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TRADE POLICY AND JOB LOSS

U.S. Trade Deals with Colombia and Korea Will be Costly

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he U.S. manufacturing sector lost 5.3 million jobs (nearly one-third of total employment) between January 2001 and September 2009. The United States accumulated a large, structural trade deficit over the past three decades, and in 2007, the non-oil share of this deficit was responsible for the loss or displacement of more than 5 million jobs (Scott 2008). Although the U.S. trade deficit has fallen dramatically since July 2008, as a result of the worst recession in 70 years, many analysts project that the deficit will expand again once the recession ends (Bertaut, Kamin, and Thomas 2009).

This study examines proposed U.S. trade agreements with Colombia and South Korea and projects that they are likely to increase the U.S. trade deficit by \$16.8 billion, and eliminate or displace 214,000 U.S. jobs. Other projections, which claim that these deals will create jobs in the United States, including those from the U.S. International Trade Commission and one published by the U.S. Chamber of Commerce, ignore factors such as the impact of trade deals on foreign direct investment (FDI) and the role played by exchange rate manipulation and most non-tariff trade barriers, thereby underestimating the impact of these deals on U.S. imports and job losses.

The Chamber report (Baughman and Francois 2009) also claims that Buy American provisions likely cost the United States nearly 200,000 jobs. This estimate ignores millions of jobs created by stimulus spending by the United States and other countries, and vastly overstates trade—related job displacement, by a factor of 30 or more.

This report examines the failed history of recent forecasts of the impacts of U.S. trade agreements, reviews the factors which have contributed to errors in the projections of the U.S. International Trade Commission and uses the lessons learned to analyze the Chamber report.

A history of failed forecasts

Economists have been projecting that trade agreements between the United States and developing countries would generate an improving trade balance and support job creation in the United States for many years. These projections have usually been wrong. For example, Hufbauer and Schott (1993) projected U.S. exports to Mexico would rise more rapidly than imports following implementation of the North American Free Trade Agreement (NAFTA). In fact, the United

States, which had a \$1.7 billion trade surplus with Mexico in 1993, experienced a rapidly growing trade deficit that reached \$74.8 billion in 2007, before declining to a \$64.7 deficit in recession-influenced trade in 2008. Numerous other economists also predicted that NAFTA would generate rising trade surpluses that would support domestic job creation. Growing trade deficits with Mexico between 1993 and 2004 alone eliminated or displaced a net total of 560,000 U.S. jobs (Scott 2006).

A particular source of concern is that the U.S. International Trade Commission (ITC), which generates official estimates of the likely impacts of proposed trade agreements, has generated many erroneous forecasts of the impacts of those agreements on U.S. trade, employment, and GDP.

A recent report, published by the U.S. Chamber of Commerce (Baughman and Francois 2009), examines the likely impact of failing to implement the U.S. Colombia Trade Preference Agreement and the U.S.-Korea Free Trade Agreement. It also estimates the costs of Buy American policies in the stimulus act, and the costs of recent decisions by Congress to suspend a limited program to open U.S. highways to drivers and trucks from Mexico.

Overstating the benefits of trade agreements

Most projections of the effects of Free Trade Agreements (FTAs) focus on their impacts on trade barriers. Since U.S. trade barriers are relatively low, and most countries entering into FTAs with us have higher tariff and non-tariff barriers to trade, these models usually project that the U.S. trade balance will be improved by the implementation of FTAs. However, the effects are typically quite modest. The Chamber study is much more extreme. It assumes that only exports would be affected by the proposed FTAs, and that they would have no impact on imports. Its estimates of the export impacts of these agreements are also implausibly large. **Table 1** presents a comparison of two ITC studies (USITC 2006; USITC 2007) of the impacts of these agreements with the Chamber's findings.

The ITC and Chamber studies assume that changes in tariffs and tariff equivalents are the most important drivers of trade flows in FTAs.1 Since U.S. trade barriers are already low, FTAs generally have a bigger impact on trading partner tariffs. Thus, for example, if tariffs and other non-tariff barriers in the United States average 3% before an FTA with Korea, Korean barriers might average 15%, with post-FTA tariffs of 1% and 5%, respectively. Since trade barriers fall faster in partner countries in these agreements, these models usually project that U.S. exports will rise faster than imports would.

All of the studies reviewed in Table 1 project relatively large impacts on GDP. Bivens (2007) has reviewed a number of similar studies and found that the most widely cited studies vastly overstate the benefits of past and future trade liberalization. One of the best studies found that all

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Projected impacts of trade agreements

(billions of dollars)

	Exports	Imports	Trade balance	GDP	Jobs
U.S. International Trade Commission (USITC)					_
KORUS-max*	\$10.9	\$6.9	\$4.0	\$11.9	negligible/minimal
U.SColombia	1.1	0.5	0.6	2.5	none
Total-USITC**	12.0	7.4	4.6	14.4	negligible/minimal
Chamber study***	40.2	0.0	40.2	44.8	338,352

- The ITC KORUS study project a range of trade impacts: Exports \$9.7-10.9 billion, and Imports \$6.4-6.9 billion.
- The ITC predicts that the U.S.-Panama TPA would have a "small" impact on the U.S. economy; it did not estimate total impacts of this agreement on the U.S. economy (USITC 2007b).
- *** Combined impacts of falure to enact U.S. Korea, Colombia, and Panama trade agreements.

Source: USITC (2006, 2007 and 2007b) and Baughman and Francois (2009)

of the benefits of liberalization since 1982 have generated gains of \$9 (nine) per household, or about \$1.5 billion. This includes the effects of NAFTA, the Uruguay Round, and formation of the WTO and China's entry into that organization. Thus the projected GDP impacts shown in Table 1 are unreasonably large in comparison with this standard.

The GDP impact projected by the Chamber study is by far the largest estimate shown in Table 1. It reflects the peculiar structure of the Chamber study, which uses a general equilibrium (GE) model that is constrained in a way that generates unreasonably large impacts of trade on national output (GDP). Most GE models assume that the economy is always at equilibrium and that everyone who wants to work is able to find a job—thus ignoring dynamic labor market adjustments. Baughman and Francois (2009) assume that workers refuse to accept jobs at lower wages, and therefore a loss of exports translates directly into lost GDP and unemployment. This model does not accurately describe how the economy operates. For example, between 2000 and 2007, as U.S. trade deficits expanded, most displaced manufacturing workers were absorbed by other sectors of the economy (e.g. construction). While this shift in the composition of output may have contributed to the housing crisis as well as to the downward pressure on wages of U.S. production workers (Bivens 2008), it did not cause a rise in unemployment or a fall in output.

Projections of the likely benefits of trade agreements made by the ITC and many economists have a terrible track record. Many trade agreements, especially those with poorer developing countries, have been followed by growing U.S. trade deficits with partner countries. For example, the ITC estimated that China's April 1999 tariff offer, which became the basis for its WTO accession in 2000, would have relatively modest impacts on the U.S. economy, as shown in **Table 2**.

It's somewhat surprising at first glance that the ITC forecast that China's entry into the WTO would have a negative impact on U.S. trade flows, but this is largely driven by the dismantling of quotas on China's apparel exports to the United States. The agency assumed that gains in China's share of the U.S. apparel market would come at the expense of other exporters; hence overall, the study predicts that liberalizing trade with China would generate an improvement in the U.S. total (global) trade balance.

Actual changes in U.S. trade with China dwarfed all ITC projections, as shown in the last column of Table 2, which reports U.S. trade with China and the world as a

TABLE 2

USITC projections of the impact of China's WTO tariff reduction offer vs. actual changes in trade, 2001-08 (billions of dollars)

	Predicted	Actual*
Total exports	\$1.5	\$599.3
Total imports	0.9	986.6
Total trade balance	0.6	-410.4
Exports to China	2.4	50.5
Imports from China	3.4	235.5
U.SChina trade balance	-1.0	-185.0
GDP	0.3	

^{*} Actual changes in trade could be due to other factors.

Source: USITC (1999, 2009) and Economic Policy Institute.

whole between 2001 and 2008. Actual changes in bilateral trade flows could be due to other factors, but nonetheless the predictions appear wildly optimistic and inaccurate.

The missing links in the ITC's model include foreign investment and outsourcing of production by domestic and foreign multinationals. China's entry into the WTO made it a much more secure location for foreign investment, thus contributing to its appeal as a long-term production source for multinational companies who shifted hundreds of billions of dollars worth of investment and goods production from the United States to China in this period. Empirical evidence suggests that both of these ignored mechanisms are important in reality.

Studies ignore the roles of FDI and outsourcing

According to China's official statistics, foreign direct investment (FDI) in China more than tripled from \$44.2 billion in 2001 (the year before China joined the WTO) to \$147.8 billion in 2008. China absorbed nearly \$600 billion (\$594.75 billion) in FDI between 2002 and 2008 (International Monetary Fund 2009). This surge of investment, combined with a flood of domestic investment in export-oriented production funded by local and provincial governments as well as by China's national government, and by private investors in China, led to a tremendous surge in China's exports to the United States and the rest of the world. Scott (2008b) shows that between 2001 and 2007 alone, the growth of U.S. trade deficits with China caused the loss or displacement of 2.3 million U.S. jobs.

That trade agreements such as the one that brought China into the WTO would lead to huge inflows of FDI and soaring U.S. trade deficits should not have been a surprise to the ITC. The United States experienced similar results in FDI and trade with Mexico following the 1993 North American Free Trade Agreement (NAFTA). Scott (2006) shows that between 1993 and 2004, U.S. trade deficits with Mexico increased \$60 billion, causing the loss or displacement of 560,000 jobs in the United States. Total FDI in Mexico increased 422% in the decade following NAFTA (as compared to the preceding decade) and Mexico absorbed \$156 billion in FDI between 1994 and 2004.

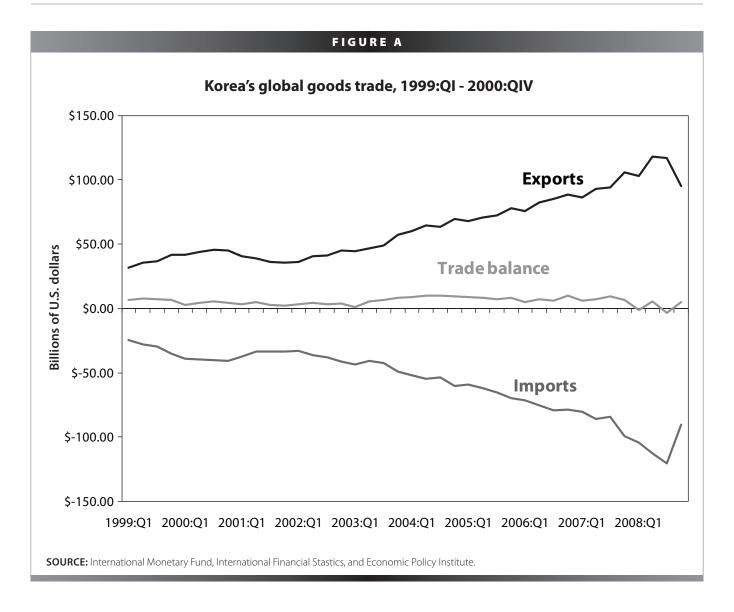
The most important direct impact of FTAs and other trade-promoting agreements (such as China's entry into the WTO) is to encourage FDI in countries that are party to trade agreements with the United States, especially in countries with relatively low manufacturing wages. These investments often fund construction of factories that outsource U.S. production. Combined with the development of locally funded (from government and private sources) contract manufacturing capacity, these investments stimulate rapid growth of exports as well as the loss or displacement of millions of U.S. jobs due to rapidly rising imports and trade deficits with countries such as China and Mexico.

Ignores the effects of FTAs on U.S. imports

Baughman and Francois (2009) assume that other countries, including Canada and the EU, implement free trade agreements with Korea, Colombia, and Panama, and then compare two scenarios that assume that the United States does, and does not, implement trade agreements with these countries. The study assumes that failure to pass the Korea-U.S. Free Trade Agreement (KORUS) and U.S. Trade Promotion Agreements (TPAs) with Colombia and Panama reduces U.S. export sales to these markets by \$40.2 billion.

The Chamber study is structured differently than the ITC assessments of such agreements, which model their effects on U.S. trade while holding other countries' trade policies constant (a partial equilibrium approach). The merits of these various assumptions about alternative states of the world can be debated. However, it is clear that the Chamber study has ignored the likely impact of these agreements on U.S. imports. Korea has experienced rapid internationalization in the past decade. Between 1999:Q1 and 2008:Q3, Korea's exports nearly tripled (+280%) and imports nearly quadrupled (+381%). While the latter figure was inflated due to the high cost of oil imports in 2008, Korea has managed to sustain a trade surplus for all but two quarters in this period, as shown in **Figure A**.

Although Korea has agreed to phase out trade restrictions for many products and services in the U.S.-Korea FTA, Korea maintains substantial non-tariff barriers to trade, and it has also maintained a network of subsidies



for target industries (USTR 2009). Overall, the Korean trade regime bears many similarities to that of China. China agreed to eliminate nominal barriers to imports such as tariffs and non-tariff barriers to trade as part of the agreements it signed as a condition for WTO entry and permanent normal trade relations with the United States. However, after China was admitted to the WTO in 2001 it maintained and expanded many of these trade barriers and erected new ones so as to develop a very large and growing trade surplus, which exceeded 10% of China's GDP in 2008. U.S. imports from China exceeded exports by a ratio of nearly 5:1 (\$338 billion in imports vs. \$70 billion in exports) in that year.

South Korea's trade regime appears to have overall goals and structure that are similar to China's. If U.S.

exports to Korea were to rise following implementation of the Korea-U.S. FTA, it is likely that the largest increases will be in intermediate products such as scrap, plastic, chemical feed stocks, and electronic components (as was the case with China). These products will be assembled into final goods and re-exported to the United States, resulting in a growing U.S. trade deficit with Korea. The United States has had a trade deficit with Korea in every year since 1997 (including the first half of 2009).

South Korea's developmental trade regime is complex and highly sophisticated. Tariffs and tariff rate quotas (TRQs)² are especially high for agricultural products (e.g., over quota tariffs of 243% on honey, 176% on milk powder, 324% on barley, 513% on malting barley, 304% on potatoes, and 630% on popcorn). Korea also main-

tains strict quotas on rice imports through its Minimum Market Access quota, which calls for doubling rice imports (from a very low base) over the next 10 years.

Korea also "maintains standards, technical regulations and conformity assessment procedures that are burdensome and appear to have disproportionate effects on imports." (USTR 2009, 307). For example, Korea

requires testing to be done by "domestic nonprofit organizations." U.S. manufacturers argue that the failure to recognize testing done by U.S. labs disadvantages U.S. products and requires expensive retesting to enter the Korea market. Korean phytosanitary standards for beef imports (especially those regarding mad-cow disease) have also hurt U.S. beef exports to Korea, although there is now a

THE BIGGEST RISK: SURGING TRUCK IMPORTS

The motor vehicles and parts sector is responsible for a large share of the overall U.S. trade deficit with Korea, and it is one of our most imbalanced trade relationships. Between 2006 and 2008, it was responsible for 71% to 79% of the U.S. trade deficit with Korea. Imports exceeded exports in this sector by factors ranging between nearly 13:1 and 17:1. The U.S. trade deficit with Korea in motor vehicles and parts ranged from \$9.5 billion to \$10.8 billion in this period. This reflects the fact that the automotive sector is a pillar industry in the Korean economic development model, and the market is largely closed to U.S. imports through a combination of differences in tastes (Korean consumers prefer much smaller and more fuel efficient vehicles than those sold in the U.S.) and an extensive network of product regulations that serve as effective non-tariff barriers to imports.

U.S. imports of small trucks benefit from a 25% tariff that applies to imports from most countries (except for Mexico and Canada, under NAFTA). This tariff will be phased out over 10 years under the KORUS FTA. The truck sector has been the most large-scale, profitable segment of the U.S. automotive market served by U.S. auto companies. Despite the truck tariff, U.S. companies face substantial competition from imported trucks, especially from Japan. If the tariff on Korean truck imports is phased out, there is no doubt that Korean and other manufacturers will rapidly scale up production in Korea and that small truck exports to the United States will rise very rapidly as the truck tariffs are phased out.

In 2007, the last full year before the auto crisis, 8.5 million vehicles were sold in the U.S. small truck market (which includes minivans and sport utility vehicles); 16.3% (about 1.4 million) of those vehicles were imported from outside the NAFTA region (U.S. vehicle sales statistics include vehicles manufactured in Canada and Mexico within the "domestic" category); 7.6 million units were sold in the U.S. auto market in 2007; and 31.2% (2.4 million) of those vehicles were imported from outside of North America.³ If the truck tariff is phased out, there is every reason to believe that the truck import share will rise to one-third or more of the U.S. auto market. In addition, elimination of the truck tariff would remove a substantial incentive for foreign producers to assemble vehicles in the United States. The growth of such "transplant" production has been perhaps the most rapidly growing segment of vehicle production in the United States in the past decade. Transplant production would likely fall if the truck tariff were reduced or eliminated, and it would be replaced with cheaper, imported vehicles, displacing most or all of the U.S. labor content of those units. The result would be rapid growth in the U.S. vehicle and parts trade deficit, and falling output and employment in these industries in the United States. The U.S. vehicle and parts trade deficit with Mexico, which was liberalized under the NAFTA agreement in 1993, reached \$28 billion in 2008, eliminating more than 200,000 jobs or job opportunities in these industries.

program in place for shipping beef from cattle less than 30 months of age that has increased U.S. beef exports (USTR 2009, 307).

Korea maintains standards in a number of areas that limit imports of U.S. goods, including labeling requirements for health foods and organic foods, telecommunications standards that are inconsistent with international norms, labeling requirements for spirits and other goods, and hazardous substance laws applying to electronic products and automobiles (USTR 2009, 308-310).

Ignores role of currency manipulation

The Chamber study also ignores currency manipulation and the effects of the exchange rate regime on Korea's trade flows. Korea also manages its currency to ensure that it maintains a trade surplus. Korea's foreign exchange reserves quadrupled between the first quarter of 1999 and the second quarter of 2009 (most recent data available). While analysts have cited a number of motives for the rise in holdings of foreign exchange reserves, including the desire to maintain adequate reserves to pay for imports and as a hedge against short-term foreign exchange liabilities (related to short-term foreign currency borrowing), the fact is that sustained purchases of foreign exchange to expand central bank reserves constitutes currency manipulation.4 But for the steady, trend growth in Korea's currency reserves, growing demand for the Korean won would have resulted in higher levels of currency appreciation, which would have made imports cheaper and Korea's exports more expensive, thus likely resulting in a Korean trade deficit throughout much of this period, something which would apparently have been unacceptable to Korean leaders.

China has maintained an undervalued currency for many years, which contributed to the growth of its bilateral trade surplus with United States and its global current account surplus, since it entered the WTO in 2001. Mexico's competitive position, vis-à-vis the United States and Canada, was also greatly enhanced by a collapse in the value of the Mexican peso in 1994, a year after it entered into the NAFTA agreement. While the proximate cause of the peso collapse was a financial crisis, Blecker (1997) has argued that the peso realignment was central to the

achievement of Mexico's trade and development goals after NAFTA took effect.

The Korean won lost more than one-third of its value in the wake of the global financial crisis of 2008. It regained some value in the 2nd quarter of 2009, but remains about 28% below peak levels reached in the fourth quarter of 2007. The Chamber report makes no mention of the impact of Korean currency realignment on the likely impacts of the Korea-U.S. Free Trade Agreement, although it was published in 2009.

Likely impacts of the U.S.-Colombia TPA and the U.S.- Korea FTA on U.S. trade and employment

Past projections by the ITC and many other economists regarding the outcomes of U.S. trade agreements have been erroneous, such as NAFTA⁵ and the agreement to provide China with permanent most favored nation (MFN) status (allowing it into the WTO). There have also been flaws in the tariff-based economic models used by the ITC and the Chamber study, including the failure to include investment effects and the impacts of factors such as currency manipulation and non-tariff barriers to trade. Given these problems, an alternative approach is clearly needed to assess the likely impacts of the proposed trade agreements with Colombia and South Korea on the U.S. economy. This report examines actual changes in trade flows before and after trade agreements were reached with Mexico and China, and it uses these data to forecast the likely impacts of the U.S.-Korea FTA and the U.S.-Colombia TPA.

Table 3 reviews the history of U.S. trade with Mexico and China seven years before and after trade agreements were implemented with each country. In each case, (compound annual) growth rates of trade flows (imports and exports) before and after implementation of the NAFTA with Mexico, and China's entry into the WTO are reported.

Under the NAFTA agreement, the average annual rate of growth of U.S. imports from Mexico accelerated from 12.7% per year to 19.1% per year, while the growth rate of U.S. exports to Mexico actually declined. This result is striking, because it stands at odds with projections by Hufbauer and Schott and other many other economists that exports to Mexico would increase after NAFTA.

TABLE 3

FTA and WTO impacts on bilateral trade, seven years before and after trade agreement

Trade flows (billions of dollars)

Λm	ادىيە	rowth	rator
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Mexico	1986	1993	2000	Pre-NAFTA	Post-NAFTA	Difference	
Imports	\$17.3	\$39.9	\$135.9	12.7%	19.1%	6.5%	
Exports	12.4	41.6	111.3	18.9	15.1	-3.8	
Trade balance	-4.9	1.7	-24.6				
China	1994	2001	2008	Pre-WTO	Post-WTO	Difference	Average change
Imports	\$38.8	\$102.3	\$337.8	14.9%	18.6%	3.8%	5.1%
Exports	9.3	19.2	69.7	10.9	20.2	9.3	2.8
Trade balance	-29.5	-83.1	-268.1	15.9	18.2	2.3	

Source: USITC (2009) and Economic Policy Institute.

Three factors explain this decline. First, there was a sharp rise in capital goods exports to Mexico in the pre-NAFTA period. Blecker (1997) noted that these exports supplied new export-factories being built in Mexico to take advantage of the improved investment climate there, and the level of exports was unsustainable, given the buildup of Mexico's overall balance of payments deficit in this period. The 1994 peso crisis also resulted in a sharp fall in real incomes in Mexico (reducing demand for consumer goods from the United States) as well as a fall in the peso, which created an adverse shift in the terms of trade for U.S.-made goods. There are striking similarities to Mexico in recent U.S. trade with Colombia that are discussed below.

U.S. exports to and imports from China accelerated sharply following China's entry into the WTO, as shown in Table 3. Import growth increased 3.8 percentage points to 18.6% per year. Export growth nearly doubled, but from a tiny base. U.S. imports from China exceeded exports in 2001 by more than five to one, the United States' most imbalanced trade relationship. Despite the very high (20.2%) average annual rate of growth in exports to China in the 2001-08 period, this imbalance was largely unchanged (falling to 4.85:1 in 2008).

On average (of growth rates in U.S. trade with Mexico and Canada), as shown in the last column of Table 3, U.S. import growth accelerated nearly twice as much as exports (import growth accelerated 5.1 percentage points while export growth accelerated only 2.8 percentage points). Furthermore, export growth accelerated in only one of two cases (China), and only from a very small base. Given China's reliance on the United States for feed stocks such as plastics, iron ore, and scrap, and for imported intermediates (such as electronic components), two outcomes were largely inevitable: that U.S. exports of these components would rise rapidly, and that the value of U.S. imports would rise even more rapidly since China was transforming imported inputs into valued manufactured final goods that were re-exported to the United States.

Projected impacts of proposed trade agreements

U.S. experience under NAFTA and with China's entry into the WTO were used to project the likely impact of the proposed U.S. trade agreements with Colombia and Mexico. Results of these projections are shown in **Table 4**. Colombia is much poorer than Mexico, with a per capita

TABLE 4

Likely impacts of trade agreements between the United States, Colombia and Korea, 2008-15

	Pre-FTA			Estimated post-FTA trade			
	(trade, billio	ons of dollars)	grow	th rate	(trade, l	billions of dollars)	
Colombia	2001	2008	2001-08	2009-15	2015	change, 2008-15	
Imports	\$5.7	\$13.1	12.6%	17.7%	\$41.1	\$35.4	
Exports	3.6	11.4	17.9	17.9	36.1	32.5	
Trade balance	-2.1	-1.7			-5.0	-2.9	
Korea							
Imports	\$35.2	\$48.1	4.6%	9.7%	\$91.8	\$56.6	
Exports	22.2	34.7	6.6	9.4	64.9	42.7	
Trade balance	-13.0	-13.4			-26.9	-13.9	
Total change						-16.7	

Source: USITC (2009) and Economic Policy Institute.

GDP in 2008 nearly 40% lower than Mexico's (\$8,895 per capita in Colombia vs. \$14,495 in Mexico).⁶ Non-electrical machinery exports are the second largest sector export category (behind chemicals), totaling \$1.8 billion in 2008, 16% of total U.S. exports to Colombia. These exports increased 149% between 2005 and 2008, and unsustainable rate of growth (similar to pre-NAFTA trade patterns with Mexico). Chemicals were the largest U.S. export commodity to Colombia (\$2.3 billion in 2008).

Total U.S. exports to Colombia increased 17.9% per year between 2001 and 2008, from a very low base. As in the case of Mexico after NAFTA, this pace appears unsustainable and the rate of growth of U.S. exports to Colombia is unlikely to be increased by the Trade Promotion Agreement between the two countries. Recent, rapid growth of trade volumes reflects, in part, the large role played by crude oil, natural gas, minerals, and ores, which made up nearly two-thirds of U.S. imports from Colombia in 2008, and which have increased rapidly in price between 2005 and 2008 (before commodity prices collapsed in 2009). Nonetheless, it is assumed that export growth continues during the forecast period at an unchanged 17.9% per year rate. It is assumed that the rate of growth of imports from Colombia accelerates by 5.1 percentage points per year (the average following Mexico's entry into

NAFTA, and China's WTO entry) to 17.7% per year. Since the United States had a small trade deficit with Colombia, and with imports and exports growing at essentially the same rates, the projections suggest that the U.S.-Colombia trade deficit will increase by \$2.9 billion between 2008 and 2015.

Total U.S. trade (imports plus exports) with South Korea was more than triple that with Colombia in 2008 (\$82.8 billion vs. \$24.5 billion), as shown in Table 4. The United States had a significant trade deficit with Korea in 2008, as it has in every year since 1998. U.S. trade volumes have increased at slower rates with Korea than with Colombia in the 2001-08 period, as shown in the third column of Table 2. It is assumed here that implementation of an FTA between the United States and Korea would increase the rates of growth of imports to and exports from that country by the average margins shown in the last column of Table 4, reflecting the average U.S. experience under NAFTA and China's entry into the WTO. Thus the rate of growth of imports would accelerate to 9.7% per year, while exports would increase 9.4% per year. At these rates of growth, the U.S. trade deficit would double in the first 15 years after the trade agreement, as shown in Table 2, rising from -\$13.4 billion in 2008 to -\$26.9 billion in 2015.7

TABLE 5

Likely impacts of U.S. trade agreements with Colombia and Korea, 2008-15: U.S. trade-related jobs supported or displaced (thousands of jobs)

Colombia	2008	2015	Change
Imports	127	397	270
Exports	99	315	215
Trade balance	-27	-83	-55
Korea			
Imports	465	888	422
Exports	302	566	263
Trade balance	-163	-322	-159
Total change			-214

Source: USITC (2009) and Economic Policy Institute.

Projected effects of trade agreements on U.S. employment

Exports tend to support domestic employment, and imports displace production that could support domestic jobs. Most studies of the effects of proposed trade agreements begin by estimating the effects of those agreements on trade flows and then estimating the effects of changes in trade flows on domestic employment. Scott (2008; 2008b) uses a 201 sector model of the economy and detailed data on trade flows in those industries to estimate the effects of changing trade patterns on employment.

The projected employment impacts of the U.S.-Colombia TPA and the U.S.-Korea FTA are estimated in **Table 5**. Averages for the employment impacts of U.S. non-oil exports and imports were used to estimate the likely effects of changing trade flows.⁸ In 2008, U.S. imports from Colombia could have supported 127,000 jobs if produced domestically, and exports supported 99,000 jobs, so net trade with Colombia resulted in a net displacement of 27,000 U.S. jobs. Given projected changes, the growth of the U.S. trade deficit with Colombia will displace 83,000 U.S. jobs in 2015, for a net loss of an additional 55,000 jobs. Likewise, the projected growth of U.S. trade deficits with Korea between 2008 and 2015 will displace an additional 159,000 U.S. jobs. Overall, if adopted, the U.S.-Colombia and U.S.-Korea trade agree-

ments will displace a total of 214,000 additional U.S. jobs. The majority of the jobs displaced would be in manufacturing, but many jobs would also be lost in industies that sell other goods and services to manufacturing.

The Chamber study (Baughman and Francois 2009) assumes that these trade agreements would lead to net increases in U.S. exports of \$40 billion, and the creation of 383,400 jobs. This study has shown that the U.S. trade deficits with Colombia and Korea are instead likely to increase U.S. trade deficits with both countries by roughly \$17 billion (Table 4, above), resulting in the net loss of approximately 214,000 jobs.

Employment impacts of Buy American provisions in the Recovery Act

The Chamber report also claims that inclusion of Buy American provisions in the American Recovery and Reinvestment Act of 2009 could cause a net loss of 176,800 jobs if other countries retaliate with their own "Buy National" policies. This estimate is based on the observation that at least 90 countries or regions have announced stimulus plans totaling over \$1.7 trillion. Baughman and Francois (2009, 9-10) assume that 1% of this total is reserved for "Buy National" programs that reduce potential U.S. exports by approximately \$17 billion, resulting in the job loss projections noted above.

This scenario is ludicrous for several reasons. First, as Paul Krugman (2009) pointed out in a recent blog posting,

We are in the midst of a global slump, with governments everywhere having trouble coming up with an effective response....if macro policy isn't coordinated internationally—and it isn't—we'll tend to end up with too little fiscal stimulus everywhere.

Now ask, how would this change if each country adopted protectionist measures that "contained" the effects of fiscal expansion with its domestic economy? Then everyone would adopt a more expansionary policy—and the world would get closer to full employment than it would otherwise. Yes, trade would be distorted, which is a cost; but the distortion caused by a severely underemployed world economy would be reduced. And, as the late James Tobin liked to say, it takes a lot of Harberger triangles to fill an Okun gap.

In December 2009, the recession cost the United States some 10.6 million jobs (Shierholz 2010). It is estimated that the Recovery Act has saved or created between 1 and 1.5 million jobs (Irons 2009). Stimulus spending in other countries has accelerated the recovery of those economies, which will also be good for the U.S. economy.

The risks and potential costs of trade diversion cited by Baughman and Francois (2009) are vastly overstated, for at least two reasons. First, the Recovery Act contained explicit language that permits governments to waive the Buy American rules when they conflict with our international commitments under trade agreements such as NAFTA and the WTO (Stewart and Drake 2009). Second, the amount of U.S. trade potentially affected by "Buy National" rules is vastly overstated because other nations also have similar, reciprocal obligations to the United States. Most "Buy National" rules, including those in the United States, apply primarily to imports from countries like China and India that have not signed onto WTO or other government procurement codes.

Baughman and Francois (2009) estimate that only \$3.2 billion of the \$787 billion in Recovery Act spending (0.41%) will be affected by "Buy American" rules. If a similar proportion of the \$1.7 trillion in stimulus spending by other countries (identified by Baughman and Francois) is affected by "Buy National" rules, then total world exports would decline by only \$6.9 billion. However, the U.S. share of total world exports was only 8.1% in 2008 (International Monetary Fund 2009). Thus, the U.S. share of "lost" exports would be on the order of one-half billion dollars. Baughman and Francois' estimate of the potential impact of buy national rules is too large by a factor of 30.

But the more important point remains that the cost of "Buy National" policies pales in comparison with the benefits to be gained from more \$2.5 trillion in global stimulus spending, which will save or create millions of jobs worldwide. As Krugman notes, if building the political support needed to implement this spending diverts a few billion, or even tens of billions of dollars from world trade, the costs (in terms of jobs lost) are vastly outweighed by the benefits (in jobs saved or created) of increased stimulus spending needed to offset the worst global recession in 70 years.

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Endnotes

- These studies include estimates of the impacts of reducing or eliminating tariff rate quotas and quotas on apparel, agricultural products, and some other commodities. Some models also include tariff equivalents of aggregate non-tariff barriers from United Nations trade data. However, specific non-tariff trade barriers, such as Korean restriction on imports of U.S. motor vehicles, are not included in these studies
- TRQs are "intended to provide minimum access to previously closed markets or to maintain pre-Uruguay Round access" (USTR 2009, 306). A prohibitive tariff is usually applied to over-quota import amounts.
- 3. The Mexican share of North American auto production by the Big-3 U.S. automakers rose from 11% in 2007 to 15% in 2008 (Scott 2009). The United States had a trade deficit with Mexico of \$32.2 billion in 2007 and \$28.7 billion in 2008 in autos and parts. The U.S. trade deficit with Canada in auto and parts was largely eliminated (\$-1.2 billion) in 2008 as a result of the fall in the U.S. dollar, relative to the Canadian dollar. Hence, U.S.-based automakers are rapidly shifting production to Mexico.
- 4. In the wake of the Asian financial crisis in 1997, many developing countries increased holdings of foreign currency reserves. While this has helped reduce the risk of financial collapse, and helped stabilize many of these countries (including Korea) in the wake of the 2008 global financial crisis, the overall growth in reserve holdings has distorted the structure of global exchange rates, leaving many countries with currencies that are substantially undervalued against the dollar. China has by far the largest holdings of foreign exchange reserves, in excess of \$2.1 trillion in the 2nd quarter of 2009, Japan held slightly less than \$1 trillion in reserves in July of 2009 and many other Asian countries maintained currencies that were undervalued, relative to the dollar (Cline and Williamson 2009).

One outcome of the global financial crisis is that the reserves of the IMF were roughly quadrupled, from about \$250 billion to \$1 trillion. The IMF needs to become an active "lender of last resort." It can play a key role in global currency realignment by persuading countries like China and Korea to end currency manipulation. This is consistent with the IMF charter, which prohibits member countries from engaging in currency manipulation "to prevent effective balance-of-payments adjustment or to gain an unfair competitive advantage over other countries" (Goldstein 2003).

5. See, for example, Scott's (2006, 4) critique of Hufbauer and Schott's (1993) projections that NAFTA would lead to a \$9 billion increase in the U.S. trade balance with Mexico, and a net gain of 171,000 jobs.

- 6. World Bank, World Development Indicators (2008), quick reference tables for GDP (PPP basis) and population,
- 7. Differences in the rates of growth in exports and imports are not driving the results shown in Table 4. Even if imports and exports grow at the *same rate*, then the trade deficit with both countries rises by a nearly identical amount between 2008 and 2015. For example, assume that in each case, trade grows at the slowest growth rates shown for each country in column 4 in Table 2 (17.7% for Colombia and 9.4% for South Korea). Then the trade deficit with Colombia increases to \$-5.3 billion in 2015 (not \$-5.0 billion) and to \$-25.1 billion (not \$-26.9 billion) with South Korea in 2015.

Rapid import growth and the existence of trade deficits before trade agreements take effect combine to ensure that trade deficits continue to grow when the trade agreements were concluded. Because exports were less than imports in the base year, then the trade deficit tends to expand if imports and exports both grow at the same rate. These deficits tend to persist and grow following implementation of trade agreements with the United States, as illustrated by the cases of Mexico and China. The only way to eliminate trade deficits with these countries is for the rate of growth of exports to these countries to *accelerate*, while import growth rates fall. That has not been the case for the most important U.S. trade agreements, especially with low- and middle-income developing countries such as China and Mexico.

- 8. Based on average figures for the employment content of U.S. non-oil exports and imports in 2007 (Scott 2008b, Table 1). U.S. exports supported approximately 8,700 direct and indirect jobs per billion dollars of output, and goods displaced by imports would have supported 9,700 jobs per billion dollars of output, based on average values for U.S. non-oil trade. Detailed projections for U.S. trade with Colombia and Korea in 2015 were not developed for this research, so averages had to be used. These averages reflect actual flows of total U.S. trade in non-oil goods in 2007. At the margin, it is assumed that the vast majority of expanded U.S. trade with both countries will be in non-oil products. For further details on the methodology used to estimate the employment impacts of trade see Scott (2008 and 2008b).
- 9. The rapid growth of trade volumes (both imports and exports) contribute to job displacement in these estimates.

U.S. trade with Colombia (both exports and imports) roughly triples between 2008 and 2015 in the estimates shown in Table 4, and trade with Korea nearly doubles. Since imports are more labor intensive than exports, a doubling of trade volumes that left the trade balance unchanged would cause a substantial increase in job displacement.

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