Business Roundtable℠

America, Canada and Mexico:

Mutual Benefits from Trade and Investment

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Business Roundtable™

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EXECUTIVE SUMMARY

- The United States, Canada and Mexico have been building stronger economic ties for decades, with positive results. The changes have been significant, and over the last 40 years have worked their way deeply into the economies of each country. Policy makers in each country understood that their citizens stood to gain a great deal by cleaning away the tangle of unnecessary barriers that raised costs for consumers, workers and firms while also limiting growth. The efforts to level the playing field between them culminated with the North American Free Trade Agreement (NAFTA), which has now been in effect for 15 years.

- Today, the United States, Canada and Mexico form a marketplace that includes 440 million consumers and represents one third of the world's economy. At $15 trillion, this market is larger than that of the 27-member European Union.

- U.S. goods trade with Canada and Mexico is more than double that with China. Over the last 14 years, U.S. trade with Canada and Mexico has been growing faster than trade with the rest of the world. U.S. farmers and manufacturing workers depend more today on exports to our neighbors than ever before. Exports to Canada and Mexico from a number of key U.S. manufacturing sectors represent growing shares of total sector output. Every state exports to Canada and Mexico.

- U.S. imports from Canada and Mexico are primarily raw materials, components and machinery used in U.S. manufacturing. The economies of the three countries are intertwined, with parts and components crossing borders and finding their way into finished products in all three countries – finished products that are also traded across borders in addition to being sold domestically.

- U.S. services trade with Canada and Mexico has also been growing over the last 14 years. Over the entire period, the United States has enjoyed a services trade surplus with Canada and Mexico.

- Canadian and Mexican manufacturers and services have been increasingly investing in the U.S. economy over the last 14 years, as have American companies in Canada and Mexico. These investment support employment and output in all three economies.

- Trade with our neighbors has a net positive impact on U.S. jobs. In 2007, more than 17 million U.S. jobs directly or indirectly depended on trade – exports and imports of goods and services – with Canada and Mexico. Those jobs can be found in every sector of the economy, and every state.

- NAFTA as well has had a net positive impact on U.S. jobs, supporting 3.8 million direct and indirect jobs in total in 2007. These jobs are located in every sector, and in every state.

* Both trade with Canada and Mexico generally, and NAFTA specifically, have had a positive impact on American incomes. National income is higher, as are wages. Every U.S. household has the equivalent of nearly $2,000 in extra income – every year – because of our current trading relationship with Canada and Mexico.

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America, Canada and Mexico:
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I. INTRODUCTION

The United States and Canada have been leveling the trade and investment playing field over the last five decades, and Mexico joined them in the 1980s. These efforts reached the end of their latest phase with the full implementation of the North American Free Trade Agreement (NAFTA) on January 1, 2009.

As trade has been liberalized, the linkages between the three economies have gown. Today, borders are virtually meaningless for many industries in the three countries, as goods and services travel back and forth, inputs from one economy travel to another where they become finished products for export back to a neighbor, or trading partners around the world.

All of this trade and investment support jobs in the United States. This paper undertakes a comprehensive assessment of the number of U.S. jobs both directly and indirectly dependent on trade with Canada and Mexico, and more narrowly on NAFTA.

We begin with a review of the history of the U.S-Canada and U.S.-Mexican efforts to liberalize trade, describe the trade and investment trends over the last 15 years from the U.S. perspective, and then report our results for the employment impacts of this trade today.

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II. A BRIEF REVIEW OF HISTORY: DECADES OF HARD WORK

The history of trade liberalization by and between the United States, Canada and Mexico is long. The efforts have been many and, consequently, the economic effects of this liberalization have been ongoing for decades.

A review of the history is useful to understanding its scope. In addition, many of the questions before policy makers today are remarkably similar to questions posed to – and answered by – policy makers over the last four to five decades.

A. Canada

Canada and the United States formally began the bilateral process of leveling the playing field between them in 1965 with the Canada-United States Automotive Agreement (commonly referred to as the 1965 Auto Pact). It allowed automotive firms based in Canada duty-free access to the U.S. market (subject to a minimum North American content requirement), and firms based in Canada firms received duty remission for parts and vehicles imported from anywhere in the world in exchange for production requirements in Canada. Despite its complicated "rules," auto production and trade between the United States and Canada soared. The success of the Auto Pact gave rise to interest in negotiating similar agreements focused on other sectors; however, it proved an inappropriate model for other sectors.

The United States and Canada had flirted with the idea of a free trade agreement between them for many years. However, the desire for greater and assured[1] access to the huge U.S. market conflicted with the Canadian desire for "distinctness" from the United States, making the issue politically charged in Canada, and the talks never got off the ground. Political fears trumped economic aspirations in Canada until 1973, when several events began to shake the Canadian view that it could afford to ignore greater economic integration with the United States. These included U.S. countervailing duty investigations targeting Canadian industrial support policies, the inability to extend the Auto Pact model to other sectors and conclude a series of

[1] A 1973 U.S. countervailing investigation affecting Canadian radial tires drove home to Canadians their vulnerability to U.S. trade remedy actions that had the potential to shut down important export sectors to an important foreign market – and to attack directly a political given in Canada: the obligation of government to support industry in less developed regions of the country. A similar investigation in 1986 on lumber drove home the point: access to the U.S. market could not be assured as long as Canadian policies could be targeted by U.S. trade remedy actions. *See* Sperry Lea, "A Historical Perspective," in *Perspectives on a U.S.-Canadian Free Trade Agreement,* Robert M. Stern, Philip H. Trezise, and John Whalley, eds. (Ottawa, Ontario and Washington, DC: The Institute for Research on Public Policy and The Brookings Institution, 1987), p. 23.

sectoral agreements *in lieu* of one overall trade agreement, growing protectionist sentiment in the United States stemming from the 1973 and 1979 oil shocks and the impacts of tariff cuts under the Kennedy and Tokyo Rounds, an outflow of investment from Canada, and a severe world recession in the early 1980s, among other events.[2] These events frustrated Canadian policy initiatives designed to develop and strengthen the Canadian economy – notably, the Foreign Investment Review Agency (the inward flow of investment had slowed considerably) and the National Energy Policy (the oil price collapse was undermining that effort). In short, "[d]uring the early 1980s, Canada found itself particularly vulnerable. Markets for its basic commodities had declined sharply; the world trading system had become a Darwinian jungle; and the U.S. market had grown in importance for Canadian exports, but also in the unpredictability of their access to it."[3] By 1985, Canadian Prime Minister Brian Mulroney was ready to formally propose to the United States that the two countries negotiate a free trade agreement.

For its part, U.S. support for an FTA that included Canada and even Mexico came from a range of sources, notably Senator Max Baucus (D-MT) who in 1979 amended the Trade Agreements Act to direct the president to study the desirability of trade agreements with Canada, and Ronald Reagan, who, in declaring his candidacy for President in November 1979 promised to pursue a "North American accord" that would permit goods from the United States, Canada and Mexico to "flow more freely across their present borders than they do today."[4] It also "helped" that the multilateral trade liberalization process was sputtering: a GATT ministerial meeting of in 1982 to launch a new round of multilateral negotiations failed to move those negotiations forward, and several countries were starting to believe they could better achieve their trade objectives bilaterally rather than through the GATT.

The United States and Canada began negotiations for what would become the U.S.-Canada Free Trade Agreement (CFTA) in June 1986. The CFTA eliminated virtually all agricultural and goods tariffs on qualifying U.S.-Canada trade in a phase-out beginning in 1989 and ending in 1998. It developed rules of origin to qualify goods for CFTA preferences that replaced the prevailing "substantial transformation" method of determining origin with a "tariff shift" method. It covered government procurement and investment. It also covered services trade for the first time (using the so-called "negative list" approach: only listed services are covered), paving the way for the

[2] *See* Lea, *op. cit.*, p. 23-24 for an even longer list of events.

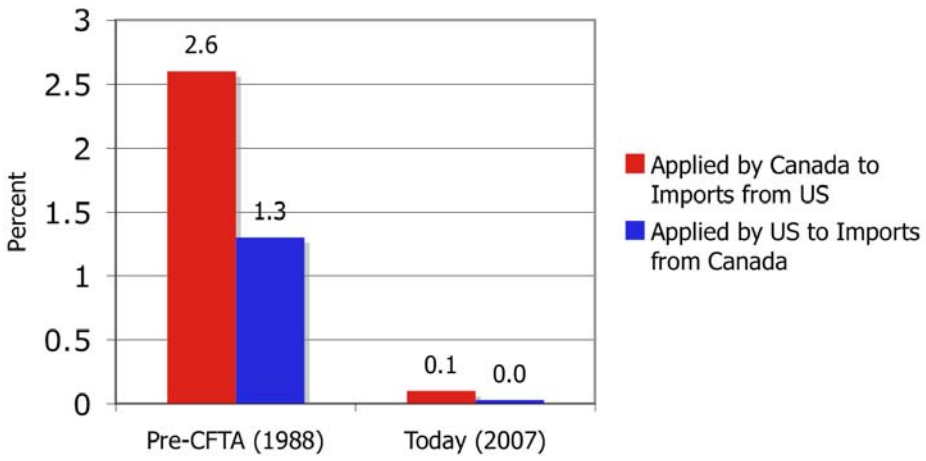
[3] Lea, *ibid.*, p. 26.

[4] http://www.4president.org/speeches/reagan1980announcement.htm.

inclusion of services in GATT/WTO negotiations to come. The CFTA also features dispute resolution mechanisms, an important issue for Canada (including the establishment of bi-national panels to disputes over antidumping or countervailing duty actions). However, negotiators deferred to the WTO process[5] to address thorny agricultural subsidies and other policies affecting agricultural trade, and did little to improve customs administration and intellectual property rights protection.

Figure 1

CFTA Levels the Playing Field



Sources: U.S. Census Bureau; Department of Finance, Government of Canada

B. Mexico

Up until the 1980s, Mexico had followed a classic and popular development model focusing on import-substitution industrialization, relying on tariffs of up to 100 percent and nontariff barriers to stimulate domestic production.[6] Mexican economic policy embraced protection from imports (tariffs, import licensing, local content requirements), foreign investment restrictions and state ownership of companies for

[5] The Uruguay Round was finally launched in September 1986.

[6] Nontariff barriers included domestic content requirements and import licenses, which in 1976 affected 91 percent of the value of Mexican imports.

much of the 20th Century. But a collapse of oil prices and the resulting drop in export revenues in the early 1980s left Mexico unable to service its huge foreign debt. In exchange for a bailout, the International Monetary Fund mandated austerity measures, and the Mexican economy stagnated.

Two successive Mexican presidents – Miguel de la Madrid (1982-88) and Carlos Salinas de Gortari (1988-94) – undertook major reforms that turned the economy around. These included privatizing numerous state-controlled or state-owned enterprises, and easing restrictions on foreign trade and investment in certain sectors, including the auto and telecommunications industries, financial services and petrochemicals. In August 1986, Mexico joined the GATT, which required it to begin reducing tariffs and other trade barriers. In December 1987, for example, Mexico reduced its highest tariffs – 100 percent in early 1986 – to 20 percent. A new patent and trademark law went into effect in 1991, benefiting chemical, pharmaceutical and biotechnological products and inventions. A copyright law was changed to protect computer software and sound recording in Mexico for the first time.

Table 1: Mexican Tariffs, 1985-1990

1985	23.5%
1986	24.0
1987	22.7
1988	11.0
1989	12.8
1990	12.5

Source: Production-weighted average tariffs, from SECOFI.

These changes had huge immediate impacts. A trade deficit replaced Mexico's annual trade surpluses, as import demand surged, the peso appreciated, and slower growth in the United States (1991 was a recession year) hit Mexico's exports to the United States, its largest market. Foreign investment flooded into Mexico in response to the lifting of restrictions and new intellectual property rights protections, rising from $3.5 billion in 1989 to $12.3 billion in 1991.

Mexico's trade liberalization effort took another big step forward in the summer of 1990 when Salinas expressed an interest in negotiating a free trade agreement with the United States. Until now, the extent of trade liberalization between the United States and Mexico had been limited to "maquiladora" assembly plants along the border, first established in 1965, that permitted Mexico to process components, largely imported duty-free from the United States, into finished products that were then exported. Another production-sharing program extended duty reductions to certain apparel exported to the United States. In 1976, the United States implemented

the Generalized System of Preferences program, which extended duty-free treatment for certain imports from developing countries, including Mexico. By 1990, when Salinas sought the NAFTA, one quarter of Mexico's exports to the United States received duty-free access to the U.S. market (the share was higher, 51 percent, by 1993); U.S. quotas further restricted important exports like apparel. Overall, U.S. tariffs applied to imports from Mexico *not* eligible for duty-free treatment under a preference program averaged 4.2 percent in 1993.

Mexico's interest in trade liberalization extended beyond the United States. Mexico signed an economic, financial and scientific cooperation agreement with the European Community (1991, updated in 2000) and FTAs with Chile (1992, updated 1998). Post-NAFTA FTAs included agreements with Colombia and Venezuela (1995), Bolivia (1995), Costa Rica (1995), Nicaragua (1998), Israel (2000), Guatemala, Honduras and El Salvador (2001), Iceland, Norway, Lichtenstein and Switzerland (2001), Uruguay (2004) and Japan (2005). Mexico has been seeking to level the trade playing field steadily and broadly.

Because U.S.-Canada trade and investment was well on its way to liberalization as a result of the CFTA, the United States was interested in the NAFTA largely as a mechanism to lock in Mexico's many trade and investment reforms – and to expand them. Canada joined in to ensure that the changes brought on by NAFTA between the United States and Mexico would benefit Canada as well.[7]

NAFTA is broader than the CFTA.[8] It removes tariffs between the three partners over 10 years (by 2004), with exceptions for some agricultural products that become tariff free after 15 years (January 1, 2009).[9] It also covers nontariff barriers (e.g., quotas, import licenses), investment, intellectual property rights, as well as dispute settlement, customs administration, product standards, telecommunications, labor and environment. Services are covered using a "positive list" approach: all services are covered unless specifically exempted. Exempted services include, for example, maritime shipping (United States), film and publishing (Canada) and oil and gas drilling (Mexico). NAFTA's rules of origin follow the format of the CFTA rules, with improvements to address issues that had arising under the CFTA.

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[7] U.S. General Accounting Office, "North American Free Trade Agreement: Assessment of Major Issues," GAO/GGD-93-137B, Volume 2, September 1993, p. 9.

[8] NAFTA also replaced CFTA, although the CFTA's tariff elimination schedule continued; all tariffs between Canada and the United States were eliminated by 1998. Also, see 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.

[9] U.S. duties applied to imports from Mexico of certain vegetables and fruit -- cucumbers, asparagus, broccoli, melons, and processed vegetables -- will be eliminated on January 1, 2009 (depending on the season of the year); U.S. tariff-rate quotas on Mexican frozen concentrated orange juice, peanuts and sugar will also be eliminated on January 1, 2009. Mexican tariffs on U.S. exports of dried onions and certain processed vegetables, frozen concentrated orange juice, and melons, and Mexican tariff rate quotas affecting U.S. exports of corn, dry beans, milk powder and sugar, will be terminated on January 1, 2009.

Figure 2

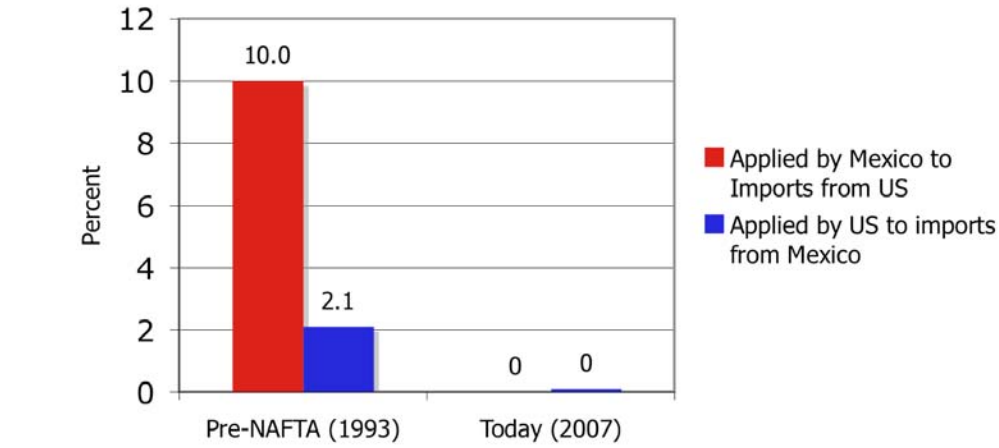
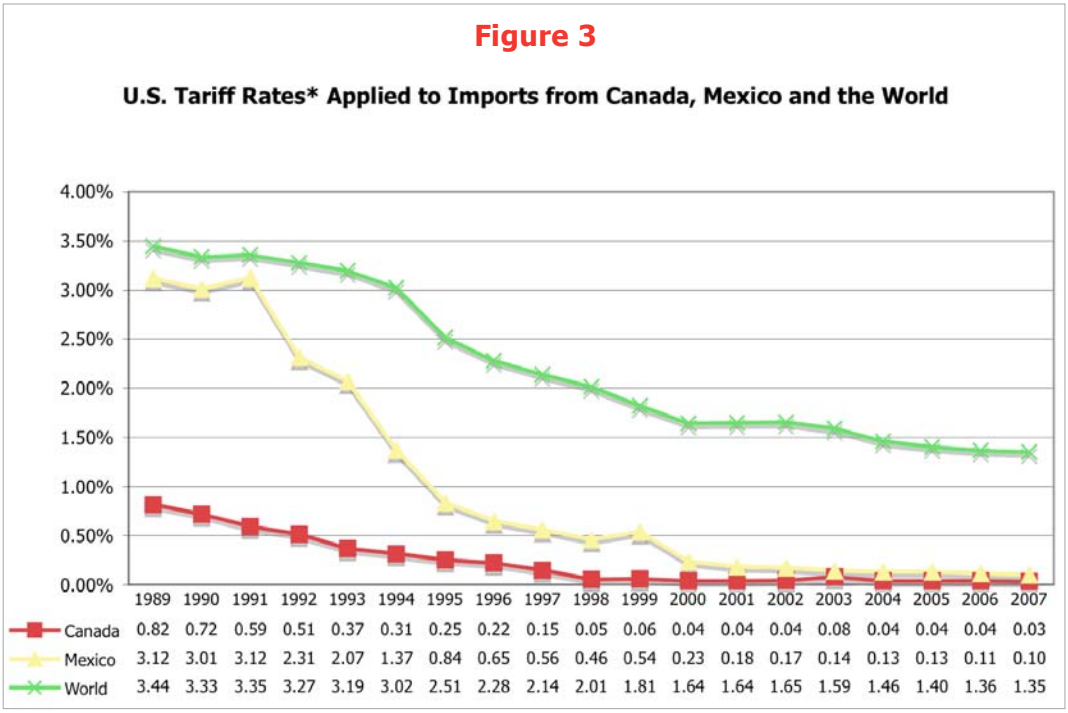


Figure 3



*U.S. trade-weighted tariff rates applied to imports from Canada, Mexico and the World (total duties collected divided by total (dutiable and nondutiable) imports). U.S. trade-weighted duties are actually slightly above zero, as some products imported from Canada and Mexico do not meet the NAFTA rules of origin and therefore duties are assessed on those products. Source: Derived from U.S. Census Bureau.

But NAFTA is far from a "free trade" agreement. Not all products or services traded between the United States, Canada and Mexico are free of trade barriers: some are not covered at all. For example, neither the CFTA nor the NAFTA cover cultural industries – publication, distribution or sale of books, magazines, newspapers, film and video recordings; radio, television and cable broadcasting. Others are subject to rules of origin that restrict the application of tariff benefits in important ways.[10] Foreign investment in Mexico's petroleum sector is not permitted. The United States continues to restrict Canadian and Mexican access to U.S. maritime transportation services.

C. Since NAFTA

Of course, the conclusion of the NAFTA negotiations did not insulate the three neighbors from internal and international events that had negative impacts on their economies. No trade agreement could protect Mexico from the peso crisis that hit in 1994-95 and necessitated a devaluation in December 1994, which ultimately led to a deep recession. NAFTA did not cause, nor could it have prevented, the hundreds of thousands of job losses both the United States and Canada experienced from the bursting of the so-called "high tech bubble" in 2001.

But NAFTA did keep one of Mexico's responses to the peso crisis – in May 1995 hiking up tariffs to bound rates on 502 footwear, leather, textile and apparel products, and imposing quotas on textiles and apparel – limited to countries outside the "neighborhood." The higher tariffs and quotas did not apply to goods that met the requirements for preferential treatment under NAFTA.

Thus, the process of leveling the playing field by liberalizing trade and investment between the North American neighbors has taken place gradually over more than 40 years – unilaterally, bilaterally, and trilaterally. From the perspective of history, NAFTA – the culmination of the activity – added, in effect, the frosting to the cake.

Since much of the focus of attention to the impacts of trade and investment with Canada and Mexico has focused on the years since NAFTA went into effect, the balance of this study reviews the trade and investment trends from the U.S. perspective over the NAFTA period, from 1993 (the year before NAFTA went into effect) to the present.

[10] Typically, rules of origin restrict tariff benefits to products containing only regional components and, consequently, the trade data show that the United States still collects import duties on some apparel or automotive products that would otherwise be duty-free.

Figure 4

History of U.S, Canadian, Mexican Trade Agreements

1965	Canada-United States Automotive Agreement
June 17, 1986	Negotiations for a U.S.-Canada Free Trade Agreement (CFTA) launched
August, 1986	Mexico joins the General Agreement on Tariffs and Trade and begins to liberalize its trading regime
January 1, 1989	CFTA enters into effect
February 5, 1991	North American Free Trade Agreement (NAFTA) talks launched
December 17, 1992	NAFTA signed by three countries
August 13, 1993	Negotiations of supplemental agreements on labor, environment and import surges concluded
January 1, 1994	NAFTA enters into force, first set of products that meet rules of origin becomes duty free; absorbs CFTA
January 1, 1998	Second set of products that meet rules of origin becomes duty free
January 1, 2003	Third set of products that meet rules of origin becomes duty free
January 1, 2009	NAFTA fully in effect, all products that meet rules of origin are duty free.

III. TRADE AND INVESTMENT TRENDS OVER THE LAST 15 YEARS

By any measure, the U.S.-Canada-Mexico trading relationship matters importantly to America. For starters, it is huge. Today, the United States, Canada and Mexico form a marketplace that includes 440 million consumers and represents one third of the world's market (as measured by GDP). At $15 trillion, this market is larger than that of the European Union (with its 27 member economies).

The United States trades more with Canada and Mexico in a single month than it trades with France in one year. Total U.S. exports to and imports of goods alone from Canada and Mexico are more than double U.S. exports to and imports from China. They amount to $2.3 billion per day. One of every four dollars of the U.S. trade surplus with the world is contributed by the trade surplus it has with its neighbors in Canada and Mexico.

A. Goods Trade

Except during the 2001-2002 period, U.S. trade in agricultural and industrial goods with Canada and Mexico has been growing strongly over the last 14 years.[11] Over the last 14 years, trade with Canada and Mexico has been growing slightly faster than trade with the rest of the world. From 1993-2007, total goods trade with Canada and Mexico grew at an average annual rate of 8.5 percent, compared to 8.1 percent per year for total trade with all other countries.

While the balance of trade with Canada and Mexico has been negative and increasing, most of the increase is due to growing U.S. imports of energy, particularly crude petroleum. Table 2 shows that the U.S. trade deficit with its neighbors would be less than half as large as it was in 2007 but for energy trade.

[11] A number of events happened in 2001 that had an impact on U.S. trade and investment with all countries, but with Canada and Mexico in particular. First, the United States experienced a recession in 2001, temporarily cutting demand for imports and slowing exports generally, and causing a retrenchment in investment (both inward and outward). Second, the "dot.com" bubble burst, which had a particularly negative impact on high tech goods and services trade between the United States, Canada and Mexico. Third, the September 11 attacks resulted in a virtual closing of the U.S. border with Canada and Mexico, disrupting trade until the United States could sort out its security needs. Fourth, China entered the World Trade Organization, lowering barriers to goods and services imports, and the United States removed quotas on imports of apparel from China. The result has been an increase in interest in exporting to and importing from China, diverting trade not only from Mexico and Canada but from other U.S. trading partners as well. Fifth, the Canadian dollar declined in value against the U.S. dollar in 2000-2002, hitting a high of C$1.61 per U.S.$1, then rose in subsequent years to C$0.92 per U.S.$1 in November 2007. Exchange rate changes impacted not only the direction of trade flows but also investment flows.

Table 2

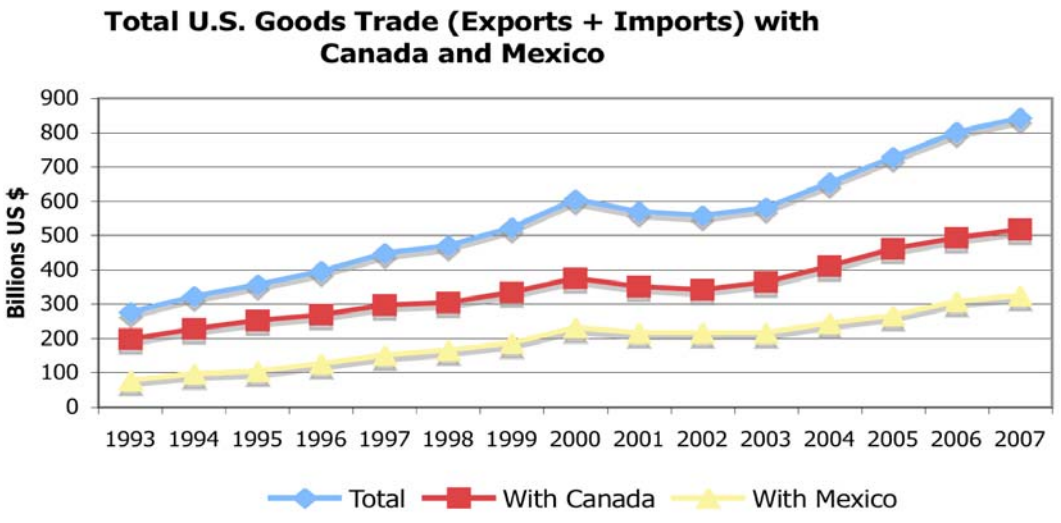
U.S. Goods* Trade with Canada and Mexico, 1993-2007

(Billions)

	1993	1995	1997	1999	2001	2003	2005	2007
Total	**$276.1**	**$357.3**	**$447.6**	**$521.9**	**$568.6**	**$580.1**	**$728.7**	**$842.2**
Canada	198.4	252.7	296.6	335.0	351.4	363.7	462.0	517.5
Mexico	77.7	104.7	151.0	186.9	217.2	216.4	266.7	324.7
Balance	-11.8	-41.1	-41.2	-67.7	-98.3	-116.3	-158.9	-177.2
U.S. Exports	**132.1**	**158.1**	**203.2**	**227.1**	**235.2**	**231.9**	**284.9**	**332.5**
Canada	91.9	113.3	134.8	145.7	144.6	148.7	183.2	213.1
Mexico	40.3	44.9	68.4	81.4	90.5	83.1	101.7	119.4
U.S. Imports	**143.9**	**199.2**	**244.4**	**294.8**	**333.5**	**348.2**	**443.8**	**509.7**
Canada	106.5	139.4	161.8	189.3	206.8	215.0	278.8	304.3
Mexico	37.4	59.8	82.6	105.5	126.7	133.2	165.1	205.3
Total Excluding Energy	**261.5**	**339.7**	**416.1**	**492.8**	**517.0**	**515.7**	**622.2**	**709.9**
U.S. Exports	129.6	155.0	208.6	222.2	227.7	224.2	270.3	313.9
U.S. Imports	131.9	184.7	236.8	270.6	289.4	291.5	352.0	396.0
Balance	-2.3	-29.7	-28.2	-48.4	-61.7	-67.3	-81.7	-82.1

* Agricultural and industrial products; excludes reimports and U.S. goods returned. Source: Bureau of the Census.

Figure 5



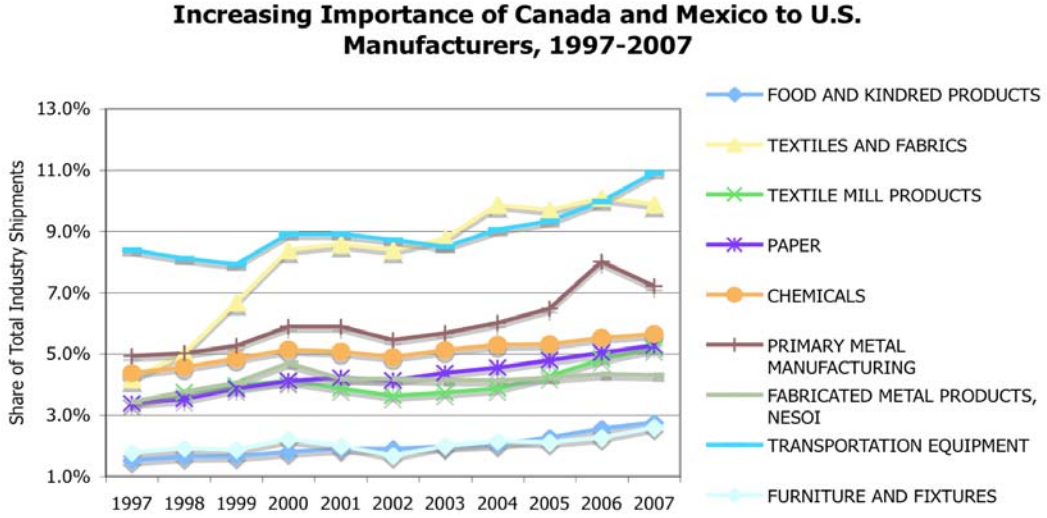
1. Goods Exports

Over the last 14 years, U.S. exports to our neighbors have increased at an average annual rate of 7.0 percent – 6.3 percent a year to Canada, and 8.7 percent a year to Mexico, compared to 6.5 percent per year in all other countries combined.

U.S. farmers and manufacturing workers depend more today on exports to our neighbors than ever before. In 1995, U.S. exports to Canada and Mexico amounted to $7,650 per U.S. agricultural and manufacturing worker. By 2007, those exports per worker totaled more than $20,650.

Exports to Canada and Mexico from a number of key U.S. manufacturing sectors represent growing shares of total sector output. Figure 6 shows that exports to Canada and Mexico of beverages, and textiles and fabrics, for example, have doubled their shares of total sector shipments since 1997.

Figure 6



Source: Derived from Census data.

Table 3 shows that much of what the United States exports to Canada and Mexico is raw materials and components. But also important are finished consumer goods, most notably cars, food products, pharmaceuticals and computers. It was once thought that Mexico, in particular, would never amount to a sizable market for U.S. consumer goods, but cars and computers figure prominently in Mexico's purchases from the United States.

Table 3

Snapshot: Top Ten U.S. Export Categories, 2007

(Billions)

To Canada – Total	**$213.1**
Motor vehicle parts, engines, bodies, chassis	28.8
Industrial and service machinery	21.2
Chemicals (except medicinals and food additives)	14.9
Passenger cars	14.2
Trucks, buses and special purpose vehicles	12.3
Food crops (soybeans, wheat, rice, etc.)	11.2
Pharmaceuticals, cosmetics, toiletries, books, printed matter	10.2
Furniture, cookware, glassware, rugs, other household goods	6.9
Electrical and electric generating equipment	6.7
Iron and steel products	6.6
Top 10 Total	**121.9**
To Mexico	**119.4**
Chemicals (except medicinals and food additives)	13.5
Motor vehicle parts, engines, bodies, chassis	12.6
Electrical and electric generating equipment	9.5
Industrial and service machinery	9.3
Food crops (soybeans, wheat, rice, etc.)	8.3
Petroleum and products, excluding natural gas	7.4
Computers, peripherals and semiconductors	5.6
Finished metal shapes	4.4
Passenger cars	3.4
Textile fibers, yarns and fabric	3.3
Top 10 Total	**77.3**

Source: Bureau of the Census, based on three-digit end-use categories.

Canada and Mexico ranked among the top five export destinations for 32 states, and among the top 10 for another 12 states. It is noteworthy that five of the so-called "Rust Belt" states – Michigan, Ohio, Illinois, Indiana, Pennsylvania – are among the ten largest state exporters to Canada, and the same are among the top 11 largest state exporters to Mexico.

Table 4

State Exports to Canada, 2007

(Millions)

Michigan	$25,631.2	Louisiana	$1,853.9
Ohio	19,616.5	Connecticut	1,799.5
Texas	16,805.8	Colorado	1,773.6
California	16,122.8	Oklahoma	1,620.1
Illinois	13,312.1	Maryland	1,449.0
New York	13,195.1	Vermont	1,349.9
Indiana	10,726.9	Mississippi	1,252.8
Pennsylvania	9,237.8	Arkansas	1,210.9
Washington	7,588.8	Nebraska	1,208.2
Tennessee	6,734.2	West Virginia	1,160.6
Kentucky	6,551.3	North Dakota	998.8
New Jersey	6,238.9	Utah	941.4
Wisconsin	5,845.8	Maine	890.7
North Carolina	5,646.6	Nevada	797.1
Minnesota	5,032.8	Delaware	770.3
Missouri	4,963.1	Idaho	606.1
Georgia	4,384.2	New Hampshire	604.7
Florida	3,677.0	Montana	584.7
Massachusetts	3,412.7	South Dakota	570.4
South Carolina	3,248.0	Rhode Island	533.4
Iowa	3,234.2	Alaska	460.3
Alabama	2,891.5	New Mexico	236.0
Oregon	2,785.3	Wyoming	233.7
Virginia	2,729.2	Hawaii	21.0
Kansas	2,427.7	District of Columbia	5.9
Arizona	2,143.5		

Source: U.S. Department of Commerce.

Table 5

State Exports to Mexico, 2007

(Millions)

Texas	$56,009.3	Alabama	$799.8
California	18,342.8	Connecticut	784.8
Arizona	5,235.8	Mississippi	736.0
Michigan	5,206.6	Minnesota	665.6
Illinois	3,629.5	Virginia	615.8
Florida	3,101.7	Arkansas	539.7
Ohio	2,995.5	Maryland	465.5
Louisiana	2,830.4	Oklahoma	433.5
Indiana	2,605.7	New Mexico	375.4
Tennessee	2,421.5	South Dakota	239.1
Pennsylvania	2,222.3	Utah	223.8
New York	2,162.0	Nevada	177.5
Wisconsin	1,890.9	West Virginia	150.2
North Carolina	1,729.7	Delaware	146.7
Iowa	1,583.8	Idaho	138.6
New Jersey	1,435.5	New Hampshire	128.4
Kentucky	1,366.7	North Dakota	123.1
Missouri	1,355.1	Rhode Island	71.1
Georgia	1,228.2	Alaska	63.8
Washington	1,209.3	Vermont	51.9
Massachusetts	992.3	Maine	29.1
South Carolina	981.6	Montana	24.7
Oregon	954.0	Wyoming	15.5
Colorado	949.9	District of Columbia	4.0
Kansas	915.8	Hawaii	2.6
Nebraska	900.4		

Source: U.S. Department of Commerce.

2. Good Imports

U.S. imports from Canada and Mexico are primarily raw materials, components and machinery used in U.S. manufacturing. Excluding energy products, 63 percent of total imports from Canada and Mexico are industrial goods; 37 percent are finished consumer products. The tariff savings afforded by NAFTA (and the CFTA before it) have been considerable. During the five years before NAFTA, from 1989-1993, U.S. companies paid a total of $84.2 billion on goods they imported from Canada and Mexico. After NAFTA, from 1994-2007

(a period of 14 years), total duties paid amounted to just $7.4 billion. Thus, the savings in duty costs amount to a significant reduction in manufacturing costs for U.S. companies and workers.

Table 6

Snapshot: U.S. Non-Energy Goods Imports with Canada and Mexico, 2007

(Billions)

Imports from Canada*	**$224.4**
Industrial Goods	149.7
Trucks, motor vehicle parts	32.1
Agricultural and industrial machinery	20.0
Ores and metals	17.7
Plastics and chemicals	14.8
Consumer Goods	74.5
Passenger cars	36.8
Medical, dental and pharmaceuticals	4.9
Meat and poultry products	4.0
Imports from Mexico*	**171.8**
Industrial Goods	100.2
Trucks, motor vehicle parts	39.0
Agricultural and industrial machinery	13.2
Computers, peripherals, telecom. equipment, other office equipment**	9.4
Consumer Goods	71.6
Televisions, VCRs and other video equipment	18.9
Passenger cars	13.5
Household items (including appliances)	12.4
Apparel and textile household goods	5.3
Vegetables and vegetable products	3.3

* Excluding U.S. goods returned and reimports.

** We split total U.S. computer and peripheral imports from Canada and Mexico into the consumer and industrial categories based on the estimate by the Consumer Electronics Association that 46 percent of the volume of computer imports from all sources is sold to consumers and the balance to commercial users. Detailed data for U.S. telecommunications equipment imported from Mexico in 2007 suggests that 40 percent is for consumer use and
60 percent for industrial use. Source: Derived from U.S. Bureau of the Census data.

Figure 7

U.S. Non-oil Imports from Canada and Mexico, 2007

Source: Derived from U.S. Bureau of the Census data.

Our neighbors are increasingly important energy suppliers to the U.S. market. In terms of barrels, in 2007 Canada, and Mexico were the largest and second largest, respectively, suppliers of crude petroleum to the United States, followed by Saudi Arabia.[12] Imports of energy products from Canada and Mexico account for a growing share of total U.S. imports.

Table 7

U.S. Fuel and Energy Imports from Canada and Mexico, 1993-2007

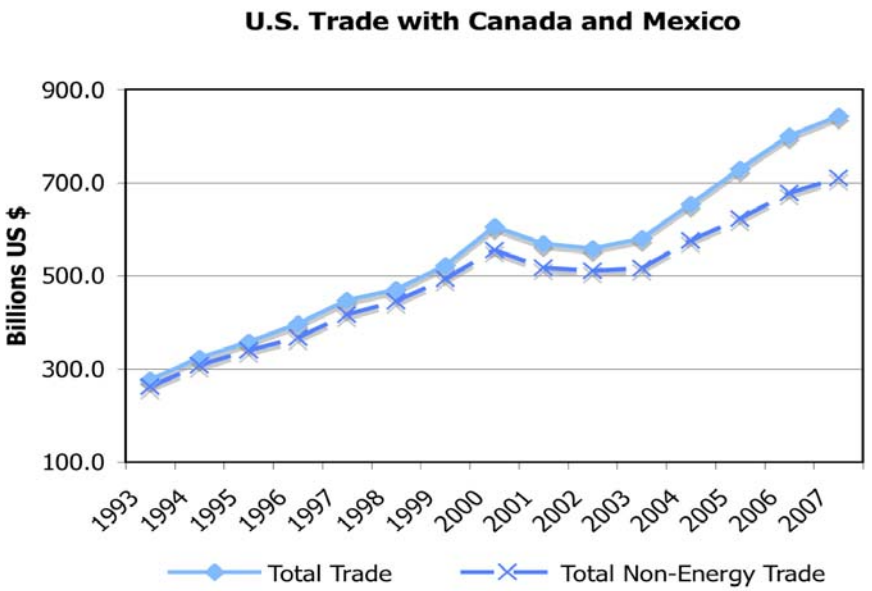
(Billions)

	1993	2000	2005	2006	2007
Canada	**$12.0**	**$32.1**	**$66.8**	**$74.5**	**$80.1**
Crude petroleum	5.0	12.7	23.9	32.6	37.6
Natural gas	3.2	10.4	26.9	24.2	22.4
Electricity	0.7	2.7	2.5	2.5	2.7
Other*	3.1	6.3	13.5	15.2	17.3
Mexico	**$4.8**	**$11.5**	**$25.1**	**$32.2**	**$33.6**
Crude petroleum	4.2	9.8	22.3	29.1	29.8
Other*	0.6	1.7	2.8	3.1	3.8
Fuel & Energy's Share of Total Imports from Canada & Mexico	11.3%	12.0%	20.1%	21.4%	21.7%

* Nuclear fuels, fuel oil, coal, liquefied natural gas, and other energy products.
Source: U.S. Department of Commerce, Bureau of the Census.

[12] *See* http://tonto.eia.doe.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbbl_a.htm

Figure 8



3. Trade Integration

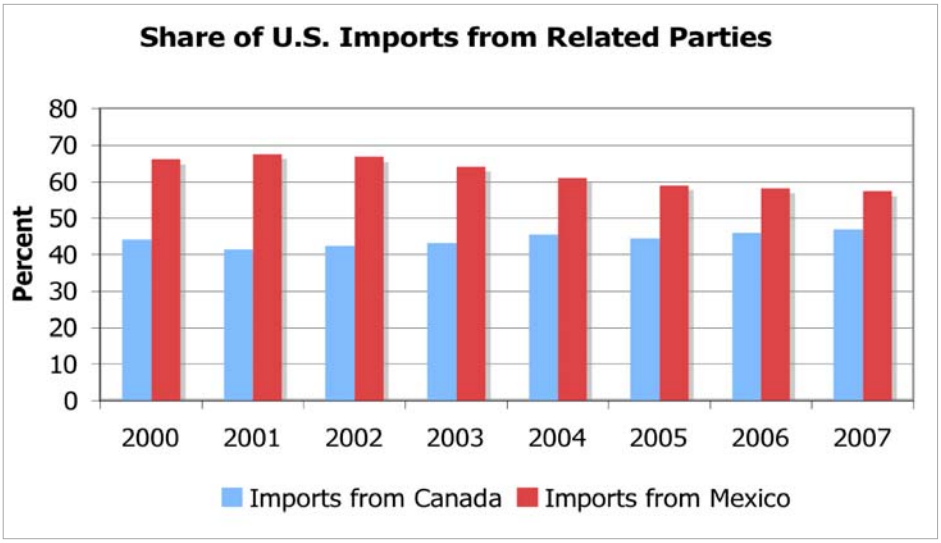
Most of what the United States trades with Canada and Mexico is raw materials, components, machinery and other inputs to manufacturing production and farming. As such, the economies of the three countries are intertwined, with parts and components crossing borders and finding their way into finished products in all three countries – finished products that are also traded across borders in addition to being sold domestically. It is fair to say that imports from Canada and Mexico contain much U.S. content. Motor vehicle parts made in the United States are shipped to Canada and Mexico where they are assembled into cars that are shipped back to the United States. U.S. wheat and corn are used in Canada and Mexico to make food products, many of which are shipped back to the United States.

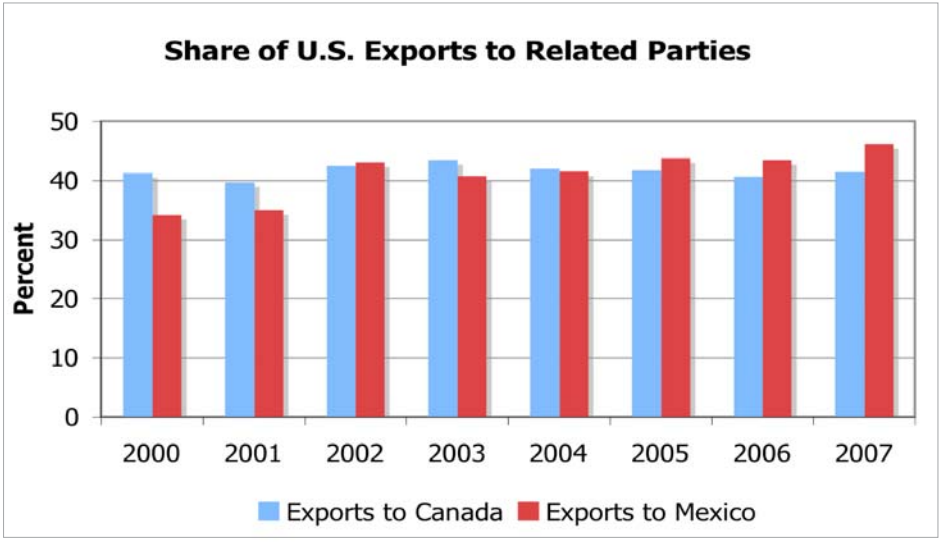
U.S. trade with its neighbors frequently occurs between companies related to U.S. companies. Over the last eight years,[13] about half of U.S. imports from Canada and Mexico came from companies located in Canada or Mexico that are related to U.S. companies. This compares to just 26 percent for imports from

[13] Data are not available for earlier years. See http://www.census.gov/foreign-trade/Press-Release/2007pr/aip/related_party/

China. An increasing share of U.S. imports from Canada comes from related suppliers. The export picture shows even more growth in this kind of integration: the share of total U.S. exports to Canada and Mexico, combined that goes from U.S. companies to related companies in Canada or Mexico has risen over the last eight years, and especially so with respect to U.S. exports to Mexico.

Figure 9





Source: Derived from U.S. Census Bureau data (data not available prior to 2000).

B. Services Trade

U.S. services trade with Canada and Mexico has also been growing fairly steadily over the last 14 years. Total services trade – exports and imports – has increased at an average annual rate of 6.7 percent, with growth in trade with Canada at 7.0 percent a year surpassing that with Mexico, at 6.0 percent a year.[14]

Table 8
U.S. Services Trade with Canada and Mexico, 1993-2007
(Billions)

	1993	1995	1997	1999	2001	2003	2005	2007
Total	**$44.8**	**$46.2**	**$55.5**	**$61.7**	**$68.0**	**$75.8**	**$90.0**	**$108.0**
Canada	26.7	29.3	34.6	39.2	42.0	47.2	55.3	68.4
Mexico	18.1	16.9	20.9	22.6	26.0	28.7	34.8	39.6
U.S. Exports	**27.9**	**26.8**	**31.5**	**35.6**	**39.7**	**43.9**	**53.3**	**67.1**
Canada	17.3	18.1	20.6	22.8	24.5	27.6	32.9	43.3
Mexico	10.5	8.8	10.9	12.97	15.2	16.3	20.4	23.8
U.S. Imports	**17.0**	**19.4**	**24.0**	**26.1**	**28.3**	**32.0**	**36.7**	**40.9**
Canada	9.4	11.2	14.0	16.4	17.5	19.6	22.3	25.2
Mexico	7.6	8.2	10.1	9.7	10.8	12.4	14.9	15.8

Source: Bureau of the Census.

[14] Services trade growth with Canada and Mexico is slower than services trade growth (either exports, imports or total – exports plus imports) with the world. This is probably because the U.S. and Canada have similar comparative advantages in services and both delayed any serious liberalization of trade in services until just recently.]

1. Services Exports

Most of this trade is travel-related – not surprising as Canada, Mexico and the United States are each are popular travel destinations for families in the three countries (travel to Canada or Mexico is considered a services import in the U.S. data), and many Canadians enjoy vacationing in the United States (Canadian travelers' spending in the United States is recorded as a U.S. services export). But also significant are intra-company services – also not surprising given the high degree of cross-border integration of U.S. companies with affiliates in Canada and Mexico – as well as business services and financial services. Transportation services related to moving goods across the borders are significant U.S. services exports as well. It is noteworthy that trade in a telecommunications services which was largely excluded from NAFTA, is relatively small.[15]

Table 9
Snapshot: U.S. Services Exports to Canada and Mexico, 2006
(Millions)

	Canada	Mexico	Total
Travel	$10,334	$7,146	$17,480
Passenger fares	3,095	2,119	5,214
Other transportation	3,189	1,403	4,592
Royalties and license fees	5,078	1,567	6,645
Education	772	354	1,126
Financial services	2,257	669	2,926
Insurance	1,918	232	2,150
Telecommunications	651	332	983
Business, professional and technical services	4,430	2,383	6,813
Intra-company services	6,584	2,187	8,771
Film and TV tape rentals	1,073	302	1,375
Other	-74	3,749	3,675
Total	**39,381**	**22,443**	**61,750**

Source: U.S. Department of Commerce, Bureau of Economic Analysis

[15] NAFTA excludes from coverage the provision, but not the use, of basic telecommunications services (e.g., telephone services). It improves U.S. access to public telecommunications transport services and enhanced or value-added services (e.g., e-mail, on-line information and data processing).

2. Services Imports

In addition to services related to tourism, key U.S. services imports from Canada and Mexico include transportation of goods across the borders, intra-company services, and business services. It is noteworthy that Canadian and Mexican transportation services are as high as they are given that U.S. transportation services barriers were not liberalized by NAFTA.[16]

Table 10
Current Snapshot: U.S. Services Imports from Canada and Mexico, 2006
(Millions)

	Canada	Mexico	Total
Travel	$7,319	$10,003	$17,322
Passenger fares	373	901	1,274
Other transportation	4,725	981	5,706
Royalties and license fees	860	215	1,075
Education	100	278	378
Financial services	435	190	625
Insurance	645	8	653
Telecommunications	372	573	945
Business, professional and technical services	3,304	369	3,673
Intra-company services	5,073	1,187	6,260
Other	336	52	388
Total	**23,542**	**14,757**	**38,299**

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

[16] Although NAFTA does require that the United States permit Mexican trucks to operate in the United States, the United States has yet to implement that requirement.

3. Services Trade Balance

Over the entire period, the United States has enjoyed a services trade surplus with Canada and Mexico. Trade in travel-related services is relatively balanced. However, trade in other services is heavily tilted toward the United States. The value of U.S. financial services exports (derived from U.S. financial services firms operating in Canada and Mexico) is nearly five times greater than U.S. imports. U.S. insurance exports to Canada and Mexico are more than triple imports. U.S. exports of business, professional and technical services are nearly double imports.

C. Investment

Investment flows to any market are influenced by a variety of factors, many of which have nothing at all to do with trade agreements. They include economic growth and/or stability, exchange rates, interest rates, in addition to relative wage rates. Also remember that Mexico made changes to its investment regime independent of NAFTA, changes that would have encouraged investment in Mexico from the United States and other trading partners even if NAFTA had never been implemented.

1. Canadian and Mexican Investment in the United States

Canadian and Mexican investment in the United States has increased five-fold over the last 14 years. That said, as a share of total foreign direct investment in the United States, the share of America's neighbors has remained fairly stable – between 9 and 10 percent – except for a significant decline from 2001-2003. The drop largely came from Canada, a reaction to the slump in the U.S. economy from 2000-2002 (with 2001 officially a recession year), as well as the bursting of the "high tech bubble" in 2001 (Canadian firms were active investors in that U.S. sector).

Table 11

Canadian and Mexican Foreign Direct Investment in the United States, 1994-2007* (Historic Cost Basis)

(Billions)

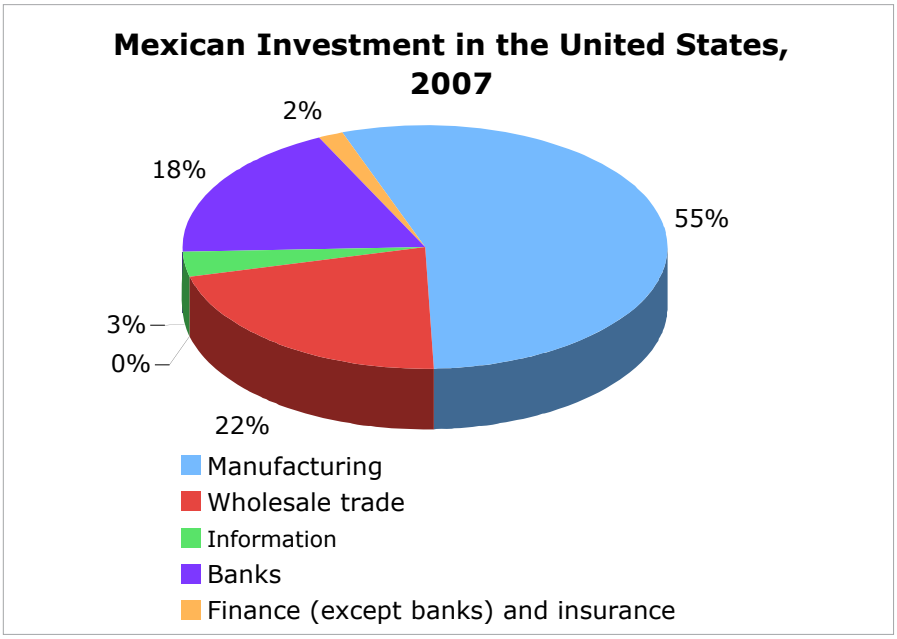
	Canada	Mexico	Total, Canada & Mexico	Total, All Countries	Canada & Mexico's Share of Total
1994	$41.2	$2.1	$43.3	$480.7	9.0%
1995	45.6	1.9	47.5	535.6	8.9
1996	54.8	1.6	56.4	598.0	9.4
1997	65.2	3.1	68.3	681.8	10.0
1998	72.7	2.1	74.8	778.4	9.6
1999	90.6	2.0	92.6	955.7	9.7
2000	114.3	7.5	121.8	1,256.9	9.7
2001	92.4	6.6	99.0	1,344.0	7.4
2002	92.5	7.8	100.3	1,327.2	7.6
2003	95.7	9.0	104.7	1,395.2	7.5
2004	125.3	7.6	132.9	1,520.3	8.7
2005	165.7	3.6	169.3	1,634.1	10.4
2006	175.2	5.3	180.5	1,843.9	9.8
2007	213.2	6.0	219.2	2,093.0	10.5

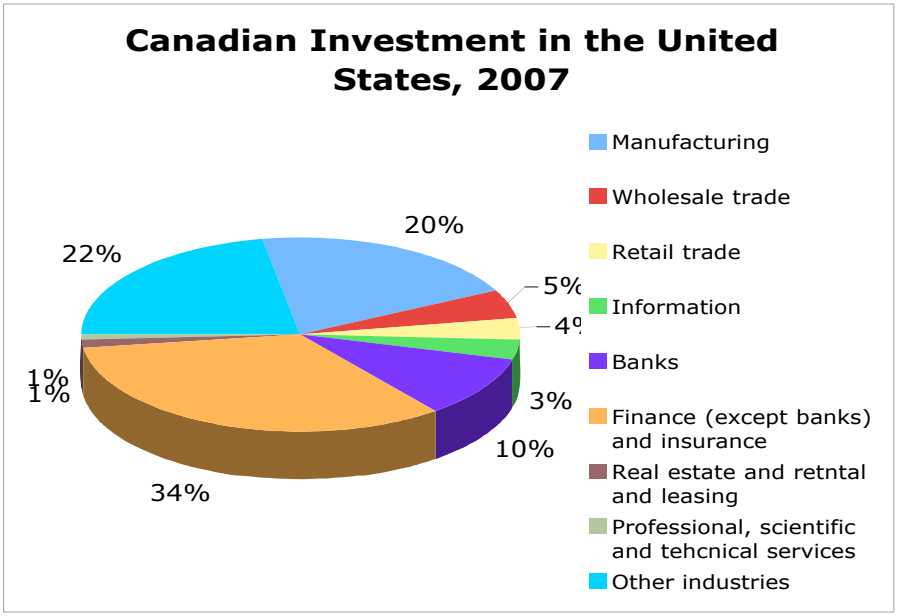
* Data for 1993 are not available.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Output at Canadian and Mexican companies in the United States has been increasing, employing more than 516,000 workers in 2006 (see Table 12). While employment at Canadian-owned facilities declined through 2004, it shot back up in 2005; meanwhile, employment has been increasing at Mexican-owned investments in the United States. Figure 10 shows that most Canadian investment consists of financial and insurance companies (excluding depository institutions); next in importance is manufacturing (primarily in the chemical sector, which alone accounts for more than one-third of total manufacturing direct investment in 2007). Mexican investment is predominantly in manufacturing (primary and fabricated metals investments account for 40 percent of Mexico's manufacturing total), followed by wholesaling operations.

Figure 10





Source: Marilyn Ibarra and Jennifer Koncz, "Direct Investment Positions for 2007: Country and Industry Detail," *Survey of Current Business*, July 2008, p. 35, http://www.bea.gov/scb/pdf/2008/07%20July/0708_dip.pdf.

Table 12

Canadian and Mexican Investment in the United States: Economic Activity of Majority-Owned U.S. Affiliates, 1999-2006

(Values in Billions $; Employment in Thousands)

	Total, Canada & Mexico			Canada			Mexico		
	Value Added	Jobs	Comp.	Value Added	Jobs	Comp.	Value Added	Jobs	Comp.
1999	$37.8	564.2	$28.5	36.4	534.7	$27.4	1.4	29.5	$1.1
2000	39.6	636.7	33.1	36.9	583.0	31.1	2.7	53.7	2.0
2001	34.4	546.2	30.0	31.7	499.2	27.9	2.7	47.0	2.1
2002	38.8	518.8	27.2	35.5	472.5	24.9	3.3	46.3	2.3
2003	38.5	444.0	26.5	35.5	396.0	24.2	3.0	48.0	2.3
2004	43.4	435.5	27.0	40.2	384.6	24.6	3.2	50.9	2.4
2005	52.9	523.9	31.4	48.1	466.5	28.6	4.8	57.4	2.8
2006	62.6	516.2	34.7	56.7	457.4	31.7	5.9	58.8	3.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis (these data are only available for the years shown).

2. U.S. Investment in Canada and Mexico

U.S. direct investment in Canada and Mexico has also been increasing over the last 15 years (four-fold); however, it represents a steadily declining share of total U.S. foreign direct investment abroad, from 15 percent in 1993 just before NAFTA went into effect, to 12.5 percent in 2007. One big reason is the greater interest in U.S. investors in China, after its entry into the World Trade Organization in 2001.

Table 13

U.S. Foreign Direct Investment in Canada and Mexico, 1993-2007

(Historic Cost Basis)

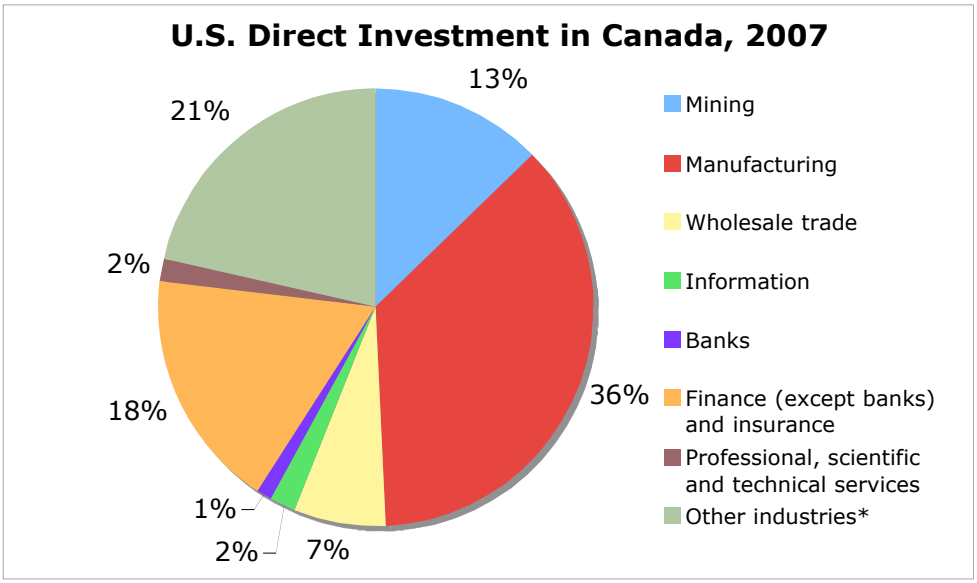
(Billions)

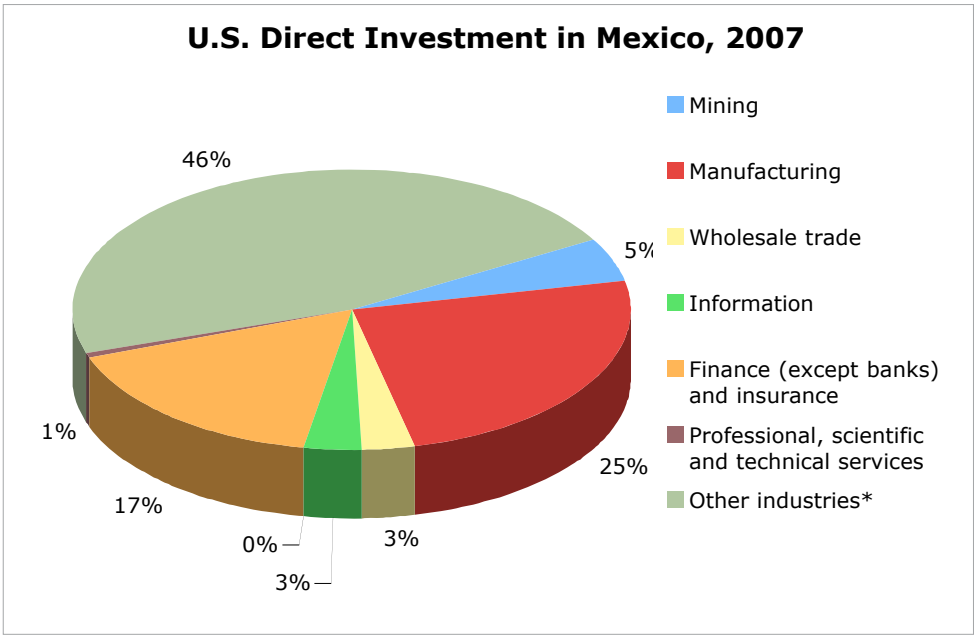
	Canada	Mexico	Total, Canada & Mexico	Total, All Countries	Canada & Mexico's Share of Total
1993	$69.2	$15.2	$84.4	$564.3	15.0%
1994	74.2	17.0	91.2	612.9	14.9
1995	83.5	16.9	100.4	699.0	14.4
1996	89.6	19.4	109.0	795.2	13.3
1997	96.6	24.1	120.7	871.3	13.9
1998	98.2	26.7	124.9	1,000.7	12.5
1999	119.6	37.2	156.8	1,216.0	12.9
2000	132.5	39.4	171.9	1,316.2	13.1
2001	152.6	52.5	205.1	1,460.4	14.0
2002	166.5	56.3	222.8	1,616.5	13.8
2003	188.0	56.9	244.9	1,769.6	13.8
2004	214.9	63.4	278.3	2,160.8	12.9
2005	231.8	73.7	305.5	2,241.7	13.6
2006	230.0	83.2	313.2	2,454.7	12.8
2007	257.1	91.7	348.8	2,791.3	12.5

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Most U.S. investment in Canada is in manufacturing industries – primarily transportation equipment (22 percent of total manufacturing investment) and chemicals (14 percent) in 2007. Finance (excluding depository institutions) and insurance, and mining are also significant sectors for U.S. investors in Canada. U.S. investment in Mexico is heavily concentrated in manufacturing: chemicals (23 percent of total manufacturing investment) and transportation equipment (22 percent) leading the way. Depository institutions (banks) are likely the largest component of the "other industries" category for U.S. direct investment in Mexico.

Figure 11





* Data for details of industries in this category are not available.
Source: Marilyn Ibarra and Jennifer Koncz, "Direct Investment Positions for 2007: Country and Industry Detail," *Survey of Current Business*, July 2008, p. 35, http://www.bea.gov/scb/pdf/2008/07%20July/0708_dip.pdf.

IV. IMPACTS OF TRADING RELATIONSHIP WITH CANADA AND MEXICO THE ON AMERICA

Much has been made of the impact trade liberalization generally, and NAFTA specifically, has on U.S. jobs. While it is true that increased imports have cost some American workers their jobs,[17] it is also true that increased exports *and* imports support jobs in the United States.[18] This section reports the results of our effort to quantify the number of U.S. jobs tied to trade – both exports and imports – with Canada and Mexico today (in 2007).

Our methodology is described in detail in the Appendix. Briefly, our estimates reflect direct and indirect jobs related to trade, and it take into account jobs linked to exports and imports of goods and services, as well as jobs lost to imports of goods and services. Our estimates also take into account the way in which different sectors of the economy interact with each other and with other countries.

A. Jobs Related to Trade with Canada and Mexico

Trade with Canada and Mexico supports millions of U.S. jobs. In 2007, more than 17 million U.S. workers owed their jobs to trade with Canada and Mexico – nearly one in ten. The jobs are spread across the economy, in manufacturing (a *net positive* number of nearly 924,000 jobs), agriculture and other natural resource sectors (over 52,000), and services sectors (most significantly retail and wholesale trade, transportation and warehousing, 3.2 million; business services and communications, 2.8 million; and travel-related services, 2.7 million).

[17] The number is relatively small. According to Bureau of Labor Statistics surveys, since 1996, less than 200,000 workers (191,871) lost their jobs in an extended mass layoff due to import competition. These job losses represents 1.5 percent of total mass layoffs over the period. (An extended mass layoff occurs when at least 50 initial claims are filed against an establishment during a consecutive five-week period and at least 50 workers have been separated from jobs for more than 30 days. The data are collected and published by the Bureau of Labor Statistics, http://www.bls.gov/mls/.) More workers lost their jobs to the relocation of work to another firm within the United States (118,207) than to a firm overseas (84,272). (Based on mass layoff data for 1996-2003; after 2003, the Bureau of Labor Statistics stopped asking if domestic or overseas relocations were the cause of the layoff.)

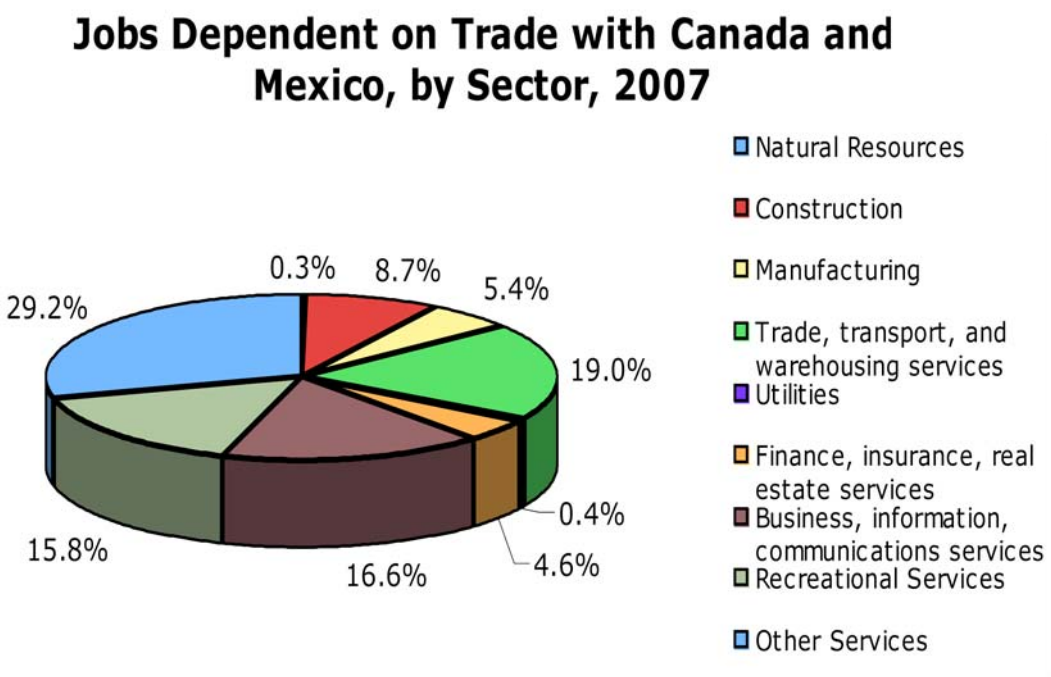
[18] *See* Laura M. Baughman and Joseph Francois, *Trade and American Jobs: The Impact of Trade on U.S. and State-Level Employment*, prepared for the Business Roundtable, February 2007. We found that nearly one in five U.S. jobs depend on exports and imports of goods and services.

Table 14
Estimated Net U.S. Jobs Related to Trade* with Canada and Mexico, 2007
(Thousands)

Total	**17,029.0**
Agriculture, forestry, fishing, mining	51.7
Construction	1,485.0
Manufacturing	922.5
Retail, wholesale trade; transport., warehousing services	3,234.3
Utilities	69.6
Finance, insurance, real estate services	784.7
Business, information, communication services	2,818.5
Hospitality and recreational services	2,694.2
Other services**	4,968.5
Share of Total U.S. Employment	**9.4%**

* "Trade" = exports plus imports of goods and services.
** Government, education and health care.
Source: Authors' estimates.

Figure 12



Jobs related to trade with Canada and Mexico are spread across the United States, in every state. Notably, each of the states in which debate about the benefits of trade has been most heated in recent months have large numbers of jobs dependent on trade with Canada and Mexico, including Ohio, 654,000 jobs; and Pennsylvania, 703,000 jobs.

Table 15
Net Number of American Jobs Linked to Trade with Canada and Mexico, by State, 2007
(Thousands)

Alabama	243.5	Montana	60.2
Alaska	42.5	Nebraska	116.0
Arizona	326.4	Nevada	159.9
Arkansas	147.9	New Hampshire	84.2
California	1,947.0	New Jersey	498.1
Colorado	305.5	New Mexico	106.0
Connecticut	216.2	New York	1,071.7
Delaware	53.2	North Carolina	509.6
District of Columbia	79.4	North Dakota	44.9
Florida	1,022.1	Ohio	654.2
Georgia	514.6	Oklahoma	196.7
Hawaii	85.6	Oregon	214.5
Idaho	85.4	Pennsylvania	703.4
Illinois	727.9	Rhode Island	61.0
Indiana	348.6	South Carolina	234.6
Iowa	187.8	South Dakota	52.3
Kansas	171.1	Tennessee	351.0
Kentucky	223.4	Texas	1,277.2
Louisiana	233.6	Utah	153.0
Maine	81.8	Vermont	42.3
Maryland	337.2	Virginia	470.6
Massachusetts	410.7	Washington	366.6
Michigan	520.7	West Virginia	87.2
Minnesota	338.6	Wisconsin	337.6
Mississippi	143.2	Wyoming	34.3
Missouri	348.2	TOTAL	17,029.0

Source: Authors' estimates.

B. Jobs Related to NAFTA

Much has been made of the impact of NAFTA on U.S. jobs. Some point to claims filed under the Trade Adjustment Assistance program, which permits workers who claim they have lost their jobs to competition from imports under NAFTA to receive temporary income benefits and retraining support. Others attempt to calculate the number of jobs lost to trade with Canada and Mexico by applying a multiplier of jobs linked to exports to the trade deficit with Canada and Mexico to charge that NAFTA has been a net job loser for the United States. Both methods are inappropriate measures of the impact of NAFTA on U.S. jobs.[19]

We use an approach that captures the up- and downstream jobs related to trade under NAFTA. It is the same approach we used above, and it reflects the trade liberalization afforded by NAFTA in 2007 (i.e., the difference between U.S., Canadian and Mexican tariffs and non-tariff barriers between the three countries (now zero or close to zero) compared to those same barriers applied to imports from other countries. Our methodology is described in more detail in Appendix A.

This more thorough analysis of the net number of U.S. jobs owed to NAFTA in 2007 finds that 3.8 million U.S. workers owe their jobs to the Agreement. In other words, if NAFTA were "canceled," 3.8 million people would need to find other jobs. As with trade with Canada and Mexico generally, these jobs are spread across the U.S. economy, in every sector, including agriculture (30,000), manufacturing (218,000) and the range of services sectors, from trade, transportation and warehousing (nearly 710,000) to business services (622,000), and travel-related services sectors (nearly 600,000).

It will be noted that far more jobs are tied to trade with Canada and Mexico generally than are tied to trade under NAFTA. NAFTA-related jobs account for just 22 percent of total U.S. jobs related to trade with Canada and Mexico. This is not surprising given that today barriers to trade in goods and services between the United States and all countries are relatively low thanks to multilateral trade liberalization that affects Canada and Mexico as well as other countries.

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[19] TAA counts reflect job losses due to imports. They do not reflect job gains from exports, or jobs positively associated with imports. Other researchers multiply the value of the trade balance (deficit) with Canada and Mexico by a factor that purports to show the number of U.S. jobs tied to exports to calculate the (negative) impact of that exports to and imports from Canada and Mexico. But this methodology wrongly assumes that any product that is imported can be produced in the United States at the same price and quality as the product that is imported or, if the price needs to be higher, it assumes (wrongly) that U.S. consumers will continue to buy as much of the U.S.-made good as they bought of the lower-priced imported good.

The extra benefit afforded by NAFTA is no longer as great relative to barriers to trade with other countries than it was 15 years ago. That said, it remains important, providing higher-income employment to nearly 4 million workers.

Table 16
Net Number of U.S. Jobs Related to NAFTA, 2007
(Thousands)

Total	**3,801.0**
Agriculture, forestry, fishing, mining	30.5
Construction	327.9
Manufacturing	218.2
Retail, wholesale trade; transport., warehousing services	709.6
Utilities	16.8
Finance, insurance, real estate services	176.9
Business, information, communication services	622.4
Hospitality and recreational services	598.5
Other services*	1,100.2
Share of Total U.S. Employment	**2.1%**

* Government, education and health care.

Source: Authors' estimates.

Contrary to claims of NAFTA critics, our comprehensive assessment of the impact on jobs by state reveals that every U.S. state today has a net positive number of jobs dependent on NAFTA, including Ohio and Pennsylvania.

Table 17

Net Number of U.S. Jobs Linked to NAFTA, by State, 2007

(Thousands)

Alabama	54.5	Montana	13.7
Alaska	9.6	Nebraska	26.2
Arizona	72.5	Nevada	35.6
Arkansas	34.0	New Hampshire	18.9
California	435.9	New Jersey	111.4
Colorado	68.4	New Mexico	23.8
Connecticut	47.6	New York	238.3
Delaware	11.9	North Carolina	114.5
District of Columbia	17.7	North Dakota	10.2
Florida	228.6	Ohio	143.1
Georgia	116.4	Oklahoma	44.2
Hawaii	19.1	Oregon	49.0
Idaho	19.5	Pennsylvania	158.8
Illinois	162.5	Rhode Island	13.6
Indiana	74.5	South Carolina	52.9
Iowa	42.8	South Dakota	11.8
Kansas	37.9	Tennessee	77.5
Kentucky	48.9	Texas	286.8
Louisiana	52.4	Utah	34.1
Maine	18.8	Vermont	9.5
Maryland	75.2	Virginia	105.2
Massachusetts	91.6	Washington	81.4
Michigan	108.4	West Virginia	19.9
Minnesota	76.7	Wisconsin	77.4
Mississippi	32.3	Wyoming	7.8
Missouri	77.6	TOTAL	3,801.0

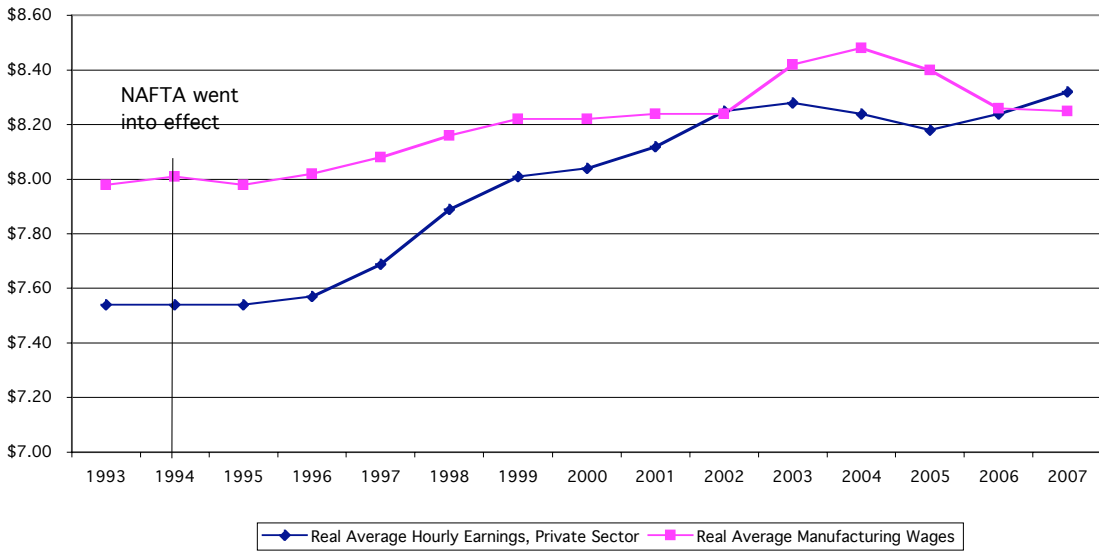
Source: Authors' estimates.

C. Income Effects of Trade with Canada and Mexico

Every U.S. family benefits from trade with Canada and Mexico. Without trade with Canada and Mexico, U.S. national income would be $221 billion lower than it was in 2007. This means that trade with Canada and Mexico generates income, every year, equal to $1,931 per household – more than the value of the economic stimulus checks recently sent to most households.

Trade liberalization and NAFTA in particular have been blamed for putting downward pressure on U.S. wages, particularly in the manufacturing sector. But Figure 13 shows that hourly wages adjusted for inflation have been generally *increasing* since NAFTA went into effect, even for manufacturing workers.

Figure 13
Real Hourly Earnings of U.S. Workers, 1993-2007
(in 1982 Dollars)



Source: Bureau of Labor Statistics.

Our analysis confirms that trade with Canada and Mexico has had a positive impact on U.S. wages. Our analysis shows that trade with Canada and Mexico boosts wage income of U.S. workers by 1.7 percent; NAFTA boosts wage income by 0.4 percent. Because of trade with Canada and Mexico, U.S. some workers are employed in higher-wage, higher-skilled sectors of the economy than they otherwise would be. In addition, workers are more productive than they otherwise would be, and contrary to claims by trade critics, they earn more as a consequence.

V. CONCLUSION

The trade and investment relationship between the United States and Canada and Mexico has been growing and deepening for decades. Trade liberalization – unilateral and multilateral – contributed to that growth. Bilateral trade liberalization through NAFTA added another boost. Mexican tariffs were nearly five times higher than U.S. tariffs; Canadian tariffs were double U.S. tariffs before CFTA. Today, tariffs are zero. In short, the playing field among the three neighbors has been leveled steadily over time. While it is not yet completely level (some non-tariff barriers to trade remain), it is more uniform among the three economies than it is with other U.S. trading partners.

The resulting growth in trade and investment has benefited all three countries, and the United States in particular. The three countries are committed to resolving thorny bilateral trade disputes by working cooperatively, rather than acting unilaterally. Integration between production of both goods and services has grown, making industries in the three countries more competitive internationally. U.S. workers owe their jobs and higher wages to the resulting trade. In short, a more level playing field with Canada and Mexico has been a net plus for the United States.

APPENDIX A

Methodologies

Different options are available to estimate trade linkages to employment and output. One involves manipulation of input-output tables to map the linkages between exports and/or imports to labor demand and total output across sectors. Such an approach presents several problems, however. The first is that the shares in the base data basically fix the structure of production and demand. In addition, there may be double counting, as the net effect of exports and imports is not the simple sum of export effects and import effects. In addition, such an approach may also overestimate effects unless the impact of substitution toward trade with the rest of the world is also included.

To accommodate these issues, we applied a computable multi-sector model of the U.S. economy. Computable general equilibrium (CGE) models are characterized by an input-output structure (based on regional and national input-output and employment tables) that 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-sectoral 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 modeling firms' use of factors and intermediate inputs. 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.

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). For our Mexico-Canada and NAFTA experiments, 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, 2002). The GTAP version 7 dataset is benchmarked to 2004 and includes detailed national input-output, trade, and final demand structures. Using macro and related trade and employment data, we have updated the dataset to 2007.

The basic social accounting and trade data are supplemented with trade policy data, including additional data on tariffs and non-tariff barriers. The data are supplemented with data from the U.S. Department of Labor on state-level employment and from the U.S. Bureau of Economic Analysis on state level output. These data allow us to map nationwide effects to state-level changes in employment and output.

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.)

Table A-1: Model Sectors

Primary Agriculture	Motor vehicles and parts
Forestry and Fishing	Transport equipment nec
Mining	Electronic equipment
Processed Foods	Machinery and equipment nec
Beverages and tobacco products	Manufactures nec
Textiles	Electricity
Wearing apparel	Construction
Leather products	Trade
Wood products	Transport and Warehousing
Paper products, publishing	Communication
Petroleum, coal products	Financial services nec
Chemical, rubber, plastic prods	Insurance
Mineral products nec	Business services nec
Metals	Recreation and other services
Fabricated Metal products	PubAdmin/Defense/Health/Educat

The Model

We used the same basic model structure for both the assessment of impact of all Canada-Mexico trade on the United States, and the impact of NAFTA on the United States. The only critical difference is the counterfactural: the cessation of all trade between the three trading partners, or raising U.S.-Canadian-Mexican tariffs to current MFN rates and reimposing non-tariff barriers in motor vehicles and in services.

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 outputs 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.[20] 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.

Experiments

Total Trade with Canada and Mexico

The experiments conducted with the model involve imposing changes in U.S. trade, in this instance effectively eliminating U.S. exports and imports by imposing prohibitively high duties or other costs against trade with the United States across the board with both countries. This allows us to trace changes at the border as they work through the U.S. economy.

Our results tell us how much U.S. and state output and employment would decline were the United States to cease exporting and importing goods and services from Canada and Mexico. These results thus also measure the reverse scenario: how much does current levels of trade in goods and services with Canada and Mexico contribute to U.S. and state output and employment. We report the results from this second perspective in this paper.

NAFTA

The estimates of the impact of NAFTA involve replacing the current tariff-free trade with MFN tariffs for NAFTA trade, re-imposing nontariff barriers that have been reduced in the motor vehicle sector, and increasing costs for trade in services. These are summarized in the Table A-2.

The MFN tariffs represent the protection that would be imposed by Canada, Mexico, and the United States against each other under WTO commitments if the NAFTA were eliminated. The services costs represent trade cost savings unique to intra-NAFTA trade, and are based on recent econometric estimates (Francois 2008) of apparent trade cost reductions in regional agreements. This is based on a bilateral gravity model of services trade and recent (2004-2006) trade volumes.

[20] 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.

The motor vehicle trade costs are also based on gravity modeling, and quantify the extent to which NAFTA has reduced trade costs, apart from tariffs, for trade in the motor vehicle sector in North America.

Table A-2

Trade Costs Related to NAFTA

MFN protection, %	USA	Mexico	Canada
Primary agriculture	3.0	13.0	0.9
Forestry, fisheries	0.3	11.5	0.2
Mining	0.4	3.6	0.0
Processed foods	7.7	33.8	34.1
Beverages, Tobacco	4.7	43.4	6.0
Textiles	9.8	16.4	9.9
Apparel	13.2	34.5	16.8
Leather	9.0	23.9	8.9
Wood	0.3	17.2	4.2
Paper	0.0	13.1	0.1
Petroleum, Coal products	1.9	10.6	0.3
Chemicals, rubber, plastics	2.1	12.6	2.7
Non-metallic minerals	3.1	16.0	2.0
Primary Metals	0.7	11.5	0.2
Fabricated Metals	3.1	16.7	3.6
Motor Vehicles	2.4	18.5	5.5
Other Transport	0.9	20.9	7.9
Electrical Machinery	0.4	4.5	0.3
Other Machinery	1.5	13.1	1.4
Other Manufactures	2.3	21.4	2.5
Services trade cost reductions in NAFTA			
Transport and warehousing	6.7	27.9	20.6
Other services	3.9	16.9	12.3
Estimated NTB cost reductions			
NTB savings in motor vehicles	22.4	22.4	22.4

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