Trade Action—or Inaction:
The Cost for American Workers and Companies

U.S. Chamber of Commerce

The U.S. Chamber of Commerce is the world's largest business federation representing more than 3 million businesses and organizations of every size, sector, and region.

Trade Action – or Inaction: The Cost for American Workers and Companies

by

Laura M. Baughman and Joseph F. Francois*

September 15, 2009

Summary

In recent months, the United States has taken a number of trade actions – and refused to take others – that have a negative impact on U.S. companies, their workers, and the economy. We examine three of these – the failure to implement the U.S.-Colombia and the U.S.-Korea free trade agreements, "Buy American" provisions in the American Recovery and Reinvestment Act of 2009 ("Recovery Act"), and the failure to implement the trucking provisions of the North American Free Trade Agreement and Mexico's resulting retaliation against U.S. exports. At the request of the United States Chamber of Commerce, we estimate these three trade actions/inactions would have a negative effect on U.S. companies and their workers, and that employment losses could total as much as 585,800 jobs.

Introduction

In recent months, the United States has taken a number of trade actions – or refused to take others – that have a negative impact on U.S. companies, their employees and the economy generally. This paper considers three of these:

- Congress and the Administration have yet to consider legislation that would implement three free trade agreements (FTAs) the United States has negotiated: with Colombia, Panama and Korea. Each of these would support job-creating trade – both exports and imports – in the United States with each U.S. partner country. While the United States stalls, other major exporters (notably the EU and Canada) are moving ahead with FTAs of their own with these countries.

* Laura M. Baughman is President of Trade Partnership Worldwide, LLC in Washington, DC (www.tradepartnership.com). Dr. Joseph F. Francois is Managing Director of Trade Partnership Worldwide, LLC, and professor of economics at Johannes Kepler Universität Linz.

- Congress mandated new "Buy American" stipulations in the American Recovery and Reinvestment Act of 2009 (the "Recovery Act") that, if implemented in a way that invites retaliation by U.S. trading partners or triggers the imposition of mirror "buy national" policies by those trading partners, would cost U.S. jobs.

- The United States revoked a compromise effort to implement, at least in part, its North American Free Trade Agreement (NAFTA) obligations to permit full U.S.-Mexico cross-border trucking (the so-called "trucking pilot program"), and Mexico responded with the imposition of retaliatory penalty duties on imports from the United States. Both actions have a negative impact on U.S. companies and their workers.

This paper summarizes the recent history of each trade event, and presents our estimates of their impacts on U.S. employment. The methodologies we employed to calculate these job estimates and other findings are detailed in Appendix A.

Failure to Implement U.S.-Korea and U.S.-Colombia Free Trade Agreements

The United States has completed negotiations of three FTAs that await Congressional approval of implementing legislation. The United States signed FTAs with Colombia on November 22, 2006, with Panama on June 28, 2007, and with Korea on June 30, 2007. Congress has not yet taken up any of these agreements.

Other major trading partners are also in the process of negotiating FTAs with Colombia and Korea. Canada completed negotiation of an FTA with Colombia and submitted it on March 26, 2009, for approval by the Canadian House of Commons. Canada completed negotiations of an FTA with Panama on August 11, 2009. The Canadian government describes its negotiations with Korea for an FTA as "well advanced."[1]

Similarly, the EU and Korea concluded negotiations on July 14, 2009, for a comprehensive FTA that is expected to be signed in late 2009 and implemented in 2010. The EU has held several negotiating rounds for a free trade agreement with Colombia that may also include Peru and Ecuador.

If the EU and Canada implement their FTAs with Korea and Colombia and the United States does not, exporters in the EU and Canada will enjoy a competitive advantage over U.S. exporters in the Korean and Colombian markets. Some U.S. export sales to these markets will be lost to exporters in the

[1] Foreign Affairs and International Trade Canada, "Canada-Korea – Free Trade Agreement Negotiations," http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/korea-coree/index.aspx.

EU and Canada. The loss of export sales will have a negative impact on U.S. companies, national output and consequently U.S. jobs. In addition, failure of the United States to implement its FTAs with Colombia and Korea will cost related exports, output and jobs. Specifically, failure to implement the U.S. FTAs while our trading partners go forward with their FTAs would lead to a decline of $40.2 billion in U.S. exports of goods and services and U.S. national output failing to grow by $44.8 billion. We estimate that the total net negative impact on U.S. employment from these trade and output losses could total 383,400.

Imposition of "Buy American" Provisions of the Recovery Act

Congress passed, and the President signed into law, the American Recovery and Reinvestment Act of 2009 (the "Recovery Act") in February 2009. It provides tax relief and government funds for a wide variety of spending initiatives, totaling $787 billion. It includes a requirement that all iron, steel and manufactured products used in Recovery Act-funded public building and works projects be produced in the United States. It further includes a mandate that clothing, equipment and textile products purchased by the Department of Homeland Security with Recovery Act funds be made in the United States. The legislation authorizes limited waivers, and stipulates that the "Buy American" provisions be applied in a manner consistent with U.S. obligations under international agreements.

In the enthusiasm to create new U.S. jobs and to spend the stimulus money as quickly as possible, it is inevitable that rigorous attention to U.S. international agreement obligations will be difficult and the United States will be exposed to the risk of retaliation.[2] More immediately, moves by U.S. trading partners to employ their own "buy national" or "buy local" requirements to their stimulus spending initiatives have been reported.[3]

We estimate that any net increases in U.S. employment resulting from the new "Buy American" provisions will quickly evaporate as other countries implement "buy national" policies of their own. In the event that retaliation causes

---

[2] This is in addition to the economic impacts of slowing the initiation and completion of projects due to the complexities caused by the "Buy American" provisions.

[3] See for example Annys Shin, "'Buying American' Puts Strain on U.S. Trade with Canada," *The Washington Post*, August 11, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/08/10/AR2009081002834.html; Raymond Colitt, "Brazil may challenge 'Buy American' at WTO," Reuters UK, February 17, 2009, http://uk.reuters.com/article/idUKTRE51F52920090217; Jamil Anderlini, "'Buy China' policy set to raise tensions, *Financial Times*, June 16, 2009, http://www.ft.com/cms/s/66454774-5a7c-11de-8c14-00144feabdc0,Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2F66454774-5a7c-11de-8c14-00144feabdc0.html%3Fnclick_check%3D1&_i_referer=http%3A%2F%2Fwww.governmentcontractslawblog.com%2F2009%2F07%2Farticles%2Fstimulus%2Frecovery-act-update-us-stimulus-buy-american-prc-stimulus-buy-chinese-canada-and-wto-not-pleased%2F&nclick_check=1

U.S. companies to lose just 1 percent of potential foreign stimulus procurement opportunities, the net employment loss to the United States from the Recovery Act's "Buy American" provisions could total 176,800. In the event retaliation escalates, U.S. job losses will mount dramatically.

Failure to Implement NAFTA Trucking Provisions

Between 1982 and 2007,[4] the United States limited the access of Mexican trucks to the roughly a 25-mile commercial zone along the U.S. border and certain U.S. border cities. U.S. and Mexican trucks must deliver cargo-laden trailers to the border, hire short-haul "drayage" haulers to pull their trailers across the border, which then return empty to Mexico or the United States. Long-haul trucks on the other side then pick up the trailers and take them to their destination.

This system prevailed despite the requirements of NAFTA that the United States and Mexico phase out restrictions on cross-border passenger and cargo services. The U.S. refusal to implement the NAFTA trucking provisions continued despite a 2001 NAFTA dispute settlement panel decision that found the U.S. restrictions violated its NAFTA obligations, followed by litigation barring implementation of the NAFTA trucking provisions without full environmental impact statements.

The Supreme Court finally reversed the lower court decision in 2004, and the United States and Mexico agreed to a short-term joint demonstration "pilot" program, the "Cross-Border Demonstration Project," that went into effect in September 2007. The United States allowed up to 100 trucking firms from Mexico to transport international cargo beyond the commercial zones along the U.S.-Mexico border and Mexico allowed up to 100 U.S. trucking firms to transport international cargo into Mexico. The trucking pilot program was originally designed to run for one year. On August 4, 2008, the United States and Mexico extended the program for another two years.

However, the FY2009 Omnibus Appropriations Act (P.L. 111-8) enacted in March 2009 ended funding for the program on March 11, the date President Obama signed it into law. Mexico responded on March 16, 2009 with an announcement that it would retaliate against the United States for the cancellation of the trucking pilot program. On March 19, Mexico imposed penalty duties on $2.3 billion in imports of 89 products from the United States, with an immediate duty cost of about $421 million.[5] (Mexico has continued to allow U.S. trucks to travel into Mexico beyond the border area.)

---

[4] Before 1982, trucks from Mexico could transport goods anywhere in the United States.

[5] See http://www.ita.doc.gov/td/industry/otea/301alert/mx_ret.html.

In short, since March, U.S. companies and consumers have been bearing not only the drayage costs associated with transferring cargo from Mexican trucks to U.S. trucks – an estimated $739 million -- which are passed on to U.S. consumers in the form of higher costs, but U.S. exporters have been bearing the costs of Mexican retaliation as well, an additional $421 million, which have a negative impact on U.S. production for export, and associated employment impacts.

We estimate that the net negative impact of continuation of drayage and Mexican retaliation cause U.S. exports to decline by $2.6 billion. We further estimate that the impact on U.S. employment of the failure of the United States to implement the trucking provisions of NAFTA coupled with Mexican retaliation equals 25,600 jobs.

Summary of Estimated Job Effects

Failure to Implement U.S.-Colombia FTA, U.S.-Korea FTA	-383,400
Imposition of “Buy American” Provisions of American Recovery and Reinvestment Act of 2009	-176,800
Failure to Implement NAFTA Trucking Provisions and Mexican Retaliation	-25,600
TOTAL	-585,800

Appendix A

Methodologies

This appendix details the data sources and methodologies used to estimate the net impacts on the United States of various U.S. trade actions and failures to act. We focus on the employment impacts.

Failure to Implement the U.S.-Colombia FTA and the U.S.-Korea FTA

We applied a computable multi-sector model of the world economy to assess the impacts of the failure of the United States to implement two free trade agreements while its largest competitors go forward with implementing similar agreements. Computable general equilibrium (CGE) models are characterized by an input-output structure of economies (based on regional and national input-output and employment tables). They explicitly link industries in a value added chain from primary goods, over continuously higher stages of intermediate processing, to the final assembling of goods and services for consumption. Inter-sector linkages are direct, like the input of steel in the production of transport equipment, and indirect, via intermediate use in other sectors. The model captures these linkages by mapping firms' use of direct and intermediate inputs to production. The most important aspects of the model can be summarized as follows: (i) it covers all world trade and production; and (ii) it includes intermediate linkages between sectors. Using a CGE model, and taking the current wage structure of the U.S. economy (i.e., holding wages constant and allowing employment levels to adjust), we examine the effects of these trade policy failures on the pattern of U.S. trade, production and employment.

Data

Our data come from a number of sources. Data on production and trade are based on national social accounting data linked through trade flows (see Reinert and Roland-Holst 1997). These social accounting data are drawn directly from the most recent version of the Global Trade Analysis Project (GTAP) dataset, version 7 (see Dimaranan and McDougall, 2008). The GTAP version 7 dataset is benchmarked to 2004 and includes detailed national input-output, trade and final demand structures for that year. Using macroeconomic and related trade and employment data, we have updated the dataset to 2008.

The basic social accounting and trade data are supplemented with trade policy data, including additional data on tariffs and non-tariff barriers. The data on tariffs are taken from the World Trade Organization's integrated database, with supplemental information from the World Bank's recent assessment of detailed pre- and post-Uruguay Round tariff schedules and from the UNCTAD/World Bank WITS dataset. All of this tariff information has been concorded to GTAP model sectors within the version 7 database. The sectors in the model are shown

in Table A-1. The GTAP regions are aggregated into the U.S. and rest-of-world. (The rest-of-world is further subdivided into major OECD and non-OECD markets.) The data are also supplemented with employment data from the Bureau of Economic Analysis of the Commerce Department.

Table A-1
Model Sectors

Natural resources	Transport equipment nec
Processed foods	Electronic equipment
Beverages and tobacco products	Machinery and equipment nec
Textiles	Manufactures nec
Wearing apparel	Utilities
Leather products	Construction
Wood products	Retail and wholesale trade
Paper products, publishing	Transport and warehousing
Petroleum, coal products	Communication
Chemical, rubber, plastic prods	Insurance and financial services nec
Mineral products nec	Business services nec
Iron and steel	Recreation and other services
Non-ferrous metals	PubAdmin/Defense/Health/Education
Fabricated metal products	

The Model

In the model, single representative, composite households comprise each region, with expenditures allocated over personal consumption and savings. The composite household owns endowments of the factors of production and receives income by selling them to firms. It also receives income from tariff revenue and rents accruing from import/export quota licenses (when applicable). Part of the income is distributed as subsidy payments to some sectors, primarily in agriculture.

On the production side, in all sectors, firms employ domestic production factors (capital, labor and land) and intermediate inputs from domestic and foreign sources to produce output in the most cost-efficient way that technology allows. Capital stocks are fixed at a national level. Firms are competitive, and employ capital and labor to produce goods and services subject to constant returns to scale.[6] Products from different regions are assumed to be imperfect

[6] Compared to dynamic CGE models and models with alternative market structures, the present assumption of constant returns to scale with a fixed capital stock is closest in approach to older studies based on pure input-output modeling of trade and employment linkages. In the

substitutes in accordance with the so-called "Armington" assumption. Substitution elasticities are from the recent econometric literature.

The Experiments

Using this CGE model with a 2008 dataset, we estimated the impacts on the United States of the implementation by the EU and Canada of FTAs with Korea and Colombia, and U.S. implementation of FTAs with Korea and Colombia. This includes bilateral tariff reductions, reductions in trade costs related to administrative costs, and reductions in services trade costs (modeled as a modest 5 percent reduction in services trade costs[7]). We then compared these results to those obtained by estimating the impacts on the United States of the implementation of the EU and Canadian FTAs, but not the U.S. FTAs. The results are as follows: U.S. exports of goods and services decline by 2.2 percent, U.S. GDP drops by 0.31 percent, national income declines by $28.3 billion, and U.S. total employment drops by 0.3 percent. Based on 2008 exports of goods and services ($1,826.6 billion) and GDP ($14,441.4 billion), these results translate into lost exports of $40.2 billion and lost U.S. output of $44.8 billion. U.S. full-time equivalent employment in 2008 totaled 127.8 million workers,[8] yielding a net job loss of 383,352.

Imposition of "Buy American" Provisions of Recovery Act

The Recovery Act appropriates a total of $787 billion in new government spending designed to stimulate the U.S. economy. About 13 percent of this total ($101 billion) is targeted at spending on infrastructure projects, the projects that would be impacted by the Buy American requirements.[9] This potential spending includes purchases of iron, steel and other manufactured products as well as the services of contractors that undertake the projects. Based on data for U.S. federal procurement of manufactured goods in 2008, we estimate that $37 billion

---

present context, it can be viewed as generating a lower-bound estimate of effects relative to alternative CGE modeling structures.

[7] The tariff-equivalent of U.S. services trade barriers has been estimated at 16 percent or more. J. Francois, B. Hoekman, J. Woerz (2007), "Does Gravity Apply to Nontangibles: Gravity Estimates of Services Trade Barriers," European Trade Study Group annual meetings plenary paper. We model a cut in those U.S. services trade barriers of just 5 percent; greater liberalization would boost our export and employment costs significantly.

[8] U.S. Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=197&Freq=Year&FirstYear=2007&LastYear=2880.

[9] Derived from a detailed summary of investment spending included in the legislation and prepared by the House Committee on Appropriations, "Summary: American Recovery and Reinvestment Report Conference Agreement," February 2009, http://appropriations.house.gov/pdf/PressSummary02-12-09.pdf.

of the $101 billion would be spent on the procurement of manufactured goods.[10] Of this amount, we estimate that $3.2 billion is vulnerable to the new Buy American provisions.[11]

A $3.2 billion shift in federal procurement from foreign sources to domestic sources would create jobs in the up- and downstream sectors associated with that new production. It would also cost jobs in the importing/wholesaling sectors, and all the up- and downstream sectors associated with that importing and wholesaling activity. Unwarranted discrimination against foreign suppliers could also result in retaliation by the governments representing those suppliers. This could happen in one of two ways: direct retaliation equal to the loss of sales to the United States, or imposing their own "buy national" requirements on public purchases by foreign governments.

To estimate these job effects, we rely on Bureau of Labor Statistics (BLS) calculations of the number of jobs required to produce $1 million in output. The so-called "employment requirements table" is based on 2006 input-output tables estimated by the BLS representing 2006 labor productivity levels. It shows, for example, that every $1 million of steel product manufacturing output requires 8.74 workers (1.5 workers in that sector directly, and 7.24 elsewhere in the economy). Using the employment multipliers appropriate to each manufacturing sector, we find that transferring $3,219 million in purchases from foreign suppliers to U.S. suppliers creates 29,789 jobs throughout the U.S. economy. It costs 5,680 jobs associated with the loss in importing activity (estimated as the gross margin associated with $3,219 million in mining and manufacturing imports), for an estimated net gain of 24,109. However, retaliation would erase all of those employment gains and then some. If foreign governments reduce their imports of U.S. manufactured goods by $3,219 million (U.S. exports fall by that much), the total gain in U.S. employment would evaporate, with a net impact on U.S. employment of the 5,680 jobs lost to the absence of imports.

---

[10] According to data provided by the Federal Procurement Data System ("Total Action by NAICS Report", found at www.fpds.gov), 36.57 percent of total Federal procurement in 2008 went to purchase goods produced in four North American Industrial Classification (NAICS) sectors: mining (NAICS 21); food and beverages, textiles and apparel and leather manufactures (NAICS 31); wood, paper, and printed products, petroleum and coal, chemicals, plastics, rubber and nonmetal manufactures (NAICS 32); and metals (e.g., iron and steel), metal products, machinery, computer and electronic products, transportation equipment, furniture and miscellaneous manufactures (NAICS 33). This share represents the total value of manufactured goods purchased by the federal government divided by total federal procurement on all goods and services in 2008. The share of manufactured goods that will be purchased by the $101 billion available under the Recovery Act for infrastructure spending is likely to be higher, which would mean that our estimate of the trade at risk is conservative.

[11] FPDS reports that 10 percent of all federally procured products came from foreign sources ("Buy American Act Place of Manufacture Report"). Of that, 1.3 percent was sourced from trade agreement partners, or was exempted as the result of a public interest determination, a non-domestic availability determination, or an unreasonable cost of domestic product determination, among other possible exceptions. We assume that these exceptions apply to the new Buy American purchases, in the same proportions, both at the national and state and local levels (a similar database of state and local procurement purchases is not available). Therefore, 8.7 percent of Recovery Act purchases could come from foreign sources, but might not if U.S. procurement agents choose to implement the "Buy American" requirements more rigidly instead.

The impact of foreign "buy national" requirements would be even worse. At least 90 countries or regions (e.g., the European Union) have announced stimulus spending plans of their own, totaling well over $1.7 trillion.[12] If foreign governments impose their own "buy national" requirements on public purchases that lock U.S. goods and services providers out of even just 1 percent of this total spending, the net U.S. job impact could climb to a loss of 176,762.[13]

Failure to Implement NAFTA Trucking Provisions

There are two costs now associated with the failure by the United States to implement the NAFTA trucking provisions. First is the need to incur drayage costs thanks to the cancellation of the trucking pilot program. The U.S. Department of Transportation estimated that drayage costs $100-$200 per truck crossing.[14] In 2008, total border crossings from Mexico into the United States reached 4,866,252.[15] Multiplying the mid-point of the per-truck crossing cost, $150, by the number of truck crossings yields an annual cost estimate of drayage of $739 million in 2008. This cost is passed on to U.S. consumers, ultimately, in the form of higher prices for goods imported from Mexico. On top of the drayage costs, U.S. exporters are now facing retaliatory tariffs on certain goods exported to Mexico equivalent to about $421 million based on 2008 exports.

Using the CGE process described above, we conducted two experiments. One involves measuring the net impacts of continuing the drayage system cost burden on U.S. consumers, and, second, measuring the net impacts of retaliation on U.S. exporters of processed foods and other manufactures. The results are as follows: continuation of drayage and Mexican retaliation cause U.S. exports to decline by $2.6 billion, and reduces total U.S. employment by another 0.02

---

[12] "International economic stimulus plans," http://www.sites.google.com/site/maar258/; "FACTBOX-Europe's fiscal stimulus plans," Reuters, March 17, 2009, http://www.reuters.com/article/turkey/idUSLH44404720090317; Library of Congress, "Financial Stimulus Plans: Recent Developments in Selected Countries," http://www.loc.gov/law/help/financial_stimulus_plan.php#.

[13] U.S. goods and services exporters would lose out on $17.2 billion in procurement opportunities abroad (1 percent of estimated stimulus spending in at least 90 countries). Each $1 million in U.S. output supports 11.66 jobs, so the loss in jobs associated with the loss in sales totals 200,871. Factoring in the net gain in U.S. jobs from "Buy American" (24,109) yields a net loss of 176,762 jobs.

[14] Mark I. Ojah, Juan C. Villa, William R. Stockton, David M. Luskin, and Robert Harrison, "Truck Transportation through Border Ports of Entry: Analysis of Coordination Systems; Appendix B: Description of the Northbound Border-Crossing Process," Report No. TX-01/50/1XXA3038, November 2002, http://www.borderplanning.fhwa.dot.gov/TTIstudy/TTIAppB.htm.

[15] U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, "U.S. Border Crossings/Entries by State/Port and Month/Year Sorted by Year (Ascending)," http://www.transstats.bts.gov/BorderCrossing.aspx?Sel_Fields=Trucks.

percent. The total impact on U.S. jobs is 25,557 (again, based on total U.S. full-time equivalent employment in 2008 of 127.8 million).

REFERENCES

Dimaranan, B. V. and R. A. McDougall (2002), Global Trade, Assistance, and Production: The GTAP 5 Data Base, Center for Global Trade Analysis, Purdue University.

Francois, J.F. (2008), "Deconstructing Trade in Services – A Detailed Assessment," University of Linz, working paper.

Francois, J.F. and C.R. Shiells (1994), Modeling Trade Policy: Applied General Equilibrium Assessments of North American Free Trade, Cambridge University Press: Cambridge UK.

Hertel, T.W. E. Ianchovichina and B.J. McDonald (1997), "Multi-Region General Equilibrium Modeling," in J.F. Francois and K.A. Reinert, eds., *Applied Methods for Trade Policy Analysis: A Handbook*, Cambridge University Press.

Huff, K. R. McDougall and T. Walmsley (2000), "Contributing Input-Output Tables to the GTAP Data Base," GTAP Technical Paper No. 01, GTAP consortium.

McDonald, S. and K. Thierfelder (2003), "Deriving a Global Social Accounting Matrix from GTAP version 5 Data," GTAP consortium.

Reinert, K.A.. and D.W. Roland-Holst (1997), "Social Accounting Matrices," in Francois, J.F. and K.A. Reinert, eds. (1997), *Applied Methods for Trade Policy Analysis: A Handbook*, Cambridge University Press.

U.S. Chamber of Commerce
1615 H Street, NW
Washington, DC 20062
www.uschamber.com