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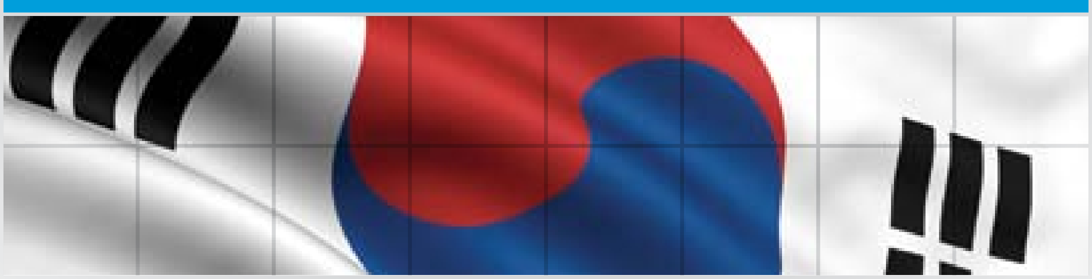

U.S.-KOREA BUSINESS COUNCIL

Failure to Implement the U.S.-Korea Free Trade Agreement: The Cost for American Workers and Companies

by Laura M. Baughman and Joseph F. Francois[1]

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Congress and the Administration have yet to consider legislation to implement the U.S.-Korea Free Trade Agreement (FTA), which was signed by representatives of the two governments on June 30, 2007. While more than two years have passed since the agreement was signed, it is unclear when the agreement will be implemented.

Other major trading nations are also seeking trade agreements with Korea. The European Union (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. Separately, the Canadian government describes its negotiations with Korea for an FTA as "well advanced." [2]

The U.S.-Korea FTA would support job-creating trade – both exports and imports – in the United States. If the EU and Canada implement their trade agreements with Korea and the United States does not, exporters in the EU and Canada will enjoy a competitive advantage over U.S. exporters in the Korean market. Some U.S. export sales will be lost to exporters in the EU and Canada. The loss of export sales will have a negative impact on U.S. companies, national output and consequently U.S. jobs.

Failure by the United States to implement its trade agreement with Korea will cost related exports, output and jobs. Specifically, failure to implement the U.S.-Korea FTA while our trading partners go forward with their FTAs with Korea would lead to a decline of $35.1 billion in U.S. exports of goods and services to the world and U.S. national output failing to grow by $40.4 billion. We estimate that the total net negative impact on U.S. employment from these trade and output losses would total 345,017 jobs.

Estimated Costs to the United States of Failure to Implement the U.S.-Korea FTA

Total U.S. Goods & Services Exports	-$35.1 billion
GDP	-$40.4 billion
Net Welfare	-$25.2 billion
U.S. Jobs	-345,017

Methodology

This appendix details the data sources and methodology used to estimate the net impacts on the United States of the failure to implement the U.S.-Korea FTA while two major trade competitors implement similar agreements. 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

1. 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.

2. 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.

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available at **www.uschamber.com/trade**

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*
Processed foods	Electronic equipment
Beverages and tobacco products	Machinery and equipment*
Textiles	Manufactures*
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*
Mineral products*	Business services*
Iron and steel	Recreation and other services
Non-ferrous metals	Public Administration/ Defense/Health/Education
Fabricated metal products	

*Not elsewhere classified

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.[3] Products from different regions are assumed to be imperfect 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 U.S. implementation of the U.S.-Korea FTA. 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[4]). 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-Korea FTA. The results are as follows: based on 2008 exports of goods and services ($1,826.6 billion) and GDP ($14,441.4 billion), U.S. exports of goods and services to the world decline by $35.1 billion, U.S. GDP drops by $40.4 billion, and national income declines by $25.2 billion. U.S. full-time equivalent employment in 2008 totaled 127.8 million workers,[5] yielding a net job loss of 345,017.

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.

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

4. 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.

5. 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.