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Dr. Robert E. Scott
Director of International Programs, Economic Policy Institute

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Hearing on the Impact of the U.S.-China Trade and Investment on Pacific Northwest Industries

U.S.-CHINA TRADE, 1989-2003:
Impact on jobs and industries in the Northwest

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Good morning my Chairman and members of the Commission. My name is Robert Scott and I am a senior international economist with the Economic Policy Institute in Washington, DC. Thank you for inviting me to testify today. The rise in the United States' trade deficit with China between 1989 and 2003 caused the displacement of production that supported 1.5 million U.S. jobs, as shown in my recent study for the Commission. Some of those jobs were related to production or services that ceased or moved elsewhere; others are jobs in supplying industries. These jobs reflect the effect on labor demand – in lost job opportunities – in an economy with a worsening balance between exports and imports. Most of those lost opportunities[1] were in the high-wage and job-hemorrhaging manufacturing sector. The number of job opportunities lost each year grew rapidly during the 1990s, and accelerated after China entered the World Trade Organization in 2001. The loss of these potential jobs is just the most visible tip of China's impact on the U.S. economy.

During the fourteen-year period covered by my study, there has been a significant shift in the kinds of industries suffering job displacement, a shift that runs counter to initial expectations. Where the largest impact was once felt in labor-intensive, lower-tech manufacturing industries such as apparel and shoes, the fastest growth in job displacement is now occurring in highly skilled and advanced technology areas once considered relatively immune, such as electronics, computers, and communications equipment.

Major findings of this study include:

- Nation-wide, the loss of job-supporting production due to growing trade deficits with China has more than doubled since it entered the WTO in 2001.The 1.5 million job opportunities lost are distributed among all 50 states and the District of Columbia. In the Northwest, losses rose from -10,800 in 1997-2001 to -12,600 in 2001-03, despite the fact that the latter period was half as long as the former.
- These findings are supported by the results of research by Kate Bronfenbrenner and Stephanie Luce for the Commission, who found that there has been "a major increase in production shirts out of the U.S. in the last three years, particularly to Mexico, China, India and other Asian countries. (Bronfenbrenner and Luce 2004, i)"
- Between 2001 and 2003, after China entered the WTO, the growth of the U.S. trade deficit with China displaced production that supported a net total of -6,300 in Oregon and -6,400 jobs in Washington.
- China's exports to the United States of electronics, computers, and communications equipment, along with other products that use more highly skilled labor and advanced technologies, are growing much faster than its exports of low-value, labor-intensive items such as apparel, shoes and plastic products.
- China is also on the verge of gaining advantage in more advanced industries such as autos and aerospace products.
- Consequently, China now accounts for the entire $32 billion U.S. trade deficit in Advanced Technology Products (ATP).

- Between 1989 and 2001, the NW suffered small net losses of production that supported employment in agriculture. In the past two years, these trends have reversed and trade has supported production that employed 245 jobs in Oregon and 330 in Washington. However, these gains were more than offset by the loss of -4,800 manufacturing job opportunities in Oregon and -4,300 jobs in Washington.
- The U.S. government has failed to develop critically needed data on import and export trade flows at the state and regional level. Bronfenbrenner and Luce also note that companies are making increased efforts to cover up shifts of production to China and other countries. The U.S. government needs to mandate reporting of such production shifts by U.S. and foreign multinational companies operating in this country.

China's entry into the WTO was supposed to provide openings for sufficiently rapid growth in U.S. exports to reduce the trade deficit with China. While the export growth rate has increased since 2001 (from a very small base), the value of those exports has been swamped by a rapidly rising tide of imports. The WTO is a free trade and investment agreement that has provided investors with a unique set of guarantees designed to stimulate foreign direct investment and the movement of factories around the world, especially from the United States to low-wage locations such as China and Mexico (Scott 2003). Furthermore, no protections were contained in the core of the agreement to maintain labor or environmental standards. China's refusal to revalue its exchange rate, despite enormous demand for its currency, is also a major contributor to the growth of the United State' trade deficit. Thus, the WTO and the broader process of globalization have tilted the economic playing field in favor of investors, and against workers and the environment, resulting in a race to the bottom in wages and environmental quality.

Dissecting trade and employment flows

An analysis of the effect of trade on the domestic economy begins by considering the impact of both imports and exports. If the United States exports 1,000 computers to China, many American workers are employed in their production. If, however, the United States imports 1,000 computers from China rather than building them domestically, then a similar number of Americans who otherwise could have been employed by the office machine industry and its suppliers will have to find other work. Hence, increases in exports support domestic employment, while increases in imports displace domestic production that could have supported more jobs in any given sector. Some analysts examine only the benefits of growing exports to the economy, while ignoring the role of imports. This is especially true at the state and metropolitan level, because the U.S. Census Bureau generates a series of report on exports from these regions. No comparable statistics on domestic production displaced by imports are available from the U.S. government. My report is designed in part to begin filling that gap with estimates of the employment effects of imports and exports from China at the state level.

Overview

Total trade flows between the United States and China are shown in the top half of **Table 1**. U.S. exports increased from $5.8 billion in 1989 to $26.1 billion in 2003, a fourfold increase. Imports rose from $11.9 billion to $151.7 billion in the same period, a twelve fold increase on top of a base that was already twice as large as exports. As a result, the U.S.-China trade deficit increased $119.5 billion, or nearly two thousand percent. The rate of growth of U.S. trade with China has accelerated since 1989, as shown in **Figure 1**. Between 1989 and 1997, U.S. imports from China grew an average of $6.4 billion per year; while exports increased about $1 billion per year. Thus the trade deficit widened $5.5 billion per year, on average, in this period.

Between 1997 and 2001, import growth increased more than 50 percent, to $10 billion per year, export growth picked up slightly (to $1.4 billion), and the trade gap expanded by $8.6 billion per year. Between 2001 and 2003, import growth jumped to $25 billion per year, a 150 percent rise in only 4 years. Exports grew rapidly, but not enough to offset the explosion in imports, so deficits increased, on average, $21 billion per year in 2002 and 2003, and these figures were restrained by the 2001 recession. The effect on the U.S. economy from trade trends with China has clearly jumped onto a different plane.

The employment impact of a change in trade is determined by its effect on the trade balance, the difference between exports and imports at the detailed sectoral level.[2] Ignoring imports and counting only exports is like balancing a checkbook by counting deposits but not withdrawals. The many officials, policy analysts, and business leaders who ignore the negative effects of imports and talk only about the benefits of exports are engaging in false accounting.[3]

The labor content of U.S. trade is shown in the bottom half of Table 1. Between 1989 and 2003, the growth in U.S. exports to China created demand that supported 199,000 additional U.S. jobs. In the same period, the growth of imports displaced production that could have supported an additional 1,659,000 jobs (note that the growth of imports displaces domestic jobs, so the labor content of import growth is reported as a negative number in Table 1 and throughout this paper). As a result, growth in the U.S. trade with China eliminated a net 1,460,000 domestic job opportunities in this period.

These estimates include both the direct and the indirect effects of changes in trade flows on employment. Direct effects include the employment that could be supported by a given level of steel imports, while indirect effects include employment supported by the steel industry in other manufacturing sectors (e.g.,. machine tools), as well as jobs in service industries (e.g., computer programming or temporary help). Manufactured goods make up the vast majority of the United States' trade with China. In 2003, 79 percent of U.S. exports to China were manufactured goods, as were 99 percent of imports. However, only 40 percent of the jobs supported by growth in exports and 79 percent of the jobs supported by growth in imports were in manufacturing in the period between 2001 and 2003. The differences between these two shares (29 percent for exports and 19 percent for imports) reflect differences in the relationships of the industries involved with production that supports jobs in sectors such as transportation, utilities, services and government.[4]

Some economists reject the general notion that trade growing deficits can cause a net loss of job opportunities. Their most common argument is that employment levels are determined by macroeconomic policies such as monetary and fiscal policies and, most relevant to trade, exchange rates, and that, in the long run, the economy is usually at full employment. In fact, when the economy is operating at full employment, as in the late 1990s, growing trade deficits affect the *distribution* of jobs rather than the overall *number* of jobs in the economy. Growing trade deficits resulted in less employment in manufacturing and more jobs in non-traded goods such as services, retail trade and construction (Bivens 2004).

In the long run, monetary and fiscal policies are usually adjusted to maintain full employment. If jobs in traded-goods industries pay better than the alternatives for workers affected by trade deficits, then the most important effects of growing trade deficits will be on the distribution of wages and incomes. Numerous studies have borne this out, demonstrating the significant negative effects that trade has had on the distribution of income over the last few decades of variable but generally growing trade deficits (TDRC report, chapter 3). In addition to offering higher wages for workers with comparable education and skills, manufacturing jobs also tend to offer better benefits as well.

On the other hand, the economy has operated well below potential output since 2001 because total employment growth has failed to keep up with growth in the working-age population (Price 2004). In this environment, the persistence of large and growing trade deficits has had a depressing effect on the overall level of employment, as well as its distribution across major sectors of the economy. The growth in the global U.S. trade deficit reduced manufacturing jobs by 1.78 million between 1998 and 2003 alone (Bivens 2004). In 2003 the manufacturing sector represented only 11.2 percent of total U.S. employment of 129.93 million jobs. But for the loss of these jobs in manufacturing, and in the economy as a whole, the manufacturing share of U.S. employment would have been 1.4 percentage points (12.3 percent) higher in 2003 than it actually was.

Unintended results of China's entry into the WTO

The claim that new trade agreements will create jobs and raise incomes in the United States has frequently been made by supporters of these agreements in both Republican and Democratic administrations. In practice, the results of China's 2001 entry into the WTO have confounded these expectations. U.S. exports to China increased by $8 billion between 2001 and 2003, as shown in Table 1, an increase of 44 percent. U.S. imports increased by $50 billion, or 49 percent, on a base of imports that was nearly six times the value of exports in 2001. As a result, the trade deficit increased by 50 percent in this two-year period alone. The growth in this deficit exceeded the expansion in the deficit over the eight years from 1989 to 1997, and the four years from 1997 to 2001.

Figure 2 examines the changing employment effects of trade with China. Growing trade deficits eliminated production supporting about 70,000 jobs per year between 1987 and 1997, and 105,000 jobs per year between 1997 and 2001. Between 2001 and 2003, job displacement soared to 234,000 per year, more than twice the rate of the preceding four years. This change is particularly noteworthy because total U.S. domestic employment fell from 2001 to 2003. Between 1997 and 2001, the U.S. global trade deficit increased by 31 percent (7.8 percent per year). Between 2001 and 2003, it grew 10 percent (5.1 percent per year).

Trade and employment displacement in the Northwest

The growth of trade deficits with China displaced production supporting jobs in all 50 states and the District of Columbia throughout the study period. Exports from every state have been offset by faster-rising imports. Tables 7a and 7b provide detailed estimates of job gains due to the growth in exports, jobs displaced due to growing in imports, and the trade balance for each state. In every case, many more jobs are lost due to growing imports than are gained through increasing exports.

In the Northwest, 13,400 job opportunities were lost between 1989 and 1997 (**Table 2a)**. Job losses rose from -10,800 in 1997-2001 to -12,700 in 2001-03, despite the fact that the latter period was half as long as the former **Table 2b)**. On an annual basis, losses accelerated from 1,000 jobs per year in the 1989-97 period, to 2,700 in 1997-2001 and 6,350 in 2001-2003. Not only are the rates of job losses growing rapidly, but the *rate of* increase is accelerating. Between 1989-97 and 1997-2001 this rate increased 62%, and between 1997-01 and 2001-03 it increased by 134%. These data provide strong evidence that the loss of job opportunities to China in the NW is going to increase rapidly in the future unless policies are adopted to slow or reverse the growth in the bilateral trade deficit.

Between 1989 and 2001, the NW suffered small net losses of production that supported employment in agriculture. In the past two years, these trends have reversed and trade has supported production that employed 245 jobs in Oregon and 330 in Washington. However, these gains were more than offset by the loss of -4,800 manufacturing job opportunities in Oregon and -4,300 jobs in Washington.

Even within agricultural, perceived gains obscure the inherent volatility of this industry. Net U.S. exports increased 7-fold between 2002 and 2003, from $0.4 billion to $2.7 billion. However, the average level of net U.S. exports in this sector between 1997 and 2003, a more reliable indicator overall competitiveness, was $0.7 billion, or about one-quarter of actual exports in 2003.

Within the manufacturing sector, several industries were particularly hard hit. The electrical equipment industry (especially audio/video and communications equipment) suffered the largest losses in the Northwest, growing from -2,400 in the 1989-97 period, to -1,700 in the (much shorter) 1997-2001 period and -2,200 since 2001. Data on the semi-conductor industry has only been available since 1997. Losses there rose from -1,000 in 1997-2001 and to -1,200 in 2001-03 (again, a doubling in the annual rate of job loss).

Perhaps most surprising are the changes in trade-related production supporting employment in the aerospace industry. Between 1989 and 1997 exports supported 900 new positions in Washington (with no impact in Oregon), one of the few sectors with a net gain. By 1997-2001 these gains fell to 100, and there was no net change in production supporting employment in the 2001-03. This may be the harbinger of significant declines in employment directly related to trade with China. Note that these estimates may understate the impact of trade on aerospace and other sectors, because U.S. firms may be outsourcing production destined for sales in third country markets. This may be particularly important in aerospace because it is so heavily dependent on export sales.

Conclusion

Growing trade deficits with China have displaced production supporting 1.5 million U.S. jobs since 1989. The rate of job displacement is accelerating, especially since China entered into the WTO. China's entry into the world trading system was supposed to open up its vast domestic markets to products from around the world, and the United States engaged in extensive negotiations with China to ensure that it obtained its share of these benefits. These benefits have yet to materialize. Instead, multinational companies from around the world have used the protections for investment and intellectual property provided by the WTO to rapidly expand investment, production, and exports from that country. The United States remains China's primary market for exports. In just 15 years it has rapidly transformed its export profile from one dominated by clothing, shoes and plastic products, to one in which electronics, machinery, transportation equipment, other fabricated metals, chemicals, and medical equipment account for more than half of exports. China's leading-edge industries are gaining increased market shares in the motor vehicle and aerospace sectors, which have provided the most durable foundations for the United States' industrial base for generations. That shift, in turn, reduces the demand for high technology workers and highly skilled business professionals in the United States. It is hard to overstate the challenges posed by this export behemoth.

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Endnotes

[1] The term "job opportunities" refers to actual or potential domestic jobs that could be supported the amount of production represented by a given volume of imports or exports.

[2] The model used in this study breaks the economy down into either 184 or 192 discrete sectors or "industries." It is assumed that equal amounts of labor are required to produce one dollar's worth of imports or exports in that sector. Thus the employment effects of a $10 trade surplus in agricultural products (industry 1) are the same whether they represents imports of $0 and exports of $10, or imports of $90 and exports of $100.

[3] We distinguish carefully between total exports and domestic exports, and between consumption imports and general imports in this analysis. Domestic exports are goods produced in the U.S. Total exports also include goods produced in other countries and shipped through the U.S. Only goods produced in the domestic economy support employment in this country. Analogously, consumption imports are goods consumed in this country, while general imports also include some goods that are transshipped elsewhere. While there consumption imports were only 0.5 percent less than general imports in 2003, Domestic exports were 6 percent less than total exports in that year. Hence, this later distinction has a significant effect on the trade balance and employment effects of U.S. exports. Foreign exports (the difference between total and domestic exports) were only 0.6 percent of total exports in 1989, so the value of goods transshipped through the U.S. has been growing over time, relative to total trade.

[4] Note that the some sectors that used to be included within manufacturing are now treated as part of the services sector, for example software programming. Some trade in these industries is included in our data set. Therefore, a small share of services jobs reported represent direct employment effects. See table 3b below.