. PREEG. Trying to respond to the question briefly but a little more directly, if, as I understand the question, we finally after all these years, as Fred said, we start doing something saying, “You are in violation of your commitments, you need to move,” and they don’t, well, quite frankly, with violation of IMF and closely-linked WTO commitments under Article 15, as was raised earlier by Senator Schumer, we would have a case. And if they won’t do it, we can take it to the WTO dispute settlement procedure, and we would almost certainly win. Then they would either have to change or we would have the right to retaliate.

I would hope and assume it would never get that far, but that would be a straightforward course of action if they just continue to turn us down.

Dr. BERGSTEN. Could I give you an even more straightforward course of action? Ernie’s right, but those things will take two years or more to play through. There is a much more direct reaction: we buy renminbi. People say, “Oh, this would be really dirty play.” I have proposed this in the case of Japan. Japan, in my view, is even more incorrigible on the exchange rate because the market has

been pushing the yen up for the last two years. Japan has intervened now, and built its reserves to \$550 billion.

I have said to Secretary Snow personally, but I have also testified publicly, that every time Japan buys a dollar (or sells a yen to buy a dollar) to keep the dollar excessively strong, we should sell a dollar. In fact, we should just tell them that every time they buy a dollar we are going to sell a dollar and I am confident they would quit and the yen would find its market rate.

Now, interestingly, over the weekend at Dubai, the G-7 reached an agreement and the yen has gone up 5 percent. I don't know whether anybody said that to them, I don't know what leverage was used, but somehow Japan stopped defending the yen at 117:1 and now it is at 111:1. Good progress. I congratulate Secretary Snow. I congratulate the G-7. They have made good progress on the yen. Fine. Let's do something like that on the renminbi. All we have to say is, "Fellows, we have got a lot of dollars. We can buy renminbi as fast as you can sell renminbi." And if you want to find a way to encourage market forces to push the currency up, that is the way to do it.

This would smack of John Connolly "treading on the manicured playing fields of international finance," but it would be a lot more effective than 301's and Article 15's and Article IV's of the IMF, which take a very, very long time to do.

Co-Chairman MULLOY. How much longer can you be with us?

Dr. BERGSTEN. I have to go.

Co-Chairman MULLOY. Okay. I do not want to keep you past time because it was agreed that you would need to get you out of here by noon. Dr. Bergsten, thank you very much.

I am sorry that we had to go out of order on that for you other panelists, because you have very, very good statements. Why don't we turn to those now, and Dr. Roach, you can lead off.

Thank you again, Dr. Bergsten.

Dr. BERGSTEN. I apologize to my colleagues on the panel. They are all good friends and I appreciate your tolerance.

**STATEMENT OF STEPHEN S. ROACH, Ph.D.
CHIEF ECONOMIST, MORGAN STANLEY**

Dr. ROACH. Fred, I learned to be tolerant of you over the years. It is never easy though.

Thank you. I have 7 minutes?

Co-Chairman MULLOY. Seven minutes, doctor.

Dr. ROACH. I would like to submit my complete testimony for the record and summarize my key conclusions at this point. I do believe, as I have stated just a few minutes ago, that there are some serious and worrisome misunderstandings about the role of China in the global economy that are being conveyed at this hearing today. I have to say, I have participated in hearings in Washington for 20 years. This is honestly, up until this point in time—and maybe it will be different this afternoon—the most one-sided hearing that I have ever heard.

What I would like to do is just highlight what I think are three key flaws in the current thinking about the so-called China threat, and then just give you some thoughts on what I think needs to be done to address this problem.

Number one, I would like to give some numbers that put an order of magnitude around the so-called power of the Chinese export machine. On the surface it looks like China's exports are rising at rates to threaten all of us in ways that we could never, ever contemplate. In the last decade China's exports have gone from \$120 billion to \$365 billion over a decade. If you take the numbers apart, however, 65 percent of that growth over the 10-year period is traceable to Chinese subsidiaries of multinational corporations and joint venture partners who have consciously set up operations in China through record inflows of foreign direct investment.

Last year China was the largest recipient of foreign direct investment of any nation in the world. Were multinationals forced to do that? I would argue today that what is going on here is simply the globalization of supply chains in country after country around the world who cannot compete on a high-cost basis in an increasingly open global economy. As painful as it is, that is the way the world works. Is this China's problem or is this our problem? Who is the competitive threat? Is it them or is it us? That is misconception number one.

Secondly—and Fred alluded to this and I would just like to underscore this emphatically—China's role in the world trade system is far more that of an assembler of product produced elsewhere than it is of a pure producer of Chinese-made product. Economic research has shown this for a number of years. A colleague of mine, Professor Lawrence Lau at Stanford University, has done some outstanding econometric work in analyzing the value-added content of Chinese exports. And his work and that of his associates demonstrates very clearly that for every dollar of Chinese exports that is shipped out, only 30 cents of it represents domestic-value added by domestic producers. In fact, for the exports going to America that number drops to 20 cents. That means the great Chinese export machine, whether it is outsourcing or pure exports, benefits its trading partners more than it does the domestic Chinese economy.

The third misconception is the one I already alluded to, and that is where do these trade deficits come from? To me, they are inexorably linked, as I stated earlier, to America's lack of national savings. Savings must always equal investment. It is not a theory. It is just an accounting identity. So when we do not have any domestic savings, we have to import surplus savings from abroad. To do that we have to run current account and trade deficits. I put it to you again, as I said earlier, if you close China down, we would still have a trade deficit because we do not have any savings. The alternative is just to slow our growth rate down. And if you think we have a job problem now, contemplate the consequences of what that would mean. We are blaming China for our own inability to run an effective fiscal policy in the United States.

I ask you, should China be blamed for Washington's fiscal irresponsibility?

What needs to be done here? I give you three recommendations: I totally disagree with Fred that you can arbitrarily determine what the appropriate value of the renminbi is. I have charts in my formal testimony that show a trade-weighted value of the renminbi right now. It is no different than it was, on average, since 1998. In fact, as Fred said, China is running a very small overall trade

surplus suggesting its currency is not undervalued in any way whatsoever.

I would further put to you that if you start moving around the currency, that would destabilize the global supply chain that our cost inefficient companies are so desperately trying to establish in order to make themselves competitive in the global economy.

Secondly, I think if you want to get the fix on the U.S.-Chinese trade deficit problems, fix our budget deficit.

Thirdly, I think you have to recognize that what you have heard here this morning, from Congressman after Congressman, Senator after Senator, is nothing other than bald-face protectionism. It smacks to me of some of the most dangerous rhetoric I have heard in the U.S. Congress in my career. I agree with Commissioner Wessel that this is right out of the script of the Smoot–Hawley type sentiment that existed in 1930 after a speculative bubble popped in the U.S. stock market. I think it is appropriate to go on record calling protectionists a very serious threat to the U.S. and the global economy.

Thank you.

[The statement follows:]

**Prepared Statement of Stephen S. Roach, Ph.D.
Chief Economist, Morgan Stanley**

Getting China Right

A persistently weak global economy is now moving into a very dangerous place—the slippery slope of trade frictions and protectionism. As political cycles now enter the macro equation, the blame game has begun. Such sentiment is nearly unanimous in singling out a new scapegoat—a rapidly growing Chinese economy. World opinion has become increasingly united in putting pressure on China to revalue its currency. In my view, that would be a serious mistake for China, the United States, and global economy at large. I think the world has got the China story dead wrong.

The blaming of China goes something like this: With real GDP growth in the industrial world holding on a subpar path for a third year in a row, the ongoing vigor of the Chinese economy obviously sticks out. Industrial output was up an astonishing 17% year-over-year in August, and exports surged by 27%, clear signs that China is capturing market share in an otherwise sluggish world. China's currency peg is widely believed to be compounding the problem. Many believe the renminbi is undervalued to begin with. Moreover, tied to a now-depreciating U.S. dollar, the RMB appears to have been given a competitive boost against non-dollar currencies. Assuming the dollar has a good deal further to go on the downside—perhaps as much as another 20% over the next couple of years—most fear that China's competitive advantage will become all the more pronounced. Suddenly, China's image has been transformed from the land of opportunity into a serious threat to the United States and the broader global economy.

Bad Economics

If the world economy were thriving, China's rapid growth would be welcome. Unfortunately, that's not the case. In a still-sluggish global economy, market share is a very precious commodity. Any threats to competitive positions, compounded by hiring shortfalls, can trigger hostile responses. These pressures are very much in evidence today. China's huge and growing bilateral trade surplus with the United States is widely seen as a mounting source of tension. The culprit, goes the argument, is China's currency peg. A revaluation of the RMB is now thought to be a necessary antidote. I believe that would be a serious mistake for three major reasons:

First and foremost, there is enormous confusion over the character of the so-called Chinese export threat. In my opinion, the world has formed an erroneous impression that newly emerging Chinese companies are capturing global market share with reckless abandon. In fact, nothing could be further from the truth. For more than a decade, the real export dynamic in China has come far more from the deliberate outsourcing strategies of multinational corporations headquartered in the developed

world than from the rapid growth of indigenous Chinese companies. Over the 1994 to mid-2003 interval, China's exports essentially tripled from US\$121.0 billion to \$365.4 billion. It turns out that "foreign-invested enterprises"—Chinese subsidiaries of global multinationals and joint ventures with industrial-world partners—have accounted for fully 65% of the total increase in Chinese exports over that period. In other words, China's increasingly powerful export machine has America, Europe, and Japan stamped all over it.

This is hardly an example of China grabbing market share from the rest of the world. Instead, it is more a by-product of the struggle for competitive survival by high-cost producers from the industrial world. Last year, a record US\$52.7 billion of foreign direct investment flowed into China, making the country the largest recipient of FDI in the world. This inflow did not occur under coercion—it was entirely voluntary. A high-cost industrial world has made a conscious decision that it needs a Chinese-based outsourcing platform to increase productive efficiencies. Dismantling the RMB peg would destabilize the very supply chain that has become so integral to new globalized production models. Ironically, it would be a serious negative for those same economies—Japan, the U.S., and Europe—that have led the rush to Chinese outsourcing. By putting pressure on China to change its currency regime, the industrial world runs the risk of squandering the fruits of its own efforts. Fear of the so-called China export threat completely misses this critical point. The power of the Chinese export machine is more traceable to "us" than it is to "them."

A second argument in support of a stable Chinese currency hinges on the nation's competitive prowess. Contrary to widespread perception, China does not compete on the basis of an undervalued currency. It competes mainly in terms of labor costs, technology, quality control, infrastructure, and an unwavering commitment to reform. My guess is if China were to revalue the RMB upward by 10% or even 20%—a change I do not expect nor advise—its exports would suffer minimal loss of market share. A key reason for this is that China's export prowess is mainly in the role of an assembler—its exports have a high content of materials and products made elsewhere. By contrast, only a small portion of its exports are actually made in China. Stanford Professor Lawrence J. Lau and his colleagues have estimated that for every dollar of Chinese exports, only 30 cents reflects value-added by domestic Chinese production (see C. Xikang, L. Cheng, K.C. Fung, and L.J. Lau, "The Estimation of GDP and Employment Induced by Exports: An Application to Chinese Exports to the United States," Revised December 2001). For Chinese exports going to the United States, the domestic-value added share is even lower—only 20 cents on the dollar. That means even a substantial revaluation of the RMB would not make much of a difference to the price competitiveness of Chinese exports. If, for example, the RMB peg to the dollar were adjusted upward by 20%, this research suggests the price of Chinese exports to the U.S. would go up by only 4%—hardly enough to trigger a major demand shift back into American-made products.

There's even a more basic element to this argument insofar as the U.S. is concerned: China's currency is pegged to the dollar—an arrangement that hasn't changed one iota since 1994. That means there have been no currency-induced shifts in relative prices that can explain the deterioration of the U.S.-China trade deficit from \$30 billion in 1994 to \$103 billion in 2002. Furthermore, no nation's competitive threat to the broader world economy should be judged on the basis of bilateral trade imbalances. It's the overall trade position that matters. In the first eight months of this year, China's trade surplus amounted to just US\$8.9 billion, less than half the pace of a year ago. Consistent with this condition of near balance, our estimates suggest that the trade-weighted value of the RMB is basically in line with average levels prevailing since 1998. It's hard to conclude on the basis of these trends that the Chinese currency represents a serious competitive threat to the broader global economy.

Third, dismantling the peg could destabilize world financial markets. It is important to stress that there is little doubt over the endgame. China has consistently reiterated its long-term commitment to opening its capital account and eventually making its currency fully convertible. At the same time, China knows full well that a good deal of heavy lifting on the reform front has to occur before these objectives can be accomplished. That's true of both capital-market reforms and the need to clean up its banking problems. China has taken great strides on these fronts, but a lot more needs to be done. Until there is more progress on financial reforms, I believe it would be entirely premature and very risky for China to float its currency and open its capital account. Such ill-timed actions could lead to heightened instability in Chinese, Asian, and world financial markets that could seriously jeopardize the global economy. This is a critical lesson of the Asian financial crisis of 1997–98 that an impatient and politically charged world should not lose sight of when putting pressure on China. Nor should we forget the key role China played in tem-

pering that crisis when it resisted the temptation to follow other Asian nations down the road of devaluation.

Several other considerations argue against an RMB revaluation: an intensification of imported deflationary pressures on a Chinese economy that is only now climbing out of deflation; the possible emergence of bubbles in other Chinese asset markets, especially property; and a signal to market speculators that the RMB would now be “in play.” Moreover, there is one of history’s most salient lessons to remember: Poor countries like China will never close the development gap with rich countries if they are repeatedly forced to revalue their currencies. Finally, some observers believe that an open capital account actually would allow Chinese investors the opportunity to diversify their currency holdings into dollar-denominated assets—triggering an asset allocation shift that could backfire and result in a weaker RMB.

The Political Agenda

I fear there’s a deeper meaning to the pressures now being put on China: Unwilling to accept responsibility for their own economic shortcomings, the wealthy nations of the industrial world are making China a scapegoat for their weak recoveries. That’s especially true of the United States, still mired in a jobless recovery fully 22 months after the last recession hit bottom in November 2001. Frustrated over persistent job losses, America’s politicians have become convinced that China is the culprit. And so Washington is now taking dead aim at the “China problem.” Legislation recently has been introduced in the U.S. Senate that threatens to impose 27.5% across-the-board tariffs on Chinese exports into the U.S. if the RMB peg is not abandoned (S. 1586). Two of the sponsors of this bill—Senators Schumer and Graham—have presented their views to you this morning. I am strongly opposed to this action, as well as to comparable measures recently introduced in the U.S. House of Representatives (H.R. 3058). I believe these proposals pose grave risks to the U.S. and world economy.

At present, I would judge the odds of such legislation being enacted as no higher than one in five. Yet those odds will undoubtedly rise as the U.S. political cycle heats up—especially if America remains stuck in a jobless recovery. Perceptions of job and income security have long been the defining issue in U.S. Presidential campaigns. It’s hard to believe that it will be any different this time around, especially since America’s current hiring shortfall—some 4.2 million jobs and counting, by my reckoning—is the worst in modern, post-World War II experience. Significantly, this Congressional assault on China is bipartisan. That underscores the breadth of support for actions proposed against China, an especially worrisome sign of more protectionist initiatives to come. For that reason, alone, it is hard to dismiss the real significance of recent anti-China measures introduced in the U.S. Congress. They are shots across the bow of America’s commitment to globalization.

It is ironic that by pointing the finger at China, the U.S. Congress is avoiding its fair share of responsibility for America’s conundrum. The U.S. has an extremely serious saving problem—a net national saving rate that fell to a record low of 0.7% of GDP in the first half of 2003. In recent years, the biggest swing factor behind this plunge in national saving has been the extraordinary deterioration in the fiscal position of government units—at the Federal, State, and local levels. The combined government-sector saving rate has swung from a surplus of about 3% of GNP in 2000 to a deficit of nearly 4% in mid-2003. Moreover, courtesy of Washington’s latest bout of fiscal profligacy, the government shortfall is set to widen by another 1 to 1.5 percentage points over the next 12 months. Unless there is a spontaneous and lasting revival in private-sector saving—highly unlikely, in my view—national saving can only fall further. Hooked on spending, America has no choice other than to import surplus saving from abroad in order to finance economic growth. And the only way to get that capital is for the U.S. to run massive current-account and trade deficits.

That’s where China enters the equation. Yes, America’s largest trade deficit is now with China—a \$103 billion shortfall in 2002 and on track to exceed that amount in 2003. But keep in mind, a severe domestic saving shortage means the U.S. has to run trade deficits with someone—unless, of course, it is prepared to curtail sharply domestic consumption. If America weren’t trading with China, those deficits would have to occur with other nations—Canada, Mexico, other Latin economies, Japan, elsewhere in Asia, or possibly even Europe. That poses perhaps the most introspective question of all: Should China be blamed for Washington’s reckless fiscal adventures?

It is dangerous and wrong for the U.S. to point the finger at China as a major cause of its massive and still-widening trade deficit. If the United States wants to reduce its trade gap, it must come to grips with more fundamental problems of its own, namely the rapidly vanishing national saving rate. Until it does so, U.S. trade

deficits are likely to be the rule, not the exception, and the low-cost, high-quality option of Chinese trade is in America's best interest. In fact, this is exactly the way the theory of comparative advantage—one of the mainstays of economics—is supposed to work. By importing from China, American consumers are getting a break in purchasing power. Shifting our trade deficits elsewhere—precisely what would have to occur for a saving-short U.S. economy—would only erode that windfall of purchasing power. Tariffs on China would, in fact, raise the cost of doing business for many American companies. For example, Wal-Mart, America's largest company in terms of revenues, reportedly sources some \$15 billion of product in China. Under S. 1586, Wal-Mart would be hit with the functional equivalent of a \$4 billion tax hike. American shareholders and consumers would only suffer as a result.

China helps the U.S. economy in other ways. In particular, it plays a very important role in financing America's current-account deficit. China's net purchases of long-term U.S. securities hit \$60 billion in 2002 and are running well in excess of that pace so far in 2003. With the bulk of that demand concentrated in Treasuries, there can be no mistaking the role that China has played in holding down U.S. interest rates and thereby supporting America's economic recovery. If the RMB were adjusted upward, Chinese accumulation of currency reserves would slow and its demand for dollar-denominated assets could easily slacken as a result. That, in turn, could lead to a backup in long-term U.S. interest rates that could jeopardize a key source of support for America's economic recovery.

Don't Ignore Japan

I am also concerned about the China bashing that has been going on in Japan for well over a year. Senior Japanese officials have blamed China for exporting deflation and for the "hollowing out" of the Japanese labor market. Nothing could be further from the truth. Low-cost, high-quality Chinese imports provide a windfall to the purchasing power of beleaguered Japanese consumers—precisely the same type of benefits that Japan's export machine provided the world in the 1970s and 1980s. If you want an example of an undervalued currency, study the path of the yen during Japan's economic renaissance; it averaged close to ¥300 versus the dollar in the 1970s and about ¥220 in the 1980s—dramatically cheaper than its current reading in the ¥110 to ¥115 range. It strikes me as hypocritical for Japan to criticize China for emulating a strategy that was central to its own development model. Putting pressure on China to revalue its currency is a poor excuse for Japan's own inability or unwillingness to reform.

Moreover, as I travel through the newly industrialized "special economic incentive zones" in China, I am repeatedly struck by the widespread presence of Chinese subsidiaries of Japan's most successful companies. In fact, I am hard-pressed to identify any major Japanese producer that does not have a significant presence in China. Corporate Japan is not being forced to shift its production to China. This is the rational response of uncompetitive, high-cost Japanese producers attempting to maintain market share in an increasingly open global economy.

Over the years, I have learned the most about Asia when I hop directly between Beijing and Tokyo—an opportunity recently experienced by U.S. Treasury Secretary John Snow. I can only hope that Secretary Snow has been able to appreciate the extraordinary contrasts between these two economies. A post-bubble Japanese economy has been in a period of relative stagnation for nearly a dozen years—with real GDP growth averaging only 1.1% from 1992 to 2002; over the same period, China's real GDP growth has averaged about 10%. Yet as the second largest economy in the world, Japan's per capita national income was still some 40 times that of China at market exchange rates in 2001 (or 6.5 times that of China on a purchasing power parity basis). Notwithstanding this dramatic disparity in living standards, there can be no mistaking the shift in the pendulum of economic power in Asia. China remains unflinching in terms of its commitment to reform and structural change. By contrast, Japan has taken the concept of inertia to a new level. It would be tragic if the political cycle came down hardest on the economy that is playing the greatest role in reshaping the world. Yet that's precisely the risk as the politics of globalization now come into play.

While China is being charged with maintaining an artificially depressed currency, Japan has long written the book on currency intervention and manipulation. Indeed, in order to prevent a market-induced strengthening of the yen, Japanese authorities have spent well in excess of a record US\$80 billion on official currency intervention so far this year. To the extent the U.S. and the rest of the international community condones such massive intervention, the incentive for Japanese reforms may well be diminished. Unlike China, where there is a steadfast commitment to reforms, in Japan there is a very explicit trade-off between reforms and foreign exchange rates. I remember full well the sheer sense of panic that gripped Japan Inc. in the spring

of 1995 when the yen/dollar cross rate hit ¥80. The Japanese recognized at the time that radical reforms were the only way to cope with a super-strong currency and were getting ready to implement such measures. But in the end, the world flinched and allowed the yen to depreciate by some 45% versus the dollar over the next three years or so. And Japan never really lifted a finger on reform.

That's a lesson that should not be lost on U.S. politicians and authorities elsewhere around the world as they overlook Japan's transgressions and focus on China. Japan's line of reasoning is that its economy is too weak to tolerate a stronger currency. But to the extent that currency manipulation forestalls long-overdue progress on the Japanese reform front, then there is good reason to question the wisdom of such tactics. Countries that manage foreign exchange rates in order to suit their own purposes are explicitly bringing others into the equation. From the standpoint of the U.S., that means the Japanese authorities are, in effect, short-circuiting a depreciation of the dollar that would otherwise be the inevitable by-product of a classic current-account adjustment. From the standpoint of Europe, Japanese currency manipulation could well force a disproportionate share of the dollar adjustment onto the euro.

Fortunately, there is reason to believe that the world may now be coming to its senses on bringing Japan into the global rebalancing equation. At the recently concluded G-7 meetings in Dubai, the call for greater flexibility in exchange rates was an unmistakable signal to Japan that the world was losing patience with massive currency intervention by a major developed nation. A firmer economy has given Japanese authorities some leeway to back away from this effort, at least for the time being. As a result, the yen has now strengthened through the ¥115 threshold versus the dollar, and the burden of America's current-account adjustment now stands a greater chance of being spread more evenly throughout the global economy. This is good news for global rebalancing—provided, of course, Japan stays the course and refrains from returning quickly to its long standing practices of currency intervention. But what applies to Japan—the world's second-largest economy—does not apply to China, still a very poor country. As I have stressed above, China's transition to a flexible currency regime must occur on terms that are conducive to its own stability, in economic as well as in financial terms. Japan is rich enough to welcome the verdict of market-clearing exchange rates. China is not—at least, not yet.

Something Must Give

There are times when economic weakness and politics make for strange bedfellows. This appears to be one of those times. The political season is starting to heat up in the United States, and all eyes are on the stresses and strains of America's jobless recovery. This puts the politics of globalization in an entirely different context. Reflecting the often intense interplay between the political and economic cycles, China has now become the tension point *du jour* in the geopolitical debate.

In tough economic times, politicians always need a scapegoat. That's what this wave of China bashing is really all about. It has little to do with economics and everything to do with the blame game. Yet this politically-inspired foray is symptomatic of a much deeper macro problem that now confronts an unbalanced world. The world's sole growth engine—the U.S.—is encumbered with the largest current account deficit in modern history. This reflects not only the inherent pitfalls of a saving-short U.S. economy but also the utter lack of autonomous domestic demand growth elsewhere in the world. As America pulls the world economy along for the ride, it goes deeper and deeper into the quagmire of trade deficits, budget gaps, saving shortfalls, and excess debt accumulation. This is hardly a sustainable outcome for the U.S. or for the rest of the world. It speaks of a worrisome and dangerous build-up of tensions in the global economy.

Like steam in a teapot, ultimately these pressures need to be vented. As I see it, the possible remedies range broadly between two extremes—the economics of a U.S. current-account adjustment and the politics of trade frictions and protectionism. The recent shift in G-7 currency policy is an encouraging sign of an economic resolution to the world's imbalances. Yet the interplay between America's jobless recovery and Presidential election cycle could well shift the odds from the economic to the political remedy. Right now the odds of a politically driven solution are low. But the risk is that they will rise.

Unfortunately, the saber-rattling over China in the U.S. and Japan is not an isolated example of mounting trade frictions elsewhere in the world. Two other recent examples come to mind that paint a picture of a world veering all too close to protectionism. First is the recent breakdown of talks at the WTO ministerial meetings in Cancun. Tensions between rich and poor countries came out in the open on such long-standing issues as agricultural subsidies, investment and competition rules, and financial market transparency. The failure of this meeting of the World Trade

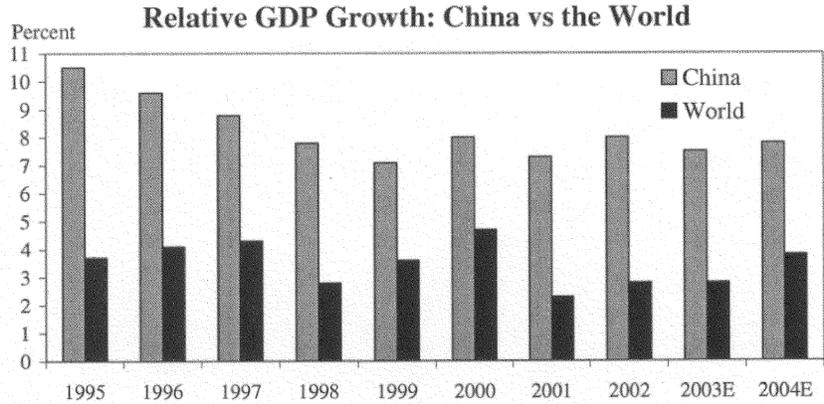
Organization is reminiscent of the fiasco in Seattle in 1999 and raises serious questions about the successful completion of the Doha Round of trade liberalization slated for 2004.

Second, European leaders have joined the fray, aiming to protect their long-sluggish economy. Their fear is that the euro may bear a disproportionate share of the burden of further dollar depreciation. Such concerns are at the root of charges recently leveled at Asian countries whose currency pegs are perceived to insulate them from adjustments in the dollar. This sentiment, which came to a head at a recent gathering of European finance ministers in Stresa, Italy, appears to have spilled over into a more formal protest at the recently-concluded G-7 meetings in Dubai. In 1930, Senator Reed Smoot and Representative Willis C. Hawley sponsored legislation that significantly raised the level of U.S. tariffs. Courtesy of a recently burst equity bubble, the U.S. economy was in recession and a Republican administration favored the protectionist remedy to provide relief for American workers. President Herbert Hoover signed the Smoot-Hawley Tariff Act into law in June 1930. Global trade retaliation quickly followed, as did a downward spiral in world trade. Many believe that such frictions ultimately set the stage for the Great Depression that followed. These lessons should not be ignored in today's post-bubble era. No one, including myself, thinks such an outcome is likely today. Yet that's a risk that can no longer be taken lightly as politics now comes face to face with the dark side of globalization.

I strongly believe that China is the world's greatest development story of the 21st century. Its emergence will benefit not only the 20% of the world that lives in its most populous nation but also the 80% of us who do not. But China's road to prosperity is not without pitfalls and risks. Nor can economic stability be taken for granted in the far richer developed world. Yet in the end, we must all learn to live with the stresses and strains of globalization. Turning inward is not an option for the U.S. Our commitment to globalization should be unwavering in bad times as well as good. Unfortunately, the combination of a politically charged atmosphere and a tough economic climate often creates scapegoats. China is today's scapegoat. It's high time to put an end to this dangerous blame game.

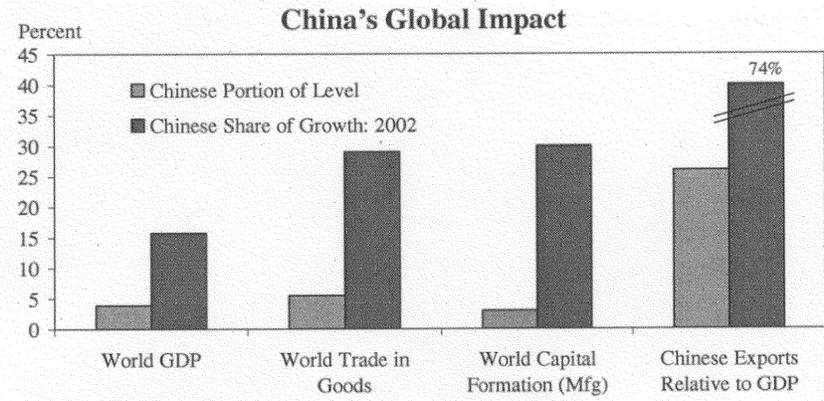
Getting China Right

China remains the fastest-growing economy in the world.



Source: Morgan Stanley Research

While China is still a small economy, its growth is having a major impact on the rest of the world.



Source: IMF, World Trade Organization, Morgan Stanley Research

China's industrial growth dynamic is heavily influenced by outsourcing.



East Asian economies have played a key role in funding America's gaping current-account deficit.

East Asia: Net Purchase of Long-Term US Securities
(US\$ billions)

	Total	US Bonds			US Stocks	E. Asia's Trade Surplus
		T Bond	Agency	Corporate		
1988-97	390	265	70	41	14	758
1998	42	42	10	2	-12	242
1999	74	27	31	11	5	227
2000	87	-3	57	20	13	192
2001	159	33	79	26	21	137
2002	199	55	95	25	23	183
H102	58	-2	39	12	10	84
H103	158	77	64	12	6	78

Source: CEIC, Morgan Stanley Research

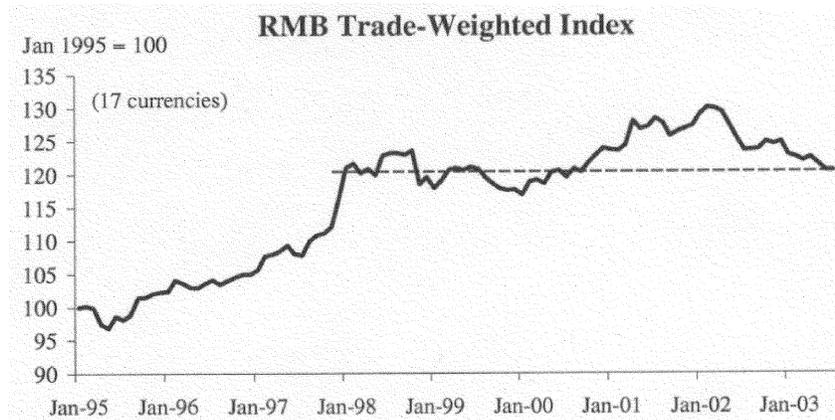
China is now closing in on Japan as a source of foreign demand for dollar-denominated assets.

Net Purchase of Long-Term US Securities: China vs. Japan
(US\$ billions)

	Net Purchase		Trade Surplus	
	China	Japan	China	Japan
1988-97	48	209	69	874
1998	4	20	44	108
1999	17	43	29	108
2000	16	52	24	100
2001	52	57	23	54
2002	60	92	30	79
1H02	21	40	13	38
1H03	41	77	4	34

Source: CEIC, Morgan Stanley Research

While China's currency has depreciated slightly in recent months, it can hardly be called undervalued.



Source: DataStream, Morgan Stanley Research

Co-Chairman MULLOY. Well, we know where you stand, Dr. Roach.

Mr. Hale.

**STATEMENT OF DAVID HALE
CHIEF ECONOMIST AND FOUNDER, HALE ADVISORS, LLC**

Mr. HALE. Well, thank you very much for the opportunity to speak to this Commission. I think you face unique challenges because really the debate today is not just about China's currency, it's about the much larger question of how the world is going to cope with the reemergence of China as a great economic power.

On the eve of the British Industrial Revolution 230 years ago, China accounted for almost a third of world output. After 20 years of communism, it accounted for only 2 percent of world output. And now, with the very high rate of economic growth coming from market-oriented economic policies and very far-reaching reforms, China will at some point in the next 20 years once again represent 10 percent of world output. So we have to make a lot of adjustments to this very profound and very far-reaching change in China's status in the global economy and global geopolitics.

Now, the currency question has come into focus recently because China has been experiencing a great export boom. Year-on-year growth rates for exports are almost 33 percent. China's share of world exports will be this year almost 6 percent, compared to only 3 percent five years ago. In the case of the United States, China has now emerged this year as our second largest trading partner. In the first half of this year, it displaced Mexico. China's share of our imports now is 11.4 percent, Mexico's falling to 11.2. And I can tell you that in the case of Mexico, the government there and the corporate community is deeply concerned that Mexico, not the United States, could lose tens of thousands of jobs to competition with China.

Now, as a consequence of this export boom and this growing share of world trade, there's growing pressure everywhere for China to revalue its currency, not just here in Washington but demands have been made by the governments of Japan, Korea, and other Asian countries are sympathetic because the East Asian countries perceive that over the last ten years they've lost market share to China in terms of both trade and also attracting FDI.

And, indeed, if you look at the share of U.S. imports from other Asian countries, it has over the last seven or eight years fallen across the board. Indeed, the total Asian share has fallen from 40 percent to 35 percent because of these countries not being as competitive as they would have been 10 or 15 years ago.

China's resisting this pressure to revalue for a variety of reasons. I think we should spend a couple of minutes examining them because they're very critical in formulating our own policy response.

First, during the great Asian financial crisis five years ago, China maintained a stable exchange rate at a time when other countries were devaluing by 30, 40, 50 percent. I was in Beijing in January of 1998 for conversations with Premier Li Lanqing about this policy, and he was then in the midst of discussions about what they should do, and they decided to remain pegged to the dollar. Where they had been for several years at 8.3, he went to the Davos

World Economic Forum, ten days later made a speech to announce this policy, and the following day there was a huge rally across Asia in the stock markets, 14 percent in Hong Kong alone because of relief that China would not promote further financial contagion by devaluing.

I think it's important we recognize the financial statesmanship of China five and six years ago during this period of extreme crisis in the Asian region.

Secondly, while China's having an export boom, it's also having a great import boom. A few months ago, import growth was 40 percent year-on-year. And as a result, it's quite possible that China's trade surplus will simply vanish without having a currency revaluation. The fact is WTO entry is opening China to an unprecedented wave of foreign competition and foreign imports. And because of this \$500 billion of FDI in China, many foreign firms—American, Japanese, British, German—now have distribution systems in China, something they never got in Japan in the whole of the modern period because, after World War II, Japan effectively banned foreign direct investment, didn't allow it, to protect domestic companies. Because China is so open, this import penetration will go much, much further.

Thirdly, China's confronting a major crisis in its domestic financial system. The stock of nonperforming loans in its banks is 30 or 40 percent, a number of \$300 or \$400 billion. They have over the last three years begun to address this by restructuring \$100 billion of bank loans, but the fact is they have a long ways to go.

Because of this banking crisis, the S&P credit rating agency warned two weeks ago that if China were to float its currency or have a big revaluation, they would lower the country's credit rating because they perceive a currency revaluation would be destabilizing to both the Chinese corporate sector and to the banking system and might even promote speculative capital flight.

Fourthly, as I just mentioned, China's had an extraordinary FDI boom. As Steve Roach just explained, the reason for this export growth is foreign companies, not just Chinese companies. Fifty-five percent of China's exports come from foreign companies compared to 41 percent seven or eight years ago, and this share is still increasing. Again, I want to stress the contrast with Japan and Korea.

On the eve of the great Asian financial crisis five years ago, Japan had only \$17 billion of FDI, Korea had \$12 billion, because both countries did not want foreign competition. China has opened the door to an unprecedented level of foreign investment.

What this also means, by the way, is if we do get a 25-percent currency revaluation, it's not clear what it will mean for China's export prices. True, weak, unprofitable Chinese companies will be forced to raise their prices, but many multinational companies will probably engage in transfer pricing and not raise the price of the goods they export. They will simply absorb it in their global profit margins. This is a very, very different model than we confront in the past with Japan, Korea, and other Asian countries.

Finally, China has a major problem with unemployment. We're concerned about job losses here. So are they. In the last five years, they have lost 50 million jobs in the state-owned companies. They have got 150 million peasants who want to move to the cities from

the countryside. They've got a huge human population they've got to reemploy in the private sector over the next five or ten years. And, needless to say, export growth is one way to do that.

As a consequence of these five factors, I think China will be in the short term very reluctant to revalue. But as Fred indicated, there is a great debate going on. A year ago, Premier Zhu Rongji made a speech to a group of 50 Hong Kong businessmen, promising within six months they'd go to a wider currency target band, not 30 or 40 percent but 5 or 10 percent. They didn't do it because they were at that time entering a political transition to new party leaders, a new President, and it was very, very difficult to make big policy changes in the midst of a political transition. But the fact he made this speech tells you this issue has been in play for some time.

The major reason for China to revalue is very simple. First, this huge growth in foreign exchange reserves is now producing potentially inflationary levels of monetary growth. Money growth is now running at 20 percent compared to 12 percent 12 and 18 months ago. This is leading to real estate inflation. In contrast to Japan 15 years ago, it hasn't yet led to a stock market inflation because Chinese investors, like American investors, lost a lot of money two years ago in the stock market, so they're still very risk averse. But there's no doubt this money growth does create the risk of more inflation. So there's an incentive for China at some point to change policy to control its money growth, but they'll move, I think, very, very slowly.

I think what we have to do basically is keep focusing on market opening to ensure that China complies with the new trade rules, to give access to imports as well as to FDI, to encourage over time more exchange rate flexibility, but not demand it immediately.

And, finally, just to finish up here, we have to recognize that what we're demanding could also have consequences for our own financial markets. There is today a new phenomenon in the world not well recognized in Washington. The basic underpinning of this Administration—foreign policy, economic policy—is a new geo-financial balance of power in the world, represented by the fact that the countries of East Asia collectively account for 70 percent of the world's foreign exchange reserves compared to 30 percent ten years ago. And they've been rolling over these reserves almost universally into American dollar financial assets. This is what's been funding in the last 18 months the American budget deficit, the American current account deficit. China alone has bought \$100 billion of U.S. Government securities in the last 15 months. Japan has done \$150 billion. Other Asian countries, \$40 or \$50 billion more.

If we lost access to these savings, to these capital flows because of a change in currency policy, it would lead to higher American bond yields, higher American mortgage rates, a weaker housing market, and slower growth of domestic consumption. That would help to reduce the trade deficit, but it would also depress the growth rate of the American economy. So we should recognize that we also have potential vulnerabilities to any major changes in the exchange rate policies of China and other East Asian countries.

[The statement follows:]

**Prepared Statement of David Hale
Chief Economist and Founder, Hale Advisors, LLC**

Should China Revalue Her Currency?

There is little doubt that China's exchange rate policy has emerged as a major global topic. During recent months, the governments of Japan, Korea, and the U.S. have called upon China to revalue the country's currency. Many Americans blame China for the fact that manufacturing employment has been declining for a year after the economy bottomed. China is perceived as a threat because it has been enjoying export growth of 35% during recent months. As a result of booming foreign direct investment and the return of flight capital, China also has foreign exchange reserves of \$355 billion or the second highest in the world after Japan.

China has been resisting pressure for exchange rate appreciation for a variety of reasons.

First, China maintained currency stability during the east Asian financial crisis of 1997–1998. China kept her exchange rate firm in order to lessen the risk of greater financial contagion in the region. Her policy was an act of financial statesmanship which she believes weakens the case for exchange rate appreciation today. Secondly, China has recently joined the WTO and slashed import barriers. Her import growth is now booming at a 40% annual rate and her trade surplus is likely to fall sharply this year despite robust exports. Thirdly, China is deeply concerned about rising unemployment because of layoffs at state-owned companies. These firms have shed over 50 million jobs during recent years. As exports are now 28% of GDP, China regards the foreign trade sector as a growth locomotive for containing unemployment. Finally, China's financial system is highly fragile. The big four state-owned banks have \$300–400 billion of non-performing loans (30–40% of the total) and also must prepare for greater foreign competition because of the WTO rules. China fears that currency volatility could bankrupt more state-owned companies and undermine confidence in the country's financial stability at a time when the WTO rules will be exposing the troubled state-owned banks to foreign competition.

The decision by China to maintain a stable currency during the Asian financial crisis caused her real exchange rate to appreciate but it did not greatly damage her competitive position because of rapid productivity growth. As a result, China is now emerging as an important workshop in the global supply chain between Asia and the world. China is increasingly playing the role of an assembly shop for components produced by other Asian countries. Pan Asian exports to China rose from \$72.1 billion in 1995 to \$160.6 billion in 2002. The imports for domestic consumption grew from \$42.2 billion to \$78.7 billion while imports for reprocessing grew from \$29.8 billion to \$81.9 billion. Imports for reprocessing now account for 51% of China's imports from east Asia compared to 41% in 1995. As a result, China is now running trade deficits with other east Asian countries because of imports of components and raw materials while running trade surpluses with North America and Europe because of rapidly growing exports of manufactured goods. On the basis of Chinese data, the country has trade deficits of \$31.5 billion with Taiwan, \$13.1 billion with Korea, \$7.6 billion with Asean, \$5.0 billion with Japan, and \$1.3 billion with Australia. Taiwan's exports to China now exceed 13% of the island's GDP. China has displaced the U.S. as South Korea's largest trade partner.

The changing role of China can be seen in the composition of U.S. imports. China now produces about 11% of U.S. imports compared to 5% in the late 1980s. But the east Asian share of U.S. imports has slumped from 40.1% during 1994 to 32.5% recently. Many of the goods formerly produced by Taiwan, Singapore, and Korea for the U.S. market now come from China. There has also been intense price competition which has reduced costs for American consumers. Morgan Stanley estimates this competition has saved American consumers \$100 billion.

The major cause of China's booming exports is not an undervalued currency. It is an upsurge of foreign direct investment which has significantly boosted China's productive capacity and managerial competence. China now has over \$400 billion of FDI compared to \$1.3 trillion for the U.S., \$497 billion for the United Kingdom, \$482 billion for Belgium-Luxemburg, and \$480 billion for Germany. As FDI is now expanding by \$55–60 billion per annum, China will soon have the second largest stock of FDI in the world. Foreign companies produce over half of China's exports and accounted for 65% of export growth during the past decade. China's openness to FDI is also in striking contrast to the policies of Japan and Korea, which tried to restrict trade in the past by discouraging FDI. On the eve of the Asian financial crisis six years ago, Japan had only \$17 billion of FDI while Korea had just \$12 billion.

The role of FDI in China's economy makes for a striking contrast with Japan and Korea. On the eve of the east Asian financial crisis six years ago, there was only \$17 billion of FDI in Japan and \$12 billion in Korea. Both countries effectively banned FDI for almost half a century to nurture domestic companies. Japanese companies also developed their own brand names and distribution channels to conquer global markets. As a result, both large and small American companies often felt that Japan was an unfair trade partner. China is totally different. More than half of China's exports come from American, Japanese, and other foreign companies. China has no global brand names. It sells primarily under the names of foreign companies. As a result, most multinational companies are satisfied with Beijing's trade and investment policies. The major complaints are coming from small- or medium-sized U.S. companies which don't have the capital to invest in China or have not yet had time to penetrate the market there. If Beijing could improve market access for small companies, there would be fewer demands for trade protection or currency revaluation.

The major risk posed by China's decision to retain a stable exchange rate lies in the area of monetary policy. The boom in forex reserves is encouraging rapid growth of money and credit. The growth rate of M1 and lending has accelerated from 10–12% during early 2002 to nearly 20% during recent months. The surge in money growth has not had a major impact on asset markets. The stock market is below its peak of two years ago. Real estate prices have been increasing at a 5% annual rate. But the central bank is very concerned about over investment in real estate and recently announced new regulatory controls on property lending. Property lending had been expanding at an annual rate of 25% while the volume of mortgage loans has shot up to 924 billion rmb from only 19 billion during 1998. What the central bank cannot fully regulate is the tendency for easy credit and surplus liquidity to promote an inefficient allocation of capital throughout the economy. China now has the highest rate of investment in the world. In 2002, investment averaged 42.2% of GDP compared to a previous peak of 41.3% during the boom of the mid-1990s. There is a danger that such a high level of investment could encourage the creation of so much excess capacity that firms will find it difficult to achieve profitability. In such a scenario, the investment boom could set the stage for corporate liquidity problems and an investment recession in two or three years. Korea experienced such a crisis during the late 1990s. If China wants to maintain a stable exchange rate without running a dangerously expansionary monetary policy, she will have to liberalize her controls on capital outflows. If Chinese people and companies could purchase foreign assets, there would be slower growth of foreign exchange reserves. There were large capital outflows by Chinese companies during the late 1990s because of concern about the Yuan being devalued. But this money has returned and swelled forex reserves recently because of the new confidence in China's currency.

It is ironic that the U.S. Government has joined the list of countries calling upon China to revalue her currency. The U.S. is now able to finance its large fiscal deficits and current account deficits only because of currency intervention by Asian central banks, especially Japan and China. The central banks of China and Hong Kong have purchased nearly \$100 billion of U.S. Government securities during the past eighteen months. The east Asian central banks now have 70% of the world's foreign exchange reserves compared to only 30% in 1990 and 21% in 1970. They keep their \$1.7 trillion of reserves 80–90% invested in U.S. Government securities. In the 1960s, France sold U.S. dollars for gold in order to protest the role which the dollar played promoting America's super-power status but continental Europe is now irrelevant to the dollar's direction because it has only 8.6% of global foreign exchange reserves compared to 40% in 1972. If China were to protest U.S. foreign policy by selling the dollar for Euros or gold, it could set the stage for a large correction which would drive up U.S. bond yields, weaken the housing market, depress American domestic consumption, and jeopardize the President's reelection. But China has a \$105 billion trade surplus with the U.S. and is anxious to promote American consumption, so it will do nothing to challenge Bush policies through the currency market.

There is no simple answer to the debate about China's currency policy. There are increasing fears in the U.S., east Asia and Europe about China's competitive challenge. China is naturally reluctant to alter her currency policy because of concerns about high unemployment, the weak banking system and the legacy of the east Asian financial crisis, and the competence of Chinese firms at hedging currency risk. These concerns will cause China to change policy gradually. But as the recent upsurge of monetary growth will testify, China cannot totally insulate herself from the burgeoning foreign exchange reserves resulting from speculation about her currency policy. The most sensible policy is to introduce a wider target bank of 3–5% for the currency and let the market begin to reflect the factors which have caused forex reserves to increase so dramatically.

Co-Chairman MULLOY. Thank you, Mr. Hale.
Dr. Preeg.

**STATEMENT OF ERNEST H. PREEG, Ph.D.
SENIOR FELLOW IN TRADE AND PRODUCTIVITY
MANUFACTURERS ALLIANCE/MAPI**

Dr. PREEG. Thank you, Mr. Chairman. It's a pleasure to be here, a pleasure to be back here. Some of you may recall I was here two and a half years ago to present a paper on Chinese currency manipulation. It was a very lonely feeling at that time. Almost nobody had heard the term "currency manipulation" before or thought about it much.

Co-Chairman DREYER. Deja-vu all over again.

Dr. PREEG. Well, this morning, as I heard the seven Members of Congress, I had the distinct feeling of being something like a Dr. Frankenstein in a lot of chapters of that book.

But, in any event, let me sally forth. I have three issues I'd like to raise to clarify: one is the Chinese currency manipulation is in violation of IMF/WTO; second, the impact, a couple of comments on the trade balance and the economy; and, third, what would be the appropriate U.S. policy response.

Just to start, though, China has been in clear violation of IMF and WTO commitments over the past three years by maintaining an unfairly low exchange rate to gain a competitive advantage. IMF Article IV, Section 1, states that members should "avoid manipulating exchange rates . . . in order . . . to gain an unfair competitive advantage over other members," and Section 3 of Article IV stipulations "the right of members to have exchange arrangements of their choice consistent with the purposes of the Fund and the obligations under Section 1 of this Article," which is very clear that whether they have a floating rate policy like Japan, fixed rate like China, they have to do it in a manner, in a way that does not lead to currency manipulation.

Then, what is currency manipulation? Again, defined very clearly in the surveillance provision related to Article IV, it is "protracted large-scale intervention in one direction in the exchange market." That's it. And "one direction" means buying because that's the way you buy foreign currencies, that's the way you keep your currency lower and, therefore, get a competitive advantage.

So the case of violation rests on what China has in fact been doing protracted large-scale intervention in one direction. But can there be any question? I have some figures here. There is nothing—it is totally unprecedented in the 60 years of the IMF experience, and Japan and China are sort of neck and neck in the last couple of years. But, in China, what is especially important is that there's been an upward movement over the last few years. The monthly purchases of foreign exchange by China went from \$3.8 billion a month in 2001 to \$5 to \$7 billion a month in 2002 to \$10 billion a month this year. And their reserves have almost doubled, \$166 billion to 357. So there should be no question about violation of Article IV.

As to the WTO Article XV that was raised earlier today, it says "you should not frustrate the intent of the Agreement." What is the intent? It's very clear in the preamble of the GATT. The objective is to enter into reciprocal and mutually advantageous arrange-

ments directed to the substantial reduction of tariffs and other barriers to trade. Well, obviously, the currency manipulation would frustrate the intent. And, quite importantly, there is a direct link between Article XV of the GATT to IMF Article IV, presumably, in saying that the members of the GATT/WTO “should accept all findings of statistical fact presented by the Fund relating to foreign exchange.” So, therefore, an Article IV finding would make the case in the WTO.

So that’s the legal case. I’ll come back to briefly at the end on what our policy response should be.

What has been the impact of this massive unprecedented currency manipulation of the last three years? Japan, China, but also others—South Korea and Taiwan—clearly are in that category. I have made some estimates—they’re presented in a paper I presented earlier this year—as to how much lower the—or how much higher the Chinese currency would be under a market-based floating rate and how much larger our trade deficit is as a result of currency manipulation.

The basic concept involved is that official purchases of foreign exchange, as being done by the central banks of China, Japan, and elsewhere, they take off the market the net inflow of foreign currencies during a period, during the year, that otherwise would have put upward pressure on the exchange rate. And the relevant relationship is between the extent of this intervention, buying up the foreign exchange, and the size of the current account surplus, and the new flow of long-term investment, mainly foreign direct investment.

In the case of China, in 2002, they had a \$35 billion current account surplus. They had about \$50 billion new inflow of FDI, or an \$85 billion—this is called “basic balance”—plus \$85 billion. During the same period, though, of that 85 net inflow, the Chinese central bank bought up—just put away \$75 billion, or almost 90 percent. And that’s a very substantial amount of offset, and this year it’s likely to be over 100 percent of their purchases.

Now, there are other factors at play, and there’s no way to do a precise statistical estimate. There is some econometric work on the U.S. side and the Asia side, but in any event, in rough terms, what I came up with, my estimates are that as a result of currency manipulation the last two or three years, the Japanese yen is undervalued by at least 20 percent and the Chinese currency by in the order, in the rough order of 40 percent. And Taiwan and South Korea are also in the 20-percent category.

Now, what that means, impact on trade deficit, there’s a lot more econometric work in this area and, consistent with comments made by Fred, with this degree of undervaluation about \$100 billion of our \$400 billion trade surplus would be related or be a result of such a currency manipulation. The other three-quarters can be explained by a lack of saving and other factors. And of that \$100 billion, \$50 billion or more can be attributed to China, directly or indirectly, as explained in the paper.

There are other economic effects I won’t go into. A lot of this has been discussed already. This would be part of the adjustment process. There would be adverse impacts on our interest rate, inflation, although at some point we do have to adjust. Probably the cir-

cumstances are as good as they can get now to go through the landing, if you will, of the dollar.

Another broader economic effect that has been mentioned briefly earlier today is that the manufacturing sector in the United States is the engine for growth. Two-thirds of the R&D of our country is in manufacturing. Well over 90 percent of patents come out of manufacturing. And this productivity surge in recent years has been largely new manufactured products and applied services, technology intensive, being spread throughout the economy.

Well, when you have—this year we will have a \$500 billion deficit in manufactures, or almost. That amounts to one-third of the value-added of our manufacturing sector. In other words, if we had balanced trade in manufacturing, we would have a manufacturing sector one-third larger and a smaller services sector, and that's a lot larger. It would be a lot broader base for the engine of growth, many more resources for the R&D, the patent development, et cetera.

Conversely, East Asia, throughout East Asia, China perhaps most importantly, has a bigger engine for growth as a result of having this large inflow of trade surplus plus a large inflow of foreign direct investment with embedded new technologies. And there's nothing wrong with both of us having engines for growth. That should be the objective. But it should be done in a way that does not involve something that would be an unfair competitive advantage, namely, currency manipulation.

There's also a defense relationship in the paper. I won't go into it, because if we have a smaller engine of growth than we would have had otherwise, technology, intensive manufacturing, and they have a larger one, the capability is building up.

Co-Chairman MULLOY. I think, Dr. Preeg, if you could finish up within 30 seconds or so, and then we really want to open it up for some questions.

Dr. PREEG. Well, just the policy response. We need a stronger response. I mentioned three things that we should do. One is we should be explicit in saying they're in violation of IMF and WTO. It doesn't take a year or two. Once you do that, a lot more pressure to move ahead, and most of these cases settle out of court promptly, particularly when one side sees they're going to lose at the end of the day.

The second point is—and this hasn't been raised today—there should be equal treatment if we do proceed with this currency manipulation concern, not just single out China but Japan, South Korea, and Taiwan. It's better bargaining, and for the China relationship, I think it's quite important that Taiwan be treated equally with China to show that this is not a protectionist attack on China.

And, third, highlight the mutual benefits. This has already been raised. China would gain some things. One specific wasn't mentioned: If they did revalue 20 percent, their oil price would go down 20 percent throughout their economy, and they're now close to two million barrels a day, and it's growing.

And finally, finally, what do I recommend what they should do as a suggestion? They have to decide. And as I have at the end here, I believe they should revalue up, a 20-percent re-peg to get

closer to a market-based rate. They admit they're undervalued, as Fred said, but at the same time, they should then convert to a convertible capital account with a band around the new peg. And then with the band, they could see how it works and over time, whatever length, they could gradually widen the band toward the ultimate objective, which seems to be agreed, of a floating rate.

Thank you.

[The statement follows:]

**Prepared Statement of Ernest H. Preeg, Ph.D.
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Chinese Currency Manipulation and the U.S. Trade Deficit

This presentation addresses three issues:

1. Chinese currency manipulation in violation of IMF and WTO commitments.
2. The impact on the U.S. trade balance and economy.
3. The appropriate U.S. policy response.

1. Chinese Currency Manipulation in Violation of IMF and WTO Commitments

China has been in clear violation of its IMF and WTO commitments over the past three years by maintaining an unfairly low exchange rate in order to gain a competitive advantage in international trade and investment. IMF Article IV, Section 1, states that members should "avoid manipulating exchange rates ... in order ... to gain an unfair competitive advantage over other members," and Section 3 stipulates "the right of members to have exchange arrangements of their choice consistent with the purposes of the Fund and the obligations under Section 1 of this Article." In other words, exchange rate policies, whether a floating rate as in the case of Japan or a pegged rate as in the case of China, must be implemented in a way that does not lead to the currency manipulation stricture of Section 1.

The IMF definition of currency manipulation is very explicit in the surveillance provision related to Article IV, which refers to it as "protracted large-scale intervention in one direction in the exchange market." "In one direction," of course, means buying foreign currencies since this is the way to maintain an undervalued currency in order to gain an unfair competitive advantage.

Within these clearly defined IMF provisions, currency manipulation by China rests on the assessment as to whether or not China has been undertaking "protracted large-scale intervention in one direction in the exchange market." But can there be any doubt? Table 1 shows the average monthly purchases of foreign exchange by the Chinese Central Bank from 2001 through July 2003. During this period, the foreign exchange holdings of the Bank have more than doubled from \$166 billion to \$357 billion. Moreover, there is a strong upward trend in official purchases throughout the period, from \$3.8 billion per month in 2001 to \$5-\$7 billion per month in 2002 to \$10 billion per month in 2003. These Chinese purchases, along with official Japanese purchases, as also shown in Table 1, are far beyond any precedent throughout the almost 60-year history of the IMF.

**Table 1. Official Chinese and Japanese
Foreign Exchange Purchases**

(\$ billions, monthly average)

	China	Japan
2001 (Jan.-Dec.)	3.8	3.4
2002 (Jan.-June)	5.1	6.9
2002 (July-Dec.)	7.3	3.8
2003 (Jan.-June)	10.0	12.5
2003 (July)	10.0	11.1

Source: IMF, *International Financial Statistics*; and Coalition for a Sound Dollar, "Currency Manipulation Monitor."

The Chinese violation of World Trade Organization (WTO) commitments pertains to GATT Article XV, dealing with "Exchange Arrangements," which stipulates that members should not take exchange rate actions that "frustrate the intent of the provisions of this Agreement." The intent of the Agreement, as stated in broadest terms

in the Preamble, is the objective of “entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade.” Clearly, “exchange rate manipulation to gain an unfair competitive advantage,” as defined by IMF Article IV, meets the “frustrate the intent” test. In fact, GATT Article XV also provides for full consultation with the IMF, including that members “should accept all findings of statistical fact presented by the Fund relating to foreign exchange.” Thus, there is a direct linkage between IMF proscribed currency manipulation and violation of WTO Article XV, including recourse to WTO trade dispute procedures. This linkage is addressed more fully under issue three below.

The critical conclusion is that China—as well as Japan, Taiwan, South Korea, and perhaps some others—have been in clear violation of IMF and WTO commitments related to exchange rate policy. There should be no controversy about this conclusion, which leads to the follow-on questions of the economic impact of such currency manipulation on the U.S. trade balance and economy, and the appropriate policy response by the United States and other trading nations suffering the unfair competitive disadvantage from currency manipulation.

2. The Impact on the U.S. Trade Balance and Economy

Currency manipulation results in a lower than market-based exchange rate, with a consequent larger trade surplus by the manipulator and larger trade deficits for its trading partners. How much lower the Chinese exchange rate and how much larger its trade surplus with the United States are, as a result of Chinese currency manipulation, cannot be measured with precision, but even approximate orders of magnitude are sufficient to indicate a significant competitive disadvantage for U.S. export and import competing industries.

The estimates provided here are explained in detail in an earlier study.¹ The estimates were based on the period through mid-2002, and in the year since then currency manipulation by both China and Japan has accelerated sharply, as shown in Table 1, and thus, if anything, the cited estimates understate the more recent impact of the manipulation on exchange rates and trade.

The basic concept involved is that official purchases of foreign exchange take dollars and other foreign exchange off the market that otherwise would have created demand for the national currency and put upward pressure on the exchange rate. The relevant relationship is between the extent of official purchases and a country’s “basic balance,” that is its current account (mostly trade) plus the net flow of foreign direct investment (FDI).² For example, in 2002 China had a current account surplus of \$35 billion and a net inflow of FDI of about \$50 billion, and thus a basic balance of +\$85 billion which, in relation to the size of overall Chinese trade and investment, would have put very strong upward pressure on the exchange rate. The Chinese Central Bank during 2002, however, purchased \$75 billion of foreign exchange, thereby directly offsetting almost 90 percent of the upward pressure on the currency from the very large basic balance surplus. In 2003, official foreign exchange purchases will likely exceed 100 percent of the Chinese basic balance dollar inflow.

The estimates I made in the IIE book cited above derive from this basic relationship and available econometric work relating exchange rate adjustment to changes in the trade balance. The estimates provided are that the Japanese yen was at least 20 percent undervalued as a result of currency manipulation, and that the Chinese renminbi was in the order of 40 percent undervalued. Together with currency manipulation by South Korea, Taiwan, and others, the estimated impact on the U.S. trade deficit was that approximately \$100 billion, or one-quarter of the total \$400 billion trade deficit in manufactures in 2002, was caused by currency manipulation. The \$100 billion larger trade deficit equates to 1.0–1.5 million jobs in U.S. manufacturing. In 2003, both the trade deficit and the intensity of currency manipulation

¹Ernest H. Preeg, “Exchange Rate Manipulation to Gain an Unfair Competitive Advantage: The Case Against Japan and China,” contained in *Dollar Overvaluation and the World Economy*, C. Fred Bergsten and John Williamson, eds. (Institute for International Economics, February 2003), pp. 267–284.

²Some observers conclude that currency manipulation has no significant impact because annual official foreign exchange purchases, even at \$100 billion per year, pale by comparison with a trillion dollars per day of international financial transactions. The error in this assessment is to compare net and gross financial flows. The very large majority of gross market financial transactions are offsetting inflows and outflows, just as most trade consists of offsetting export and import payments in its impact on exchange rates. What really counts for upward and downward pressures on exchange rates is the net dollar inflow or outflow on trade, current, and long-term capital accounts, which is directly offset, dollar for dollar, by Central Bank purchases of foreign exchange.

have increased substantially, which again might justify an upward revision of these numbers.

As to the impact on the U.S. trade deficit by China alone, there is both a direct and an indirect effect. Based on the shares of trade and estimated undervaluation of currencies, China directly accounts for about \$40 billion of the \$100 billion larger U.S. trade deficit. Indirectly, however, China has an additional impact because Japan, South Korea, Taiwan, and others throughout Asia claim they have to intervene and keep their currencies undervalued because of the very low manipulated Chinese rate. In other words, they say they have to manipulate their currencies to remain competitive with China. There is also good reason to believe that if China were to substantially revalue its currency, the other Asians could be persuaded to scale back their Central Bank purchases and allow their currencies to float upward. Thus, putting the direct and indirect effects of Chinese currency manipulation together, \$50 billion or more of the \$100 billion trade deficit increase can be attributed to China.

As for the broader impact of Chinese and other East Asian currency manipulation on the U.S. economy, there are three principal effects, one involving short-term adjustment of the U.S. trade deficit, and the other two having more fundamental and longer term consequences.

1. Short-term adjustment of the trade deficit. There is widespread agreement that the \$500 billion U.S. current account deficit cannot be sustained indefinitely, and that the inevitable downward adjustment will involve a significant lowering of the dollar exchange rate. As noted above, such adjustment should be of substantial benefit to U.S. export and import-competing industries, but it also has its costs, including upward pressure on interest rates and inflation and perhaps some downward effects on the stock market. The current outlook, however, is about as favorable as it can get for minimizing these adverse adjustment effects. Inflation is very low and most indicators point to a relatively strong economic growth path, with relatively low interest rates, over the next year or two.

In this context, the huge official purchases of dollars by East Asians, including China, are currently financing more than half of the \$500 billion U.S. current account deficit, thus tending to postpone the inevitable current account adjustment. And the longer we postpone the trade adjustment through such borrowing from foreign governments, the “harder the landing” for the dollar and the U.S. economy will likely be, including the likelihood of a larger necessary adjustment during less favorable domestic economic circumstances.

2. Adverse impact on U.S. manufacturing as the engine for growth. The manufacturing sector is the engine for growth for the overall U.S. economy.³ Two-thirds of research and development and over 90 percent of new patents derive from the manufacturing sector. The application of new technologies throughout the economy is predominantly through manufactured products with an increasing component of related services for training, application, and maintenance also supplied by manufacturing companies. Productivity growth in the U.S. economy has soared from 1.5 percent in 1990–1995 to 2.5 percent in 1995–2000 to 3.4 percent since 2000, and the engine for this extraordinary growth record is the manufacturing sector.

The unprecedented U.S. trade deficit in manufactures, however, has resulted in a much smaller engine for growth in the United States and a corresponding larger engine in East Asia, including China, in particular. The U.S. trade deficit in manufactures has increased steadily from about \$150 billion in 1997 and \$250 billion in 1999 to \$373 billion in 2001, and it is projected to exceed \$450 billion this year, of which 70–80 percent is with East Asia, and over \$100 billion with China alone. The trade deficit in manufactures currently amounts to about one-third the value added in U.S. manufacturing industry. Put another way, if U.S. trade in manufactures were in balance, the U.S. manufacturing sector would be one-third larger, including about five million more jobs. The net result would be a substantially larger engine for growth, with substantially greater resources available for research and development, investment, and training to upgrade employee skills.

This relationship between the evermore technology-intensive manufacturing engine for growth and the trade balance is clearly evident in the economic strategy of the East Asian export powerhouses, including China. A large trade surplus plus a net inflow of technology-intensive direct investment in manufacturing is a central policy objective, and currency manipulation to maintain or increase the surplus is a highly effective policy instrument to this end. A sustained trade surplus as a pol-

³The assessment in this section is drawn from *U.S. Manufacturing: The Engine for Growth in a Global Economy*, Thomas J. Duesterberg and Ernest H. Preeg, eds. (Praeger Publishers, October 2003).

icy objective has long been called “mercantilism” by economists. In current East Asian form, it can be more pointedly described as “advanced technology mercantilism,” and China is the outstanding practitioner.

3. Adverse impact on U.S. defense capability. This impact follows principally from the previous point of a larger East Asian manufacturing engine for growth relative to the United States as a result of currency manipulation and its impact on the U.S. trade deficit. A broader Chinese manufacturing base, with strong incentives to upgrade technological content, enables China to modernize its military capability at a faster pace. Likewise, a relatively smaller U.S. manufacturing base would have a restraining effect for the United States to maintain its high technology lead in weapons, related information systems, and other defense capabilities.

Another indirect effect of Chinese currency manipulation on Chinese military modernization is the enhanced capability to purchase weapons and other defense-related goods and services from abroad, largely from Russia in recent years. With close to \$400 billion of foreign exchange sitting idly (while gaining interest) in the Chinese Central Bank, China has virtually unlimited funds available for cash purchases of advanced military capability.⁴

3. The Appropriate U.S. Policy Response

U.S. policy has been in a state of denial about currency manipulation for many years. The 1988 Omnibus Trade Act requires the Secretary of the Treasury to report to the Senate Banking Committee twice each year with an assessment of currency manipulation by trading partners. The congressional motivation for this provision was concern about Japanese exchange rate manipulation dating back to the mid-1980s. Secretaries of the Treasury, however, have almost always responded with brief statements denying any signs of currency manipulation. Neither Japan nor China has ever been mentioned as possible currency manipulators. One consequence of this U.S. denial is that the IMF Secretariat has avoided the subject as well. If the Secretary of the Treasury of the largest IMF member, which also suffers the principal competitive disadvantage from currency manipulation, every six months categorically denies manipulation by any other IMF member, no one else would be so presumptuous as to disagree with him.

There has recently been significant change in this policy. Secretary John Snow is now urging China and Japan to move toward a more market-based exchange rate policy. The United States also pressed the Group of Seven (G-7) finance ministers on September 20 to adopt language calling for more flexibility in exchange rates to promote adjustment based on market mechanisms. There has still been no public statement, however, about violation of IMF and WTO commitments, and the country focus is very uneven, with a predominant focus on China. Japan, in fact, stated that the G-7 statement represented no change in policy for Japan.

A more complete and effective policy response would put the issue in broader context, in terms of both substance and procedure.

A. The Substantive Response

The United States should make a clear and comprehensive statement about the problem of currency manipulation and its adverse impact on the U.S. trade deficit. It should consist of three basic points:

1. Violation of IMF and WTO commitments. The United States should state clearly that China, Japan, and some others are in violation of IMF Article IV and WTO/GATT Article XV commitments as described in section 1 above. This is the factual cornerstone of the problem, and a clear statement would counter frequent criticism that the United States is pursuing a protectionist trade policy toward China. The IMF/WTO legal case also strengthens U.S. bargaining leverage to resolve the problem as an urgent matter.

2. Equal treatment for all currency manipulators. The current policy of singling out China is inconsistent conceptually and can have adverse impact on other U.S. foreign policy interests with China. It also adds to the perception of U.S. protectionism because of the very large U.S. bilateral trade deficit with China. At least Japan, South Korea, and Taiwan should be approached on equal terms, with a view to terminating IMF proscribed currency manipulation. Japan, in fact, has been ma-

⁴A related and utterly absurd financial relationship is that China still receives several billion dollars per year in long-term concessionary loans from the multilateral development banks, which could be provided internally from less than one month's purchases of foreign exchange by the Chinese Central Bank. China should immediately be converted from an aid recipient to an aid donor country in view of its massive official foreign exchange holdings.

nipulating its currency far longer than China and in a more obvious way.⁵ The inclusion of Taiwan is significant not only because Taiwan is a long-time manipulator, with foreign exchange holdings of \$186 billion, up \$30 billion in the past 12 months alone, but as a demonstration to Beijing that the United States is treating both Chinas on an equal basis for this purely economic and commercial issue.

3. Highlight the mutual benefits. There is a short-term competitive trade advantage for China from currency manipulation, but there are also disadvantages. If China were to revalue its currency up by 20 percent, for example, the cost of imported oil—currently 1.5 million barrels per day and rising rapidly—would decline by 20 percent throughout the Chinese economy. Likewise, the ensuing reduction of Central Bank purchases of foreign exchange would provide additional financial resources for internal needs such as building infrastructure and reducing poverty. Longer term transition to a more efficient market-based exchange rate, in conjunction with movement toward free trade, is clearly a mutual economic interest of both China and the United States as global trading nations.⁶ These overriding positive dimensions should be highlighted in discussion between the governments about the currency manipulation issue.

B. The Procedural Response

Based on such a substantive statement of policy, the United States should undertake further bilateral, group, and institutional consultations with a view to a prompt ending currency manipulation by trading partners. Bilateral consultations would begin with the four named East Asian trading partners that are having the largest adverse impact on U.S. commercial interests. Group consultations would take place within the Asia Pacific Economic Consultation (APEC), in view of the transpacific concentration of both currency manipulation and the U.S. trade deficit, and in the G-7 industrialized country grouping, wherein the Europeans and Canada also suffer adverse consequences from East Asian currency manipulation because they have been absorbing a disproportionately large share of the trade impact from the decline in the dollar thus far.

Institutional consultations would be initiated in the IMF with respect to violations of Article IV and in the WTO with respect to violations of GATT Article XV. These formal consultations could be delayed pending early resolution of the issue through informal bilateral consultations, but the United States should be clear that this is an urgent matter and that the United States is prepared to move forward promptly to such formal consultations if necessary.

* * *

A final question pertains to what would be the most appropriate policy response by China. An abrupt switch from the current fixed pegged to the dollar, nonconvertible on capital account, to a market-based floating rate, could cause some short-term disruption in financial markets. A more balanced action proposed here would be an immediate 20 percent revaluation of the renminbi to bring it closer to a market-based level, together with a transition to convertibility on capital account within a band around the newly established peg. Over a couple of years, this band could be progressively broadened until a market-based floating rate is achieved. This is, however, only a well-intentioned suggestion. The ultimate choice is up to China, as provided in IMF Article IV, Section 3, which stipulates the right of members to have exchange rate policies of their choice, *as long as they do not lead to currency manipulation to gain an unfair competitive advantage.*

Discussion, Questions and Answers

Co-Chairman MULLOY. Thank you.

⁵The Japanese Central Bank simply intervenes in a floating rate market to buy foreign currencies and thus maintain a lower than market-based exchange rate. China, with a dollar pegged rate that is nonconvertible on capital account, requires all incoming foreign exchange not used on current account to be sold to the Central Bank. The net result is the same in terms of IMF proscribed currency manipulation, but the process is more indirect and less clearly perceived by some observers.

⁶The substantive economic benefits to both the United States and China from a multilateral free trade agreement for manufactures are described in detail in Ernest H. Preeg, *From Here to Free Trade in Manufactures: Why and How* (Manufacturers Alliance/MAPI, August 2003). In view of the failure of the WTO ministerial meeting in Cancun, the United States and China should indeed give urgent consideration to such an initiative as a way to salvage the multilateral trading system as well as to reap the substantial direct economic benefits.

I am going to have the first five minutes, and we're going to limit ourselves to five minutes so everybody has a chance before we have to break.

First, I want to just tell you, in the context of this hearing, we tried to think it through—and it was some months ago—what we wanted to do with it. There weren't all these congressional bills in there three months ago or two months ago when we started putting this hearing together. This issue has hit, and I think it hit because there is a major problem out there and that Congressmen are trying to understand how to deal with it. And once we decided to look at those bills that the Congressmen and Senators were putting in, we felt it very important to bring these people—these elected representatives of the people in here to find out what they think is going on, because they are a transmission belt from the larger society to policymakers. And you don't always get that when you're in the Administration, what's really going on out there.

The other thing I want to say, I was around this town when PNTR was going through the Congress. And, remember, it had to get through both Houses of Congress. And part of the problem, I think, was the way it was sold. It was sold to the elected representatives of the people that it was going to correct the trade imbalance with China by opening up China to American exports. That was the way it was sold.

Now, I want to read to you an article that appeared—and I think it's very important for people out in the larger community to understand this. The *Wall Street Journal* on May 25, 2000, the day after the House voted and approved PNTR, said this in an article about that vote. It said, "And while the debate in Washington focused mainly on the probable lift for U.S. exports to China, many U.S. multinationals have something different in mind. 'This deal is about investment, not exports,' said Joseph Quinlan, an economist with Morgan Stanley Dean Witter." I think that is your firm, Dr. Roach. "U.S. investment is about to overtake U.S. exports as the primary means by which U.S. companies deliver goods to China."

So, in our first report, we said China's effort to get into the WTO, a key part of it was to get investment. It was sold here that it would help Americans sell more to China, and I think part of the problem now is that the members had a misimpression of what was happening here. And I think that's now created a political problem that we should be thinking about how to deal with rather than attacking these Congressmen, who are really telling you that there's a problem out there that's not being dealt with.

Now, I think it's more than an exchange rate issue, personally. Paul Craig Roberts, who was an Assistant Secretary of the Treasury under Ronald Reagan, is going to testify here later today, along with other economists, and he's going to tell us that part of the problem is the fact that mobile factors of production—capital, technology, and even labor through Internet transfers of high-level jobs. He's going to tell us that that has changed what has been the perception for a century about what trade was about, that you make goods here, you ship them there. And he's saying that you really need to rethink what we're doing here, because when you can move factories, technology, and white-collar jobs and everything out of

your country to another country, that changes the perception of what people thought was trade.

So I would just like—with that statement just ask: Do you think there's any validity to these concerns, Dr. Roach? And others, if you want to comment.

Dr. ROACH. Let me just comment. And, look, I apologize if I got a little hot here. But I sat here and listened to Congressman after Congressman expressing tremendous frustration and anger at China's role in accounting for, as one Congressman put it, "the bleeding" that's going on in America.

The reason that this issue is so important right now is because here we are 22 months into an economic recovery and jobs are still going down.

Co-Chairman MULLOY. Right.

Dr. ROACH. In fact, this is the most jobless recovery in the history of the modern-day U.S. business cycle. And so, therefore, the Congressmen, as typical refuse to accept responsibility for anything. They want to point their finger at someone else. And yet there's a legitimate argument to be made. And the counterargument here is that they're the problem. That by creating these irresponsible deficits that go on forever, they have cooked the books in terms of giving us trade deficits for as far as the eye can see, because we have no national savings. And that's a huge issue. I wish that there were some Congressmen here to respond to this. But, as they usually do, they just sort of dip in and they dip out because they're always so busy. They don't like to really discuss issues with you. They like to preach.

And then you raised, I think, an absolutely critical issue—and Craig Roberts, if he's going to talk about it, God bless him. The whole concept of trade is being transformed by IT-enabled connectivity that allows us now to extract labor input from anywhere around the world, whether it's in tradable goods or what we used to call non-tradable services.

The really big story that no one is alluding to here is that services may be next. Chuck Schumer did allude to that, but he's so focused on manufacturing, he can't see past the loss or the closing of some auto plants in parts of New York. But we're a service economy. Eighty percent of our workforce is services. That's six times the share of manufacturing. And now, courtesy of the Internet, we're able to extract increasingly high value-added service output from places like India.

So I'm sure there's going to be a U.S.-India Commission that is going to be set up at some point in the not so distant future. Once we deal with China, then we're going to go attack India.

Is that the way the world's greatest nation wants to behave? I'm not proud of that at all. Yet, I think that's a serious risk that's where we're going. Here in this room you're charged with U.S.-China relations. But what I do as a macroeconomist is try to figure out how this all fits into the broader picture.

Yes, America is a great country, and if we just stay focused on investing in human capital, and innovation, I guarantee we'll be fine. Go back and read the hearings, if they exist, of what the farmers felt in the late 1800s or the sweatshop workers felt in the early 1900s. You're getting sentiment today that's very reminiscent of

those earlier junctures when there were fears and anxiety over the future.

And America was always great enough to come up with that next new thing. Yet by looking inward and going protectionist, we're doing exactly the opposite. That worries me a lot.

Co-Chairman MULLOY. I'd like to engage further, but my time is up.

Commissioner Reinsch.

Commissioner REINSCH. Thank you, Mr. Chairman.

First, just for the record, I just want to say I agree with Mr. Roach that the real underlying problem here is our extraordinary budget deficit and, to use my words, the irresponsible fiscal policy of the Administration. If you compare fiscal '00 to the current year, the change is just extraordinary, probably greater than ever in our history, and I think that does underlie a lot of the problems.

Nevertheless, as Mike Wessel said, we're here to talk about China, and so we have a narrower focus, and I have just two questions, and I would ask for short answers, please, so we can squeeze them in.

The first one is: Mr. Hale made, I think, a point that some others have made which is very important, which is that the Chinese not only have had an export boom but an import boom. I guess the first question is: Why aren't more of those imports coming from the United States?

Mr. HALE. No simple answer. Last year, we had about \$20 billion of exports to China, and U.S. multinational companies had \$26 billion of what I'd call sales in China from their own production in that country or their own local sourcing. China's huge import boom has actually been from other Asian countries. China is currently running a trade deficit of \$32 billion with Taiwan, \$10 billion with Korea, \$5 billion with Japan, \$7 or \$8 billion from ASEAN.

The reason is very simple: China's basically turned into a huge assembly shop. They buy a lot of components, more raw materials from East Asia, especially Taiwan, and turn it into finished goods.

Commissioner REINSCH. Well, why aren't they buying them from us?

Mr. HALE. Because I don't think we produce a lot of the components anymore that drive this industrial boom. Those are produced, have been produced over the last 10 or 15 years by other Asian countries. The fact is a lot of these industries left the U.S. going back 10, 15, 20 years ago, and so we don't have the same link in the supply chain that the other countries do.

Will that change? Who knows? I mean, as China goes more up market to more sophisticated industries, to more high-value-added industries, it's quite possible that our share will increase because those kinds of goods are still produced here as opposed to the components, the widgets and things like that.

But, the fact is, as Fred Bergsten indicated, a lot of the things that China produces just aren't produced here anymore.

Commissioner REINSCH. Well, you make a very good point because what you're talking about is an erosion of the manufacturing base that extends way beyond our relations with China. It's been going on for 20, 30 years.

Mr. HALE. Well, a huge change. We can say that the manufacturing output share of GDP is still relatively high. Employment has fallen steadily for many years, especially in the last three or four years, because we've just gone to a different product mix. And because the Chinese economy is still, as Stephen indicated, relatively poor, its capacity to absorb what I would call the most sophisticated products, the most high-value-added products, is somewhat limited compared to Europe or Japan or other affluent societies.

Commissioner REINSCH. Let me pick up—do you want to say something, Dr. Roach?

Dr. ROACH. Let me just briefly add one thing. Under WTO accession, I think some of the greatest opportunities that lie out there for U.S. companies in China is in the liberalization of services. And, again, that's where the bulk of our jobs are. There's tremendous opportunity for us to get involved in Chinese service markets in a fashion that would benefit U.S. workers significantly.

Commissioner REINSCH. Ernie, do you want to throw in ten seconds' worth?

Dr. PREEG. Just on the U.S. manufacturing sector, it's been hit hard cyclically in the last three years. But over the last 20 or 30 years, the share of GDP in labor has gone down because productivity growth consistently has been two to three times higher in manufacturing than services. The quantity of manufactures throughout the 1990s grew faster than the quantity of services.

Commissioner REINSCH. Okay.

Dr. PREEG. That's a positive thing.

Commissioner REINSCH. That's very helpful, and I appreciate that.

The other question picks up on something that Mr. Hale said, which is that China has become a giant assembly operation. They're sucking in imports from elsewhere, putting them together, and shipping them here. That makes sense. It seems to me that that is sort of, nevertheless, kind of a short-term or static picture.

The real debate that we probably ought to be having, and are not, is if or when, at what point are they going to turn the corner and move into product development and design of their own and ultimately begin developing all those parts and components domestically and change the equation that you've just described.

I attended a conference last February where there was much debate about this and much speculation about whether that would ever happen and what the consequences would be if it does. Would any of you like to opine on that?

Mr. HALE. Well, China, for example, is now developing a semiconductor industry, but, again, with foreigners driving the process. Taiwan companies are leading it.

Commissioner REINSCH. Yeah, but that's technology transfer. That's not—

Mr. HALE. America's companies are also playing a role. China's also proposed in the last two years, to appease the Asian countries that are concerned about its economic takeoff, a regional free trade zone encompassing ASEAN, Korea possibly, someday even Japan, if they can get over all the agricultural problems they have.

So China is trying to actually demonstrate to the other countries in the region that it's not going to basically displace them com-

pletely, but this integration process will continue and there will be a competitive advantage for somebody to engage in two-way trade. And, again, the structures that we have right now won't necessarily be there in five or ten years. They'll be constantly evolving.

China, for example, has a computer company called Legend, which is very successful. It's got a 26-percent market share in China. IBM and Dell are 3 or 4 percent each. But 80 percent of the components for Legend computers come from Taiwan. Basically, it's an assembly operation for Taiwan components.

And now, what's happened in the last three years is that all these Taiwan companies have moved to the Mainland. Taiwan investment last year in China was \$30 billion. Five years ago, it was \$10 or \$15 billion. Taiwan, which is a huge factor in many technologies, is now moving 60, 70 percent of its output to the Chinese Mainland. So what would have been in the past a U.S. trade deficit with Taiwan will now be a trade deficit with China instead.

Dr. ROACH. I would just say I think it's perfectly logical to expect what you laid out. This is the continuum of economic development; poor countries lacking in capital, both physical and human, start out assembling. Then as they slowly start to climb up the curve of development and prosperity, they become more educated, more technologically adept, and they turn those skills into producers.

This very process is now unfolding in China, and I think we can expect more of it. This is the way globalization works. We can expect it in countries all over the world.

Our challenge in America is always the same to stay ahead of the curve. And we've been great at that over time. The risk, though, is that we react to new pressures, that and start to look inward and protect ourselves. I don't think there is anything to fear here. This is what global prosperity is all about. It's a win-win for us.

Commissioner REINSCH. I think you're exactly right about the challenge. The question in this case is whether China is different from other previous cases because of its size and because of the nature of its economy. But my time is up.

Mr. HALE. Just to stress again, China is different because of its size and because of its scope. But, again, in contrast to the other Asian countries that we were concerned about ten years ago, Japan and Korea, it's incredibly open. This development model is incredibly open, so, therefore, the opportunities there are much greater than they were a generation ago in Japan or in Korea. We've got to recognize that. This is not a closed economy model. It's employing cheap labor. It's got a reasonably well-educated population. They produce 300,000 graduates every year in the engineering area. So it's formidable. But it doesn't mean that we can't find huge opportunities if we focus and organize our efforts in the correct way.

Co-Chairman MULLOY. I think that's the key. I think we've got to figure out how to organize ourselves a lot better and think about that we're into this global economy now, how do we organize ourselves, and we haven't really thought that through. And that's what we're trying to think through here with you—

Mr. HALE. I just have an anecdote. I gave a speech a few months ago to the U.S.-China Chamber of Commerce in Chicago. I spoke

to almost 350 people. After my speech, I looked at the corporate guest list to see who I was speaking to. I did not recognize a single name on the list. Every single firm there was a small Midwestern—Illinois, Indiana, Iowa—manufacturing company, very concerned about China.

Twenty businessmen came to me after my speech and said, “Can you help me buy a plant in China? I have to go there to be competitive.”

Co-Chairman MULLOY. Right.

Mr. HALE. But these were the small companies. And what’s driving this whole debate about China’s exchange rate policy is not General Motors or Motorola. They’re fine. They’ve got \$5 billion investments in China. They have a huge market share. It’s the small companies who have not yet accessed China because they lack the resources, lack the expertise, lack the skills. And we have to help those companies penetrate China, and China should be helping those companies.

Co-Chairman MULLOY. Commissioner Wessel.

Commissioner WESSEL. Again, thank you. And, Mr. Roach, thank you for your passion. I have followed your writings and speakings for many years, and you are honest and forthright in your beliefs, and we appreciate that.

I do believe that this is not intended as a one-sided discussion. The Members of Congress are reflecting a comment you made just a couple of minutes ago, that this is the most jobless recovery we have seen in probably the post-war period. And our defined unemployment rate does not reflect the real unemployment rate, which I would argue is well over 10 percent, with those who have given up, those who are working part-time jobs because they can’t find full-time jobs. And, really, that may be the root of the larger problem in the sense that when you’re out of a job, you can’t save. When you’re underemployed, you can’t save. You’re spending every dime you get to try and stay out of debt and try and make sure that your family has food on the table and can afford what it needs to live on a daily basis. So as I said before, we do recognize that there is a larger problem. The China problem is a part of that.

But I’d like to ask all three of you here: If one were to take present circumstances, meaning a skyrocketing deficit and the laws we have on our books without much change, the frustration that people are seeing, that the American public sees, is because they see their jobs moving to China. As I said earlier, they’re moving from Mexico to China and elsewhere, and this may be the overall globalization problem.

Do you believe we can sustain our high standard of living without dramatic change in U.S. policy?

Dr. ROACH. I think that this perception that Americans see their jobs moving to China is a perception that’s very much shaped in the hallowed halls of Congress. Those perceptions are very hard to validate—especially the trade-off between U.S. layoffs and Chinese hiring.

Consider America’s jobless recovery: By my estimates, we’re probably about four and a quarter million jobs below where we would normally be at this point in a business cycle. About half that

shortfall is in manufacturing. About half that shortfall is in services.

Why are companies laying off workers? Is it China's fault? Is it Korea's fault? Is it Japan's fault? Is it our fault? Probably everybody's at fault because what is going on here are the perfectly normal cross-border transfers of globalization. Your challenge is so tough because you're charged with looking at China, alone. But you just said it: This so called China problem must be examined in a bigger context.

In an era of globalization, the concept of capacity and supply takes on totally different meanings. And it simply may well be that we have a huge global imbalance between supply and demand. We've got excess capacity everywhere around the world in literally everything we do, and as we take our barriers down, we're now realizing this for the first time ever. Moreover, the Internet enables us to tap sources of supply that we've never been able to tap before, both in manufacturing and in what we used to call non-tradable services.

The final piece of this puzzle is that because of this imbalance between supply and demand, companies don't have any pricing leverage as they used to. And so they have to keep cutting costs to survive and deliver returns to shareholders. That's why we've had this inflation-deflation debate—an extraordinarily different aspect of our macro scene that hasn't been evident for a long time.

So, to survive as a business when you're lacking in pricing leverage and facing competition that you've never seen before, you have to keep pushing down on the cost curve. And that means going to outsourcing chains, whether they're in China, whether they're in India, or any other low-cost producer around the world. And this does put pressure on what we think we're entitled to in terms of our standard of living as the world's most prosperous nation.

But those entitlements get drawn into question when we run reckless economic policies as we are doing today with these massive budget deficits. And I agree with you that the unemployment rate is probably a good deal higher than the official numbers suggest, consistently with these pressures or our standard of living.

But as much as you're charged with dealing with U.S.-China in the narrow sense, I think you would be doing the country a huge service if you, simply stated, that this problem is one piece in a much bigger puzzle. We can't pretend to just isolate U.S.-China relationship on a bilateral basis anymore. There are forces much bigger than U.S.-China that are affecting the prosperity and the standard of living of the American worker.

Mr. HALE. I think we should recognize that China has actually had a benign effect on the standard of living of the American people by producing a big disinflation in the cost of many consumer products. Andy Xia, his colleague in Hong Kong, produced a report two weeks ago suggesting that the cost savings in the last five years have been worth \$100 billion per annum for American consumers. Basically China buys a lot of commodities. In fact, its commodity demand is so great it's pushing up the price of copper, aluminum, and steel, but turns it into very cheap final goods, which in turn enhance our living standards.

Now, the jobless issue is a very profound one, and just a few numbers to put it in perspective. Since President Bush became President three years ago, we've lost 2.7 million jobs. No American President since Herbert Hoover has lost jobs on this scale. Even the Presidents we think were failures outperformed the current President: his father, ten years ago, 2.6 million jobs; Gerald Ford, terrible recession, 2.8 million jobs; Jimmy Carter, a disaster, plus 10 million jobs.

This is a very unique period, and I fear that if the 5-percent GDP growth we're now experiencing here in the third and fourth quarters doesn't give us two or three hundred thousand jobs in the fourth quarter, even President Bush may resort in the new year to protectionist trade policies, big dollar devaluations, who knows what, because he doesn't have any policy levers. We've got a massive budget deficit. Interest rates are 1 percent. Where else do you go to find jobs but to bash foreigners? It's really a political choice, perhaps.

But as Steve just indicated, the bottom line is: What will produce a highly competitive, highly entrepreneurial economy to produce jobs and produce wealth? And the answers are always the same. A good level of savings and investment, a well-educated labor force, a reasonably good set of institutions to make the economy function correctly.

Our savings rate is the lowest in recorded history. That's why our current account deficit is so large; our budget deficit is massive, because we have, since September 11th, taken on some major responsibilities.

I would add that the budget deficit has not cost us jobs. If we had not had the big budget deficit, the big increase in defense spending, we might have lost four million jobs, not 2.6 million. The deficit is helping in the short term. But in the long term, we have to bring it under control to get that savings and investment balance right, to have a high-growth, prosperous economy.

So the policy answers are not complex. They've been there for a long, long time. We know about them, but they do require political will, they require some creativity, and they require some courage from the people who are responsible for making public policy.

Co-Chairman MULLOY. Commissioner D'Amato.

Commissioner WESSEL. Can we hear from Mr. Preeg?

Co-Chairman MULLOY. Oh, I'm sorry.

Dr. PREEG. Well, two quick comments.

First, obviously there are a lot of factors in play. I just want to say that this week we put out a book called "U.S. Manufacturing: The Engine for Growth in a Global Economy." I'm co-editor. It has the full thing. There's a lot about fiscal policy, the deficit, about restructuring to have enough incentive for innovation and investment. There's a lot about tort reform. There's a lot about health care reform. So there are lots of things we should be doing to make sure our manufacturing industry keeps its momentum.

But I don't think we should lose sight of the fact—which is the subject of this hearing—the exchange rate issues, because this is only one part, but it's an important part, substantively, and it does have the potential of moving into protectionist directions. And in our membership, we have 450 companies, manufacturing compa-

nies. We're essentially a private sector think tank, a lot of interaction. They're all interested in China when you put the question to them. But if the exchange rate were 40 percent different or even 20 percent, not everyone but a lot of them say: Well, then we would do it differently. Then we could keep our contracts here. They would restructure.

It's a very dynamic, changing circumstance, but a major revaluation of the Chinese currency, in my view, would have quite substantial effects, as we said, perhaps \$50 or \$100 billion of a trade deficit. That's very substantial.

Commissioner WESSEL. If I could just clarify one thing, I believe it was Dr. Bergsten who said that a \$100 billion switch would equal roughly 500,000 jobs. Is that an estimate that you'd agree to?

Dr. PREEG. It's generally 10,000 per billion. A hundred billion is a million jobs.

Commissioner WESSEL. Thank you.

Co-Chairman MULLOY. Commissioner D'Amato.

Vice Chairman D'AMATO. Thank you, Mr. Chairman, and I want to thank the panelists for their testimony. I think this is the kind of debate that we were hoping for.

I would like to point out that if we were intending to have a massive one-sided hearing, we certainly would not have invited this panel. We certainly would not have invited Dr. Roach.

So I would like to just make that point up front. We enjoyed having his testimony because we have a lot of preachers here. We had a number of preachers this morning, and I think we have some preachers this afternoon, too, on each side of the issue. And, Dr. Roach, I don't want to single you out, but I think that you make a textbook case for globalization and for multinational corporations. You say, "... in the end, we must all learn to live with the stresses and strains of globalization"—for some reason. "Our commitment to globalization should be unwavering in bad times as well as good times. ..."

And I just would like to point out that the emotion you saw this morning it is palpable. It's really coming hard at us. And there are reasons that there is a lot of smoke out there, and usually where there's smoke there's fire. So, I think that there are some legitimate issues on both sides of this case.

When I think of globalization and multinational corporations, you'll forgive me, but I think of corporations like the Big Eight accounting firms, like Tyco, like Enron, like WorldCom, like Global Crossing. And I think of fraud, massive fraud, and criminal behavior. One can make that case, too. Now, quaint as the Congress is, it's useful to have regulatory operations on behalf of average people.

When we had the debate over PNTR for China—it's true that the Administration made very clear arguments, without which and it would not have been passed by the small majority it did in the House, i.e., without these arguments—that the Chinese were going to be brought to a rule-of-law system, they were going to be abiding by their WTO commitments, and we were going to ensure that they did so.

The second set of arguments—which you may not remember, but we remember—is that this would inevitably lead to openness in the

Chinese society as well as the Chinese economy and would lead to democracy. These arguments were made very, very strongly. And what this Commission has found out through its assessment of what happened in the SARS crisis and the post-SARS crisis is that democratic reforms and openness in democracy have not occurred in China. Indeed, the regime seems to be going in the opposite direction.

So we're worried about that because, if we were going to create a very, very powerful China and the assumption was that it's going to be a China that's based on openness not only in the economy but in its society and political system, there is some reason for worry. So we're worried about is the extent of China's commitment to the rule of law.

Now, as Mr. Preeg points out, in the manipulation, which is the subject of this hearing, manipulation of currency, we regard that as a violation of their commitments under the IMF and the WTO, and that is the rule-of-law process that we were told is going to be enforced.

Now, today, we don't have any representative from the Treasury Department here. We've invited the Treasury Department for the last month, tried to get somebody from Treasury to testify.

Co-Chairman MULLOY. Two months.

Vice Chairman D'AMATO. Two months. And guess what? Nobody was available, but they would send up their testimony.

Well, we just found out that the testimony was written and approved in Treasury, sent to the White House, and the White House decided, no, we're not sending that testimony up. So the White House is sitting on the testimony. They say we'll get it in a couple of weeks.

So the question we have then is: What is the commitment of the Administration to addressing this question of manipulation of currency as an example, an important example of enforcing the rule of law? This country prides itself on honoring its commitments, and we have a history with the Chinese not really complying with the commitments they have signed with us.

The WTO was going to be different, and we're hoping that it will be different. But in order to enforce those commitments, we need to be tough. The Administration has got to go along with the Congress in being tough and enforcing those commitments. Otherwise, where are we going here?

You're going to get that kind of emotional reaction from the Members of Congress who see us being used and a system that is being rigged against us.

But let me ask all the panelists this question: Do you agree that this currency manipulation is, in fact, a serious matter and conforms in many respects to 19th century mercantilism? This is certainly not globalization. This is mercantilist behavior. This is not the kind of thing that you're talking about. And if the Chinese are practicing mercantilism and we are promoting a rule of law, what is it that is going to bring the Chinese into conformity to these agreements? If they do not you will certainly see an acceleration of the emotion you saw this morning in the political arena, and it will overwhelm everything.

That's my view. Can you comment on that?

Dr. ROACH. Well, I take your warning and your concerns very seriously. It is certainly clear to me, even before I came here this morning, that this is a very serious issue. Now, having heard the debate firsthand, I go back with even deeper concern than I had before I left from New York this morning. This is a very, very worrisome development.

Ernie Preeg makes the case for currency manipulation being a violation of IMF and WTO/GATT provisions, and he clearly knows a lot more about that than I do. But what is important to understand is he did not make the case to single out China. He made that case in the context of anyone who is manipulating their currency, especially wealthy countries like Japan who has intervened massively in excess of \$80 billion so far this year to prevent its currency from reaching fair value. So the risk is again in singling out China, a very poor country, especially compared to Japan, that this is scapegoatism at work. It is not what we as the world's greatest nation should feel proud of.

In terms of the WTO promises that we think we had when we got into this agreement with China, I think you have got your finger on exactly the remedy. If there is a consensus of opinion in the body politic in the United States that China is in violation of the spirit under which it has joined WTO, then the remedy is simple. This was the whole idea of WTO accession from China—to bind them to a rules-based system that we have control over. So if you believe there is a violation, call them up on charges and make them be accountable for their actions. That is what this system is all about. We just can't complain about it. If we feel strongly that they are violating international standards that they have agreed to, then let's make them explain their case, defend their case, and subject them to the penalties if in fact they are in violation. I happen to think they are not. There are estimates in written my testimony that look at the value of renminbi relative to a basket of currencies that China trades with. It does not show anything all that out of line, nor does China's trade surplus on an overall basis. These are the types of issues that need to be debated in establishing the merits of the concerns that are addressed here today.

Again, I just reiterate my basic concern. I hear you. I think the emotion in Washington is high. It cannot be taken lightly, but it is up to us as responsible citizens to try to understand that emotion and deal with it in a way that is not damaging to our country and to the broader global economy.

Co-Chairman MULLOY. Dr. Preeg.

Dr. PREGG. Well, as you may have guessed, I do believe it is a serious issue and I do believe we should, as we now seem to be agreeing, we should be calling the other—if in fact we find them in violation of their commitments, we should say so and do something about it.

Just a correction though. The assessment of what they are violating is not on some of these broader measures, but it is very clearly protracted large-scale intervention in one direction. That is the direct policy action that pushes the currency down more, and here it is quite clear.

Now, what the policy background is for, what should happen next, it goes back to the Omnibus Trade Act of '88 when the Con-

gress took the initiative. Currency manipulation is in there. Twice a year the Secretary of the Treasury has to say, "Has anybody been manipulating currency?" Consistently, over all the years, they said a brief statement, "No." They have never mentioned Japan or China once in 15 years. I have talked to some of the people writing these statements. I do not want to get too much into it.

The reason is, first of all, once you say they are in violation, you have to do something about it. And we finally reached that point, because they never said it, even Secretary Snow. He has used the term currency manipulation, but he has never said it is a violation of IMF Article IV or Article 15. We are coming up in the next report in October, and I think one reason they are probably sitting on your statement is that they know that people for once are actually going to pay attention to what he says. Because usually he just goes—I was there at Senate Banking. I was testifying along with Secretary O'Neill a year ago, and it was a two-sentence statement saying, "Oh, we did not find any." So it is really coming down.

But if he once says, "Yes, we believe they are in violation," then he has to push ahead, and then you are going to have real pressure, and I would presume that there would be movement for a lot of reasons. The protectionists, all the reasons Fred said, that it is a mutual interest to deal with this issue.

Vice Chairman D'AMATO. Let me just make one statement, if I may, Mr. Chairman.

Yes, the new report will be coming in October, and I am hoping that this hearing will help to generate some interest down there in getting it done on time.

The last report, have any of you recently read anything by Kafka? I think they have subcontracted with Kafka to write the exchange report, because the last one I have here, July 2002 to December 2002, quote, "No major trading partners of the United States manipulated exchange rates." Okay. So there you have Kafka.

Dr. PREGG. That is the full analysis called for in the Trade Act, one sentence.

Vice Chairman D'AMATO. If they were to find that there was manipulation, then by the law of the Trade Act of '88, the Administration has got to start negotiations to it.

I think this next report is going to be where the rubber meets the road, as they say, on this issue.

Co-Chairman MULLOY. Before we turn to Commissioner Dreyer, just let me say I was with the Banking Committee when that provision was put into the '88 trade bill. Treasury Under Secretary Mulford used it a couple times. He identified Taiwan and he identified Korea, early on, '89, '90 period. And when he was there, they were even talking about China in '90, '91 period. But then things changed and the leadership of the Banking Committee changed. Senator Gramm became Chairman, it became less important. So last year was the first time the Committee held a hearing on that provision in six or seven years. And Chairman Shelby got a commitment out of Snow in a hearing two months ago that Snow would be back up with that report and testifying on it in October.

Commissioner Dreyer.

Dr. PREGG. Just in response, I agree with you and there were early on a couple references to Taiwan, but Taiwan, I did mention earlier if we were pursuing Taiwan and China evenly on this, I think it would help the bilateral relationship with China. Let me just, one sentence. Taiwan is significant, not only because Taiwan is a long-term manipulator, with foreign exchange holdings, 186 billion now, up 30 billion in the last 12 months. They have a much smaller economy and so pro rata they are right up there with China and Japan and they really should be brought into this as well as South Korea.

Co-Chairman MULLOY. Commissioner Dreyer.

Co-Chairman DREYER. Dr. Roach, I totally agree with you when you say that we need to fix our budget deficit. I am also with you when you say we, as Americans really should think about saving more before we complain about others. A third factor which you did not mention, but which I hope in future testimonies you will, is that we should fix our educational standards in this country, which are rotten and abysmal. I am a professor. I have carte blanche to say this. Increasingly, this mantra of “leave no child behind” means dumbing down educational standards so that every child can pass, and this is particularly true in science and technology. This is the reason that increasingly our high-tech companies import their talent from China, from Bangalore and from where-have-you.

That said, I beg you to consider that there are some nuances to some of the other things you said. One of them is that China is a poor country, and what I see increasingly is that yes and no, increasingly there is a poor China getting relatively poorer in the hinterland. On the coast you have a wealthy China getting wealthier. It is this China that we need to be concerned about.

China, yes, as you say, basic manufacturing, but it is getting more high-tech all the time. This Commission has listened to testimony in another venue of Boeing executives who agree that they will set up a production facility there if the workers are trained, and the workers are no sooner trained then they decamp and a whole new set comes in to be trained. This is not quite the way it was going to work.

Your statement, if we did not buy from China, we would have to buy from somewhere else, sure. But if we buy from Malaysia and Indonesia and Philippines, we are not buying from a country that is developing a high-tech weapons industry with the avowed purpose of beating, quote, “a certain superpower that is technologically very powerful.” That is a category of one.

I think in your “why are we worried so much about China” you really must take these other factors into consideration. I suppose I am barking up the wrong tree when I ask an economist to consider non-economic factors, but nonetheless, once in a while some of them are relevant.

Dr. ROACH. Look, I think it is critical for all of us, politicians, businessmen, economists, to think holistically. So much of what you just said resonates—especially the point on education in America. I have 6 children that have completed various phases of the educational system, and 2 of them are in the labor market right now—looking for work. Believe me, it is not an easy search.

And economics is not a science. The problem is that we spend a lot of time on statistics and mathematics and think we have the answers. Yet the real world is the interplay of economics, politics, sociology and global forces that are well beyond anything we can capture in our old models. Unfortunately, we use these old models to estimate the future when the future is radically different than any of the history on which these models are built. And that is one of the challenges of globalization. The issues that you raise are profound and those are the ones that we need to look at. The military considerations that you raised with respect to China are something that I leave it up to you—that is your charge. I know nothing about that. Those are the judgments that you are empowered to make.

But again, the thing that concerns me the most about this issue—and I just go back to the point I made at the outset—is that we have a problem in America. It's a big problem that is coming to a head right now. As Mr. D'Amato just said, it is the job issue, and how do we deal with this job issue? The educational point that you just made has got to be central to the solution because that has always been our edge. If we lose the edge—investing in human capital—then the job issues we are facing today are going to get worse. That is not economics. It's common sense.

Co-Chairman MULLOY. Do you have time to take—we have two other Commissioners who have questions for you.

Mr. HALE. I have another conflict, yes, because you said 1 o'clock.

Co-Chairman MULLOY. I know that. So, Dr. Hale—

Dr. PREEG. I will answer for him.

Co-Chairman MULLOY. Thank you again for being with us.

Commissioner Robinson, did you have something?

Chairman ROBINSON. If I might, as a follow-on to Commissioner Dreyer's remarks, I've reflected on some of the frustration that you heard on the part of Members earlier in these proceedings. Like our Commission, their mandate is to explore not just the economic and financial dimensions or layers of the bilateral relationship, but the strategic, political and military side of the equation. We heard a number of thoughtful remedies and perhaps even some over simplification of the nature of the challenges we face here, both on the trade and currency fronts.

But it is looking at that integrated picture which most Members have to cope with. As Commissioner Dreyer was talking about, we see a robust offensive military buildup, one of the world's leading proliferators of weapons of mass destruction, ballistic missiles, a human rights abuser, ICBMs targeted at the United States now with ever more accurate mobile varieties, either already deployed or in the pipeline, not to mention the threatening of Taiwan's autonomy and way of life as a fairly ongoing event.

So we are also coping with what China is doing with its large export surpluses, with the funds that it is attracting through FDI and that inordinate sucking up of the East Asian percentage of FDI. Another example is what kind of Chinese entities are coming to our capital markets to attract funds and what are they doing with those funds?

So there are a number of issues here that differentiate China in important ways from Malaysia, Singapore and our other trading partners. Of course that is something I know you are aware of, but

I just wanted you to also understand that some of what you have heard today is I think conditioned by this broader look at the bilateral relationship.

Dr. ROACH. I am in favor of the broad look. That is what I am all about. I would say just two things in response.

One, if we do have these deeper, broader issues with China and it is critical for us that we remain engaged with China rather than put up walls that cause frictions and distancing. I go to China quite frequently. At first they are hard to talk to. After a while you get to know them and they are very engaging. It is critical for us to stay engaged. Protectionism is the opposite of that.

I think that the frustration that I heard the most this morning pertains to jobs. The frustration that you heard the most from me is that we are not reorganizing our role in creating the so-called China problem. I hold our fiscal authorities responsible right now for the most reckless outcome of U.S. economic policy that I have seen in my career. Their unwillingness to accept one iota of responsibility for their own actions is hugely frustrating to me as someone who has spent his professional life in financial markets as a practicing macro economist. So there are frustrations on all sides of this issue.

I congratulate you for giving me the chance to vent some of my own frustrations as well.

Co-Chairman MULLOY. We have one more Commissioner who has a question for this panel. Commissioner Becker.

Commissioner BECKER. Thank you. I don't want to beat a dead horse on this thing. It has been covered a little bit, rather broadly in a way. I would like to go back to what Commissioner Reinsch had asked about why don't the Chinese buy from us, imports from the United States.

I am concerned about why we cannot sell anything to the Chinese, any industry in the United States. Virtually all the small manufacturing has been shut down and either moved to Mexico or China. Usually they move to Mexico on a border, then they move to China. When one of them goes, then the others have to either go out of business or follow suit because people cannot work for nothing. You cannot compete against 25 cent an hour labor. When we talked about—Congressman Levin talked about democracy as part of the PNTR, the move in that direction. You do not have workplace democracy. Workers cannot share in the wealth they helped create.

The bottom line is the hysteria that you talked about here in Washington on having to do something about the job loss and the plants leaving America, it is not just in Washington. I can take you to Ohio and Indiana and Pennsylvania and Detroit, Michigan, virtually anywhere. Now it has spread beyond the industrial belts in the United States. It is into the high-tech areas. I just do not know how this is going to level out and how you see this leveling out. If they don't raise wages in China, and I don't mean by pennies—the differential that showed up in some of the testimony here was \$26 for manufacturing, high-paying manufacturing jobs, \$26 an hour versus 25 cents an hour in China.

We are concerned about what this leaves us here. If we continue down this road with nothing being done, we are going to lose all

the manufacturing industry, all of it. So people are grabbing. Right now they are grabbing on the exchange rate as something that may be like a magic bullet and turn things around. I think it is much deeper than that.

You mentioned the multinationals, the large corporations being secure, like the General Electrics and the General Motors. The fact of the matter is what they do is they have called all their suppliers together and have told them they are going to relocate into China so that they can lower the price of the product that they buy. I mean this is truly a race to the bottom, that we are looking for something in there that is going to give some help in that. I do not see that.

If you have anything that you would add to that or comment on that, I would appreciate hearing.

Dr. ROACH. I understand your concerns, and I will just say a couple things. I do go to China a lot. I take the opportunity to walk into stores, not just the glitzy ones, but some of the smaller grocery stores off the beaten path. One of the things that first of shocked me that there is an awful lot of U.S. branded products sitting on shelves. The Chinese are poor people. I take your point on the two Chinas, but I do not share the idea that on the coastal region you have a wealthy, vibrant Chinese economy. You have a Chinese economy that is moving ahead, but they are many, many multiples behind what I would consider to be a wealthy, prosperous nation.

They have an appetite for American products. They have an appetite for American services. You go down the streets of Beijing, and you see that increasingly—whether it is fast food franchises or retail product. They have American brands on them. Whether that retail product is made in our textile mills in South Carolina, as Senator Graham would love it to be, is a fair question. But he has been losing textile jobs there for a lot longer than China has been a factor in the global economy. Is that China's fault?

You keep coming back to this question about where we are going as a nation. Then you also tell me that you are just charged with dealing with U.S.-China bilateral. Where we are going as a nation transcends the U.S.-China bilateral relationship. That is the context. Those are the questions that need to be addressed. I totally agree with that. But I also think if you just stick within your narrow guidelines here, you can come up with answers that could be inconsistent with the bigger picture. That does worry me a lot.

Co-Chairman MULLOY. Ernie.

Dr. PREEG. Well, to respond slightly broader, my impression this morning, which has been a very exciting morning for me, listening to everyone, is that there is this growing protectionist sentiment, movement because of the imbalance and all the problems with jobs. This is getting linked together with the exchange rate, the currency relationship. And free trade, I believe that we can both benefit by having open trade. We should keep pushing China to open up its system as they become more competitive. But I really do see that the currency relationship in the last few years has become a major issue that could trigger the protectionist backlash very easily.

And what the challenge is—and I am just going to refer briefly to a paragraph—in case you don't all get to read to page 7—because this relationship between ever more technology intensive

manufacturing engine for growth and the trade balance is clearly evident in economic strategy throughout East Asia, including China. And this trade surplus, plus a net inflow of investment, it has been called mercantilism over the years, and as I say, in current East Asian form it can be more pointedly described as quote, “advanced technology mercantilism,” and China is the outstanding practitioner.

We just have to say that it is a mutual interest to have open trade investment. Comparative advantage means certain areas you are going to be more competitive, you have lower labor costs, but it has to be balanced, it has to be by rules that are in fact free trade rules. Right now the rule that is most out of line, if 40 percent is even roughly correct of their currency, that this is a major issue and if we do not do something about it there will be very likely the protectionist backlash we have heard so much about here today.

Co-Chairman MULLOY. Let me just thank you both very much for being with us today. I would invite you both if you have further thoughts about a strategy we ought to be doing, we will welcome them.

We are going to be back here at 2 o'clock with a panel of Dr. Peter Nolan of Cambridge University, Dr. Steinfeld of MIT, and Kate Walsh of Stimson Center, to talk about China's effort to build its own industrial and technological base, and then at 4 o'clock a panel on the impact on the U.S. economy.

Thank you very much.

[Whereupon, at 2:00 p.m., the luncheon session concluded, the afternoon session to convene at 2:05 p.m., this same day.]

**AFTERNOON SESSION, 2:05 P.M.
THURSDAY, SEPTEMBER 25, 2003**

REMARKS OF CHAIRMAN ROGER W. ROBINSON, JR.

Chairman ROBINSON. Excuse me. If everyone will take their seats, we'll begin the afternoon session, please. Thank you.

Okay. We'd like to begin, if you don't mind. We had a number of Congressional Members, seven in all this morning. For those of you who had an opportunity to attend the morning session, it was a very animated session and I think had immense value-added to the subject we're here to discuss.

Today the Commission holds the third in a series of hearings during the 108th Congress. Our first two hearings in June and July focused on the important topics of media control in China, specifically how it played out during the SARS outbreak and on China's behavior with respect to the critical issue of the proliferation of weapons of mass destruction and ballistic missiles, with a focus on China's pivotal role in the ongoing nuclear crisis with North Korea.

Today we will be examining issues on the economic security side of our portfolio, namely, China's exchange rate policies and industrial and investment strategies and their impact on the U.S. economy, particularly our manufacturing sector. These issues are currently receiving substantial media attention but have been in our mandate and on our research agenda from the first year of the Commission's establishment.

Indeed, in quoting one of the findings from our first annual report to the Congress in July 2002, “Continuing trade surpluses, vast investment inflows, and very high foreign exchange reserves are evidence that China is manipulating its currency by holding down its value, thereby gaining an unfair trade advantage that increases the U.S. trade deficit.”

Our first-year report went on to state, “The Commission believes China’s currency manipulation needs to be addressed and that the Chinese should be pressured to change their exchange rate policy and eliminate capital controls. Moreover, while it is not presently in China’s interest to use its very large dollar reserves as an economic weapon against the United States, in the future this possibility exists.”

In America, people in varying capacities—business, labor, academia, the media, and government—have come to better understand the almost tectonic economic forces now shaping the U.S.-China economic relationship. With increasing sophistication, China has become a manufacturing powerhouse. Its central and local government policies have supported development of key industrial sectors.

In the 1990s, China became embedded in what has become a global supply chain for many traded products and saw its share of global trade in manufactured goods triple.

In the meantime, there is increasing unease in the United States over the declining share of manufacturing output and employment in our overall economy, and this is happening while China’s currency, the yuan or RMB, remains pegged to the U.S. dollar at a rate set by government fiat some nine years ago.

What are the causes and effects here? What are the key linkages? Are there steps the U.S. should be pursuing to remedy these challenging and in some cases debilitating circumstances?

Today we’ll be exploring these and other important questions with a distinguished group of panelists. We’re particularly honored that we have been joined this morning by several Members of the House and Senate from both sides of the aisle who contributed substantially to this hearing by giving us their valuable perspectives on these crucial matters. The Congress is profoundly concerned about the issues we’re discussing today, and a number of Members, as you know, have introduced thoughtful legislation, including that of Congressman English, who appeared before us as the first witness this morning, to address these concerns. We look forward to working with Congress as it moves forward in its consideration of appropriate remedies.

REMARKS OF VICE CHAIRMAN C. RICHARD D’AMATO

Vice Chairman D’AMATO. Thank you very much, Mr. Chairman. I welcome this panel this afternoon.

By way of a little background, the creation of this Commission in the winter of 2000 during the debate over giving China most-favored-nation status on a permanent basis was predicated on several important assertions.

First, the Clinton Administration stated that granting such status and admission to the WTO was predicated on the assumption that China would play by the rules of the international trade game

and certainly not promote permanent unfair subsidies or mercantilist practices.

Second, the National Security Adviser as well as the President stated repeatedly during that debate that it was in America's, quote, "vital national security interests for China to be granted these important trade concessions."

A third assertion was that increased economic growth and higher standards of living in China would lead to democratic reforms, democratic political reforms, and the eventual extinction of the widespread tyranny practiced by the Chinese communist regime.

So far, these assertions do not appear to be playing themselves out. China still has a poor record of honoring its promises and agreements, and this hearing focuses on one of the most important and glaring: artificially pegged exchange rates calculated to give China across-the-board highly unfair advantages vis-à-vis its so-called trading partners.

Second, this Commission has been created to examine the questions of the national security implications of the policies and practices by both the Clinton and Bush Administrations vis-à-vis China on trade. The large-scale and increasing sophistication of U.S. resources being transferred, with increasingly important high-technology components is adversely affecting our basic economic foundation from a strategic perspective.

Third, democratic reforms have been squelched in China. After some brief flicker of hope in connection with the SARS health crisis, openness is still treated as an enemy of the governing regime, and the regime still maintains a widespread gulag against its own people.

Modern Chinese mercantilist practices have resulted in pouring billions of dollars of U.S. investment, technology, and manufacturing resources unfairly into China. This distorted transfer of economic treasure to Beijing is now very large, and Congress has told this Commission to evaluate the implications of it for U.S. national security and identify what tools we have to address this issue.

Given these realities, the question today is what actions Congress should promote to push these trends in healthier directions for our own national interest. We look forward to your testimony.

Mr. Chairman.

**REMARKS OF COMMISSIONER PATRICK A. MULLOY
HEARING CO-CHAIR**

Co-Chairman MULLOY. Thank you. I wanted to note that we did have seven Members of the Congress here with us earlier today. They appeared as their schedule permitted, and we had a very good discussion. I should note that Senator Olympia Snowe, the Chairman of the Senate Small Business Committee—we had the Chairman of the House Small Business Committee. She has submitted a statement for the record, which we will put in the record, and we will get that around to all Commissioners.

I think our witnesses should know that here is what we're wrestling with. We were asked to look at the impact of the inter-relationship between our economy and that of China and the impact on the standard of living of our people and our national security interest.

Now, there has been tremendous erosion, at least many think, of our manufacturing sector, and that's the context that we're trying to look at this issue. Secretary of Commerce Evans spoke in Pittsburgh two weeks ago, and he said this: "The President believes that our economic and national security require a stable, robust manufacturing sector that produces sophisticated goods here in the United States." That's President Bush's statement. The Administration is putting together a manufacturing initiative.

So your help in helping us understand the Chinese economy, the multinational investments in China, and your interpretation of what this means will be very helpful for us in going forward and trying to tell the Congress what we found out in our investigation and what we ought to be doing. And so any policy recommendations that you have, as well as your analysis, would be most helpful to us.

Thank you again for being here with us.

Dr. Dreyer.

**REMARKS OF COMMISSIONER JUNE TEUFEL DREYER
HEARING CO-CHAIR**

Co-Chairman DREYER. Welcome to the afternoon session of our hearing. For those of you who were not here this morning, we had a three-part focus: one, the value of the Chinese yuan, AKA the renminbi; second, China's exchange rate policies; and, third, what policy options does the United States Government have in response to dissatisfaction with the way those first two are going.

This afternoon, we have somewhat of a shift of focus. We want to look first at the dynamics of China's strategies for attracting foreign investment and channeling both domestic and foreign resources into key industries and technologies.

A number of observers of China believe that this topic and not just the exchange rate question per se is the key to assessing the overall impact of China's economic policies and development on the U.S. economy.

We'll be considering the factors behind the remarkable growth of manufacturing capacity in China, now dubbed "the workshop of the world" or "the shop floor of the world" for the 21st century and what are the implications of this for the United States economy.

One obvious driving force is the global search for low-cost production of quality goods, and this has led increased domestic and foreign investment in expanding such production capacity in China. The determining factor here is often low-cost labor, but other factors in this growth and capacity can stem from the Chinese government's own industrial policies, for example, its designation of certain pillar industries as well as policy and financial support for key manufacturing infrastructure, science and technology, and research and development projects.

Other factors may be more related to globalization in general than to China in particular, such as the way transnational corporations operate globally integrated manufacturing and distribution networks with China, as an important node embedded in an overall web of production.

Another key factor at work here is the speed with which Chinese manufacturing and research and development are moving up the

value chain to encompass more technologically advanced products and research.

We're going to hear today from three expert witnesses who have studied the development of China's export-oriented manufacturing segments and its connection to the global supply chain.

Professor Peter Nolan of Cambridge University has written extensively about China's connection to what he calls the global business revolution.

Professor Ed Steinfeld of MIT has researched China's industrial policy and done case studies of large Chinese firms' performance in the domestic and global marketplace.

And Kate Walsh, Senior Associate of the Stimson Center, has done field research and written a monograph on the growth of foreign-funded research and development activities in China.

I just happen to have a copy here of *Foreign High Tech R&D in China*, a very interesting book worth your while. I do not get a cut on how many copies Kate sells of this. And I commend Ms. Walsh for being not only extremely informative but, an aberration for academics, you are very concise as well.

Now, each panelist comes at this question of China's industrial and investment priorities and strategies from a somewhat different angle, and I expect we're going to get a good multidimensional picture from the collective testimony and the follow-on discussion.

The second panel and final panel of the afternoon, we're going to hear testimony from four witnesses, also with differing perspectives, in this case on the question of how the U.S. economy is being affected by China's exchange rate and its industrial and investment policies and trends.

Our panelists in the second panel will be Frank Vargo of the National Association of Manufacturers; Thea Lee of the AFL-CIO; Paul Craig Roberts, who chairs the Institute for Political Economy, and he was formerly an Assistant Secretary of Treasury; and Willard Workman of the U.S. Chamber of Commerce.

I anticipate that your collective statements and follow-up dialogue with us will reveal a broad range of views and different emphases on policy prescriptions.

My fellow Co-Chair here has shoved timing regulations that I am supposed to let you know about. Each of you is going to be given seven minutes to present his or her oral remarks, and we're going to ask each member of the panel to present testimony before beginning the question-and-answer period.

Now, our ground rules, lady and gentlemen, are that we are given five minutes for each round of questions, and this includes the time not only that we ask but the answer that the panelist gives. And so you are, I supposed, allowed to yell "unfair" if some Commissioner takes up time with a four-minute question.

I'm going to have a light here, and it will go from green to yellow when there are two minutes left, and it will flash red at the end of the allotted time and also make a very annoying noise.

Okay. Without further ado, Professor Nolan, could we start with your testimony?

PANEL II: CHINA'S INVESTMENT STRATEGIES

**STATEMENT OF PETER HUGH NOLAN, Ph.D.
SINYI PROFESSOR OF CHINESE MANAGEMENT
UNIVERSITY OF CAMBRIDGE**

Dr. NOLAN. I've tried in my paper to suggest that understanding this question is best viewed in a wider context of China's system fragility, and I think China's political economy is at a critical and very difficult stage in its evolution. Most fundamental is the question of poverty and the fact that it has 800 million people who earn, on average, about 85 cents a day; 150 million migrants who flock into the cities and earn between \$1 and \$2 per day; and all—everything about China's political economy, a huge amount of things flow from this reality.

In addition, China is at a crisis in terms of its environmental situation. The party itself is in what can only be described as a crisis, self-recognized and attempting to be self-diagnosed. The financial system is also, in everybody's view, in an acute state of crisis.

In addition, China is confronted by an extremely difficult situation in international relations, and its relationship with a much stronger global power, the United States. This clearly stands at the very front of every consideration in China's politics and economics.

However, on top of these very difficult questions of system fragility lies the issue of China's relationship to the global business revolution. China undoubtedly has intense ambitions to create a group of globally competitive large corporations—that has existed for the last 20 years and that still exists today. That ambition extends not just from the center but also down to the provinces and to the cities and even to lower levels. And China has learnt and studied the experience of past countries that successfully initiated and carried out industrial policies, including Hamiltonian policies in the United States through to the policies of Japan and Korea in more recent times.

We can say China has been very successful in various ways. It absorbs huge amounts of FDI, as we know, which is one of the main reasons we're here today. There's been a massive rise in the value of low-value-added manufactured goods, a huge rise in output, and China can point with pride to 11 firms in the Fortune 500.

However, I believe it's essential for the Commission to truly understand, apart from these headline figures, the nature of the competitive capability of China's corporations in order to reach appropriate policy conclusions.

First of all, all of China's Fortune 500 firms are highly protected state-owned enterprises, mostly with huge manning levels. They are not globally competitive firms. China has just one firm in the world's top 600 firms by R&D expenditure. It is a minnow in terms of the generation of R&D knowledge on a global scale.

If we look at China's high-technology sectors—semiconductors, IT hardware, aerospace, pharmaceuticals—China's firms lag a long way behind the global leaders, and in this regard we can say that China's catch-up compares very unfavorably with that which was achieved by Japan in a very different epoch, both politically and economically, in the 1950s, 1960s, and 1970s.

In mid-technology sectors, also, the so-called pillar industries—like autos; sectors such as earthmoving equipment, which are less

widely studied; lifts, which people hardly think about—lifts for tall buildings, but they're very important; medical equipment; large power stations, over 600 megawatts—in these sectors, also, there is an immense gap between China's indigenous firms and those that are successful in the global environment.

Even in low-technology sectors, it's not as simple as it might seem. Everybody imagines that a simple product like a soft drink or a simple product like coal is naturally an area in which China can excel. But there are high-valued-added sectors in even the coal industry and, of course, simple consumer goods have behind them immensely capable and long-developed global brands. And in these sectors, China also is far behind the global leaders.

So we can say, why has China's industrial policy faced such difficulties? Why can we say that in many senses it has not succeeded? There are many internal questions which I shall not discuss at this point in this brief presentation, but concentrate instead on the reality, the extraordinary reality that is so challenging for us all, for me as an Irish-origin British citizen standing in the middle of it, and for the United States, and for China. And I think it's useful to not be a part of either civilization or culture.

The reality is China has joined the global economy at a stage in which concentration of business power has never, ever been greater, and that is the challenge for everybody. This period has seen an explosive merger and acquisition, the period in which China was thinking about joining the WTO. During my own studies in the course of the China Big Business Program, it was amazing. Every few months something explosive happened in the course of our initial studies involving both Chinese and Western firms.

This period has seen the full flowering of competitive concentration. There is almost a universal rule; the top four, five, or six firms account for 50 to 70 percent of global markets: aerospace, autos, pharmaceuticals, power equipment, IT hardware, software, ice cream, tobacco, beer, soft drinks. The list goes on and on and on.

In our studies in China and our policy discussions, a common observation was if we can't win and tackle the global systems integrators, at least we can compete further down the value chain. And my answer to the Chinese in these discussions was think very carefully about what the nature of the global value chain is.

We have identified a process that we call the cascade effect whereby concentration amongst first-tier systems integrators—in autos, aerospace, soft drinks, other sectors—flows like water down the hill over the companies that are below it, and they force them to concentrate, to meet their needs on a global basis in industry after industry after industry.

So, for example, in our discussion with the aerospace industry, the people said, well, where in the value chain can we sit? And we said, well, at the moment it's pretty difficult because you can't compete with GE, Pratt & Whitney, and Rolls Royce because they control 100 percent of the aircraft engine market, and that's the first tier of the value chain. And you can go further into the first tier of the value chain in aerospace.

In automobiles, you may not be able to compete with VW or Ford or General Motors or Toyota, but you can compete with whom?

With Bosch, with Denso, with Valeo, with Visteon, with Delphi? These are giant, immensely capable corporations that have now concentrated whole segments of the vehicle under their control and through their capabilities provide better and cheaper products and orchestrate the whole value chain. But the challenge for China's business thinkers and leaders and politicians is absolutely immense and far beyond what it appears at first sight.

This is an immense challenge, and, of course, all these firms, almost without exception, are located in the high-income countries, have their headquarters there, and a very large fraction of those, of course, are American, but not exclusively. Many of these are also Japanese, and a certain proportion are European.

So, in conclusion, in sum, two simple conclusions that I would suggest. If China wishes its large firms to make progress and catch up with the global leaders, I can see no way in which it can do it without some kind of industrial policy. The idea that on the global level playing field by exposing China to competition spontaneously large Chinese firms will emerge and compete, I think, on any widespread basis is a fantasy.

Alongside that, there undoubtedly is intense interest, hopes, and aspirations amongst all sorts of people at every level of the political system, from the center to the province to the city, to try and build their own successful firms that can compete, provide employment and technology for their own people. And I stress, without industrial policy, I cannot see how that can possibly happen on any widespread basis.

If the WTO rules are really strictly applied—and I'm not an expert, a lawyer, on WTO rules. But if they were strictly applied, it seems to me this would lead to a steady, indeed a rapid increase in the already substantial dominance in many sectors of the modern high-value-added sector of the Chinese economy—not, of course, those producing for the myriad of Chinese poor people by the global giants. And June mentioned China is becoming the workshop of the world. I prefer to think of the phrase “workshop for the world.” It is nothing like the workshop of the world of Britain. Britain produced all the high-technology products of the world. It supplied the engines to America. It supplied the steel rails to America. It supplied textile machinery across the world. China today, their firms are not in the same league in this competition, but China is the home for many of the world's global corporations, not its own corporations as the workshop for the world.

The strict insistence, if successful, of the application with WTO rules in full I believe will be very likely to contribute to overall systems instability in China through the impact on unemployment. Already 40 or 50 million people have lost their jobs in SOEs. And when one talks about—I've just come back from researching in Malaysia and the Far East—about hollowing out 40 to 50 million people in China who've lost their jobs in SOEs surrounded by 800 million poor people, it's a very different environment for hollowing out. It's an immense challenge for the Chinese government. They have their own huge hollowing-out problem despite absorbing the FDI of the world. It's very challenging for them, as it is for us.

I think also, finally, the impact on social inequality is likely to be very, very large. And if this process proceeds too rapidly, then

one has to wonder whether the social structure is capable of absorbing this process.

A final, final word. I think the impact on Chinese political consciousness has to be considered. The Chinese people are proud, have a long history, and if in the full application of the rules of the WTO in a successful way China's firms were to lose out in every significant respect and China was to become, if you like, a dependent economy, albeit one that had lots and lots of industrial manufacturing taking place within it, then one should not underestimate the sense of disappointment, impact on national consciousness, and that in its turn would also have a contribution to make to system instability.

[The statement follows:]

**Prepared Statement of Peter Hugh Nolan, Ph.D.
Sinyi Professor of Chinese Management, University of Cambridge**

***System Fragility, Industrial Policy and China's International Relations,
With Special Reference to Strategic Industries***

1. Introduction

This paper examines the motivation for, and the outcome of China's industrial policies in key strategic industries and considers the consequences for China's relationship with the high-income countries, especially the USA.

For almost two decades China has implemented a wide range of industrial policies, with the stated aim of nurturing indigenous "national champions" (as well as local ones). Despite these policies, China has been unsuccessful in producing a group of globally competitive large firms. At a comparable stage in its development, Japan's industrial policies had nurtured a large troupe of several dozen giant, globally competitive firms, with global markets, global brands, and leaders of global technology in their field. They were also in the forefront of global management systems, having developed an immensely effective structure consisting of an extended supply chain around the core companies.

China is in the remarkable position of becoming the "workshop of the world," but in a quite different sense from that of Britain in the nineteenth century. British firms were uniquely powerful in the world's most advanced technologies, exporting their high technology products across the world. China has become the home to most of the world's giant corporations, either producing directly in the country, or using it as a source of procurement. These firms' investments have contributed enormously to the progress of production systems within China. However, among successful late-comer countries China has become uniquely dependent on global capital and technology, and production within the production systems of foreign firms. This new phenomenon is a challenge for policy makers in both China and the high-income countries, especially the USA.

The analysis contained in this paper raises some obvious questions: Should China abandon industrial policy, or should it pursue it with renewed vigour and in new, creative ways to meet the unprecedented competitive challenge that face large indigenous firms on the global level playing field within the WTO? Is it possible for global giant firms to build their production systems in China while China itself simultaneously nurtures a group of globally competitive large indigenously owned firms?

The dimensions of the policy challenge for both China and the USA are even greater if we recognise the fragility of China's political economy within which the explosive growth of these production systems is taking place. Section 2 of this paper outlines some of the key aspects of these challenges. The rationality of international pressure to force China's compliance with its WTO obligations, to abandon industrial policy, to fully open itself to multinational direct investment, to allow market forces to determine the exchange rate and permit free movement of capital into and out of the country, must be considered in relation to this wider environment of political economy and the possibility of system collapse.

Section 3 summarises the evidence concerning the competitive capabilities of China's large firms today, shortly after China's entry to the WTO. It concludes that in the markets for high value-added goods and services, China does not yet possess any globally competitive large firms. This is partly due to the internal difficulties that China faces in implementing industrial policy. However, even more important is the fact that the competitive environment internationally is quite different from

that which faced previous late-comer countries. China is rapidly integrating with the global economy at a time when the concentration of business power among firms based in the high-income economies has never been greater.

The intense international pressure upon China, especially from the USA, to abandon industrial policy needs to be considered in relation to a realistic appraisal of the dimensions of this challenge and the likely outcome of abandoning industrial policy. In order to provide a more realistic evaluation of these potential consequences, the Appendix analyses in closer detail the challenges facing China's national champions in the critical strategic sectors of aerospace and oil and petrochemicals, which have themselves formed the object of sustained industrial policy in the USA.

2. China at the Crossroads¹

China has achieved remarkable results in its social and economic development since the process of "reform and opening up" was initiated by Deng Xiaoping over two decades ago. However, that same process has produced a series of formidable challenges for the entire system of political economy. One of these is the challenge of the Global Business Revolution, which is analysed in Section 3. The other principle challenges are outlined in this section.

Poverty, Inequality and Social Tension

Behind almost every aspect of China's development process in the early 21st century lies the harsh reality of the "Lewis model" of "economic development with unlimited supplies of labour" (Lewis, 1954).

China has a huge population of almost 1.3 billion, increasing by over 15 million each year (SSB, ZTN, 2002). Almost 70 percent of the Chinese population still lives in the countryside. Employment in agriculture is stagnant, and there are estimated to be as many as 150 million "surplus" farm workers. As the impact of the WTO on Chinese agriculture (and on rural township and village enterprises) increases, pressures on rural underemployment will intensify. The unavoidable reality is that the level of rural underemployment will continue to rise rapidly in the early years of the 21st century. Since the late 1990s, rural real incomes have fallen year upon year.

Despite the decline in absolute poverty in the early years of China's rural reforms (Nolan, 1988), there still are huge numbers of people who are absolutely poor in terms of international poverty lines. The average per capita income of China's 800 million rural residents is just US\$290 (RMB 2,366), or 80 cents per day (SSB, ZTN, 2002: 343). The massive growth of rural underemployment provides intense incentives for rural-urban migration, and great downward pressure on non-farm wages in unskilled and low-skilled occupations. By 2002, there were around 150 million rural residents who worked in the urban areas without permanent urban residence qualifications. These were predominantly "lumpen" labour, with limited skills. The rate of pay is the equivalent of roughly US\$1–2 per day, which is the price of "lumpen" migrant labour throughout human history (at today's prices).

There are estimated to be as many as 48 million people who are without work as a result of reform in state-owned enterprises. The explosive increase in unemployment has become the "most challenging issue in China's economic and social development" (UNDP, 2000: 58).

Privatisation in China has been characterised by widespread insider dealing and corruption. A very narrow group of just two to three million people has been able to "get rich quickly." It is estimated that that just 0.16 percent of the population controls 65 percent of the nation's US\$1.5 trillion liquid assets in Mainland bank deposits (SCMP, 29 March 2003).

By 2002, China's accumulated stock of FDI had reached around US\$450 billion. This investment is creating clusters of modern businesses in relatively isolated areas within China's major cities. These virtual "Treaty Ports" are emerging as areas with a relatively high degree of *de facto* autonomy, and form a nucleus of high-income employment for both Chinese and foreigners, isolated from the surrounding society. A rapidly-growing group of China's highest income earners live in isolated, protected compounds.

There has been much discussion about the growth of the Chinese urban "middle class." However, the average per capita income of China's total of 480 million officially registered urban residents in 2001 was just US\$830. If we included the unofficial urban population of around 150 million migrant workers, then the figure would be even lower. One recent study estimates that among China's urban households, the income of only around 20 million has caught up with the average of the urban

¹For a fuller treatment of the issues analysed in this section, see Nolan, 2003.

households in East Asia's newly industrialised countries (Qu Hongbin, 2002). In other words, China's emerging middle class, those who can afford, for example, to buy automobiles, is a "besieged" minority among a sea of urban poor people, who vastly outnumber them. The 21st century meets the eighteenth century at the window of Starbucks. The vast majority of the urban population are excluded by their low incomes from Starbucks or Wal-Mart and excluded by armed guards from the apartment blocks of the new middle class, except where they are employed for domestic service.

Official data show that the Gini coefficient of the urban distribution of income rose from 0.25 in 1992 to 0.34 in 2001 (SSB, ZTN, 1993 and 2002). However, the official data do not include most of the 150 million migrants who are not registered as part of the urban population. The data also greatly underestimate the income of the highest segments of the native Chinese urban population. Nor do they include the high incomes of the fast-growing population of foreign employees of the multinationals. If all these factors are taken into consideration, the distribution of China's urban incomes is likely to be among the most unequal in the world.

The reform process has entered a period in which there is an increased danger of social instability compared with the past twenty years of reform. There has been extensive discussion among policy makers about how to ensure that during this tense period, China is sustained as a "steady and harmonious society." China's leaders have a declared vision of an "everlasting and peaceful nation." There has been intense debate about how to build a dynamic economy, while "laying the groundwork for a market that is moral and fair."

The Environment

China's environmental deterioration reflects the intense pressure of a huge and growing population upon China's already fragile natural environment, with the impact hugely reinforced by high-speed industrial growth in a poor country with limited resources at the disposal of the state.

Around 38 percent of the entire country is affected by serious soil erosion (UNDP, 2000: 70). The area of desert is increasing at around 2,500 square kilometres per year, equivalent to the area of a medium-sized country. In the past four decades, almost one-half of China's forests have been destroyed. There is a serious and worsening shortage of fresh water. "Rampant water pollution" is making the situation worse. The flow of the Yellow River has reduced to a mere trickle for long periods of the year (see Wang Xiaoqiang, et al, 1999). China is experiencing the "most severe, large-scale and profound ecological destruction in [its] history" (UNDP, 2000: 70).

China's explosive industrial growth has led to high-speed expansion of energy-intensive industries. By the late 1990s, these accounted for around 36 percent of the country's manufacturing value-added, compared with just 23 percent in Japan and 21 percent in the USA (Nolan, 2001a: 700). China has a relatively limited amount of oil and gas, but has huge reserves of coal. By the mid-1990s, China had overtaken the USA as the world's biggest coal producer, accounting for almost thirty percent of global output. Coal provides a low-cost way to meet a large fraction of China's booming demands, accounting for around 70 percent of the country's primary energy used in electricity generation (Nolan, 2001a: 699). The ways in which coal is mined, transported and used as a fuel approximates that of the advanced economies before the 1950s. This has caused a huge burden of air pollution.

The implications of China's mode of industrialisation are of the greatest importance for the physical sustainability of life across the whole planet. China already is the world's second largest producer of "greenhouse gases" after the USA (World Bank, 2001: 292-3). If it follows the U.S. free market approach to industrialisation, allowing, for example, complete dominance to the automobile, then the prospects for the world are terrifying. If China's 1.4 billion people were to sustain their current growth path and at some point catch up with today's USA level of per capita income, and were to use similar technologies, China's use of commercial energy and emission of carbon dioxide would be one-fifth greater than those of the entire world today—a terrifying prospect.

Party and State

Party. The Chinese Communist Party, with 64 million members, is at the heart of the Chinese state. Leadership by the Communist Party is the foundation of Chinese modernization. However, the Party faces a rising tide of corruption.

In his speech on 1 July 2001 to celebrate the 80th anniversary of the founding of the Chinese Communist Party Zemin emphasized the possibility of complete system disintegration: "To rally the 1.2 billion and more people behind the socialist modernization drive in a large and multi-ethnic developing country like China, it

is a must to have the strong leadership of the Communist Party of China. Otherwise, the country will . . . not only fail to realize its modernization but also sink into a chaotic abyss.” He pointed out the serious danger of loss of power by the Party if the corrosive trends were not checked: “[W]e must be strict in Party discipline. We should have a deeper understanding of the loss of political power by some Communist Parties in the world that had long been ruling parties and learn a lesson from them.” He emphasised that combating corruption and building clean government was vital for the survival of the Party. The level at which Party members were investigated and brought to trial for corruption rose to include many in high positions, some of whom were sentenced to death.

The reason that so many cases of corruption have come to light, and been written about in the Chinese press, is precisely the fact that the Chinese leadership is fully aware of the deep threat that it poses, and is trying hard to do something about it. Official reports to the National People’s Congress in early 2003 declared that in the previous five years, the war against corruption had been substantially stepped up, with a total of almost 13,000 prosecutions of government officials (SCMP, 11 March 2003).

Reforming the Party itself is a massive task. “Regime improvement” rather than “regime change” is the only logical way to proceed in order to meet the needs of China’s vast population. The massive effort to try to clean up the country’s financial institutions after the Asian Financial Crisis demonstrated the continued and improved effectiveness of this mighty apparatus. In Guangdong province alone, a vast clean-up operation involved thousands of Party cadres at every level. They closed hundreds of local financial institutions, and ensured that their massive obligations were dealt with in a way that preserved social stability. Such tasks are vital for the Chinese development effort in the period ahead.

State. China is a vast, poor country with urgent development needs, many of which can only be met by state action of one sort or another. Huge advances have been in the technical competence of the Chinese bureaucracy. However, during the reform period, the state’s budgetary revenue fell from over 31 percent of GDP in 1979 to just 14 percent in 1999 (SSB, ZTN, 2001: 256). This was not only below that of many developing countries, such as Indonesia and Malaysia, but also below that of Russia, which is perceived as having experienced “state desertion” during the reform period. In this sense, China’s level of “state desertion” during the “transition” period outstripped even that of Russia, which has “gravely undermined the [Chinese] government’s capacity to promote economic development” (UNDP, 2000: 41).

The state’s greatly weakened fiscal capability has serious implications for social stability. In order to dampen the impact of large-scale lay-offs, the Chinese government has been trying for many years to develop a comprehensive social security system. However, such programmes had made very limited progress by the end of the 1990s. While they are being established they require a large infusion of government funds, but the state’s fiscal weakness made this impossible (UNDP, 2000: 76).

A high degree of responsibility for public action has been devolved to localities, which now account for around two-thirds of total budgetary expenditure (World Bank, 2002: 31). They now have responsibility for almost nine-tenths of total budgetary expenditure on culture, education and health (World Bank, 2002: 31). Local governments have increasingly turned to the market to fund welfare provision.

By the end of the 1990s, state budgetary allocations covered just 46 percent of actual expenditures on education.² The increasing use of individual payments to acquire educational services has resulted in a substantial deterioration in the educational status of the poor. Under the rural people’s communes in the 1970s, around 85 percent of villages had a cooperative medical system, albeit often rudimentary, but this structure was largely dismantled after de-collectivisation in the early 1980s. When the agricultural collectives were disbanded in the early 1980s, the financial basis for risk-sharing was largely eliminated. Today, more than 90 percent of the rural population are without any coverage from collective risk-pooling schemes. In 1999, the government budget funded just eleven percent of total health expenditure, while 59 percent came from out-of-pocket payments. These changes have resulted in highly unequal access to health services.

Finance

China’s participation in the international financial system has been compared to a boat setting out to sea. What are the prospects for the “weather”? How well constructed is the “boat”?

²The information in the paragraph is all from World Bank, 2002.

What are the prospects for the weather? The concept of free movements of capital is fundamentally different from that of free trade in goods. Capital flows are particularly subject to asymmetric information, agency problems, adverse selection and moral hazard. Keynes (1936: chapter 12) provides the foundation of the modern critiques of the potentially destabilising effects of uncontrolled financial markets. He strongly attacked the idea that stock markets and currency markets are efficient, and based on rational expectations. He famously warned of the negative impact of speculation, which he likens to gambling: “Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done” (Keynes, 1936: 159).

Keynes’ fears have been amply realised since the 1980s, as controls on capital movements were liberalised across the developing world. The period has seen an unprecedented number and intensity of financial crises, affecting radically different types of economy. These ranged from “small, well-regulated and open” Hong Kong at one end to huge, state-interventionist, Indonesia at the other. The common factor was financial liberalisation and asset bubbles provoked by a huge inflow of speculative capital relative to the size of the economy. The bursting of the bubble in each case had massive social and economic consequences. In the case of Indonesia, this resulted in “regime-change.” One of the most successful “developmental states” in the Third World was overthrown in a matter of months from the onset of the Asian Financial Crisis. China and India, each of which had only limited convertibility of the national currency, were almost alone among Asian countries in escaping the worst effects of the Asian Financial Crisis.

China has been well-served by the pragmatic reform philosophy of “groping for stones to cross the river.” At the end of the 1980s there was intense pressure for high-speed political reform to precede deepening of economic reform. The USSR’s collapse provided an object lesson for China. It showed that there were huge dangers in pursuing extensive political reform prior to economic system reform. This reality was quickly understood by everyone in China, and people across the world (Nolan, 1995). The Asian Financial Crisis provided another deep lesson to China’s policy makers—the “Financial 4 June.” Financial system reform is the most sensitive and difficult part of the whole process of system change. If mistakes are made in this area, with its deep roots in everyday lives of the whole population, it threatens the whole socio-political fabric. The Asian Financial Crisis reinforced the need for China’s policy makers to be incredibly cautious in liberalising capital flows and moving towards full convertibility of the *renminbi*.

How strong is the boat? Despite implementing important changes, China’s big four banks continue to be heavily influenced by government institutions in their lending decisions. Much of the pressure to continue to make policy loans results from the intense competitive environment that confronts China’s indigenous large firms with China’s entry to the WTO (see below). The big four banks continue to generate huge amounts of non-performing loans (NPLs). Many international experts believe that the conditions are “ripe for a financial crisis.”

The big four banks face immense difficulties in changing corporate governance practices. In the late 1990s, the impact of the Asian Financial Crisis on Hong Kong and neighbouring Guangdong Province helped to bring about the collapse of two giant local financial institutions, Guangdong International Trust and Investment Corporation (GITIC) and Guangdong Enterprises (GDE), the flagships of the province. The subsequent bankruptcy and restructuring respectively revealed the shockingly inadequate nature of corporate governance within these two institutions, which only a few months previously had been held up in international financial analysts as paragons of financial management. The shock of these events helped to stimulate a widespread clean-up of both central and local financial institutions. The “clean-up” itself exposed the depth of the problems that the government faced.

In early 2002, it was revealed that the five bank officials at the BOC branch in Kaiping city (Guangdong) had stolen the equivalent of around US\$500 million. In its report on the Kaiping scandal, the Chinese financial journal *Caijing* (5 May 2002) concluded that the Kaiping scandal illuminated the “terrifying complexity and scale of the challenge facing China”: “Only by drawing a lesson from this bitter experience and facing reality bravely will the Chinese banking industry be able to make up for lost time.”

In the past two years, banking officials at the apex of the country’s banking system have encountered serious difficulties. Most notable were three of the four “candoo commanders” hand-picked by Premier Zhu Rongji to lead the country towards modern, well-run financial institutions. Zhu Xiaohua, former deputy governor of the

People's Bank of China and head of management of China's foreign exchange reserves, was arrested and sentenced to fifteen years in prison. Wang Xuebing, formerly head, successively, of the China Construction Bank and the Bank of China, was arrested and dismissed from the Party. He is awaiting trial. Li Fuxiang, also a former head of the management of the country's foreign exchange reserves, committed suicide while under official investigation.

Reform of the country's financial institutions is being carried out in challenging circumstances. China's large financial firms face the prospect of an intense escalation of competition from global financial institutions. Leading financial services firms, all from the high-income economies, recently have been through a period of unprecedented merger and acquisition, to take advantage of global markets, and of economies of scale and scope in respect to research and development, branding, human resource acquisition, and central procurement (e.g. IT systems). Super-giant financial services firms, predominantly American, such as Fidelity, Citigroup, JP Morgan Chase, GE Capital, Morgan Stanley Dean Witter, Merrill Lynch and AIG, have emerged. Citigroup alone has annual revenues of US\$112 billion and profits of around US\$14 billion, many times greater than the entire group of China's "four big banks." They have rapidly acquired dominant positions in the financial markets of most of Latin America and Eastern Europe. When Citigroup acquired Bannamex, Mexico's "national champion" in financial services, the *Financial Times* commented: "The acquisition of Bannamex underscored the rapacious appetite of Citigroup for assets in the developing world." Citigroup immediately stated: "China is top of our radar screen." Experienced U.S. bankers in China believe that is only a matter of time before the leading global financial institutions take the "cream" of the Chinese market.

The less that China's indigenous large financial firms are able to achieve their own self-reform, the stronger will be the argument made by the global giants to allow them to "take command of the boat," as experienced "sailors" who can run the country's financial institutions well. Citigroup argues that the big four banks in China should be "torn apart into small units in order to avoid a financial crisis." Undoubtedly this would make it far easier for the global giants to "rout the enemy one by one" (*gege jipo*).

International Relations

Maoism comprehensively stressed social equality and the importance of "positive" freedoms for all social strata. The Communist Party has moved away from the inward-looking anti-capitalist ideology of the Maoist period. However, it is unimaginable that it will embrace a pure free market philosophy, with comprehensive emphasis on Hayekian individual "negative" freedoms and a minimal role for the state. This philosophy achieved a high point in political influence in the USA in the late nineteenth and early twentieth century. However, since the 1960s it has once again emerged to dominate the U.S. political mainstream. By contrast, China's leaders are groping their way towards an ideological "Third Way" between state and market, which is based on China's rich historical experience, "using the past to serve the present" (*gu wei jin yong*) (Nolan, 2003). In this sense, namely, struggling for the dominant ideology of the epoch of globalisation, China poses a threat to the current mainstream of U.S. political thinking. However, it is on common ground with a long tradition of U.S. political thinking which has emphasised the importance of the state in enabling the realisation of "positive freedom" for all segments of society (Foner, 1998).

China's development policies since the late 1970s have produced a powerful economy, that is viewed as becoming a serious potential rival for the dominant world power, the USA, within a relatively short period of time. As we will see in the following sections, China's industrial firms are still technologically far behind U.S.-based firms. Those who wish to emphasise the size of the Chinese "challenge" point to the fact that measured in "purchasing power parity" (PPP) dollars (essentially using the prices of the USA), China is already the world's second largest economy, 36 percent larger than Japan, and over one-half the size of the USA (World Bank, 2001: 230-1). However, the PPP figures are highly suspect as a true measure of China's economic might. Using the PPP figures, China uses the same amount of energy per unit of GDP as the USA itself (Nolan, 2001a: 914), hardly a plausible proposition. Even if one disregards the PPP figures, it is indisputable that, if China maintains its high growth rate, at some point it will, indeed, become a serious challenger to the USA's dominant position. China's massive economic potential means that it will increasingly be a competitor with the USA for access to the world's major sources of primary energy and raw materials.

In the above senses, China is viewed by many Americans as a "strategic competitor." "China's rise" and its consequences for the USA is the central issue for U.S.

foreign policy in the twenty-first century. China will be in an immensely vulnerable position in this relationship for a long time to come.

The USA is the world's comprehensively dominant military power. The first Gulf War demonstrated vividly that the USA stood at the centre of the "Revolution in Military Affairs," both in terms of the production of the relevant technologies and the assembly of arms to deliver these technologies in battle. It emphasised the growing gap between the U.S. and Europe. Successive wars in the former Yugoslavia, Afghanistan and Iraq have demonstrated that the gap is growing even wider and will continue to do so as the U.S. military budget rises while that in Europe shrinks.

The USA has made clear its nervousness about China's growing military capability. President George W. Bush's policy statement, "America's Security Strategy" (quoted in full in the *FT* 21 September 2002) warns China: "[A] quarter century after beginning the process of shedding the worst features of the Communist legacy, China's leaders have not yet made the next series of fundamental choices about the character of their state. *In pursuing advanced military capabilities that can threaten its neighbors in the Asia Pacific region, China is following an outdated path that, in the end, will hamper its own pursuit of greatness. It is time to reaffirm the essential role of American military strength. We must build and maintain our defenses beyond challenge.* ... Our forces will be strong enough to dissuade potential adversaries from pursuing a military build-up in hopes of surpassing, or equaling, the power of the U.S." (emphasis added). As the war against Iraq demonstrates, the USA's friends of today can become their enemies tomorrow. The current international situation is one of the most unstable for a long time. China's military strategists cannot rule out the possibility that at some point, the object of "regime change" may even include China.

In the year 2000, the U.S. Congress established the Congressional-Executive Commission on China (CECC) to "monitor China's compliance with international human rights standards, encourage the development of the rule of law, establish and maintain a list of victims of human rights abuses, and promote bilateral cooperation" (CECC, 2002). The CECC's first annual report, in September 2002, was extremely critical of alleged human rights abuses in China. It made a number of recommendations to the U.S. Government to expand its activities to identify Chinese human rights abuses and support the redress of those abuses, especially among migrant workers and women. Such activities would contribute to increased social and political instability at a critical stage in China's system evolution.

In sum, China faces a fundamentally different position in its international relations than that which faced Japan, Korea or Taiwan at comparable stages in their development. Each of these achieved their modern "take-off" as close allies of the USA in the international struggle against communism, especially the People's Republic of China. The USA tolerated a "developmental state" in each case, which heavily protected the economy, kept global financial institutions at arms length, and strongly controlled international financial flows.

The final shape of the USA's view of how best to "engage" with China is still unclear. However, there is a powerful set of interests that believes serious conflict with China is unavoidable. Henry Kissinger has warned that the hawks in the U.S. Government see China as "*a morally flawed inevitable adversary*" and believe that the U.S. should act "not as a strategic partner, but as it treated the Soviet Union during the cold war, as a rival and a challenge" (quoted in *FT* 20 August 2001) (emphasis added). By distancing itself from the moderating influence of international institutions, including the cautious voices of "Old Europe," the U.S. constitutes an unpredictable force at the heart of international relations. The increased unpredictability in the foreign policy of the world's hegemonic power constitutes a formidable challenge for China's own foreign policy.

Conclusion

As China enters the twenty-first century it faces a wide-ranging series of deep challenges that threaten the entire social, economic and political system. These challenges arise from both inside and outside the country. It is a period of high-speed economic and social change. During such periods the potential for political instability is acute. The Chinese government is working hard to try to increase its risk management capabilities to meet this challenge.

Due to the number and intensity of the challenges that China faces, there is a high possibility that at some point a "fire" will break out. It cannot be predicted where, when, or how. It is highly likely that it will be connected with the financial system. We have seen that China faces a massive challenge in the financial sector. During the Asian Financial Crisis, China came close to a major financial and, by implications, a social and political crisis. Only by bold and effective policy measures was the country able to survive. With full convertibility of the national currency it

would be far harder to survive a collapse of confidence by global financial markets of the kind that has regularly occurred in other developing countries under financial liberalisation. If the “fire” does not begin with the financial system then it likely that it will quickly spread into the financial system. If China were to face a financial crisis of the dimensions of those that have regularly attacked other developing countries during the epoch of globalisation and liberalisation since the 1980s, it would be immensely difficult to maintain system stability. The relationship of political instability with financial crisis is long-standing. As Karl Marx pointed out in 1853: “Since the commencement of the eighteenth century there has been no serious revolution in Europe which has not been preceded by a commercial and financial crisis” (Marx, 1853: 9).

3. China and the Global Business Revolution

China's Ambitions

China began liberalizing the post-Mao economy in the late 1970s. A consistently stated goal of China's industrial policy has been to construct globally powerful companies that can compete on the global level playing field:

In our world today economic competition between nations is in fact between each nation's large enterprises and enterprise groups. A nation's economic might is concentrated and manifested in the economic power and international competitiveness of its large enterprises and groups. . . . *Our nation's position in the international economic order will be to a large extent determined by the position of our nation's large enterprises and groups.*

(Wu Banguo, Chinese State Council, August 1998.)

China's chosen global giant corporations have been supported through a wide range of national industrial policies, which include: tariffs, which were gradually reduced during the reform years; non-tariff barriers, including limitations on access to domestic marketing channels, requirements for technology transfer and to sub-contract to selected domestic firms as the price for market access; government selection of the partners for major international joint ventures; preferential loans from state banks; privileged access to listings on national and international stock markets; tax relief; privileged access to land; direct support from R&D from the government budget; government procurement policy; and government mediated mergers and acquisitions.

As the reforms have progressed, the Chinese government has made it increasingly clear that the country intends not only to establish a group of globally competitive large firms in the manufacturing sector, but also in financial services and telecommunications. China Mobile and China Unicom, with massive international flotations, as well as China Telecom and China Netcom, were at the forefront of this process. International flotations of the mainland business of the three leading commercial banks are under intense discussion. The Bank of China's Hong Kong operations were floated in 2002. As China entered the WTO, the country's commitment to building globally competitive large firms remained undiminished:

The state will encourage big state-owned businesses to become internationally competitive corporations by listing on domestic and overseas stock market, increasing research and development expenditure, and acquiring other businesses. *The country will develop thirty to fifty large state-owned enterprises in the next five years through public offerings, mergers and acquisitions, restructuring and cooperation.*

(Bai Rongchun, Director General, Industrial Planning Department, State Economic and Trade Commission, July 2001.)

China's planners carefully studied the industrial policies used by the high-income economies in their early stages of development. From Britain during the Industrial Revolution, the U.S. and Continental Europe in the nineteenth century, through to the East Asian “Tiger” economies of the late twentieth century, almost without exception, late-industrializing countries used some form of industrial policy to nurture “national champions” (Nolan, 1995; Chang, 2002). Each of these late-industrialising countries was able through different methods to nurture a group of globally competitive large firms.

However, the most powerful influence on the thinking of China's policy makers was the Japanese experience. During a similar period in Japan's development, from the 1950s to the 1970s, Japan's industrial planners supported the growth of a series of giant companies that developed into globally powerful firms. In many sectors the state nurtured just two or three dominant firms that were in an oligopolistic position in the domestic market. After two decades of industrial policy, there was a

whole corps of globally competitive Japanese companies. By the late 1980s, it had twenty of the largest one hundred corporations in the *Fortune 500* list. These companies developed through extensive support from state industrial policies, similar to those adopted by China forty years later.

As well as continued support for the construction of a “national team” of internationally competitive firms, local governments at both the provincial and the city level also are determined to make use of industrial policies to nurture a local “team.” The best-known Chinese firm internationally is, probably, the consumer electronics firm, Haier. Apart from the high entrepreneurial capabilities of its CEO, Zhang Ruiming, its growth owes much to the support given by both the Shandong provincial government and the Qingdao city government. Shanghai intends that large local firms such as Shanghai Auto, Shanghai Aerospace, Jinshan Petrochemical Company and Baoshan Steel Company, will become global industry leaders. The fact that China has joined the WTO has not dimmed the ambition of local provincial and city governments to use industrial policy to nurture local champions. The population of China’s provinces is mostly as large as substantial countries and the population of most large cities is bigger than city-states such as Singapore or Hong Kong. The growth of autonomy in devising industrial policies at the level of the province and the city is a reflection of the weakening capabilities of the central government and advance in fissiparous tendencies in the Chinese state structure.

China’s Success

In the course of two decades, China’s large enterprises advanced their business capabilities, undertaking evolutionary institutional changes in key aspects of their business organisation (Nolan and Wang, 1998). China’s large, state-owned enterprises have grown rapidly in terms of value of sales. A group of them has floated on international stock markets. They have absorbed a great deal of modern technology. They have learned how to compete in the marketplace. They have substantially upgraded the technical level of their employees. They have learned wide-ranging new managerial skills and gained substantial understanding of international financial markets. They have become sought-after partners for multinational companies. China’s large state-owned enterprises avoided the industrial collapse of the former USSR. China has become the fastest-growing part of the global industrial economy.

Under the policies of reform and opening up, China has attracted huge amounts of foreign direct investment. A “herd” mentality to participate in the “Chinese miracle” developed among global giant corporations. By the year 2002, China had overtaken the USA as the world’s largest recipient of FDI, with the stock of FDI reaching around US\$450 billion. Global corporations now view China as central to their long-term strategy.

However, despite the evidence of remarkable progress, it is crucially important for proper policy formulation in the USA to evaluate carefully the extent and nature of progress in large Chinese firms compared with that of the global leaders.

Benchmarking the Chinese “National Team”

How capable are China’s “national champions” to compete on the “global level playing field” within the WTO? In the course of the *China Big Business Programme*, since the mid-1990s we have tried to answer this question, using detailed case studies from China’s “national team” in several different sectors, benchmarking them against the global leaders in the respective sector (Nolan, 2001a and 2001b). So far these studies have included aerospace, pharmaceuticals, oil and petrochemicals, power equipment, automobiles and components, steel, consumer electronics, telecommunications, mining, IT hardware, soft drinks, beer, retail and financial services. In each case we have found evidence of intense efforts by Chinese industrial entrepreneurs and government departments, and highly significant progress in business capability. However, in every case we found that deep problems remained. The micro-level evidence from our case studies suggests that in most key respects, China’s industrial policies have not yet succeeded in building globally competitive large firms.

At the start of the 21st century, not one of China’s leading enterprises had become a globally competitive giant corporation, with a global market, a global brand, and a global procurement system. The Chinese companies included in the *Fortune 500* mostly faced huge problems of downsizing. China had no less than five of the top eleven companies in the *Fortune 500* in terms of numbers of employees, a dubious achievement. All of China’s eleven *Fortune 500* companies were either wholly or predominantly state-owned firms, operating with a high degree of state protection from international competition. China has just two companies in the *FT 500* which ranks firms by market capitalization. These are CNOOC (China National Offshore Oil

Company), and China Mobile, each of which operates in a protected domestic environment. Moreover, the vast bulk of the high technology IT hardware equipment for China's telecoms companies is purchased from the global giants.³ China has only one company in the world's top 600 companies by R&D expenditure. China does not have any representatives in Morgan Stanley Dean Witter's list of the world's top 250 "competitive edge" companies. China does not have a single company in *Business Week's* list of the world's top 100 brands.

The brutal reality is that after two decades of reform China's large firms mostly are still far from being able to compete with the global giants. The gap is especially marked in the high-technology sectors, including semi-conductors, aerospace, large-scale power equipment (over 600 MW), IT hardware (especially the high technology networking equipment sector), and patented pharmaceuticals. For example, in the critically important high technology sector of semi-conductors, which supplies the "food" for all other advanced technology industries, China has only negligible capability. It is estimated that around eighty percent of China's total consumption of semi-conductors are imported, and the "domestic" production of semi-conductors is totally dominated by the local subsidiaries of the global giants. Among the top thirty suppliers of microchips to the mainland market, there is not one indigenous Chinese firm (SCMP, 9 September 2003). Moreover, despite intense Chinese government efforts to attract the world's leading semi-conductor makers to China, most of the world leaders in the sector are content to export these exceptionally high value products to China rather than produce within the country.

The gap is marked even in "mid-technology" sectors such as oil and petrochemicals, auto assembly and auto components, large-scale construction and mining equipment, and elevators for tall buildings. Even in sectors with apparently less advanced technology, such as steel, beverages, coal, and domestic electrical equipment, there is a wide gap with leading global companies in the highly branded and/or high technology, high value-added segments of the market. The challenge is not confined to the manufacturing sector. China's four main commercial banks, large accountants and insurance companies lag far behind the global giants in almost all respects. The global giants are already well on their way to constructing oligopolistic industrial structures in the highly branded and high technology parts of the Chinese market in a wide range of goods and services.

In the two strategic industries of oil and aerospace (see Appendix and Zhang Jin, 2004), China's national champions lag behind the world's leading firms. Despite success in completing restructuring and flotation within just over one year, PetroChina and Sinopec are at a disadvantage in terms of the global distribution and quality of reserves, technology, and financial strength. There remains a deep internal struggle to establish a cohesive corporate culture to integrate their powerful subordinate companies and establish a truly unified company. In simple measures of revenue and profit, China's aerospace companies AVIC 1 and 2 are far behind leading aerospace sub-systems suppliers such as Honeywell, Pratt & Whitney, and GE engines. Even taken together, they are minnows compared with system integrators Boeing and Lockheed Martin. Moreover, they remain highly diversified companies with a high proportion of revenues coming from non-aviation production.

Why has the result of industrial policy in China been so different from that in post-war Europe, Korea, Taiwan, or Japan? This was partly due to internal and partly to external difficulties that were peculiar to China.

Internal Difficulties

Policy inconsistency. As we shall see in the oil and petrochemical industry, within the same industry, radically different reform policies were pursued at different times. At the same time, completely different policies were pursued in different sectors such as the aerospace, oil and petrochemical industry. For example, while control was being centralised in the oil and petrochemical industry, AVIC was being broken up into two separate entities, each of which was even less able than before to compete with the global giants.

Where is the firm? The foundation of China's economic reform was to increase "enterprise" autonomy. The core of most large "enterprises" was a single large production unit. This had many benefits, including the development of a strong sense of corporate ambition at the enterprise level. However, it caused difficulties in the subsequent attempts to build multi-plant firms with unified central control over in-

³The commoditised, low value-added part of the mobile phone market is being increasingly penetrated by Chinese consumer electronics firms. However, the global giants (including Nokia, Motorola, Ericsson, Cisco, Siemens, Alcatel, and Lucent) either through imports or their large production networks of within China comprehensively dominate the supply of high technology IT equipment to the Chinese telecoms service industry.

dividual production units. For example, it involved huge struggle to centralise control over powerful companies such as Daqing under CNPC and Shanghai Petrochemical Corporation under Sinopec.

Impoverished economy. China is still a poor country, with a relatively small global middle class. In almost all sectors, from power plants to beverages, markets are highly segmented. Alongside the modern, high value-added, globalized sector, there is typically a huge, low value-added, commoditized segment, which supplies goods and services for poor people. A large fraction of domestic demand is for low price, low value-added products for over one billion peasants, internal migrants and poor urban residents. Here is a different world of ferocious competition between myriads of anonymous “perfectly competitive” indigenous firms. Indigenous firms have to fight a battle on two fronts, on the one hand with global giants in high value-added products, and on the other hand, with domestic small and medium enterprises (SMEs) in low value-added products.

Local protectionism. China has a strong tradition of relatively autonomous local government. There has been persistent local resistance to cross-regional mergers, due to fears of downsizing and/or loss of control of a “local asset.”

Inheritance from the planned economy. Unlike the other “late-comer” countries, China’s large enterprises inherited huge manning levels, which are extremely hard to reduce without causing social instability. In 2002, CNPC and Sinopec each still employed around one million people. AVIC 1 and AVIC 2 together employ over 400,000 people, more than twice as many as Boeing and Lockheed Martin do. This will remain a deep problem for many years.

Incentive to diversify. The inability of China’s emerging large firms to compete on international markets, plus the fact that they each have a huge workforce, produced a high incentive for the individual enterprise to diversify. A single large enterprise could easily have hundreds of “children” and “grandchildren” subsidiaries and related companies. For example, AVIC has 116 subordinate enterprises grouped under 56 “children” enterprises. This gives the “illusion of scale,” but beneath an apparently large firm there are typically hundreds of uneconomically small firms and immense problems of corporate governance.

Problems for China’s bureaucracy. China’s bureaucracy lacked the intense nationalist incentive to build large firms successfully that drove Japanese (and Korean) policy makers. Also, China’s leaders are engaged in an intense drive to root out corruption from the country’s huge bureaucracy. Corruption undermines the bureaucracy’s ability to lead industrial policy effectively.

Ideological commitment to state ownership. China remained for most of the reform period committed to state ownership as a goal in its own right, rather than building powerful corporations by whatever means was suitable. It proved hard to achieve the separation of government and enterprise that has been advocated for many years. Even today, the internationally floated former Chinese state-owned enterprises are still majority state-owned in all cases, and most domestically listed firms are still majority state owned. Even the most famous “non-state” firms, such as Haier in consumer electronics and Legend in computers, have extremely complex ownership structures, with a substantial degree of state ownership and control.

External Difficulties

China’s attempt to build large globally competitive firms coincided with the most revolutionary epoch in the world business history, possibly even including the Industrial Revolution. The transformation of global business structures since the 1980s amounted to nothing less than a “business revolution.” This presents a fundamental challenge for China’s industrial policy, and amounts to a very different policy environment from that which faced other late-comer countries in their attempt to “catch-up.”⁴

Liberalization of world trade and capital markets. The period since the late 1980s witnessed for the first time the opening up of a truly global market place in goods, services, capital and skilled labour. The only market which still remains bound firmly by nationality is the vast sea of unskilled labour. The total stock of FDI in developing countries rose from \$344 billion in 1985 to \$2,181 billion in 2001

⁴For a detailed analysis, see Nolan (2001a), chapter 2, “The challenge of the global business revolution.”

(UNCTAD, 2002). China was the main single focus of attention.⁵ The struggle among the world's leading firms has deeply penetrated the most developed parts of the low- and middle-income countries. China is at the centre of this battle.

Explosive M&A and concentration. The period since the 1980s witnessed the world's most explosive period of mergers and acquisitions (M&A). The size of the merger boom of the 1990s eclipses that of any previous epoch. It will leave a long-lasting imprint on the global business structure. The process of concentration was most visible at the level of the global system integrators. In sectors as diverse as large civilian aircraft, military aircraft, integrated oil and petrochemicals, automobiles, pharmaceuticals, power equipment, semi-conductors, computer systems, mobile phones, lifts, camera film, electronic games, tobacco, ice cream and soft drinks, a small number of focused global producers dominates the world market (Nolan, 2001a, p. 40–42). Competitive capitalism's inbuilt tendency to concentration and oligopoly has flowered on a global scale. There appears to be a universal rule of concentration, namely, that a small number of firms, around three to six, control around fifty to seventy percent of the total world market, concentrating on high value-added products in any given sector, while hundreds or thousands of anonymous, local small- and medium-sized firms battle for the remaining part of the market.

“Cascade effect.” Not only have the core “systems integrators” experienced an explosive process of concentration. The deepening interaction between core companies and supplier companies has created an explosive “cascade” effect that is rapidly leading to concentration and focus among the first tier suppliers and spilling over even into second and third tier suppliers. In sector after sector, the “first tier” suppliers are themselves multi-billion dollar companies with “global reach.” For example, in the aerospace industry, just three firms produce large jet engines. In the auto industry, just three firms account for around three-fifths of the entire global market for tires, and just two firms account for over one-half of the world's entire supply of brake systems. In the mining industry, just three firms account for almost the entire international coal trade, while just two firms account for over one-half of the global market for large excavation equipment. In the industrial gas industry, just five firms account for around three-fifths of the global market. In the accountancy industry, just four firms account for almost all audits conducted among *Fortune 500* companies. In banking, just four firms account for almost all investment banking services for large corporations. In advertising, just three firms account for almost all advertising services for large corporations. This makes the competitive landscape even more challenging for firms from developing countries. If they can't compete as “systems integrators,” how can they compete with the established giant firms in the first tier of the global supply chain, or even at lower tiers, where concentration is also progressing at high speed?

The “external firm.” Through the hugely increased planning function undertaken by systems integrators, facilitated by recent developments in information technology, the boundaries of the large corporation have become blurred. Competitive advantage for the systems integrator requires that it must consider the interests of the whole value chain in order to minimize costs across the whole system. Far from becoming “hollowed out” and much smaller in scope, the extent of control exercised by the large firm has enormously increased during the global business revolution. Indeed, one can speak of a new form of “separation of ownership and control.” In the epoch of the global business revolution, facilitated by advances in IT, core firms within the value chain exercise tight control over firms across the whole value chain. Firms that wish to be selected as “aligned” or “partner” suppliers to the leading systems integrators, must agree to cooperate with the core firms within the sector in opening their books, planning their new plants, organising their R&D, planning their production schedules and delivering their products to the core firms. This is a new form of industrial planning which extends across the boundaries of formal ownership structures and radically undermines old ideas of the size and nature of the firm.

Dominance of firms based in advanced economies. Firms headquartered in regions containing a small fraction of the world's population have comprehensively dominated the global business revolution (Table 1). The high-income economies contain just 16 percent of the world's total population. They account for 93 percent of

⁵ Despite the rapid growth, in 2001, China still accounted for only 18 percent of the total stock of FDI in developing countries (UNCTAD, 2002), significantly below its share of population. Latin America's total stock of FDI in 2001 stood at \$693 billion, 75 percent greater than that of China. Latin America's population (509 million) is only 41 percent of that of China.

the world's total stock market capitalization, 93 percent of *Fortune 500* companies, 95 percent of the *FT 500* companies, 98 percent of the world's top 600 companies by value of R&D spending and 99 percent of the world's top brands. The USA alone has with 192 of the *Fortune 500* companies, 240 of the *FT 500* companies and 275 of the top 600 companies in terms of R&D expenditure.

Developing countries are massively disadvantaged in the race to compete on the global level playing field of international big business (Table 1). The whole of the developing world, containing 84 percent of the world's population, contains just 37 *Fortune 500* companies, 27 *FT 500* companies, 15 of Morgan Stanley's list of the 250 leading "competitive edge" companies, one of the world's top 100 brands, and just ten of the world's top 600 companies by R&D expenditure, of which seven are in Korea and Taiwan. Across the whole of the rest of the developing world, there are just three firms in the world's top 600 firms by R&D spending. There is just one each in China and Brazil. Most dramatically, there is also just one in Russia, which built a vast storehouse of high technology under Soviet Communism. These data vividly illustrates the fantastic inequality in the global distribution of technological prowess: "Large MNCs are the chief repositories of the world's stock of knowledge, and all the screaming in the world will not change this" (Martin Wolf, *FT*, 17 November 1999).

Table 1. Dominance of Firms Based in High-Income Countries of the Global Big Business Revolution

	Popu- lation		GNP, 1999 (a)		GNP, 1999 (b)		Fortune 500 companies (2003) (c)		FT 500 companies (2003) (d)		Top 600 companies by R&D spend (2002)		Stock mar- ket cap- italization (1999)	
	billion	%	\$b.	%	\$b.	%	No.	%	No.	%	No.	%	\$b.	%
HIEs	926	16	22,921	78	21,763	56	463	93	473	95	590	98	33,603	93
L/MIEs	4,903	84	6,311	22	17,324	44	37 (e)	7	27 (f)	5	10 (g)	2	2,427	7

Sources: *FT*, 28 May 2003; World Bank, 2001: 274–5, and 304–5; *Fortune*, 28 June 2003; DTI, 2002.

Notes: (a) at prevailing rate of exchange

(b) at PPP dollars

(c) ranked by sales revenue

(d) ranked by market capitalization

(e) of which: Korea = 13, China = 11, Brazil = 4, Russia = 3, Mexico = 2, Taiwan = 1, Singapore = 1, India = 1, Malaysia = 1

(f) of which: Hong Kong = 9 (of which, Mainland Chinese companies = 2, Brazil = 2, Taiwan = 3, Singapore = 2, Mexico = 1, India = 1, Korea = 4, Saudi Arabia = 3, Russia = 2

(g) of which: Korea = 4, Taiwan = 3, China = 1, Brazil = 1, and Russia = 1.

HIEs = High Income Economies

L/MIEs = Low/Middle Income Economies

Paradox of the big business revolution. The past fifteen years or so has witnessed an unprecedented increase in the degree of global concentration of business power. However, alongside this has emerged a result that is extremely problematic from the perspective of traditional mainstream economics. Far from the intensity of competition weakening as almost all mainstream economists would have predicted, the period has seen a greatly increased intensity of oligopolistic competition between giant firms, alongside an increase in the extent of concentration within each sector and sub-sector. This period saw unprecedented concentrations of expenditure by giant firms on technical progress through R&D spending, global procurement, marketing, human resource development and on spreading best practice techniques across the whole value chain. In sector after sector the period witnessed the paradox of falling prices and improved product quality to meet consumer wants alongside the intense growth of oligopoly.

Conclusion

China's rapid move towards "close" integration with the world economy is occurring at a time of revolutionary change in the global business system. Large Chinese firms are far from ready to compete on the "global level playing field." This presents an extreme challenge for China's industrial strategy. Privatisation of China's large enterprises will not be sufficient to make them globally competitive. If China's firms cannot generally compete at the level of "system integrator," it is hard to see either how in most industries they will be able to compete at the level of first tier supplier. China's entry to the WTO greatly reduces the scope for industrial policy. Strict application of the rules of the WTO Agreement at every level of Chinese business and government would drastically limit the state's actions to support indigenous firms

in their efforts to “catch-up.” For a substantial period ahead, China would have to accept that, under the terms of the WTO Agreement, its best hope would be to be a workshop “for” the rest of the world, housing the production facilities for global giant firms and the leading parts of their supply chain, headquartered in the high-income countries, rather than a workshop “of” the world as Britain was in the mid-nineteenth century.

To devise a strategy to deal with the today’s overwhelming imbalance in business power requires great skill and leadership ability. China’s leaders at both the national and local level are trying simultaneously to juggle two contradictory forms of “industrial policy.” On the one hand, they are trying to encourage multinational investment by offering a wide range of incentives to produce a “good investment environment.” On the other hand, they are trying to nurture local and national “industrial champions.”

China is becoming increasingly “dependent” in the classical sense used by the Latin American economists in the 1950s (Frank, 1967). In every case, successful late-comer industrialising countries, from the USA in the late nineteenth century to South Korea in the late twentieth century, have produced a group of globally competitive firms. China is the first successful late-comer not to have done so. It is remarkable that China reached a position in which it had the world’s sixth largest economy⁶ and was the seventh largest exporter without having a group of internationally competitive large firms. This is highly significant in the history of economic development. Already, over 30 percent of industrial profits, and one-half of China’s export earnings are generated by foreign-invested firms.⁷ If the “bubble” of foreign direct investment in China were to burst, it would have serious consequences for the growth path and for the country’s socio-political stability. There is intense debate at all levels of Chinese society about the significance of this phenomenon. Many popular books and articles draw comparisons with the dependent nature of Chinese economic development from the mid-nineteenth century until 1949.

This presents a big challenge for China’s policy makers. China faces far greater global industrial concentration and competition than any previous late-comer country. Given the drastic inequality in competitive power between its own firms and the global leaders, China has to find a different strategy from that adopted by other late-comer countries, if it is to build a substantial group of large globally competitive firms.

4. Conclusion

U.S. foreign policy played an important role in the collapse of the USSR. Through the instrument of the international institutions, especially the IMF,⁸ the USA also played an important role in the disastrous choice of policies which plunged post-communist Russia into prolonged economic crisis, which has been only partially alleviated by the current high price of oil (Nolan, 1995). Through intense efforts within the IMF, U.S. foreign policy played a central role in pushing developing countries to liberalise the flow of short-term capital. It is now widely recognised, even within the IMF itself,⁹ that premature liberalisation of financial flows in developing countries has been extremely harmful to developing countries. In extreme cases, such as Indonesia, the consequential financial crisis helped precipitate “regime change,” and socio-economic chaos. Even the paragon of the free market and well-regulated banking, Hong Kong, was deeply affected by the crisis. It is still far from a full recovery.

The unfolding disaster in Iraq serves as a salutary reminder of the dangers for U.S. foreign policy of “state collapse,” from whatever cause, in geopolitically significant countries.

Despite many appearances to the contrary, China’s political economy is at a critical and fragile stage in its evolution from the planned economy (Nolan, 2003). Its own leaders have warned of the dangers of system collapse. This is not an idle warning to justify continued one-party rule. It reflects a realistic evaluation of the magnitude of the development challenge that confronts the new leadership. Collapse of the former USSR was a disaster for the Soviet people, and was harmful to global prosperity and stability, not least through the effect on terrorism. Financial insta-

⁶It is the second largest measured in terms of PPP dollars (World Bank, 2001), but as discussed elsewhere, this greatly overstates the true size of China’s national product.

⁷In addition, a substantial fraction of China’s huge exports of electrical goods (\$85 billion in 2001) were produced by indigenous Chinese firms acting as “Original Equipment Manufacturer” suppliers to the global giants.

⁸The International Monetary Fund (IMF) and the World Trade Organisation can be said to represent “global” interests, and their constituency may be construed as the world. In reality, however, they are heavily American dominated.” (Brzezinski, 1997: 27).

⁹See, for example, Prasad, et al., 2003.

bility across wide swathes of Latin America, East and Southeast Asia, has also harmed the prospects for global economic progress and stability. The consequences of the disintegration of China's political economy would dwarf these. This outcome would be disastrous, not just for China, but for the USA also.

There are numerous channels through which such an outcome could be triggered, most obviously through the financial sector. Intense international pressure in respect to industrial policy is another possible (and closely related) channel. China's large firms face a severe challenge in competing on the "global level playing field" with the world's leading system integrators in manufacturing, as well as with the leaders in the first tier of suppliers. The gap in competitive capability is at least as wide in that part of the service sector which meets the needs of global firms and the global middle class. Strict application of the WTO rules, enforcing the "global level playing field," would make it impossible for most large Chinese firms to compete with the global leaders.

All of the group of large Chinese firms which are groping their way towards becoming globally competitive, such as CNPC, Sinopec, CNOOC, Baoshan Steel, China Telecom, China Netcom, China Unicom, China Mobile, Haier, Huawei, and Legend, owe a great deal to state industrial policy. Even for these firms, and even with continued state industrial policy, the long-term outlook is far from certain. The challenges facing China's aspiring global giants are far greater than those that faced any previous late-comer country. Without sustained industrial policy large Chinese firms will mainly fail in their efforts to catch up with the world's leading firms. The example of Brazil, which has a per capita income far above China's, illustrates vividly the likely outcome in the absence of state industrial policy.¹⁰ Over one-half of Brazil's leading firms (by sales revenue) are global giants.¹¹

In almost every case, successful late-comer countries, from Britain and the U.S. in the eighteenth and nineteenth centuries, to Korea and Japan in the late twentieth centuries, used one form or another of industrial policy to nurture their own "national team" of large, globally competitive firms. China's ambitions are no less intense. To deny China the chance to use the same mechanisms that they themselves used is tantamount to "pulling up the ladder" through which they themselves developed globally competitive firms (Nolan, 1995; and Chang, 2002). Indeed, the attempt by high-income countries to pressurise poor countries, such as China, to give up national industrial policy, is itself a form of industrial policy, since it amounts to clearing the ground for competitive success for the dominant firms headquartered in the high-income countries.

It may be argued that it no longer matters that a firm is "American" or "Chinese," because production systems are global. It may be argued that in the long-run large global firms will become "Sinicised" due to the growing role of Chinese institutional and individual shareholders and Chinese people working within the global corporation. It may be argued that in the long-run there is a powerful incentive for high technology activities to be increasingly located in China, close to the world's greatest concentrations of highly qualified, relatively low-paid employees.

However, these are speculations about the long run. Today, under the WTO rules of the "global level playing field," China's large firms face an intense threat. That competitive threat had already become clear well before China was admitted to the WTO, since it had already relaxed numerous constraints on FDI in the preceding years. However, the terms of China's admission to the WTO, if fully applied, amount to a comprehensive dismantling of Chinese industrial policy, which greatly intensifies that threat. The pace of growth of FDI by global giant firms in China is accelerating sharply.

The pressure from within China to continue with industrial policies arises from at least three directions. In part it arises due to nationalist feelings. This is far from unique to China. In the USA in the 1970s and 1980s national sensibilities were inflamed by the rapid penetration of Japanese firms. Similar sensibilities are aroused in China at the explosive intrusion of global giant firms, often U.S.-based, in that country. It would be naïve not to draw attention to the surge of anti-American feeling in developing countries associated with the U.S.-led globalisation process. Such feelings erupted in China after the bombing of the Chinese embassy in Belgrade.

¹⁰In fact, Brazil has not totally abandoned industrial policy. Some of its most successful firms, such as Embraer, CVRD Ambev, and Petrobras, only exist due to past and present actions by the Brazilian state to nurture "national champions." Without such policies, the degree of dominance by global giants in Brazil would be even greater than it is.

¹¹Among the top 25 "Brazilian" firms in 2001, fourteen are global giants, including (in descending order of revenue within Brazil in 2001) Volkswagen (2), GM (3), Fiat (5), Unilever (7), Bunge Foods (9), Phillip Morris (10), Nestle (11), Ford (12), Cargill (13), Daimler Chrysler (16), Siemens (20), Ericsson (21), BASF (22), and Motorola (24).

The incentive to continue with industrial policy arises also due to concern at the ferocious pressure that unconstrained opening up to global giant firms would exert upon employment in the Chinese state-owned sector. Explosive growth and domination of large segments of the modern economy by global giants is already helping to press forward high-speed downsizing of employment in Chinese state-owned firms, providing fuel to the fire of social discontent.

The attempt to nurture indigenous national champions is also perceived as important by Chinese policy makers because of the implications for national security. The U.S. Government has long supported the U.S. aerospace industry through industrial policies for precisely the reason that it is a key to the generation of a wide network of new technologies. The oil and petrochemical industry has long been regarded as a “strategic industry” in the USA, with intimate inter-twining of business interests and international relations in a form of industrial policy the goal of which is to secure primary energy supplies to the USA.¹² In industries such as these, which it considers are of special strategic significance, it is to be expected that Chinese policy makers will continue to try hard to nurture indigenous national champions.

China’s high-speed move towards becoming the world’s largest manufacturing base is giving rise to understandable anxiety not only in the USA, but across all the high-income countries, not least among China’s immediate Far Eastern neighbours, including Taiwan. This has caused ferocious domestic debate about “hollowing out” of these economies.

In order that there is a balanced policy response towards China’s industrial policies to nurture its indigenous firms, it is necessary to appreciate the intensity of the competitive threat that confronts large Chinese firms on the global level playing field of the WTO. At a meeting in Beijing in the Great Hall of the People in 2001, one U.S. Representative said: “Competition from abroad will help the Chinese to raise their level of efficiency, just as the U.S. car industry did in the 1980s in the face of Japanese competition.” To compare the indigenous Chinese auto industry today with Chrysler, Ford and GM in the 1980s shows little appreciation of the true nature of the competitive structure of global big business and the magnitude of the inequality between large firms from the high-income countries and those from developing countries.

In order to produce a balanced policy response it is also vital to appreciate the wider setting of the fragility of the entire system of Chinese political economy. Excessive pressure upon China to capitulate to U.S. demands to enforce in the strictest terms the WTO regulations and essentially abandon industrial policy could make a serious contribution to destabilising the entire system of political economy. This result would ultimately be in no one’s best interests, either in China or in the USA.

In sum, given the immense imbalance in global business power, especially in high technology sectors, it is easy to understand why China might wish to continue to support indigenous firms through various measures of industrial policy at both the national and the local level. If these measures were, indeed, to be implemented successfully, then they might contribute to global peace and prosperity by helping to stabilise China’s political economy.

APPENDIX: CATCH-UP IN CHINA’S STRATEGIC INDUSTRIES

A1. Oil and Petrochemicals

The Global Setting

Crude oil and natural gas remain central to global political economy. However, the regional distribution of world oil and gas reserves, production and consumption are highly uneven. This is of special importance for global political economy. China is poorly endowed with oil and gas. Its share of the world oil and gas reserves amount to only 2.3 percent and 0.9 percent respectively (BP, 2001). In 2000, China was the third largest oil consuming country after the United States and Japan. After 1993, China became a net crude oil importer. Oil imports in 2000 was equivalent to 31 percent of China’s total oil consumption.

At the end of the 1990s, among the world top 25 oil companies ranked by operating performance, fourteen (fifteen if Petrobras is included)¹³ were state-owned national oil companies (NOCs), all based in developing countries (*Petroleum Intelligence Weekly*, 18 December, 2000). These NOCs own the majority of the world oil and gas reserves and are the world’s largest oil producers. However, they are rel-

¹² See, for example, the discussions of oil, U.S. energy security and U.S. foreign policy in Brzezinski, 1997, and Yergin, 1991.

¹³ Petrobras (Brazil) is partially privatized.

atively weak in downstream refining and marketing. There have been no cross-border mergers among the NOCs.

(i) Mergers and Acquisitions

Extensive privatisation of the oil and petrochemical industry opened up new opportunities for mergers and acquisitions in both the advanced and developing countries. In the late 1990s, a frenzy of consolidation began to sweep through the global oil majors. This fundamentally changed the competitive landscape in the industry. The mergers and acquisitions include BP's trans-Atlantic merger with Amoco and its takeover of Atlantic Richfield Company (Arco), securing BP's position as one of the top "big three" western oil companies; Exxon's merger with Mobil, the new company created overtaking Royal Dutch/Shell as the largest western oil company; the merger between TotalFina, created through French Total's takeover of the Belgian PetroFina, and Elf Aquitaine; the merger between Chevron and Texaco. The consolidation process accelerated among the mid-sized integrated oil and petrochemical companies. The merger between Conoco and Phillips in 2001 created the world's sixth largest energy company in terms of reserves and production. In February 2003, BP combined its Sidanco holdings with Tyumen Oil (TNK) for \$6.75 billion, creating Russia's third largest oil and gas company, together with Alfa Group and Access-Renova (AAR). Only two months later, Russia's largest oil producer, the Yukos Oil Company, took over Sibneft, the fifth Russian oil company for \$13 billion. The new company YukosSibneft became the world's fifth largest publicly traded oil company in terms of production. At 2.4 million barrels of oil a day, the new company ranks behind Exxon Mobil, Royal Dutch/Shell, BP and Chevron Texaco. In August 2003, BP agreed to purchase a quarter of Slavneft for \$1.35 billion. If realised, the deal will position BP as the world's second largest publicly traded oil and gas producer, ahead of Royal Dutch/Shell (*FT*, 2 August 2003).

The Middle East, the Caspian Region, and the West Africa are the terrain to battle for hydrocarbon resources. In March 2003, the Saddam Hussein regime was overthrown and the world embarked on a post Iraq War era. Before the War, global majors called for a "level playing field" for all oil companies in the post-Saddam Iraq. The Russian, Italian, French and Chinese oil companies have made deals with Saddam Hussein's government, amounting to \$38 billion.¹⁴

(ii) The "Cascade" Effect

The consolidation of the global large oil companies promoted the "cascade" effect in each sector from upstream to downstream: Halliburton and Schlumberger in oil-field service; ABB Lummus and Amec in petrochemical process technologies and construction; GE and Rolls-Royce in pipeline pumps; Acelor and POSCO in pipeline steel. The consolidation of the big oil companies also helped to promote the oil shipping companies to consolidate.

(iii) Repsol-YPF

During the period of large-scale mergers among the western major oil companies, Spain's Repsol successfully launched a hostile bid for Argentina's YPF in 1999. YPF, Argentina's "national champion," was privatised, restructured, and subsequently listed in the stock exchanges in Buenos Aires and New York in 1993. It was then the largest publicly traded oil company in Latin America. The deal is highly significant in that it is the first time that a large privatised western oil company has taken over a major, formerly state-owned oil and petrochemical company from a developing country.

(iv) Competitive Obstacles for Firms Based in Developing Countries

The mergers in the world's oil and petrochemical industry during the global business revolution have created a group of new super-giants that stand in a position of greatly enhanced competitive advantage compared to potential competitors from developing countries. These new super-giants greatly increased their size and their assets base. They have constructed a portfolio of high quality oil and gas reserves distributed around the world. They are able to invest large amounts in R&D to sustain and extend their technical lead over other companies. They have the resources to invest in large-scale information technology systems that can better integrate their extended internal value chain, stretching from exploration to the petrol station. They have developed marketing systems with immensely powerful global brands. They have built massive multi-billion dollar central procurement capabilities with large consequent cost-savings. MSDW estimates that the super-majors, namely Exxon Mobil, Shell and BP, have a capability to sustain their competitive

¹⁴ *FT*, 25 February 2003.

edge in the industry for at least fifteen years (MSDW, 1998). Not one integrated oil and petrochemical firm based in a developing country has been able to challenge the global giants in this sector. By far the most successful example was YPF. However, as that case vividly illustrated, privatisation, liberalization and high quality management, are far from a guarantee of independent survival.

China's Response

In the same period that the merger frenzy swept through the global major oil companies, China's oil and petrochemical industry underwent massive restructuring. After an intense debate on how to reform the oil and petrochemical industry, the Chinese government created two large integrated oil companies through administrative measures.

(i) The 2000/1 Flotations of PetroChina, Sinopec and CNOOC

In April 2000, PetroChina, created on the basis of the core businesses of CNPC, listed in New York and Hong Kong (China) Stock Exchange. The parent company CNPC held a 90 percent of PetroChina's total equity. BP became PetroChina's strategic investor. In October 2000, Sinopec, established on the core businesses of the oil Sinopec (now known as Sinopec Group) listed in the stock exchanges in New York, Hong Kong and London. Sinopec Group controlled 56 percent of Sinopec's equity. Exxon Mobile, BP, Shell and ABB Lummus became Sinopec's strategic investors. Equity involvement by the global super-majors was crucial to their successful listing of PetroChina and Sinopec. After the failure in international flotation in 1999, CNOOC Ltd., China's small/medium-sized offshore producer, was eventually listed in New York and Hong Kong in February 2001.

(ii) Business Capabilities

• Reserves and Output

PetroChina's oil reserves and production were close to the level of the world's leading companies. Sinopec is similar to ENI in terms of oil reserves and oil production. In terms of gas, PetroChina follows behind the "big three" and Sinopec lags considerably behind the global majors (Table A1). However, the two leading Chinese oil companies have a crucial difference with the global giants in terms of global distribution and the quality of the portfolio of oil and gas assets. PetroChina and Sinopec produce entirely within China.¹⁵ Daqing, at which 50 percent of PetroChina's oil reserves are located, is declining seriously. About one-third of PetroChina's gas reserves are in the Tarim Basin in Xinjiang. It will require advanced technology and involve high transportation costs to produce and transport the gas from Tarim to the main consuming areas in the eastern part of the country (*xi qi dong shu*). Less than five of PetroChina's oil fields can make a profit when the oil price is at \$10–15 per barrel, the benchmark price at which the global giants can still make a profit.

• Refining

China's refining sector needs revamping, upgrading and expanding. PetroChina and Sinopec between them only have four refineries with capacities greater than 10 million tons. With more than half of the oil imports from the Middle East, most of China's refineries need to add capabilities to process sour crude oil. In addition, more stringent environmental regulations for refined products calls for high-conversion refineries. With tariff reduction due to China's terms of admission to the WTO, few of PetroChina's refineries can survive in near-open competition with imported refined products.

• Marketing Petroleum Products

Only around one quarter of the service stations owned by each of PetroChina and Sinopec (Table A1) were franchised retail outlets bearing the companies' brands, "PetroChina" and "Sinopec" respectively. Neither refined products supplies nor the price of refined products are centrally controlled, nor are accounts centrally consolidated, even for the network of service stations owned and operated by the two companies themselves. The two companies' wholesale entities have no effective coordination of supply, price or customers. PetroChina and Sinopec still have a long way to go before they develop the logistics expertise of the global giants or possess a comparable brand based on the safe and low-cost operation of a huge logistics system. This is a crucial part of the development of the brand for globally competitive oil and petrochemical company. Moreover, the Chinese companies still must face the challenge of rationalising

¹⁵In January 2003, PetroChina expressed its intention to make overseas acquisitions to meet the company's oil and gas production targets at an annual rate of 5 percent for three years to 2005.

the market. It is estimated that in 2001 the average annual throughput per service station in China was 750 tonnes/year, only 27 percent of the average for other ten countries¹⁶ (Yin and Dong, 2002). However, the number of service station per hundred kilometres in China was 5.7, compared with the average 2.8 for the other ten countries. In 2002, Sinopec reported the annual throughput for its service stations was 1,560 tonnes per station, compared with approximately 2,400 tonnes for ENI's service stations.

• **Petrochemicals**

The average annual capacity of petrochemical sites is just 400,000 tonnes, only half of that of the global majors. Instead of having a small number of giant, low-cost integrated sites situated in a few concentrated areas, as the global giants do, these 18 ethylene crackers are located at 16 sites in 15 cities. For petrochemical production, high value-added products only account for 30 percent of China's total production. Imports of petrochemicals account for up to 50 percent of the Chinese market (Sinopec, 2001). With further reductions in import tariffs since China's entry to WTO, even these low value-added petrochemical products face intense competition not only from global majors but also from low-cost producers in the Middle East and the South East Asia. China's downstream sector will experience severe impact after 2006 when China's phase-out period for WTO finishes.

• **R&D**

The technological capabilities of PetroChina and Sinopec both upstream and downstream are relatively backward. A Chinese industry expert pointed out that the country's low level of technological innovation upstream would pose "a great constraint on the industry's competitiveness and efficiency" (*China Petroleum*, January 1999). In petrochemical production, backward technology resulted in a high level of energy consumption and a low percentage of chemicals for further processing and utilisation (Chen, 1998: 29). In terms of R&D spending, the global majors are able to spend more in absolute terms due to the sheer size of their sales revenue (Table A2). Moreover, they are able to purchase greater amounts of the R&D "embedded" in the products of specialist suppliers to the oil and petrochemical industry.¹⁷

Table A1. Operating Data Compared: Global Majors Versus PetroChina and Sinopec, 2002

Company	Proved reserves		Production		Refinery throughput (mmb/d)	Oil product sales (mmb/d)	Petrochemical production (mmt)	Service station number
	Oil (bb)	Gas (bcf)	Oil (mmboe/d)	Gas (bcfd)				
Exxon Mobil	12.6	55,718	2.5	10.5	5.5	7.8	26.9*	42,000
Royal Dutch/Shell	10.1	53,438	2.4	9.4	4.1	7.4	21.4*	46,000
BP	7.8	45,844	2.0	8.7	3.1	6.6	27.0	30,000
TotalFinaElf	7.2	21,575	1.6	4.5	2.3	3.2	16.4†	16,600
Chevron Texaco	8.7	19,335	1.9	4.4	2.1	3.9	—	20,400
ENI	3.8	18,629	0.9	3.1	0.65	1.0	—	10,700
Repsol YPF	2.0	18,205	0.58	2.6	1.2	1.0	3.5	6,600
PetroChina	11.0	38,817	2.1	1.7	1.6	1.1	3.5	13,000
Sinopec	3.3	3,329	0.74	0.49	2.1	1.4	10.5	28,000
CNOOC Ltd.	1.4	3,548	0.3	0.27	—	—	—	—

Note: *Sales †Capacity
 bb = billion barrels, bcf = billion cubic metres, mmboe/d = million barrels of oil equivalent per day, bcfd = billion cubic feet per day, mmb/d = million barrels per day, mmt/y = million tonnes per year, mmt = million tonnes

Sources: Compiled from company reports

¹⁶They are the USA, UK, Germany, France, Italy, Switzerland, Japan, Canada, Mexico, and Singapore.

¹⁷For example, Schlumberger spends more on R&D than Shell (£324 million compared with £313 million), while Haliburton spends more than ENI (£160 million compared with £146 million) (DTI, 2000: 54).

(iii) Financial Performance

- **Revenue.** Their sales revenue places PetroChina and Sinopec alongside the leading second tier of global oil and petrochemical companies, but far short of the industry leaders, Exxon Mobil, Shell and BP. Even the combined revenue of PetroChina, Sinopec and CNOOC at \$71.9 billion is less than that of Chevron Texaco (Table A2).
- **Profit.** In 2002, the combined net profits of PetroChina and Sinopec were \$7.6 billion, just 36 percent of the combined net profits of the top two global giants, Exxon Mobil and Shell (Table A2). Profits per worker at PetroChina and Sinopec are minuscule compared to those at the global oil giants. CNOOC is a “lean” company and its profit per employee significantly exceeds even that of the industry leader Exxon Mobil. However, the Chinese companies are still operating in a protected situation. Moreover, the Chinese companies have huge demands on their profits. For example, they have to finance their own downsizing but also that of their parent companies, which still have huge workforces (Table A2).
- **Market Capitalisation.** If one assumed that the whole company was floated, then at the share price as of 4 January 2001, the market capitalisation of PetroChina and Sinopec would be \$47 billion and \$19 billion respectively, only a fraction of the \$251 billion for Exxon Mobil, \$166 billion for Royal Dutch/Shell and \$160 billion for BP (Table A2). Of course this greatly overstates the true market capitalisation of Chinese floated companies, since the value of the non-traded shares is typically considerably below that of the traded shares.¹⁸ The low level of operational efficiency and the high level of uncertainty in their performance after China’s accession to the WTO are serious concerns among industry experts and analysts.

Table A2. Financial Indicators Compared: Global Majors Vs PetroChina and Sinopec, 2002

Company	Revenue (\$billion)	Net profit (\$billion)	R&D spending (\$million)	Market Cap [§] (\$billion)	Employee numbers (thousand)	Profit/Revenue (%)	Profit/Employee (\$)
Exxon Mobil	204.5	11.5	631	251	92	5.6	125,000
Royal Dutch/Shell	179.4	9.4	472	166	116	5.2	81,034
BP	178.7	6.9	373	160	115	3.9	60,000
TotalFinaElf	107.7	6.2	695	106	121	5.8	51,240
Chevron Texaco	98.7	1.1	221	79	53	1.1	20,755
ENI	50.3	4.8	315.3	64	80.6	9.5	59,553
Repsol YPF	33.8	1.9	132◆	20	30.6	5.6	62,092
CNPC	42.1	6.4	—	—	1,100	15.2	5,818
of which: PetroChina	29.5	5.7	218	4.7†	419.5	19.3	13,588
Sinopec Group	41.6*	1.5*	—	—	960	3.6	1,563
of which: Sinopec	39.2	1.9	182	3.8‡	418.8	4.8	4,537
CNOOC Ltd.	3.2	1.1	13.3	11	2	34.4	550,000

Notes: * Figures are company estimates

◆ Figure in 2001

§ Market capitalisation on 10 June 2003

† Flotation 10% of company value

‡ Flotation of 20% of company value

Sources: Company reports, CBSMarketWatch.com

(iv) Organisational Structure

Although the organisational structure of PetroChina and Sinopec is superficially similar to that at an international integrated oil company, the superficial similarity conceals important differences. The global giants have a strong “one company” cor-

¹⁸This can be observed through the price at which “non-traded” shares are exchanged among state-owned companies.

porate identity and culture. Within PetroChina and Sinopec there exist powerful entities that over the years developed strong independent corporate identities and ambitions. Both PetroChina and Sinopec are integrating these powerful subordinate companies by centralising control over planning, personnel, investment and finance. Nevertheless, establishing a unified corporate identity and culture remains a formidable challenge.

The relationship between the two listed companies and their parent companies remains ambiguous. The bulk of the income of CNPC and Sinopec Group is from the dividend payment of the two listed companies. In 2002, CNPC received an approximate \$3.1 billion dividend payment from PetroChina,¹⁹ accounting for 53 percent of its net profit. In 2002, the non-core businesses of CNPC and Sinopec Group still employed more than 680,000 people and 540,000, respectively. A large fraction of these activities are loss-making. To what extent PetroChina and Sinopec have autonomy in making decisions with respect to business strategy, dividend payments and appointment of senior management remain unclear. Such a structure has caused concern to be expressed about the respective companies' commitment to creating shareholder value and protecting the rights of minority shareholders.²⁰

(v) Complex Penetration

The global giants are deeply interested to develop their business in China from upstream to downstream. According to the State Economic and Trade Commission, in upstream exploration and development, by 1999, total foreign investment reached \$1.1 billion in onshore upstream and \$6.45 billion in offshore upstream. In petrochemicals, global petrochemical giants will set up six joint ventures petrochemical complexes by 2005, each of the projects involving \$2.5–4.5 billion investment and located in the coastal regions, which have the highest average income level in China. If we assume all the joint venture projects start production in 2005, they would account for 42 percent of total projected ethylene demand in China at 10 million tons (*Oil and Gas Journal*, 10 January 2000). The global giants are in most areas technologically far ahead of their Chinese counterparts in these joint ventures. From the perspective of the foreign partner in the joint venture, they each form a part of the respective global business system, typically a single business unit. In this sense, they represent an important growth of the multinational giants within the "body" of the indigenous Chinese firm.

As discussed above, the global majors have become strategic investors in PetroChina and Sinopec. In April 2001, PetroChina and BP established a marketing joint venture in Guangdong, aiming for 500 service stations by 2001. Each of the global majors, Exxon Mobil, Shell and BP, are setting up joint ventures with Sinopec for 500 service stations in Guangdong, Jiangsu and Zhejiang, respectively. For the three companies, this was "but the beginning of their attempts to capture a share of the world's largest retail market" (*Petroleum Economist*, October 2000) (emphasis added). The strategy of the global giants to expand their downstream, high-margin business, each in a different part of China's high-income coastal markets, is clear. In the middle of 2003, Shell's joint venture with Sinopec was approved.

(vi) Overseas Expansion

China stepped up its acquisition of overseas oil and gas assets in the late 1990s (Andrew-Speed, 2002: 33–36). CNPC was the sole entity to invest in overseas oil and gas assets before 2002, the year in which Sinopec and CNOOC started their overseas expansion. Currently, CNPC has relatively large investments in Sudan and Kazakhstan and a presence in Syria, Venezuela, Peru, Canada, Myanmar, Thailand and Indonesia. In 2002, CNPC obtained 10.2 million tons of oil from its overseas assets. However, this accounted for less than 10 percent of CNPC's total production. Sinopec has assets in Algeria, Yemen and Indonesia. CNOOC acquired assets in Australia and Indonesia. It is notable that Sinochem, approved by the State Council in 2001, joined the three Chinese oil majors for overseas acquisition. In February 2003, Sinochem acquired the Atlantis project from the Norwegian oil-field service company PGS. Sinochem aims to become "a vertically-integrated state-owned oil company" (Wang, 2003).

The Chinese oil major's overseas investment programme has had serious setbacks. At the end of 2002, CNPC made a bid for the Russian government's 74 percent hold-

¹⁹ Based on PetroChina's dividend payment of \$0.02 per share and the weighted average number of 171,630 million shares issued and outstanding in 2000.

²⁰ The issues of creating shareholder value and protecting minority shareholders are discussed in *China Petroleum*, April 2000, p. 18–29 and an article "Oil industry: choices after flotation" by Zhang Jiwei in *Finance (Caijing)*, November 2000.

ing in Slavneft, the eighth largest oil company in Russia. However, just two days before the bidding date, the Russian Duma passed a resolution, forbidding any entity controlled by foreign governments to bid for Slavneft. CNPC withdrew from the bidding process. In early 2003, the proposed oil pipeline from Angarsk in eastern Siberia to Daqing was held up due to a rival proposal supported by Japan to construct the oil pipeline to the Russian port of Nakhodka on the Sea of Japan. In May 2003, CNOOC and Sinopec's purchase of an 8.3 percent stake from BG in the North Caspian Sea oil and gas project in Kazakhstan was blocked by the other partners (Shell, Exxon Mobil, TotalFinaElf, Conoco Philips and ENI), exercising their pre-emption rights. The project was considered to be "the largest oil field discovered in the last half century." Commentators regarded the pre-emption as "[flying] in the face of the traditional practice among Western businesses to court Chinese interests at all costs" (*SCMP*, 3 June 2003).

(vii) Summary

The process of restructuring and flotation of PetroChina and Sinopec was achieved through administrative measures within just one year. Despite this achievement, substantial question marks remain. Across the whole value chain from upstream to downstream, PetroChina, Sinopec and CNOOC are at disadvantage in terms of the quantity of oil and gas reserves compared with the national oil companies, and in terms of global distribution and quality of reserves compared with the super-majors. They are at disadvantage in technology and financial strength compared with the global majors. There remains a deep internal battle to establish a cohesive corporate culture to integrate their powerful subordinate companies and establish a truly unified company. The relationship of the floated companies with the parent remains unresolved. Across the value chain, PetroChina, Sinopec and CNOOC have been actively forming "strategic alliances" and establishing joint ventures with global oil and petrochemical companies. Their future relationship with each other and with the global giants remains highly uncertain, and strongly depends on the path taken towards them by their majority owner, the Chinese state. On the verge of China's entry to the WTO, a meeting convened by the State Planning and Development Commission reported China's petrochemical industry "faces severe challenges" (*Xinhuanet*, 2001). It remains an open question whether PetroChina, Sinopec and CNOOC will succeed where YPF failed.

A2. Aerospace

Global Trends

(i) Consolidation

The dramatic change in the demand side of the world's aerospace industry in the 1990s has been a powerful force to drive forward consolidation. After the Cold War, both the USA and Europe drastically reduced their defence spending (IISS, 1999, 37). Procurement techniques rapidly moved towards those of the civil aerospace world as governments push contractors to lower costs. Alongside the decline in defence procurement, European and U.S. military aircraft manufacturers have been able to sell to markets that were inaccessible during the Cold War (IISS, 1999, 283).

Since the 1980s, privatisation as well as international alliances among the world's airlines placed great pressure on aircraft suppliers to reduce cost. Following the events of 11 September 2001, a decline in commercial aircraft purchase will be partially compensated by increased purchase of military aircraft (including large transport planes) and other military equipment. In May 2003, the U.S. Congress approved a \$400 billion defence budget for the year 2004, \$20 billion more than the Pentagon requested and a \$45 billion increase over the budget for this year. Defence observers comment that even though the actual funding for 2004 would scale back to the levels initially requested by the Pentagon, "the U.S. would spend more on its military next year than the next 10 largest-spending nations combined" (*FT*, 13 June 2003). Moreover, the Pentagon's five-year defence plan forecasts increases of \$20 billion per year through to the end of the decade.

USA. Initiated by the Pentagon over the "Last Supper," over \$62 billion-worth of mergers and acquisitions occurred between 1994 and 1998 in the USA (*FT*, 3 September 1998). Between 1990 and 1998, the number of prime contractors for fixed-wing aircraft fell from 8 to 3; rotary wing aircraft 4 to 3; tactical missiles 13 to 4; expendable launch vehicles 6 to 2; satellites 8 to 5; and, strategic missiles 3 to 2 (James, 1998). During the 1990s, more than 50 companies were compelled to consolidate into today's "Big 5": Boeing, Lockheed Martin, Northrop Grumman, Raytheon and General Dynamics. The most significant event in this process was the merger between Boeing and McDonnell-Douglas. The resulting extraordinarily high level of industrial concentration received "strong support from the USA administra-

tion" (*FT*, 23 September 1997). The merger resulted in Boeing being the only producer of jet airliners in the USA and accounting for no less than 84 percent of the world's total commercial aircraft in service (*FT*, 23 September 1997). After the merger, Boeing and Lockheed Martin completely dominated military aircraft sales to the U.S. Government (*FT*, 3 September 1998). On 26 October 2001, the Pentagon awarded the \$200 billion Joint Strike Fighter (JSF) programme, the biggest defence procurement, to Lockheed Martin. The procurement decision "catapults Lockheed into an unassailable position as the world's top builder of fighter aircraft" (*FT*, 29 October 2001). Moreover, it is expected that over the lifetime of a given plane, the final cost will be several times that of the initial procurement, which will amount up to \$1 trillion at today's prices.

Europe. The European military aerospace industry with much smaller and fragmented government procurement than their counterparts in the USA realised that it must unify or perish before the U.S. challenge. In October 1999, Dasa of Germany and Aerospatiale-Matra of France and Spain merged into a new giant company called the European Aircraft, Defence and Space Company (EADS). However, EADS now has serious problems with its management structure leadership (*FT*, 16 November 2001). Moreover, BAe Systems, EADS's partner in Airbus and Eurofighter, now is a full partner with Lockheed Martin in the JSF programme. France is committed to its own Rafale fighter through Dassault and competes for export orders with EADS's Eurofighter. Italy has decided to quit the European programme to build a large military transport aircraft, the A400M. In addition, the events of 11 September will put severe pressure on Airbus, especially given the large outlays already undertaken on the super-large aircraft A380, for which the market now looks much less optimistic. In sum, the final shape of the European aerospace industry is far from certain.

Transatlantic Option. The USA has the world's largest arms market by far. In an effort to prevent the emergence of a "Fortress Europe" in the arms industry, the U.S. Government has been moving towards relaxing its controls on foreign investment in the industry and greater technology sharing with European-based defence firms. Jacques Gansler (the then Head of Procurement, Pentagon) announced that the Pentagon was willing to allow European or Asian companies to "buy major U.S. defence companies under certain conditions," one of which was that other countries must reciprocate, allowing similar access to their own markets (*International Herald Tribune*, 8 July 1999). The 1990s saw increases in programme-level collaborative arrangements between industrial firms. The JSF programme is by far the most significant one. The UK is the sole Level 1 partner that commits \$3.3 billion to the development costs and "will be given a deeper insight into the workings of the F-35 [JSF] programme." The Netherlands and Italy are the Level 2 partners, which will allow them to "influence the aspects of the F-35's design." The Level 3 partners include Canada, Denmark, Norway and Australia, with Singapore, Turkey and Israel expected to follow before the end of 2003. Level 3 partners will be given "access to technical, cost and schedule data" so that "they can shape their requirements around the aircraft" (*FT*, 22 July 2002). However, as a Level 1 partner, BAe System's demand for the source codes for the F-35 caused anger in the U.S. administration. Without the source codes, Britain would have no autonomy to adapt the aircraft for operational requirements or perform important upgrades: "Reprogramming the aircraft to face any future threats, ... could be done only once the U.S. had given its permission" (*FT*, 14 July 2003).

(ii) Systems Integration

Integrating the Supply Chain. Modern aircraft and engines have become so complex that a major aspect of competitive advantage has become the ability to integrate the whole system of supply to produce the final product. The supply base of the aerospace industry cuts across many industries: "As much as 60–80 percent of the end-product value of aerospace products derives from this supply base" (Murman *et al.*, 2002, p. 18). The system integrators—the designer and assembler of the civilian aircraft or the prime contractors for defence industry contracts—make large investments in IT systems to integrate the supplier networks tightly with the core design and assembly location, and involves increasingly detailed, instantaneous exchange of information. The surrounding system of suppliers today constitutes a veritable "external firm," whose activities are closely coordinated and planned by the core systems integrators. For example, Airbus has more than 1,500 suppliers in 27 countries, including over 500 U.S. companies, and suppliers in Singapore, India, Australia, Indonesia, Korea, Japan and China. The size of the "external firm" can greatly exceed that of the core companies. Rolls-Royce has around 20,000 people in

its aerospace division in the UK, and estimates that around 40,000 people work full-time to supply the company with goods and services.

Building Internal Systems Integration Capabilities. Alongside the trend towards concentration among component and sub-system suppliers, the leading systems integrators are themselves tending to become more vertically integrated. This enables them to perform the increasingly complicated tasks involved in integrating complex sub-systems with multiple interfaces. For example, Raytheon bought a succession of military businesses in the 1990s, including the military electronics company, E-Systems, the military systems and electronics business of Texas instruments, and the Hughes military electronics business from General Motors. By the late 1990s, Raytheon had become a huge company with a \$20 billion annual turnover, and a wide range of systems integration capabilities in missiles and torpedoes. For the defence aircraft producers, the emphasis has changed to “the integrations of systems rather than the production of individual combat platforms” (*FT*, 13 April 2003). In April 2003, EADS announced that it would integrate its defence electronics, military fighter aircraft and telecommunications activities into one division. The division will have annual revenue of \$5.4 billion and 24,000 employees in nine countries.

(iii) The “Cascade” Effect

In order to meet the demands of the systems integrators, the major components suppliers themselves needed to invest heavily in R&D and to grow in order to benefit from cost reduction through economies of scale. A powerful merger movement is taking place among first tier suppliers to the systems integrators. In the crucial aircraft engine sector, there are now only three engine makers left that have the capability to produce large modern jet aircraft engines, namely Rolls-Royce, Pratt & Whitney of United Technology and GE Engine of GE. Between them, they formed the joint ventures IAE (Pratt & Whitney and Rolls-Royce), Engine alliance (GE and Pratt & Whitney), and CFMI (GE and Snecma). By 2000, the market share of installed jet engine in the world airline fleet between them was 36 percent for Pratt & Whitney, 20 percent for CFMI, 14 percent for GE, 10 percent for Rolls-Royce and 3 percent for IAE (AECMA, 2002). The Allied Signal/Honeywell merger in 1999 created a company that has “a strong position in everything from manufacturing cockpit controls to handling aircraft service and maintenance” (*FT*, 8 June 1999). Smiths Industries Aerospace has built a leading position in the control and management of aircraft utilities, and in the electrical, mechanical and hydraulic systems through a series of acquisitions in 2000, including the aerospace division of Invensys, the actuation division of BAe Systems. Through the merger with the TI Group in the same year, Smiths strengthened its first-tier aerospace supplier status by integrating Dowty of the TI Group. The trend towards concentration is also affecting smaller companies within the industry as exemplified in Meggitt’s takeover of Whittaker Corporation. The new company supplies valves, ground fuelling products and fire and smoke detectors to “virtually every aircraft maker in the West” (*FT*, 10 June 1999). The merger was explicitly driven by the assemblers’ push to reduce the number of parts suppliers.

(iv) Competitive Obstacles for Firms Based in Developing Countries

The aerospace industry is a capital-intensive high-technology industry with high barriers to entry. The profound transformation of the leading aerospace companies based in the U.S. and Europe in the 1990s created even higher barriers to entry than existed before. Today, major aerospace companies in developing countries face greater obstacles than ever in their attempt to catch up with the world leaders. Aerospace companies based in Europe and the U.S. benefit from vast military procurement, which together account for around 60 percent of the world total military procurement. They have massive economies of scale in assembly with long production runs for each aircraft type. They have huge R&D spending and large R&D support from their respective government (Fransman, 1995, 107), especially in the capitalisations, access to export credit guarantees supported by the U.S. Government, which has enabled them to sustain their technological lead: “*The development of the U.S. aerospace industry was largely government-funded.*” As late as 1986, close to 80 percent of all R&D in this industry was federally-supported. Today this is a large employer (480,000 in 1994) and one of the largest exporters (\$30 billion per year in 1980–94) in the nation” (White House, 2000) (emphasis added). They have huge financial strength and resources reflected in large market and often have the benefit of co-finance of industrial development with the government. They have high capabilities in system integration in both the internal and external firms on a global scale. They have established globally recognised brands both for aircraft and for key sub-systems.

Not one firm from a developing country has succeeded in challenging the aerospace giants of the developed countries either as a systems integrator or a major first tier supplier. Embraer represents the highest achievements so far for developing countries in the field of commercial aerospace. However, it is far from certain that in the foreseeable future it will be able to compete successfully with the established giants in even the regional jet market, let alone in the market for larger aircraft. It is best regarded as a substantial player in the ferociously competitive niche market for regional jets,²¹ rather than a competitor to the global giants.

China's Response

The restructuring of China's aerospace industry started at the same time that the world's leading aerospace companies entered a period of profound change. In 1993, Aviation Industries of China (AVIC) was established, assuming responsibility for the management of all the aviation industry assets formerly under the Ministry of Aviation Industry. It was formally turned into an experimental state holding company in 1996. The goal of the holding company was to transform the nationwide collection of enterprises into an internationally competitive aviation company "with worldwide fame and influence" (AVIC, 1998: 2-4).

(i) The Year 1999 Restructuring: Splitting Into Two

By early 1999, debate over how to restructure it in the light of its own internal problems and the explosive changes going on in the world industry outside became increasingly intense. In early 1999, the Chinese government decided to split AVIC into two fully integrated parts, AVIC 1 and AVIC 2. The stated goal of the reform was the "break up of monopoly and the fostering of fair market economy mechanism" (*China Daily Business Weekly*, 31 January 1999). While the world's leading aerospace corporations were in the midst of an unprecedented epoch of consolidation, the Chinese aerospace industry was being divided into smaller segments. After the restructuring, the new AVIC 1 took over businesses in manufacturing interceptors, interceptor-bombers, tankers, transporters, trainers, and reconnaissance airplanes while the new AVIC 2 focused on helicopters, transporters, trainers, and general aircraft.

(ii) AVIC's Businesses

Size. In 2002, the combined total sales of AVIC 1 and AVIC 2 are less than one-tenth of Boeing's and one-fifth of Lockheed Martin's, and, as we shall see, a large fraction of their revenues is now from diverse non-aerospace products. Their combined total revenues are only about one-fifth of the revenue of aerospace suppliers United Technologies and Honeywell, respectively (Table A3). However, AVIC 1 and AVIC 2 together employ over 400,000 people, more than twice as many as Boeing and Lockheed Martin do. If AVIC's aerospace division adopted Western manning levels, . . . then the entire aerospace division would employ only around 5,000 people. If AVIC's entire engine division were a separate company, and adopted Rolls-Royce's manning levels, it would employ only around 1,200 people (Nolan, 2001a: 227). Moreover, the world leading aerospace companies have multi-billion dollar market capitalisations. This enables them to finance M&A through the stock market even if they have negative profits (Table A3).

Non-Aviation Production. In line with the policy of "military to civilian conversion" and the strategy of "civilian supports military," AVIC had been turned into a vast empire of diversified businesses. By 1997, AVIC manufactured more than 5,000 types of non-aviation products. In real terms, the sales of non-aerospace products rose by around 23 percent per annum from 1979 to 1997. Automobiles, auto components and motorcycles together accounted for 62 percent of the total value of AVIC's revenue in 1997. Sales revenue of motor vehicles accounted for 72% of the total sales revenue of AVIC 2 (AVIC Economic Research Centre, 2000, p. 9).

Sub-Contract/Sub-System Joint Ventures. AVIC had progressed from purely compensation trade to becoming a competitive global supplier of components, including being the sole suppliers of some items (B-747 wing rear ribs, B-737 maintenance doors, BAe 146 doors, Dash-8 cargo doors and LM2500 turbine disks). Following the collapse of the proposed joint production plans for the AE-100 and the MD-90, Airbus and Boeing both responded with offers of considerably enhanced participation by AVIC in the production of sub-systems. Boeing is leading in that strategy with 74 percent of all parts built in China going to Boeing (*Aviation Week & Space Technology*, 8 May 2000: 63). Airbus agreed that AVIC could "participate in

²¹In recent years, Fokker, BAe and Fairchild Dornier have all exited this sector due to the intense competition and low profits.

the development” of its 107-seat A318 programme, but, to date this remains very limited in scope. In the foreseeable future China’s sub-contracting industry seems likely to lag far behind the level of sales and technological sophistication achieved by the sub-contracting industry in Japan and South Korea. Despite AVIC’s intense efforts to win contracts and their substantial growth, China’s sub-contracts with the global giants are small-scale. In 2001, AVIC 1’s total subcontract sales were around a mere \$120 million, the size of a small-scale engineering company in the West. In the aero-engine sector, the total output value of the joint venture between Xian Aero-engine Company and Rolls-Royce to manufacture turbine blades will be only around \$30 million at full production in the early 21st century (*China Daily Business Weekly*, 11 October 1998).

AVIC does not participate in the decisions over aircraft purchase in China. This limits its ability to place leverage on the global aircraft makers to sub-contract within China. Moreover, the main Chinese aircraft manufacturers are competing with each other to obtain sub-contract work, which weakens the overall industry’s bargaining power in obtaining sub-contracts, and in settling the terms for the sub-contracts. In addition, China’s sub-contractors lack ability to co-finance on a large scale. In the meantime, China’s leading sub-contractors face intense international competition from Israel in military sub-contracting, and from Japan and South Korea in civil sub-contracting. China’s sub-contractors are generally only able to contract for “Level 3” contracts, compared to the sub-contract of Japan and South Korea usually at Levels 4 or 5. The latter usually involves co-financing and co-designing.

Table A3. Relative Size of Selected Aerospace Companies, 2002

Company	Assets (\$b)	Revenue (\$b)	Profit (\$m)	Market Cap.* (\$b)	Employees (000s)
Boeing	52.3	54.1	492	20.9	165
EADS	49.7	28.3	-283	—	103
Lockheed Martin	25.8	28.2	500	21.9	125
Northrop Grumman	42.3	17.8	64	15.8	117
Raytheon	23.9	17.0	-640	11.8	76
General Dynamics	11.7	13.9	917	12.3	54
BAe Systems	25.1	12.1	-1,030	3.7	68
Rolls-Royce	4.8	9.2	84	1.2	39
United Technologies of which: Pratt & Whitney	29.1 6.1	28.2 7.6	2,200 1,300	27.6 —	155 —
Honeywell	27.6	22.3	-220	17.9	108
GE of which: GE Engine	575.2 —	131.7 11.1	14,100 2,100	259.6 —	315 26
AVIC 1	4.2	2.6	18.1	—	280
AVIC 2	3.8	2.4	2.4	—	210

Notes: Market capitalisation

Sources: *Fortune Global 500*, 2003, *FT Global 500*, 2003, companies’ reports, research

(iii) AVIC’s Organisational Structure

Children and Grandchildren. The business structure of AVIC is extremely complex. The function of the headquarters in monitoring, control, coordination and unifying the whole company to utilise resources and maximise returns is extremely weak. AVIC had 116 subordinate plants grouped under 56 “children” enterprises. There was a cascade of businesses each with investments in subordinate companies, from “children,” through “grandchildren,” “great grandchildren,” “great-great-grandchildren” and “great-great-great-great grandchildren.” The result was a typical East Asian diversified conglomerate, investing in any activity that brings some short-term profit, but without a common focus. This structure raises deep problems for corporate governance and central control over the operations of subsidiaries and related companies. After the 1999 restructuring, each of AVIC 1 and AVIC 2 inherited this hugely unwieldy and unfocussed business structure.

Flotation of Subsidiaries. The institutional structure of AVIC has changed gradually since the mid-1990s through the flotation of different parts of the Company. By 1998, seven subsidiaries had floated. The typical flotation is of a minority share in the floated company, with the majority shareholding still held by AVIC through its subsidiary company. For example, in the case of XAC International, XAC held 64.71 percent of XAC International.

Flotation of AVIC 2. At the beginning of 2003, AVIC 2 was awaiting State Council approval of its international flotation. AVIC 2 undertook restructuring in late 2002 and merged four of its subsidiaries into a new company for flotation. The proceeds from the international listing would be used to fund businesses such as aircraft and helicopter manufacturing and mini-van production (*China Daily*, 13 January, 2003). If AVIC 2 succeeds in the flotation, it will be the first time that part of China's defence industry has been listed overseas.

(iv) Comprehensive Penetration

In military aircraft, it is likely that there was a real fall in the amount of resources allocated to modernisation of China's indigenous industry during the economic reform period. The number of military aircraft produced is reported to have fallen significantly (Nolan, 2001). In the mid-1990s, China had "a fleet of 5,000 obsolete combat aircraft, most of them based on old Soviet designs such as the MiG-21 and MiG-19 fighter aircraft, and the Tu-16 bomber" (Sergounin and Subbotin, 1999: 74). During the 1990s, Chinese fighter aircraft production facilities have produced no more than 36 planes a year (Kondapalli, 1999: 171). By 2002, China has about 1,000 fighter aircraft, among which over 650 are J-7 (MiG-21) series, 200 J-8 (Finback) series, and 90 Su-27s. The country's airforce is hugely reliant on the Russian Su-27s for their most advanced fighters. It is estimated that China has 513 military transporters (IISS, 2002: 147-148). The technical capabilities of the much-anticipated J-10 (produced by AVIC 1) are no rivals to the world's advanced fighter aircraft. Although it has a "secure" internal market for upgrading the PLA Air Force, it only has a tiny niche export market and has political constraints in selling into those markets. This will greatly limit the economies of scale that can be achieved in producing the J-10.

In civilian aircraft, a total of only 130 Y-7s, a small turboprop aircraft, had been produced by the late 1990s, and new orders had dried up completely. To compound matters, a Y-7 exploded in mid-air in 2000. Following the conclusion of the crash investigation, all 64 Y-7s were taken out of service in June 2001. By the end of 2002, of the 561 large jetliners (above 100 seats) operating in the mainland of China, Boeing had 406 airplanes and Airbus had 124. Together they accounted for 95 percent of the unit market share in the country.

China's attempt to build its own indigenous large passenger aircraft, the Y-10, ultimately failed. China's domestic airlines refused to buy the plane. It was extremely heavy compared to the Boeing 707, with high fuel consumption and a very limited range. After the conclusion of the Y-10 programme in 1985, the Ministry of Aviation devised a "three-step take-off plan," from the MD-90 assembly MD-90 to jointly design and manufacturing the AE-100 with Airbus to the ultimate goal of self-design and building a 180-seater plane by 2010. One by one each of these objectives fell by the wayside. The termination of the MD-90 programme and the AE-100 programme were perceived outside China to "deal a severe blow to China's nascent aviation industry" and "throw into doubt its plans to become a substantial aircraft manufacturer" (*FT*, 5 August 1998 and 6 October 1998). Many people in the Chinese aircraft industry felt that it had been let down not only by Boeing and Airbus, but also by the Civil Aviation Administration of China (CAAC), which had refused to order either the MD-90 or the planned AE-100.

(v) Development Plans

• New Regional Jet Programme

At the end of 2000, it was apparent that China had abandoned the ambition to build a medium-capacity, single-aisle airliner. "We cannot compete with aviation giants such as Boeing and Airbus in financial clout and market share" (Zhang Hongbiao, Vice Minister of the Commission of Science, Technology & Industries of National Defence (COSTIND), quoted in *China Daily*, 6 November 2000). China's "best bet" would be producing regional airliners. COSTIND will invest \$600-\$725 million in R&D for the new regional jet programme aiming to build a new 50-70-seat turbofan aircraft to international standards. AVIC 1 has since established AVIC 1 Commercial Aircraft Company (ACAC) to oversee resources, production, certification and marketing of ARJ21, the new 79-99 seat regional jet. AVIC 1 hopes to sell 300 ARJ21s to the domestic market and ex-

port 200 in twenty years. GE has been chosen to supply the CF34–10A engine and the Honeywell and Parker Hannifin team is to develop, produce and support the ARJ21's flight control system. AVIC 1 has also been in discussions with Bombardier about a regional jet joint venture, but the future of this is uncertain. In the meantime, AVIC 2 has devised a separate three-step plan for developing regional aircraft: establishing a joint venture for final assembly, producing components locally and developing by-products and new products. AVIC 2's joint venture with Embraer to produce a 30–50-seat regional plane in Harbin has been approved.

The market prospect for regional jets in China is promising even after the events of 11 September 2001. Boeing has predicted that around 70 percent of the total of the 1,800 new medium- and large-sized commercial aircraft purchased by China over the next twenty years would be single-aisle regional jets (Keck, 2001). The competition for selling regional jets to China is intense. Bombardier and Embraer are racing each other for selling into the Chinese airlines. Boeing and Airbus continue to actively market their smallest aircraft to Chinese airlines in an effort to capture the growing regional jet market. Price competition in all aircraft categories can be expected to intensify following the collapse in the world aircraft market after 11 September 2001. This is good news for Chinese airlines, but bad news for a potential regional jet produced in China. If China is, indeed, successful in designing and building its own regional jet, it will be far behind in the race for its own national market by the time that the first deliveries begin. This will be a huge disadvantage in an already intensely competitive segment of the world aircraft market.

(vi) Summary

The aerospace industry's supply chain incorporates a large fraction of the world's most advanced technologies. These technologies are almost entirely embedded in firms headquartered in the high-income countries, especially the USA. Since the early 1990s, the world's leading aerospace companies (including the systems integrators and the main participants in the supply chain) based in the high-income countries, especially those in the USA, have achieved massive competitive advantage through high-speed consolidation and through achieving great progress in their systems integration capabilities, hugely strengthening their already immensely powerful competitive position. Moreover, this period witnessed the near-disintegration of the former Soviet Union's civilian aerospace industry, which had the potential to seriously challenge the dominant position of U.S. and European civilian aircraft makers. In this period there also took place a drastic weakening of Russia's military aircraft industry.

In this period, despite intense efforts, AVIC has failed to make any inroads on the dominant position of the world's leading corporations from the high-income countries, especially the USA.

Abbreviations

FEER—Far East Economic Review
 FT—Financial Times
 SCMP—South China Morning Post

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Co-Chairman DREYER. Thank you, Professor Nolan.
Professor Steinfeld.

**STATEMENT OF EDWARD S. STEINFELD, Ph.D.
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Dr. STEINFELD. Thank you very much, Madam Chairperson. It's a pleasure to be here today, and I appreciate and am honored by the invitation.

Picking up on some points that Peter Nolan made and that have been made by others here, we are all aware that a significant portion of global production activities have migrated over to China, somewhat to the consternation of some individuals outside China, some are celebrating. Nevertheless, those activities have moved.

What strikes me and what's continually striking to me in my recent years of field work in China is that, as I move from Chinese domestic enterprise to enterprise, whether they are privately owned or state-owned, I find that the managers in these enterprises are doing anything but celebrating. In fact, most of these firms across virtually every sector find themselves locked in intense bidder competition with domestic peers.

One of the reasons why they're locked in this kind of mostly price competition is that the firms, whether in high-tech sectors or low, tend to congregate around the sort of lowest value activities, the most commodified, codified activities in the global supply chain, activities that don't really require innovation, proprietary designs, or proprietary skills in manufacturing or marketing. So the firms can really compete only on the basis of price, and they, therefore, engage in this cutthroat price-cutting and drive their profit margins down.

Now, I'll wait until the end to mention Chinese governmental, central governmental ambitions to pursue industrial policy, or at least traditional industrial policy as we understand it involving distortions of markets and funneling of resources into a small number of large enterprises that are protected and encouraged to export. I would say there's ambivalence toward industrial policy in that sense, although there are efforts to carry it out. But even putting that aside, the sort of aims and objectives, I think it's fair to say

that industrial policy, to the extent it is carried out in China, is failing.

What I'd like to do is spend just a few minutes to explain why I believe it is failing without attaching any value judgment to whether it's good or bad that this policy is failing.

I think the answer, ironically, lies in some of the institutional aspects of the system that have allowed reform to proceed. In other words, the changes in the system institutionally that allowed an effective transition from command planning to the market have undercut in many circumstances the ability of the government to sort of manipulate and manage traditional industrial policy, and it has also undercut the ability of firms in China, whether state-owned or private, really to engage in substantial upgrading up the global supply chain. Let me just list a couple of these institutional factors.

One, governmental decentralization. In order to make reform palatable and in order to allow a certain degree of experimentation across a varied country, the central government pursued a great deal of decentralization of authority throughout the reform era, which continues. That's fine. Local governments have bought into reform, and they have started and maintain close relationships with many enterprises. But when the center tries to carry out the building of pillar industries, its only mechanism available is to filter that industrial policy through many different municipalities and localities, a very different model from what South Korea or Japan, arguably, pursued earlier.

We have a duplication of industrial policy across many municipalities and localities leading to lots of duplication and redundancy of investment. Moreover, local governments protect local firms, be they private or state-owned, and these governments tend to resist consolidation and merger across the domestic economy which would allow the creation of sort of domestic giants that we would associate with traditional industrial policy.

The second area institutionally pertains to low state capacity, low ability of the state really to carry out and implement its policies. With very rapid economic growth in China, economic transitions have become much more complex, and the demand for sort of public goods of regulation—courts and effective regulations, transparent regulations—the demand has grown very rapidly, but the ability of government at any level to supply this demand and accommodate this demand, arguably, has not grown very rapidly.

Now, in some sense that's good. And it was certainly good in the early reform era because localities or even higher-level governments couldn't really interfere with the reform process effectively. They couldn't halt reform. But today they're not very effectively providing public goods of governance.

What that means for enterprises is, first, that enterprises really have to operate on the basis of trust, so they stay local, they stay small, they stay with relationships that they won't need to resort to courts or anything else to enforce contracts.

The second aspect of low state capacity is the sort of information that's required and ability to exact and pull out information from the economy that we would associate with running an effective industrial policy. Whether we like industrial policy or not, the government at the central level doesn't seem to have that capacity in

China. In fact, it seems desperately and troublingly starved for information, which undercuts its ability to regulate.

And this last institutional feature I point to in this system is the general level of informality that exists, particularly in the area of property rights.

Now, until quite recently, the development of private firms or even the specification of property rights even to public firms was a sensitive issue in China politically. Well, in order to move reform forward, the architects of reform simply dodged the issue, again, until quite recently, which is fine. It's a very effective strategy of moving reform forward, sort of sidelining certain issues that are sensitive politically.

The problem is that when firms emerge in this environment with very unclear property rights, a few things happen. Number one, the boundaries of the firm are quite unclear. It's unclear where the firm begins and ends, whether it's a part of another firm or not a part. Because the firm level boundaries are opaque, it becomes very hard for these firms to access capital from any kind of bank, sometimes whether state-owned or a more commercial bank. So the firms, again, stay small and don't generally have resources to engage in upgrading. They have resources to engage in global production in certain kinds of activities, but not higher-end activities.

The second thing that happens with informality and this blurring of boundaries is the boundaries between local government and firm become very blurred. So there is a lot of local protection, but protection in part against foreign firms but often against other domestic firms. A local government in one municipality will protect its firms against encroachment from other municipalities, and in some cases, municipalities will compete against one another to get foreign direct investment and will lower the barriers to foreign direct investment. So there's competition and protection in a variety of ways that sometimes benefits outsiders, sometimes hurts outsiders, both domestically and in China.

Now, just the last point about what really is the nature of the industrial policy aims of the Chinese state, particularly the central state. Well, I'll just say that many of us find the changes associated with globalization, changes in the way production activities are organized globally, we find these troubling and confusing here in this country, and understandably so. In China also, officialdom finds these changes very confusing, and there's great ambivalence with regard to industrial policy.

On the one hand, there's a belief among many officials that in order to grow and in order to grow domestic firms, these firms have to be opened up to global supply chains; they have to be very densely linked with foreign partners; they have to be exposed to free, liberalized markets. And, hence, we see one arm of Chinese industrial policy, with a comparative advantage strategy, WTO accession. But I must say there is an alternative ambition as well, the belief that firms really have to be funded by the state and supported in order to be built up and to compete head to head with foreign global leaders in manufacturing, in production.

I must say, while both of these ambitions are clearly there in China, the evidence as far as actual policies that are carried out, I'd say first off tends to congregate toward the comparative advan-

tage strategy. In other words, the real action on the ground seems to lean more toward the comparative advantage than the pillar industry policies, although there are pillar industry policies.

But lastly, and most important, even though there are these pillar industry policies, like them, love them, or hate them, the ability of the government, the proven ability to carry out these policies has been very, very limited.

Thank you.

[The statement follows:]

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***China's Shallow Integration: Networked Production and the
New Challenges for Late Industrialization***

Summary

Chinese enterprises have become extensively linked with the global economy, yet in a decidedly shallow manner. They remain stuck in commodity manufacturing, undifferentiated activities for which innovation is absent, and competition revolves around cutthroat cost cutting. This outcome stems from three factors. First, it reflects the new challenges to development posed by globally networked production. Second, it reflects tensions between the political economic imperatives of successful post-socialist transition and the institutional imperatives for upgrading in networked economies. Third, it reflects uncertainty surrounding the adjustment of traditional industrial policy to the new demands of development through participation in global supply chains.

I. Introduction

By the late 1990s, the significance of China's economic development from the outside world's perspective was undergoing a major shift. No longer was China just a story of impressive marketization and transition, a model whose lessons were perhaps relevant to the developing world. Instead, China was increasingly becoming the story of a rising economic powerhouse, a force for reshaping the distribution of power not just in the developing, but the developed world as well. Today, China stands as the fourth largest manufacturing nation in the world, its rise making high-quality goods available at unprecedented low cost to consumers across the globe. At the same time, the world's richest nations are expressing ever more strident concerns about China's competitive threat, concerns most recently focused on the connection between Chinese currency valuation and the decline of developed world manufacturing jobs.

These arguments, however, miss the point. China's emergence is occurring in the context of a fundamental shift in the organization of global production, a shift that makes China's rise categorically different from that of predecessors like Germany, Japan, and South Korea. That something is truly different is underscored by a phenomenon upon which this paper will focus. As indicated by a 2001 World Bank survey of 1,500 enterprises across five major Chinese cities, Chinese firms are integrating extensively with the global economy, but they also remain stuck in primarily low end, commodity manufacturing, activities for which they have few other options but to compete on the basis of cutthroat discounting. In global economic terms, China is integrating extensively, but also shallowly.

This paper makes three main arguments. First, the combination of extensive but shallow integration can be understood only as a byproduct of a new mode of industrial organization, globally-networked production. This manner of organization presents unique challenges to developing countries, even ostensible success stories like China. Second, China's pattern of integration—especially the difficulty firms face in climbing the ladder of industrial upgrading—stems from contradictions between the political economic requirements for effective post-socialist transition and the institutional imperatives for upgrading within the context of globally networked production. Basically, the institutional changes that permitted China's successful climb out of socialist command planning are now impeding the efforts of Chinese firms to build global competitiveness. Third, the shallow integration of Chinese firms also stems from the difficulties faced by policy makers in fitting old models of development—namely the industrial policy focus of Japan and South Korea—into the newer and more ambiguous imperatives of networked production.

II. The Shifting Architecture of Global Production

Technological change, particularly digitization, has dramatically altered the architecture of production processes globally. By facilitating the management and transmission of vast amounts of information, digitization has allowed the codification of highly sophisticated processes of production. Once codified, processes can be split into discrete steps—modules, in effect—and standards to ensure their connectivity can be established. Modularization, in turn, has permitted activities that once had to be co-located geographically and managed organizationally within the confines of a single firm to be spread out across great geographic and organizational expanses.

The issue is not that any activity can be done anywhere, or that all manufacturing has been completely modularized, but rather that new options for structuring activities now exist. For some processes, individual steps have become completely modularized such that the rules of connectivity between upstream and downstream steps are fully codified and stable. At the other extreme are processes whose component steps cannot easily be codified and disaggregated. They may be separated geographically and organizationally, but their integration into a final product requires extensive coordination and communication among the producing parties. This sort of “integral” production architecture may be pursued as a matter of choice by a lead firm (i.e., a vertically-integrated organization), but also may be dictated by the state of technology.

Chinese enterprises have skillfully exploited the opportunities of modularization, aggressively upgrading their manufacturing skills so as to meet outsourcing demands by leading global players. In some cases, Chinese firms have autonomously pushed the replacement of traditional integral architectures of production with more modularized, open forms, thus forcing the commodification—and outsourcing to China—of certain activities, regardless of the preferences of overseas lead firms.

Yet, while modularization affords new opportunities, it also creates major vulnerabilities for later entrants. Fully modularized, open production architectures virtually by definition entail the manufacturing of standardized, non-differentiated products. Firms focusing on such activities have little choice but to compete on the basis of low cost and high volume. Moreover, they continually run the risk of being unseated by the next low cost entrant, particularly since fully modularized products are easily substitutable from the consumer’s perspective. That Chinese firms have mastered modularized production accounts for China’s emergence as the globe’s shop floor. It also accounts for the fact that Chinese firms across a variety of sectors today find themselves locked in mutually-destructive price competition.

Once new entrants commence modularized production, they rapidly face pressures to upgrade, not so much in terms of the complexity of their manufacturing activities, but rather in terms of the source of their competitiveness. Several options exist. The modularized producer can attempt to control the supply chain by actively setting rather than passively accepting rules of connectivity in the upstream and downstream directions. Alternatively, the producer might elect to shift away from modularization, instead moving back toward more integral processes, ones that must be coordinated and co-designed with upstream and downstream partners in the network. Finally, as is done by many leading global players, the firm may compete by providing key services—overall product definition, branding, and marketing—that shape the entire supply chain and command the bulk of final product’s value.

These options require innovation in some sense, a daunting challenge for even the most sophisticated commodity manufacturers. Again, there exist both opportunities and pitfalls in this area. To the extent a modular manufacturer is engaged in multiple supply chains—i.e., by producing a stand alone component that can be plugged into a variety of downstream products—the manufacturer’s fate ends up tied to no single final product. Hence, the manufacturer is free to innovate in ways that not only incrementally improve existing downstream products (“sustaining” innovation), but also in ways that unseat such products by facilitating new substitutes (“disruptive” innovation). Similarly, open, modularized supply chains permit the rule makers—those determining the rules of connectivity—to shift the standards, and thus force the rule takers to scramble in compliance. Such freedom undoubtedly contributes to the extremely rapid product cycles and dizzying pace of innovation characteristic of high tech industry today. Yet, it also creates major vulnerabilities for the rule takers, the commodity producers, and all the rest of the supply chain participants that must respond to innovative lead firms.

III. The Phenomenon in Contemporary China: Price Wars and Corporate Structure

Much of Chinese industry today consists of small-scale firms competing intensely on the basis of discounting. In theory, this could be understood as a prelude to in-

dustry-wide shakeouts that should eliminate smaller firms and consolidate activities into a few larger producers, presumably the sort that might engage in industrial upgrading. Evidence of such progression, however, remains sparse. Instead, a pattern of corporate organization has persisted that sets Chinese firms apart from many of their global counterparts, and certainly from the lead firms in global supply chains.

First, and not surprisingly given China's relatively recent marketization, Chinese firms tend to be both newer and smaller in scale than their global counterparts. In the World Bank's 2001 survey of 1,500 higher technology enterprises in China, firms averaged just over 600 employees, and generally had been in existence for only 10 to 15 years. Even China's more famous firms—those with known brands and national, if not global, status—tend toward the smaller side.

Second, Chinese firms, though their output often ends up either in foreign hands or in overseas markets, tend to be extremely localized in terms of their actual operations. In the World Bank's 2001 survey, 41 percent of the manufacturing firms in the sample reported producing to specifications set by foreign firms. Twenty-one percent reported directly producing parts for foreign firms, while 25 percent reported producing final products for such customers. Indicative of China's liberal policies toward foreign direct investment (FDI), 25 percent of all firms in the survey reported having foreign equity partners, with the foreign ownership stake on average hovering just over 50 percent.

Despite foreign interaction, however, the firms' upstream supply network and downstream customer base tended to be confined geographically. The 2001 survey suggested that on average, over 50 percent of upstream suppliers were located in the respondents' own respective cities. Approximately 75 percent of the supply network on average was located within China. Downstream, the survey indicated that for the average Chinese firm, approximately half of the customer base is located within the firm's own municipality. Approximately 15 percent of the customer base on average was reported to be overseas. Whether for upstream or downstream interactions, rather traditional means prevailed—communication was conducted primarily by phone and fax, while goods themselves moved primarily via surface transportation.

The localized nature of Chinese commercial networks leads to a third point, the relative shallowness with which Chinese firms integrate into global supply chains. Despite high levels of foreign ownership, only 15 percent of the manufacturing firms surveyed by the World Bank in 2001 reported designing parts for foreign customers, a sign that the respondents are essentially "rule takers" in open, modularized production processes. Only seven percent reported providing customers R&D or other specialized services. The figures are surprisingly low given that the sample specifically targeted higher-tech sectors, the very ones in which we should expect high degrees of innovation, networking, and development of firm-specific proprietary knowledge.

The firms were failing not only to design for downstream customers, but also to develop deep relationships of any kind with such customers, again, a sign of open, modularized production. Sixty-nine percent of the survey respondents reported using trading companies to handle interactions with the broader customer base, thus suggesting essentially arms-length rather than deeply enmeshed customer relations.

In terms of identifying factors inhibiting greater exports, respondents focused on the difficulties and costs of meeting foreign product standards, and particularly the intense cost competition they face (Table 1). Managers preferred to produce for export markets, and few claimed that targeting the domestic market offered better financial gains, but managers perceived that their firms lacked the capabilities needed to meet foreign standards in a cost-effective manner. At the same time, they perceived themselves to be in an intensely cost competitive environment, with pressures bearing down from both domestic and foreign counterparts.

That leads to a fourth and final point regarding innovative capacity. Chinese enterprises today face great pressure to upgrade their technological capabilities, and managers—as they did in the 2001 survey—routinely report high levels of what they at least perceive to be innovative activity. The pressures are understandable. Modern production, whether for ostensibly low end goods like textiles or high end goods like semiconductors, virtually by definition entails the management of complex processes, complex machinery, high quality expectations on the part of customers, and rapid turn-around times.

That Chinese firms are so extensively involved in production for overseas markets represents a major achievement, indicating extremely impressive degrees of learning on their part. It would be incorrect, however, to assume that such learning actually constitutes—or necessarily leads to—"innovation." It is not at all clear that these firms are developing intellectual assets, production skills, modes of serving customers, or actual products that can be understood as in any way proprietary—things

that cannot be duplicated by hundreds or thousands of other firms in their immediate environment. In the 2001 survey, nearly half of all firms reported innovations in shop floor production processes, and another 46 percent reported innovations in managerial techniques, all measures that allow for the cutting of costs. What few if any of the firms reported were innovations that allowed the firm to charge a higher margin rather than a lower one—in other words, innovations that would encourage customers to pay a premium. Moreover, given the prevalence of product “wars” and cutthroat discounting among the proliferation of small producers in China, it appears that nobody has discovered the sort of proprietary cost-cutting solutions that afford competitive advantage over a reasonable period of time.

The response to this dilemma often entails another activity that survey respondents term “innovation,” the introduction of new products or entirely new lines of business. Commodity producers end up chasing one surplus market after another, a pattern true even for China’s more advanced branded companies. Even the most established firms cope with increasing competition by aggressively discounting and expanding sales volume on existing products, entering new product areas in which they can compete again only on the basis of discounting and razor-thin margins, or finally, by trying to export their way out of trouble by pursuing overseas markets. In essence, firms focus on activities with low barriers to entry. Once the cost pressures become too intense, rather than moving upward into higher end activities or taking the time to develop proprietary skills, the firms diversify into other low entry barrier markets.

IV. Reform Style, Governmental Capacity, and Industrial Policy

The pattern described above stems in large part from the interaction between three factors: governmental reform style, state capacity, and industrial policy. This interaction has at once permitted the integration of Chinese firms into the global economy, and substantially constrained the depth of that integration.

Reform Style

Since the dawn of reform, China’s approach to market transition has been characterized by informality, experimentation, and decentralization. Central leaders have set the overall policy aim (economic growth) and the basic constraint (the maintenance, in the vaguest terms, of “socialism”). Local officials, then, have been granted broad leeway to engage in policy experiments, virtually all of which have involved elements of market economics. “Socialism” is maintained simply to the extent that the experiments remain informal. When experiments prove successful, the center encourages their implementation—again on informal terms—nationally. If success continues, the experiments stand to be adopted *post hoc* as official government policy. Finally, in some—but not all—cases, the center formalizes the outcomes with new institutional rules, many of which directly challenge the initial condition of “maintaining socialism.” Through a certain element of linguistic legerdemain, that which began as an experimental alternative to socialism (and hence its explicitly informal status) gets legitimized as socialism itself, albeit socialism “with Chinese characteristics.”

The approach has proven brilliant in many respects. Without it, China’s transition to what much of the world terms capitalism could never have proceeded smoothly. It also explains how private enterprise—anathema just twenty years ago in China—now constitutes the predominant ownership form in Chinese industry.

There are, however, negative ramifications. Entrepreneurial firms can thrive and engage in international commerce under such conditions, but their property rights tend to remain either undefined or, to the extent they tuck themselves under the auspices of a governmental bureau or state-owned firm, inaccurately defined. Without clear property or formal title to assets, these firms face limited financing options. Borrowing from a bank becomes virtually out of the question. Instead, they have little choice but to self-finance, a situation that may ensure hard budgets, but one that also tends to limit enterprise growth.

In a pattern consistent with that of virtually all firms in China save for larger SOEs, enterprises in the World Bank’s 2001 sample reported relying primarily on retained earnings as their main source of financing (Table 2). Firms consistently reported that upwards of 50 percent of all financing came from retained earnings. Bank loans amounted to 19 percent of total financing on average, though the figures were somewhat lower in Tianjin (15 percent) and somewhat higher in Chengdu (24.8 percent). Equity financing, not surprisingly given governmental quota restrictions on stock market listings, was low across the board (averaging 0.6 percent across the sample). Personal loans from family and friends constituted an important source of financing, averaging 8.6 of total financing for firms in the sample.

Limited financing options lead to tight liquidity constraints. The enterprise response often involves operating on a cash basis, but that then leads to the forgoing of transactions that in more formalized systems allow for greater enterprise expansion. Furthermore, rather than investing in existing business lines and developing specialized skills, cash-starved firms jump to alternative businesses simply to maintain cash flow. Such diversification addresses liquidity issues, but it does not encourage the development of firm-specific proprietary assets or skills. Instead, firms remain stuck in low entry barrier activities.

Informality, to the extent it dilutes the firm's legal status, also limits the firm's geographical reach. Without legal standing, the firm must engage predominantly in trust-based transactions. The surest way to ensure trust is to stay local, essentially by buying from known local suppliers (or better yet, backward integrating to ensure reliable supplies) and selling to reliable local customers (so as to ensure payment). When dealing with international markets, the main option becomes to sell to a local trading company.

For foreign companies dealing with such informal organizations, the optimal strategy often entails either buying from a more formalized state trading company or actually taking equity in the local producer itself. Indeed, FDI, to the extent that it places the recipient into the special regulatory category of "foreign owned," constitutes a formalization mechanism, one that benefits provider and recipient alike. In some cases, Chinese firms sell their assets to foreign firms at a discount, but in so doing achieve a degree of formality that permits access to credit and insulation from arbitrary governmental policy.

Like informality, governmental decentralization leaves a mark on entrepreneurial organizations. Many local governments in the reform period have eagerly promoted economic development, and as part of that goal, have frequently promoted local entrepreneurship. They have been less eager, however, to facilitate development that benefits areas beyond the locality. Early in the reform era, this reluctance manifested itself in regional trade wars and overt barriers to inter-provincial trade. More recently in the 1990s, given central crack downs on overt protectionism, localities have used more subtle methods: selective enforcement of product standards, more rigorous registration and licensing requirements for outsiders, and prejudicial application of health codes, just to name a few.

Similar issues impact sectoral and geographic rationalization in industry. Whereas rational mergers and acquisitions are frequently blocked through administrative interventions, commercially *irrational* mergers are often imposed by local administrative fiat. Particularly in the state sector, financially-sound firms have been forced, often under duress, to assume ownership of insolvent organizations simply to stave off bankruptcies. That the acquiring firm is sometimes accorded preferential policy treatment as a sort of *quid pro quo* only further distorts budget constraints and incentives for productive growth.

More generally, when firms are forced to merge with failing local neighbors or to source only from local counterparts, they are indirectly prevented from interacting with the best, most advanced suppliers. Administratively-imposed restrictions on such linkages, particularly restrictions that confine the linkages to a given municipality, prevent Chinese firms from accessing not only the best global suppliers, but even the best national ones. Deprived of high quality components and important learning opportunities, many Chinese firms are pushed only further down the road of low-end manufacturing and cost-based competition. Moreover, when localities try to keep the firm local, the firm's problems of small scale and limited financial resources simply deepen.

State Capacity

By the later 1990s, the architects of Chinese reform began to tackle many of the problems discussed above, and efforts across a variety of areas to formalize China's market system have risen to the top of the policy agenda. The problem, however, is that these imperatives have collided with the reality of limited state capacity in China.

The issue manifests itself in at least two respects: the ability of the center to coordinate policy across the government's administrative hierarchy, and the ability of the government as a whole to regulate commercial activity in the civil sphere. The first problem has arguably receded in recent years. The second, however, has proven more vexing. As might occur in any developing economy, the Chinese system has experienced a dramatic increase in the complexity and density of interactions between economic actors, most of which are no longer under the direct administrative control of the state. Across the board—whether in terms of financial relationships, contracts, issues of corporate control, or intellectual property rights—demand within the civil sphere has increased for both objective rules and reliable enforcement. This

demand, however, has outpaced the ability of the state to provide governance-related public goods. Courts are overwhelmed with cases, judges are often inadequately trained, and enforcement mechanisms are generally weak at best.

It is widely recognized in China today that rule of law is essential for sustained growth, but it is far less clear how rule of law can be achieved or even exactly what rule of law entails. Meanwhile, the absence of effective legal institutions encourages rent-seeking behavior that further erodes trust in commercial transactions and society more broadly. In the financial area, for example, we have witnessed the emergence of what some Chinese describe as a “non-payment” economy. Commercial buyers make purchases, and then refuse to pay. Borrowers take out loans, and then default. Banks accept deposits, and then squander them in ill-advised lending. In each case, the victim is left with little recourse.

What results is neither utter lawlessness nor an absence of growth. Instead, there exists a subtle pattern of unclear rules, low levels of trust, and frequent efforts to skirt the boundaries of legal strictures, conditions that—as indicated earlier—all impact on the organizational structure and global competitiveness of Chinese firms. At the very least, the environment impinges on both the capacity and inclination of firms to innovate.

Industrial Policy

Lurking behind the aforementioned capacity issues is the issue of ultimate governmental aims. China throughout the 1990s has pursued institutional reforms that encouraged market deepening and a leveling of the playing field for all economic actors. That said, contemporary Chinese industrial policy retains a rather schizophrenic quality.

On one side, the government pursues what it now terms a “comparative advantage” strategy of development, an essentially neoclassical notion that development proceeds through the natural convergence of factor prices across nations. The country’s relative factor endowments at any particular time are taken as given (in China’s case, surplus labor and scarce capital), and development is understood to unfold as the country specializes in the production and export of goods intensive in the use of the abundant factor. As long as external trade and internal markets are opened up—conditions that become central goals of this aspect of industrial policy—a dynamic international division of labor should ensue.

Policy makers in Beijing, at least on this particular side of industrial policy, have followed the theory’s prescriptions, albeit with some modifications. Reform, since its very inception, has been promoted as a process of “opening up,” and opening up specifically to foreign trade, knowledge, and technology. China throughout the 1980s, and particularly after 1992, dramatically reduced statutory import tariff rates. Since 1997, the government has also substantially expanded policy initiatives that exempt certain domestic firms and institutions from paying the import duties that formally do exist. Finally, in 2001, China formally became a member of the World Trade Organization, binding itself to an accession protocol more expansive, in terms of both market access and permissible trade practices, than that faced by any other developing nation in history.

Equally important, reformers have pursued what has amounted to the most liberal FDI policy of any Asian developing nation. Here, a bit of practicality has tempered slavish devotion to textbook abstractions. Heckscher-Olin-Samuelson theories assume perfect knowledge. That is, as long as capital and labor are allowed to flow freely, prices should equalize across countries, and productivity should equalize across firms. The actual knowledge of *how* to produce is presumed to be trivial, presumably moving much like a library book from borrower to borrower. As long as the prices are right, the firm is presumed capable of producing. Non-competitiveness, therefore, can be attributed primarily to bad policy: government distortion of prices, excessively high wages, and illiberal trade regimes.

Policy makers in Beijing, however, instead of waiting passively for “natural” transfers of knowledge and technology, have chosen proactively to build a vector, foreign direct investment through industrial joint ventures. In exchange for transferring technology and know-how to Chinese counterparts, outsiders have been granted privileged access to the Chinese domestic market or preferential treatment on other grounds.

Over two decades, China’s FDI policies—not to mention its liberal policies toward emigration—have led to a monumental scaling up of managerial expertise in the country. Whether in foreign firms or domestic, an essentially world-class population of managers has been created at the highest tiers of the economy. Increasingly, this population has begun to flow back and forth between employment in foreign and domestic companies, and between employment within China and outside.

Of course, the question is whether particularly in domestic firms these managers can operate in an institutional environment conducive to enterprise success. Skilled domestic managers now exist, but can physical assets really flow? Will commercially moribund firms—legacies of the prior era for the most part—be allowed to go under, and entrepreneurial firms be permitted to rise from their ashes?

Again, at least on this side of the industrial policy ledger, major strides forward have occurred. Between 1994 and 2000, with the government's policy of *zhua da fang xiao* (grasping the large, and releasing the small), almost 60,000 small to medium-sized SOEs have been "restructured," a term that generally signifies outright liquidation, privatization, or transfer to employee ownership. At the same time, the private sector has been permitted to burgeon, and now constitutes the largest single ownership form in Chinese industry. In the past, "enterprise reform" in China meant measures to improve performance in existing state owned firms. Today, "enterprise reform" has increasingly come to mean measures for *eliminating* poor performers.

Conceptually, then, this particular guise of Chinese industrial policy—the exposure of firms to foreign competition, the encouragement of FDI and knowledge transfer, and the ruthless downsizing poor performers—can be understood as a "creative destruction" centered vision of development. Industrialization becomes the progeny of market forces, and those forces themselves are understood as the mechanism for winnowing winners from losers. The continual composition and decomposition of constellations of assets—in other words, the rise and fall of firms—is treated as a good unto itself, one that outweighs the intrinsic value of any given firm. Innovation, the driver of development, is envisioned not as the product of a steady accumulation of tacit knowledge and internal experience within long-lived corporate organizations, the sort that must be protected by governmental policy. Rather, innovation grows out of the maelstrom of intense inter-firm competition, the continual overtaking of conservative incumbents by radical newcomers, and the wild dynamism of organizational destruction and recreation.

What makes Chinese industrial policy so difficult to comprehend, though, is that for all its focus on market-based approaches and comparative advantage, it also happens to have an entirely different side, one that embodies assumptions of heavily statist Japanese and South Korean models of the past. Policy makers in Beijing may be employing all the mechanisms associated with comparative advantage strategies, but the ultimate aim of such policies remains the creation of "national champion" firms in self-reliant, vertically integrated "pillar" industries. This, after all, is what the "grasping the large" side of the *zhua da fang xiao* (grasping the large, and releasing the small) enterprise restructuring policy is all about. It is about creating exactly the type of organizations associated with the Japanese and Korean models of yore: large, vertically-integrated business groups that encompass entire industries from upstream to down, operate at the cutting edge of technology, and dominate global markets from their home base in China. Yet, this is a story that involves more than just new techniques for achieving old industrial ambitions. Rather, it is a story about a government claiming as its ultimate policy aim precisely the type of firms that its most high profile restructuring (and trade) policies militate against. In essence, the government is seeking to create the very firms that comparative advantage, not to mention global technological change, select against.

Of course, as some policy makers in Beijing are inclined to admit, China's effort to build "national champion" conglomerates must differ from earlier Japanese and South Korean efforts in a few respects. First, the Chinese economy today is much larger and more diversified than were the Japanese and South Korean systems at the height of their respective experiments with dirigiste industrial policy. Simply to exert the same degree of control associated with the Korean model, Chinese policy makers would be dealing with an exponentially larger task and exponentially more complex information flows than anything experienced in 1970s Korea.

Second, the Chinese government, in no small part because of the reformist legacies of decentralization and informality, operates in a less unified manner than that of Japan or Korea decades ago. Whether by design or default, policy makers in Beijing today implement most national policy through local agents. This has certainly proven true in the effort to build "national" pillar industries, a task that has been essentially farmed out to individual provinces and municipalities. Consequently, while China's industrial planners proclaim the need for national steel, auto, or machine building firms, what results is the duplication of such entities in virtually every province and large municipality.

Third, Japanese and South Korean developmental efforts were premised on the idea that at least in their home markets, key industrial conglomerates would be granted sweeping protection. They would be held to international standards and encouraged to compete head to head with foreign firms in foreign markets, but on the

home front, they would be showered (selectively) with subsidies and sheltered from outside competition. As signified by the terms of China's WTO accession, though, the world today is not that of the 1960s and 1970s, in no small part because the world's wealthiest countries—though hardly paragons of free trade—do not tolerate the sorts of protectionism they once did with regard to Asian developers. Nor, somewhat ironically, are they inclined to tolerate the sorts of export flows previously generated by Asian “national” firms.

Whether or not the Korean-style industrial policy was effective on its own terms and in its own era is a major question, but one not immediately relevant to this paper. What is relevant, however, is the basic reality that while China may seek to build the kinds of firms associated with such models, it has at its disposal few of the policy instruments and external conditions enjoyed by industrializers decades ago.

How can Chinese policy makers then square the circle between the highly divergent conceptions represented by each of these approaches? Decision makers may presume that to the extent they get industrial policy “right,” the resulting “national champion” pillar industry organizations will be globally competitive and hence sustainable after WTO-mandated market liberalization takes place.

Yet, that really begs the question of how the divergent premises of “comparative advantage” and “national champion” can be reconciled. After all, one view stresses the primacy of churning and market selection—creative destruction—as the driver of innovation and growth. The other stresses virtually the opposite, the degree to which innovation occurs through the evolution and sustenance of established incumbents, corporate repositories of knowledge and experience. One view emphasizes the market's role as a selection mechanism, a ruthless judge of winners and losers. The other emphasizes the market's role as an incentive mechanism, a treatment that when applied to preexisting organizations encourages efficiency. One view says that firm-level incentives are inseparable from, and indeed can be understood only as emanating from, the system-wide process of “creative destruction.” The other suggests that market incentives, by encouraging existing firms to maximize efficiency, obviate—or at least reduce the likelihood of—such destruction. Indeed, in this latter view, if selection begins spontaneously to operate—if losers start to appear, particularly on a grand scale—then something must have interfered with the proper operation of the market, be it politicization, insufficient liberalization, or “bad policy” in any of its other guises. One view, in essence, understands the firm as a byproduct of the market. The other takes the firm, particularly the modern industrial conglomerate, as the linchpin and driver of the market.

Policy makers could try, as is done in China, to hedge by operating on both sets of premises simultaneously. In so doing, however, they frequently adopt policies that function at cross purposes. For example, the quest for a “national team” has led to persistent governmental distortions of financial markets. Such distortions, though, by withholding capital from China's most dynamic, market-oriented firms—its private enterprises—limit the ability of these firms to respond to competitive pressures being induced by “comparative advantage” market liberalization measures. In essence, the distortions aimed at building the national team undercut the global (and domestic) competitiveness of a huge swath of Chinese industry.

Along similar lines, policy makers encourage the development of vertically-integrated pillar industry firms, but then pass on the actual developmental task indiscriminately to localities. What results is neither the verticality nor overall scale that traditional Korean-style industrial policy calls for. “National champion” firms end up in reality as little more than local or regional players. At the same time, the focus on verticality encourages localities to think not in terms of cluster economies, innovative communities, or cross-cutting supply chains—the sorts of environments from which effective “comparative advantage” competitors are likely to emerge today—but instead in terms of self-contained industrial units, units that may coexist, but not interact. Firms end up with locally focused captive supply chains, a worst of all worlds situation even if one agrees with the goal of building integrated national conglomerates. To the extent the supply chain is held captive, it should at least be permitted to extend broadly in geographic terms (so as, hopefully, to incorporate “best in class” suppliers nationally). Keeping it local almost guarantees that the firm will fail to access the best suppliers, and hence will fail to produce world class products. At the other extreme, to the extent one believes that firms should focus on modular activities and then link into upstream and downstream activities on a global basis (in line with the “comparative advantage” approach), administratively enforced captive supply chains should disappear altogether.

More generally, by merging essentially irreconcilable visions for industrial development, policy makers end up achieving the aims of neither. Localization and geographic duplication undermine the scale and supply chain quality conditions that

might, under the theory's own assumptions, produce globally competitive conglomerates. At the same time, the institutional distortions induced to achieve national champions (local as they may be) undercut the ability of non-state firms to compete effectively on purely market terms. The firms shielded from creative destruction remain weak, while the distortions behind that shielding leave everybody else handicapped in the face of creative destruction. That many in the latter group have survived is testament more to their fortitude than to the brilliance of industrial policy *per se*. Unfortunately, such survival, achieved primarily through commodity production and cutthroat discounting, is hardly the basis for extended success in the future, whether at the enterprise or national level.

V. The Issue of Catch Up

The preceding discussion still leaves open the question of catch up—the question, of whether China's lead firms, for all their problems today, may just be in the first stages of catching and ultimately surpassing their foreign rivals. In other words, might we be witnessing today the opening stages of a situation analogous to the Japanese auto industry's rise vis-à-vis American auto companies in the 1970s? Is it the same story of new competitors figuring out how to produce products inexpensively, introducing those products overseas first into lowest end market segments, gradually and quietly building market share, and then finally down the road becoming dominant in high value products?

In answering these questions, it is worth considering the conditions under which Japanese and South Korean industrial firms rose decades ago. Industries then could still in a meaningful sense be understood as separate, self-contained entities, and often self-contained in national terms. We could refer to the American steel or the French auto industry, and we could contemplate whether rising industrializers like Korea would develop strength in a particular industrial sector. Moreover, in these relatively autonomous industries, product innovation occurred in incremental terms, and manufacturing processes tended to be integral. The various steps in the process, while perhaps understood in broad terms in these stable industries, were uncoded (and given the state of information technology at the time, probably uncoded). As such, they could not organizationally be pulled apart from one another, instead tending to be particular to each firm or each firm's captive supply chain. Challenges then, to the extent they could amass the resources needed to enter these capital-intensive industries, could compete on the basis of process innovation, the ability to produce the same products as incumbents but at significantly lower cost. Because manufacturing processes remained uncoded and integral within the firm, shopfloor innovations were truly proprietary. They were, in effect, a form of art or craftsmanship that neither incumbents nor other entrants could easily copy.

Chinese firms today are operating in a dramatically transformed era. First, it is not whole industries that move today from developed to rising nations, but instead activities. What has moved to China *en masse*, whether at the bequest of leading global companies or through pressures from Chinese firms themselves, are the manufacturing-intensive segments of particular value chains. More precisely, it is the codified, commodified, non-integral manufacturing activities that move. Competing in these areas, while hardly trivial, often does involve mastering open processes rather than developing proprietary ones. It is for that reason in part that we see so many new entrants from China in manufacturing rather than the handful of firms that entered from Japan and South Korea in previous decades.

Second, when Japanese and South Korean competitors emerged, they were rising up against relatively stable incumbents, incumbents whose focus was still on manufacturing. As such, the incumbents were essentially stationary targets whose products could be substituted by lower cost alternatives. Today, the situation is quite different. In large part because of modularization, the incumbents—global lead firms—are hardly stationary, and in many cases have completely transformed themselves. Chinese firms like Legend, Haier, Huawei, and Bird may be rising on the basis of their low cost manufacturing expertise. At the same time, most lead firms—whether IBM, Electrolux, Cisco, Motorola, Dell, or many others—are moving away from manufacturing entirely. Instead, they are increasingly focusing on what may be broadly termed the “service” side of production: overall product definition, design, marketing, and supply chain management.

That then leads to a third point about the way the terms “industry” and “national industry” are understood today. In previous decades, it made sense—with a certain degree of simplification—to conceive of industries as distinct silos. Particular nations, then, could be mapped over one or more of those silos. In the current era of modularization, however, it is not just that activities within discrete industries have been split apart, but rather that these independent, highly specialized activities now cut across multiple industries. What were once distinct industry supply chains now

overlap, intersect, and interact in myriad forms. As such, it becomes increasingly difficult to say exactly which “industry” a given firm or nation specializes in. Is a semiconductor foundry in the electronics industry, or, since its chips go into cell phones, in the telecommunications sector? Is the “fabless” semiconductor design house designing chips for automobiles—along with semiconductors for a host of other applications—in the auto industry? Perhaps it also happens to be integral to aerospace, telecommunications, or home appliances.

Because the specialization associated with modularization has led to the blurring of boundaries between industries and growing interaction across them, it now may make more sense to think of matrices and webs of specialized activities rather than discrete, stand-alone industrial sectors. Among other things, such organizational change leads to the phenomenon of modularized innovation and ripple effects of such innovation across formerly unrelated industries. The “fabless” chip design house, in its efforts to design a telecommunications application, may come up with a new capability applicable to aerospace. For the chip innovator, the ultimate downstream application may be irrelevant, so long as the design gets purchased in great quantity. Yet, the downstream application certainly is not irrelevant to those who are competing in the downstream activities, particularly when the new application may lead to downstream substitutes. A firm like Microsoft may keep churning out operating software for PCs, but so too does it focus on enabling the sorts of products—palmtop computers, digital writing tablets, web-capable mobile phones—that may undercut or otherwise replace PCs. One can begin to see how in the modularized world specialized innovations lead to unpredictable outcomes.

One can also begin to see the challenge for contemporary industrial policy. It is not just that the pace of change is faster now than in the heyday of Japanese or South Korean industrialization. More important, the organizational mechanism of change—particularly the extent to which it is spread across ostensibly unrelated firms and “industries”—is completely new. For a nation to be strong in autos, aerospace, or telecommunications, what fundamentally does it need? Software companies? Semiconductor design houses? Handset manufacturers? Steel firms? Marketing firms?

That it is hard to say underscores the risks entailed in forcing the vertical integration of industries. From a product architecture perspective, it may be impossible to determine the exact boundaries of a given industry. Yet, Chinese industrial policy, by selecting “pillar” industries does precisely this in an artificial sense. It operates under the idea that a country can, from upstream to down, “build” a steel or auto or aerospace sector. Similarly, for various institutional reasons, individual Chinese companies may themselves elect to vertically integrate their activities. Whether through institutional default or conscious policy, they end up forcing the integration—whether under a single company roof or within a single national geography—of activities that are not in any technological sense “integral.” In effect, they push together within a given organizational boundary activities that could just as easily stand alone from one another. In so doing, as such activities are held captive within single “industry” supply chains, policy makers and corporate strategists limit the extent to which modular innovation and cross-fertilization can occur. It is not surprising, therefore, that China perceives itself, probably correctly, as lagging behind India, let alone developed countries, in industries like software. Similarly, it is not surprising that China lags in high end semiconductor design capabilities.

In China today, the industrial policies and institutional deficits that encourage vertical integration isolate even the best Chinese enterprises from state of the art technology, reduce the likelihood that Chinese firms will set rules of connectivity globally, and end up facilitating specialization among foreign lead firms. What results is not so much catch up as a greater division of labor, one that arguably widens the gap between overseas lead firms and Chinese follow-on producers.

VI. Conclusions

This paper has argued that the innovative capacity of Chinese firms and their ability to upgrade within global supply chains are impeded by legacies of Chinese reform style, current bottlenecks in the institutional reform process, and inconsistencies in governmental industrial policy. To be sure, progress has been made on a number of fronts. The Chinese government has moved aggressively in administrative terms to tackle issues of market fragmentation, local protectionism, and regulatory inconsistency. Unfortunately, a number of these issues extend beyond the administrative and into the political. Their resolution, at least in part, depends on the willingness of the state and Party apparatus to subject itself fully—at any jurisdictional level—to the rules and regulations of the system.

At the same time, governmental apparatus must come to terms not just with the benefits of market economics, but also the limits. The goal of building nationally au-

onomous industries may be justifiable on societal or national security grounds. Yet, the goal is not consistent with the sorts of corporate organizations and production architectures that in today's world realize achieve commercial sustainability. Efforts to employ market liberalization to achieve "national industries" will, therefore, likely lead to two equally undesirable, albeit related results: the industries themselves will fail (and the resources that went into building those firms will have been wasted) or markets will get administratively distorted to ensure the industries' "success." Unfortunately, both outcomes are likely to inhibit the further integration and upgrading of Chinese firms in global production networks.

More broadly, however, whether for China or any other country, the organizational revolution surrounding networked production has fundamentally challenged many of the basic analytical approaches so often applied to late industrialization and economic development more generally. Given the newness of this revolution, scholars and policy makers alike are frequently left to make "shot in the dark" assumptions, assumptions that can lead to highly divergent notions of causation and highly divergent implications for policy.

To the extent one understands technology as relatively stable, product cycles as fairly long, and production networks as consisting of fully modularized, discreet processes, one could imagine that innovation would primarily fall within the "sustaining technologies" category, and that it would occur within the confines of the incumbent firm. The goal of industrial policy then might be to create the kinds of large, self-contained organizations that could dominate a particular piece of the supply chain. These organizations would diverge significantly from the ideas of vertical integration popular in China today, but so too would they diverge from the vision of small start ups conjured by "creative destruction."

Yet, if one understands technology as highly unstable, product cycles as extremely short, and production networks as defined by extensive coordination between upstream and downstream producers in integral processes (in other words, if coordination needs undercut full modularization), then innovation would fall primarily in the "disruptive technologies" category, and might be understood as occurring primarily through interaction between firms. Under such circumstances, the policy goal would be to create not particular kinds of companies, but rather particular kinds of communities (a la Silicon Valley). Chinese industrial policy may be creating neither of these, but one can sympathize with the dilemmas policy makers face.

Finally, for all the problems surrounding upgrading efforts in Chinese firms, it is worth asking what the relevant comparison or benchmark for China really is. Chinese firms today in most sectors are locked in intense competition, competition for which the dominant strategy still seems to involve deep discounting rather than specialization and innovation. By virtually any measure, Chinese firms are not as innovative as global leaders—namely multinationals producing branded products—in any given supply chain. But are the global leaders really the relevant comparison? China's per capita income in 2001 was US\$890, roughly 1/40th of Japan's or the United States'. It is perhaps not surprising that Chinese firms are failing to unseat incumbents from these far richer countries. Yet, in terms of positioning in global supply chains, can we say that Chinese firms are performing poorly relative to Mexican firms, Malaysian firms, or Thai firms (firms hailing from countries with per capita incomes, respectively, six times China's, four times China's, and twice China's)? The point is that Chinese firms may not be innovating relative to one another and relative to globally branded leaders. Yet, they are out-competing rivals from far wealthier developing countries, and they are doing so by rapidly developing competence in increasingly complex manufacturing processes. Simply to remain in the game—simply to compete even on the basis of cost—firms in the contemporary era must upgrade rapidly, and that is precisely what Chinese enterprises have proven able to do. They may not be "innovating" in the traditional sense, but they are keeping pace with a dynamically evolving system of global production, an achievement that appears to elude many of their developing country counterparts. While that may not fit the Chinese goal of "catching up," keeping pace represents an achievement worth celebrating—and understanding analytically—in its own right.

Table 1. Main Inhibitors of Export Growth (data from 2001 World Bank Survey)

	All firms	Beijing	Shanghai	Tianjin	Guangzhou	Chengdu
Shipping and transport costs	9%	6%	8%	7%	15%	8%
Cost of meeting foreign legal and product standards	15%	13%	11%	13%	18%	16%
Inability to produce to clients' standards, specifications, and schedule	15%	15%	12%	13%	19%	13%
Inability to match prices of domestic competitors who export	11%	13%	10%	14%	8%	9%
Inability to match prices of foreign competitors	12%	11%	17%	11%	4%	9%
Inability to meet demands by foreign clients for product upgrades and changes in specifications	6%	4%	7%	9%	7%	5%
Difficulty of recovering payments from abroad	3%	4%	2%	5%	4%	2%
Supplying the domestic market is relatively more profitable	7%	7%	8%	6%	4%	8%
Costs of establishing a foreign distribution network too high	17%	16%	18%	12%	13%	22%
Domestic content requirements	4%	11%	7%	9%	8%	8%

Table 2. Sources of Enterprise Financing (data from 2001 World Bank Survey)

Channels of Financing By Percentage	Observations	All firms	Beijing	Shanghai	Tianjin	Guangzhou	Chengdu
Capital from retained earnings/internal funds	1486	51.5% (39.84)	51.7% (40.09)	51.2% (40.68)	49.2% (42.92)	50.1% (39.60)	55.1% (35.57)
Capital from letter of credit	1486	0.8% (5.50)	1.1% (9.2)	0.6% (3.91)	0.7% (5.21)	0.4% (2.55)	1.0% (4.12)
Capital from supplier credit	1486	3.3% (11.21)	3.1% (10.71)	4.2% (13.20)	3.0% (11.04)	4.0% (12.62)	2.8% (7.70)
Capital from bank loans	1486	18.9% (27.94)	17.0% (25.98)	19.3% (28.21)	14.9% (27.77)	18.7% (28.73)	24.8% (28.14)
Capital from other financial institutions	1486	1.6% (8.34)	1.2% (7.40)	2.0% (10.62)	1.1% (6.98)	0.7% (4.75)	3.1% (10.33)
Capital from a parent or partner company	1486	8.4% (24.63)	7.6% (24.16)	11.9% (28.96)	8.6% (25.73)	8.9% (25.74)	5.1% (16.61)
Capital from equity finance	1486	0.6% (5.89)	0.1% (0.65)	1.1% (8.53)	1.0% (9.41)	0.1% (1.17)	0.6% (3.17)
Capital from personal, family and friends	1486	8.6% (24.94)	7.8% (23.89)	3.2% (15.45)	17.2% (35.08)	8.6% (24.88)	6.2% (18.44)
Capital from other sources	1486	6.3% (21.45)	10.3% (26.38)	6.6% (21.53)	4.4% (19.07)	8.5% (25.22)	1.9% (10.33)

Co-Chairman DREYER. Thank you.
Ms. Walsh.

**STATEMENT OF KATHLEEN (KATE) A. WALSH
SENIOR ASSOCIATE, THE HENRY L. STIMSON CENTER**

Ms. WALSH. Thank you for inviting me. I'm pleased to be here and talk about some work that I've been involved in, and thank you also for the very nice plug. The report is available for free on the website, and if anyone is interested, I'm happy to send a copy. But the report does frame the nature of my remarks today. I will be talking in similar terms, but really take more of a global perspective, and then turn to the Chinese economy.

My view of China's current market focuses on China's high-tech industry really—what my focus is, the information technologies, information technology industry sector, so not automotive, not aerospace, not some of these other areas where China has had difficulties over the past few years and decades. Really I'm focusing on the one sector which I think has its own dynamics and actually lends itself to the trends I'll be talking about and also explains a bit why China has had some success there.

That is, one of the things that we found in looking at investments in China and technology transfer mechanisms and motivations for foreign companies that invest in transfer technology to China was that more and more foreign investors were investing in R&D in China.

Now, this trend became apparent in the mid- to late 1990s, and it's continued, in fact, accelerated, over the past several years. And the reason, at least in my view, and others', for this, despite the market environment that one finds in the PRC, where you obviously have problems with intellectual property rights and industrial policies and lots of challenges for foreign companies investing in China, you still see investments in R&D. So the curiosity was, what is R&D in this context, and why are companies investing in it in China?

Well, I think the answer lies in the global economy, as we've already heard. I think having looked at some studies that exist by economists—and I'm not an economist. I take a security perspective to these issues in U.S.-China relations but it seems clear that the global supply chain is evolving to the point where companies selling their products or manufacturing products abroad now more and more need to add value to their products and value that is tied to the local tastes of the foreign markets in which they're investing.

And so this has led to not only an offshore manufacturing trend—which I won't get into in detail, but it is a concern—but also on top of this, complicating matters, is a growing trend toward outsourcing of R&D, corporate high-tech R&D, which is following this manufacturing.

Now, one important distinction, at least in my view, from the manufacturing R&D trends is that I think in manufacturing you may see sort of a one-for-one loss perhaps in the U.S. economy and see this manufacturing emerging in China and India and elsewhere.

On R&D, I'm not sure that that's the case. I think the R&D investments we're seeing, at least today, are additional R&D assets

being added or moved abroad and not necessarily replacing R&D assets here in the U.S., which is important, I think, as we determine what implications this trend has.

And I think this overseas R&D trend overall presents some very important opportunities for U.S. industries, and obviously also some new challenges. Internationally, regionally, and in bilateral relations, this is affecting the global economy in terms of outsourcing, but also the regional economy. How do Japan, South Korea, and other states in the region deal with a China that is becoming more of a high-tech competitor? And this may seem surprising to some, but my view of China is that their economy can allow an agricultural, rural economy and also increasingly have a high-tech end that we're seeing in the coastal areas of China.

And I think that's one of the important implications of the study I've been engaged in, which is we should not measure China's high-tech competitive capability by the same measures we use for the United States, or for other Asian nations. I think China will be able to compete in high-tech sectors, and we're already seeing that in the China market, in the regional Asian economy, and also increasingly globally.

China, I think, also has the advantage of being involved in the global economy at just the right time, particularly, again, in terms of information technologies. China has been opening its market over the last 20 years, which has coincided with the latest wave of globalization, which has, in turn, been founded on the information, communications technology revolution. So this has coincided, and I think China is trying to exploit these trends, and has had some success in doing so.

China, like other countries in the world, is trying to create a knowledge-based economy. They saw the enormous growth in the U.S. economy in the 1990s and would like to mimic it. And even further back, the enormous growth and innovation both on the commercial side and the military side that the United States witnessed post-World War II, this lesson has not been lost on China and other countries, that if you invest in R&D and you focus on innovation among academia, industry, and government, that it will pay long-term dividends. And I think China is pursuing that strategy.

So given all of these ongoing dynamics, it is no surprise to me at all that China is implementing the industrial policies that we've seen in terms of pillar industries, picking winners, local content requirements, tech transfer demands and so forth.

I think it's important—and we are engaged now in making sure—that China is living up to its commitments under WTO. I think that's essential. And it will be a constant battle. It's not going to be a one-time issue to deal with. Your Commission, I expect, and others will have to deal with this issue every year to make sure that China is keeping to its commitments. And I think it's important to do it publicly, not to undermine U.S. relations with China but to keep it at the forefront of our relations so that this can be a win-win situation, which is also in China's interest.

But I'd suggest that that's not sufficient. I think to address these trends that we've talked about very briefly—the global trends we're seeing and the growing high-tech competition by and in China—we

need to respond to these trends that characterize globalization. And I don't think we've done enough of that as yet.

There are many implications for U.S. policies and trade policies and export controls. I won't get into those now. But I think essentially if our strategy is to stay ahead of China, whether it be one, two, or more generations of technology, I think what we need to do is focus on getting a better picture of the global economy and China's role in it. An analogy is the battlefield picture that we have. Because of information technologies, we can actually see or visualize the battlefield today. That's an enormous asset for our military.

I think we have to do something similar with the global economy so that we understand the forces that we're dealing with, our industry can exploit those forces, and we can maintain our technological gap with China and other countries that may be of concern long term. We don't have that capability today, and I think that we need to focus our government resources on developing that capacity. And there are important reasons to do so.

I guess my time is up, so I'll leave my comments there. Just one last issue. I think that we need to invest in the long term. I admire many of China's efforts to advance its education and language skills, engineering skills, and so forth. I think it's time that the United States commit again to investing in these types of programs, funding R&D, Federal funding in investment long term, education, retraining, all of these basic investments that we have, I think, not done recently, and we need to invest for our own future so that we can maintain our technological edge.

Thank you.

[The statement follows:]

Prepared Statement of Kathleen (Kate) A. Walsh *
Senior Associate, The Henry L. Stimson Center

Summary

The U.S.-China economic and security relationship is undergoing fundamental, structural change due to global economic forces. As a result, China may witness much more rapid development of its commercial—and, indirectly, defense industrial—capabilities than demonstrated by other developing economies. To meet this challenge, respond effectively, and avoid potential negative side-effects, U.S. policymakers require better, more timely, and comprehensive data and analysis of emerging global trade dynamics and China's efforts to exploit these trends. In particular, the rise of global R&D in commercial high-tech industries and the growing level of foreign R&D investment in China warrant greater U.S. Government attention and resources.

The Changing Nature of Global Trade and Investment Presents New Opportunities, and New Challenges

As barriers to international trade and foreign investment are lowered under world trade rules, the very nature of international trade and investment is changing. Increasingly, multinational corporations (MNCs) are able to exploit foreign markets, labor pools, infrastructure, communications systems, and supply chains. As a result, numerous MNCs are expanding (and, in many cases, shifting) production lines overseas. Moreover, multinationals competing in these overseas markets are beginning to move up the value chain of production, which is leading to the distribution of more advanced manufacturing processes worldwide. This growing trade dynamic has begun to generate many questions and concerns—particularly during the current economic downturn—as more and more manufacturing jobs and related services move offshore, many of them to China.

*The views outlined above are those of the author alone and do not reflect an official position or view of the Henry L. Stimson Center.

But there is an additional dynamic that has emerged as a result of growing global trade that has yet to receive the attention it deserves: the increasingly global nature of commercial high-tech research and development (R&D). While the United States continues to enjoy an overall net inflow of R&D dollars, U.S. companies in the year 2000 invested almost \$20 billion in overseas commercial R&D (up from about \$5 billion in the mid-1980s).¹ This trend mirrors developments in other Western economies, which are also witnessing increased levels of inward and outward commercial R&D investment. Today, the percentage of foreign-funded R&D in the United States (15%) and in the U.K. (16.8%) is about double that of two decades ago (up from 6.2% and 8.7%, respectively, in 1981); similarly, Canada and most other OECD states have experienced a rise in commercial R&D investment from abroad.²

In large part, the driving force behind the globalization of R&D is the need for commercial ventures to increase the value-added quality of the goods or services they are manufacturing and selling abroad. For this purpose, research, design, and development work is often best done (at least in terms of cost concerns) near to one's production base. Thus, as manufacturing moves offshore, so too is industrial R&D. Generally, the R&D assets being added or moved abroad is not the most advanced or basic type of research work, which is for the most part still undertaken at the high-tech company's home base. More often R&D conducted overseas involves various forms of technology development or applied research work. Other reasons MNCs establish offshore R&D ventures include the need to set up "listening posts" in other high-tech business centers (i.e., Silicon Valley and its equivalents abroad), for localizing foreign products to match local tastes, for training and marketing purposes, and in the China market, for improving *guanxi* (generally, building connections or relationships) and/or to meet continuing (if now less formal) technology transfer demands.³

An important aspect of the global R&D dynamic, however, is its expanding international scope. R&D investments by multinational corporations are no longer limited to industrialized economies in Europe and Asia (or to close U.S. allies). Today, the world's leading high-tech companies are establishing commercial R&D centers in many parts of the developing world as well. Although the data concerning levels of foreign R&D investments abroad is very limited (even with regard to Western economies), it is becoming clear that countries in the developing world too, particularly China and India, are experiencing a rapid rise in the level of foreign R&D investment.⁴ According to a recent Stimson Center study, high-tech multinationals in the information communications sector have established over 200 separate R&D centers on the Mainland over the past dozen years (1990–2002).⁵ Other estimates place the overall number in China today at somewhere between 100 and 400 foreign-funded R&D sites.⁶ This growing trend represents a new stage in economic

¹ Figures are from the Bureau of Economic Analysis, U.S. Department of Commerce; and Donald Dalton and Manuel Serapio, *Globalizing Industrial Research and Development* (Washington, DC: U.S. Department of Commerce, 1999).

² National Science Board, *Science and Engineering Indicators* (Washington, DC: U.S. Government Printing Office, 1993 and 2002); Donald Dalton and Manuel Serapio, *Globalizing Industrial Research and Development*, Table 1: Percentage of R&D financed from foreign sources, selected countries 1981–1999 (Washington, DC: U.S. Department of Commerce, 1999); and *OECD Science, Technology & Industry Outlook (2002)* (Paris, France: OECD, 2003).

³ As part of its accession agreement to the WTO, China made a specific commitment to ensure the "elimination and cessation of enforcement of trade and foreign exchange balancing requirements, local content and export performance offsets and technology transfer requirements made effective through laws, regulations or other measures." However, the U.S. Secretary of Commerce recently cited complaints by U.S. companies of continued "forced transfer of technology from firms launching joint ventures in China." Anecdotal evidence supports this finding, although there does appear to be some lessening of this dynamic. See WTO Accession Protocol of the People's Republic of China (WT/L/432), November 23, 2001, §IV(8)a, p. 16; and Donald Evans, "Remarks by Commerce Secretary Don Evans to the Detroit Economic Club" (September 15, 2003), available online at http://www.commerce.gov/opa/speeches/Evans/2003/Sept_15_Evans_manufacturing_Detroit.htm.

⁴ *Science and Engineering Indicators 2002*.

⁵ Kathleen Walsh, *Foreign High-Tech R&D in China: Risks, Rewards, and Implications for U.S.-China Relations* (Washington, DC: The Henry L. Stimson Center, June 2003), available online at <http://www.stimson.org>.

⁶ Estimates cited in PRC press reports suggest that there are somewhere between 120 to 400 foreign-invested high-tech R&D centers in China, but it is unclear what specific criteria were used in determining these figures. A study by the Chung-hua Institute for Economic Research in Taiwan cites a figure of 148. See "China Tipped to Become World Hi-tech Center," *People's Daily Online* (June 2002), which notes that "Foreign businesses have set up over 120 R&D centers in China, and there will be 10 more this year."; "China's Foreign Trade Sets New High Despite Adverse Circumstances," *People's Daily Online* (October 28, 2002), citing "... nearly 400 R&D centers of various types ..."; and "Taiwan's R&D Should Differentiate From That of

globalization, yet, its overall implications for U.S. economic and security interests and U.S. relations with China have not yet been fully explored.⁷ Meanwhile, China and other recipients of this potentially more advanced form of technology transfer are encouraging further R&D investment from abroad in hopes of accelerating the development of their own domestic high-tech industries and “knowledge-based” economies.

Finally, the ongoing revolution in information communications has helped fuel the growth in offshore manufacturing, services, and commercial R&D. In particular, high-tech industries that are heavily reliant on communications technologies (such as telecommunications or computer software development) have been able to take advantage of an increasingly global marketplace by employing the Internet or other communications platforms to increase productivity while reducing costs and expanding their worldwide presence. For example, research teams connected electronically and collaborating on a single R&D project may be located in two or three or more different sites around the world, making it possible to conduct commercial research on a continuous 24–7 work cycle. Under this model, different research centers generally focus on select segments of the overall research project based on the particular skill set or other advantages and resources specific to each researcher or center. Oftentimes, the result from this type of collaboration is in intangible or electronic form (for example, computer software code), meaning it can be easily and rapidly transferred almost anywhere around the world.

All of these global trends—the growth of offshore manufacturing, global R&D, and the information communications technology revolution—present substantial potential economic and investment opportunities for U.S. companies. At the same time, however, they present serious challenges to U.S. trade and security policy, particularly in the area of export controls. Moreover, the still-limited data available on these global trends points to the need for a much closer examination of how they are impacting U.S. interests at home and abroad.

China’s Role in the New Global Economy

The PRC has been a prime beneficiary of all of the above-described global trade phenomena due to its enormous market potential, expanding role in the world economy, and the Mainland’s many policies, programs, and incentive plans designed to take advantage of these new international dynamics. In fact, China may be uniquely positioned to benefit from today’s increasingly globalized marketplace. As a very large, generally stable, but still under-developed market, the PRC presents not only plentiful opportunities for foreign investment but also actively seeks high-tech investment from overseas, becoming in 2002 the world’s most popular site for foreign direct investment. In addition, China enjoys the advantage of a very large labor force that is not only comparatively cost-efficient but also includes an impressive and growing generation of skilled scientists and engineers (many of whom receive their degrees from U.S. universities). These assets plus China’s own investments in infrastructure, market-oriented economic reforms, and the government’s emphasis on developing strategic high-tech industries has placed the PRC in an exceptional position to exploit the global trends outlined above—which is exactly what China has been trying to do.

The PRC’s selection of “pillar industries,” its strategy of “picking winners” among China’s emerging high-tech or industrial enterprises, its incentive programs for certain high-tech industry and R&D investments (including tax credits, favorable land-lease terms, preferential loan programs, etc.), and other regulatory practices that affect both domestic and foreign investors are all part of an effort to reap the benefits of an increasingly global economy. Thus, it is likely, in my view, that China will continue to utilize these types of strategies in the future, at least as long as they are able to do so without incurring substantial costs in terms of foreign investment or international reputation.

Yet, while U.S. attention is rightly focused on creating a more fair trade environment in the PRC and making sure that China lives up to its considerable commitments under the WTO, our attention should also be focused on (and we should be preparing for) the potential for China to advance far more quickly in terms of developing its own high-tech industry—and, indirectly, its defense industrial capabilities—than has been demonstrated by other developing economies in the past. Because

China,” *Asia Pulse* (December 5, 2002). Charles McMillion cites reports by China’s Ministry of Foreign Trade and Economic Cooperation in 2000 of “nearly 100” foreign R&D centers and a CAS figure of 124 such centers in 2001. See Charles McMillion, “China’s Very Rapid Economic, Industrial, and Technological Emergence,” prepared for the U.S.-China Security Review Commission, June 5, 2002.

⁷ For a comprehensive review of this trend and its implications for both the United States and China, see Walsh, *Foreign High-Tech R&D in China*.

China is so well-positioned to exploit the global dynamics described above and has adopted development strategies designed to do so, already there are Mainland competitors emerging in critical high-tech industries such as computer software development, telecommunications, and low-end semiconductor manufacturing. There is no doubt that much of this capacity is due to foreign investment and technological input (which could conceivably be withheld if deemed necessary, but would be extremely costly in many ways). But it is also clear that a number of Chinese enterprises have already moved beyond their dependence on foreign partners and are gaining substantial market share in critical high-tech sectors in China and beyond long before many would have predicted. Therefore, it arguably makes greater sense to focus our resources on trying to prevent possible technological surprise in the case of China than on trying to obstruct China's technological advancement (an increasingly difficult prospect). For if we are better able to gauge China's high-tech trajectory, the United States can continue to trade with China armed with a growing confidence that we understand the impact U.S. technology transfers may be having on China's development, while ensuring that we remain ahead of the curve (with the added benefit of economic growth at home). But if we are to run faster, we need to know how far, how fast, and in what direction.

Added to this dynamic is the growing influx today of foreign scientific and technological know-how and equipment to China (and other parts of the world) that is integral to conducting high-tech commercial R&D, whether at home or overseas. This could serve as an important, additional accelerant in China's plans to modernize its economy, industry, and military (although China's past efforts at assimilating foreign technology demonstrate that this is by no means certain). The best evidence of this potential is the United States, which emerged as a bona fide world power following World War II mainly due to the enormous Federal investments made in basic science and engineering as well as the increased collaboration that took place among industry, academia, and government researchers during and after the war. This lesson has not been lost on China or other nations that aspire to create more advanced industrial and knowledge-based economies such as ours. Today, however, it is likely to take far less time to achieve; such is the advantage of late developers. Once again, the challenge it poses for U.S. policymakers is not how to prevent China's technological advancement, but how to stay ahead of it.

Implications for U.S. Policy

There are several important policy questions, concerns, and implications that flow from this discussion.

- ***Realize that changing global trade dynamics are already impacting U.S.-China relations.***

One immediate effect of the dynamic shifts in global trade is that the U.S.-China economic and security relationship is already undergoing fundamental—if subtle—change. China is becoming less the high-tech competitor of the future, and increasingly the competitor that industry is facing today, both in China and the global market. As the PRC continues to advance technologically, becomes more competitive globally, and does so more rapidly than some might expect, relations between the United States and China will continue to change. U.S. policy toward China must also adjust to this new reality. This could be a change for the better, or it could easily undermine today's "candid, cooperative, and constructive" relationship. In order to avoid an inadvertent decline in bilateral relations, the United States and China will need to work together to enhance transparency, reduce barriers to trade, improve the balance of trade, and to gain greater understanding of how these global trade dynamics are impacting our domestic economies, industrial capabilities, and defense modernization efforts.

- ***Add information exchanges on high-tech R&D investments to the agenda of meetings held under the U.S.-China S&T Cooperation Agreement.***

Chinese officials and academics are as interested in analyzing and quantifying the growing global R&D trend as are U.S. officials, business executives, and analysts. Over the past year, in particular, analysts in the PRC have conducted a number of surveys to try to determine the actual number of foreign-funded R&D programs in China. In addition, China now enjoys observer standing in the OECD, where studies on global R&D investments also are under way. The U.S. and Chinese National Science Foundations, too, are cooperating on standardizing collection of statistical data. The present, therefore, seems an opportune time to establish a bilateral (or multilateral) system for tracking data on international R&D investments in China. The United States and the PRC have much at stake in understanding these activities and both would benefit from more precise and regular collection of data. The existing bilateral S&T Cooperation Agreement

could provide a positive atmosphere, near-term opportunity, and official umbrella under which to conduct, or at least begin undertaking, a joint effort such as this.

- ***Develop a regular, more comprehensive process for collecting data on high-tech R&D activities abroad.***

Whether undertaken as a cooperative or domestic enterprise, greater effort is needed to provide policymakers and business executives with a clearer, more comprehensive, regular, and timely picture of global R&D activities. To gain a deeper understanding of the impact these activities are having on the U.S., Chinese, and global economy, annual statistical data of inward and overseas R&D investment is essential and must be coordinated with other countries. The U.S. National Science Foundation, Bureau of Economic Analysis (BEA), and the Bureau of the Census under the U.S. Department of Commerce have signed a Memorandum of Understanding to pool their statistical resources in order to track global R&D investments (based on existing reporting requirements on U.S. companies). This project is now underway and should provide initial findings later this year.⁸ This effort should be continued and expanded over time to provide a more comprehensive picture of this important and fast-developing global dynamic.

- ***Increase U.S. Government investment in basic research and education in order to maintain the United States' global lead in critical high-tech industries and innovation.***

U.S. Government funding for R&D has been holding steady over the past few years, but this is due mainly to concerted efforts and support from Congress. U.S. policymakers must not sacrifice funding for science and technology to other priorities such as homeland security; both are essential to long-term U.S. national security interests. Funding levels must also increase over time if the United States is to remain economically, technologically, and militarily competitive. The PRC is not alone in adopting multiyear strategies to achieve high-tech advances; Europe, Japan, and other states and regions are competing for a greater share of the world's high-tech market. In an increasingly global environment, these efforts are likely to be more successful, much more quickly, than in the past. As other nations and regions move up the technological ladder, however, many of the foreign nationals supporting U.S. labs, universities, and high-tech companies will begin to find similar work and living standards in their own economies. Thus, to ensure U.S. competitiveness over the long term, policymakers must invest more in grade school and secondary education, focusing particularly on the basic sciences, mathematics, and engineering fields. To ensure that the U.S. economy continues to benefit from a global marketplace (and that the U.S. standard of living continues to move upward as promised by supporters of global trade), significant investment also is needed for re-training and education of U.S. workers today. Without a serious, government-led effort to realize the gains from globalization, we risk not only a "race to the bottom" but also falling behind in critical advanced technological capabilities vis-à-vis the PRC and other emerging high-tech competitors.

- ***Conduct a U.S. innovation survey to aid assessment and monitoring of America's high-tech edge.***

Due to the growing realization around the world of the new global trade dynamics that are taking shape and the need to better understand the implications they hold for future economic development, countries such as Canada, Japan, and the European Union have undertaken—or are in the process of undertaking—comprehensive innovation surveys of their high-tech industries. While there has been some discussion among U.S. Government officials about conducting a similar survey of U.S. high-tech industry, this effort is unlikely to move forward without specific Congressional authorization and appropriation.⁹ Given the fast-growing trends described above and their inevitable impact on U.S. economic and security interests as well as relations with the PRC, Congress should authorize and fund an innovation survey by the National Science Foundation or other appropriate government agency(s) as soon as possible.

⁸Conversation with BEA official (September 23, 2003).

⁹See National Academy of Sciences, Board on Science, Technology and Economic Policy (STEP), "Panel on R&D Statistics at the National Science Foundation" (April 7, 2003), materials available online at http://www7.nationalacademies.org/step/STEP_Projects_R&D_Data_Needs.html.

- ***Modify U.S. commercial deemed export controls to cover R&D-related transactions abroad.***

At present, U.S. deemed export controls for commercial items do not apply overseas (unlike munitions trade controls). For dual-use technologies, deemed export licenses are required only for firms in the United States wishing to hire foreign workers with advanced skills or education from certain countries (primarily China) to work in certain technologically sensitive areas. Given the growing trend of overseas R&D, particularly in places like China and other states of potential proliferation concern, this policy makes little sense in today's world. At the same time, however, simply applying a system that is widely regarded (at least among industry, many non-governmental experts, and the GAO) as being ineffective and unduly burdensome to the small number of companies that comply (but are vital to U.S. high-tech industry), is not the answer and would prove impractical as well.

Rather, the answer lies in a different approach to export controls that would provide a middle ground between full licensing review and complete decontrol. In other words, an exception such as that used for commercially available encryption technology could be applied to R&D-related transfers overseas. Such a system could require companies simply to notify the government of pending transactions so as to provide a record of these transactions that could then be analyzed, monitored, and reviewed by officials elsewhere in the government to determine what overall impact these transactions may be having on U.S. economic and security interests. Using modern information communications technologies to ensure an efficient and time-sensitive process, an electronic monitoring system to track these transfers could also aid government officials in gaining greater transparency and accountability of U.S. R&D-related investments in China and elsewhere.

In order to successfully implement such a program, however, the support of not only Congress but also senior Executive Branch officials—representing the White House or National Security Council—is needed. The Bush Administration stated upon coming into office its intention to reform export controls to meet 21st Century challenges. The advent of foreign-invested high-tech R&D in China poses just this sort of immediate and long-term challenge. To ensure that U.S. economic and security interests are being met as high-tech R&D moves further offshore, export control reforms must be made a priority and be given the high-level attention this concern warrants.

Conclusion

The global economy presents the United States with great opportunity to enhance our economic and security interests as well as serious, long-term challenges. According to recent remarks by China's Foreign Minister, Li Zhaoxing: "China is willing to step up dialogue and cooperation with the U.S. side in economy, trade and finance with a view to continuously propelling the stability and growth of the economies of both countries and the world in general."¹⁰ The United States should take China up on this offer.

Discussion, Questions and Answers

Co-Chairman DREYER. Thank you very much.

The first question from Commissioner Mulloy.

Co-Chairman MULLOY. Let me ask all three panelists if you would comment on this. Professor Nolan, I believe you said that the concentration of business power in the world today is at historic highs, in your estimation. Is that correct?

Dr. NOLAN. Yes.

Co-Chairman MULLOY. And the second thing you said, it's not in our interest or in China's interest to force them to comply with their WTO obligations.

Dr. NOLAN. I said there were consequences that would flow from that that we should consider very carefully.

¹⁰Ministry of Foreign Affairs of the People's Republic of China, "U.S. President Bush and Other U.S. Officials Meet Visiting Foreign Minister Li Zhaoxing," Press Release (September 23, 2003), available online at <http://www.fmprc.gov.cn/eng/wjdt/wshd/t26239.htm>.

Co-Chairman MULLOY. I think you went further than that. I think you said it would be in our interest not—in their interest, definitely, and probably not ours.

Dr. NOLAN. Yes. Okay.

Co-Chairman MULLOY. Okay. So the third thing is the article that appeared in the *Wall Street Journal* right after Congress approved, the House approved China's PNTR vote, which meant China was going into the WTO, that was all sold on the basis we were going to make a lot more sales to China.

Dr. NOLAN. Yes.

Co-Chairman MULLOY. After it, an article appeared in the *Wall Street Journal* quoting this: "U.S. multinationals have"—"Washington focused mainly on the probable lift of U.S. exports to China. Many"—this is the *Wall Street Journal*. "Many U.S. multinationals have something else in mind. 'This deal is all about investment, not exports,' said Joe Quinlan, an economist with Morgan Stanley. U.S. foreign investment is about to overtake U.S. exports as the primary means by which U.S. companies deliver goods to China." And I might add at the end of that quote, not only goods to China, but goods back here to the United States. Wal-Mart does over 75 percent of their global sourcing out of China, my understanding. And that's \$15 billion a year coming here out of China by Wal-Mart alone.

Now, if the WTO was all about investment and then further, Dr. Nolan, you say on page 14 of your testimony, "By the year 2002, China had overtaken the USA as the world's largest recipient of FDI, with the stock of FDI reaching around US\$450 billion."

Dr. NOLAN. Yes.

Co-Chairman MULLOY. Okay. In light of this, what do the American people get out of China being in the WTO? We see massive amounts of investment flowing out of this country to China, and we see—we heard this morning the erosion of manufacturing and job losses here in the country. And then you're telling us it's not in China's interest to comply with its WTO obligations. What is this—I mean, think through further, what does this mean? Where are we headed? And, obviously, it's in the interest of multinationals and their bottom lines. I can see that. But what does the average person in this country get out of all this? Where are we headed here? All three of you.

Dr. NOLAN. Do you want to go ahead? Please.

Ms. WALSH. Wonderful. Ladies first. Well, I value the question, and I don't have a pat answer to that question. I think it's very difficult. But I think we need to find how it is that we win from this situation.

We have, I think, assumed for a long time that we would benefit from globalization because there was the assumption that the high-value-added goods and high-wage jobs and skills and technology that we have here would be our advantage and that no one would really be able to catch up to us, and, therefore, we'd have the advantage in this type of relationship. But I don't think we can take that for granted anymore because the global economy has witnessed fundamental shifts, and it's rapidly moving up in terms of—advancing in terms of value-added, the supply chain, which is global.

So our role in that economy I think has changed, and we haven't really responded to that. We need to get a better picture of what this is so that we can make this benefit, U.S. labor force and others, both the blue-collar and the white-collar both. And I think that we've not paid sufficient attention to that, and now we see that there are some challenges.

Co-Chairman MULLOY. Dr. Steinfeld.

Dr. STEINFELD. It's a very complicated and good question that you ask, and I would say that my answer is basically that in every major industrial transformation that's occurred in history—I'm saying the United States, from agriculture to industry or industry to higher-end industry and a post-industrial service economy, there are gains to productivity and gains to national wealth and tremendous destruction, socially, the social fabric destruction to jobs that were anchored in the old economy, be it agriculture or industry. That is a reality of progress, and I say that not normatively. That seems to be a historical reality, and we're engaged in that now.

I think we can't say to a person who has lost a lower-end, arguably manufacturing job in the United States that this change is good for you. It is not good for that citizen, and I think it's incumbent upon us socially, as it is in China for their displaced workers, to come up with a social answer.

But I think over the long run the changes associated with globalization do benefit our country in allowing a division of higher-productivity activities and lower-productivity activities, and a concentration of the higher-productivity activities in North America and Europe, and an even harder game of catch-up for those, say, for example, in China and the developing world than even was faced earlier by South Korea or Japan before that.

Co-Chairman MULLOY. Dr. Nolan?

Dr. NOLAN. I can answer? Okay. Very briefly—the time is going—I just would emphasize I think that in terms of the exports from China of U.S.-based corporations in China, this certainly benefits U.S. consumers, no question at all. That's a huge gain. But I think that the motives for global corporations are solely profits. That is their *raison d'être*. I'm a shareholder directly and indirectly through my pension fund, and my pension fund will put great pressure on the companies to source where it's cheapest and best for their profits. So the motive for going to China, clearly, building the value chain in China is because it's more profitable for them to do so.

But I think that provides tremendous challenges for both societies. There's never been a period in which FDI has moved at such a pace across boundaries, and it's moving into a huge part of the world, with a relatively cohesive domestic market that has the capability to suck FDI in a way that no other society ever had the capability to do. And the pace of change involved in that presents tremendous challenges for both societies, China and the U.S.

Co-Chairman MULLOY. Thank you.

Co-Chairman DREYER. Commissioner Becker.

Commissioner BECKER. Thank you very much. I'd like to really focus my questions to Kate Walsh. I am interested very much in the R&D, research and development, and what is happening to all this. I never quite gathered from your testimony, your written tes-

timony and your remarks, whether you felt this was good or bad, this transfer of research and development. But let me make a few points that were not pointed out in your testimony and have you comment on that.

At this Commission and other commissions, we've had industry, large industry, complain about being coerced by the Chinese to create research and development institutions and to staff it with the brightest people that we had. They would even tell them who they wanted in there, which raises a couple of questions, because in these joint ventures on research and development, we found linkage with the PLA through the Chinese universities. And I'm wondering how you feel about that, how you would assess that.

And, further, I would point to CFIUS, which is the organization that has oversight—I guess that's the best way to put that—through Treasury on military security and sensitive acquisitions, and whether you would consider the research and development that's being established as a sensitive industry, in effect, that would require or should require CFIUS oversight before that's done, because as I understand, these linkages on research and development go not just from—into China with a company from the United States, but that this funnels back to the main company in the United States. And how do you put a transfer, export transfer, on an idea that's in a person's head?

Have you examined this at all? I mean, this is quite an extensive paper on research and development. I would be interested in your comments on that, and from the other two panelists, if they care to.

Ms. WALSH. Thank you. It's all in there actually, in the monograph. But is R&D in China good or bad? It can go either way, I think, and it's important. I'm less worried now than I was when I worked with Commissioner Reinsch and others on this issue earlier, in the late 1990s.

At that time, R&D investments by U.S. and other high-tech firms in China was either, one, exploratory or what they now—everyone now calls “show R&D.” It was R&D basically for the sake of answering to local content and technology transfer demands by Chinese officials and joint venture partners.

So they set up something called R&D at the time, and some of these programs were what we would term R&D, research and development, but most of it was really just a center of some sort that was called R&D with computers and maybe some software. It really wasn't what we would define as R&D.

However, there have been several stages now, at least three distinct phases of this type of investment, and I am actually less concerned about it now, and the reason is that rather than being driven primarily, although not exclusively, by the demands made by the Chinese partners or local government for technology transfer, the main motivation now for foreign firms to invest in R&D in China is because of this global supply chain evolution. That is, they're making a strategic decision, the companies themselves, that they need to invest in R&D in China. They're not being driven by outside forces as much as their own internal corporate needs in a global economy. And that has tangible effects on the way in which they do the R&D, which is what we would in many cases now real-

ly call at least technology development, or applied research in China.

And so they put in place—you can see the changes from the 1990s to today in terms of security and protecting their intellectual property, security gates and guards, and so forth.

So it's a different dynamic now than it was, and so even though the research and development going on in China is more advanced and it's real R&D in many cases today, it is, I think, less troubling because of that.

Another factor is that these are often today wholly foreign-owned enterprises, no longer joint venture partnerships in most cases today, or at least they're moving that way.

They're also consolidating their R&D ventures and enterprises in China, no longer expanding them throughout China as they were being pushed and incentivized to do earlier. So it's more strategic thinking about R&D in China and, therefore, more carefully thought out.

So in that sense, I'm less concerned. Whether it's good or bad, I don't know. It could go either way, depending on a lot of factors. But understanding the evolution, I think, is important.

As far as the PLA, it's very difficult to know if this feeds in. One indicator, though, that China is recognizing it's had trouble doing spin-on, spin-off type of work, even in information and communications technologies areas where they've had some success, is that they're sending PLA students now to the civilian universities, the high-tech universities, Tsinghua University and Beida and others, to be schooled there in commercial technology engineering and so forth. So, they haven't, I think—that's an acknowledgment they've had some trouble there.

CFIUS I believe only covers investments in the United States, but one of the issues I've looked at since doing this report—I mentioned it just very briefly there—is the issue of deemed exports. We control foreign students or workers who come to the United States, most of whom are Chinese, who are working in sensitive high-tech areas. We deem that an export, and they're tied to the H-1B visas or the L-1 visas.

We don't do that (deemed export licensing) overseas, and there are practical reasons for that. But to me, because so much more R&D is moving offshore and the workers, the engineers are all Chinese locals—it makes little sense, I think, to be controlling exports here, Chinese working at Intel and Motorola here, and not controlling it there. How do you control intangible technology transfers? It's very difficult. I would suggest that we need a new way to do it. That is, something other than a full license review, which you can't really do a background check on a Chinese in China, it's impractical. And we don't want to completely decontrol this either.

Again, the idea I would put forward is to try to get a picture of these trade dynamics, and that would require some data. And industry is who has the information. So I would—something along the lines of the encryption exception, where much of the technology is allowed to go forward without a full license review, but the Commerce Department or the U.S. Government has some notification, some electronic record that this transfer or transaction took place. And I think that kind of data—it would be a lot, but I think it

would be useful to analysts like myself, and others, to see the ebb and flow of the technology and people. And where are they going? Are they clustered? Are they moving around? Those kinds of trends, I think, broadly would be very helpful to get a picture of these very fast-moving dynamic forces that we're seeing in the China market and globally.

Commissioner BECKER. Thank you.

Co-Chairman DREYER. I'd like to ask—I'm very interested, having some acquaintance with what you're saying myself about the problems of within-region competition, that it's factory eats factory within a region rather than being able to compete globally, or even just all over China.

How does the odd Haier break out of this and even just on a China-wide company, like Hongda, the Red Pagoda cigarettes? And you hear people like Lai Changxing saying, perhaps disingenuously; the only way to do it is by bribery and corruption because there's no other way. What do you think about that? What did enable Haier to break out and become a globally recognized name? How do they do it? And is this liable to pave the way for other companies, or is this a complete aberration?

Dr. NOLAN. I think Haier has actually connected these two arguments in a very interesting way. The first thing is that Haier is not actually a globally recognized brand. It's recognized by those of us who work in technology, but if you ask most people—

Co-Chairman DREYER. Sold at Brandsmart in Washington, D.C., area. Sorry. Globally known, advertised in the Miami airport.

Dr. NOLAN. Okay. But, as we know, what it sells at the moment is very low-end small refrigerators. Its capability to compete with GE Electrical Appliances Division, BSH, Whirlpool, Electrolux is very low. It is a highly successful firm in all sorts of ways with a brilliant CEO. Whether it would have been able to succeed without industrial policy of one sort or another is a question, and I think it's very unlikely. I think Haier is very successful up to a certain point. Whether it will succeed beyond that point is questionable because it faces an immense difficulty in moving into the high-value-added segments of that market. And there is ferocious competition in the low-value-added segment of the market.

So I think—yes, go on. Sorry.

Co-Chairman DREYER. How come it succeeded to the extent that it is available in the United States market even though it faces all this high-value competition at home?

Dr. NOLAN. To answer that it would take a very long time to expound. I mean, I've just emphasized that the level—its level of success is very limited. It has some global brand name, but not a great global brand name, a very narrow niche, and its capability to compete with the world giants, if you talk to Zhang Ruimin, is rather limited. They have a long, long way to go. They've done very well, but they're probably the most successful Chinese firm in international terms. But think of how limited that niche is: dormitory, small refrigerators for students. And its attempt to move into the high-tech, the higher-technology sectors, it is still unknown as whether it will be successful.

I would just, if I may, just link in terms of this technology transfer question, that the idea that technology is being transferred to

China is certainly true. There's an awful lot of R&D going on in China that was not formerly being done in China. But the question is: Within whom? It's being done within global giant firms predominantly within China, within Alcatel, within Motorola, within NEC.

If you look at the bread, the food for the whole high-technology sector and that which supplies the chips for Haier, China has not one single microchip company among the top 30 companies listed as suppliers within China or to China. And so it's a long, long, long way to go. And on the global level playing field in semiconductors, the idea that China would spontaneously compete with Intel or Samsung is a fantasy.

Co-Chairman DREYER. Dr. Steinfeld.

Dr. STEINFELD. I would just very quickly say, on the one hand—here a two-handed academic, of course.

My apologies. On the one hand, Haier to some extent is a symbol of where things are headed in China in the sense that the central government recognizes how this highly divided domestic market undercuts Chinese growth, and so there are great efforts to beat up, to some extent, on localities to prevent local protection, and one of the reasons, I think, for China's joining WTO is for the center to use WTO as a lever against localities.

Haier has to some extent been better than other domestic firms in unifying the domestic market. But even in this case, the company operates—in order to survive, it operates an incredibly complex portfolio of very low-value activities. In other words, a very complex portfolio of manufacturing low-end refrigerators, low-end cell phones, low-end appliances of various kinds. And what that means is the company can survive doing that. It's very entrepreneurial. In some cases, it exports to North America and Europe because that's an easier market than selling within its own domestic market. But I would say that because it's operating this portfolio of very narrow-margin activities, it doesn't generally have the resources to upgrade technologically in its business, even if we discount some of the technology, it doesn't really have the resources to engage in the very sophisticated marketing strategies that would allow it to compete head to head.

But its success is not to be sneezed at, and I think it is an indicator of where things are headed slowly in China.

Co-Chairman DREYER. Ms. Walsh.

Ms. WALSH. I would take a slightly different view, and I don't know Haier's background specifics, so let me talk more generally about firms such as Haier that we're becoming more familiar with here in the United States and elsewhere in the global economy. And, that is, I think Haier and others have—companies in China, the strategy has really been to work with as many foreign partners as possible. And this is along the range of business services, from distribution, sales, manufacturing, services, and all the rest.

And so I think because of the variety of foreign partnerships in the different parts of the business, the Chinese firms have had a very good opportunity to learn the business from the best in the world who have come to China, which is a magnet for foreign investment. And they've taken advantage of that.

Now, of course, there is uneven or mixed success in that, but overall I think the strategy has been very successful. And even in

high-tech sectors where there's sophisticated and—you know, the world's leading computer companies are in the China market, but they don't have the dominant market share in China. Legend is a Chinese domestic firm, and they enjoy by far in the PC market the market share in China, and now also in Asia. And now they're exporting to the United States and elsewhere around the world.

So they've learned the business from the foreign investors, in part because there have been demands on the foreign investors to provide training, technology transfer, local content requirements, and the Chinese partners have taken advantage of this. And I think they're smart to do so.

The question, too, is at what point can they become competitive. In the China market, I think the question, both commercially and, frankly, militarily, is when do they have the capacity to manufacture, produce, or design technology that's good enough. And I think that's really the measure that we need to look at, that it's good enough technologically to compete. And so Legend became very quickly and surprisingly the leading PC firm in China and beyond because it had a Chinese brand name, frankly, which is obvious if you're a Chinese consumer, you prefer to buy a Chinese brand name. It had the first assembly capability, but further down the road they were able to develop their own components and equipment to put into the PCs. So they're growing their business from the bottom up and learning from the best in the world how to do so.

So I think it's been a very effective strategy, and they haven't had modest ambitions. They've had from the start ambitions to go global, not just to capture their own domestic market but to quickly become a global competitor as well. And I think that's what we're seeing. In fact, we see R&D investment going two ways. You see high-tech companies, Chinese companies investing in R&D here in the U.S. and elsewhere abroad, mostly just to have a presence, not to conduct R&D per se. But it's stage one of this dynamic.

So I take a different view on this, and having visited with some of the Chinese companies, I've asked them how they've advanced so quickly, and they show me the list of foreign companies that they're involved with in different ways and do so with great pride. And they have certifications from this and other companies. So, I think they've taken advantage of the draw of foreign investment in a very smart way.

Co-Chairman DREYER. Thank you.

Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you very much, and first I really wanted to thank all of our witnesses who have provided, I think, a very interesting and different perspective than what we often hear. So I think it's giving us the ability to think in some different ways about this.

I have three not exactly questions but sort of points or issues. I'm going to put them all out on the table at once, and you can choose which ones, any or all of them, you would like to comment on or share our thoughts on.

The first one is I think I'm a little confused in that some ways Ms. Walsh's study sounds to me as though it's essentially a sector of the Chinese economy, and in a lot of ways, what she says paints

a very different reality than what our two other witnesses talked about as what they see as trends in the development of corporations or industries in China. And I think that one of the reasons that's particularly important for us, of course, here in the U.S. is, as we seem to be losing our manufacturing base, we've been told all along, certainly politicians have been told all along that our U.S. competitive advantage is our intellectual property, it's our intellectual advantage, and high-tech is critical to that. So if anybody can elucidate some of the differences that they see that could be defining these contradictions.

The second one is a point that I think that investing in R&D for American companies going to China is not necessarily a free market choice. It is my understanding that there's been a practice in the past that deals have required tech transfer and R&D transfer, and just any thoughts that you might have on that. Is that still going on? I think as part of the WTO that was a practice that was supposed to stop.

And, third, I'm a little surprised that we haven't heard a little bit more about the challenges of corruption, which Chairwoman Dreyer mentioned, and also counterfeiting, the impact of all of those things on development of the corporations.

It's a lot, but you can pick your menu there.

Dr. STEINFELD. Maybe I'll just pick the first one very quickly. I think the Legend example that was just raised is a very good one, and let me try to square the circle a little bit between, I think, what we were both saying.

Legend is a successful company by many measures in China. It has very significant market share domestically in PC manufacturing. What's interesting about Legend—and it has many partnerships with overseas companies—is when Legend sells a computer, it's a Legend computer, but it's Intel inside and it's IBM inside and various other pieces inside.

And so the global lead companies are still, for the most part, occupying the high-value production. Where that production happens is an important issue, and it's in various places. But the ownership is over the high-value activities, and Legend is left assembling these high-value components and trying to make a business out of capturing tiny margins. I personally wouldn't want to be in the PC business because the margins are deathly.

The alternative for a company like Legend is to find some kind of niche, innovative strategy to market, as Dell has, but it's not easy to do that. And the Chinese, I think, are farther behind in that sort of soft side of the business than they are even in the technology. They have a long way to go before they're really competing—Legend, I would say, has a long way to go before it's competing on high-tech.

Ms. WALSH. Well, I'll take the latter two questions, the first of forced technology transfers. Certainly this was the case before China signed or acceded to the WTO, and you're correct certainly that China made commitments not to require local content technology transfer, R&D, and other issues. And Secretary Evans in his speech in Detroit remarked that there are at least, he's still hearing complaints from U.S. industry about these demands.

My own experience, talking with foreign investors, U.S. and others in China, in 1998 and then in 2002, is that this still goes on, but I think it's less—again, less of a factor than it was, at least. Now, that may not be great progress, but, again, I think the driver is more the foreign investors today than the demands from the Chinese, and this has important effects, as I suggested.

So it still goes on, certainly. It's not transparent. It's very hard to document. And it's something that we'll have to keep after. But, it doesn't really surprise me. But I think they'll probably get less for their efforts today than they perhaps have in the past.

As far as corruption, counterfeit, IPR, it's an ongoing battle. I think companies are more aware today of the challenges in the China market, particularly as they're moving towards high-tech R&D. These are important assets that they're using, and opening some of the windows onto their own innovative processes and management styles to Chinese and Indian and other overseas R&D centers. So I think they're being more careful. That would certainly make sense. But there certainly could be some concerns there as well.

And for the United States, you know, a lot of this technology and know-how, again in the information technology industry, comes back to the United States. If it's a wholly foreign-owned subsidiary in China, in the computer software area. For instance, the computer code is e-mailed back to the United States headquarters. Oftentimes these R&D centers in China and elsewhere are given only one piece of the R&D project, and so they don't always have the whole overview of the project or how to move a project from design to market, which is one of the reasons why you see growing numbers of Chinese entrepreneurs who have come back from the U.S. to China, and then they work for the R&D center, and they say, well, you're only showing me a piece of this, I can do more. They go off and work for themselves, despite the challenges this entails.

So it's a changing dynamic, and there's pros and cons to it, which are complicated and I think will—uncertain what the effect is, but I think, as I said, I'm less worried now with this activity than I was before where it was expanding and there was less corporate oversight over it. Now it's the opposite. It's contracting, consolidating, and there is much more corporate oversight on the activities going on because obviously if you're doing R&D of any sort in China, in a market like China, you need to take greater caution, and companies are starting to do that. But I think the government—perhaps the Commission could suggest this, that the more information we can provide industry on these issues, the better off they will be, and certainly that's something that's needed in my experience.

Dr. NOLAN. I think there's a general question for the whole world, which is—certainly for the sort of Anglo-Saxon world, which is the decline in interest amongst our young people in science and technology, and also the absolute decline in the numbers of people in terms of the world population. So I think there's a general issue which goes beyond our present discussion or the Sinification or Indianisation of global research and development, because the reality is that the proportion and absolute numbers of people from Indian and Chinese origin who are interested and capable of doing

science and technology is growing at a rate that far exceeds that of Anglo-Saxon people.

The question is whether that's done in Europe or in the United States or whether it's done in India or in China, and I think what's happening is that some of this activity is flowing back to where the people are and is substituting—it would be interesting to look at. I suspect that an awful lot of the people who have lost their jobs in those industries actually are Chinese and Indian origin. So that's a wider question of who is doing the science and technology across the world. It's quite a complicated question.

To come back to the R&D in China, I would entirely endorse what Ed has said about Legend, Intel inside, IBM inside, and the enormous challenge that faces. It's very, very far from being a globally competitive R&D company.

In the past, some of the companies that we've studied have been successful in moving part of the way up the technology ladder through pre-WTO activities. We studied, for example, Harbin Power Equipment Company, which was—there was a deal brokered by the Chinese government with what was then CE, Combustion Engineering. And as a condition for penetrating the Chinese market, CE—it was required. It's quite open. Everybody knows it. It's transfer of technology in order to move up several notches in the technology rung. But that, of course, was all—it was pre-WTO.

The point is that without such transfers mediated by, in that case, the central state, it is impossible to imagine that Harbin would have even made it up a few rungs of the ladder.

And if you look at the Three Gorges, the biggest project in China by far, 800 megawatts, 24 units, those are all—23 of the 24 are supplied in one way or another, whether it's imports or through global joint ventures, by global giants. So even though they come up the ladder, traditional Chinese firms, while they can compete now very well in small power stations, still find it very, very hard—I think about 60 to 70 percent of the market for 600 megawatts and above power stations in China, the highest technology are still taken by global companies either through imports or through manufacture in China.

I could say more, but I think that reasonably complements, I hope, what the—

Co-Chairman DREYER. Commissioner Bartholomew, did you find your question on corruption answered?

Commissioner BARTHOLOMEW. On corruption specifically, I don't think so. I think everybody did a wonderful job of answering all my other questions, but any thoughts or comments on the corruption issue and the impact that it's having?

Dr. NOLAN. I'd like to say something, a little bit about that, which is that the corruption issue is absolutely central for the Chinese government. Everybody knows it. They know it. Jiang Zemin knows it. Hu Jintao knows it. And they are fighting very, very, very hard indeed to cope with a tide, a surging tide of corruption. It's public, in all the newspapers, and it's a life-and-death struggle for them to try to ensure that their party maintains a direction, has a sense of where it's going, a sense of purpose, and it is in the midst of great difficulties.

One doesn't need to say more than that. For them, it's survival of system stability. And if you want to put it in sort of simple terms, my own view is it's logical to support regime improvement, if you like, in China rather than to think about changing the regime, because the alternative is awful, the chaotic outcome, which would be disastrous for the world.

And so I think any ways that people—that anybody outside China can facilitate improvement in the capabilities of the Chinese party to effectively rule this country is in the whole world's interests.

Co-Chairman DREYER. Commissioner Reinsch.

Commissioner REINSCH. Thank you.

First I want to commend the attention of Commissioners and the audience to Ms. Walsh's work, both this book and her preceding work, which I think has just been really groundbreaking on the question of Chinese technology policy. And I say that with some bias because at one point I paid for part of it, but it really is excellent, and I think it makes her one of the foremost people in the country in terms of her work on this subject.

I also want to thank you for your deemed export idea, Kate. I'm not sure that it's a good one, but at least you've got one, which is better than the rest of us. I'm inclined to think the major beneficiary would be researchers, which might make it helpful to you, but I'm not sure about anybody else. But we can have that discussion off-line.

I think the question I want to ask the panel is an attempt to bring to bear something that was said or a couple of things that were said previously. This panel and the previous panel seem to be suggesting that really what's going on in China is normal for developing country movement up the value-added chain, that we shouldn't be particularly surprised at this development. That doesn't mean we have to welcome it, but that it's not unusual except in one respect, and that seems to be, at least according to Professor Nolan and others, the rapid pace of movement, the rapid pace of change in comparison with other countries.

Mr. Roach in the previous panel made the same point about what the Chinese are doing, and then said that the classic American response to that sort of thing in other situations has been simply to stay ahead of the curve and innovate more quickly and stay ahead particularly of the technology curve as the rest of the people are gaining on us.

I guess my question for you all is—assume for the moment that that's an intelligent policy. How do we do that when the pace of change is as rapid as you've described it in the Chinese case?

Ms. WALSH. I will take a swing at that.

I think two ways. One, we need to reform the controls that we have in place. I think the export controls we have—and I am speaking on the commercial side—today, are really out of date and do not address the global dynamics that we have been talking about here, and in particular the R&D globalization factor. So I think we need to change the way that we—whether we even try to control technologies or beyond the most critical choke point technologies which I think would be a relatively small number of technologies, what do we do with the vast number of still sensitive

dual-use technologies that we would like to somehow keep a hold of.

Commissioner REINSCH. Yes, but if I can interrupt, that is how we hold them back. How do we run faster?

Ms. WALSH. That is one aspect of it, that I think we need to change the controls so as to fit better with our industry needs and government needs, and I would suggest that information is security in that sense. The other part of it is, is how do we maintain this technology gap? How do we run faster? It is not just a matter of running faster. It is how far, how fast and in what direction. If you have true global R&D, we should expect innovations and inventions appearing in China, India, Ireland, all over the place, and no longer what we have had the benefit of—high-tech innovation mostly in the United States. So how do we capture those new technologies, new ideas that are going to be appearing elsewhere in the world, and at the same time maintain our own gap, so we avoid technology surprise and keep ahead of the curve?

The only way, in my view, to do that is, as I said, sort of a visual battlefield, you know, an all-knowing picture of what is going on with global trade dynamics. To do that we need data, we need to track the trends, and we are not doing that now. We have periodic studies here and there, and we find later, oh, that is what has been happening. It is really too late at that point. So I would say it is a two-pronged strategy, and we need attention paid to both.

Commissioner REINSCH. Do either of the rest of you want to comment? No need if you do not want to.

Dr. STEINFELD. Very quickly. I would say that for me—and my expertise is nowhere near as great as Ms. Walsh's in technology, but I would say my impression is that knowledge is the key, and human capital is really the key, and that what has kept the United States at the forefront, and I hope what will continue to keep us in the forefront, is that we have the world's most talented people emigrating to this country, and to the extent that we can keep that flow coming, primarily by staying at the top of tertiary education, postgraduate education in the world, which all due respect to my colleague from Cambridge, England, I think that will be a key component of keeping our cutting edge status in the world.

Moreover, maintaining the sort of entrepreneurial environment that we have means that when these individuals come and occasionally go back, be it to India or China, I think usually they keep one and a half feet in the United States. Their spouses, their children, they view themselves Americans. To the extent that continues, I am relatively confident we will stay considerably far ahead of the curve.

Commissioner REINSCH. Good answer. Although I would comment that this Administration, in the name of security, is in the process of not letting any of those people in, which may—we may put a crimp in the policy.

My time is up. Professor Nolan, did you want to make a comment or not?

Dr. NOLAN. I would like to have done, but if the——

Commissioner REINSCH. No, go ahead. I will——

Dr. NOLAN. You will take the time.

Commissioner REINSCH. That is all right. I will just refrain from asking my next question. Go ahead.

Dr. NOLAN. You made a very important general statement, observation, which is that it is normal to move up the value-added chain. I just want to emphasize that there is not very much movement up the value-added chain for indigenous Chinese-owned firms if you look at the example of aerospace, which is absolutely critical, which is an appendix to my paper, you will see very, very little movement up the value chain. Painful, painful slow progress for reasons that Ed and I have both investigated and talked about in our studies.

In the case of Japan, when Japan moved very rapidly and normally up the value chain, as you put it, it was Japanese firms. It was Matsushita and Toyota and Sony and so on. This is abnormal. It is a normal movement but in a very abnormal and new way, that I emphasize is very challenging for all of us, because Chinese firms, indigenous and certainly large Chinese corporations have had very little participation in this process.

For many Chinese firms, the problem is that they are losing their people too. So if you look, for example, at the aerospace industry, they are hemorrhaging good scientists and technologists into western corporations, Intel, NEC, Samsung, if you can include Japanese and East Asian as western, such global firms. And for them that is a problem.

In terms of what we do, how we run faster, something that has—I am not an expert, but it vexes me to think about what finally determines where the location of the best R&D activities takes place, and while the price is important, I think the environment is extremely critical and that is a wider environment, a physical environment, and an interesting place to be intellectually. And I am not an expert in that, but I know the people who do study that question say the initial answer is it stays in California because it is a nice place to be, or in Cambridge with Cambridge Science Park.

But I think the reality is that many places in China, despite the ghastly environment of the physical environment and pollution that is going on around it, are building some very nice environments in an intellectual sense, interesting, good places for families to live, very stimulating places to live, and building a community, which is where companies like NEC, Samsung, Intel and Motorola are going, and I think we need—as an inexpert, if I may say so—more attention to the question of the wider environment surrounding these activities across the world.

Commissioner REINSCH. That is very interesting. That opens a whole new chapter which we do not have time to go into. So thank you, Madam Chairman.

Co-Chairman DREYER. I will say parenthetically, Dr. Steinfeld, to your comment about American universities maintaining their technological superiority, I do not know about your university, but as I look at who wins the Rhodes scholarships and the Phi Beta Kappa's in my university, they are not native-born Americans.

Commissioner Robinson.

Chairman ROBINSON. Thank you.

Dr. Nolan, I was particularly intrigued by your description of I think what you termed China's systemic fragilities, and you ticked off several in your opening statements. I was wondering if you might elaborate on the financial dimension a little more, as well as provide your big-picture judgment on whether or not China's fundamental stability and cohesion may be at risk in the period ahead. As I, for better or worse, have the privilege of being the last questioner, I would certainly be interested—

Co-Chairman DREYER. You are now the next to the last.

Chairman ROBINSON. Oh, okay, there we are. But I would be interested if I could also have the thoughts of the other panelists on that broad question, because we have heard all day about China's inordinate share of foreign direct investment and the numerous other competitive advantages that China is enjoying and the fact that it is moving ahead at an extremely robust pace in a number of areas, seemingly at the expense of regional economies, as well as our own.

That said, obviously, there are still some very serious systemic bottlenecks and challenges ahead for China, and I was just curious as to how you all view this situation.

Dr. NOLAN. I think everybody knows the financial system is in a very, very difficult state. The problem of non-performing loans has been much analyzed, and the degree to which they threaten the Chinese system one can debate, but it is certainly a very, very deep problem.

Behind that lies not just the question of bad management and bad judgment but also deep systemic problems in the sense that when we talk about industrial policy, a policy loan is industrial policy in WTO terms. If a government says, please, you must lend some money to this entity that is contrary to the spirit of WTO. However, the question is to whom and to what? What entity are you lending it? One of the main reasons that Chinese entities are lending money is because their firms are so challenged. The SOEs have tremendous difficulties as they are often lending to firms that are being deeply challenged by the threat of operating on an increasingly global level playing field.

So there is a Catch 22. They are having to not just trying to help new firms to rise up, but also old firms to survive in the interest of social stability, which is a very, very deep challenge for them.

On the other hand, when we talk about the global business revolution, there has been a dramatic revolution in global financial institutions, in global financial firms, at JP Morgan Chase, Citigroup and so on really—everybody likes to talk in economics, but not me, about mergers and acquisitions failing. But what I am struck about is how often mergers and acquisitions succeed in the sense the firms survive and prosper in the long term, and Citigroup and JP Morgan Chase are pretty obvious exemplars of that. I think the Chinese are really stuck in a very difficult situation because they have to improve corporate governance in their firms. It is a very, very difficult task to do so, and of course, JP Morgan Chase and Citigroup would be very pleased to do this for them.

Of course that then presents a huge increased challenge for their own financial firms, and I think the financial system is at the core of everything, and it is in a very parlous state.

Chairman ROBINSON. Any thoughts on the big picture as to how much risk China faces in this period ahead in terms of stability?

Dr. STEINFELD. I would just add that I think it is common among academics who study China that for many people inside China. For maybe the last 15 years we have felt that there is urgency in handling some of these issues, and amazingly China has been able to avert crisis or collapse, but I must say the financial system, as Professor Nolan said, really is in a powerless state.

And I would add that it is not just a matter of government induced policy lending by banks to firms, but it is also an example of the sort of absence of control and absence of the sort of public goods of governance. It relates to Commissioner Bartholomew's question about corruption.

What that means is that often banks are utterly unregulated and pour money into closely connected firms, be they state owned or private. We see recently I think a great deal of real estate lending. What this is indicative of is not just old style command planning or industrial policy, but new style markets gone awry or markets poorly governed, and that is a major challenge for the Chinese government.

I would add though, I study the financial sector, but do not find it the most troubling issue for China. Rather I think the demographics are the most troubling issue. China is undergoing a massive industrial revolution and a massive shift from agriculture to industry. That is good, it provides growth. But it also means that millions upon millions of workers from the countryside are being pulled out of their own sort of social fabric and put into cities or are moving to cities where they have no safety net. That obviously creates tremendous tensions. The only organization around to maintain order in a sense is the party. It always amazes me, no matter how many times it happens when I visit a large private firm in China, to be greeted by the Party Secretary. That is a strange circumstance. But that these social pressures are there without any substantial safety net, or even any substantial social organization, governmental organization to handle them is breathtaking, breathtaking for me as an outsider, and it has to be breathtaking for those trying to govern this country.

Ms. WALSH. I would only add—and I am not an expert at all on China's financial structure—but I do get the sense also that it is rather fragile, in having spoken to foreign investors in China and also Chinese business managers as well. But at the same time I think it has its own strengths. The mother of invention is necessity, and I think the Chinese have found ways to get around the problems. So on a central level I think there is some concern that foreign direct investment, for instance, will not continue. It is generally, essentially, the bubble cannot continue at this level forever.

So what does China do then is I think the concern. And then at the same time how do you have Chinese entrepreneurs at all? Where do they get the capital from? There is no venture capital in China for instance, but there are still entrepreneurs and they have managed to get the capital that they need to set up a business. These are the exceptions, but still it is possible within the Chinese system.

I think measuring against Western standards is useful, but you have to go beyond that and look at it in the context of the Chinese market to understand how fragile or strong China's financial structure may be, and I do not know where that lays but I see evidence of both.

Chairman ROBINSON. Thank you very much.

Co-Chairman DREYER. Vice Chairman D'Amato.

Vice Chairman D'AMATO. Thank you, Madam Chairman.

I want to follow up a thought on Chinese entrepreneurial capacity. My question deals with the Chinese fixation on importing western technology by hook or by crook, both ways they have extensive programs, in getting western firms in and stealing technology if necessary. The effect of that, coupled with the effect of the pervasiveness of corruption and the presence of an often suffocating party elite in terms of its control of the system, I wonder whether or not they are damaging their own entrepreneurial capacities. They are never going to be able to import enough to keep up because by definition they will always going to be somewhat behind the West.

Do you have the sense that one of the so-called system fragilities is the question of sacrificing their own entrepreneurial capacities as a result of all of this that they are killing themselves and their ability to compete in the long run because of all these things. Is that a fair question?

Dr. NOLAN. Good point. That is really a nice point. I think this is very important. I think they have devoted so much attention, I mean had such positive short term gains from this massive increment of FDI, and there are huge gains, no question at all, but also tremendous tensions. I think exactly as you say one of the questions is precisely the impact it has had on entrepreneurial in an R&D sense, technological innovation sense. People are hemorrhaging out of universities into Intel, Motorola, NEC and Samsung, leaving their own corporations behind.

I think the ability to transfer—obviously in every economy pieces of technology are stolen. I do not want to comment on whether this is a large or a small amount. It is not my job, but every economy has that question. I think the key question is in order to use technology, well, you have to have an effective company with high managerial and technical abilities to make use of it in an effective way.

I think the former Soviet Union illustrated that very well. The former Soviet Union had tremendous science and technology, but no integration with daily life, and so the import, as we know, McDonnell Douglas, MD planes and so on, their ability to go forward beyond that and then turn them into real productive goods that people wanted to buy was a very different matter. I think your point is a very real one, a very interesting one, and well worth reflecting on and researching.

Dr. STEINFELD. I would agree. I would second those comments. I would also say that it is striking how entrepreneurial many Chinese citizens are. It is again breathtaking how entrepreneurial. But the question is in what directions is that entrepreneurial energy sort of focused? What are the incentives?

My feeling now, again, visiting many enterprises across numerous sectors, is that entrepreneurial businessmen realize the incen-

tives are not high to sort of directing their energy toward innovation and high-tech development. Rather, the entrepreneurial sort of business energy is directed toward managing very complex portfolios of utterly unrelated narrow margined businesses, which is impressive, and one can make a certain amount of money doing that, but it is not the kind of activity that leads to major upgrading, frankly.

I must also say that a great deal of entrepreneurial effort is directed toward negotiating a cumbersome bureaucratic system and a poorly institutionalized one, and that gets back to the corruption issue. There is great entrepreneurship in figuring out how to direct the payments appropriately.

Vice Chairman D'AMATO. Ms. Walsh.

Ms. WALSH. That is a really difficult question and I am not sure I have an answer to it. But when you were speaking I was thinking of a similar, I think argument, which is China will develop a concern for intellectual property rights once they have intellectual property to control. I mean it is akin to will you have entrepreneurs if the environment does not support it?

I do not buy that argument—that China will, only when it has intellectual property, become concerned about intellectual property rights, and that that will sort of solve itself, or on the other hand, sort of the flip side of that, that if it does not happen, then you will not have intellectual property.

What we have witnessed lately is companies in China, who to some extent know that their technology and know-how will be leaked, stolen, whatever to some extent, and that is a cost in many cases that companies are willing to incur to some extent. The practical reality in China is that, at least in the past, you have not been able to do much about it.

I was at a conference recently hearing a lawyer speak about this issue and a practical application of Chinese law on counterfeit and other concerns, piracy and so forth, and apparently most often the result is, even if you take a Chinese competitor or firm or individual to court in China, the result is often an apology, which in the west does not mean that much, although in the Chinese context it is enormous in a certain way.

So there is no redress, and so is the answer not to bother because you are not going to get the result that you like? Well, I would say no, even though the results may not be what you would wish for, and I think this ties into what we were talking about today, some of the challenges of China's WTO commitments. It is important to keep after it even though the results are not what we had hoped for, because now these same companies, partners that some U.S. firms in China have been dealing with, they are now seeing that their former partners or competitors are exporting goods offshore.

Qualcomm is the best example, for instance. They claim that Datong's telecom technology is based upon Qualcomm CDMA technology. If you wait until—and this is what I was told by a number of foreign investors in China, that they draw the line at the point when Chinese firms started to export goods that were based on U.S. technologies. So they draw the line because then it is really very threatening to the U.S. companies' and industries' concerns. Well, it is too late, I would argue.

So on the one hand I do not think that you will not have entrepreneurs just because the market is not very welcoming. I think again they will find ways, and have found ways to go around that, in very creative entrepreneurial ways. At the same time I think we have to address the IPR problems that we see now at an early stage even if the result is not what we would like because it will have an effect over time.

If we ignore it—and I think we have done that because it has not made practical sense—I think it just builds the problem into the future to the point where it becomes a political problem that could undermine relations and turn again a win-win into a lose-lose situation.

I hope that answers your question.

Vice Chairman D'AMATO. Thank you.

Co-Chairman DREYER. I would like to thank all of our witnesses for their very wise comments and thoughtful comments, and your testimony and submissions will be on our website, and we hope very much that we can call on your expertise as we write our report. This has been very valuable for us.

I would like to adjourn this panel, and we should take a 5-minute break and reconvene for the fourth and last panel of the day.

Again, thank you very much.

[Recess.]

PANEL III: U.S. ECONOMIC IMPACT

Co-Chairman DREYER. Let me begin this afternoon's panel, and our panelists will be Paul Craig Roberts, Chairman of the Institute of Political Economy and former Assistant Secretary of the Treasury, who will, I understand, go first because he has an earlier plane than anybody else to catch; and Frank Vargo of the International Association of Manufacturers; Thea Lee of the AFL-CIO, and last but scarcely least, Willard Workman of the U.S. Chamber of Commerce. May I say you have a last name more appropriate to the AFL-CIO, but that is life.

Mr. WORKMAN. I have a cousin in the AFL-CIO.

Co-Chairman DREYER. I see.

Co-Chairman Mulloy would like to say a word.

Co-Chairman MULLOY. I just wanted to thank Paul Craig Roberts for making this special effort to come up here after we talked, and I appreciate that very much, and your service to our country in many capacities, both on the Hill and in the Administration of President Reagan.

Frank, I also want to thank you. Frank, as you might know, I was a political appointee in the Commerce Department in the past Administration, and Frank, who served over 30 years in the Commerce Department, wrestling with these issues, was an invaluable help to me over there. So I wanted to thank you again.

Mr. VARGO. Pat, you were a great boss.

Co-Chairman MULLOY. Thank you.

Co-Chairman DREYER. Without further ado, you remember the ground rules? You get 7 minutes, a light goes on after 5, and then the Commissioners themselves have 5-minute questions, but that includes your answers.

Mr. Roberts.

**STATEMENT OF PAUL CRAIG ROBERTS, Ph.D., CHAIRMAN
INSTITUTE FOR POLITICAL ECONOMY, AND FORMER
ASSISTANT SECRETARY OF THE TREASURY FOR ECONOMIC POLICY**

Dr. ROBERTS. Thank you. Members of the Commission, I have been here all day, and I have listened to all of the testimony and the Q&A with you, and what I have come to do is offer you a totally different view of the problem or the situation.

You will not hear from me that the problem is the U.S. budget deficit and the zero saving rate or the Chinese exchange rate or currency manipulation or their industrial policy. What we are witnessing is simply the normal result of economic incentive. There are two new developments, and these are new developments, that have made it possible to substitute inexpensive Asian labor for expensive American labor in American production functions. What we are witnessing I propose is the substitution of U.S. labor out of U.S. production functions in a wide range of tradeable goods and services. It pays to do that.

What are these two new developments? One is the collapse of world socialism, and the other is the rise of the Internet. Now, what does the collapse of world socialism mean? It means that for the first time the mobility of western capital and technology or American capital and technology is no longer confined to the first world. It can leave North America, Europe and Japan.

What does it mean when American capital and technology leaves? It means all of a sudden Asian labor, if you are talking about manufacturing, Asian labor, which I am told can be purchased at 25 cents an hour, can be substituted for American labor, which is \$25 an hour. So you are talking about a hundred-fold difference in wage rates. So the mobility of these factors of production means they flow into countries with vast excess supplies of labor. You see, the United States, in the first world, labor tends to be paid the value of its marginal product. That is it tends to be paid the value that its productivity contributes to the firm's revenues, but that is only because it is relatively full employment.

In China the overhang on the labor market is about the size of the United States' population. And these huge excess supplies of labor, which is highly productive labor because it is working with modern capital, modern technology, can be had at a very low price. This is a new development. American labor was long protected against what was called cheap foreign labor because American labor worked with better technology, more capital, and better education. These things are no longer true.

Let's then go to the second factor, the Internet. The Internet has created a new form of labor mobility. It is now possible for knowledge jobs to be performed from most any location—we now have people checking into offices in Chicago and New York and LA and they live in China or India. We have hospitals that do not hire radiologists. They send the CAT scans to India to be read. The Internet has made it possible to substitute highly paid knowledge jobs out of our production functions and bring in inexpensive foreign labor. This threatens a wide range of jobs, engineering, design, accounting, stock analysts. You read about this in the paper all the time.

So if what we then are really confronted with is the ability of multinational firms to substitute expensive labor out of their production functions, you can see why it is not something that can be handled with exchange rate revaluations.

We hear a lot about free trade, fair trade, getting the level playing ground, that sort of thing. But does the free trade model apply? Does the mobility of factors of production essentially negate the basis on which you can have a comparative advantage? Ricardo, who developed the whole idea of free trade, showed why every country could gain even though they had no absolute advantage. But for this to work, resources had to be mobile within a country but not internationally. Ricardo said if factors of production are internationally mobile they will flow out of the country to the countries that have the greatest absolute advantage.

Where is the productivity of capital and technology the highest? It is where labor is most abundant, and this is why you see the flow of capital and technology to China. Where is the productivity of labor the highest? It is where capital is the most abundant, and this is why you see the flow of Asian labor through the Internet to the U.S. Both ways American labor is caught because if you can hire an engineer in India for \$6,000 you do not need to pay him 60.

Now, to wind up. The jobless recovery or the job loss recovery may be a myth. It may be a lot of jobs are being created. They are just not in the United States.

And this is a serious possibility. Then remember too, that things bite back. A revaluation of the Chinese currency, if it actually worked, would mean higher prices in Wal-Mart, and at a time when people's disposable incomes are not growing. If you had a nice rise in the prices of all the imported goods on which we are now dependent, you would see a big hit on U.S. disposable income, on real disposable income. Sometimes the solutions bite back and do about as much harm as the problem.

Remember, the panel that spoke this morning, both Mr. Roach and Mr. Hale brought to our attention that about 55 percent of China's exports to the United States actually come from foreign companies that are located in China, and it is basically offshore production for the American markets. So that supports my view that what you basically see happening is the flow of factors of production to where their productivity is highest. That means capital and technology go to China or India, and it means Asian labor comes here by the Internet.

So this is a much different problem and a much bigger one than we have been dealing with today. The way you deal with this I think is quite more challenging.

Thank you very much.

[The statement follows:]

**Prepared Statement of Paul Craig Roberts, Ph.D.
Chairman, Institute for Political Economy, and
former Assistant Secretary of the Treasury for Economic Policy**

Members of the Commission, I appear before you as an independent witness, representing no interest group. I was Assistant Secretary of the Treasury for Economic Policy during President Reagan's first term. I have worked on the Hill for Jack Kemp (I wrote the Kemp-Roth bill), for the House Budget Committee and for Orrin

Hatch and the Joint Economic Committee. I have held a number of academic posts. I was an editor and columnist for the *Wall Street Journal* and for 16 years a columnist for *Business Week*. Currently, I am Chairman of the Institute for Political Economy, a Senior Research Fellow in the Hoover Institution at Stanford, and a syndicated columnist.

I offer a different perspective on the “job loss recovery.” If my view is correct, we face a new problem that cannot be handled with exchange rate adjustments, retraining programs, employee protections, tax cuts, low interest rates, tort reform, and de-regulation. If I am correct, the job losses that we are experiencing are not the result of the normal workings of free trade through which resources are reallocated from uses where they are noncompetitive to uses where they have comparative advantage.

I suggest for your consideration that comparative advantage, which permits free trade to create gains for trading partners, has been undermined by the international mobility of factors of production. Instead of sectorial adjustments from changes in competitive conditions, we might be experiencing the flight of factors of production to countries where their productivity is highest. Let me explain. The case for free trade is a strong one with which I agree. David Ricardo discovered the principle of comparative advantage and based the case for free trade on this principle. He showed that if countries avoided self-sufficiency, instead specializing in economic activities where they had the greatest advantage or least disadvantage and trading for other goods, the gains from trade would make each country better off than if countries remained self-sufficient.

For comparative advantage to work, resources within each country must be mobile so they can be reallocated to areas of comparative advantage. However, factors of production must not be internationally mobile; otherwise, they will flow to those countries that possess the greatest absolute advantages. The productivity of factors of production is greatest in countries with absolute advantage.

Historically, there have been barriers to the international mobility of factors of production. In Ricardo’s time, GDP was largely determined by climate and geography, neither of which can migrate. In our own time, world socialism served to constrain capital and technology within the first world of North America, Western Europe and Japan where there are not large differences in labor costs. Multinational corporations would have felt unsafe investing in China and India even if they had been permitted by those governments to do so.

The collapse of world socialism has made vast pools of cheap and willing labor in Asia and Mexico available to U.S. capital and technology. The Internet has made the physical location of employees unimportant for many knowledge and Information Technology jobs. The Internet, outsourcing, and offshore production for the home market allow U.S. firms to substitute cheap foreign labor for expensive U.S. labor in their production functions.

The questions I pose are these:

- Are the job losses that we are experiencing the result of internationally mobile factors of production flowing to where their productivity is highest?
- Does the ease with which foreign labor can be substituted for U.S. labor in the production functions of U.S. firms make foreign labor internationally mobile to the U.S. where its productivity is highest?
- Alternatively, does the international mobility of U.S. capital and technology allow these factors of production to be put to more profitable use in countries with abundant and cheap labor?

Traditionally, American wages were protected by American productivity. Americans worked with more capital, higher technology and better education, which made them much more productive than cheaper foreign labor. An American’s pay was higher because his output was higher.

The mobility of capital and technology means an Asian can work with the same capital and technology as the American. However, the Asian does not have to be paid the same wage. He lives in countries with lower costs and standards of living. The large excess supply of labor in Asian markets means that the market wage is far lower than the value of labor’s marginal product or contribution to the firm’s revenues. It will be many years before Asian labor markets tighten to the extent that workers will be paid in keeping with their productivity.

In the meantime, will the U.S. continue to bleed jobs, both manufacturing and knowledge jobs that don’t require an on-the-scene presence?

Understand that the incentive to substitute foreign for American labor is greatest among high productivity jobs. The hundred-fold difference between 26 dollar an hour U.S. manufacturing wages and 25 cents an hour Chinese wages is a great in-

centive to offshore production. Hospitals that have their CT scans read in India for \$20 don't have to hire \$300,000 a year radiologists.

Understand that when Americans are substituted out of high productivity jobs, by default they move into lower productivity jobs. National income is adversely affected. The U.S. cannot lose its high productivity jobs and remain in the first world.

Understand that foreign hires, outsourcing and offshore production for U.S. markets add to our trade deficit and are paid for by Americans giving up ownership of assets and the future income streams produced by these assets.

What to do?

A revaluation of the Chinese currency would reduce the gains from substituting Chinese labor for American, but the current differences in pay scales are probably beyond correction by revaluation. Moreover, revaluation makes Americans poorer. All those cheap goods in Wal-Mart would go up in price. This would simultaneously set off U.S. inflation alarms and reduce American real incomes.

Capital and technology controls and protective tariffs bring their own inefficiencies.

The solution, to the extent that there is one, comes from Sir James Goldsmith: One free trade zone for the first world, one for the second world, one for the third world. When countries move from one world to another, they depart one zone and enter another. Foreign investment could continue, only U.S. investments in China would be for that market, not for displacing U.S. production in the home market.

This would deal with manufacturing. But what about knowledge workers hired over the Internet who work in their home countries for U.S. offices? One solution is an employment tax on foreign hires. Multinational or transnational corporations could evade this tax by assigning foreign hires to foreign payrolls. More costly regulation would be required to attempt to determine which entity is the recipient of the employee's work.

What we are witnessing in part is the loss of a sense of national identity. Many things have brought about this loss of identity. Open borders, massive immigration of third-world peoples, attacks on American identity by cultural Marxists and post-modernists. Many things are eroding a sense of cohesiveness. A tower of Babel is not a country.

Our approach to the world is based on the assumption that we are experiencing free trade. If, instead, we are experiencing the flow of factors of production to absolute advantage, our entire trade policy will need to be revised.

As the solution is draconian, it is important to be certain that we are experiencing the substitution of American labor out of American production functions, and not merely lagging employment after a recession or layoffs due to productivity increases.

Time will tell. If the economy continues to shed jobs while it grows, either in absolute terms or relative to the established growth-employment relationship, the case for my view strengthens.

In the meantime, it would be helpful to track the kinds of jobs that are lost and the kinds that are gained. If we are losing manufacturing and knowledge jobs and gaining retail and government jobs, the ladders of upward mobility are collapsing along with the growth of income.

Co-Chairman DREYER. Thank you, Mr. Roberts.
Mr. Vargo.

**STATEMENT OF FRANKLIN J. VARGO
VICE PRESIDENT, INTERNATIONAL ECONOMIC AFFAIRS
NATIONAL ASSOCIATION OF MANUFACTURERS;
ON BEHALF OF THE NATIONAL ASSOCIATION OF MANUFACTURERS**

Mr. VARGO. Thank you very much. And thank you for giving the National Association of Manufacturers the opportunity to testify on a subject, which is of such great importance.

I can tell you we hear more from our members about China than we do about all other trade subjects put together. It is of immense importance to manufacturers because China has both a large, rapidly growing market for U.S. products and services, and a very fierce competitor in the U.S. and global marketplace.

Now, China's accession to the World Trade Organization was a very important positive development because it represented the first time that China had to be subject to the international trade

rules that we and others follow. As China concludes its second year in the WTO, we have to say its compliance record is quite mixed. The NAM submitted a report to USTR on this, and I brought a copy, which I would like to have submitted for the record.

Our top concern though is China's currency manipulation. In our view China's undervalued currency is the single most important factor driving the growing trade imbalance between the United States and China. There have been estimates that China's currency could be undervalued by as much as 40 percent. As of July, China was sitting on more than \$350 billion of foreign exchange reserves. It is building them up at the rate of about \$3 billion a week in order to be able to maintain its peg, and to us this is a clear indication of currency manipulation and undervaluation.

As the NAM has publicly stated, we have decided to support the Coalition for Sound Dollars Initiative to move forward with a 301 case on this unjustifiable distortion of our trade.

I would like to comment for a moment on what Mr. Roberts was just talking about because that has worried me as well. I hear that, well, gee, China is different because it has the same production function we have. It has got the best equipment and the cheapest labor. When I thought about that and looked up the Census Bureau statistics, I said, "Hmm, you know, with U.S. production function, the average U.S. labor content of production labor and benefits is 11 percent of the cost of the product." So if they are using our production function, even if their labor were free, if capital costs and everything else were the same, China would have an 11 percent price advantage over U.S. products, and we hear of Chinese products coming in at 70 percent less than the U.S. product, et cetera.

So I have to take issue with this. If they were using our production function, we would not have that much of a problem.

Now, China's advantage is still in the fact it is using a different production function. It is using labor intensive—you see that because the industries that are being impacted the most, furniture and tool and die and foundries, these are all more labor intensive. So I wish they would move to our production function. Our problem would pretty much disappear.

Let me state at the outset though, the competition with China cannot be viewed from the broader competitive problems facing U.S. manufacturers, most particularly the fact that because of international circumstances and the overvalued dollar globally, that we have no pricing power. Our prices have fallen on average 6 percent since 1994, but prices in the rest of the economy have gone up 18 percent, and we have to pay those prices for health care, regulation and other factors, and this is putting a tremendous squeeze on manufacturing and that is a major factor leading companies to look at whether they ought to move offshore.

Now, we have lost over 2.7 million jobs in manufacturing. This whole recession is a manufacturing recession. Now, why should we care? Some people say—a lot of people say, who cares about manufacturing? It is 16 percent of the U.S. economy. We don't need it. This is a post-manufacturing services economy. Not so.

The fact of the matter is, if manufacturing collapsed or was seriously impaired in the United States, this would take down our en-

tire economy, our national security, and our role in the world. Why is that? Because manufacturing is the innovation industry. That is where all the innovation comes from.

People say, well, look at agriculture. It is three percent of the U.S. workforce. It feeds the United States and can feed half of the rest of the world. Why? The answer to that is because of the combines and tractors and fertilizers and seeds and geosatellites and everything else that allow agriculture to be that productive, and the same is true with services.

But the most fundamental reason is that manufacturing is how we pay our way in the world. It is 80 percent of all the merchandise exports. It is two-thirds of all of our exports of goods and services. This year, America's farmers will export a little over \$50 billion. America's manufacturers export almost that much every month. There is no combination of farm goods and services that could make up for that.

Were we to lose competence in manufacturing, we would see a collapse in the dollar, and I'm not talking about bringing it back to where it belongs because it's still about 16 percent overvalued from where it was in '97 and it's still three percent overvalued—more expensive today than the day that Secretary Rubin took office. It was too expensive then. It's too expensive now.

We're very pleased with the growing level of awareness on the part of the Congress and the Administration about manufacturing. The NAM is proposing a five-step initiative, which is described in my testimony, which is basically leveling the international playing field, reducing production costs in the United States, promoting innovation, ensuring an adequate supply of skilled workers for the future—a real problem, and improving the policy infrastructure.

Now, the leveling the playing field, an important aspect of that is China. China is not our only trade problem, and actually through last year, from '97 to 2002, the biggest increase in our trade deficit was not with China, it was with the European Union and that's because of the dollar again.

However, China is a rapidly growing problem. The last page of my testimony contains a matrix showing that if we follow the trends of the last 20 years, within five more years, our trade deficit with China will triple to over \$330 billion. This country will not take that. The situation will get out of hand. It is still manageable, and we propose that the Congress and the Administration manage it.

Now, some people say, well, imports from China are only three percent of consumption of manufacturers in the United States, and that's true. However, in 2000, it was only two percent. That one percent increase in import penetration is very significant.

Since manufacturing started to go down in 2000, the consumption of manufactured goods in the U.S. has fallen six percent. Imports from the rest of the world, other than China, have fallen six percent. Imports from China are up 38 percent since that time. And that one percent increase in the penetration of the U.S. market is worth about \$43 billion. That \$43 billion is 53 percent of our entire loss of manufacturing production, so it's a very significant figure.

China is also very important as an export market, and we need to really push that.

We can get into a discussion of investment. I have to say, from Commerce's figures, there's no visible big movement of investment yet into China, but the figures are always a couple of years old. Things could have changed dramatically.

We seek a very positive agenda with China. We want to reject any protectionism. We seek full WTO compliance. We seek end of currency undervaluation. We seek an end to subsidization and non-market production. We seek addressing counterfeiting and a great expansion of export promotion. This is the time to build up our exports to China, as well as get a currency that reasonably reflects economic reality so that trade flows can begin to reflect the true relationship between the countries.

Thank you very much.

[The statement follows:]

**Prepared Statement of Franklin J. Vargo, Vice President
International Economic Affairs, National Association of Manufacturers;
On Behalf of the National Association of Manufacturers**

Mr. Chairman and Members of the Commission: I am pleased to testify today on behalf of the National Association of Manufacturers (the NAM), and I want to compliment the Commission for holding this important hearing.

The NAM represents 14,000 U.S. manufacturing companies, including 10,000 small- and medium-sized firms. No other trade subject comes close to commanding the attention that China is getting from both large and small NAM members. China poses a unique set of challenges for U.S. manufacturers. While competition from Chinese imports and fear that U.S. manufacturers will move production to China dominate the concerns of many companies, others see China as their only growth market and want to ensure that the trade relationship does not deteriorate.

Competition with China cannot be viewed separately from the broader competitive problems facing U.S. manufacturers—importantly including the factors that are making it more expensive to produce in America at the same time that cost increases cannot be passed on in the form of price increases. Illustrating the problem, since 1994 prices in the rest of the economy have risen 18 percent, but prices of manufactured goods as a whole have fallen steadily and now stand nearly 6 percent below their 1994 level. Cost pressures, though, have continued, including those from tax and regulatory policy, excessive litigation, increasing health care costs and energy prices. Something had to give, and that has included a lot of manufacturing jobs.

Over 2.7 million American factory jobs have been lost over the past three years in a roughly one in every six jobs. That is an astonishing figure, unprecedented in such a period of time. The losses are continuing, and manufacturing lost 44,000 additional jobs last month alone.

The current economic slowdown is essentially a manufacturing recession—a deep one. The rest of the economy, while not growing at its usual rate, has not felt the same pain as manufacturing. Manufacturing represents 14 percent of the American workforce, but has accounted for nearly 90 percent of all the job losses since total U.S. employment peaked in March 2001. No wonder 75 percent of manufacturers in a recent NAM survey said that manufacturing is in crisis.

Despite recent promising signs that the manufacturing sector is recovering from its three-year long recession, U.S. manufacturers continue to struggle in the face of weak demand and the most intense global competition in history. As stated earlier, the cost of manufacturing in the United States is rising steadily. At the same time, global competition prevents manufacturers from raising prices to offset these costs. Notwithstanding significant increases in productivity, many manufacturers have found no alternative but to cut back production, relocate plants abroad or stop producing altogether.

Before going further, let me address the question of whether manufacturing matters to the United States. It is not uncommon for me to encounter individuals who say that since manufacturing only represents about 16 percent of the nation's output, who cares? Isn't the United States a post-manufacturing services economy? Who needs manufacturing?

The answer in brief is that the United States economy would collapse without manufacturing, as would our national security and our role in the world. That is because manufacturing is really the foundation of our economy, both in terms of innovation and production and in terms of supporting the rest of the economy. For example, many individuals point out that only about 3 percent of the U.S. workforce is on the farm, but they manage to feed the nation and export to the rest of the world. But how did this agricultural productivity come to be? It is because of the tractors and combines and satellite systems and fertilizers and advanced seeds, etc. that came from the genius and productivity of the manufacturing sector.

Similarly, in services—can you envision an airline without airplanes? Fast food outlets without griddles and freezers? Insurance companies or banks without computers? Certainly not. The manufacturing industry is truly the innovation industry, without which the rest of the economy could not prosper. Manufacturing performs over 60 percent of the nation's research and development. Additionally, it also underlies the technological and mechanical ability of the United States to maintain its national security and global political leadership.

Manufacturing, moreover, makes a disproportionately large contribution to productivity, more than twice the rate of the overall economy, and pays wages that are about 20 percent higher than in other sectors. But the most fundamental importance of manufacturing lies in the fact that a healthy manufacturing sector truly underlies the entire U.S. standard of living—because it is the principal way by which the United States pays its way in the world.

Manufacturing accounts for over 80 percent of all U.S. exports of goods. America's farmers will export somewhat over \$50 billion this year, but America's manufacturers export almost that much *every month!* Even when services are included, manufacturing accounts for two-thirds of all U.S. exports of goods and services. If the U.S. manufacturing sector were to evaporate or become seriously impaired, what combination of farm products together with architectural, travel, insurance, engineering and other services could make up for the missing two-thirds of our exports represented by manufactures?

The answer is "none." What would happen instead is the dollar would collapse, falling precipitously—not to the reasonable level of 1997, but far below it—and with this collapse would come high U.S. inflation, a wrenching economic downturn and a collapse in the U.S. standard of living and the U.S. leadership role in the world. And that, most basically, is why the United States cannot become a "nation of shopkeepers."

But manufacturing is definitely at risk because for too many years it has been taken for granted, and burdens and costs have been imposed on manufacturing that are now being reflected in falling unemployment and growing outsourcing. The evidence has been building for some time. A recent study commissioned by the NAM's Council of Manufacturing Associations, *Securing America's Future: The Case for a Strong Manufacturing Base*, prepared by noted economist and former Council of Economic Advisors member Dr. Joel Popkin, documents the serious challenges facing manufacturing and the erosion of our industrial base.

But even more importantly the study examines just how important manufacturing is for supporting overall economic growth, technological innovation and a high standard of living for American workers. The study is clear in its warning that **"if the U.S. manufacturing base continues to shrink at the present rate and the critical mass is lost, the manufacturing innovation process will shift to other global centers. If this happens, a decline in U.S. living standards in the future is virtually assured."**

This must not be allowed to happen.

The NAM has initiated a campaign to promote economic growth and manufacturing renewal through education, involvement and advocacy. A key goal is to make the public and policymakers aware of the pressing challenges that manufacturers face in an increasingly competitive global marketplace and obtain needed public policy changes.

We are very pleased with the rising level of awareness on the part of the Administration and the Congress. On Sept. 15, Commerce Secretary gave a major speech in Detroit announcing the launch of a new Administration initiative on manufacturing that includes many of the NAM's own recommendations. In addition, Members of Congress have shown more interest in manufacturing issues and proposed several resolutions that address concerns the NAM has raised, notably on China's undervalued currency.

The NAM is now working to harness the energy of other organizations concerned about manufacturing. This month the NAM started forming a *Coalition for the Future of Manufacturing* that will seek to raise public awareness and promote public policy changes needed to strengthen manufacturers' competitiveness and global

leadership. The coalition will bring together national, State and local organizations, as well as individual companies and their employees, that are interested in promoting economic growth, job creation and high living standards through a strong manufacturing base.

Advancing these goals will require a sustained long-term effort. Much, however, can be done in the remainder of the 108th Congress and the Bush Administration. We have identified the following as priority initiatives that could be achieved in 2003–04 and would help materially to grow the manufacturing sector, create jobs and strengthen American competitiveness. But this will be an evolving process, and we will make additional refinements as the need arises. There are five critical areas:

1. Leveling the international playing field
 - Launch a new strategy on China that deals firmly with any violations of WTO rules and unfair trade practices, including counterfeiting and subsidies, and redirects additional resources for fact-finding, analysis and enforcement.
 - Press key trading partners, particularly China and other Asian countries, to adopt a flexible, market-oriented exchange rate and stop currency undervaluation to gain unfair competitive advantage.
 - Advance negotiations on the Free Trade Area of the Americas (FTAA), other free trade agreements (notably with Australia and Central America) and, to the extent possible, the WTO Doha Development round, and ensure that the final negotiating frameworks include the complete or substantial dismantling of market barriers to manufactured imports.
 - Expand and strengthen U.S. export promotion and develop more active programs in countries, such as China, where export markets are growing fast but language, cultural and infrastructure barriers limit access by U.S. companies.
2. Reducing production costs in the United States
 - Enact asbestos and class action reform legislation.
 - Pass comprehensive energy legislation that helps to ensure adequate, affordable and reliable energy supplies, including natural gas.
 - Establish a more systematic way for the whole U.S. Government to review and assess the impact of all relevant regulations on manufacturing in the United States and provide adequate resources to undertake this function.
 - Replace immediately the 30-year Treasury bond interest rate used for pension calculations with a more accurate long-term corporate bond rate, and over the longer term, policymakers should focus on reforms that both enable and encourage employers to participate in the private pension plan system.
 - Seek to reduce the rapid increases in health care costs and make health care more affordable by enacting Medicare and medical liability reforms, expanding tax-based assistance and group purchasing through association health plans and encouraging greater individual responsibility.
3. Promoting innovation, investment and productivity
 - Pass legislation to resolve the FSC/ETI dispute in a fair and equitable way that improves the competitive position of U.S. manufacturers. In addition, simplify and reform current international tax rules to level the playing field for U.S. companies.
 - Support continued movement towards a capital cost recovery system that allows companies to expense capital equipment in the tax year it is purchased. Strengthen and make permanent the R&D tax credit set to expire on June 30, 2004. Continue to press for repeal, or at a minimum significant reform, of the Alternative Minimum Tax (AMT)—the “Anti-Manufacturing Tax.”
 - Challenge the world’s major trading nations to match the U.S. with a harmonized, cost-based, electronically based patent system by 2008, and begin by fully funding the Patent and Trademark Office and ending the diversion of patent fees.
 - Survey the full range of government programs that contribute to manufacturing R&D and seek additional funding for R&D programs that have proven successful in promoting manufacturing innovation and competitiveness.
 - Restore full funding in the FY2005 budget to the Advanced Technology Program (ATP) and Manufacturing Extension Partnership (MEP), two key programs that encourage public-private partnerships to stimulate business innovation and spread its benefits throughout the economy.

4. Ensuring an adequate supply of skilled workers and effective help for workers needing re-training and re-employment
 - Make greater efforts to demonstrate the linkage between “leaving no child behind” and the need to educate young people for competing in the global marketplace.
 - Redirect funding in the reauthorized Carl D. Perkins Act to update vocational and technical training in high schools and establish technical career paths into junior college and universities.
 - Strengthen implementation of the Workforce Investment Act to channel more of existing funds into business-directed “one stop service centers,” with particular emphasis on involving small and medium-size companies.
 - Ensure that transparent and efficient visa policies enable the United States to access the best global business talent and facilitate personnel movement around the world while also effectively protecting homeland security.

5. Improving the policy infrastructure to advance the manufacturing agenda

The Administration has demonstrated that it is taking manufacturers’ concerns seriously and making credible efforts to promote economic growth and manufacturing renewal. Secretary Evans has announced several important initiatives to improve performance in the Department of Commerce. The following steps should be part of government-wide efforts to create a stronger policy infrastructure on manufacturing issues:

- Ensure that the new Commerce Department assistant secretary for manufacturing has adequate resources and staff to advance the manufacturing agenda in Commerce and other U.S. agencies. Redirect more resources to investigating and following up on unfair trade practices of our trading partners. Provide sufficient expert staff to the new Office of Industry Analysis to assess the costs and economic impact of new rules and regulations on the manufacturing sector.
- In conjunction with these Commerce Department initiatives, establish a senior-level position in the White House National Economic Council staff to work with the new Commerce assistant secretary and help drive the interagency policy process, enlisting the support of the President and his senior staff as needed.
- Form a Presidential Council on Manufacturing that would make independent recommendations to the President and issue an annual report card on implementation of the Administration’s manufacturing agenda. On a regular basis, highlight and review progress on the manufacturing agenda in the President’s annual economic report and the Federal budget presentation.

The Role of Trade

As is obvious in the NAM agenda, trade is not the only problem facing manufacturing, but it is an important one. Trade—both imports and exports—affects manufacturing much more than the rest of the economy. In fact, trade is seven times as large a factor in the manufacturing sector than in the rest of the economy. Trade has been a key factor in the current manufacturing recession—particularly the decline in U.S. manufactured goods exports. These exports fell \$84 billion in the last two years, accounting for roughly one-third of the total fall in U.S. manufacturing shipments during that time. Given that U.S. data on manufacturers’ shipments includes double-counting and exports do not, the actual export loss is almost certainly more than 40 percent of the total loss.

Imports have also been a factor in the current situation, but less so than the export loss. Since 2000, import penetration (the import share of the U.S. market for manufactured goods) raised U.S. imports of manufactured goods by about \$40 billion above where they would have been had the import share not increased.

It is important to stress that imports are not “bad” for the economy. They must, of course, be consistent with international trade rules and U.S. trade laws. Imports are how we receive goods and services that can be produced more efficiently in other countries, and exports—which tend to be the goods and services we make most efficiently—are how we pay for what we import. Imports provide a broad range of products to industry and consumers and enhance the U.S. living standard.

So long as trade is in reasonable balance, some U.S. industries are growing while others are contracting—but manufacturing as a whole gains and becomes more productive. This doesn’t alleviate the difficulties of individual companies or industries, but tends to bring about the movement of resources within the economy in a way that generally benefits all. But when trade is not in reasonable balance, then manufacturing as a whole can be hit hard and firms losing customers cannot find other

outlets for their production and workers displaced from one industry cannot find employment in another.

The overall U.S. merchandise trade deficit rose from \$180 billion in 1997 to \$470 billion last year—roughly a \$300 billion increase. About 80 percent of that increase occurred in manufactured goods trade, which went from a deficit of \$130 billion in 1997 to a deficit of \$360 billion last year. The \$230 billion increase in the manufactured goods deficit has had a very serious effect on U.S. production and jobs. A robust manufacturing recovery and restoration of many of the lost jobs just is not possible until manufactures trade turns around.

Imports from China have played an important role here, but have not been the only factor. For example, the largest increase in the U.S. trade deficit since 1997 was not with China, but with the European Union—where the deficit increased from \$16 billion in 1997 to \$82 billion last year. The U.S. deficit rose virtually everywhere in the world. China, however, now accounts for nearly one-third of the U.S. trade deficit in manufactured goods, up from a little over one-fifth in 2000.

The fundamental cause of the overall deterioration in the trade balance was the seriously overvalued dollar. No other factor even comes close. After a decade of stability, the dollar started rising against other currencies in 1997, and peaked at an increase of 30 percent in February 2002—making U.S. exports 30 percent more expensive and imports up to 30 percent cheaper. For example, the euro fell from \$1.17 to \$0.86, making it impossible for many American companies to compete in Europe or against European companies. This particularly affected smaller U.S. manufacturers and had a disastrous effect on our trade. This is why the NAM worked so hard to obtain a dollar policy based on market-determined exchange rates reflecting economic fundamentals.

The Administration began enunciating such a policy last year, and since then the dollar has moved about two-thirds back to normal levels, when viewed against major currencies. Recently, Treasury Secretary Snow has been very definite in his statements that markets must set currency values free of intervention to prop currencies up or keep them below market-determined rates. A dollar reflecting economic fundamentals is by far the most important factor needed to cut back the enormous U.S. trade deficit.

The euro is now about \$1.15, which is close to the \$1.20 average value during the 1990s for the European currencies that now constitute the euro. The Canadian dollar also rose significantly, from \$0.63 to \$0.73—an increase that will do much to alleviate some of the significant trade tensions that have arisen with Canadian trade.

IMPORTS FROM CHINA

Let me now turn specifically to trade with China and its effects on U.S. manufacturing. Beginning in the 1970s, the United States granted what is now called “Normal Trade Relations” (NTR) status to China, opening the way for China to begin selling into the U.S. market. China faced the same small U.S. import duties that we applied worldwide, averaging less than 2 percent for manufactures.

The Chinese market, however, stayed very closed to U.S. exporters. Over the years, this situation led to faster growth of China’s exports to the United States than was the case for U.S. exports to China. In fact, for the last 20 years, U.S. imports from China have grown at an average annual rate of 20 percent per year, while U.S. exports to China have grown at an average annual rate of 12 percent.

Last year U.S. merchandise imports from China were \$125 billion, while exports to China were \$22 billion, resulting in a trade deficit of \$103 billion—the largest with any country in the world. U.S. imports from China are now six times as large as exports to China, making it a very difficult task merely to halt the growth of the deficit much less than to reverse it—as is shown in Exhibit 1 (attached). The exhibit contains a matrix showing the trade balances with China that would result from various alternative growth rates for exports and imports. If, for example, the 20-year trends of 20 percent import growth and 12 percent export growth were to continue for just five more years, the U.S. trade deficit with China would triple to over \$330 billion.

The problem is still manageable if it is addressed now. Apparent consumption of manufactured goods in the United States (using the North American Industrial Classification System—NAICS—employed in U.S. Government statistics) was \$4.325 trillion during January–July 2003, at an annual rate. Manufactured goods imports from China during this period were \$134 billion at an annual rate—3.1 percent of apparent consumption of manufactures.

This sounds like a small number, incompatible with the pain being expressed by many U.S. industry sectors. The reason for this pain, however, can be seen by examining what is happening at the margin—what is happening to changes in production and imports. In 2000, China accounted for 2.1 percent of apparent consumption of

manufactures, so its share increase to 3.1 percent so far in 2003 represents a 50 percent increase. Viewing the situation differently, between 2000, when the U.S. manufacturing industry entered its severe recession, and 2003 to date (at an annual rate), apparent consumption of manufactured goods *fell* 6 percent. Imports of manufactured goods from the world fell 2.4 percent. But imports from China rose 38 percent during that period.

Frequently, we are told by our member companies that Chinese products are being offered for sale at prices so low that the U.S. company just cannot compete. In fact, it is not unusual to hear that the Chinese product is being offered for sale at prices below the cost of the U.S. company's component or raw material costs. One NAM member told us, "I recently lost a job to China when they built three molds for my domestic customer for a total of \$1,800. The cost of the steel is more than that!" That raises serious questions that need answering, for even low labor costs and an undervalued currency could not bring about such a phenomenon.

The situation is not uniform, though. Not all of China's rapid export growth to the U.S. market is necessarily competing with U.S. production. For example, Japan's share of U.S. imports has fallen as China's has risen—implying the possibility of considerable substitution of Chinese for Japanese goods in the U.S. market. Consider, for instance, that China is now the largest supplier of computers and related components into the U.S. market. Yet as recently as 2000, China was only our fifth-largest supplier of these products. Though total U.S. imports of computers and components fell from 2000 to 2002, imports from China soared nearly 50 percent, while imports of these products from Japan fell 50 percent and from Korea fell over 40 percent.

CHINA AS A MARKET

It is also very important to avoid viewing China in a one-sided manner. In addition to being a rapidly rising supplier of imports into the U.S. market, China is also a quickly growing market for foreign goods and services, and this must not be overlooked. Last year China was our fastest-growing export market. While our overall exports fell 5 percent, our exports to China were up 15 percent. Last year China was the second-largest market for U.S. commercial jet aircraft. China has the same potential for many products.

Moreover, the growth is accelerating. In the first quarter of this year our exports are up over 37 percent compared to the year-ago period—by far the fastest growth to any market in that time period. Moreover, there is enormous potential for expansion. Less than 10 percent of China's imports come from the United States. The European Union, for example, sells 30 percent more to China than we do.

It is also important to contemplate the significance of the fact that China's trade with the rest of the world as a whole is in deficit. In 2002, using U.S. data, China's surplus with us was \$103 billion. China's global trade surplus was \$30 billion, implying a \$73 billion deficit with the rest of the world. Much of this is imports of oil and other commodities, and large amounts are also comprised of electronic components that China purchases from other Asian countries to assemble into final products for export to the United States.

It is clear that the United States must have a balanced approach to China, considering the import impact being felt, but also considering that China is about the only growth market in the world right now—and that it has the potential to be among the world's two largest import markets in the future. We need a productive two-way trade relationship.

INVESTMENT IN CHINA

Another growing concern among many companies is the fear that U.S. factories are closing their doors and that production is moving to China. There is a considerable amount of anecdotal information regarding U.S. plants shutting down and new American plants being opened in China. The statistical data, however, do not bear this out—at least not so far.

Commerce Department data show that total sales of U.S. manufacturing affiliates in China in 2000 (latest data available) were \$26.0 billion, of which \$18.3 billion were sold in China, \$4.8 billion were exported to countries other than the United States, and \$2.9 billion were exported to the United States. Thus, according to U.S. Government data, only 3 percent of U.S. manufactured goods imports from China in 2000 came from U.S.-owned companies. The rest came from Chinese or foreign-owned plants. Additionally, over 90 percent of U.S. affiliate exports of manufactures to the United States were computers and other electronic components.

Preliminary data for 2001 do not indicate a significant change. Global U.S. foreign direct investment outflows for manufacturing in that year were \$36 billion, of which 80 percent went to Europe and Canada. This is in keeping with typical patterns,

for the vast bulk of U.S. foreign direct investment in manufacturing typically goes to Europe, Canada, and other high-wage countries to supply local demand. New U.S. manufacturing investment in China in 2001 was \$1.4 billion, according to the Commerce Department's data.

The statistics and the anecdotal information seem to be saying different things. In seeking to reconcile this, it should be noted that the statistics would not reflect instances in which a U.S. firm ceased production and rather than investing in China, simply started to import products made by Chinese-owned or other foreign-owned factories. Additionally, we may just be at the beginning of the problem. It is a rare executive who returns from China without shaking his or her head and saying that unless things change they just don't see how we can compete against Chinese production and keep American manufacturing from moving offshore.

A POSITIVE AGENDA

The question is, what do we do about this? How do we assure the health of our nation's manufacturing industry in the face of this rapidly growing challenge? At the outset, we must reject protectionism as the answer. We cannot undo seventy years of trade liberalization and the attendant benefits to our standard of living and our competitiveness that have resulted from trade. Protecting industries from competition is not a formula for success and would likely result in a spread of protectionism around the world that would end up hurting everyone—including ourselves.

We need a positive agenda in addressing China. We need to recognize that China is not only our fastest-growing competitive problem right now, but also that it is going to be among our fastest-growing markets in the world. We need a combination of steps to ensure that trade follows market principles and is free of government distortions, and to ensure that U.S. productivity and technology continues to provide us a competitive edge.

The first step has already been taken: getting China into the WTO so it has to follow global trade rules. We worked hard to get China into the WTO for this very reason. We need to dispel the too-common view that China's entry into the WTO is the cause of the rapid rise of imports from China. The U.S. market was already open to China before its entry into the WTO. The United States made no import concessions when China entered the WTO—no reductions in U.S. tariffs or other trade rules whatsoever. All of the concessions, and all of the reductions in barriers are on the Chinese side. That was the price they had to pay to join the WTO.

Our exports, on the other hand, have clearly broken from their earlier trend and have started rising considerably more rapidly than before China's entry into the WTO. This is exactly what we expected—the direct result of the reduction in tariff and trade barriers that has already taken place in China. As China implements its several-year schedule of further market opening moves, much more U.S. export growth is achievable. Had China entered the WTO a decade ago, there is no question that our trade deficit with China would be much smaller today than it actually is.

In the NAM's view, we now need to pursue a set of steps to ensure more market-driven trade between China and the United States. This would include:

1. **Seek Full WTO Compliance.** We must ensure that China complies with its commitments as a new World Trade Organization member to follow all international trade rules and open its internal market in accordance with specific benchmarks set forth in its membership agreement. The NAM has established a WTO compliance monitoring program of its own and submitted its second annual compliance report based on member input to the U.S. Trade Representative (USTR) on Sept. 10. We have also pressed for more Commerce and USTR resources for monitoring and investigating compliance problems.
2. **Stop Currency Undervaluation.** We must press China to end the manipulation of its currency and allow the yuan/dollar exchange rate to be determined by the market. Economists estimate that China's currency is undervalued by as much as 40 percent, and this is having a huge distorting impact on trade. Currency undervaluation is one of the key factors pushing China's trade surplus with us to a record \$130 billion this year. China is now purchasing U.S. dollars at the rate of \$120 billion a year to prevent appreciation of its currency against the dollar. Secretary Snow's visit to Asia was an excellent start in raising the issue, and getting the G-7 Finance Ministers to agree that the China currency situation is a global problem added considerable further forward movement toward a resolution. The International Monetary Fund (IMF) is also raising its voice, pointing out that Asian currency manipulation is a dangerously destabilizing element in the global economy.
3. **End Subsidized and Non-Market Production.** We must ensure that the development of Chinese industry follows market principles and does not benefit

from direct or indirect subsidies that distort trade flows. We hear too many reports from NAM members that Chinese imports cost less than the cost of raw materials. In our dialogue with China, we must insist that the prices of traded goods are determined by real economic costs and not costs artificially set by the government.

4. **Address Counterfeiting and IPR Violations.** We must take firm actions to end China's rampant counterfeiting of U.S. and other products. Today, China is the epicenter of world counterfeiting, costing us tens of billions of dollars in lost exports and the related jobs. Moreover, counterfeit products pose significant risks to health and safety—such as in bogus pharmaceuticals or phony brake linings. We must also insist that the Chinese government take effective action to enforce the protection of patents, copyrights, trademarks and other intellectual property.
5. **Expand Export Promotion to Support U.S. Business.** Finally, we must undertake a massive joint public-private export trade effort to increase U.S. exports to China. In 2003, China is set to become the world's 3rd largest importer (\$380 billion) but the United States only has an 8 percent share of all Chinese imports. U.S. companies need to increase their marketing efforts but greatly expanded Commerce Department and other promotion assistance is also needed.

CONCLUSION

Let me conclude, Mr. Chairman, by stating that we will not succeed in preventing the migration of our manufacturing base to China and other foreign countries if we do not address the high cost of manufacturing in the United States and get the U.S. economy moving again.

U.S. industry is burdened by legal and regulatory systems that retard growth and destroy jobs. Unrestrained asbestos liability alone, for example, could cost U.S. industry \$250 billion, resulting in the bankruptcy of even large corporations. Rapidly rising health care costs are a constant worry, particularly for small manufacturers. Uncertainty over sources of energy supply has led to price volatility. Lack of support for research and development threatens to undermine U.S. leadership in cutting-edge technology. And shortages of skilled workers have left many manufacturers wondering how they will keep the engines of industry running when growth does resume.

Additionally, bilateral, regional and WTO trade agreements must be negotiated as quickly as possible to get foreign trade barriers eliminated, or at least down to our own low level. U.S. tariffs on manufactured goods average less than 2 percent, while in many parts of the world U.S.-made goods face tariffs 10–15 times higher—or even more.

Unless these challenges are also addressed, we can expect a significant further erosion in the U.S. industrial base. Competition with China will only accelerate the trend. However, if we begin to act now, with both a refocused and positive trade policy toward China and a concerted strategy on economic growth and manufacturing renewal, we can restore the dynamism and competitiveness of U.S. industry and ensure the global leadership that is so central to our economic and national security.

Thank you, Mr. Chairman.

ALTERNATIVE U.S. TRADE DEFICITS WITH CHINA

**20-Year Trend: Exports to China up 12 percent per year;
Imports up 20 percent per year**

**If these trends continue for five more years
the China trade deficit will be \$330 billion—
an increase of \$227 billion.**

Export%	12%	25%	33%
Import%			
20%	-\$330	-\$290	-\$252
15%	-\$246	-\$205	-\$167
10%	-\$178	-\$138	-\$100
7%	-\$144	-\$104	-\$66

NAM National Association of Manufacturers

Co-Chairman DREYER. Thank you. Ms. Lee.

**STATEMENT OF THEA M. LEE
ASSISTANT DIRECTOR OF PUBLIC POLICY
AMERICAN FEDERATION OF LABOR AND
CONGRESS OF INDUSTRIAL ORGANIZATIONS (AFL-CIO)**

Ms. LEE. Thank you very much. I really appreciate the opportunity to testify today on this very important topic on behalf of the 13 million working men and women of the AFL-CIO. Frank Vargo said that China is the issue he hears about from his members in the National Association of Manufacturers. I have to tell you that is very, very true in the labor movement, as well.

I also want to thank the Commission and applaud the work that you've already done to bring so much urgent attention to this issue.

China's industrial, investment, and exchange rate policies have had a profound impact on the bilateral trade between our countries and, hence, on the health of our own manufacturing sector and economy, especially on jobs in the manufacturing sector.

I want to focus my remarks today on two aspects of these policies which have had very serious negative consequences for America's workers: the Chinese government's manipulation and undervaluation of its currency, and the government's egregious and ongoing violation of the fundamental human rights of its workers. And finally, I want to talk about some of the policy solutions that we'd like to put forward.

The Chinese yuan has been pegged to the dollar at a fixed exchange rate since 1996. Underlying economic conditions have changed during that time, leading to a severe misalignment of the exchange rate, which can only be maintained through the Chinese government's massive accumulation of U.S. dollar reserves, now over \$350 billion, as Frank said.

This is an inherently unstable and unsustainable situation, and policymakers in both the United States and China need to be addressing this issue now before it gets more and more out of whack and out of hand. Addressing the issue now is what can save us from having a more severe adjustment and crisis at a later date.

The Chinese government's development path has clearly been predicated on export-led growth, with the U.S. consumer economy playing a starring role as the primary purchaser of Chinese made goods. While, of course, all governments look out for the interest of their own people, as they ought to do, they have to do that within the context of international rules and constraints.

WTO rules clearly prohibit currency manipulation to gain trade advantages inconsistent with GATT provisions. As you all know, and I think there's been a lot of discussion about this today, currency undervaluation is equivalent to raising tariffs or to imposing illegal subsidies, both of which are disciplined by WTO rules. It is also a violation of the principle of most favored nation treatment as the Chinese government has pegged its currency specifically with respect to the U.S. dollar, having an adverse impact on our country's trade balance with China relative to other countries. Certainly you see that when you look at China's overall trade relationships with the U.S. and with the rest of the world.

This choice that China has made, to artificially bolster its own manufacturing sector at the expense of the United States and other

countries indirectly, is a violation of its obligations under the WTO and we need to use the provisions that we have in place to address this issue.

Professor Robert Blecker from American University has estimated that the overvalued dollar relative to all currencies, not just the Chinese yuan but to all currencies, has resulted in about 740,000 lost U.S. jobs since 1995, as well as a loss of nearly \$100 billion in annual profits and \$40 billion in annual investment over the same period. Professor Blecker does not break out the impact of the dollar-yuan relationship specifically, but these estimates give some sense of the magnitude of the impact of the currency misalignment.

Most estimates place the undervaluation of the yuan between 15 and 40 percent. A currency misalignment of this magnitude has enormous significance in the context of U.S.-China trade. While it is not the only factor contributing to the massive U.S. trade deficit with China, it is a significant one and one that ought to be addressed urgently.

Many times we give a lot of attention in international trade negotiations to getting tariff barriers down that are much smaller than this 40 percent misalignment. I am baffled sometimes by the fact that people say, "Well, it is not the only thing wrong; therefore, we don't need to do anything to address it." I think if we have a 40 percent distortion in relative prices, we need to do whatever we can within the context of the rules to fix that, and then we can start addressing some of the other questions.

So we believe the Chinese government must allow the yuan to reflect the underlying economic and market forces. It must end the peg and cease its accumulation of U.S. dollar reserves. While the Chinese government's reluctance to take this action is perhaps understandable—everybody understands governments are looking out for their own interests—fearful of the loss of jobs in their own country—the Bush Administration's failure to act decisively in this area is not understandable.

We call on the Administration to use all the tools at its disposal, including initiating a WTO case, to send a clear message to the Chinese government that the current situation is unacceptable and will not be tolerated. We applaud the efforts in Congress to force action on this issue, as it now is clear that simple diplomacy and jawboning have failed to move the Chinese government in this area.

In addition to the unfair competitive advantage gained through currency manipulation, the Chinese government's systematic repression of fundamental workers' rights is a key contributor to the unfair advantage Chinese exports enjoy in the U.S. market. Chinese workers do not enjoy the right to form or join an independent union, as the U.S. State Department reports every year in its annual human rights report, nor do they enjoy the political freedom to criticize, let alone change, their government.

These policies amount to a deliberate and artificial suppression of wages by the Chinese government. This exploitation impacts American workers as well as workers in other developing countries and artificially lowers the price of Chinese exports in the U.S. market.

The Administration's failure to take concrete actions to address China's human rights and workers' rights violations allow these violations to continue. Workers in China, the United States, and around the world pay the price for this inaction, while companies producing in China enjoy the profits.

In addition to inaction on China's currency manipulation and workers' rights violations, the Bush Administration has failed to enforce U.S. trade laws effectively with respect to China, denying American workers the trade relief they're entitled to under U.S. law.

We understand that rifts within the business community have contributed to the U.S. Government's passivity and failure to act to date. Companies that produce in China for the U.S. market, retailers, and importers clearly do benefit from an undervalued Chinese currency, as well as from the abuse of workers' rights. Wal-Mart, for example, which is alone responsible for almost \$10 billion of the U.S. trade deficit with China, has openly supported current Chinese government policies with respect to the yuan.

On the other hand, companies that are actually producing in the United States, whether for the domestic market or for export, face debilitating and unsustainable disadvantages from both the currency manipulation and the violation of workers' rights in China. Workers, of course, are rooted here in the United States. We don't have the flexibility to move our production offshore when currencies become misaligned or when workers are treated badly in other countries, and so we have a very different view on this issue, obviously.

But American policymakers have a choice to make in trade relations with China. They can side with the importers and the outsourcers and stand by passively as China takes advantage of its WTO membership and access to the U.S. market, abusing its own workers and artificially undervaluing its currency in order to undercut American workers and domestic manufacturers. Or, they can take a stand for American jobs and act now to ensure that China plays fair in the global economy.

This seems to us too important an issue for our government to stand by passively at a time like this. The kind of impact that this trade deficit and trade relationship is having on the U.S. economy and, in fact, on the global economy, is very significant. One of the things that we're increasingly hearing from our trade union counterparts in developing countries is that they, too, feel that they've been put into a box by the Chinese government's repressive policies in terms of workers' rights. Governments of other developing countries find themselves in direct competition with China, and they must decide how to compete with China in the global economy. Every other developing country in the world has also felt downward pressure on wages and working conditions and workers rights. So the problem even goes beyond the U.S.-China trade relationship and affects the very nature of competition in the global economy today.

I thank you very much for your attention and for the invitation to appear here today and I look forward to your questions.

[The statement follows:]

**Prepared Statement of Thea M. Lee
Assistant Director of Public Policy, American Federation of Labor and
Congress of Industrial Organizations (AFL-CIO)**

Mr. Chairman, Members of the Commission, I thank you for the opportunity to testify today on this very important topic on behalf of the thirteen million working men and women of the AFL-CIO. We applaud the Commission for holding this hearing and for the valuable work you have already done to bring urgent attention to this issue.

China's industrial, investment, and exchange rate policies have had a profound impact on the bilateral trade between our countries, and hence on the health of our own manufacturing sector and economy, especially on jobs in the manufacturing sector.

I would like to focus most of my remarks today on two aspects of these policies, which have had very serious negative consequences for American workers: the Chinese government's manipulation and undervaluation of its currency, and the government's egregious and ongoing violation of the fundamental human rights of its workers. Finally, I will discuss some policy solutions that should be put in place to address these problems.

The U.S. bilateral trade deficit with China hit \$103 billion last year, and is up 24 percent in the first seven months of this year compared to the same period last year. Meanwhile, the United States has lost almost 3 million manufacturing jobs since 1998, including 431,000 so far this year. While many factors contributed to this devastating job loss, it is crucial for policymakers to focus their attention on policies that are feasible, quick, and will begin to ameliorate the job losses we have already experienced. Addressing the Chinese government's flouting of its international obligations with respect to currency values and workers' rights ought to be a top priority in this regard.

The Chinese yuan has been pegged to the dollar at a fixed exchange rate since 1996. Underlying economic conditions (relative inflation and growth rates, among other things) have changed during that time, leading to a severe misalignment of the exchange rate, which can only be maintained through the Chinese government's massive accumulation of U.S. dollar reserves—now over \$350 billion.

This is an inherently unstable and unsustainable situation. Both U.S. and Chinese policymakers should focus now on taking steps to address this situation, so that appropriate transitions can be put in place. This is necessary to avoid a more abrupt and severe crisis at a later date.

The Chinese government has clearly charted a development path predicated on export-led growth, with the U.S. consumer economy playing a starring role, as the primary purchaser of Chinese-made goods. While it is every government's right and obligation to look out for the interests of its citizens, it must do so within the context of international rules and constraints.

WTO rules clearly prohibit currency manipulation to gain trade advantages inconsistent with GATT provisions. Article XV of GATT 1994, for example, provides that "Contracting parties shall not, *by exchange action*, frustrate the intent of provisions of this agreement" (emphasis added). Deliberate undervaluation of the yuan vis-à-vis the U.S. dollar also violates the principle of most-favored-nation treatment, as it targets one country's currency, adversely impacting that country's trade. Certainly, the enormous bilateral U.S. trade deficit with China relative to other countries is evidence of the uneven impact of China's currency policies on its trading partners. Currency manipulation nullifies tariff concessions made through WTO processes and amounts to a de facto illegal subsidy of Chinese exports. China's choice to artificially bolster its own manufacturing sector at the expense of the United States (and other countries indirectly) is therefore a violation of its obligations under the WTO.

As American University economist Robert Blecker wrote in a recent Economic Policy Institute briefing paper, "[T]he sheer magnitude of the reserves accumulated by these East Asian countries, and the rapidity with which these reserves have increased in recent years, is *prima facie* evidence of efforts to keep their currencies undervalued and prevent their currencies from appreciating to exchange rates that would be conducive to more balanced trade relations with the United States. This is outright currency manipulation of a mercantilist nature, intended to maintain those countries' trade surpluses with the United States, which by 2002 accounted for about 40% of the overall U.S. trade deficit" ("The Benefits of a Lower Dollar: How the high dollar has hurt U.S. manufacturing producers and why the dollar still needs to fall further," EPI Briefing Paper, May 2003).

Professor Blecker estimates that the overvalued dollar (relative to all currencies) has resulted in about 740,000 lost jobs since 1995, as well as a loss of nearly \$100

billion in annual profits and \$40 billion in annual investment over the same period. Blecker does not break out the impact of the dollar-yuan relationship specifically.

Most estimates place the undervaluation of the yuan between 15 and 40 percent. A currency misalignment of this magnitude has enormous significance in the context of U.S.-China trade. While it is certainly not the only factor contributing to the massive U.S. trade deficit with China, it is a significant one, and one that ought to be addressed urgently. Many international trade negotiations focus on eliminating or phasing out tariff barriers much lower than this, and trumpeting the potential benefits of doing so. Just because China has other low-cost advantages over the United States is no reason for us to tolerate as much as a 40% distortion in relative prices.

The Chinese government must allow the yuan to reflect underlying economic and market forces. It must end the current peg and cease its accumulation of U.S. dollar reserves. While the Chinese government's reluctance to take this action is perhaps understandable, the Bush Administration's failure to act more forcefully in this regard is not.

We call on the Administration to use all tools at its disposal, including initiating a WTO case, to send a clear message to the Chinese government that the current situation is unacceptable and will not be tolerated. We applaud efforts in Congress to force action on this issue, as it is now clear that simple diplomacy and jawboning have utterly failed.

In addition to the unfair competitive advantage gained through currency manipulation, the Chinese government's systematic repression of fundamental workers' rights is a key contributor to the unfair advantage Chinese exports enjoy in the U.S. market. Chinese workers do not have the right to form or join an independent union (as the U.S. State Department has repeatedly reported in its annual human rights report), nor do they enjoy the political freedom to criticize, let alone change, their government.

Enforcement of wages, hours, and health and safety rules is lax or non-existent in many areas of the country, and forced and child labor are prevalent in some sectors. These abuses allow producers in China to operate in an environment free of independent unions, to pay illegally low wages, and to profit from the widespread violation of workers' basic human rights. Together, these policies amount to a deliberate and artificial suppression of wages by the Chinese government. This exploitation impacts American workers, as well as those in other developing countries, and artificially lowers the price of Chinese exports in the U.S. market.

During 2001 and 2002, the number of labor disputes and protests in China rose significantly. In response, the Chinese government jailed a number of workers for demonstrating for their rights and cracked down on any organization that might support the beginnings of an independent trade union. The official labor union—the All China Federation of Trade Unions (ACFTU)—continued to discourage strikes and work stoppages, and to negotiate sweetheart deals with employers.

In the face of these grave problems, the Bush Administration chose not to even raise the case of China before the UN Human Rights Commission in April of 2003, despite the United States' regular practice of doing so previously. In addition, President Bush did not demand any specific improvements in human rights when he met with China's President Hu in the summer of 2003. Instead, the Bush Administration has only engaged in "cooperative dialogue," a strategy that has not worked. Since deciding to pursue a dialogue instead of UN action or public pressure, Administration officials have noted "backsliding" and a "deterioration in human rights" in the country during 2003, including arrests of democracy activists, harsh sentences for labor organizers, and the suppression of independent media, church groups, and Tibetans.

Yesterday's *Wall Street Journal* reported that the Chinese government has recently cracked down on free speech and political dissent, closing four Web sites and clamping down on foreign funding and organizations (Kathy Chen, "China Curbs Growing Debate over Politics," *Wall Street Journal*, September 24, 2003). The government issued a document warning against "hostile forces," urging increased vigilance against Chinese organizations' use of foreign funding or cooperation with foreign experts and organizations. In August, the Chinese government attempted to halt debate on three topics, now labeled "not allowed": political reform, constitutional amendments, and the reassessment of historical incidents (presumably referring to the 1989 crackdown on protesters in Tiananmen Square).

The Administration's failure to take concrete actions on human rights and workers' rights in China allows rampant violations to continue. Workers in China, the United States, and around the world pay the price for this inaction, while companies producing in China enjoy the profits.

In addition to inaction on China's currency manipulation and workers' rights violations, the Bush Administration has failed to enforce U.S. trade laws effectively

with respect to China, denying American workers the trade relief they are entitled to under the law.

Rifts within the business community have contributed to the U.S. Government's passivity and failure to act to date. Companies that produce in China for the U.S. market, retailers, and importers clearly benefit from an undervalued Chinese currency, as well as from the abuse of workers' rights. Wal-Mart, for example—alone responsible for almost \$10 billion of the U.S. trade deficit with China—has openly supported current Chinese government policies with respect to the yuan. On the other hand, companies actually producing in the United States—whether for the domestic market or for export—face debilitating and unsustainable disadvantages from both currency manipulation and violation of workers' rights in China.

American policymakers have a choice to make in trade relations with China. They can side with the importers and outsourcers, and stand by passively as China takes advantage of its WTO membership and access to the U.S. market, abusing its own workers and artificially undervaluing its currency in order to undercut American workers and domestic manufacturers. Or they can take a stand for American jobs and act now to ensure that China plays fair in the global economy.

Thank you for your attention and for the invitation to appear here today. I look forward to your questions.

Co-Chairman DREYER. Thank you, Ms. Lee.
Mr. Workman.

**STATEMENT OF WILLARD A. WORKMAN
SENIOR VICE PRESIDENT, INTERNATIONAL POLICY AND
ECONOMIC REFORM, U.S. CHAMBER OF COMMERCE**

Mr. WORKMAN. Thank you. My name is Willard Workman. I'm the Senior Vice President for International Policy and Economic Reform at the U.S. Chamber and I'm also the Vice President of the Chamber's affiliate, the Center for International Private Enterprise, which is one of the four core institutes of the National Endowment for Democracy. Both the Chamber and CIPE, as we call it, receive Federal funding to develop trade, build market-based economic regimes, and promote democracy in the developing world.

I'm pleased to be here today to discuss China and I'm submitting for the record two documents that the Commission should find of interest. The first one is very easy. It's one page long. It is known as the Chamber's criteria for international investment, also known as the 12 commandments for foreign direct investment. And the second one is the Chamber's second annual report on China's performance in meeting its WTO accession commitments.

I think this is important and I want to focus a little bit on this issue of investment and why do private companies invest in China, or anyplace else, for that matter. If you look at the criteria, you may be surprised to know that this is not rocket science. It is more or less common sense.

A company sits down and they use these 12 criteria—the Japanese tend to use 18, the Germans use 15 but they all use at least these 12 criteria, not only the multinationals, but small manufacturers, as well. And just quickly scanning through the group, you see that they look at things like the size and the potential for growth of the domestic market. Certainly, China's domestic market would be attractive.

Freedom of access to the market, that's why a lot of companies are very interested in the WTO accession negotiations with China. Labor force skills and availability of raw materials. Protection from currency devaluation. If you buy something in dollars and the next day your property or asset in Beijing is devalued by 50 percent,

you've lost half of your investment. Favorable taxation and tax incentives. Low political risk, and so on.

Each individual company assigns a different weight or priority to the individual items depending on their line of business, but all companies, and I repeat this, all companies, American and foreign, use at least these 12 commandments, if you will, to guide their investment decisions in China or any country, including the United States.

In the most recent report on investment, from September 5 of 2003, UNCTAD, the United Nations Conference on Trade and Development, noted that foreign direct investment in China for 2002 increased by \$53 billion, making China the number one foreign direct investment destination among developing countries. When you think about this, this is not surprising in light of China's accession to the WTO in 2002.

However, absent Chinese adherence to its WTO commitments, something that the Chamber and Frank at the NAM have both looked at, not only from our perspective, not only in manufacturing but in a variety of areas that I'll list in a minute, if they don't stick to what they've committed to, then you can assume that foreign direct investment to China will level off or even decline.

The things that we looked at in terms of—think about what the Chinese committed to in their WTO accession agreement. In the area of agriculture, which is a major issue for them and was one of the sticking points that the disappointing Cancun ministerial recently in Mexico of the WTO. Autos, there was a section they made major commitments to open up their domestic market to automobiles and particularly their distribution system. Express delivery services, Federal Express, United Parcel Service, DHL, and others are looking at the very large China internal market as a place for growth and opportunity.

Financial services—we noted that China has begun to make progress in its obligations in financial services by revising some of its laws, and in fact, our affiliate, CIPE, in partnership with a private nongovernmental economic think tank in China, has been working to rewrite the Chinese bankruptcy laws, which is essential if they're going to make the transition from state-owned enterprises to publicly-owned enterprises. They have to recover the useful assets in the, quote, "bankrupt state-owned enterprise" and reapply it very efficiently and in a timely manner to productive enterprises.

Intellectual property rights—this has been an issue of particular concern to the Chamber, not just in what you would think of, the soft intellectual property rights related to software, CDs, music, and video, but even some of our auto manufacturers and heavy industry manufacturers have had a particular concern about this.

The Vice Chairman of my policy committee, who is a small business manufacturer from Wichita, Kansas, who makes grain elevators and have been exporting to China for 16 years, never sends his engineering designs to China with the equipment. He just sends the equipment.

Finally, the trading rights and distribution services—there were a number of commitments that the Chinese made in that area.

Finally, there have been concerns raised about China's currency exchange rate policies. The Chamber shares these concerns about

Chinese as well as other East Asian countries' policies. The following points we think are important to consider.

We believe that currency exchange rates are best left to market forces. We believe that countries should not manipulate currencies to gain a competitive advantage. China's currency has been pegged to the U.S. dollar since 1993. During the 1997 Asian financial crisis, China was praised for the stabilizing role it played by maintaining the level of its currency.

Chinese success in entering the U.S. market is based on several factors. While its undervalued currency is one factor, Chinese exports over the past ten years have grown without regard to the relative strength of its currency.

The U.S. Chamber supports the Administration's bilateral engagement of the Chinese government in discussions on such matters as currency levels, trade flows, investment regimes, and compliance with international agreements. In addition, the Chamber supports the increased attention of the International Monetary Fund to China's exchange rate policies since that was the reason at Bretton Woods the IMF was created in the first place.

The Chamber reiterates its call on China to fully implement the commitments it made when it joined the WTO. China's progress in meeting its WTO market opening commitments will create new export opportunities for U.S. companies of all sizes and a business friendly investment environment that is increasingly based on the rule of law.

Finally, as moves in both the U.S. House of Representatives and the United States Senate to retaliate against Chinese currency practices by mandating tariff increases on Chinese products as an effective way to increase U.S. manufacturing employment, quite frankly, we don't see the connection. If you want to increase manufacturing employment, more productive areas to pursue are tort, tax, regulatory reforms, and according at least to our manufacturing members, are sorely needed. Raising tariffs on imports is of dubious value in an economy striving to gain steam and create jobs. Thank you.

[The statement follows:]

**Prepared Statement of Willard A. Workman
Senior Vice President, International Policy and Economic Reform
U.S. Chamber of Commerce**

Executive Summary

My name is Willard A. Workman, Senior Vice President, International Policy and Economic Reform, of the U.S. Chamber of Commerce and Vice President of the Chamber's affiliate, the Center for International Private Enterprise (CIPE), one of the core institutes of the National Endowment for Democracy. Both the Chamber and CIPE receive Federal funding to develop trade, build market-based economic regimes and promote democracy in the developing world.

I am pleased to be here today to discuss China. I am submitting for the record two documents that the Commission should find of interest: the U.S. Chamber's second annual report on China's performance in meeting its WTO Commitments; and, the U.S. Chamber's Criteria for International Investment, also known as "The 12 Commandments for Foreign Direct Investment."

Smart companies invest in China, or in other countries based on the following criteria:

1. **Size and potential for growth of the domestic market;**
2. **Freedom of access to the market;**
3. **Labor force skills and availability of raw materials;**

4. **Protection from currency devaluation;**
5. **Remittance of dividends, interest, royalties and technical assistance payments;**
6. **Property rights protection;**
7. **Export potential;**
8. **Regulatory burdens;**
9. **Favorable taxation and tax incentives;**
10. **Low political risk;**
11. **Predictable macroeconomic management; and,**
12. **Reliable infrastructure support.**

Each individual company assigns different weight or priority to individual items depending on their line of business, but all companies, American and foreign, use at least these "12 Commandments" to guide their investment decisions in China or any country, including the United States.

In its most recent (September 5, 2003) report on investment, UNCTAD (United Nations Conference on Trade and Development) noted that foreign direct investment in China for 2002 increased by \$53 billion, making China the number 1 FDI destination among developing countries. This is not surprising in light of China's accession to the WTO in 2002. However, absent Chinese adherence to its WTO commitments, as detailed in the Chamber's report, FDI to China will level off or decline.

A summary of the Chamber's specific assessments of China's adherence to its WTO commitments include the following six areas:

AGRICULTURE

Issue Assessment: While there has been progress in some areas, the agriculture industry continues to face a range of Chinese government actions that have held back the potential growth in U.S.-China agricultural trade.

AUTOS

Issue Assessment: Auto finance reform is nearly two years behind schedule, and delays in the release of the relevant regulations have hindered the ability of U.S. automakers to realize some of the expected benefits of China's WTO accession. Greater transparency in regulatory processes and in procedures for quota application and allocation is necessary to fully and fairly implement the WTO automotive quota.

EXPRESS DELIVERY SERVICES

Issue Assessment: The lack of an independent regulator creates challenges in the express delivery services sector, where China Post is trying to use its regulatory authority to expand its postal monopoly into a market already well served by existing commercial operators. U.S. industry representatives are encouraged at the dialogue with Chinese officials on draft postal legislation, but China will ultimately be judged by the extent to which the new law complies with its WTO commitments.

FINANCIAL SERVICES

Issue Assessment: China has begun to implement its WTO obligations in the financial services sector by revising its laws, regulations, and administrative practices, but excessive capitalization requirements are limiting the healthy development of the market.

INTELLECTUAL PROPERTY RIGHTS

Issue Assessment: China's classification of value-added services has become more restrictive in the period since WTO accession. The reduction in the scope of value-added services and the increase in the scope of basic services are especially problematic given the unreasonably burdensome registered capital requirement for foreign-invested basic service joint ventures.

TRADING RIGHTS AND DISTRIBUTION SERVICES

Issue Assessment: China's trading rights and distribution services commitments are now the subject of serious discussion between Chinese officials and U.S. negotiators regarding China's interpretations of their commitments in this area.

Finally, there have been concerns raised about China's currency exchange rate policies. The Chamber shares these concerns about Chinese as well as other East Asian countries' policies. The following points are important:

- The U.S. Chamber believes that currency exchange rates are best left to market forces. The Chamber believes that countries should not manipulate currencies to gain a competitive advantage.
- China's currency has been pegged to the U.S. dollar since 1993. During the 1997 Asian financial crisis, China was praised for the stabilizing role it played by maintaining the level of its currency.
- Chinese success in entering the U.S. market is based on several factors. While its undervalued currency is one factor, China's exports over the past ten years have grown without regard to the relative strength of its currency.
- The U.S. Chamber supports the Administration's bilateral engagement of the Chinese government in discussions on such matters as currency levels, trade flows, investment regimes and compliance with international agreements. In addition, the Chamber supports the increased attention of the International Monetary Fund to China's exchange rate policies.
- The U.S. Chamber reiterates its call on China to fully implement the commitments it made when it joined the World Trade Organization (WTO). China's progress in meeting its WTO market-opening commitments will create new export opportunities for U.S. companies of all sizes and a business-friendly investment environment that is increasingly based on the rule of law.

Finally, moves in both the U.S. House of Representatives and United States Senate to retaliate against Chinese currency practices by mandating tariff increases on Chinese products are an ineffective way to increase U.S. manufacturing employment. Tax, regulatory and tort reforms are more likely to yield a speedy resurgence in manufacturing and all sectors of the economy. Raising tariffs on imports is of dubious value in an economy striving to gain steam and create jobs.

*CHINA'S WTO RECORD: A TWO-YEAR ASSESSMENT***OVERVIEW****Testimony Backdrop**

This testimony focuses strictly on how China is carrying out its World Trade Organization (WTO) commitments and does not attempt to encompass the many other aspects of the U.S. commercial relationship with China. We recognize that such issues as the U.S.-China trade deficit, the impact of an undervalued Chinese currency, and the challenges created by Chinese import competition are currently getting increased political attention, but these subjects, though important, are not the focus of my remarks. That said, the current focus on such broader issues is driving an examination of China as a global economic player and its ability to follow through with its obligations. Absent more progress toward fulfilling its WTO commitments, concerns about China will only rise.

The undertakings in China's WTO accession were massive, the most ambitious any country ever made to accede to the WTO or its predecessor, the General Agreement on Tariffs and Trade (GATT). The international business community judged these wide-ranging, comprehensive commitments necessary because of China's growing role in the international economy. Implementation of obligations as broad as China's was always understood to be difficult, and American businesses have never assumed that it would be a short or smooth ride. In some respects, China's implementation efforts have been impressive, and the rapid growth in two-way trade and investment into China reflects this. But partial implementation is not what China promised nor what the international community and American business can accept.

China's WTO compliance has been uneven and incomplete. Unless this picture improves, there will be an increasing crescendo of complaints about China's record. A number of companies are already publicly expressing the view that China is dismissive of global trade rules and commitments. Since the country's WTO entry on December 11, 2001, we have not seen enough new contracts, new access, and new customers to stem this tide. Faithful implementation of China's WTO obligations will have positive commercial ramifications and demonstrate that its membership in the WTO is leading to new opportunities for exporters and investors.

It is important to also place these issues in their larger context. On political and security issues, China and the United States enjoy the most cooperative relationship that they have had in recent times. There has been close coordination on efforts to combat terrorism and with respect to developments on the Korean peninsula. Moreover, China and the United States share certain multilateral priorities connected to the new Doha Round of trade talks and are both involved in a series of regional and bilateral free trade agreement discussions. While these high-priority political and economic agenda items require continued attention, China's WTO record also merits the focus of the two governments at the highest levels.

Throughout my testimony, there are examples of U.S. companies interested in providing input and engaging in dialogue and consultations on how to develop laws and regulations that comply with both the letter and spirit of China's WTO commitments. China has demonstrated a willingness to work with us, but we need to see more progress in the months ahead. If progress is not made, there will be political and commercial ramifications and the full potential of this critical partnership will not be realized.

In this environment, we make the following observations:

Key Observations

- **Additional implementation progress is critical.** China's entry into the WTO brought expectations of new opportunities for American business in the form of new licenses, contracts, and exports. Without tangible improvements, there will be political consequences as well as a possible souring of business views about the market. The U.S. Chamber supports the provision of greater funding to the Office of the U.S. Trade Representative and the U.S. Department of Commerce to buttress China WTO monitoring and enforcement efforts.
- **Regulatory transparency remains a key concern in the second year of China's WTO membership.** A lack of transparency remains a systemic problem. Improvements in regulatory clarity and the consistent use of advance consultations—one of China's WTO commitments—would do much to advance the prospects for success in industries ranging from autos to telecom.
- **China must stay focused on having a positive WTO record as it works through significant leadership changes and other challenges.** China has an important stake in delivering a positive WTO record to match the significant political and economic commitments the country made. Changes in China, from the

new political leadership to the restructuring of key trade-focused agencies to the battle against SARS, must not be allowed to delay movement on WTO issues. The newly formed Ministry of Commerce must have sufficient authority and resources to secure compliance from other ministries and agencies and from provincial and municipal governments.

- **China should refrain from actions that represent backsliding from the spirit of the WTO, even if they are not strictly WTO violations.** While not a violation of specific WTO commitments, certain new Chinese directives and policy announcements are of concern to U.S. companies. For example, a draft procurement directive under consideration in Beijing could limit Chinese government purchases of foreign software, while a draft industrial policy for the automotive sector contains recommendations and guidance that appear to be contrary to the spirit of China's auto commitments.
- **If China does not adequately address compliance deficiencies, it is likely to face an increase in both bilateral and multilateral disputes, including at the WTO.** If there is not progress in addressing some of the WTO shortcomings identified in this report, we are likely to see increased challenges to China, both in the bilateral and multilateral context. Taking trade disputes to the WTO should be viewed as a last resort after dialogue and direct negotiations have failed, but the United States must be willing to consider the WTO dispute resolution system when progress is elusive. At the time of this writing, China's failure thus far to implement its commitment on agricultural tariff-rate quotas (TRQs) could be the first case that the United States will take to the WTO.
- **U.S. businesses are ready and willing to work with China to develop constructive solutions to trade differences.** U.S. businesses recognize that trade disputes serve neither side's interest, and there is a serious commitment to work with China to facilitate its progress toward implementation through such means as technical assistance and issue consultations. There are promising examples of healthy dialogue in a number of industries where differences related to China's WTO commitments have arisen, including in the insurance, express delivery services, and direct-selling industries. This report offers additional recommendations of steps China can take to both fulfill its obligations and underpin the healthy development of its economy.

Executive Summary of Recommendations

AGRICULTURE

- China's General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) should restrict its activities to import quarantine procedures that are science based and compliant with WTO and international conventions and should not impose delays, uncertainties, or commercially discriminatory or commercially unrealistic requirements that inhibit free trade.
- AQSIQ should approach the approval of import permit requests in a timely and commercially realistic manner.
- AQSIQ should ensure that all formalities are transparent, with clear timelines openly promulgated.
- China should honor its TRQ obligations and not engage in such practices as delaying announcements; granting insignificant, uneconomic quotas; applying restrictions that are not required of domestic producers or merchants; or designing nontariff trade barriers that circumvent TRQ obligations.
- China should ensure that there is greater transparency in the TRQ process and comply with the requirement to publish a list of importers that have been granted TRQ allocations.

Issue Assessment: While there has been progress in some areas, the agriculture industry continues to face a range of Chinese government actions that have held back the potential growth in U.S.-China agricultural trade.

AUTOS

- China should put in place a regulatory structure that reflects global norms and not institute capitalization requirements and net asset ratios for auto loan institutions that act as market access barriers. In light of the nearly two-year delay in implementing its auto finance commitments, China should expedite the approval of applicants.
- Draft regulations covering distribution services should be made available for prior public comment, and final regulations must allow foreign-invested auto enterprises to engage in distribution activities as soon as possible, with no requirement of a separate distribution system for domestic and imported autos.

- The allocation of the remainder of the 2002 and 2003 auto quotas and the reallocation of unused 2002 and 2003 quotas should take place promptly. China should also provide assurances that there will be a fair, transparent, and open process for the 2004 quota application and allocation.
- China should actively enforce compliance with the WTO's Trade-Related Intellectual Property Rights (TRIPs) agreement as it applies to the automotive industry.
- China's draft auto industrial policy should be modified to bring it fully in line with the letter and spirit of its WTO commitments.

Issue Assessment: Auto finance reform is nearly two years behind schedule, and delays in the release of the relevant regulations have hindered the ability of U.S. automakers to realize some of the expected benefits of China's WTO accession. Greater transparency in regulatory processes and in procedures for quota application and allocation is necessary to fully and fairly implement the WTO automotive quota.

EXPRESS DELIVERY SERVICES

- New postal legislation must reflect China's WTO commitments and not allow China Post to extend its existing monopoly to new areas.
- The new legislation should define the scope of the postal monopoly as packages and documents weighing less than 350 grams where the price is less than three times that of the lightest ordinary mail over the shortest domestic distance. In two years, this should be reduced to 250 grams and two times the price of ordinary mail; two years later, it should be reduced to 150 grams and the price of ordinary mail.
- Although not technically a WTO mandate if certain requirements are met, China should ensure competition and efficiency by separating the postal regulatory function and the postal business function into different and independent entities. The postal regulator should focus on the quality of postal service, pricing related to cost, and related accounting systems to prevent abuse of the exclusive rights granted to the universal service provider.
- China should regulate businesses that operate outside the scope of the defined postal monopoly by using a nonpostal regulator, such as the Ministry of Commerce, for international freight forwarders.

Issue Assessment: The lack of an independent regulator creates challenges in the express delivery services sector, where China Post is trying to use its regulatory authority to expand its postal monopoly into a market already well served by existing commercial operators. U.S. industry representatives are encouraged at the dialogue with Chinese officials on draft postal legislation, but China will ultimately be judged by the extent to which the new law complies with its WTO commitments.

FINANCIAL SERVICES

- China should bring registered capital requirements in line with global best practices and regulatory standards.
- China should improve the clarity and specificity of financial services regulations and administrative measures and consistently provide advance notice and reasonable comment periods on proposed measures.
- China should allow foreign insurance companies to expand geographically according to the terms of its WTO commitments and permit the use of a single branch/sub-branch structure throughout the country without any additional capitalization requirements or lengthy application processes.
- China should allow foreign insurance companies to establish more than one branch at a time—that is, on a concurrent, not consecutive basis—commensurate with domestic counterparts.
- China should adopt prudential criteria for the banking sector based on international norms and should avoid the use of borrowing restrictions that limit the efficient functioning of the market.
- China should avoid proposals that would limit the maturity of interbank transactions and create difficulties for banks to match the maturity structure of their assets.
- China should make the qualified foreign institutional investors system more workable by eliminating some of the requirements under the current system.

Issue Assessment: China has begun to implement its WTO obligations in the financial services sector by revising its laws, regulations, and administrative practices, but excessive capitalization requirements are limiting the healthy development of the market.

INTELLECTUAL PROPERTY RIGHTS

- China should undertake a coordinated nationwide intellectual property rights (IPR) enforcement campaign against traditional (e.g., book, cassette) and recent or emerging (e.g., CD, VCD, DVD, Internet-related) piracy, end-user piracy of software and other copyrighted materials, and counterfeiting. China should also immediately eliminate the high criminal thresholds and procedural obstacles that prevent the effective use of criminal prosecutions in addressing IPR violations. At the same time, China should make revisions to the Penal Code such that it fully applies to all rights under copyright as well as all other piracy-related crimes.
- China should take similar effective enforcement actions in other manufacturing sectors to stem the tide and culture of piracy, including in areas such as pharmaceuticals that pose grave public health risks.
- China should take more effective customs and border measures to curtail the massive importation of pirated materials into the country.
- China should continue with its efforts to train judges in IPR laws; provide adequate resources to relevant police, prosecutors, and administrative agencies; and ensure that penalties for intellectual property violations are sufficiently strong to serve as a deterrent.
- China should ratify the World Intellectual Property Organization Copyright Treaty and the Performances and Phonograms Treaty.

Issue Assessment: Improvements in China's IPR legal framework must be matched by greatly enhanced enforcement efforts at the local level.

TELECOMMUNICATIONS SERVICES

- China should not reduce the scope of its commitments in the category of value-added services by reclassifying them as "basic" services, a category that is far more restrictive for foreign investors. The capitalization requirements that China has established for providers of basic telecommunications services are unrealistic, bear no reasonable relationship to commercial or public interest requirements, and constitute a barrier to entry. This high capitalization requirement should be eliminated.
- China should promote greater transparency in legal and regulatory proceedings, including the consistent use of required advance notice and comment periods.
- China should take steps to increase the independence of the regulator, the Ministry of Information Industries, from the major state-owned telecommunications operators.
- China should cease to restrict the ownership and operation of international gateways to wholly owned telecom service providers.

Issue Assessment: China's classification of value-added services has become more restrictive in the period since WTO accession. The reduction in the scope of value-added services and the increase in the scope of basic services are especially problematic given the unreasonably burdensome registered capital requirement for foreign-invested basic service joint ventures.

TRADING RIGHTS AND DISTRIBUTION SERVICES

- China should put forward transparent and WTO-consistent regulations that spell out precisely how U.S. enterprises can begin to realize the benefits of China's commitments in the area of trading rights and distribution services.
- These regulations should eliminate the artificial restrictions imposed on companies that made investments in China before its accession to the WTO and should make clear that all companies may conduct operations in China as they would anywhere in the world.
- China should make draft rules relating to trading rights and distribution services available for prior public comment.

Issue Assessment: China's trading rights and distribution services commitments are now the subject of serious discussion between Chinese officials and U.S. negotiators regarding China's interpretations of their commitments in this area.

A TWO-YEAR ASSESSMENT**A Look Back at Year-One Developments**

The September 2002 report of the U.S. Chamber's China WTO Implementation Working Group represented the group's views on how China's WTO implementation efforts were proceeding nine months into its membership in the global trading body. That report highlighted a number of positive areas where China had faithfully complied with its obligations and where its efforts—in such areas as WTO education

and training—were indicative of a high-level commitment. That report also highlighted areas where compliance had certain shortfalls.

Many of our initial assessments are still valid today. China seems committed to the WTO process, but there remains a continued need for progress, including in such areas as regulatory transparency and the establishment of fully independent regulatory bodies—that is, regulators that are not also competing in the market. With respect to individual industries, excessive capitalization requirements in the financial sector, delays in permitting nonbank institutions to provide auto financing, the lack of a functioning agricultural TRQ system, and continued delays in granting permanent approvals for genetically modified crops are among the year-one issues that carry over as concerns.

On the positive side, tariff cuts continue to be made in a transparent fashion and according to the agreed upon timetable. This past year also saw progress with respect to China's participation in the Information Technology Agreement (ITA) as the country removed certificate requirements on 15 tariff items that previously had to meet conditions before qualifying for the ITA tariff rates. In addition, as just one example of consultations with foreign companies to develop WTO-consistent regulations, the direct-selling sector has been pleased by the willingness of the new Ministry of Commerce to consult with companies about the form and substance of new regulations being drafted to govern that industry.

While the 2002 report did not mince words about our expectation of full compliance, it reflected our members' understanding about the scope and likely challenges of the effort ahead. It recognized the time that would be needed to develop or amend literally thousands of regulations to ensure their compliance with China's WTO commitments and to put in place the physical and human capacity to implement those regulations in a transparent and predictable manner.

One year later, expectations are rising, and the degree of progress in implementing WTO commitments in year two and beyond will impact how quickly China's own economic modernization efforts proceed, how foreign investors view opportunities in that important marketplace, and how political leaders in the United States, particularly in the U.S. Congress, approach the bilateral relationship.

New Commitments and Expectations for 2003

China's commitments in the second year of its WTO membership range from the continuation of tariff cuts that began upon its accession to the second phase of gradual market openings being implemented over a period of years. Some of the most significant commitments in the second year include those related to financial services, telecom services, and trading rights and distribution services. Many of these are highlighted below.

SELECTED YEAR-TWO COMMITMENTS

Tariff Rates by January 2003

China's second-year tariff commitments took effect January 1, 2003, and were administered with few anomalies.

Customs Valuation by December 2003

China must adopt two WTO customs valuation decisions concerning the treatment of interest charges and the valuation of carrier media-bearing software for data processing equipment.

Value-Added Telecommunications Services by December 2003

China must permit foreign suppliers to establish joint ventures (with no more than 50% foreign equity) with no geographic restrictions.

Advertising by December 2003

China must permit foreign majority ownership in advertising firms.

Financial Services

Life/Nonlife Insurance by December 2003

China must allow foreign life and nonlife insurers and brokers to operate in the Chinese cities of Beijing, Chengdu, Chongqing, Fuzhou, Ningbo, Shenyang, Suzhou, Tianjin, Xiamen, and Wuhan. China must allow foreign nonlife insurers to provide the full range of nonlife insurance services to both foreign and domestic clients.

Banking **by December 2003**

China must allow foreign banks to provide local currency services in Chengdu, Chongqing, Fuzhou, and Ji'nan, as well as local currency services to Chinese enterprises.

Securities **by December 2003**

China must allow foreign providers to establish fund management joint ventures (limited to a 49% equity stake).

Trading Rights and Distribution Services**Right to Trade** **by December 2003**

By December 11, 2002, foreign-invested enterprises holding minority foreign shares were to receive full trading rights, and those holding majority foreign shares must receive those rights by December 2003. There are ongoing reductions (continuing through December 2004) in the list of goods to be traded only by companies designated by the central government (affects natural rubber, timber, plywood, wool, acrylic, and some steel products).

Wholesale and Commission Agents' Services **by December 2003**

China must permit foreign distributors of most products to establish majority-owned enterprises with no geographic restrictions.

Retailing Services **by December 2003**

China must permit foreign retailers of most products to establish majority-owned enterprises with no geographic restrictions.

Source: General Accounting Office and U.S. Chamber analysis of China's WTO commitments.

This testimony makes constructive recommendations regarding some of the high-priority trade differences with China in the hope of avoiding more serious trade disputes. Let's take a closer look at some key areas.

AGRICULTURE

China's WTO commitments to reduce both tariff and nontariff barriers in the agricultural sector have met with mixed results. There has been welcome progress in some key areas such as tariff reductions. Unfortunately, however, many nontariff barriers continue to limit the progress anticipated from China's WTO membership.

Some of the key issues that need to be addressed include

- a range of problems with the implementation of China's promised TRQ system, including a lack of transparency, delay in the announcement of quotas, granting of insignificant and uneconomic quotas, imposition of restrictions that are not required of domestic producers or merchants, and other unnecessary restrictions;
- uncertainty regarding biotech regulations and the issuance of permanent safety certificates for biotech products;
- labeling and information requirements on meat and poultry products that raise export costs without enhancing food safety;
- administrative interference with import trade by China's quarantine authorities and Ministry of Commerce, including requirements that importers get import permits before signing purchase contracts and making shipments;
- significant export subsidies for agricultural products, particularly corn; and
- Chinese adherence to the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures. There is particular concern regarding the failure to utilize the International Plant Protection Convention, "zero tolerance" pathogen standards that are neither science based nor practical, and undue quantitative restrictions on meat and poultry imports.

The agricultural TRQ issue has the potential to be the first case against China under the WTO dispute resolution system.

The U.S. Chamber's September 2002 report called for science-based, permanent rules for genetically modified organism (GMO) imports, a transparent TRQ system, and an end to agricultural export subsidies.

While China has eliminated or reduced some tariff barriers, the benefits from these actions can be quickly offset by continued nontariff barriers that restrict trade into China, create significant marketplace uncertainty, and discourage further foreign investment.

We urge the governments of China and the United States to work collaboratively to reduce these unjustified barriers to agricultural imports and the modernization of Chinese food production.

For 2003, the U.S. Chamber has chosen to highlight two specific areas where reform is urgently required for China to comply with the spirit of its WTO commitments: (i) regulatory practices of AQSIQ and (ii) agriculture TRQ systems.

AQSIQ Regulatory Practices

U.S. soybean, cotton, and meat traders have reported significant restrictions on exports of products to China stemming from AQSIQ's posture on the issuance of Import of Animal and Plant Quarantine permits and its inspection procedures. Chinese quarantine regulations require importers to obtain import permits before entering into purchase contracts and effecting shipments. With import permits valid for only 90 days, buyers are locked into a very narrow period to purchase, transport, and discharge their cargoes before expiration of the permits.

While the technical requirement imposed on importers is to obtain an import permit in advance of contracting for commodity shipments, the current AQSIQ requirement is essentially unworkable as importers buy products when prices are low—sometimes months ahead of actual shipment. Contracting parties cannot wait to obtain an import permit first before making a contract for shipment of commodities.

Although China removed soybean import quota control in 1999, the Chinese government now appears to control import volume through WTO-inconsistent methods such as the use of quarantine import permits. Many of the administrative requirements of the import permit system—such as factory inspections, the requirement that buyers not import more than they did in previous years, rules that restrict buyers from using premium/basis or other forward delivery contracts, and rules that restrict the issuance of permits only to processing plants and not to traders supplying multiple plants—have no relevance to the enforcement of animal and plant health regulations. The requirement for a surface inspection of imported grain and feed ingredients prior to discharge has no scientific validity.

AQSIQ has recently slowed the issuance of permits, which has resulted in significant commercial uncertainty and, in some cases, has placed U.S. foreign investment in the Chinese agricultural sector at risk. Because of the commercial necessity to contract for commodity shipments when prices are low, combined with inherent delays in having import permits issued, many cargoes of soybeans end up arriving in Chinese ports without import permits. This has created delays in vessel discharge and resulted in demurrage bills for Chinese buyers.

AQSIQ has committed to notify importers about the result of their permit applications within 30 days of receipt. However, some importers are waiting well beyond 30 days without obtaining any feedback from AQSIQ, as it appears that provincial inspection and quarantine offices that act as intake centers for import permit applications are asked to delay submitting these applications to AQSIQ in Beijing. This effectively extends the 30-day notice period AQSIQ has to respond to the party requesting an import permit.

Most recently, AQSIQ has suggested to foreign diplomats that it will take action to restrict specific firms from exporting or importing soybeans based on allegations that the firms have failed to meet certain quarantine regulation and mandatory quality requirements.

Recommendations:

- China's General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) should restrict its activities to import quarantine procedures that are science based and compliant with WTO and international conventions and should not impose delays, uncertainties, or commercially discriminatory or commercially unrealistic requirements that inhibit free trade.
- AQSIQ should approach the approval of import permit requests in a timely and commercially realistic manner.
- AQSIQ should ensure that all formalities are transparent, with clear timelines openly promulgated.

Agricultural Tariff Rate Quotas

China has not made sufficient progress¹ in implementing tariff-rate quotas for bulk agricultural commodities such as wheat, corn, cotton, and vegetable oil in a

¹ China's Ministry of Commerce and National Development and Reform Commission have recently published a draft regulation amending management of TRQs for imported agricultural products. At the time of writing, the U.S. Chamber of Commerce is uncertain whether the draft regulation will address the current concerns of the U.S. agriculture sector with respect to China's TRQ systems.

manner that opens the market to trade as anticipated under China's WTO accession agreement. Regulations designed to establish TRQ systems were late in being released, lacked sufficient transparency, and introduced unreasonable licensing procedures for importers. In some cases, China contravened its accession agreement by allowing TRQs reserved for "nonstate trading companies" to be issued to state-owned enterprises.

The TRQs for corn and wheat in many cases were distributed in such small quantities as to render them uneconomic to fulfill. When TRQs were issued, it has been very difficult, if not impossible, to ascertain which companies were granted quotas, and the authorities responsible have refused to publish full lists of quota recipients, in violation of the WTO agreement.

We are encouraged by China's recent proposed elimination of current State Development and Reform Commission requirements that a significant portion of each TRQ be used only for processing and mandatory reexport of finished products. This restriction is most important for cotton, where well over one half of the TRQ has been restricted to reexports, and represents a violation of China's accession agreement.

Recommendations:

- China should honor its TRQ obligations and not engage in such practices as delaying announcements; granting insignificant, uneconomic quotas; applying restrictions that are not required of domestic producers or merchants; or designing nontariff trade barriers that circumvent TRQ obligations.
- China should ensure that there is greater transparency in the TRQ process and comply with requirements to publish a list of importers that have been granted TRQ allocations.

AUTOS

China's WTO commitments in the automotive sector were designed to address a range of policies and practices that limited the ability of automakers to fully engage in the Chinese automotive market. These commitments include a significant reduction in automotive tariffs, phaseout of auto tariff quotas and licensing requirements, easing of restrictions on investment, permission of nonbank automotive financing, phasein of trading rights and distribution services, full adherence with the WTO agreement on technical barriers to trade for auto standards and certification, and active enforcement of the WTO agreement's commitments on intellectual property. Overall, compliance with these commitments has been uneven. The commitment China made to lower tariff rates has largely been met. In many other areas, however, China has fallen short of fully meeting its obligations.

A case in point is in the area of auto financing. China agreed that upon accession it would allow nonbank financial institutions to provide auto financing without limitations on market access or national treatment. Almost two years later, final implementing regulations have not been issued, and the most recent draft regulations contain excessive capitalization requirements and net asset ratios that are significantly higher than are found in other markets around the world. These requirements will make it difficult for U.S. and other foreign firms to provide these services to consumers in China, which will, in turn, dampen the demand for automobiles in China and reduce the economic contribution that the auto sector can make to the Chinese economy.

With regard to its auto quota and import licensing commitments, China agreed to a three-year global auto quota for the importation of finished motor vehicles and select components. The quota was US\$6 billion for the first year (2002) and is scheduled to grow 15% annually until all quota restrictions are eliminated by January 2005. While the 2003 import quota on motor vehicles (US\$9.125 billion) exceeded minimum WTO commitments to expand the quota levels, the delay in issuing the regulations and quota allocations has resulted in uncertainty and significant disruption of distribution and retail businesses for imported vehicles.

China also committed to phase in trading and distribution rights for joint ventures and foreign-owned enterprises within three years of accession. The ability of automakers to fully utilize trading rights to freely bring in motor vehicles and distribute them to complement the vehicle models manufactured in China is critically important. This will enable automakers to market a wide range of vehicle options and provide consumers with more choices. Although draft implementing regulations granting and governing trading rights and distribution services have not yet been released, there is a growing concern that automakers will be required to establish separate distribution systems for domestic and imported vehicles, which would clearly be inconsistent with the intent of the WTO commitments on trading rights and distribution services.

Protection and enforcement of IPR, as defined in the WTO TRIPs agreement, is increasing in importance to automakers operating in China. Since China's accession to the WTO, there has been an increase in IPR violations of automotive products, such as automotive braking, steering, and emissions systems. The violations have an adverse commercial impact on those automakers that hold the patents and trademarks for these products, but more importantly, they pose a serious safety and health risk to Chinese citizens.

In early May 2003, China released for comment a draft update of the industrial policy governing China's automotive industry. In general, the policy appears to promote a return to top-down, government-directed management of the fundamental structure and scope of the industry. For example, the policy contains guidance on the close management of automotive production, investment, distribution, trade, and technology, which is inconsistent with the great strides China has taken toward a more market-oriented economy. We are encouraged that China is seeking input on the draft auto industrial policy and support modification of the policy to ensure that it is fully consistent with the letter and spirit of China's WTO commitments.

Recommendations:

- China should put in place a regulatory structure that reflects global norms and not institute capitalization requirements and net asset ratios for auto loan institutions that act as market access barriers. In light of the nearly two-year delay in implementing its auto finance commitments, China should expedite the approval of applicants.
- Draft regulations covering distribution services should be made available for prior public comment, and final regulations must allow foreign-invested auto enterprises to engage in distribution activities as soon as possible, with no requirement of a separate distribution system for domestic and imported autos.
- The allocation of the remainder of the 2002 and 2003 auto quotas and the reallocation of unused 2002 and 2003 quotas should take place promptly. China should also provide assurances that there will be a fair, transparent, and open process for the 2004 quota application and allocation.
- China should actively enforce compliance with the WTO's TRIPs agreement as it applies to the automotive industry.
- China's draft auto industrial policy should be modified to bring it fully in line with the letter and spirit of its WTO commitments.

EXPRESS DELIVERY SERVICES

In the U.S. Chamber's 2002 report, it called on China to prohibit the State Postal Bureau, which is both a regulator and a competitor in the market, from acting inconsistently with its WTO obligations by adopting measures that either expand the traditional postal monopoly to new areas, such as express delivery, or accord more favorable treatment to China Post when supplying express delivery services in direct competition with private operators. In 2003, express delivery service providers continue to call for WTO-consistent regulations and laws that encourage, not hinder, competition.

China needs to separate China Post's regulatory functions from its business operations, define the postal monopoly as narrowly as possible, and promote fair competition in sectors, such as express delivery, where China Post competes with private-sector operators. Express delivery companies can then operate outside the scope of the defined postal monopoly without obtaining any entrustment or approval from China Post.

U.S. industry representatives are concerned that the current draft revisions to China's postal law, which the National People's Congress (NPC) has announced that it will pass this year, violate China's WTO market access and national treatment commitments. The draft law would expand China Post's monopoly to all shipments under 500 grams, which would greatly impair the ability of express delivery carriers to provide services in China.

Express delivery companies are encouraged that the NPC and the State Council's Legislative Affairs Office have met with them to discuss this draft and appear to be making a serious effort to listen to the views of foreign participants in the market. But China will be judged by its actions. The draft must be revised to reflect China's WTO commitments and to promote beneficial competition in the market. Specifically, China must remove the existing 500-gram threshold for shipments in the draft postal legislation. These restrictions would allow China Post, the dominant carrier, to extend its monopoly from private letters to other shipments.

Recommendations:

- New postal legislation must reflect China's WTO commitments and not allow China Post to extend its existing monopoly to new areas.

- The new legislation should define the scope of the postal monopoly as packages and documents weighing less than 350 grams where the price is less than three times that of the lightest ordinary mail over the shortest domestic distance. In two years, this should be reduced to 250 grams and two times the price of ordinary mail; two years later, it should be reduced to 150 grams and the price of ordinary mail.
- Although not technically a WTO mandate if certain requirements are met, China should ensure competition and efficiency by separating the postal regulatory function and the postal business function into different and independent entities. The postal regulator should focus on the quality of postal service, pricing related to cost, and related accounting systems to prevent abuse of the exclusive rights granted to the universal service provider.
- China should regulate businesses that operate outside the scope of the defined postal monopoly by using a nonpostal regulator, such as the Ministry of Commerce, for international freight forwarders.

FINANCIAL SERVICES

Insurance

Since joining the global trading body, China has made considerable progress toward openness and the acceptance of international norms, and much of this progress has come in the financial services sector where China made substantial liberalization commitments. In insurance, foreign nonlife carriers will be able to provide insurance to indigenous Chinese companies by the end of 2003. In addition, China will eliminate geographic limitations on foreign insurance company expansion by the end of 2004. Foreign companies may already provide master policies (if the headquarters of the insured is located within the insurer's licensed city) and large-scale commercial risks without geographic restrictions. Moreover, under China's WTO obligations, foreign insurance brokers may now form joint ventures and may gradually transition to wholly owned foreign enterprises by December 2006.

Some of China's reforms go beyond its WTO commitments. Allowing nonlife insurance companies to provide accident and health products, under the terms of the recently amended Insurance Law, is an encouraging development. China has not, however, succeeded in meeting all of its commitments, and significant challenges remain. The U.S. Chamber is pleased with recent actions by CIRC offering public comment periods on the "Trial Implementing Rules on the Regulations of the People's Republic of China for the Administration of Foreign-Invested Insurance Companies" and "The Administrative Regulations on Insurance Companies" and applauds this move to realize China's transparency commitments.

However, certain draft regulations are inconsistent with China's WTO obligations, including the requirement for insurers to convert existing branch operations to local subsidiaries. China should also allow insurers to conduct business on a branch/sub-branch operating structure, as is widely permitted under established international norms. Foreign insurers await CIRC's reply to their request for confirmation of their understanding on a series of issues that they have identified as vague regarding the treatment of domestic and foreign companies, including from the national treatment standpoint. Generally, foreign insurers believe China's drafts are a move in the right direction and expect CIRC to provide further clarification during its next meeting with industry representatives and officials from the Office of the U.S. Trade Representative. Such a meeting will represent the next stage in an ongoing dialogue and collaborative process initiated in December 2002. Given the number of outstanding questions that exist on a range of significant issues, foreign insurers consider it important that the next meeting be held during the fall of 2003.

The current approach of specific regulations for domestic insurers and separate regulations for foreign insurers may be necessary in the early stage of opening the insurance sector. However, as China implements national treatment for all insurers, we look forward to the day when China will have a single, unified set of regulations, based on international best practices, for all insurance companies operating in China.

At this time, of greatest concern are the following three issue areas:

Excessively High Registered Capital Requirements

The U.S. Chamber's 2002 China WTO compliance report called for policies that would allow foreign insurance companies to establish a branch with a reasonable initial capitalization backed up by the strength of the parent organization. It also called on China to permit geographic expansion in compliance with scheduled phase-outs of geographic restrictions and without having to separately capitalize each location. Unfortunately, in 2003, excessive capitalization requirements to enter or ex-

pand in the insurance market remain a major concern for many U.S. Chamber members.

China's imposition of extremely high registered capitalization requirements—substantially higher than similar requirements in the vast majority of insurance markets throughout the world—has negative implications for both foreign and domestic insurers. Such high capitalization requirements severely limit the WTO benefits of greater market access for foreign firms seeking to enter the Chinese market and the removal of geographic restrictions on firms already in the market. These requirements also represent a poor utilization of capital for all insurers, preventing them from using capital efficiently and thus hindering the sound development of an important component of China's integration into the world economy.

China's current regulations were put in place when the Chinese insurance market was relatively closed and when regulations sought to govern a primarily domestic insurance industry. Those regulations may have made good sense at that time and in that context. But China's growing role in the global economy requires the acceptance of global practices and regulatory standards as the Chinese are now regulating global insurers with global assets, not just domestic insurers with domestic assets. The modernization of these requirements will help China achieve its goal of a more developed, open, and competitive market for the benefit of insurance consumers throughout the country.

Capital requirements that emphasize overall insurer solvency over registered capital would free up resources that would allow both domestic and foreign insurers to introduce new products and technologies and help build a thriving insurance market. In place of excessive capitalization requirements, levels could be calibrated according to the scale of a company's business and levels of risk being covered, which would address any present or future concerns about the viability of smaller market players.

Lack of Transparency and Clarity in Regulatory Environment

China should provide more clarity and specificity with respect to insurance regulations and administrative measures. A number of China's insurance regulations are vague and permit a wide degree of bureaucratic discretion, which has led to confusion, misinterpretation, and inefficient operating practices. In line with its WTO commitments, as well as internationally accepted standards and good business practices, China should make consistent use of advance notice and comment periods. Both local and foreign insurance professionals should be given a reasonable period of time to review and comment on proposed new measures.

In the past, the Chinese Insurance Regulatory Commission (CIRC) rarely allowed insurance companies and/or other interested parties to comment on draft measures before they became effective. CIRC should take advantage of the international experience that many foreign insurance professionals bring to China and work more closely with the private sector to ensure the development and acceptance of timely, market-oriented, and economically sound policies. CIRC should also establish and maintain a regular dialogue with industry experts and consumers to address the needs of the industry and consumers of insurance services.

U.S. insurance companies are pleased by the dialogue CIRC has undertaken with a U.S. Government-industry group and hope to contribute to solutions that will both promote solvency and build an internationally competitive Chinese insurance market.

Restrictions on Branch/Sub-branch Operating Structure

China's WTO commitments on branching clearly state that China will permit branching consistent with the phaseout of geographic restrictions. But China's current regulations do not allow insurers to sub-branch off a branch operation except within the immediate, licensed territory (e.g., Shanghai). While foreign and domestic companies may apply for more than one branch at a time, the Chinese government has not approved more than one branch at a time for foreign insurers. In addition, China has not permitted geographic expansion of existing foreign life insurance companies with the same corporate structure they had established before China's WTO membership.

Without a change in current practice, foreign insurers will be unable to achieve the economies of scale necessary to build a truly national business like their domestic counterparts. This means that both commercial and individual consumers will remain underserved in many parts of China and will not benefit from the competition that market opening was intended to stimulate.

Foreign insurance companies should be allowed to expand geographically in China in line with established international norms and operating practices (i.e., through

the use of the internationally accepted branch/sub-branch structure). Specifically, foreign insurance companies should be able to establish a branch with a reasonable initial capitalization backed up by the strength of the parent organization. They should be allowed to expand throughout the country—in accordance with China's timetable for the phaseout of geographical restrictions—through the establishment of sub-branches that are not limited to the immediate, licensed territory. Additionally, the company should not have to separately capitalize each new location.

In most countries, when insurance companies enter foreign markets, they are allowed to establish an initial branch and then expand to new locations throughout the country through a network of sub-branches that report to the original branch. This branch/sub-branch structure is supported by, and legally tied back to, its corporate parent. Thus, branch operations should not be treated as if they were separate, stand-alone entities. Likewise, because a branch/sub-branch structure is supported by its parent corporation's assets, the company should not have to recapitalize when expanding to a new location. This branch/sub-branch operating structure is an established international norm and a widely accepted principle of operation.

Recommendations:

- China should bring registered capital requirements in line with global best practices and regulatory standards.
- China should improve the clarity and specificity of insurance regulations and administrative measures and should consistently provide advance notice and reasonable comment periods on proposed measures.
- China should allow foreign insurance companies to expand geographically according to the terms of its WTO commitments, and should permit the use of a single branch/sub-branch structure throughout the country without any additional capitalization requirements or lengthy application processes.
- China should allow foreign insurance companies to establish more than one branch at a time—that is, on a concurrent, not consecutive basis—commensurate with domestic counterparts.

Banking

In the banking sector, concerns revolve around recent Bank of China proposals to limit the renminbi (RMB) interbank loan market and high dotational or endowment capital requirements for branches of foreign banks—which rise many times over for also conducting business in Chinese currency.

The proposed regulation to cap borrowing at 40% of total liabilities and to limit borrowing tenors would lead to an inefficient use of capital, and would contravene national treatment principles by discriminating against foreign-funded financial institutions. The U.S. Chamber's 2002 report also spoke out against such a cap, which would negatively impact the foreign-funded institutions that depend on this financing to serve their clients, mainly foreign-invested enterprises that are making positive contributions to the Chinese economy.

Foreign banks depend on interbank RMB loan agreements as they are still not allowed to accept RMB deposits from Chinese enterprises or individuals, except in very limited cases. Moreover, foreign-invested enterprises deposits in RMB do not usually exceed what they borrow. Chinese banks are much less dependent on interbank refinancing as they do not face the same legal restrictions as do foreign banks regarding drawing on deposits and, unlike foreign banks, have access to the savings pool of Chinese citizens.

China's WTO commitments in the banking sector do not encompass such a borrowing restriction. Article XVI of the General Agreement on Trade in Services (GATS) says that, among other things, limitations on the total value of service transactions in the form of numerical quotas shall not be maintained or adopted in sectors where market access commitments are undertaken. Therefore, the cap is a violation of this article. And as a prudential measure, quota restrictions on certain refinancing sources are inferior to liquidity supervision approaches that relate the maturity structure of a bank's liabilities to the maturity structure of its asset portfolio.

Also a violation of the GATS article is the proposal that would restrict the maturity of interbank transactions to three years, in addition to the possible rollover of not more than half of the original maturity. Such a step could prevent banks from matching the maturity structure of their assets when they are already placed at a competitive disadvantage with respect to Chinese banks due to Bank of China minimum interest regulations on loans, a refinancing cartel of the Chinese banks, and a tax on foreign bank branches based on their interbank refinancing interest rate.

As China finalizes implementing regulations for financial services, the U.S. Chamber encourages the Chinese authorities to bring financial services capitalization levels and refinancing conditions in line with common global practices and regulatory standards. New regulations must not be allowed to undermine the benefits that the WTO accession agreement was designed to bring or to hinder China's ability to develop a thriving financial sector.

Recommendations:

- China should bring banking sector capitalization levels and refinancing conditions in line with common global practices and regulatory standards.
- China should adopt prudential criteria for the banking sector based on international norms and should avoid the use of borrowing restrictions that limit the efficient functioning of the market.
- China should avoid proposals that would limit the maturity of interbank transactions and create difficulties for banks to match the maturity structure of their assets.

Asset Management

China's entry into the WTO was a significant step in opening up the asset management market in China. Under the country's accession agreement, foreign firms are permitted to own up to 33% of a Chinese asset management firm as of December 11, 2001, and up to 49% of an asset manager by December 11, 2004. For the asset management sector, the concerns regarding WTO implementation are similar to the challenges that exist within other segments of the financial services sector, including a lack of transparency and high capitalization requirements.

When the China Securities Regulatory Commission (CSRC) published the draft joint venture rules under which foreign firms could participate in the asset management market, there was concern that the draft rules did not provide a complete list of objective criteria for approving foreign institutions. Unfortunately, when the CSRC adopted its final rules, it did not clarify the criteria that it intended to use in its approval process. Instead, it replaced the unclear text with language providing the CSRC with broad discretion to impose additional requirements for qualification of a foreign firm. Regulations that lack transparency or provide broad discretion to officials in approving applications create uncertainty for foreign firms that wish to enter foreign markets. Moreover, when the CSRC published the draft joint ventures rules for comment, interested persons had only 10 days to respond.

Under the final joint venture rules, a foreign institution seeking to enter a Chinese joint venture must have no less than RMB 300 million [US\$36 million] in capital. This high level of mandated capital for asset management firms is excessive and represents a barrier to entry. The business of asset management is not capital intensive, and client assets typically are not in the custody of the asset manager and are not at risk if the asset manager experiences financial reversals. Moreover, a high capital requirement disproportionately affects foreign asset managers because their operations in each country will typically not be as significant as their operations in their home country.

A-Share Market

China has taken steps to open the A-share market to foreign investors by adopting rules governing qualified foreign institutional investors (QFIIs). A number of aspects of the new QFII rules, however, limit their practicality by (1) restricting the percentage of an issuer's securities that may be held by any one QFII and by all QFIIs in the aggregate, (2) requiring each QFII to commit total investments of at least US\$50 million to a dedicated QFII account, (3) requiring the amount invested to remain in the QFII account for at least one year for open-end funds and three years for closed-end funds, and any remittances from the account to be approved in advance by the State Administration of Foreign Exchange, and (4) lacking specific criteria to be applied for certain aspects of the licensing process.

Recommendations:

- China should put in place transparent regulations and administrative practices to ensure that foreign firms will not be treated in an arbitrary manner and that approvals of applications will be based on objective and fair criteria and rules that protect investors.
- China should provide a meaningful period of time for comment in promulgating financial services regulatory requirements.
- China should reconsider the high capital requirements it has imposed on fund management companies.
- China should make the QFII system more workable by eliminating some of the requirements under the current system as described above.

INTELLECTUAL PROPERTY RIGHTS

China was required to fully meet its WTO obligations in the area of IPR protection before its accession on December 11, 2001. But after nearly two years of membership in the global trading body, it is clear that the country's IPR enforcement system still has significant weaknesses and is far from effective. Upon accession, China's laws and regulations and enforcement systems had to comply with the substantive and enforcement provisions of the TRIPs Agreement. Although the country's statutory legal regime was largely in place prior to its accession, IPR enforcement continues to be a major concern, as it was in the Chamber's 2002 analysis.

The International Intellectual Property Alliance estimate of losses due to copyright piracy was US\$1.85 billion in 2002, with piracy rates above 90%. Trademark and patent enforcement has fallen short as well.

Enforcement of IPR, a key obligation under TRIPs, cannot be considered effective until civil and criminal penalties are routinely applied to infringers of IPR. While China's government at the central and provincial levels carries out raids and other enforcement actions, there is limited coordination of these efforts and no commitment to pursue criminal prosecutions with deterrent penalties. Pirated music, books, (especially higher-education textbooks, pirated translations, and increasing counterfeiting using well-known publisher trademarks, authors' names, and trade dress), business software, movies, and video games are readily available throughout the market, hindering the ability of both indigenous and U.S. creators and rights holders to build successful businesses. Newly emerging problems include Internet piracy, such as the illegal and unauthorized download of online journals and other materials. Without a strong criminal remedy, rights holders have turned to more expensive and less effective civil actions, which are not providing the necessary deterrent effect.

Also worrisome are increasing reports of counterfeiting in industrial areas beyond the copyright industry. Manufacturing sectors, such as the automobile industry, report an increasing prevalence of theft of industrial designs.

Ultimately, China will not continue to attract foreign investment in research and development if the resulting intellectual property will not be protected long enough for creators to see a return on that investment. And as more trade is stimulated through China's continued implementation of its WTO commitments, IPR-related frictions are likely to grow with trading partners with resulting damage to China's international reputation as an investment destination for knowledge-based industries.

Pharmaceutical Industry Intellectual Property Concerns

China is a large and increasingly significant market for U.S. pharmaceutical companies. In 2002, the country made positive strides in promulgating laws that will improve intellectual property protection for pharmaceutical products in China, including a regulation extending all patents to 20 years, as required by TRIPs. Other improvements include adopting provisions on data protection and patent linkage.

But counterfeit pharmaceuticals continue to be a significant problem in China, especially over-the-counter products sold outside hospitals, of which 10%–15% are by some estimates counterfeit. Although Chinese authorities, including the State Food and Drug Administration (SFDA), are devoting time and resources to addressing this problem, success will be limited without laws on the books that strengthen criminal penalties for counterfeiters.

Currently, only if a substandard pharmaceutical seriously injures someone is the infringer subject to incarceration. Affixing someone else's intellectual property onto one's own packaging or labeling only subjects the infringer to incarceration if the infringement is "serious." Without criminal sanctions, including mandatory minimum incarceration at a relatively low threshold for all counterfeiting, it will be difficult to significantly curtail the counterfeiting of pharmaceuticals in China. And in the wake of the recent SARS epidemic, it is more important than ever that the Chinese authorities take effective actions to ensure the integrity of the drug supply. Action includes not only promulgating laws strong enough to take action against this criminal activity but also strong and consistent enforcement activities by law enforcement and judicial officials.

In the area of data exclusivity, China committed to encourage clinical trial development by adopting provisions that would provide a six-year period of exclusivity. Data exclusivity encourages the investment into clinical trials by not allowing a second registrant to rely on the pioneer's data package for the period of exclusivity. While the industry welcomed the promulgation of new regulations in 2002, it has still received relatively little feedback on how these provisions are to be implemented.

On the issue of patent linkage, it is critical that the regulatory authorities at SFDA do not grant marketing approval to infringing generic producers of products receiving patent protection. Provisions to provide for such linkage between drug regulators and IPR agencies are found in Articles 11 and 12 of the Drug Registration Regulation.

However, there is concern that the SFDA does not publish drug registration application information with a sufficient degree of transparency to enable the patent holder to identify a registration application of an infringing product. U.S. pharmaceutical companies look forward to working with Chinese drug registration authorities to increase transparency, both at the national and provincial levels.

Recommendations:

- China should undertake a coordinated nationwide IPR enforcement campaign against traditional (e.g., book, cassette) and recent or emerging (e.g., CD, VCD, DVD, Internet-related) piracy, end-user piracy of software and other copy-righted materials, and counterfeiting. China should also immediately eliminate the high criminal thresholds and procedural obstacles that prevent the effective use of criminal prosecutions in addressing IPR violations. At the same time, China should make revisions to the Penal Code such that it fully applies to all rights under copyright as well as all other piracy-related crimes.
- China should take similar effective enforcement actions in other manufacturing sectors to stem the tide and culture of piracy, including in areas such as pharmaceuticals that pose grave public health risks.
- China should take more effective customs and border measures to curtail the massive importation of pirated materials into the country.
- China should continue with its efforts to train judges in IPR laws; provide adequate resources to relevant police, prosecutors, and administrative agencies; and ensure that penalties for intellectual property violations are sufficiently strong to serve as a deterrent.
- China should ratify the World Intellectual Property Organization Copyright Treaty and the Performances and Phonograms Treaty.

TELECOMMUNICATIONS SERVICES

China's Ministry of Information Industries (MII)'s classification of value-added services has become more restrictive and rigid in the period since WTO accession. The 2003 Telecommunication Services Classification Catalog moves several services from the value-added service category to the basic service category. Equally troubling, MII's most recent catalog eliminates the value-added service of "code and protocol conversion" that China specifically listed in its WTO commitment. The current framework establishes a ceiling rather than a floor as to what qualifies as a value-added service, providing no transparent opportunity for an applicant to demonstrate that a new and innovative unlisted service should qualify as a value-added service. This post-accession increase in barriers on value-added service providers runs contrary to China's market-opening commitments.

China's reduction in the scope of value-added services and increase in the scope of basic services is especially problematic given the unreasonably burdensome registered capital requirement for foreign-invested basic service joint ventures. The Foreign-Invested Telecommunications Enterprises regulation specifies that basic service joint ventures must meet a 2 billion RMB (US\$240 million) registered capital requirement to be eligible for application. This requirement "could not reasonably have been expected" when China's commitments were made, as required by Article VI 5 (a)(ii), because it was effected by an administrative regulation dated December 11, 2001, after WTO members approved China's accession on November 10, 2001. The unjustified and unrealistic amount of this capital requirement bears no reasonable relationship to commercial or public interest requirements and represents a barrier to entry that China must eliminate.

China should do more to improve the degree of transparency in its regulatory processes, including providing required advance notice and comment periods. For example, the 2003 Telecommunications Service Classification Catalog was released in Chinese on the MII website without any prior notice or opportunity for public consultation. The effective date was two weeks following release, limiting any meaningful opportunity for public comment.

Additional measures are necessary to increase the independence of the regulator—MII—from the major state-owned operators in the telecommunications industry. Currently, by designation, MII occupies dual roles as a protector of state enterprise operators and as the industry regulator. The first role should be removed without delay.

Recommendations:

- China should not reduce the scope of its commitments in the category of value-added services by reclassifying them as “basic” services, a category that is far more restrictive for foreign investors. The capitalization requirements that China has established for providers of basic telecommunications services are unrealistic, bear no reasonable relationship to commercial or public interest requirements, and constitute a barrier to entry. This high capitalization requirement should be eliminated.
- China should promote greater transparency in legal and regulatory proceedings, including the consistent use of required advance notice and comment periods.
- China should take steps to increase the independence of the regulator—MII—from the major state-owned telecommunications operators.
- China should cease to restrict the ownership and operation of international gateways to wholly owned telecom service providers.

TRADING RIGHTS AND DISTRIBUTION SERVICES

A key year-two priority is ensuring that China will allow foreign firms to take full advantage of the trading rights (i.e., the right to import and the right to export) and distribution services commitments set forth in its WTO accession agreement. This area is one of the most critical to a wide range of industries and will be a key measure of how China’s implementation is evaluated. China’s trading rights and distribution services commitments are now the subject of serious discussion between Chinese officials and U.S. negotiators regarding China’s interpretations of their commitments in this area.

Full compliance in the area of trading rights and distribution services is particularly important in China, as many of the companies that invested there in the years prior to its WTO accession were forced to agree to restrictions to normal business practices in order to enter the market. In granting full trading rights, China should remove all artificial restrictions on company operations, such as those placed on companies whose investment licenses specified that they could not sell imported products or products purchased from third parties.

China committed to allow foreign-invested enterprises to receive full trading rights for virtually all products over a three-year period. Minority-share joint ventures should have received these rights—without having to satisfy export performance, prior experience, and other similar commitments—by December 11, 2002. In fact, regulations were vague about how this would happen and, in some cases, they made new requirements contrary to the stated commitment to provide full rights.

With respect to distribution services (wholesaling, commission agents, retailing, and franchising), a similar three-year phase-in is to take place. Foreign minority joint ventures providing direct retailing services (and subordinate and related services) were to have been permitted upon China’s WTO accession, subject to certain geographic and numerical limitations. Minority-share foreign joint ventures in wholesale business and commission agents’ business operations were to have been permitted by December 11, 2002.

Currently, foreign-invested manufacturing enterprises may only engage in wholesale and commission agents’ services and may provide after-sales services for those products that they manufacture in China and, in some cases, for imported parent company products. Other enterprises with minority foreign ownership that obtain specific distribution licenses can provide these services, as well as direct retailing services, for others’ products, subject to stringent requirements not authorized by China’s accession agreement. And there is ongoing concern in the auto industry because China is reportedly considering requiring automakers to establish separate distribution systems for domestic and imported vehicles, which would be a clear violation of the national treatment principle.

China has also issued vague, problematic measures covering subordinate and related services. A July 2002 Notice regarding foreign-invested logistics companies technically met China’s obligation to permit foreign minority joint ventures by December 11, 2002, but the text did not define precisely how enterprises could expand their business scope to include distribution. In addition, a November 2002 Notice opened up goods transport, loading and unloading, and warehousing to foreign majority ownership but capped foreign investment levels at 75%, contrary to China’s commitment not to impose such caps on foreign participation.

Members of the China WTO Implementation Working Group are monitoring closely how distribution services commitments, one of the key benefits of China’s WTO accession, are implemented.

Recommendations:

- China should put forward transparent and WTO-consistent regulations that spell out precisely how U.S. enterprises can begin to realize the benefits of China's commitments in the area of trading rights and distribution services.
- These regulations should eliminate the artificial restrictions imposed on companies that made investments in China before its accession to the WTO and should make clear that all companies may conduct operations in China as they would anywhere in the world.
- China should make draft rules relating to trading rights and distribution services available for prior public comment.

Conclusion

The U.S. Chamber's China WTO Implementation Working Group believes that the Chinese government remains committed to implementing its WTO obligations as a crucial underpinning of its own economic development and modernization goals and has seen many examples of a willingness to work with the American business community as it seeks to fulfill its WTO obligations.

We knew at the outset that this would be a complex undertaking. China would be amending or writing literally thousands of new laws and regulations as part of a fundamental transformation of its system, and this would not be a process without challenges. But in advocating for China's WTO membership, our expectation has always been that this process would lead to a more open and transparent Chinese market based on the rule of law. In addition, we expect that China's compliance with its commitments will create tangible examples of new business opportunities for exporters and investors. Unfortunately, evidence of new commercial opportunities is not yet as strong as it should be.

At the end of the day, China will ultimately be judged on the extent to which it opens its markets, puts in place a more transparent system based on the rule of law, and creates a business environment in which foreign companies and Chinese companies alike can thrive. When China achieves this goal, we will see the kind of commercial results that American business and political leaders anticipated when they gave their strong support for China's membership in the WTO.

The U.S. Chamber will continue to represent the interests of its member companies doing business in China or seeking to do business there. By providing forums and other opportunities for dialogue and the fostering of new business relationships, we hope to contribute to the strengthening of U.S.-China relations. The U.S. Chamber urges the two governments and business communities to find ways to resolve WTO-related challenges through ongoing dialogue and consultations and stands ready and willing to assist in these efforts.

U.S. CHAMBER OF COMMERCE
Washington, D.C. 20062-2000

**WHAT GOES INTO A COMPANY'S FOREIGN
MARKET INVESTMENT DECISIONS?**

1. **Internal Market**—the size and potential for growth of the domestic market, especially the purchasing power of its customers are key. You don't invest where you have little potential to make a profit.

2. **Freedom of Access to the Market**—the strength of the competition as well as governments' interference to entering the market. Freer access increases its attractiveness as an investment opportunity.

3. **Labor Force and Raw Materials**—while the investor brings capital, technology and management to the table, the quality of the indigenous work force and the availability of in-country raw materials are also important ingredients in the recipe for success.

4. **Protection from Currency Devaluation**—simply stated, if you make an investment in euros or yen or rubles, and then the local assets (valued in the local currency) are devalued, you have lost part (or possibly all) of your original non-dollar-based investment.

5. **Remittance of Dividends, Interest, Royalties and Technical Assistance Payments**—if you can't get your money out of the country, then why invest?

6. **Property Rights Protection**—likelihood that a company's property, real or intangible (patents, copyrights, etc.), will be stolen.

7. **Export Potential**—ability to source from an operating unit in one market to serve nearby markets or maximize a company's global efficiency by trading among its various operating entities in different countries to round out its product lines.

8. **Regulatory Burdens**—the cost of government intervention on business (and profits) in the United States.

9. **Favorable Taxation and Tax Incentives**—although tax incentives geared to attract initial investments are important, the final investment decision is usually based on how taxation at the national, provincial and local levels will affect the normal operating environment.

10. **Low Political Risk**—an investor's ability to rely upon the integrity of the host government (Federal, State or local) and its ability to maintain local law and order is essential to any long-term investment.

11. **Predictable Macroeconomic Management**—confidence that the economy where the investment takes place will be managed in a competent/predictable way and that rules will not change midway in a contest.

12. **Reliable Infrastructure Support**—the ability to consummate transactions and get products and services to market is critical. Whether it is reliable transportation services, power generation, insurance and accounting services, a competent financial system, or other basics, investments cannot yield reliable returns without them.

INVESTING IN CHINA OR INDIA?

China and India are the giants of the developing world. Both enjoy healthy rates of economic growth. But there are significant differences in their FDI performance. FDI flows to China grew from \$3.5 billion in 1990 to \$52.7 billion in 2002; if round-tripping is taken into account, China's FDI inflows could fall to, say, \$40 billion. Those to India rose from \$0.4 billion to \$5.5 billion during the same time period (box table II.4.1).

Even with these adjustments, China attracted seven times more FDI than India in 2002, 3.2% of its GDP compared with 1.1% for India. In UNCTAD's FDI Performance Index, China ranked 54th and India 122nd in 1999–2001. FDI has contributed to the rapid growth of China's merchandise exports, at an annual rate of 15% between 1989 and 2001. In 1989 foreign affiliates accounted for less than 9% of total Chinese exports; by 2002 they provided half. In some high-tech industries in 2000 the share of foreign affiliates in total exports was as high as 91% in electronics circuits and 96% in mobile phones (*WIR02*, pp. 162–163).

About two-thirds of FDI flows to China in 2000–2001 went to manufacturing. In India, by contrast, FDI has been much less important in driving India's export growth, except in information technology. FDI in Indian manufacturing has been and remains domestic market-seeking. FDI accounted for only 3% of India's exports in the early 1990s (*WIR02*, pp. 154).

Box II.4. China and India—What Explains Their Different FDI Performance?

Even today, FDI is estimated to account for less than 10% of India's manufacturing exports (UNCTAD forthcoming a). For China the lion's share of FDI inflows in 2000–2001 went to a broad range of manufacturing industries. For India most went to services, electronics and electrical equipment and engineering and computer industries. What explains the differences? Basic determinants, development strategies and policies and overseas networks.

Basic Determinants

On the basic economic determinants of inward FDI, China does better than India. China's total and per capita GDP are higher (box table II.4.1), making it more attractive for market-seeking FDI. Its higher literacy and education rates suggest that its labour is more skilled, making it more attractive to efficiency-seeking investors (World Bank 2003c, p. 234; UNDP 2002). China also has large natural resource endowments. In addition, China's physical infrastructure is more competitive, particularly in the coastal areas (CUTS 2003, Marubeni Corporation Economic Research Institute 2002). But, India may have an advantage in technical manpower, particularly in information technology. It also has better English language skills.

Some of the differences in competitive advantages of the two countries are illustrated by the composition of their inward FDI flows. In information and communication technology, China has become a key centre for hardware design and manufacturing by such companies as Acer, Ericsson, General Electric, Hitachi Semiconductors, Hyundai Electronics, Intel, LG Electronics, Microsoft, Mitac International Corporation, Motorola, NEC, Nokia, Philips, Samsung Electronics, Sony, Taiwan Semiconductor Manufacturing, Toshiba and other major electronics TNCs. India specializes in IT services, call centers, business back-office operations and R&D.

Rapid growth in China has increased the local demand for consumer durables and nondurables, such as home appliances, electronics equipment, automobiles, housing and leisure. This rapid growth in local demand, as well as competitive business environment and infrastructure, have attracted many market-seeking investors. It has also encouraged the growth of many local indigenous firms that support manufacturing.

Other determinants related to FDI attitudes, policies and procedures also explain why China does better in attracting FDI.

- China has “more business-oriented” and more FDI-friendly policies than India (AT Kearney 2001).
- China's FDI procedures are easier, and decisions can be taken rapidly.
- China has more flexible labour laws, a better labour climate and better entry and exit procedures for business (CUTS 2003).

A recent business environment survey indicated that China is more attractive than India in the macroeconomic environment, market opportunities and policy towards FDI. India scored better on the political environment, taxes and financing (EIU 2003a). A confidence tracking survey in 2002 indicated that China was the top FDI destination, displacing the United States for the first time in the investment plans of the TNCs surveyed; India came 15th (AT Kearney 2002). A Federation of

Indian Chambers of Commerce and Industry (FICCI) survey suggests that China has a better FDI policy framework, market growth, consumer purchasing power, rate of return, labour laws and tax regime than India (FICCI 2003).

Development Strategies and Policies

The different FDI performance of the two countries is also related to the timing, progress and content of FDI liberalization in the two countries and the development strategies pursued by them.

- China opened its doors to FDI in 1979 and has been progressively liberalizing its investment regime. India allowed FDI long before that but did not take comprehensive steps towards liberalization until 1991 (Nagaraj 2003).
- The two countries focused on different types of FDI and pursued different strategies for industrial development. India long followed an import-substitution policy and relied on domestic resource mobilization and domestic firms (Bhalla 2002; Sarma 2002), encouraging FDI only in higher-technology activities.

Despite the progressive liberalization, imposition of joint venture requirements and restrictions on FDI in certain sectors, China has, since its opening, favoured FDI, especially export-oriented FDI, rather than domestic firms (Buckley forthcoming; IMF 2002). Such policies not only attracted FDI but led to round-tripping through funds channelled by domestic Chinese firms into Hong Kong (China), reinvested in China to avoid regulatory restrictions or obtain privileges given to foreign investors. In India, round-tripping, mainly through Mauritius, is much smaller and for tax reasons. It has been suggested that domestic market imperfections associated with problems of outsourcing, regulations and local inputs have led to “excessive internalization” of production activities by TNCs in China. So part of the FDI, occurring because of the imperfections of the domestic market, is undertaken as a second best response by manufacturing TNCs to the Chinese environment (Buckley forthcoming).

For India the situation is somewhat different. A tradition of entrepreneurship has spawned a broad based domestic enterprise sector (Huang and Khanna 2003). This combines with the necessary legal and institutional infrastructure and restrictive FDI policies followed until the 1990s. As a result, TNC participation in production has often taken externalized forms (such as licensing and other contractual arrangements). Even after a significant liberalization of FDI policies, internalization is not necessarily dominant. Consider information technology, industries where outsourcing to private Indian firms is efficient and there are quality domestic sub-contractors.

China’s accession to the WTO in 2001 has led to the introduction of more favourable FDI measures. With further liberalization in the services sector, China’s investment environment may be further enhanced. For instance, China will allow 100% foreign equity ownership in such industries as leasing, storage and warehousing and wholesale and retail trade by 2004, advertising and multimodal transport services by 2005, insurance brokerage by 2006 and transportation of goods (railroad) by 2007. In retail trade, China has already opened and attracted FDI from nearly all the big-name department stores and supermarkets such as Auchan, Carrefour, Diary Farm, Ito Yokado, Jusco, Makro, Metro, Pricemart, 7-Eleven and Wal-Mart (PricewaterhouseCoopers 2002).

In India the government is planning to open some more industries for FDI and further relax the foreign equity ownership ceiling (EIU 2003a). To identify approaches to increase FDI flows, the Planning Commission established a steering committee on FDI in August 2001. Following the Chinese model, India recently took steps to establish special economic zones. China’s special economic zones have been more successful than Indian export processing zones in promoting trade and attracting FDI (Bhalla 2002).

Overseas Networks

In addition to economic and policy-related factors, an important explanation for China’s larger FDI flows lies in its position as the destination of choice for FDI by Chinese businesses and individuals overseas, especially in Asia. The role of the Chinese business networks abroad and their significant investment in mainland China contrasts with the much smaller Indian overseas networks and investment in India (Bhalla 2002). Why? Overseas Chinese are more in number, tend to be more entrepreneurial, enjoy family connections (*guanxi*) in China and have the interest and financial capability to invest in China—and when they do, they receive red-carpet treatment. Overseas Indians are fewer, more of a professional group and, unlike the Chinese, often lack the family network connections and financial resources to invest in India.

Both China and India are good candidates for the relocation of labour-intensive activities by TNCs, a major factor in the growth of Chinese exports. In India, however, this has been primarily in services, notably information and communication technology. Indeed, almost all major United States and European information technology firms are in India, mostly in Bangalore. Companies such as American Express, British Airways, Consec, Dell Computer and GE Capital have their back-office operations in India. Other companies—such as Amazon.com and Citigroup—outsource services to local or foreign companies already established in the country (AT Kearney 2003). Foreign companies dominate India's call centre industry, with a 60% share of the annual \$1.5 billion turnover.

Investor sentiment on China as a location for investment is improving (MIGA 2002; AT Kearney 2002; American Chamber of Commerce in China 2002). Nearly 80% of all Fortune 500 companies are in China (*WIR01*, p. 26), while 37% of the Fortune 500 outsource to India (NASSCOM 2001). Despite the improvement in India's policy environment, TNC investment interest remains lukewarm, with some exceptions, such as in information and communication technology (AT Kearney 2001).

The prospects for FDI flows to China and India are promising, assuming that both countries want to accord FDI a role in their development process—a sovereign decision. The large market size and potential, the skilled labour force and the low wage cost will remain key attractions. China will continue to be a magnet of FDI flows and India's biggest competitor. But, FDI flows to India are set to rise—helped by a vibrant domestic enterprise sector and if policy reforms continue and the government is committed to the objective of attracting FDI flows to the country.

Source: UNCTAD.

Discussion, Questions and Answers

Co-Chairman DREYER. Thank you very much, Mr. Workman.

We will now have questions from the Commissioners. I believe Ambassador Ellsworth was first.

Commissioner ELLSWORTH. Thank you, Madam Chairman.

Mr. Roberts, what an interesting presentation you made to us just a few minutes ago. Thank you for that. Congratulations on it.

Dr. ROBERTS. Thank you.

Commissioner ELLSWORTH. If that is true, that is to say that the cause of what we're talking about here today, that is the impact of a huge rise of manufacturing in China at the expense of jobs here, if your explanation is true, that is to say that it is due to the collapse of world socialism and the rise in the use of the Internet, then there isn't much we can do about it, is there?

Dr. ROBERTS. There may not be.

Commissioner ELLSWORTH. Right. And so just hypothetically, let's you and I assume here for a moment that this trend that we're distressed about in the United States is going to continue for a long time. I don't know how long. Perhaps you don't, either. But that it's going to continue for a long time, and my question is, isn't that going to permanently change the terms of trade between particularly—in the world between manufacturing in Japan, North America, and Europe on the one hand, and commodities on the other hand, like oil and foodstuffs and so forth? Would you expand on that for a few minutes?

Dr. ROBERTS. Well, if this substitution—this labor substitution continues, first of all, I assume it's happening if the figure that's used everywhere that 55 percent of the Chinese imports is offshore production of U.S. multinational firms—so we talk about Chinese products, but it's Chinese labor—it's really not trade. It's like arbitrage, isn't it, where the cost of two things is so different. It's like arbitrage.

And it's not really the success of the Chinese in entering our market, it's the success of—

Commissioner ELLSWORTH. Absolutely.

Dr. ROBERTS. —firms going to lowest factor costs, producing there and sending back here. So if it continues, then what you would see, it's the highest productivity American labor that's most vulnerable. It's not the low-cost labor, it's the highest because that's where the biggest gain you substitute out engineers and radiologists and skilled manufacturing.

So you have to ask, where do those people go? And in economics, to the extent that I understand it, when you're moved out of your highest productivity use, you have to move into a lower productivity use. So if you see a pattern of U.S. labor—and I'm not just talking about manufacturing labor, I think the most vulnerable now are the high-paid knowledge jobs—you'll see a roll down in the productivity of the American jobs. That is, you'll find the software engineers doing something else. In fact, it's already happening.

So what happens through time is you get rolled out of the higher productivity jobs. What happens to the growth of income? What happens to the ladders of upward mobility? So they collapse. They collapse on you. There are no ladders of upward mobility. This is a good way to become a third-world country very quickly.

So if this is really happening, suppose we have two more years of recovery and we still lose jobs. Then it looks more like what I'm saying is happening. If all of a sudden we start creating jobs again, then maybe this isn't what's happening. But if you look at all the announcements of so many of the corporations, we're moving out 1,500 engineering jobs, we're moving out research and development, we're moving out white collar jobs, then it has to be simple economic incentive. There are a lot of skilled, educated people that are now available to us and we are being substituted out.

I don't know if that answers you, but—

Ms. LEE. If I may, I'd like to agree with Mr. Roberts' assessment of the severity of the problem and what the likely impact is on the U.S. economy if it's allowed to continue unchecked. The impact on the whole middle-class wage structure, I think is very serious.

But I disagree about the lack of solutions. I think it's very clear, we have an international trading system. We've written the rules. We have trade agreements. And we've, in my view, written a set of rules that have systematically disadvantaged American workers and American manufacturers, through our tax system as well as our trade rules.

One of the key areas has to do with workers' rights, the failure of the United States to protect workers' rights and human rights and democracy in the set of global trading rules, both at the WTO and in some of the trade agreements we've signed.

We have a system of trading rules that is lopsided, that has done a pretty good job or a medium-good job of protecting corporate and commercial interests, but has really neglected the whole social dimension of globalization, the workers' side of globalization. What we see is a system where workers are systematically disadvantaged, whether they're in the United States or in China. Chinese workers aren't taking jobs away from the U.S. and laughing all the way to the bank. They're also having their wages kept down.

But if you had a system where workers' basic human rights were respected, where they were able to bargain for a fair share of the benefits they create in the global economy, have a say in the political system and so on, you would see a development of a middle class and you would at least have a hope of having a more reciprocal trading relationship. Then we could trade with developing countries, and the wages of workers would be rising with economic growth and productivity.

What we're seeing now, though, is wages stagnating all over the world, and so the production moves overseas, American workers lose the jobs, and yet the consumption power of the whole global economy is undermined as those workers' wages are kept lower.

Co-Chairman DREYER. Mr. Roberts, could you comment on Ms. Lee's comments?

Dr. ROBERTS. Well, look. In China and India, there are huge overhangs in the labor market. As I said, in China, what is it, it's 300 million easy.

Co-Chairman DREYER. The population of the United States.

Dr. ROBERTS. The population of the United States, maybe more. Well, when you have such huge excess supplies of labor, how are you going to be paying them American wages?

Ms. LEE. I didn't say American wages, but wages that reflect their productivity.

Dr. ROBERTS. How are you going to pay them any wage?

Ms. LEE. Well, if there—

Dr. ROBERTS. There's a huge—it's supply and demand.

Ms. LEE. If they're producing goods for the U.S. market, we can pay them a decent wage.

Dr. ROBERTS. Not necessarily, because we go there because the labor's cheap and we—

Ms. LEE. If we pay them a decent wage, then they provide the consumer market themselves. If we pay them a rock-bottom 25-cent-an-hour wage, they're never going to be consumers.

Co-Chairman DREYER. Mr. Workman.

Dr. ROBERTS. The notion that you can fix—it's kind of like listening to Fred this morning tell us how we can fix the price of the currency and solve the problem. And now we're told we can just fix the price of Chinese labor and we can solve the problem.

Ms. LEE. Not overnight.

Dr. ROBERTS. You can't—you wanted solutions, and I don't really have a solution, but I do remember a few years ago, a few perceptive people saw this coming, and one was Sir. James Goldsmith, and he said that what you had to have was free trade among equals. You could have a first-world free trade zone. You could have a second-world free trade zone. You could have a third-world free trade zone. And as the countries move from one world to the other, they could move from one zone to the other. And there could be some overlap so that there was movement, exchange between them.

And you could still have foreign investment, only the foreign investment would be like it used to be. Foreign investment used to be it went to a country and produced for the markets in that country, you see. But what we have now is foreign investment goes somewhere and produces there for markets back home. It's a different use of foreign investment, and it's due to the availability of the labor. It has not previously been available.

It's a new development, and China, of course, was suppressed for all those years with this communist system, so they are really behind the curve. So they have massive supplies of labor. It's willing. It works good. It's available now. That's the real problem. It's not the exchange rate that's the problem or, I mean, fixing it. To what extent is a fix? What fixes it? But you might improve something a little bit.

But the real problem is that the productivity is—capital is the highest where labor is most abundant.

Mr. WORKMAN. I thank the Ambassador for the question and I'm struggling to overcome the depression that Mr. Roberts' comments are visiting on me.

It now explains why I haven't been able to land a job as a civil engineer for 30 years.

Just a couple points. I don't disagree in terms of what's changed out there in this era of globalization, and I think if—and I've had a lot of discussions with a lot of different, quote, "elites, academics, press, politicians, government civil service as well as business people on both sides of the Atlantic and Pacific about this."

And I think the one thing that everybody focuses on that characterizes globalization is speed. Globalization has been going on since the Roman Empire. The difference today, with the modern telecommunications system, which is way beyond the Internet, is the time frame within which decisionmakers, both in the public sector and in the private sector, the time frame is compressed enormously.

So whereas 50 years ago, a manager had the luxury of taking three to six months to make a decision about whether or not to invest someplace, now, in order—because of competitive pressures, he may have two or three days to make that decision and less than perfect information. So I agree on the Internet, but it is beyond the Internet.

The collapse of world socialism, I'm reminded of the words of Mark Twain, reports of my death are premature. The last time I checked, the social democrats were the government in the Federal Republic of Germany. There's a social contract in the European Union. From my perspective at the Chamber, there are vestiges of socialism that are around. And, in fact, at CIPE, we have courses in economic journalism training where we teach the press, who first learned their economics at Karl Marx University, how a market-based economy is supposed to work and what their role in a market-based economy is, legitimate role for the economic press.

So I have a little bit different take on this than Mr. Roberts, and I am somewhat optimistic that maybe that's because my name is Workman and I have a cousin in the AFL-CIO.

Co-Chairman DREYER. Poor Mr. Vargo has been left out here.

Mr. VARGO. Oh, I'm enjoying the relaxation. I'd like to reiterate a comment I made earlier, and that is that only 11 percent of the cost of a U.S. manufactured good is labor. So no matter how cheap labor is overseas, that is a factor, certainly, but it is not the dominant factor. And if a product gets a 20 percent or a 40 percent price advantage because of a currency, that is a much more significant factor.

But I'd also like to touch briefly on a couple of other allegations that have been made, that 55 percent of our imports from China are coming from U.S. affiliates. Department of Commerce data, which are available only through the year 2000, so I'd be delighted to see someone else's data, said only three percent of our imports from China come from our affiliates. In the year 2000, the Department's data, which are our balance of payment statistics, indicate that U.S. affiliates produced \$26 billion in China and only \$2.9 was exported to the United States.

Census Bureau data on related party trade, which can be a Japanese company in China shipping to the same company's affiliate in the United States, are 20 percent. I infer from that, then, that 17 percent is coming from other country investment into China.

A final brief comment. It is still true that 90 percent of U.S. overseas direct investment in manufacturing goes to Europe, Canada, Japan, Australia, and Singapore, and Singapore has an average per capita GDP that's as high as Europe. So 90 percent of our investment is still going to the high-income companies and it is for local consumption there.

Co-Chairman DREYER. Mr. Ellsworth, did you have a follow-up?

Commissioner ELLSWORTH. Who handed me this note? A colleague handed me a note that reminds me, and I pass it on, the FDI in China, cumulatively, not just last year, but cumulatively over the years is largely from Hong Kong, Taiwan, Japan, and Singapore and that we account cumulatively for only ten percent of the FDI in China. So multinationals largely are buying from each other inside China.

But I still think that Mr. Roberts' insight here—I haven't heard it or seen it before and I don't know whether there's been a whole lot written about it, but I think it's very illuminating. It's depressing. It's discouraging.

And by the way, Mr. Workman, for a civil engineer, you're really sophisticated here on these FDI things, so congratulations.

Mr. WORKMAN. It was on-the-job training at the Chamber.

Co-Chairman DREYER. Commissioner Bartholomew.

Co-Chairman MULLOY. Did you have something more to say, Mr. Roberts?

Dr. ROBERTS. Well, I would respond to Frank. You see, the figures that he gives about where our foreign investment goes is very misleading because you couldn't put anything in China until recently. I mean, even if you wanted to, they wouldn't let you. And yet, we've had 100 years to invest in Canada and Europe, and over 100 years, you build up a lot of investments. And just the investment it takes to maintain those investments is huge.

So the fact that you have—that we have so much in the first world doesn't really mean anything. We're talking about the flows now.

And as I said in my testimony, I give you this as questions. I'm not dogmatic about it, but I present it to you as a new way to look at it and it bears watching, because if job losses continue despite a recovery, then something has to explain it. There's really not a whole lot to explain it.

So that's really all else I wanted to say. Thank you.

Co-Chairman DREYER. Commissioner Bartholomew.

Commissioner BARTHOLOMEW. Thank you very much, and thank you to our witnesses for coming and talking to us today. I was particularly encouraged by reports that the National Association of Manufacturers and the AFL-CIO might be working towards common ground and some initiatives to help—

Co-Chairman DREYER. It's those cousins.

Commissioner BARTHOLOMEW. —to help American workers, so I'm not sure of the status of that, but more power to you and I hope that things work out.

My question actually specifically is for Mr. Workman. I've gone over this list of the 12 commandments for foreign investment and by my count, at least seven of these are problematic in terms of what is going on in China. Now, a number of them are improving, but I'll tell you the ones that I think are potentially troublesome, which leads me to believe that either dealing with China is not playing by the same rules, which is an issue that's been ongoing with China, or something else is going on that falls outside the parameters.

But I wondered if I could get your thoughts, not necessarily on the specifics of this but what else might be going on. The ones that

I think are questionable would be, two, freedom of access to the market; five, remittance of dividends, interest royalties, and technical assistance payments; six, property rights protection; eight, regulatory burdens; nine, favorable taxation and tax incentives; ten, low political risk; and 12, reliable infrastructure support.

Now, as I say, some of those, I think, are better than they were ten years ago, but I'm not convinced that they meet a test that would actually justify the level of foreign direct investment going into China and wondered really your thoughts on that. Do we need a set of 12 different commandments or what else is at play?

Mr. WORKMAN. No, I don't think we need a different set of commandments. This makes, as I said, common sense. It passes the horse sense test.

You have to understand that this is relative, because companies are looking, for example, do I make the investment in China or do I make the investment in South Korea or do I make the investment in India, and so it is a relative comparison that is going on with these companies and these are the factors that they consider within that context.

By no stretch of the imagination does—the reason why the United States in the year 2002 was the number one destination for foreign direct investment is because, for the most part, we look pretty good on this criteria and we have a good return on investment, although the FDI going into the U.S. last year dropped by 50 percent from the year before. That's because we were in a recession and what have you, so we weren't that attractive. But again, it is relative.

And I'd be happy to submit for the Commission for the record—I didn't bring it with me today, but within the UNCTAD world investment report, there is an actual comparison between India and China. So you've got 1.4 billion Chinese and 1.1 billion Indians and why is it the Chinese are much preferred, the number one preferred FDI investment amongst the developing countries and the Indians are the 53rd element? One is a democracy that has an incredibly rigid economic regime. The other is an authoritarian regime, but in the economic sector, since 1979, has been loosening and introducing flexibility into its economic regime.

Our more detailed 25-page cure for insomnia report—that I've also attached—will tell you in detail where we think the Chinese need to go further, at least in meeting what they promised to do when they joined the WTO. If they do that, then they become an even more attractive destination for foreign direct investment, not only from the United States, but from all over the world.

Just one thing about this issue of exports and investment. Transnational corporations—a term I don't like, but the U.N. uses it—there's about 78,000 transnational corporations. In 2001, the last year data is available, they accounted for about \$8 trillion in global exports. So they were shipping something somewhere. The same companies in 2001 had \$18 trillion in sales from their overseas affiliates, i.e., where they have invested to produce in a domestic market or in a regional market.

So that's why we tend not to focus as a country on this issue of investment. The money doesn't go away. That \$18 trillion in sales, some of it comes home, comes home to papa. So there is an advan-

tage to that and that can be plowed back into R&D. It's up to the company what they want to do.

So the other aspect about investment which I find intellectually interesting is that there is no multilateral investment regime. There is a small piece in the WTO called TRIMs, trade-related investment measures. There was an effort in 1996 in the OECD to come up with a regime that failed, and that's among the rich countries.

So essentially, when you're talking about investment flows, you're talking about what—the only people really sort of self-regulating themselves are the private sector companies. So it makes for—and the governor on them is if they make a bad investment decision, then their board is going to fire them.

Dr. ROBERTS. May I just make a comment. The Commission ought to know that, at least in recent years, the vast bulk of foreign investment in the United States is not new plant and equipment. It's foreigners acquiring ownership of existing assets. They're acquiring ownership of companies, real estate, equities, bonds, and these figures are available. I didn't bring them with me. And that's because we have a huge trade deficit, and so all the dollars that go out comes back and they acquire ownership of the assets.

So you can get confused thinking that we are an investment Mecca. This is not plant and equipment and new stuff but this is a change in ownership. We're paying for the trade deficit by giving up assets, and that's what is measured by this large figure of foreign investment in the United States.

Commissioner ELLSWORTH. How much trouble would it be for you to provide us with that?

Dr. ROBERTS. I could do it when I get home, or——

Commissioner ELLSWORTH. Please.

Dr. ROBERTS. —your staff can do it.

Co-Chairman DREYER. Yes. We would be very interested in that.

Dr. ROBERTS. It's online with the, what, BEA, probably. I'll talk to the staff and we'll find it. It's easy. It's easy to do.

Co-Chairman DREYER. Good. Commissioner Wortzel.

Commissioner WORTZEL. Well, I want to start by addressing Assistant Secretary Roberts for a second. If all these overseas assets, or these domestic assets are being bought by overseas investment, are they being shipped out of the country, or——

Dr. ROBERTS. Well, it's just ownership.

Commissioner WORTZEL. It's just ownership, and they're employing Americans?

Dr. ROBERTS. A lot of it was mergers, acquisitions.

Commissioner WORTZEL. It seems like that's a good thing. I mean, people are still working. The equipment's not leaving. They're producing goods for the United States.

Dr. ROBERTS. I didn't say it was good or bad.

Commissioner WORTZEL. All right.

Dr. ROBERTS. But there's often an inference is made that we are a Mecca for investment and people think, oh, this is plant and equipment. They're building things here. But what I'm telling you, in recent years, it's just a change of ownership.

Commissioner WORTZEL. Right.

Dr. ROBERTS. So whether it's a good thing or not, you see, Americans actually are losing all the future income streams that flow from the loss of ownership. If you don't own the real estate or the companies, you don't get the profits or the rents, right?

Commissioner WORTZEL. But if you're over there in the AFL-CIO, you're pretty happy.

Ms. LEE. So long as it's a union company.

Commissioner WORTZEL. As long as it's a union company.

I'm interested if any one of the witnesses could enlighten me. What other currencies are pegged to the U.S. dollar for value so strongly. I know we're saying the Chinese are getting this great 15 to 40 percent advantage; what other currencies are pegged like that that we're ignoring? I know we're a China panel, but that would be interesting to know.

Co-Chairman DREYER. Almost but not quite.

Commissioner WORTZEL. I came up with almost the same factors that Commissioner Bartholomew came up on the wisdom of companies making investment decisions in China. Number two, freedom of access to the market. There's not much freedom of access to the Chinese market.

Remittance of dividends—if you can't get your money out of the country, why invest? And in China, you can't get your money out of the country. You've got to go through all kinds of silly ways to get it out of there.

Property rights—terrible. Intellectual property rights and any other property rights in China are very poorly protected.

Of course, the export potential is real high because the goods are coming back to the United States, don't you. Favorable taxation and tax incentives, not very good.

Political risk, you have collapsed legitimacy for a dictatorial ruling party, a communist party that's repressing its people and is using a couple million armed people to repress the population. Political risk, it seems to me, is pretty high.

Predictable macroeconomic management—there's not much of that in China. Reliable infrastructure support, fairly poor except around the coast.

So if all this is going on in China, I wonder if you took the top 50 United States investors in China, what is the percentage or risk of their total investment outside the United States compared to the risk they are taking in China. How much are they really risking when they go into China; where else are they investing; and what's their return on that percentage of risk? I think those are more interesting sorts of statistics.

Mr. WORKMAN. Okay. Well, again, as I mentioned to Commissioner Bartholomew, this is relative. In 2002, the investment outflows from the United States were \$183 billion. Frank will correct me if I'm wrong. I think something like \$20, \$29 billion went to China, is that right? What was the number?

Mr. VARGO. Oh, from the U.S.?

Mr. WORKMAN. Yes.

Mr. VARGO. Not nearly that high, no.

Mr. WORKMAN. Okay. So in relative terms, yes, there are some American investors that are investing in China, but the bulk of American investment, 43 percent of all American foreign direct in-

vestment in the world is in the European Union, and 45 percent of all their foreign direct investment is in the United States.

So the bulk of the investment is—80 percent of world investment is in the Northern Hemisphere and it's amongst the OECD countries. The other 20 percent, 20, 25 percent, to the developing world. China for the past ten years gets one-fourth of that, and that really—that went up in 2002 and I think I—because there was an expectation on the part of investors that the Chinese were going to be more open, they were going to live up to their WTO commitments, they were encouraged and they took some risk, so they invested more in China.

It'll be interesting a year from now to look at the 2003 data, because both Frank's organization and my organization, our conclusion in terms of how are the Chinese doing, this is our second report on the subject, and they're not doing as well as they were last year in terms of meeting their commitments.

Commissioner WORTZEL. I appreciate your response. That would have been my final question. It seems to me that from what I'm reading this year, your second year assessment is far less rosy than what I saw last year—when I was out in Shanghai and read this stuff.

Mr. WORKMAN. That's correct.

Mr. VARGO. Could I just add to that? Could I encourage you, the Commission, to task the Bureau of Economic Analysis to provide you with the figures, because you don't have a clue. There's this myth that all this American investment is going into China and it's not. When you look at American manufacturing investment, or the bulk of the investment that Wally mentions, and I believe the overall figure is correct, is in financial institutions, services, wholesaling. Only a relatively small fraction of that is manufacturing investment. And of our manufacturing investment, about one percent of it or two percent of it's going into China.

Co-Chairman DREYER. Mr. Vargo, would you have any idea where the bulk of the FDI in China, then, is coming from? Is it Taiwan, Hong Kong?

Mr. VARGO. It is exactly Taiwan and Hong Kong, Japanese investment, some Korean, and these figures are readily available to the Commission.

Ms. LEE. But a lot of it is also masked by the fact that U.S. companies are buying products from other companies, subcontracted out from China. So it doesn't show up under the majority-owned foreign affiliates.

Mr. VARGO. Undeniably. Undeniably.

Co-Chairman DREYER. But you see it in the \$100 billion trade deficit.

Mr. VARGO. Sure.

Co-Chairman DREYER. So whether we're having that impact is pretty clear. Whether it comes from U.S. foreign investment or U.S. companies buying goods from a Taiwanese-owned company doesn't really matter in the end.

Commissioner BECKER. Could I make a very small point on that very quickly?

Co-Chairman DREYER. Yes.

Commissioner BECKER. When we issued our report last year, this was researched, at least to that point. The significant point that I think about that is 90 percent of the investment coming into the United States is, as Mr. Roberts says, is to buy existing property without creating anything new, whereas 90 percent of the investment, direct foreign investment going into China, is to build new facilities. I think that's a point that tells you what really is happening in the world.

Commissioner BARTHOLOMEW. I have actually just one issue I'd like to add to Commissioner Wortzel's. The same 50 companies that he was talking about, it would be interesting to know how many of those 50 companies are getting some sort of U.S. Government risk insurance or guarantees for their investment so that their violation of the 12 commandments here are putting the U.S. taxpayer on the hook rather than necessarily putting themselves on the hook.

Co-Chairman DREYER. Yes, because you've really got to take into consideration the relatively small percentage of companies involved in business in China who say they are making a profit.

Okay. Commissioner D'Amato.

Vice Chairman D'AMATO. Thank you, Madam Chairman.

I think this is a great panel because whenever anybody starts to make a point, all the rest of you shake their heads.

So I know we've got a real debate going on here.

Co-Chairman DREYER. This is proof of a successful panel.

Vice Chairman D'AMATO. And I think there's a lot of—I'm trying to understand what the nature of the underlying problem is here, because I think that Mr. Roberts' comment is very interesting because we have some international mobility factors of production which confuse us because they don't fit into our traditional models. So comparative advantage as a traditional Ricardo model doesn't apply here, and we don't have a new model to—we don't really have a new model.

What I think we have is, and I'll be grossly oversimplifying, of course, the question I have is who's in charge here, and my answer is the multinationals are in charge. That's what we call globalization. Let's face it. Those are the multinationals. They're in charge. They're the ones that are allocating the factors of production around the world.

And I guess the question is, the other side of globalization is nationalism, and so we derogate nationalism by calling it protectionism. That's very convenient for multinationals because then it looks like nationalism is a dirty word.

But I think the fundamental question is, who's going to be in charge of allocating the factors of production, whether you call it investment overseas or control of ownership here, if the national authorities are not going to assume that they should be in charge of protecting the economic health of the country. Then, of course, it seems to me the only other answer is this is going to be run by multinationals. That's my simplified take of it.

It seems to me that national authorities, such as the building that we sit in, exist for the health of the nation state. And I guess the question is interesting, because Mr. Roberts says he doesn't

have any answers. I think the fundamental question is, who is the dominating agent that's going to come up with the answers?

Is it going to be the nation state or are we going to leave it up to the multinationals? If we leave it up to the multinationals, then we're just here charting—we're charting the flow of these factors of production. If it's the nation state, then we have to come up with new sets of principles that go beyond the sense of calling it protectionism, a new set of principles that the nation state is going to operate under to protect the nation state. Otherwise, we are going to end up eventually with no nation states.

Does that make any sense to you? Anybody can answer. Everybody else can shake their heads.

Mr. WORKMAN. Well, I have some difficulty with when you get in—you asked the question, who allocates the factors of production within a nation state, because we already went through a 75-year history where the answer, at least in the Soviet Union, was the government will allocate the factors of production. And so I have some concern about that.

Do the multinationals, these nameless, faceless corporate folks, are they really allocating factors of production? I think they're responding to market circumstances, but I think you're getting close to the point about the challenge of China, because in the case of China, we have a hybrid.

We have—we used to call it in export control days, we used to talk about non-market economies and how do we deal with them because they're immune, they're protected from market forces. In the case of China, we have an economic system that is moving towards being responsive to market forces. But we have a political regime that is not moving towards being responsive to political forces which are spun off by the economic pressures.

In my point of view, and one of the reasons why CIPE has been involved in China—and we are not viewed as being friendly because we have an affiliation with this word democracy in our mission, we are viewed somewhat suspiciously, but they understand that, for example, in our economic journalism training, when you go to the China news agency, and we train all the economic journalists, and they have got a certain amount of freedom to report economic news, information, statistics, objectively and without government interference.

Well, their colleagues on the other side of the newsroom who are reporting political news or reporting the daily outbreak of SARS in Beijing or whatever, they're censored. They don't have the same kind of freedom of the press the economic journalist has. That creates pressures within China.

But I think the challenge for us all is to figure out how to help China, hopefully, through this transition from a non-market economy to a market-based economy, but also a pluralistic political system, as well.

Ms. LEE. I'd like to step in, if I may.

Dr. ROBERTS. I'm going to leave, so let me do it.

Ms. LEE. I have to leave, too, but go ahead.

Dr. ROBERTS. Oh.

Ms. LEE. Go ahead.

Dr. ROBERTS. Your question is good, and the implication of economic globalism is one world government, because otherwise there's no way to make all the adjustments that happen within a national economy when regions shift in their importance. So you could have a case where economics is far ahead of politics, and that is a very difficult thing to deal with.

Ms. LEE. Can I leap in quickly? Thanks, because I'm afraid I do have to leave, as well.

You're absolutely right that the question is who's writing the rules for the global economy, what is a rational framework of economic incentives that we put in place that we can all feel confident about.

One of the things that's changed, I would say a little bit differently from what Mr. Roberts said, we still live to some extent in a world of comparative advantage. We have mobile capital now and somewhat mobile labor and that creates a different situation. But we also have comparative advantage operating in a world of very different social regulatory frameworks and democracies.

What we don't want in the global economy is a set of rules that disadvantages democracies and countries that live up to their international human rights obligations, that have decent environmental laws. All those things cost money. We have a political system where we make those tough decisions at the national level.

We don't have a political system to make those decisions at the international level, and yet the result of not being able to talk about things like workers' rights or environmental protections, democracy at the international level is this race to the bottom, the idea that countries like China that are aggressive, that are large, that are not democracies, that have horrible, horrible workers' rights policies and human rights policies are winners in that global economy.

We want the winners to be the democracies, the countries that nurture their trade union movements, that have a middle class, that are really developing, but we haven't written the rules that will give us that outcome, and that's what we need to do. That's what the United States needs to do, to say we have an economic interest in seeing a different set of economic incentives facing both companies and governments. We shouldn't reward the worst players in the global economy, and that's what we're doing by failing to address these other issues.

Vice Chairman D'AMATO. Yes. Let me just make one comment. It may be that we sort of have a bifurcated system, that the Chinese are exercising more nationalism than we are and they are tailoring what's going on economically to their view of where they want to go in terms of building a powerful Chinese state.

That is certainly not true in the United States. In the United States, I think we have more economic decisionmakers, multinationals that are operating independently without regard to political authorities. I certainly don't think that's as true in China. China has got their eye on the ball, and that is national economic growth and becoming a powerful nation state.

Co-Chairman DREYER. Commissioner Becker really, really wants to ask Ms. Lee a question before she departs.

Commissioner BECKER. I wanted to ask everybody a question, but—

Co-Chairman DREYER. Your mike.

Commissioner BECKER. Let me go ahead and push this and I'll tell you right now. Earlier this morning, you weren't here. We had some legislators that gave their perspective of the trade with China and what's happening with our trade laws. Senator Dorgan, Sandy Levin, and Representative Stenholm, they all talked about Cancun. They all talked about the trade laws and the ineffectiveness of the trade laws. In fact, there were some very pointed comments made about the incompetent people that are negotiating these trade laws on behalf of the United States.

You were at Cancun and you represented the AFL-CIO in the trade arena. I want to refer back to Doha. I'd like you to give us your perspective on what is happening with—specifically with our anti-dumping and countervailing duties, our safeguards in the hands of the USTR. Tell us, if you would.

Ms. LEE. Thank you, George, for the question. What I see happening is when the USTR goes into these very difficult international negotiations, is when they come under pressure, they have been willing to put U.S. trade laws on the negotiating table, on the chopping block, even as 140 other countries in the WTO have made it clear that their intention in these negotiations is to weaken and gut U.S. trade laws. The clear intention of the U.S. Congress has been that those trade laws not be put up for renegotiation, that we maintain them and we be able to use them effectively.

The U.S. Government has been willing to open negotiations in way that could weaken our trade laws, which puts us in a very vulnerable, precarious situation, and I think it's very dangerous.

The other thing that was dangerous for us in both Doha and Cancun is that the USTR's position is to take global tariffs to zero without getting any progress on workers' rights, to open negotiations on our trade laws, and not to achieve reciprocal market access from developing countries. It's actually written into the Doha Declaration that we're not even going to seek reciprocal market access from developing countries. Special provisions affecting China are also actually written into the draft declaration. The newly acceded WTO countries are actually given even more of a pass on lowering their own trade barriers because it's been recognized that they've already made certain accessions.

So we're in a very troubling place in terms of what this Administration has been willing to put into the negotiations in the WTO round in a way that is really undermining the position of both American manufacturers and American workers.

Mr. VARGO. I'd like to comment on that, because Thea won't be surprised, I have a different view. I think the Administration is doing a great job in negotiating.

Over the years, the United States followed the philosophy, we're going to cut tariffs and get the other industrial nations to cut tariffs and we let the developing countries not do anything. So here we are—largely because of the Cold War. So here we are, after 20, 30 years of industrial countries cutting trade barriers and the developing countries, India, China, Taiwan, all of these countries have enormous tariffs against American industrial goods and we've

got to get them down. The only way we can get them down is by getting into negotiations.

I have no concerns that U.S. trade laws are going to be put up on the chopping block. I think that Ambassador Zoellick did a great job in deflecting that and in setting up the negotiations in such a way that we address the causes that bring these laws around, the subsidies that they have. So I think we're in good hands.

Mr. WORKMAN. If I could offer a point of view, there's—on the issue of the anti-dumping laws, there's not any difference between what Thea said and what the U.S. Chamber believes. We did not want the anti-dumping laws put on the negotiating table at Doha. That was our position. Well, we didn't win on that.

We're pleased with the way the negotiations have—

Commissioner BECKER. Collapsed.

Mr. WORKMAN. —gone slowly in the 15 months since Doha, and that will be one of the key criteria that we look at, the key issues that we look at when and if there is a Doha Round agreement.

The most contentious issue within our membership in the Uruguay Round was on the changes, the weakening from our point of view, of the anti-dumping countervailing duty laws that would necessarily ensue from the Uruguay Round agreement, and we didn't like it then and we don't like it now.

So this is one of those odd situations where the Chamber and the AFL-CIO see eye to eye, and we have a history for the past ten years of testifying jointly on this particular issue.

Now, the other comments that Thea had, we part company. But I just wanted to make that point.

Commissioner BECKER. I was going to comment, when Mr. Roberts was here, it was Thea against three on the thing. But there are alliances there.

Mr. WORKMAN. Sure.

Commissioner BECKER. That's developed and very good.

What I wanted to do was just make sure that she was able to put this onto the record. I didn't necessarily want it to be from me.

Mr. WORKMAN. Well, you've got a bunch—

Commissioner BECKER. We've always had a position going back to GATT that our trade laws were untouchable. Mickey Kantor came back from the Uruguay Round and told us—told everybody very bluntly that we talked about it, it was a one-time talk, they would never be on the table again. We made it very clear that our trade laws were untouchable. And now we find out that in spite of being told that they weren't put on the table, that after Doha, I mean, this was put together and we're very concerned about that.

Mr. WORKMAN. Well, there's this nuance where we'll have a discussion and we'll study it. They can study it until the cows come home, but I just don't want them to reach any conclusions.

Commissioner BECKER. Very good.

Co-Chairman DREYER. Final question.

Commissioner BECKER. Thank you very much.

Co-Chairman MULLOY. I want to come back to the exchange rate issue. Frank, you and the AFL-CIO, my understanding is, are working on a 301 to go on the China exchange rate issue. Now, help me understand this. The 301 is for USTR to begin a process of identifying China as an unfair trader, and if that is done, the

way I understand the WTO, the EU took us to the WTO to knock 301 out of our laws and the WTO let us keep 301 on the basis that it would be used in compliance with the way the WTO works.

So even if USTR does do that and identify, we still have to go to the WTO then to bring a case, in which the WTO would then rule that, yes, China is violating their IMF and WTO—well, their WTO obligations, and they would look for the IMF for advice on that in terms of whether they're a manipulator, and then we would get permission after that process. And my understanding, that process could take up to two years. Is that the way you see it, and then I have a follow-up.

Mr. VARGO. Well, let me begin by saying that while it's certainly true that NAM and AFL-CIO are going to—discussing and exchanging views on 301, the 301 process is coming from what is called the Coalition for a Sound Dollar, not from NAM or AFL-CIO, and AFL-CIO is currently not a member of that coalition.

Co-Chairman MULLOY. It's not a member?

Mr. VARGO. No. Whether they will become one is something that we will see. And again, the NAM has said, as one of 90 members of that coalition, that we are going to support this initiative. While many other associations have also stepped forward, the coalition is still in the process of polling its entire membership.

Now, a 301 case, what we are seeking is elimination of the problem, which is the undervalued currency, which is not merely pegged. Other currencies are pegged, as you point out, and they sometimes buy dollars and sell dollars to maintain the peg, but only China has to spend \$3 billion a week to maintain that peg because of their huge surplus, and that's the problem.

The remedy—we want this solved. We're not out looking for trade restrictions.

Co-Chairman MULLOY. But the 301, what it gets you is USTR saying it's an unfair trade practice and then—

Mr. VARGO. Or unjustifiable.

Co-Chairman MULLOY. —and unless China changes that, unless China decides to change that at that point, then the only way to get that enforced would be to go through WTO, is that correct?

Mr. VARGO. Not necessarily, and the USTR website says that there can be unilateral action. But we are not looking at what the teeth might be. It has teeth. It does have teeth. Whether it goes through the WTO or does not, we will leave that for another way.

Co-Chairman MULLOY. Senator Schumer has a different approach, and let me just—his approach is to say, I'm going to use Article 21 of the GATT WTO to put immediate sanctions on, because as you pointed out and as the President agrees, manufacturing is essential to our national security. You said that earlier. And therefore, he would use that to say we're not going to let this unfair trade practice have that moves our manufacturing sector out.

Mr. VARGO. We've told the Senator that we cannot support that and we don't think that this is anywhere near an appropriate use of the National Security Clause.

Co-Chairman MULLOY. Wally, are you at all involved with the Coalition for a Sound Dollar and the 301 action, or is it—

Mr. WORKMAN. No, and at our policy committee meeting in two weeks, we'll bring it up and see how our members want to go. Of course, we represent manufacturers, but we also represent everybody else. So I'll let you now then.

But maybe I can provide some technical assistance on this, because the Chamber was involved in helping craft the changes to Section 301 in 1988 in the trade bill. From start, the coalition could initiate or file a petition with USTR claiming that it's unjustifiable or unreasonable. There are a number of different criteria that you can use on a 301 case. USTR then has 90 days to accept or reject the position.

Co-Chairman MULLOY. Right.

Mr. WORKMAN. They can reject the position—the petition. Or, USTR could self-initiate a Section 301 case and go forward.

Depending on whether it's the 90 days if NAM and the coalition go forward or if it's a self-initiated USTR case, you're looking at, by the time you get to the end of the road, between 18 and 21 months.

Now, in the context of the WTO, if you asked Pascal Lamy if Chinese currency exchange rates are a matter for the WTO, you will hear the answer that he gave at a conference *Roll Call* sponsored, as well as the Chamber and others, two weeks ago, which is no. So, therefore, Senator Schumer is talking about bringing a case before the WTO, and if it's on exchange rates, I think a large number, but it only takes one in the WTO, will say no, this is not in our court.

What that means is—then the United States, if they want to, because 301 is broad, they can say, well, exchange rates falls under 301 and we're going to raise this and initiate a 301 investigation of Chinese exchange rate function.

So that's how the process and the time lines and everything work and at least what publicly some of the key players, like Lamy from the EU have been saying about this. I think it's helpful, and what we're going to try to do for our members in two weeks is to focus on the problem and what are solutions, near-term solutions to the problem. And right now, my best guess is we dust off the IMF and we keep Secretary Snow jawboning, because the issue is not just China.

Co-Chairman MULLOY. No, I know.

Mr. WORKMAN. Japan is a problem, too.

Co-Chairman MULLOY. Yes. That was brought to our attention this morning by a very—and not just Japan, but Taiwan, Korea.

One last thing. On Schumer, his bill doesn't take to the WTO.

Mr. WORKMAN. Okay.

Co-Chairman MULLOY. His would take immediate action and let the Chinese take us to the WTO if they're unhappy with what we're doing. So that's a different approach than Manzullo, who could take China to the WTO.

Mr. WORKMAN. Well, I'm not sure how we could take immediate action unless it's a 301—

Co-Chairman MULLOY. No, he's—

Mr. WORKMAN. —and I just don't see how that works.

Co-Chairman MULLOY. Thank you.

Co-Chairman DREYER. He has introduced a bill, I think is what Commissioner Mulloy means, but I'm going to have to cut this off—it's 5:30—and thank you.

Mr. VARGO. Before you do, could you give me 30 seconds here, because—

Co-Chairman DREYER. Okay, 30 seconds.

Mr. VARGO. Nobody here has hit on the point that we're hearing from our companies on China, which is that, they're getting subsidized energy, they're getting export subsidies, they're getting free plant, et cetera. When you look at why China is so super-competitive, don't dismiss those as possibilities.

Co-Chairman MULLOY. Could you lay those out and give—is that part of your testimony, Frank, or—

Mr. VARGO. No, it is not.

Co-Chairman MULLOY. Could you give us that in a separate submission?

Mr. VARGO. Yes.

Co-Chairman MULLOY. That would be very helpful.

Co-Chairman DREYER. Yes, that would be very helpful. And meanwhile, thanks to both of you, not only for coming and presenting your testimony, but for sticking it out to the absolute bitter end, and we really appreciate it. This has been extremely valuable.

The Chair of the Commission, Roger Robinson, would like to say a couple of concluding words.

Chairman ROBINSON. Well, first, I'd like to chime in and thank you all for a truly stimulating afternoon, and we will, Frank, value very much that last input of data and assure that it gets proper attention.

I'd also like to congratulate and thank the Co-Chairs of this hearing, which was, I think, very well conceived and involved an intensive amount of work, so I thank them.

Also, our staff, the entire Commission staff, by and large, worked on this particular hearing because of its timeliness and its import, particularly James Swanson, Steve Schlaikjer, and Tony Sutton. I know all of us Commissioners value enormously the effort that went into preparing this hearing.

And with that, I'd like to adjourn our session. Many thanks.

[Whereupon, at 5:30 p.m., the hearing was adjourned.]

[Submissions for the record follow:]

Testimony of Senator Olympia J. Snowe

I would like to thank the U.S.-China Economic and Security Review Commission for calling this hearing today and for inviting me to testify. This Commission has been charged with the crucial task of analyzing our economic policies vis-à-vis China and the effect they have not only on our bilateral relations, but also on the U.S. economy and our national security. As China becomes a larger player in the international trade arena and our trade relationship increases, we must remain vigilant in monitoring its practices and policies that affect our competitiveness both here and abroad.

Congress granted Permanent Normal Trade Relations (PNTR) for China because we knew that China would become a major player in international markets whether we wanted them to or not. After all, China already enjoyed total access to our market while we did not have the same benefit. Perhaps most importantly, we supported PNTR because a China in the World Trade Organization is bound by the same international trade rules as the United States or any of our other trading partners. While many were optimistic about the increased market access to the world's largest population, few dared to expect this to be an easy path.

Part of this Commission's purpose is to serve as an objective observer, and an active investigator, into the veracity of that commitment and China's compliance with WTO rules. Of particular importance is China's *deliberate* undervaluation of its currency to maintain an unfair trade advantage.

That policy is clearly in violation of the principles behind Article XV of the General Agreement on Tariffs and Trade, which states that WTO members "shall not by exchange rate action frustrate the intent of the provisions of this agreement," which is to create fair and open markets for global commerce. China has joined the world trading system—it must now play by its rules and adhere to these principles.

In an open trading system, manipulation of currency—either by frequent intervention or by a calculated undervaluation of one's currency through a fixed exchange rate—undermines the concept of comparative advantage by creating market distortions. These disruptions not only affect trade, but also result in the loss of real jobs for U.S. manufacturers. This is particularly devastating in my State, which has lost over 17,300 manufacturing jobs in this latest economic downturn.

There has not yet been a *comprehensive* study into what effect China's pegged exchange rate has on U.S. jobs or the economy. However, manufacturers have told me that they see China's currency as one of the leading causes of our manufacturing job losses. That is why, as Chair of the Senate Committee on Small Business and Entrepreneurship, I have joined with my House counterpart, Chairman Manzullo, to ask the GAO to investigate the cost to U.S. workers of China's monetary policy and determine the full extent of this harmful practice.

I am greatly concerned about what I believe they will find, because I have heard from company after company who have had to face the reality that they can no longer compete with unfairly priced Chinese products. Some argue they were forced to close their doors because of China's low labor costs, and others argue it is the lack of labor and environmental regulations in China that makes us uncompetitive. However, the full extent of China's advantage is the combination of an artificially undervalued currency, unfair non-tariff barriers, *and* low cost of production.

While we all want wages, labor rights, and environmental protection to improve in China, the biggest concern that every manufacturer brings to my attention is that they can't compete with a currency undervaluation that economists estimate could be as high as 40 percent. This serves as a *de facto* subsidy that no competitor can surmount.

For this reason, I have been among a core group in Congress that has called on the Administration to take strong action with regards to the foreign manipulation of currencies. I was pleased to work with my colleagues to ask the Treasury Secretary to make China's currency the top priority of his recent trip to Asia.

Secretary Snow took the message to China that the manipulation of its currency must end and that China should take steps to freely float its currency. I was pleased with his action and look forward to this Administration's continued strength and resolve to bring China's currency into the free market.

I have also joined with several of my colleagues to send a stern, but constructive, message through a bipartisan Sense of the Senate that Congress believes China should start taking the necessary steps towards a flexible exchange rate immediately.

This change in Chinese monetary policy is a process that will take time, but I believe China is capable of taking some immediate steps towards a market-based currency. At the very least, China should make a moderate revaluation of the yuan, combined with a widening of the currency band and a loosening of some capital con-

trols. They could also move from a peg with the U.S. Dollar to a basket peg with several major currencies, including the Japanese Yen and the Euro. In so doing, China would be in a better position to strengthen its domestic financial system enough to permit a significant liberalization of capital outflows and, in the not too distant future, adopt a freely floating currency. These types of steps would remove some of the burden from U.S. manufacturers while promoting a more prosperous and stable China.

The U.S. is not alone, Europe and others have begun to express growing concern over China's rigid currency. The IMF has blamed currency manipulation for impeding global economic recovery and creating greater economic insecurity. Also, as the G-7 noted in its last meeting in Dubai, flexibility in exchange rates promotes smooth adjustments in the international financial system, based on market mechanisms.

Clearly, this issue is not only in the interests of the U.S. and our manufacturers, it is also in the interest of China, Asia, and the global economy. As the growing international coalition illustrates, word is getting out and people are waking up to the effect of China's currency manipulation.

Addressing the currency structure will *not* be an easy task for China, but if they are going to continue reaping the benefit of being part of the WTO, then China too, will have to abide by its rules. If China does not, the Administration should bring appropriate action under existing U.S. trade laws and through the World Trade Organization dispute settlement mechanism.

The U.S.-China Economic and Security Review Commission has a critical role to play in providing policymakers with your objective analysis on a constructive path toward solving this difficult policy dilemma. I applaud the work you have been doing and look forward to your report on this and other important areas of U.S.-China economic relations.

**Testimony of Grant D. Aldonas
Under Secretary of Commerce for International Trade Administration**

Members of the Commission, thank you very much for inviting me to participate in this hearing to discuss our trade relationship with China and the Department's role in implementing the President's Manufacturing Initiative. Both issues are timely and I appreciate your willingness to focus the Commission's attention on these two interrelated topics. I regret that I was unable to testify in person at the actual hearing last week, but I appreciate you allowing me to submit this statement for the hearing record. I would welcome the opportunity to discuss with you the Initiative and the broader market rigidities that have impact for U.S. manufacturing.

The Economic Context

Let me start by setting the economic context for discussing both the health of our manufacturing sector and our trade relationship with China. I want, first, to underscore the continuing strengths of our manufacturing sector. We tend to forget that the United States remains far and away the largest producer and exporter of manufactured goods in the world. Standing alone, our manufacturing sector would rank as either the 4th or 5th largest economy in the world. Far from being hollowed out, our manufacturing sector is, in fact, larger than the entire economy of China.

In addition, I think it's important to stress that productivity in manufacturing today is higher than it was even during the late 1990s when everyone was speaking about a "new economy." Those increases in productivity, and the policies that we have adopted to reinforce them, have allowed the United States to reclaim the top spot in the World Economic Forum's rankings as the most competitive economy in the world.

The productivity numbers are important for another reason that reaches beyond the current economic prospects of our manufacturers. What they reinforce is the importance of a healthy manufacturing sector at the core of our economy. According to Paul Krugman, the noted economist and, I should add, at times a critic of this Administration, "Productivity isn't everything, but in the long run it is almost everything. A country's ability to raise its standard of living over time depends almost entirely on its ability to raise output per worker." What both the latest statistics and Krugman's comment point out is the contribution that manufacturing makes to innovation—innovation that is key to raising our productivity and the standard of living enjoyed by all Americans.

Having said that, there is no doubt that our manufacturers face some very significant economic challenges in today's business environment. Most importantly, they face continuing pressure on pricing power and profit margins due to the excess capacity on the market even as the recovery from the recent recession takes hold. The most recent figures suggest that the economy grew at a 3.3% rate in the second quarter of this year and the pace of economic activity appears to have accelerated since then. Timely fiscal stimulus and management of the money supply appear to have set the foundations for a solid recovery.

It now appears that manufacturing, after many months of very slow growth, is beginning to participate in that broader economic recovery. Durable goods orders have been up generally, although down in August. And, the Purchasing Manager's Index, a key indicator of future economic growth, is now consistently above the level that means stronger growth ahead.

Even on the unemployment front, there are signs of job growth consistent with a stronger economy. It's probably worth recalling that unemployment has remained above 6 percent for four months. Not that long ago, that would have been perceived as relatively low in terms of unemployment.

Having said that, I want to reiterate, as the President has, that the Administration is committed to working towards an economic climate where everyone that wants a job has one. And there is an important story to tell about the unemployment figures in manufacturing.

The recession in manufacturing began in 2000, ten months in advance of the general recession in the economy. The economy was just beginning to cope with the effect of a sharp drop in business investment as industry pulled back from a period of heavy investment in technology. Not surprisingly, most of the job losses in manufacturing came in precisely those industries—telecommunications equipment and computing—that benefited most from the boom in investment related to the "dot.com bubble" of the late 1990s.

What has surprised most economists has been the fact that manufacturing continued to shed jobs deep into the recovery of the economy. As recently as this past month, manufacturers dropped another 93,000 from the employment rolls. Employment in manufacturing has been declining for decades as productivity gains have

significantly reduced the number of man-hours needed to produce a given product. Those gains have averaged 3% or more for the last 15 years. And, employment in manufacturing has fallen commensurately.

Some share of the recent reduction in manufacturing employment during the initial stages of the recovery and expansion is directly attributable to the efforts of manufacturers to cut costs and raise productivity. Under considerable competitive pressure, American manufacturers are finding ways to do more with less. And, the labor market is responding by shifting jobs to other industries.

That said, the more important thing to focus on for purposes of our discussion today is the link between the competitive pressure that has driven American manufacturing to pursue those productivity gains and what is going on in the international environment, particularly with respect to our trade with China and its emergence from a fully state-controlled economy to become a major force in manufacturing.

On the international front, one of the most frequently cited statistics is our trade deficit, which has been growing overall and particularly with China. Although the trade deficit is often thought of as an indicator of our competitiveness, and over long periods of time it is such an indicator, today it is better understood as a measure of the relative growth in our economy compared to our trading partners. In past recessions, continuing growth abroad mitigated the effect of the U.S. recession on our manufacturers. In the most recent recession, that did not happen. Japan led and Europe followed us into the recession and neither has yet to climb out to any significant degree.

The data behind the trade deficit bear out the effects of differences in economic growth rates between economies. While the common perspective is that the entire deficit is due to an increase in imports, the truth is that our exports have fallen off far more sharply. That points to the fact that the economies of both Europe and Japan are stagnant. As former Treasury Secretary Lawrence Summers put it, "The world economy is flying on only one engine." That engine happens to be the United States. In eleven of the last twelve years, U.S. economic growth has outpaced that in Japan, Germany, and the European Union.

What's more, slow growth among our leading trading partners is not new. Japan's economy, which still represents close to 2/3 of the gross domestic product of Asia, has barely grown for a decade. Germany's economy has not grown appreciably in three years. On top of that, the rest of Asia, with the notable exception of China, has presented a very mixed picture in terms of economic growth since the onset of the Asian financial crisis in 1997. While some economies have recovered, others have not. And, these are markets that were once among the fastest growing in the world—markets that had become significant consumers of the sorts of advanced technology capital goods that our manufacturers sell.

What that should tell us, both in terms of the economy as a whole, and the manufacturing sector in particular, is that perhaps the most significant single action we could take is to step up encouragement of our trading partners, particularly Japan and Germany which together make up 20 percent of the world economy, to jettison their anti-growth policies and to adopt policies that are designed to boost economic growth. We need to preach what we practice because the alternative to growth is always a zero-sum game of dividing up the existing pie and that leads directly to the sort of strains we are seeing now in our trade relationships.

Our Trade Relationship with China

Which leads me to China. In the more than 20 roundtables the Department held with manufacturers across the country over the past six months, there was no single country that garnered more attention than our trade with China and its emergence from state-imposed economic isolation to become a major center of manufacturing. The Chinese have made considerable progress over the last two decades in lifting more than 200 million people out of poverty by relying ever more heavily on the market to direct resources within its economy.

The stakes involved are high. China is our fourth largest trading partner. Bilateral merchandise trade reached \$147.2 billion in 2002. Last year, China overtook Japan to become our third largest source of imports. In July of this year, China surpassed Mexico to become our second largest source of imports. Our imports from China are more than five times greater than our exports. The bilateral trade deficit hit \$103 billion in 2002 and reached \$65 billion in the first seven months of this year. In addition, China has provided help on a number of fronts—from the arms talks with North Korea to the War on Terrorism. China has helped on the economic front as well. Along with the United States, China accounts for most of the current growth in the world economy.

The upside is that China's economic policies have brought about a rising standard of living in China and considerably higher disposable income. All of that makes China an attractive market for much of what we produce in the United States.

It is worth noting that since 2001, China has been our fastest growing export market by far among our top ten trading partners. Our exports to China surged 19% in 2001, 15% last year, and more than 22% in January–July even though our exports to the world declined 7%, 5%, and rose less than 3% during the same respective time periods.

One of the basic reasons for negotiating for 13 years with the Chinese over their accession to the World Trade Organization was to ensure that we would knock down the many barriers to entering China's market. On paper, the accession agreement represents a considerable success. Today, the tariff rates that China imposes are lower on average than much of the rest of the developing, and in some instances, the developed world. In addition, the WTO agreement obliges China to protect the intellectual property of U.S. manufacturers and service suppliers. The agreement also eliminated many of the barriers to the free distribution of American goods throughout the Chinese economy, instead of being beholden to trading through a Chinese state enterprise as in the past.

The situation facing our manufacturers from a competitive perspective was far worse prior to China's entry into the WTO. Our manufacturers lacked access to the Chinese market, but their manufacturers had relatively free access to ours. In the first year following China's accession to the WTO, I think both Congress and the President showed an extraordinary amount of patience as China worked to pass the literally thousands of new laws needed to bring the country into compliance with WTO rules.

Now, as we move deeper into the second year of China's participation in the WTO, we need to see actual enforcement of those laws and basic compliance with WTO rules in other areas. I know that the President, Secretary Evans, Ambassador Zoellick, and most recently Secretary Snow have all made that point vigorously with their counterparts in China. And, I can attest that, at a working level, the rest of us have taken up the cause just as vigorously.

But, there is still a very, very long way to go. We have considerable challenges in terms of WTO compliance, particularly in areas like the protection of intellectual property that represents the key U.S. competitive edge in many manufacturing industries. In fact, no country raised more attention as a source of concern than China during the roundtable discussions. Our manufacturers complained about rampant piracy of intellectual property; forced transfer of technology from firms launching joint ventures in China; a broad range of trade barriers; and capital markets that are largely insulated from free-market pressures. We also heard rising concerns about the timeliness and direction of China's implementation of its WTO commitments in areas such as transparency, IPR protection, trading rights and distribution services, agriculture, and financial services.

Fundamentally, China's change from a non-market economy to one that operates fully on market principles is incomplete. Although the Chinese often make the case that they are a market economy because they want the benefits that designation would yield under our antidumping laws, the simple fact is that many of the main drivers of the Chinese economy remain in state hands. Whereas U.S. companies face continuing pressure from our capital markets to turn a profit, that pressure simply does not exist in many cases in China.

In one sense, this problem is not new. American firms have seen the same pattern in other Asian markets for years. Even the 1997 financial crisis has not weaned industries or governments from those unhealthy practices—witness Korea's continuing support for the Hynix semiconductor operations, a company that was otherwise headed for liquidation.

I recognize that many commentators see a demand for a "level playing field" as a demand for protection, but that is not always, or even usually the case. Most manufacturers I have spoken with over the last six months didn't want protection; they wanted the unfair trade practices that rigged the game against them eliminated. A good example is the forest products industry, which has an enormous fight with Canada over subsidies. In the context of our roundtable on forest products manufacturing their principal request was for the President to negotiate the elimination of the barriers they faced abroad and the subsidies they faced in terms of competition from imports.

The same held true for most manufacturers with whom we discussed China. There was a strong recognition that we were better off in a world in which the rules were observed and the competition was fair, than a world segmented by trade barriers which would mean less trade and slower economic growth for all.

At the same time, I also must stress that there are significant parts of our manufacturing sector that are under extraordinary pressure to adjust to new levels of competition from imports, particularly from China. Industries like textiles and apparel in the South and tool and die in the Northeast and Midwest offer examples of the sorts of pressures our manufacturers face. Both the challenges and the pain felt in many communities are very real.

In the case of textiles and apparel, the challenges are particularly intense because the industry is emerging from a 40-year period when it was protected by quotas on imports of competing material and clothing. As a consequence, the industry remains highly fragmented and is being forced to go through, all at one time, the adjustment and consolidation that most U.S. industries went through in the 1970s and 1980s.

In the last round of world trade negotiations, President Clinton agreed to phase out the quota system that had protected the textile industry. Most of the truly sensitive items from the perspective of U.S. industry were given the longest phase-outs. But, the quotas will come to an end on January 1, 2005, and that will mean still stronger competition from imports.

What is not generally understood is that most of the sharp increase in Chinese imports has come at the expense of our other trading partners. As new products have come free of quota arrangements, retailers no longer face the need to source products from multiple countries. Instead, much of what was previously shipped to the United States from other Asian countries now comes to us from China. But, that has not meant less pressure on U.S. manufacturers in terms of price competition.

While the argument most frequently raised about China by commentators seems to be the difference in wage rates, most of my conversations with manufacturers, particularly in textiles, suggested other reasons for increased Chinese competition. What is not often understood is that, today, the textile industry is actually very high tech. There is very little labor involved in many products that come out of the industry and wages are a relatively small portion of the total cost of production except in the case of products that require considerable hand stitching.

The truth of that statement was brought home to me in a conversation with a North Carolina manufacturer of textile products used in the luggage industry. Most bags today are made with some form of rip-stop material, none of which is hand sewn. Nor is the frame of most roll-on bags manufactured by hand. Yet, the North Carolina manufacturer showed me 5 suitcases, one nesting inside the other, that sold for a total price—delivered from China—of under \$30. In other words, the total cost of the five bags was below the North Carolina manufacturer's cost of materials alone.

The point to that story is simply that it is not wages alone that allowed the Chinese manufacturer to sell the 5 pieces of luggage for a delivered price of less than \$30. The cost of most of the materials is determined in world markets, so if the Chinese economy were open to international trade and competition, then the Chinese manufacturer's materials costs would be comparable to that of the U.S. costs. This means that to get the delivered price down to below \$30 there must be a very large amount of government subsidy, express or implied, to the manufacturer—a subsidy that can take the form of an outright cash grant to the exporter, but more often will take the indirect form of tariff protection against competition, the forgiveness or rebate of taxes, or the continuing extension of credit to uncreditworthy enterprises.

In my view, although the textile industry is commonly criticized for seeking protection based on the past 40 years of quotas, the complaint that has led the industry to seek safeguards against Chinese imports stems from a different motive. There is no real argument that the Chinese market operates fully on a market basis, and the reasons for the industry's request for help stems from that simple difference between the pressures they face in our market on a day-to-day basis and the pressures that their Chinese competition doesn't.

What that also points out is the fact that, in addition to pressing the Chinese at every opportunity on their compliance with their WTO commitments, we also have to be extraordinarily vigilant regarding the injurious effects of other forms of government support for Chinese industry that are not covered by current WTO rules. Those sorts of practices require a different type of tool—one that requires digging out the facts regarding the underlying competitive differences that our industry faces in terms of import competition from China.

As I noted above, the textile industry is not alone in facing Chinese subsidies and protection. Other industries like tool and die face similar competitive conditions. That is why one of the most forward-leaning recommendations we intend to make regarding our trade is the establishment of an office in the Commerce Department the sole function of which will be to investigate these sorts of practices. When we

find these anti-competitive practices, we will vigorously seek their elimination by the Chinese and by other trading partners.

The one thing I can assure you is that the Department of Commerce is dedicated to making sure China does play by the rules. We will vigorously pursue China's compliance with its WTO commitments and we will enforce our domestic unfair trade laws rigorously and fairly, as both President Bush and Secretary Evans have made clear.

The Department of Commerce's Role in Trade With China

The Department of Commerce, in close coordination with USTR and other agencies, has adopted an aggressive and multi-pronged approach to ensure that China honors its WTO commitments and that U.S. companies benefit from these opportunities. We will target unfair trade practices wherever they occur. We are exploring the use of new tools to expand our trade promotion activities in China. We are expanding efforts to engage Chinese officials to make sure they "get the rules right" as they continue their enormous task of restructuring their economic system.

The Commerce Department has actively provided WTO-related technical assistance to China since September 2000, well before China's accession to the WTO. Initial programs focused on increasing the awareness of general WTO principles among Chinese government officials. As China developed an increasingly sophisticated understanding of the WTO system, our programs have been tailored to more specific areas, such as standards development and intellectual property right (IPR) protection. For example, in 2003 Commerce sponsored or coordinated programs on fertilizer standards, antitrust, government procurement, medical device regulatory training, and information and communication technologies standards and conformity assessment.

Despite China's commitments to crack down on rampant piracy, counterfeit CDs, DVDs, and pharmaceuticals continue to flood the market. In addition, piracy and counterfeiting in China has a significant impact on U.S. intellectual property rights holders in China itself. In fact, the International Intellectual Property Alliance estimates that business software, music, movie and entertainment software piracy rates in China exceed 90%, with damages of \$1.85 billion in 2002. We have raised specific IPR concerns during our meetings with senior Chinese government officials and have repeatedly demanded that the Chinese government uphold its bilateral and multilateral IPR commitments.

Through the annual Special 301 process, we scrutinize China's IPR conditions in close coordination with our colleagues in other agencies. To make sure that China has the tools to implement its commitments, we have organized a series of seminars with Chinese officials. Programs in development for later this year include a WTO pharmaceutical regulatory seminar and anti-counterfeit training, and IPR criminal and border enforcement seminars. We have worked on these programs on an intra and inter agency basis, using the resources of U.S. Patent and Trademark Office, Department of Justice and other agencies. We think China can and should do better in these areas. We continue to press for progress.

However, keeping our focus on China's WTO implementation and the country's other trade practices is only part of the solution. We must continue to enhance the ability of U.S. businesses to compete in China. We are increasing our efforts to ensure that U.S.-developed technical standards are accepted in China just as they are throughout the world. We are launching "Doing Business in China" seminars in cities across the country to address concerns about the Chinese market from small- and medium-sized businesses. We are exploring ways to develop more trade leads in China and to provide even more targeted information on opportunities in China for companies in the U.S.

Combined with these domestic efforts, we regularly engage Chinese government officials to ensure trade agreement compliance and market access for our products and services. Secretary Evans will visit China in October to advance U.S. interests and advocate for a level playing field in our economic relations with China. We will have another opportunity to raise outstanding issues during the 15th U.S.-China Joint Commission on Commerce and Trade (JCCT) to be held in Washington in early December.

The President's Manufacturing Initiative

With that, I would like to turn to the topic of the President's Manufacturing Initiative. In March of this year, during Manufacturing Week, Secretary Evans had the opportunity to speak before the National Association of Manufacturers in Chicago. At that time, he announced the President's Manufacturing Initiative.

As a part of that initiative, Secretary Evans directed me to lead a comprehensive review of the issues influencing long-term competitiveness of U.S. manufacturing.

The central goal of the review is to develop a strategy to ensure that government is fostering an environment that promotes a dynamic manufacturing industry. The review will conclude with the release of a report later this fall.

The Commerce Department's senior management, including Secretary Evans and Deputy Secretary Bodman, all pitched in. We held roundtable discussions with manufacturers in the aerospace, auto, semiconductor, and pharmaceutical sectors, among others, in more than 20 cities across the United States—from Manchester, New Hampshire to Columbus, Ohio, to Detroit to Los Angeles—to develop the report and recommendations.

What we heard from manufacturers in terms of the challenges they face was significant. While the international competition is what has garnered most of the attention in the press, by far the greater weight of the manufacturers' comments focused on domestic issues—what I call “keeping our side of the street clean.” What I mean by that is simply paying attention to the needs of our manufacturers as we develop legislation or implement regulations. It is the steady accumulation of multiple burdens, rather than a single cause, that has had the most severe impact on the competitive environment in which our manufacturers operate.

The list of issues our manufacturers identified should not surprise anyone who has taken a serious interest in manufacturing. While our manufacturers have tightened their belts and raised their productivity in an effort to remain competitive and, in fact, to succeed in the day-to-day competition in the marketplace, they have seen that advantage and the hard-won productivity gains eroded by everything from higher energy costs to higher medical and pension costs to higher insurance costs due to a run-away tort system.

Just a few examples might suggest why manufacturers have seen their costs rise. We heard from manufacturers in New Jersey that 30 cents of every dollar of revenue went to pay health benefits for employees. Manufacturers gladly pay for their employee's health benefits because they see their own interest served by a healthy and motivated workforce, but if we are serious about manufacturing, we have to be serious about grappling with the underlying drivers that have created 145 percent increases in health care insurance costs that obviously are not sustainable indefinitely.

In Michigan, I met with auto parts suppliers that faced continuing pressure from the auto companies to lower their prices by 20 percent or face the prospect that the auto companies would turn to overseas sources of supply. Much of the concern those parts suppliers reflected the terms on which they compete with those overseas suppliers, particularly in China. But the auto parts suppliers knew that the ultimate source of the problem lay in an auto industry that is grappling with the same sorts of legacy costs that burdened the steel industry. If we are serious about manufacturing, then these industries will have to get those financial obligations under control.

In Columbus, Ohio, Des Moines, Iowa, and in my hometown of Minneapolis, Minnesota, I met with manufacturers in the plastics and adhesives businesses that are heavy users of natural gas. The companies in the plastics businesses in particular risk seeing whole new markets fall to their foreign competitors who see lower natural gas prices. If we are serious about manufacturing, we have to adopt a national energy plan that will help us access new sources of supply and improved transmission to reduce the cost of energy to our manufacturers as well as to consumers.

Another example we heard from virtually every manufacturing trade association we met with was the need to eliminate the complexity and the disincentives our tax system creates for investing in manufacturing in the United States. Any number of issues fall in that category. Take the bias in the current tax code against equity financing, which raises the cost of capital, thereby reducing the investment. This bias also translates into a preference for debt, which yields highly leveraged companies and a highly leveraged country, all the while encouraging the worst sorts of gaming as clever tax lawyers try to find ways to take what is an equity interest and call it debt in order to qualify for an interest deduction. Taken together, even without cutting rates, reforms of the tax code could make a profound difference to the relative attraction of investing in manufacturing in the United States.

But, perhaps the most egregious example comes out of the tort system in this country. If we are serious about manufacturing, we have to get serious about reforming the tort system.

One issue, in particular, stood out among the manufacturers' concerns about the tort system. That was the ongoing asbestos litigation. There, the continuing litigation has yet to help many individuals who were harmed by prolonged exposure to asbestos, while, at the same time, the litigation hangs over virtually all U.S. manufacturing, raising their insurance costs and dampening their returns.

Manufacturers pointed to declining vocational school programs, declining enrollments in engineering and the funding of scientific research, all of which are essential to the productivity gains that keep our manufacturing sector competitive and keep a skilled workforce employed.

Finally, as I noted above, in addition to keeping our own side of the street clean, U.S. manufacturers demanded a level playing field. For most, that translated into a demand that we negotiate down tariff rates that are higher than ours and break open new markets. Or it translated into a demand for the enforcement of rules barring the theft of intellectual property. It translated into a demand for the enforcement of our unfair trade laws or laws against customs fraud.

What I did not see was an interest in outright protection. Rather, most manufacturers saw trade as a simple question of equity. If we keep our markets open to our trading partners goods, they should do the same for us. But, where our trading partners did not live up to the terms of our agreements or otherwise heed the rules, our manufacturers expected that those trading partners should pay a price.

While we are still in the process of finalizing the report and recommendations across many fronts, Secretary Evans has outlined several new initiatives in response to the concerns we heard from manufacturers, particularly the need for a stronger focus within the U.S. Government on manufacturing and the most immediate cases of unfair trade affecting our manufacturers. The first initiative, announced by the President on Labor Day, is a new Assistant Secretary of Commerce to serve as the point person in the Administration and within the U.S. Government for manufacturers and as an effective advocate for the manufacturing sector's competitiveness. There are many programs within the Federal Government that bear on manufacturing, but heretofore there was no one person or one office responsible for bringing their efforts into a coherent strategy. The second would call for the creation of Assistant Secretary for Trade Promotion to boost our exports, particularly to those markets that our negotiators have recently opened to our trade like China. And, the third is the establishment of an Unfair Trade Practices Team to track, detect, and confront unfair competition before it injures an industry here at home.

We expect the report and the remainder of the recommendations to be out soon. In addition to moving on the implementation of those recommendations, we intend to do two things to follow up. The first is to go back to the manufacturers we visited earlier this year to get their reaction on what we have suggested and to help us refine our approach as we move forward. The second is to discuss the next set of issues we intend to tackle as part of our on-going commitment to support our manufacturing sector.

That concludes my testimony. I would be pleased to answer any questions that you may have.

**STATUTORY MANDATE OF THE U.S.-CHINA ECONOMIC AND SECURITY
REVIEW COMMISSION**

Pursuant to Public Law 108-7, Division P, enacted February 20, 2003

RESPONSIBILITIES OF THE COMMISSION.—The United States-China Commission shall focus, in lieu of any other areas of work or study, on the following:

PROLIFERATION PRACTICES.—The Commission shall analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.

ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.—The Commission shall analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing, and R&D facilities; the impact of these transfers on United States national security, including political influence by the Chinese Government over American firms, dependence of the United States national security industrial base on Chinese imports, the adequacy of United States export control laws, and the effect of these transfers on United States economic security, employment, and the standard of living of the American people; analyze China's national budget and assess China's fiscal strength to address internal instability problems and assess the likelihood of externalization of such problems.

ENERGY.—The Commission shall evaluate and assess how China's large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D efforts and technological assistance, in influencing China's energy policy.

UNITED STATES CAPITAL MARKETS.—The Commission shall evaluate the extent of Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests.

CORPORATE REPORTING.—The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States investments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China.

REGIONAL ECONOMIC AND SECURITY IMPACTS.—The Commission shall assess the extent of China’s “hollowing-out” of Asian manufacturing economies, and the impact on United States economic and security interests in the region; review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing’s military modernization and force deployments aimed at Taipei, and the adequacy of United States executive branch coordination and consultation with Congress on United States arms sales and defense relationship with Taipei.

UNITED STATES-CHINA BILATERAL PROGRAMS.—The Commission shall assess science and technology programs to evaluate if the United States is developing an adequate coordinating mechanism with appropriate review by the intelligence community with Congress; assess the degree of non-compliance by China and [with] United States-China agreements on prison labor imports and intellectual property rights; evaluate United States enforcement policies; and recommend what new measures the United States Government might take to strengthen our laws and enforcement activities and to encourage compliance by the Chinese.

WORLD TRADE ORGANIZATION COMPLIANCE.—The Commission shall review China’s record of compliance to date with its accession agreement to the WTO, and explore what incentives and policy initiatives should be pursued to promote further compliance by China.

MEDIA CONTROL.—The Commission shall evaluate Chinese government efforts to influence and control perceptions of the United States and its policies through the internet, the Chinese print and electronic media, and Chinese internal propaganda.

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