Testimony before the U.S.-China Economic and Security Review Commission

Hearing on US-China Economic Challenges

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Question 1. Does the U.S.-China trade have an impact on U.S. jobs, wages and benefits? If so, how has this changed over the last 10 years?

Currency Manipulation, Trade, Jobs and Wages

The President has identified reducing inequality as the "defining challenge of our time." While inequality is a complicated problem, it won't be solved without raising wages of middle class Americans, creating more jobs, and reducing unemployment. To do that, we need to increase sales of goods and services made in the United States, which means expanding exports, reducing imports, and shrinking our trade deficit.

Currency manipulation, by about twenty countries (mostly in Asia), is the single most important cause of our trade deficit. These nations have been exploiting our markets and stealing U.S. jobs for over a decade. Ending currency manipulation would reduce U.S. trade deficits by \$200 to \$500 billion per year within three years, creating 2.3 to 5.8 million U.S. jobs (**Table 1**). It would also increase U.S. GDP by \$288 to \$720 billion (2.0 to 4.9 percent), reduce U.S. budget deficits by \$107 to \$266 billion (34.4 to 86.1 percent) and improve state budgets by \$40 to \$101 billion (2.0 to 4.9 percent of total state spending).

China is by far the largest currency manipulator, and it has increased its holdings of foreign exchange reserves by at least \$359 billion per year, on average, between 2006 and 2012 (see **Figure A**). Gagnon (2013) has shown that there is nearly a perfect, 1-to-1 correlation between a country's official purchases of foreign exchange reserves and its current account balances. China acquired over \$4 trillion in foreign exchange reserves and other foreign assets since 2000. Those purchases are strongly correlated with the growth of China's trade and current account surpluses with the United States, and the world.

Currency manipulators have increased their holding of official foreign assets by nearly \$1 trillion per year in recent years. Bergsten and Gagnon (2012) also estimate that the elimination of currency manipulation would result in 10 to 25 percent depreciation in the trade-weighted value of the dollar. The elimination of currency manipulation would result in a somewhat larger appreciation in the Chinese yuan and other manipulated currencies relative to the U.S. dollar.

Currency manipulation can be eliminated by passing new laws (such as H.R. 1276 and S.1114) and by confronting the perpetrators.¹ China is by far the most important currency manipulator. There are approximately 20 other significant currency manipulators, and many others who have been forced to engage in defensive devaluations to maintain their competitiveness with China and other large manipulators (Bergsten and

¹ H.R. 1276 and S.1114 would allow the Commerce Department to treat currency manipulation as a subsidy in Countervailing Duty trade cases (OpenCongress.org 2013b and 2013a).

Gagnon 2012, 1). In this regard, it is important to note that official Chinese trade data, which are used by the IMF and other agencies to estimates China global trade surplus, substantially and consistently underestimate the overall Chinese trade surplus, as shown by comparison of Chinese trade statistics with comparable trading partner data on their trade with China (**Figure B**).

Turing to trade, jobs, and wages, the most important cause of growing inequality remains extremely high levels of unemployment, and low levels of labor force participation. The unemployment rate was 13.1 percent in January if missing workers are included. Sustained low unemployment would deliver much higher levels of wage growth to workers in the bottom and middle of the income distribution. When unemployment falls, wages rise much faster at the bottom and middle of the income distribution than at the top. Thus, reducing unemployment will directly improve income inequality. EPI research has also shown how the growth of trade with China and other low-wage nations has contributed directly to growing income inequality.

EPI research on the costs of China trade and the impacts of trade with low-wage countries

Business and government officials frequently claim that export growth is delivering great benefits to the economy. For example, the International Trade Administration (ITA) claimed last year that

Americans are selling more U.S. goods and services to the 95 percent of consumers who live outside of our borders. In 2012, U.S. exports hit an all-time record of \$2.2 trillion and supported 9.8 million jobs.²

Trade is a two way street. Exports support domestic jobs, but imports displace jobs that would be located in the United States. But when most U.S. officials talk about the benefits they refuse to discuss imports or their effects on employment. Talking about trade and only discussing the growth of exports and their implications for employment is like keeping score in a baseball game and only counting runs scored by the home team—it might make your team sound good, but it won't tell you if they've won the game (Scott 2013b).

Exports support jobs, but imports destroy them. The best measure of the net impact of trade on the demand for labor, and on overall GDP in the United States, is the change in the U.S. trade balance, measured in dollars.

The Administration continues to tout the supposed benefits of rapid export growth.³ However, the *rate* of growth of exports is not the only, or even the most important determinant of changes in the U.S. trade balance, as shown in the attached charts for U.S. trade with China. For example, **Figure C** shows that exports to China grew at a 10.3 percent annual rate in 2013, while imports increased only 3.5 percent. However, as shown in **Figure D**, the value of U.S. exports to China increased only \$11.4 billion in 2013, while the value of imports increased \$14.8 billion. Thus, the U.S. trade deficit with China increased \$3.4 billion last year (in 2013).

The trade deficit increased, despite more rapid export *growth* because total value of imports exceeded that of exports by a factor of 3.6-to-1, (U.S.-China imports, exports and the trade balance for 2000-2013 are shown in **Figure E**). Thus, exports would have to grow 360% faster than imports just to keep the trade deficit from growing, and they did not. The U.S. trade deficit with China has increased rapidly since that country entered the World Trade Organizations (WTO) in 2001, as shown in Figure E.

The China Trade Toll: Growing Trade Deficits, Job Losses and Wage Suppression

Growing U.S. trade deficits with China between 2001 and 2012 eliminated 2.9 million U.S. jobs. More than three fourths of the jobs lost (2.3 million, 77.1 percent) were in the manufacturing sector (Scott 2014b,

² International Trade Administration. 2013. "National Export Initiative." <u>http://trade.gov/nei/</u>

³ International Trade Administration. 2012. "Powering Export Growth." <u>http://trade.gov/cs/cs_annualreport12.pdf</u>

for thcoming). Similar findings have been obtained by Autor, Dorn and Hanson (2012) and Pierce and Schott (2013).⁴

Workers displaced by trade were pushed out of good jobs with excellent wages, primarily in manufacturing industries, into lower paying jobs in non-traded industries, or into unemployment. Growing trade deficits with China between 2001 and 2011 resulted in the net loss of at least \$13,505 per displaced worker in 2011 alone. For all displaced workers, using education group averages, net wages losses totaled \$37 billion (Scott 2013a).

Direct trade and wage losses are just the tip of the iceberg went it comes to the cost of China trade, and globalization more broadly, for American workers. Using standard models to benchmark the cost of globalization for American workers without a college degree Bivens (2013) has estimated that in 2011, trade with low wage countries lowered wages by 5.5 percent—roughly \$1,800 for all full time, full-year workers without a college degree.

There are approximately 100 million workers in the United States without a college degree. Overall, the growth of imports from low wage nations has resulted in a total transfer of \$180 billion per year from production to non-production workers, directly contributing to the observed rise in inequality. The growth of trade with low-wage countries explains 90 percent of the rise in college wage premium since 1995. Between 1995 and 2011, China alone was responsible for over half (51.6 percent) of the growth in the college/noncollege wage gap.

⁴ Autor, Dorn and Hanson (20120 examine the period 1990-2007. Pierce and Schott examine data for March 2001 to March 2007.

Questions 2. What secondary factors, such as indirect employment effects, or the impact of manufacturing job losses on the business services sector, have affected overall employment in the U.S. economy as a result of the trade imbalance?

The U.S. economy is entering the seventh year of the great recession. Nearly 8 million jobs are needed to absorb the excess workers in the economy and return to unemployment levels that prevailed before the start of the recession. The U.S. economy was operating 4.5 percent below potential output in 2013 (and output gap of \$797.5 billion).⁵

The elimination of currency manipulation would directly stimulate the creation of up to 2.3 million U.S. jobs (**Table 2**, high impact scenario). An additional 1.7 million jobs would be created in indirectly supported industries, including jobs in supplier industries (such as steel, glass and tires used as inputs to the auto industry), and service industries (such as accounting, scientific and technical and managerial services). Because the economy has un-used resources, the creation of up to 4 million (direct plus indirect jobs by the elimination of currency manipulation will also result in the creation of additional respending jobs in the economy, as those initial workers spend the wages earned on goods and services. Since wages are high in manufacturing (which makes most traded goods), reducing trade deficits will have a large "multiplier" effect on employment. We estimate that the multiplier for such spending is 0.44. Thus, an additional 1.8 million jobs multiplier jobs would be created by eliminating currency manipulation in the high-impact scenario, as shown in Table 2.

Jobs supported by eliminating currency manipulation would be concentrated primarily in manufacturing and agricultural states in the Upper Midwest including Wisconsin, Indiana, Iowa, Minnesota, Michigan, Ohio, South Dakota, Nebraska, and also Idaho in the West. Growing trade deficits have devastated manufacturing production, which has had a ripple effect on state and local governments throughout these "rustbelt" regions of the country.

Question 3. How would our economic relationship with China need to change for it to produce more U.S. jobs and a better balance of trade?

China has built an export based economy on a foundation of illegal financial, trade and industrial policies. These include China's currency manipulation, its many trade-distorting practices including extensive subsidies, illegal barriers to imports, restrictions on critical trade in critical materials (such as taxes and quotas on exports of rare earth minerals), dumping, and suppression of wages and labor rights and a race to the bottom in environmental, an health and product safety standards that have threatened consumers in the U.S., polluted our air and oceans and increased global warming.

At the same time, China has suppressed wages and neglected the development of its own domestic consumer markets. From a macroeconomic perspective, China has developed bloated manufacturing and trade goods sectors and suppressed domestic consumption. As a result the structure of China's economy is distorted, imbalanced and unsustainable.

China needs to redevelop its economy by reducing its reliance on export-led growth and taking steps to increase domestic consumption. These could include measures to raise domestic wages by raiding minimum wages and by recognizing the rights of workers to independently organize and bargain collectively (e.g. form independent trade unions). China can also boost domestic demand by increasing investment in its social safety net and through expanded investments in domestic infrastructure.

⁵ Congressional Budget Office, <u>Baseline Economic Forecast—February 2014 Baseline Projections</u>.

Question 4. As China evolves from an economy that makes copies of things to an economy that also invents things, what does the U.S. need to do to ensure that our workers are prepared to compete?

There are a number of policies the United States can and should undertake to redevelopment its economy. All will contribute to rebuilding U.S. manufacturing. For example, underinvestment in infrastructure reduces the efficiency of the economy and he competitiveness of U.S. manufacturing. The United States needs \$3.6 trillion in infrastructure investment by 2020.⁶ Rebuilding U.S. infrastructure will create huge demands for domestic manufactured products such as steel, concrete, construction equipment, controls and instruments. It will also help rebuild overall demand in the domestic economy

Enacting policies to more effectively stimulate demand, including ending currency manipulation, rebuilding infrastructure, investing in clean and renewable technology industries, and eliminating unfair trade policies (such as dumping, subsidies, and other unfair trade barriers) are the most important steps needed to rebuild U.S. manufacturing.

New trade policies to respond to a dynamic and increasingly hostile international environment would move toward a restructuring of the world trading system so that it supports fair, balanced, and sustainable trade. And the massive public investments needed to rebuild U.S. infrastructure and develop new green and clean energy technologies will create domestic and foreign demand for new products that can help rebuild U.S. manufacturing, while increasing the competitiveness of the U.S. economy as a whole. Finally, reforms of health care and tax systems are also needed to increase competitiveness and rebalance public spending and revenues in the United States.

While policies that address the demand side of the equation are critical, supply-side assistance is also crucial; U.S. manufacturing suffers from reduced capacity, in both absolute terms and relative to our trading partners. The United States and its domestic manufacturers are operating in an environment where many other countries, including Germany, Japan, China, and Korea, operate comprehensive, supply-side programs to support their traded goods industries. The United States needs to create a world-class environment to support domestic manufacturing (Ezell and Atkinson 2011 and 2012). This should include greatly enhanced investments in technology development, and manufacturing "extension programs" such as the Manufacturing Extension Partnership, a program of the National Institute of Standards and Technology (NIST) that is vastly underfunded when compared with agriculture capacity-building programs of the USDA and with manufacturing capacity-building programs of other countries such as Canada, Germany and Japan.

The United States also needs an intermediary institution to provide working and investment capital to small and medium-sized manufacturers, which often lack access to U.S. bank and capital markets that give preference to large multinational companies for bank loans and long-term corporate bonds. This "Mannie Mae" would be modeled on the federal housing enterprises (i.e., Fannie Mae, Freddie Mac, and Ginnie Mae) that channel capital into the nation's housing finance markets.

In addition, federal and state governments should work with schools, unions, and manufacturers to develop improved school-to-work training programs for non-college graduates, modeled on German and Danish labor force policies.

Finally, Japan has a Ministry of Economy, Trade, and Industry (METI), a powerful agency that works to ensure that foreign trade policy complements efforts to strengthen domestic manufacturing interests. China through its five-year plans also provides critical strategic support to manufacturing efforts. The U.S. government needs to

⁶ American Society of Civil Engineers 2013. <u>Report Card for America's Infrastructure</u>.

expand its capacity to develop and implement national trade and competitiveness strategies to respond to, and compete with, Japan's METI and China's five-year plans.

Lessons on building strong support systems from the United States and other countries

The major elements of a more effective national trade and industrial policy were outlined in the previous section. A few examples will illustrate the scale of resources and commitments required to raise manufacturing support in the United States to a level on par with other countries.

In the debates about the future of manufacturing, comparisons are frequently drawn between the decline of employment in agriculture and that in manufacturing. However, agriculture has continued to be a major U.S. exporter, and its contribution to the economy has been relatively constant in recent years despite the sharp decline in employment. Agricultural output has continued to grow (in real terms) despite falling employment.

One of the primary reasons for rising output in agriculture is the steady growth of productivity (output per acre). Among the foremost reasons for the large and steady rise in agricultural productivity has been the key role played by the federal government in supporting research and its dissemination and diffusion. Resources dedicated to this task include the U.S. Department of Agriculture and its Agricultural Research Service, the system of land-grant colleges that support a vast base of primary research into agricultural sciences, economics and technology diffusion, and the USDA's farm extension service, which has disseminated the latest research findings to farmers at the county and farm level.

There is simply no counterpart in manufacturing to the USDA/land-grant college system of agricultural research, development, innovation, and diffusion of new technologies. The entity that comes closest to performing a similar role in manufacturing may be the relatively obscure National Institute of Standards and Technology (NIST). The president's budget requested \$857 million for NIST in fiscal 2013 (NIST 2012).

In comparison, the USDA's overall 2013 budget request, including mandatory crop subsidy programs and all other research programs, was \$155 billion (USDA 2012). Some 72 percent of USDA expenditures are for nutrition assistance (the Women, Infants and Children program), which only indirectly benefits agriculture. Considering only non–nutrition assistance programs, which include farm and commodity programs, conservation and forestry, rural development, research, and other programs, the USDA's fiscal 2013 request is still \$43.4 billion, more than 50 times total spending on NIST programs. However, manufacturing generated 10 times as much output as did agriculture in 2011: \$1,731.5 billion of value added in manufacturing versus \$173.5 billion in agriculture (Bureau of Economic Analysis 2012). Thus, per dollar of economic output generated, the USDA spends more than 500 times as much to support agriculture and related activities as NIST spends on manufacturing research and related activities.

One of the most visible (and controversial) elements of NIST is the Hollings Manufacturing Extension Partnership (MEP), which was designated to receive \$128 million in fiscal 2013 (NIST 2012). Comparative research by Ezell and Atkinson (2011) has shown that U.S. expenditures for the MEP program represent only 0.0014 percent of U.S. GDP. As a share of GDP, Canada spends more than seven times as much as the United States on manufacturing extension and services programs, and Japan spends nearly 23 times more than the United States.

If U.S. spending on the MEP program were to rise to the Japanese level, it would require a budget allocation of approximately \$5 billion per year, not large in the context of the USDA budget, or of overall government spending, but a huge, roughly 40-fold increase of the program.

Germany's Fraunhofer-Gesellschaft, the country's largest organization for applied research, serves as a compelling model of what the MEP could become. It supports more than 80 research units and 60 Fraunhofer Institutes and in 2011 had a staff of 20,000, more than half of whom are scientists and engineers. It had an annual budget of €1.8 billion euros (\$2.4 billion). More than 70 percent of Fraunhofer's contract research is from contracts with industry and from publicly funded research projects. Almost 30 percent of its funding is provided by the German federal and state (lander) governments. (Fraunhofer 2012)

The U.S. GDP is approximately 4.2 times larger than Germany's (IMF 2012). If the U.S. MEP program were operated on the scale of the Fraunhofer-Gesellschaft, it would require total funding of \$10.1 billion, of which \$3.0 billion would be required from federal and state contributions. Thus, both the German and Japanese examples suggest U.S. spending on the MEP program should be expanded 20- to 40-fold. Expanding to a program of this scale would require time and resources to ensure that the needed capacities were developed and the resources well invested.

But expanding the MEP program would by no means be sufficient to restore U.S. manufacturing competitiveness. The United States would also need to greatly expand its national R&D infrastructure, both through funding programs within federal agencies such as the National Science Foundation, the Department of Energy, the Environmental Protection Agency, and the National Institutes of Health, and by creating a national system of research universities dedicated to developing manufacturing technology and training manufacturing engineers. This training system would serve as the manufacturing equivalent of the USDA's system of land-grant colleges, but on a larger scale.

International comparisons also provide good models for labor/management relations, for financing small and medium-sized manufacturing firms and other exporting firms, and for training non-college-educated workers. German manufacturers practice "stakeholder capitalism" in which boards of directors include an equal number of representatives of managers and workers (Meyerson 2011). Germany also has an entire sector of banks devoted to financing small and medium-sized firms, which reduces such firms' need to rely on private capital markets and lessens the demand for maintaining short-term profits. Additionally, Germany has a highly developed school-to-work job-training system for non-college-educated workers, which is much more effective than U.S. job training and displaced-labor-assistance programs. As a result, over the past decade Germany has maintained a large and growing trade surplus even relative to low-wage countries outside the eurozone, despite having some of the highest manufacturing compensation rates in the world (BLS 2011). Furthermore, it has maintained its competitiveness in world export markets, and its exports are dominated by autos and other high-value, durable manufactured goods.

There are externalities that lead U.S. private firms to underinvest in training, R&D, and other activities that would be supported by supply-side policies previously suggested. There are also market imperfections in capital markets that need to be addressed with new public institutions, as suggested above. These market imperfections provide an economic justification for investing public resources in activities that would enhance U.S. manufacturing capacity.

While it is beyond the scope of this statement to detail a comprehensive program to develop a world-class environment to support U.S. manufacturing, it is clear that such programs are necessary and would greatly aid expansion of manufacturing and other traded industries, creating millions of additional jobs. Rebuilding manufacturing through rebalancing trade can help restructure the U.S. economy, close the output gap, and help return the U.S. economy to full employment. In the absence of such programs, the United States appears destined to suffer through a "lost decade" or more of excessive unemployment and output far below potential (Fieldhouse and Bivens 2012).

On the other hand, implementing more effective trade and industrial policies, coupled with massive investments in infrastructure, clean technologies, and renewable energy, could reduce or eliminate the U.S. trade deficit altogether. This would support millions of additional good jobs, add hundreds of billions of dollars to U.S. GDP, and reduce unemployment and federal budget deficits while greatly improving state and local finances. These policies would be win-win for the United States, its workers, U.S. communities, and manufacturing and other high-wage domestic industries such as construction and utilities.

Question 5. What is the U.S. doing to address worker readiness and education?

It is important to note that at this stage of the recovery, there is very strong evidence suggesting that a shortage of training or skills mismatches are not responsible for current high levels of unemployment. As a February 2014, there were still more than 2.5 unemployed workers for every available job opening in the county. There are between 1.3 and 8.2 times as many unemployed workers as job openings in every industry. In *no* industry does the number of job openings even come close to the number of people looking for work (Shierholz 2014).

There is some evidence that employer paid training in the U.S. has increased slightly in 2013. The American Society for Training and Development (ASTD) estimated that "organizations spent \$164.2 billion on training in 2012, up from \$156 billion in 2011."⁷ An earlier study for the Employment and Training Administration of the U.S. Department of Labor and the ASTD found that in 2006 businesses spent \$46-\$54 million per year on training. However, only one fifth to one third of employees received training from their employer, and more educated workers were more likely to receive training.⁸ Thus, most workers did not receive job training from their employer.

Question 7. Why negotiate a Bilateral Investment Treaty (BIT) with China? Why seek an agreement that ensures U.S. companies are better able to move jobs to China?

This question illustrates the tension between policies that are good for U.S. companies, and those that benefit the United States as a location for jobs and production. The data on the economic impacts of foreign investment and "insourcing" are quite clear. Between 1990 and 2006, foreign multinational companies (MNCs) operating in the U.S. were responsible for the net loss of 4 million jobs in domestic firms taken over by those companies, due to layoffs, firms that spun off (and including net jobs created in startups owned by those firms) (Scott 2007).

One of the major motivations for negotiating a BIT is to encourage foreign multinationals to invest in the US. Pubic officials often take credit for the local jobs created or retained by such investments. Millions of dollars in public money are often offered as incentives to attract such investments, in what often becomes a race-to-the bottom among cities and states who engage in "smokestack chasing." Less attention has been given to what happens after the initial investment takes place. Sometimes foreign MNCs make an initial job-creating investment and then change their mind. Swedish MNC Electrolux, for example, manufactured refrigerators for years in Greenville, Michigan but recently closed the plant and moved most of its 2,700 jobs to Mexico.

Insourcing is often deliberately designed to remove jobs from American industries. Foreign multinationals buy U.S. firms, hollow them out, and then outsource production to their home countries. For example, a few years ago the Indian firm GHLC acquired Dan River, a U.S. textile company. News reports confirm that "Indian firms are attracted in particular to companies whose brands enjoy considerable popularity in their home markets as

⁷ Cook, Dan. 2014. "Employers spending more on training"

⁸ Nightingale, Demetra and Kelly Mikelson, "<u>Estimating Public and Private Expenditures on Job Training in the</u> <u>U.S.</u>"

those brands can be manufactured more cheaply in their Indian plants" (Business Wire 2007). A similar fate likely awaits Smithfield foods, which was recently purchased by China's Shanghui.⁹

Stepping back from the plant-level view of insourcing, a **Figure F** provides data on total trade by U.S. and foreign MNCs for 1997 to 2011. Overall, these firms have been responsible for a growing share of the U.S. trade deficit. Foreign MNCs were responsible for nearly half (44.2 percent) of the U.S. goods trade deficit in 2011. It is, in general, true that foreign companies invest in the United States to gain access to this market.

In the 1990s and before, it was true that U.S. MNCs also invested abroad to gain market access. U.S. MNCs used to have a goods trade surplus until 2000. Since then, these firms have developed a large and growing trade deficit. The dominant mode of production for U.S. MNCs is now oriented largely towards outsourcing production of goods destined for sale in the United States. U.S. trade deficits with China and other countries have displaced millions of jobs in the United States. Overall, U.S. and foreign MNCs are responsible for nearly three quarters (71.1 percent) of the U.S. goods trade deficit in 2011, and shown in Figure F, and hence for most of the jobs displaced by trade in the United States. Thus, the globalization of finance, and the rapid growth of MNCs have hurt the US economy through the contributions of these firms to growing U.S. trade deficits and trade-related jobs losses. What is good for Wall Street is definitely not good for Main Street in America.

The United States would be better served by using the scarce resources devoted to negotiating new international trade agreements and investment treaties to improve the enforcement of U.S. fair trade laws. The risks associated with a new BIT, especially with China, greatly outweigh any potential benefits.

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⁹ Industry Week. "China's Shuanghui Buys Meat Processor Smithfield Foods,"

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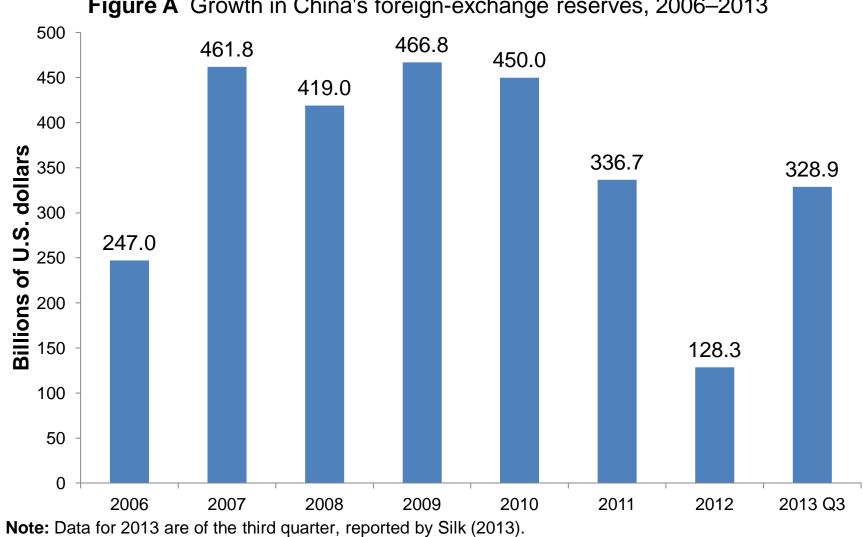
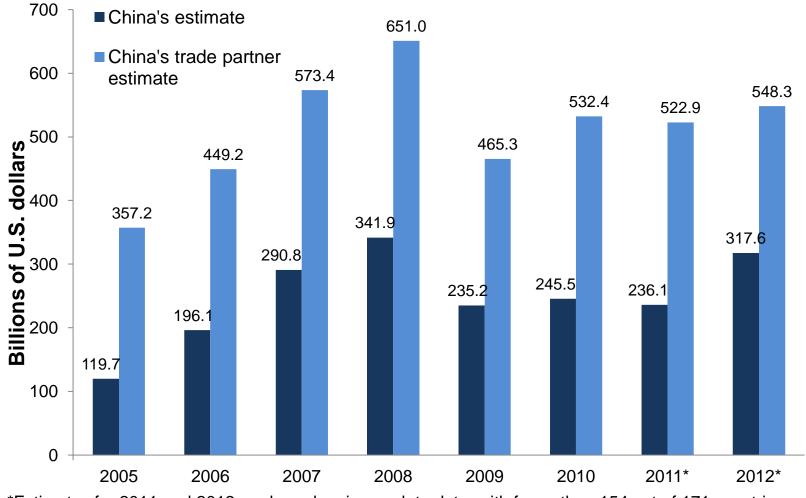


Figure A Growth in China's foreign-exchange reserves, 2006–2013

Figure B China's global goods trade surplus, Chinese vs. trading partner-country reports, 2005–2012



*Estimates for 2011 and 2012 are based on incomplete data, with fewer than 154 out of 171 countries reporting.

Source: Author's analysis of U.N. Comtrade (2013)

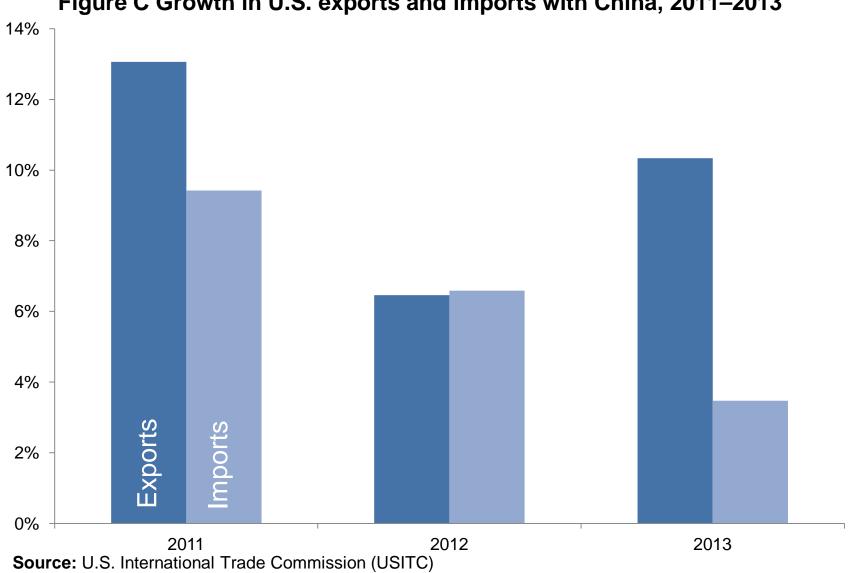


Figure C Growth in U.S. exports and imports with China, 2011–2013

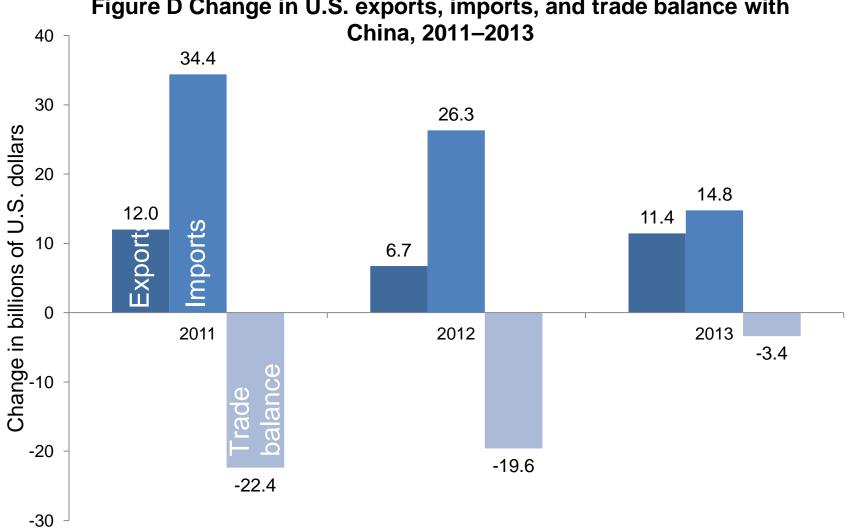
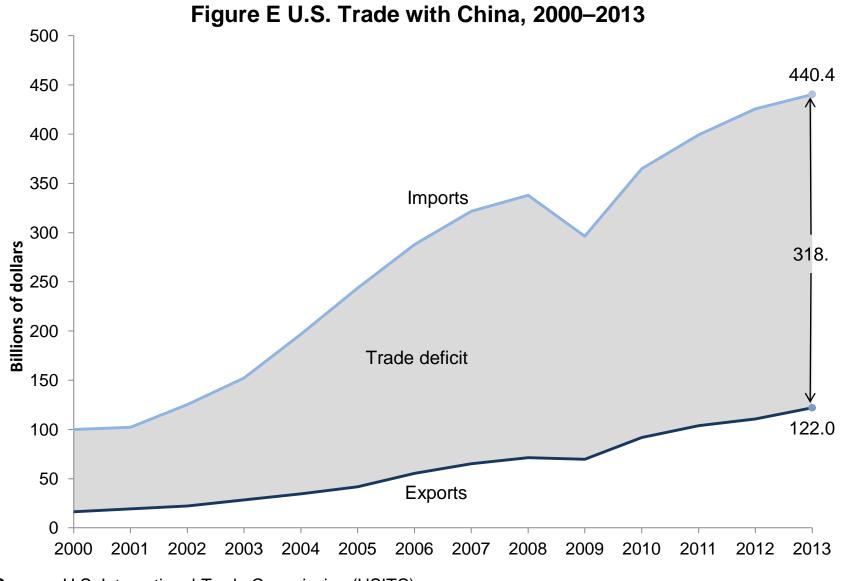


Figure D Change in U.S. exports, imports, and trade balance with

Source: U.S. International Trade Commission (USITC)



Source: U.S. International Trade Commission (USITC)

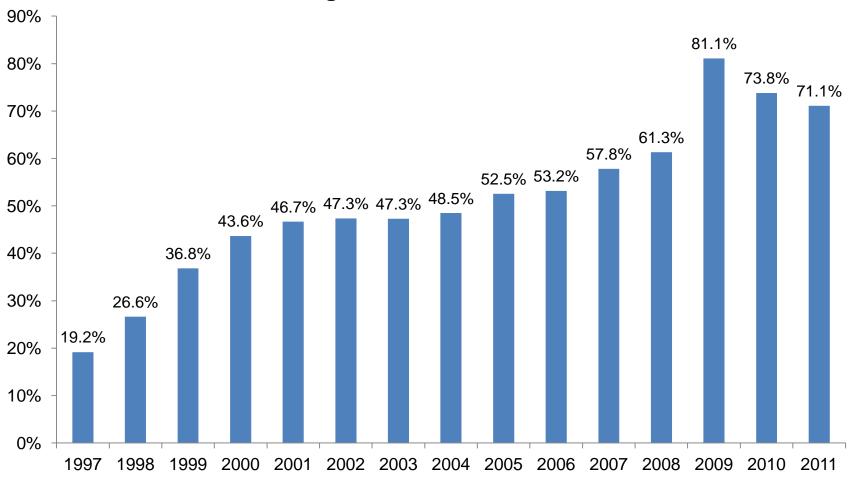


Figure F Trade deficit of MNCs operating in the U.S. as a share of the total U.S. goods trade deficit, 1997–2011

*Multinational companies

Source: Bureau of Economic Analysis National Income and Product Account Table 1.1.5 and Direct Investment and Multinational Companies data

state spending, 2015			
	Scer	Scenario:	
	Low	High	
Change in:	impact	impact	
Trade deficit (billions of dollars)	-200	-500	
Gross domestic product			
in annual billions of dollars	288	720	
as a share of projected GDP in 2015	2.0%	4.9%	
Number of jobs	2,300,000	5,800,000	
Federal budget deficit			
in annual billions of dollars	107	266	
as a share of projected federal deficit in 2015	34.4%	86.1%	
State budget funds			
in annual billions of dollars	40	101	
as a share of state spending	2.0%	4.9%	
as a share of state/local deficits in 2015	27.4%	68.4%	
Note: Dollar calculations are in 2005 dollars.			
Source: Author's analysis of U.S. Census Bureau American Community Survey (2013), U.S. International Trade Commission (2013), Congressional Budget Office (2013a and 2013b), Bivens (2011), Bivens			
and Edwards (2010), Kondo and Svec (2009, 10), Bureau of Labor Statistics (2013), Bureau of Labor Statistics Office of Employment			

explanation of data sources and computations, see Scott (2014)

Table 2 Impact of ending currency manipulation on U.S. jobs, 2015			
	Sce	Scenario:	
	Low impact	High impact	
Direct jobs	1,112,700	2,280,800	
Indirect jobs	487,300	1,719,200	
Respending jobs	700,000	1,800,000	
Total	2,300,000	5,800,000	

Source: Author's analysis of U.S. Census Bureau American Community Survey (2013), U.S. International Trade Commission (2013), Congressional Budget Office (2013a and 2013b), Bivens (2011), Bivens and Edwards (2010), Kondo and Svec (2009, 10), Bureau of Labor Statistics (2013), Bureau of Labor Statistics Office of Employment Projections (2011a and 2011b), and Zandi (2011). For a more detailed explanation of data sources and computations, see Scott (2014)