INSTITUTE FOR INTERNATIONAL ECONOMICS

NAFTA REVISITED

ACHIEVEMENTS AND CHALLENGES

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1

Overview

In June 1990, Mexican President Carlos Salinas de Gortari and US President George H. W. Bush announced a daring initiative: the creation of a free trade area between the United States and Mexico. When formal negotiations began one year later, Canada—spurred on by fears that its benefits from the 1989 Canada-US Free Trade Agreement (CUSFTA) might be diluted—joined the project. Negotiations on the North American Free Trade Agreement (NAFTA) proceeded to create one of the world's largest free trade blocs.[1] Upon entering into force in January 1994, NAFTA represented a $6 trillion economy with a population of 360 million. Ten years later, the NAFTA area grew to a $12.5 trillion economy with a population of 430 million.

Of course North American economic integration was well under way long before NAFTA—building on the 1965 Canada–United States Automotive Agreement (commonly known as the 1965 Auto Pact), initiation of the Mexican *maquiladora* program of 1965,[2] Mexican economic reforms from the mid-1980s, accession to the General Agreement on Tariffs and Trade (GATT) in 1986, and the CUSFTA in 1989. For many decades before 1990, the United States accounted for the predominant share of trade and

1. The European Union has more members, a larger population, and somewhat larger GDP than NAFTA. By contrast with NAFTA, the European Union is a customs union with a common external tariff and substantial supranational institutions.

2. The Mexican maquiladora program (initially termed the Border Industrialization Program) was developed to create assembly jobs in border communities when the United States terminated its *bracero* program in 1964 (see chapter 2 on labor).

foreign direct investment (FDI) in both Canada and Mexico.[3] Moreover, during the three years from announcement to completion of the negotiations, US trade with Mexico and Canada grew almost twice as fast as merchandise trade with other countries. North American economic integration would have continued to deepen—even *without* NAFTA—in response to new technology and competitive pressures in the world economy. But progress would likely have been slower.

Overall, the three economies of North America have grown significantly during the first decade of NAFTA. Average annual real GDP growth over 1994–2003 was 3.6 percent for Canada, 3.3 percent for the United States, and 2.7 percent for Mexico (despite the sharp recession in 1995). While all three countries grew faster than the OECD average during this period, Mexico's progress was insufficient to address its long-run development challenges and well below its estimated potential growth rate.[4]

Since NAFTA, intraregional merchandise trade has doubled; US FDI in Canada and Mexico increased even faster. How much NAFTA has contributed to growth and efficiency is a tough analytical question that challenges scholars. It is important to emphasize, however, that NAFTA obligations are only part of the story. The trade and investment pact is only one component of the rich complex of economic relations among the three countries. Macroeconomic events—the Mexican peso crisis of 1994–95, the US high-tech boom of the 1990s, and Canadian budget and monetary discipline—clearly shaped the depth and pace of economic integration. The effects of the agreement are difficult to disentangle from these and other events in the North American and global economies.

For the United States, NAFTA was an economic opportunity to capitalize on a growing export market to the south and a political opportunity to repair the sometimes troubled relationship with Mexico. At the same time, NAFTA was seen as a way to support the growth of political pluralism and deepening of democratic processes in Mexico and as part of the long-term response to chronic migration pressures.

In addition, US officials hoped the regional talks would spur progress on the slow-paced Uruguay Round of multilateral trade negotiations, while providing a fallback in the event that those talks faltered. NAFTA reforms promised to open new doors for US exporters—who faced Mexican industrial tariffs five times greater on average than US tariffs—to a growing market of almost 100 million people. US officials also recognized that *imports* from Mexico likely would include higher US content than competing imports from Asia, providing an additional benefit. Increased Mexican sales in the US market would in turn spur increased Mexican purchases from US firms.

For Mexico, NAFTA represented a way to lock in the reforms of the *apertura*, or "market opening," that President Miguel de la Madrid inaugurated in the mid-1980s to transform Mexico's formerly statist economy in the wake of the devastating debt crisis of the 1980s. Mexico needed more rapid growth to provide new opportunities for its young, expanding population. Given the legacy of the debt crisis of 1982, low domestic savings, and an increasingly overvalued peso, the most practical way to propel growth was to import goods and capital, creating more competition in the Mexican market.

An FTA with the United States was crucial to maintain secure access to Mexico's largest market and to blunt efforts to roll back Mexican reforms.[5] NAFTA obligations sharply raised the political cost of reversing economic reforms and made it easier to deflect protectionist demands of industrial and special interest groups. The trade pact thus was an integral part of the plan to create a more stable policy environment so that Mexico could attract greater FDI inflows—with its embedded technology and management skills—to build and finance growth.

For Canada, the latecomer to the NAFTA table, the objectives were less ambitious. Initially, Canadian officials suspected that a new agreement with Mexico would erode the hard-fought gains of the CUSFTA, which had come into force only in 1989. Canadian unions felt that Mexico's low wages would undercut Canada's competitive advantage in the US market, possibly diverting US FDI away from Canada. Trade between Canada and Mexico was small, the prospective deal seemed unlikely to redress CUSFTA shortcomings on trade remedies, and Canadians were less worried about migration flows than their US counterparts.[6] However, as it became clear in September 1990 that the United States and Mexico were going to move ahead with or without Canada, the Canadian government decided that it had more to gain by joining the negotiations than by stay-

3. In 1990, US trade (exports and imports) with Canada and Mexico totaled $170 billion and $57 billion, respectively; Canada-Mexico trade ran about $2.5 billion. US and Canadian companies invested heavily in each other's economy (combined FDI of about $95 billion), and US firms accounted for $10 billion in FDI in Mexico.

4. The OECD (2004d) estimates that Mexico's annual potential growth rate could be raised to 6 percent with structural and regulatory reforms. It argues that unless Mexico implements structural reforms to improve education and infrastructure and increase competition in the business sector, the Mexican economy will lag behind its 6 percent potential. See "Tequila Slammer—The Peso Crisis, Ten Years On," *The Economist*, January 1, 2005.

5. President Carlos Salinas de Gortari used NAFTA ratification as political cover to reform the use of *ejido* lands (communal agricultural property). The Mexican Congress permitted the sale and consolidation of ejido lands when it ratified NAFTA, an important step toward the creation of economically viable agricultural units.

6. At first, Industry Minister John Crosbie vehemently denied any rumors of CUSFTA expansion: "It doesn't matter to us how many powerful US senators are for free trade with Mexico. . . . There is an absolute zero pounds per square inch of pressure on the Mexico question." Quoted in "Canada Is Free to Turn Down Mexico Deal, Crosbie Says," *The Toronto Star*, June 27, 1989, B2.

ing on the sideline.[7] Involvement allowed the government to minimize the risks to Canada of US-Mexico free trade and offered an opportunity to extract new commercial concessions from the United States.

At the time of its ratification, NAFTA was hailed by some and derided by others. Even after more than a decade of hindsight and data, the political debate over NAFTA remains confused and divisive. Much of what was promised from NAFTA could never be achieved solely through a free trade deal; much of what has occurred since NAFTA was ratified cannot be attributed to policy changes that the trade pact mandated.

Critics continue to berate the NAFTA partners for missed opportunities and misplaced priorities; some continue to recite misguided analysis put forward a decade ago during the NAFTA ratification debate. Before the pact was even concluded, NAFTA served as a lightning rod for attacks by labor and environmental groups against trade liberalization. NAFTA critics charged that the pact would encourage footloose plants to leave the United States and Canada, that low-wage Mexican jobs would displace US workers, and that the threat of relocation would suppress wage demands. While one would expect such effects to some degree, the critics grossly exaggerated their magnitude. Ross Perot's infamous "sucking sound" claims proved totally unfounded. Yet legendary tales still resonate in public debate.

However, NAFTA critics also cite an array of concerns that are harder to dismiss: continued high levels of illegal immigration, slow progress on environmental problems, growing income disparities (particularly within Mexico), weak growth in real wages, and trafficking of illegal drugs. Some of these problems are correlates of economic integration and higher incomes, though NAFTA is only a small part of the story. Nonetheless, these issues are often cited as evidence of a "failed NAFTA."

To their credit, the NAFTA critics have shone a spotlight on important problems, but most of them fail to offer constructive remedies. To redress decades of environmental abuse or labor and migration problems—not to mention the scourge of drugs and related crime—will require major initiatives well beyond the scope of a trade pact. NAFTA was never designed to address all the ills of society—though some political leaders during the ratification debate made inflated promises about trade's medicinal powers.

This book assesses NAFTA's first decade and speculates on prospects for deeper economic integration. Individual chapters provide detailed analysis of what has happened in three important sectors of the North American economy, which together account for nearly a third of intraregional trade (autos, agriculture, and energy); the varied implementation of key components of the trade accord (dispute settlement, labor, and environmental provisions); and US-Mexico migration. The concluding chapter offers recommendations for reforms by the NAFTA countries that could enhance the benefits of their partnership.

This chapter starts with a historical context for NAFTA, including why it arose, how it was received, and how contemporary events have affected North America since the pact came into force. From this perspective, we assess how well the NAFTA partners have achieved the goals set out in the agreement itself—as opposed to passing judgment on political leaders' promises voiced during the overheated ratification debate. We consider NAFTA's effect on trade, investment, and employment, as well as the operation of NAFTA's dispute settlement provisions, and its side accords on labor and the environment.

Against the modest benchmarks set out in the agreement, NAFTA has been a success: The North American economy is more integrated and more efficient today than it would have been without NAFTA. Our assessment is critical in some dimensions: We find that important NAFTA institutions lacked adequate mandates and funding; consequently, they fell short of aspirations. However, we believe NAFTA's failures are best addressed by building on its successes. Looking to the future, we highlight areas where North American partners can make progress on new challenges.

NAFTA in Historical Context

Trade agreements do not operate in a vacuum. How well the partners take advantage of the opportunities the pacts create depends importantly on overall macroeconomic policy and political stability in the region. In this regard, the three partners navigated rough shoals in the inaugural decade of NAFTA. Mexico's financial problems in NAFTA's early years provided an acid test for the regional alliance. The security demands of the post–September 11 era may pose greater challenges over the long haul. To understand how regional trade and investment have adapted to events, we first examine the economic and political forces that have shaped North American economic integration since NAFTA's entry into force in January 1994.

The Making and Selling of NAFTA

Like all trade agreements, NAFTA is the outgrowth of complex negotiations both within and between nations. The negotiation of the NAFTA text took 14 months of haggling, with side agreements added later; the result is a far cry from an ivory tower FTA. More than 100 pages of restrictive rules of origin, especially in the textile, apparel, and automotive indus-

7. See "Canada Joins Trade Talks, Crosbie Foresees Deal with US, Mexico by End of 1991," *The Globe and Mail*, September 25, 1990, B1.

tries, are both trade-distorting and protectionist.[8] Mexico retained its monopoly for the state oil company, Petróleos Mexicanos (Pemex), a symbol of national sovereignty and the cash cow of Mexican public finance.[9] Free trade in agriculture between the United States and Mexico was delayed up to 15 years for the most import-sensitive products; the United States and Canada continued to exclude important farm products from free trade obligations. Other departures from the free trade ideal could be listed (for examples, see Hufbauer and Schott 1993).

Supporters of free trade minimized their criticisms of NAFTA's protectionist features, seeing them as the price of getting an agreement at all. Moreover, in the United States, free trade opponents—an ideologically diverse array including H. Ross Perot, Patrick Buchanan, and the AFL-CIO—likewise focused on the big picture. They were dead set against the agreement and succeeded in making NAFTA a leading issue in the 1992 US presidential campaign.

President George H. W. Bush was NAFTA's strongest supporter in the election, but the most virulent attacks on NAFTA came not from his Democratic rival, Bill Clinton, but from primary challenger Patrick Buchanan (and his political ally, if ideological opposite, Ralph Nader) and then from third-party candidate Ross Perot. These men charged that NAFTA would cause a "giant sucking sound" of US capital and jobs fleeing to Mexico, while also endangering the sovereignty of the United States. Environmental groups charged that Mexico would become the pollution haven of North America, attracting firms that wanted to evade higher US and Canadian standards. Bush defended NAFTA as a tool for job creation and said it was the greenest trade agreement ever (Hufbauer and Schott 1993). The "greenest" claim was true, but since environmental concerns were not previously incorporated in trade agreements, the standard was not demanding.

NAFTA presented a challenge and an opportunity for the Democratic presidential candidate, "New Democrat" Bill Clinton. Generally supportive of NAFTA, Clinton criticized Bush on the details: "If I had negotiated that treaty, it would have been better."[10] Clinton argued that NAFTA needed to be improved by adding side agreements on workers' rights, environmental protection, and import surges. His nuanced position was

8. FTAs generally include rules of origin to prevent "trade deflection"—imports from non-FTA countries into the FTA member with the lowest most-favored nation (MFN) tariff for transshipment to other FTA members. However, the NAFTA rules of origin go far beyond the measures necessary to prevent trade deflection.

9. The Mexican Constitution bars all foreign companies from petroleum exploration and distribution. Mexican politicians see Pemex as a symbol of national patrimony and as the source of about 30 percent of government revenues. As a result, however, Pemex has been drained of funds needed for infrastructure and technology investments.

10. See "Mexico's President Hedges on Trade Pact Deals," *Washington Post*, October 10, 1992, C1.

successful in uniting the Democratic party under a banner of "fair trade" during the election.

Once elected, President Clinton persuaded Mexican President Carlos Salinas and Canadian Prime Minister Brian Mulroney to negotiate his proposed side agreements in order to secure NAFTA ratification in the US Congress. The resulting agreements, the North American Agreement on Environmental Cooperation (NAAEC) and the North American Agreement on Labor Cooperation (NAALC), were largely consultative mechanisms. Each created a supranational commission with limited means of enforcement to ensure that countries abide by their own laws.[11] The third side agreement on safeguards was nothing more than a clarification of the NAFTA text itself.

Although the side agreements won few converts from the anti-NAFTA side,[12] they did provide President Clinton with the political cover necessary to steer NAFTA through Congress (Destler 1995). To further smooth relations with his own party, Clinton attached a $90 million transitional adjustment assistance program to the NAFTA legislation (NAFTA-TAA).[13] NAFTA-TAA provided limited training and income support for workers displaced by trade or investment with Canada or Mexico, though the qualifying criteria glossed over the actual link between lost jobs and NAFTA (see chapter 2 on labor). To sweeten the NAFTA deal for the 14-member House Hispanic caucus, and particularly Representative Esteban Torres (D-CA), whose support turned on the issue, the United States and Mexico established a North American Development Bank (NADBank) to finance infrastructure projects (primarily wastewater treatment plants) on both sides of the border.[14] However, NADBank financing rates were so high, and qualification conditions so onerous, that in five years (by 1999) the bank had committed to only five loans. More recently, activity has increased, and as of March 2004, the bank had approved 76 projects with a total authorized financing of $642 million, $186 million of which had actually been disbursed.[15]

11. The NAALC and NAAEC are analyzed in greater detail in chapters 2 and 3 on labor and environment, respectively.

12. A few environmental groups, such as the National Wildlife Federation, were among the converts. Subsequently, the meager impact of the NAAEC disillusioned them.

13. See "Clinton Turns Up Volume on NAFTA Sales Pitch," *Congressional Quarterly Weekly Report*, October 23, 1993, 2863.

14. The United States and Mexico both authorized $225 million in paid-in capital and callable capital of $1.5 billion each to capitalize NADBank. As of March 2004, NADBank had received $349 million in paid-in capital and $2 billion in callable capital; see www.nadbank.org/english/general/general_frame.htm (accessed on April 22, 2005) and NADBank/BECC (2004).

15. The total authorized financing for the 52 approved projects in the United States is $340 million. The 24 approved projects in Mexico have total authorized financing of $302 million (NADBank/BECC 2004). For more information, see chapter 3 on environment.

Beyond these embellishments, Clinton's primary strategy for gaining NAFTA's passage could be summed up in three words: "jobs, jobs, jobs." Although most economists agree that employment levels are determined by macroeconomic policy in the short run, and labor skills coupled with workforce flexibility in the long run, both sides of the NAFTA debate put job gains or losses at the center of their talking points.[16] Clinton was not the first to push this argument; Robert Zoellick, counselor at the State Department in the George H. W. Bush administration, suggested that the "bottom line" of NAFTA was the creation of 44,000 to 150,000 jobs over four years (Zoellick 1991). While this number sounds large, it was tiny compared with US employment at the time, some 110 million. Mickey Kantor, President Clinton's first US Trade Representative (USTR), raised the estimate slightly to 200,000 in only two years.[17] Our own estimate was about 170,000 over several years—which we considered statistically insignificant (Hufbauer and Schott 1993, table 2.1). Not to be outdone, NAFTA opponents Ross Perot and Pat Choate projected job losses of up to 5.9 million.[18]

The jobs argument did little to convert anyone, though it may have hardened political positions. Clinton's Democratic administration was forced to rely on Republican support to ratify NAFTA. On November 17, 1993, the House of Representatives voted to pass NAFTA by a vote of 234 to 200; 132 Republicans and 102 Democrats supported the measure, while 143 Democrats and 56 Republicans plus the lone independent opposed it. Three days later, NAFTA passed the Senate by 61 to 38, with 34 Republicans and 27 Democrats voting in favor, and 10 Republicans and 28 Democrats against.

On January 1, 1994, NAFTA came into force. On the same day, Zapatista rebels in the southern Mexican state of Chiapas launched their uprising. Within a year, Mexico would be in financial crisis, and Clinton would ask Congress to bail out its new free trade partner.

The Peso Crisis of 1994–95

The peso crisis of late 1994–95, less than a year after NAFTA came into force, dramatically shaped the perceptions of the pact. To opponents, the temporal connection between NAFTA ratification and Mexico's economic collapse was too powerful to be mere coincidence. To supporters, the peso crisis was rooted in macroeconomic policy mistakes, far removed from the trade and investment bargain struck within NAFTA.

January 1994 marked both the start of the first year of NAFTA and the final year of the *sexenio* of the Salinas administration. Salinas anticipated a triumphal exit from Los Pinos and, with American support, an international perch as the director-general of the new World Trade Organization (WTO).

Salinas did several things—with varying degrees of disclosure—as he prepared for a glorious departure. Most publicly, in keeping with the tradition of the Partido Revolucionario Institucional (PRI) whereby each president selected his successor, Salinas anointed Luis Donaldo Colosio, his social development secretary, as the PRI candidate for president. Less obviously, but also consistent with PRI tradition, Salinas launched an off-the-books election-year spending splurge. To help finance Mexico's growing current account deficit—which reached almost 7 percent of GDP in 1994—Salinas authorized the Mexican Treasury to issue *tesobonos*, debt instruments with a new flavor. Tesobonos were short-term bills denominated in pesos but with a currency adjustment clause that effectively insured repayment in dollars. This feature attracted foreign investors, who were not inclined to buy high-yielding *cetes*, Mexican Treasury bills denominated solely in pesos.

In public pronouncements, Salinas asserted he would defend the dollar band—then about 3.3 pesos to the dollar.[19] Alongside these financial maneuvers, Salinas tolerated lax private banking practices, some of which bordered on the corrupt (La Porta, López-de-Silanes, and Zamarripa 2002). Mismatched banking assets and liabilities (currency and maturity) and "connected lending" were the order of the day.[20] Finally, and most secretively—but again in PRI tradition—some members of the Salinas family collected illicit payoffs, especially from the privatization of public corporations. While there is no hard evidence that President Salinas himself took kickbacks, his brother Raul Salinas collected bribes amounting to tens of millions of dollars. All these actions were to haunt Mexico, and President Salinas personally.

The first disquieting notes had relatively little to do with the end-of-term machinations of the Salinas presidency. First came the Zapatista rebellion, on January 1, 1994, in the southern state of Chiapas. Grievances in Chiapas had practically no link to NAFTA, but the symbolic date chosen for the rebellion deliberately coincided with the pact's entry into force.

16. As then–Deputy Assistant Secretary of the Treasury for Economic Policy J. Bradford DeLong laments, political expediency usually trumps economics: "providing a short-run employment boost equivalent to an interest rate reduction of 0.1% gets turned into 'jobs-jobs-jobs' in the White House Briefing Room and then in the pages of the newspaper. . . . [National Economic Advisor Gene] Sperling always tried to keep the balance between number and quality of jobs: 'good jobs at good wages.' Clinton—on the few occasions I saw him in small groups—would always say, 'Yes, yes, I know, Gene. But that's too complicated. I need to simplify.' And he would always simplify to the 'more jobs' rather than the 'better jobs' position" (DeLong 2004).

17. See Mickey Kantor, "At Long Last, A Trade Pact to Be Proud Of," *Wall Street Journal*, August 17, 1993, A14.

18. See "NAFTA—The Showdown," *The Economist*, November 13, 1993.

19. Salinas's determination to defend the peso echoed that of President Lopez Portillo on the eve of the 1982 debt crisis. Lopez Portillo's vow to defend the peso "like a dog" is frequently misattributed to Salinas.

20. Mexican banking regulations supposedly limited currency and maturity mismatches, but the banks were able to find ways around the rules.

The Zapatistas saw in NAFTA a symbolic manifestation of the huge attention the Mexican government paid to the modern northern states and the neglect of the historically poor southern states. Concerns were heightened further when Colosio was assassinated in March 1994 while campaigning in Tijuana. To this day, theories and rumors abound in Mexico: Drug killing? Political killing? Nominated to take Colosio's place was Ernesto Zedillo, a well-regarded but relatively unknown technocrat and cabinet member who had never before held elective office.

Meanwhile, pumped up by federal spending and a consumer buying binge, the Mexican current account deficit continued to widen. Savvy Mexican investors, and a few foreign holders of Mexican tesobonos, grew nervous. They sold, sending dollars out of Mexico and depleting central bank reserves.[21]

The Banco de Mexico did not respond according to orthodox central bank doctrine. To maintain a fixed exchange rate, the bank should have allowed the domestic monetary base to shrink and peso interest rates to rise as dollars were withdrawn.[22] Instead, it purchased Mexican Treasury securities in sufficient volume to maintain the monetary base—and stave off soaring interest rates in an election year. This response ensured that as the year wore on and political troubles unfolded, the dollar reserve position of the Banco de Mexico would dwindle dramatically.

The crisis broke almost as soon as newly inaugurated President Ernesto Zedillo returned to Mexico City from the December 1994 Summit of the Americas held in Miami. The government first devalued the peso by 15 percent; then, unable to hold this line, it allowed the peso to float (Whitt 1996). The peso quickly collapsed from 3.4 to 7.2 per dollar, before recovering to 5.8 in April 1995 (OANDA Corp. 2004). Prices soared 24 percent in the first four months of 1995; December-over-December inflation for 1995 was 52 percent (INEGI 2004). With soaring inflation, domestic demand in real terms contracted sharply.

In January 1995, the Clinton administration crafted an international financial rescue package of historic proportion and committed the United States to almost $20 billion in immediate US assistance to Mexico, plus $30 billion from other sources—despite opposition in Congress and reservations by key donors in the International Monetary Fund (IMF).[23] In return, Mexican policymakers introduced stringent controls on monetary and fiscal policy. Due to NAFTA obligations, however, Mexico largely abstained from the traditional dollops of trade protection and capital controls usually deployed by developing countries in response to balance-of-payments problems. Harsh medicine induced a deep but short-lived recession. By 1996, the Mexican economy had revived. The US loans were fully repaid, with interest, ahead of schedule in January 1997.

In sum, NAFTA facilitated the recovery of the Mexican economy in three ways:

- The US-inspired financial rescue package helped Mexico restructure its short-term dollar-denominated debt and ease its liquidity crisis. The US Treasury loans were all repaid ahead of schedule, yielding a net profit of almost $600 million (Rubin 2003, 34).
- Because of NAFTA obligations, Mexico followed a textbook recovery program based on fiscal constraint, tight money, and currency devaluation, rather than trade and capital controls.
- Open access to the US market, backed by NAFTA obligations, helped prevent an even more drastic recession in Mexico by spurring an export-led recovery in 1995–96.

If NAFTA had not been in place, the United States would surely have mounted financial assistance for Mexico, but the NAFTA partnership very likely enlarged the size of the rescue package and accelerated the speed of its delivery.[24]

Did NAFTA Contribute to the Peso Crisis?

Some critics argue that NAFTA negotiators could and should have done more to guard against prospective financial crises. Two arguments are used to blame the crisis on NAFTA: inadequate monitoring of financial institutions and "irrational exuberance" over Mexico's economic prospects.

Inadequate Surveillance. Arguably, NAFTA negotiators could have agreed to mutual surveillance of monetary, fiscal, and exchange rate policies and to mutual surveillance of banks and other financial institutions. Some analysts called for the negotiation of a side pact on macroeconomic policy to ensure more frequent consultations among the region's treasury and cen-

21. Moreover, the Federal Reserve was raising short-term US interest rates in 1994. The target federal funds rate was raised six times from 3 percent in January to 5.5 percent in November, giving investors a further reason to shift dollars out of Mexico.

22. The extreme form of orthodox doctrine is a currency board system in which the monetary base responds one-for-one to any change in the central bank's foreign exchange reserves.

23. Much of the US support was channeled through the Exchange Stabilization Fund, thus avoiding the need for congressional approval. The total rescue package was roughly $50 billion, including $18 billion committed by the IMF, $5 billion from the Bank for International Settlements, $1 billion from four Latin American countries, and $1.5 billion from investment banks (Williamson 1995).

24. By contrast, in the Mexican debt crisis of 1982, US support was far smaller and more measured; see Cline (1995). The Mexican recovery also was much slower. As Rubin (2003, 34) noted, "After the 1982 crisis, Mexico took seven years to regain access to capital markets. In 1995, it took seven months." Moreover, US exports to Mexico declined almost 50 percent in 1983 from their precrisis peak and didn't regain that level until 1988. In 1995, US exports dropped 9 percent from the previous year but surpassed precrisis levels in 1996.

tral bank officials (Williamson 1995). These subjects would be novel in an FTA. Even the European Union did not get around to mutual surveillance of macroeconomic policies until the Maastricht Treaty of 1992, and even today the regulation of European banks and other financial institutions remains a matter for national authorities. Low-key tripartite swap and consultation arrangements had been in place before the peso crisis. Evidently these were insufficient to head off financial mismanagement in Mexico City.

Moreover, it must be acknowledged that Washington would not welcome Canadian or Mexican criticism of US macroeconomic policy, and reciprocal sentiments prevail in Ottawa and Mexico City. Recent US corporate and accounting scandals ranging from Enron to mutual funds demonstrate two things: Mexico has no monopoly on lax regulation within North America, and no financial regulator has an unblemished record of initiating preemptive reform before something blows up. This is not an argument for abandoning regulatory vigilance; rather it is an observation that commends strengthened surveillance (at the national and multilateral levels).

In retrospect, NAFTA can be criticized for going light on macroeconomic and financial surveillance. But there was no appetite in the Bush or Clinton administrations to take on this agenda, and it would have met stiff resistance in Ottawa and Mexico City. It is a counsel of perfection to argue that free trade and investment in North America should have awaited macroeconomic and financial rectitude. Those goals are certainly worthy, but they remain distant beacons for North America.

Overconfidence. Did overconfidence in the wake of NAFTA intensify the rush of "hot money" into Mexico, increasing its vulnerability to crisis? Ratification of NAFTA in 1993, together with Mexican accession to the Organization for Economic Cooperation and Development (OECD) in May 1994, did create a heady mood. Wall Street awarded higher ratings to Mexican securities. Investors became less critical of Mexico, instead assuming that the economic gains to Mexico from NAFTA would translate into quick financial returns. However, we think it is unfair to blame NAFTA for fiscal splurge in Mexico and other machinations of the PRI. NAFTA enabled the Mexican kabuki show to go on longer than it might otherwise have (as foreign investors willingly acquired high-yielding tesobonos), but it did not put the show on stage.

Current Account since the Crisis

The peso crisis forced a dramatic reduction of Mexico's then unsustainable current account deficit, which reached 7 percent of GDP in 1994. Since then, the Mexican current account balance has remained in the sustainable range and has attracted little attention (table 1.1). Larger trade

Table 1.1 Overview of the Mexican current account, 1994–2004 (billions of US dollars)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current account balance											
Billions of US dollars	–29.7	–1.6	–2.5	–7.7	–16.1	–14.0	–18.2	–18.2	–14.1	–8.7	–7.4
Percent of GDP	7.0	0.5	0.8	1.9	3.8	2.9	3.1	2.9	2.2	1.4	1.1
Receipts											
Merchandise exports	60.9	79.5	96.0	110.4	117.5	136.4	166.5	158.4	160.8	164.9	188.0
Nonfactor services	10.3	9.7	10.6	11.1	11.5	11.7	13.7	12.7	12.7	12.6	13.9
Factor services	3.4	3.8	4.2	4.6	5.0	4.5	6.1	5.1	4.1	3.8	5.1
Total transfers	3.8	4.0	4.6	5.3	6.0	6.3	7.0	9.4	10.3	13.9	17.1
Of which household remittances	3.5	3.7	4.2	4.9	5.6	5.9	6.6	8.9	9.8	13.4	16.6
Total	78.4	97.0	115.3	131.3	140.1	158.9	193.3	185.6	187.9	195.2	224.2
Payments											
Merchandise imports	79.3	72.5	89.5	109.8	125.4	142.0	174.5	168.4	168.7	170.5	196.8
Nonfactor services	12.3	9.0	10.2	11.8	12.4	13.5	16.0	16.2	16.7	17.1	18.6
Factor services	16.4	17.1	18.1	17.3	18.3	17.4	20.9	19.1	16.5	16.2	16.1
Total transfers	—	—	—	—	—	—	—	—	—	—	0.1
Total	108.0	98.6	117.8	139.0	156.1	172.9	211.4	203.8	201.9	203.9	231.6

— = less than $50 million

Sources: Banco de Mexico (2005), OECD (2004a, 2005).

surpluses with the United States have been offset by growing trade deficits with the rest of the world.[25] Growing remittances (almost entirely from Mexican immigrants in the United States) have contributed significantly to Mexican foreign exchange earnings, outpacing FDI in 2003 and reaching $16.6 billion in 2004.

Current Challenges to Economic Integration

The peso crisis is now long past. While a fresh financial crisis cannot be ruled out, the prospects are more distant due to the tight fiscal and monetary policies pursued by Mexican officials.[26] But other problems continue to challenge the pursuit of economic integration in North America and the promise of greater prosperity in Mexico.

Mexico's Democratic Challenge

In 2000, the seven-decade political domination of the PRI ended with the election of Vicente Fox of the Partido Acción Nacional (PAN) to the Mexican presidency, the first peaceful transfer of power between political parties in modern Mexico.[27] The role of NAFTA, and the broader Mexican economic opening, in the realization of greater democracy are difficult to assess, although closer external scrutiny made the 2000 election much harder to rig.

Greater democracy has been a blessing for Mexico, but it has put demands on governance that did not exist under the one-party rule of the PRI. In the PRI era, the Mexican Congress dutifully approved the president's policies with little debate; the president secured support for his policies from state governments through revenue sharing and PRI party discipline. Without these carrots and sticks, Mexican leaders now need to forge coalitions among different parties and interest groups. In the long run, this process may lead to better and more stable policies; in the short run, however, it has often produced stalemate in Congress and the nation at large.

To be specific, President Fox has not enjoyed the same sway over the Mexican Congress and state governors as his predecessors. Nor has his administration been effectively managed. Fox's attempts to reform the Mexican tax system yielded modest results in 2004; his proposals to reform Mexican energy policies hit a stone wall (Ramírez de la O 2004).[28]

25. Like the United States, Mexico imports most of its consumer electronics from Asia.

26. In January 2005, Moody's Investor Service raised Mexico's currency rating to Baa1, two levels above the lowest investment grade rating (*New York Times*, January 7, 2005, 5).

27. Although the PRI governed Mexico continuously for seven decades, with the party always choosing the occupant of Los Pinos, power did change hands peacefully between discordant factions within the PRI.

These failures have already affected the competitiveness of Mexican industry in home and world markets.

NAFTAphobia Redux

The mantra of "No More NAFTAs" of Pat Buchanan and Ross Perot was revived in 2004, complemented by attacks from antiglobalization polemicists. During the Democratic presidential primaries in early 2004, the 10-year-old trade agreement again became a campaign theme. Strong anti-NAFTA rhetoric played particularly well in midwestern manufacturing states and southern textile-producing areas. North Carolina Senator John Edwards, the son of a textile mill worker and eventual vice presidential candidate, declared he would have voted against NAFTA if he had had the chance.[29] Edwards blamed NAFTA in particular and trade in general for the sharp decline in US manufacturing employment in recent years: "I saw what happened in my hometown when the mill closed. . . . [T]hese trade policies are killing your jobs."[30] The eventual Democratic nominee, Massachusetts Senator John Kerry, who voted in favor of NAFTA in 1993, argued that NAFTA should be renegotiated to cover more comprehensive labor and environmental obligations and enforcement procedures.[31]

While the inherently protectionist "trade policies are killing your jobs" argument is a campaign favorite, another group contends that free trade harms the developing world. Perennial presidential candidate Ralph

28. Mexico raised only 10 percent of its GDP in taxes in 2003, well below other countries at its stage in development (SHCP 2004, annex A). Consequently, the country remains highly dependent on Pemex revenues to finance government expenditures. Transfers from Pemex and oil-related rights and royalties accounted for 6.6 percent of GDP, with excise taxes bringing total oil-related revenue to 7.9 percent of GDP in 2003 (SHCP 2004, annex A). See Ramírez de la O (2004) for an accounting of Mexican finances that separates tax from nontax rather than oil from nonoil related revenue. In November 2004, the Mexican Congress approved a reform law; Mexican corporate income tax will gradually be reduced from a 33 percent statutory rate in 2004 to 28 percent by 2007. While the corporate tax reforms are a step in the right direction, the Mexican budget still depends inordinately on Pemex revenues—leaving Pemex little financial capacity for new investment. Moreover, the national tax revenues are completely inadequate to fund needed highways, ports, and other infrastructure.

29. In his run for the Senate in 1998, Edwards campaigned against NAFTA and fast-track trade negotiation authority, later renamed trade promotion authority (TPA).

30. See "In Ohio, Trade Talk Resonates," *Baltimore Sun*, February 25, 2004, 17A.

31. In response to a question on how to fix NAFTA, Kerry said, "I want to put [changes] into the body of the treaty. I know the Republicans don't like that approach. But I believe it's important for sustaining the consensus on trade. And I'm not talking about draconian, counterproductive standards. I'm talking about doing reasonable things. . . . I'm for the trade laws we passed being implemented. In NAFTA, we have labor [and environmental] protections in the side agreements. But they have not been enforced." (See "John Kerry's To-Do List; Create Jobs, Get Tough with China, and Redefine NAFTA All High on the Democratic Hopeful's Agenda," *BusinessWeek Online*, February 26, 2004.)

Nader, along with Naomi Klein, led the "anticorporate" movement, relying heavily on worker exploitation anecdotes in the low-wage textile and apparel industries.[32] The error we see is the implication that the developing countries would be helped by protection in the North, which interrupts trade and investment. For example, Klein observes that most of the workers in the Philippines factory she visited are the children of rural farmers (Klein 2002, 219–21) but ignores the fact that for rural farmers in the developing world, factory employment is a big step up. In a study on factory employment in Vietnam, Glewwe (2000) noted that at 42 cents per hour, "wages paid by joint ventures and [foreign-owned businesses] are but a small fraction of the wages paid for comparable work in the U.S. and other wealthy countries, [though] these workers are still better off than they would be in almost any other job available in Vietnam." Indeed, empirical research by Graham (2000, table 4.2) found that US affiliates in low-income countries tend to pay twice the local manufacturing wage—which implies a high multiple of rural earnings.

Many critics of NAFTA (and free trade more broadly) form an ideological alliance around environmental and labor standards. A favored idea is to create rules against imports that are produced in violation of enumerated labor and environmental standards. To a considerable extent, such rules would deny comparative advantages to developing countries. NAFTA rules of origin and antidumping actions illustrate how new standards could be misused (or abused) to create nontariff barriers that promote neither the environment nor workers' rights.[33]

Balancing Trade and Security

The terrorist attacks of September 11, 2001, brought security to the forefront of the North American agenda. Following the attacks, the United States sharply elevated security measures along its borders, causing lengthy delays. Firms that ship goods across the NAFTA borders must now consider the "security tax" of border delays and the risk of a total border shutdown. The potential for security barriers of the future to replace trade policy barriers of the past is all too real.

In response to September 11, the United States negotiated two separate bilateral agreements—Smart Borders and the Border Partnership Action Plan with Canada and Mexico, respectively. These initiatives are designed to both improve security and minimize delays. However, the basic structure of border inspections—which was designed to collect tariffs and detect smuggling, not combat terrorism—remains in place. Better approaches must be implemented to plan for the eventuality of an attack (Dobson 2002, Goldfarb and Robson 2003). In the short run, there are reasons for envisioning how a security imperative might promote deeper US-Canada rather than US-Mexico bilateral cooperation.[34] Hufbauer and Vega-Cánovas (2003), among others, argue for an entirely new system of border management. The crux of their proposal is to allow joint inspections of low-risk trade to take place at a secure site at the point of origin and away from the border and then pass through the border with minimal delay. Tamper-proof containers and GPS tracking and other technologies could be used to ensure that precleared cargo remained secure from origin to destination. Preclearance would significantly reduce the strain on border inspectors. As a step in this direction, the Fast and Secure Trade Program was initiated to allow low-risk carriers a streamlined method of clearing customs. However, only 4.4 percent of trade crossing the US-Canada border uses the program. Ontario Premier Dalton McGuinty has urged cooperation to publicize the program and improve its effectiveness.[35] In the final chapter, we discuss our own proposals for improved border cooperation.

Assessing NAFTA

Different analysts use different standards to assess the NAFTA record. We try to judge the three countries on how well they have met the objectives that NAFTA negotiators set out in Article 102, which are summarized as follows:

- promote increased regional trade and investment;

32. Anticorporate and antiglobalist arguments often call up images of 19th century worker tenements and textile sweatshops in the United States to bring home the reality of present-day conditions in the developing world. See Klein (2002) and Public Citizen (2004), founded by Ralph Nader, for an exposition of the anticorporate argument.

33. NAFTA's excessively strict rules of origin suppress trade both by keeping foreign goods out and by forcing firms to keep lengthy paper trails to certify NAFTA origin. Similar problems could quickly arise with respect to imposing labor and environmental standards on trade. Who would certify that they were being upheld? If standards are applied and enforced at the national level, how much exploitation is too much? Should the standards apply to all industries or only those that export? And what type of enforcement measures would best promote compliance? In a constructive vein, Elliott and Freeman (2003) suggest that a "market for standards" can be fostered in trade agreements, whereby developed-world consumers can be encouraged by labeling and other means to award higher value to goods that were manufactured or grown under demonstrably acceptable working and environmental conditions.

34. Given the shared language and culture, the history of close cooperation on defense and intelligence issues, and effective Canadian government response toward terrorist threats, Bailey (2004) argues that national and public security cooperation with Canada will evolve more quickly than that with Mexico.

35. Delays are endemic on both the US-Mexico and US-Canada borders, due both to increased security measures and the dramatic increase in trade that came with NAFTA. McGuinty worries that "Border delays are making Ontario industry increasingly uncompetitive . . . [and] function as a quasi-tariff on Ontario goods and services heading south" (see "Wheels of Trade Seize Up at World's Busiest Border," *Financial Times*, August 3, 2004, 3; and BNA 2004).

Univerzita Karlova v Praze

- increase employment and improve working conditions and living standards in each country;
- provide a framework for the conduct of trilateral trade relations and for the management of disputes;
- strengthen and enforce environmental laws and basic workers' rights; and
- work together to promote "further trilateral, regional, and multilateral cooperation to expand and enhance the benefits of this Agreement."

Against these yardsticks, we find that NAFTA has been largely, but not totally, successful.

Trade and Investment

NAFTA has contributed to a sharp expansion of regional trade since the early 1990s. Table 1.2 summarizes US bilateral merchandise trade with its NAFTA partners. Since 1993, the year before NAFTA came into force, through 2004, US merchandise exports to and imports from Mexico have increased by 166 and 290 percent, respectively.[36] Total two-way US-Mexico merchandise trade has grown 227 percent; in contrast, US trade with non-NAFTA countries increased only 124 percent in the same period. Likewise, US-Canada trade continued the robust expansion inspired by the CUSFTA in 1989. Since 1989, US exports to and imports from Canada rose 140 and 190 percent, respectively; total US-Canada trade roughly kept pace with trade growth with the rest of the world. Trade with NAFTA partners in 2004 accounted for 31 percent of total US merchandise trade, up from 29 and 26 percent in 1993 and 1989, respectively.

Of course, an increase in trade *with* NAFTA partners is not in itself evidence of an increase in trade *because of* NAFTA. In appendix 1A, we survey the literature on the effects of NAFTA on trade volumes in North America. As in most integration arrangements, ex ante projections of trade growth seem to have underestimated the impact of NAFTA on the three economies. But we don't really know by how much. Estimates using computable general equilibrium and gravity models of the amount of two-way trade generated due to NAFTA vary greatly. Depending on the model selected, the trade gains from NAFTA range from modest (as low as 5 percent of two-way US-Mexico trade) to very large (greater than 50 percent of two-way trade). Disentangling the effect of NAFTA on trade

36. Much of the increased trade with Mexico reflects the expansion of assembly operations. Mexican plants registered under the maquiladora program and the Program for Temporary Imports used to make Exports (Programa de Importación Temporal para Producir Artículos de Exportación, or PITEX) accounted for 81 percent of total Mexican exports to the United States in 2003.

from the other events in the past decade is difficult, but the available evidence points to a strong positive impact.

Decadal trade statistics mask two distinct periods of trade integration: the US-led boom of the 1990s and the US-led recession and slow recovery since 2000. In the initial period, US exports to its NAFTA partners doubled in value and increased twice as fast as non-NAFTA shipments, while US imports from the region increased even more (though only slightly faster than imports from the rest of the world). The US trade deficit with the NAFTA region rose from $9 billion in 1993 to $77 billion in 2000. Canada accounted for the larger share of the increase in the NAFTA deficit, some $42 billion, whereas the deficit with Mexico increased by $26 billion. At the same time, the US trade deficit with the rest of the world rose $301 billion.

NAFTA trade actually declined in 2000–03 before rebounding in 2004. Overall, US trade with its NAFTA partners rose 8.7 percent during 2000–04; exports grew by only 3.6 percent, while US imports increased by 12.8 percent. However, US exports to Mexico actually declined slightly compared with a modest increase of 6.4 percent ($11 billion) in shipments to Canada.[37]

Has US trade with Mexico "hit a wall"? One explanation for the drop in US exports is the sharp drop in Mexican demand during 2000–03, when Mexican GDP growth averaged only 0.7 percent compared with Canada's modestly higher 2.3 percent. "When the US economy sneezes, the Mexican economy catches a cold," and US exports take a hit—but that story is too simple. Despite stronger growth in 2004, the introduction of highly competitive suppliers from East Asia has severely cut into the US share of the Mexican market in several important sectors (see appendix 1B).

Taken together, trade in autos and parts, agriculture, and energy account for roughly one-third of intraregional trade. Later chapters discuss these sectors in more detail, but each deserves a preview in this chapter. We then assess the impact of the broader increase in trade and investment.

Autos

Autos and auto parts account for 20 percent of total intra-NAFTA trade, the largest single sector. Liberalization began well before NAFTA, but the agreement extended the process. Since the 1965 Auto Pact and the CUSFTA essentially integrated auto trade between Canada and the United States, NAFTA's greatest contribution to the auto sector was to bring Mexico into the fold. NAFTA phased out purely national content requirements, but as a political price, it tightened the CUSFTA rules of origin and associated North American content requirements. NAFTA also phased out so-called trade-balancing requirements (a Mexican policy device) as well as tariff and nontariff barriers within the finished auto and parts trade.

37. USITC Interactive Tariff and Trade Dataweb, 2005, http://dataweb.usitc.gov (accessed on March 15, 2005).

Table 1.2 US merchandise trade with NAFTA partners, 1989–2004
(billions of US dollars)

Partner	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Percent change, 1989–2004	Percent change, 1993–2004	Percent change, 2000–04
Canada																			
Exports	78.3	83.0	85.1	90.2	100.2	114.3	126.0	132.6	150.1	154.2	163.9	176.4	163.7	160.8	169.5	187.7	139.8	87.4	6.4
Imports	88.2	91.4	91.1	98.5	110.9	128.9	145.1	156.5	168.1	174.8	198.3	229.2	217.0	210.6	224.2	255.9	190.1	130.7	11.7
Total	166.5	174.3	176.3	188.7	211.1	243.2	271.1	289.1	318.2	329.0	362.2	405.6	380.7	371.4	393.6	443.6	166.5	110.1	9.4
Balance	–9.9	–8.4	–6.0	–8.3	–10.7	–14.7	–19.1	–23.9	–17.9	–20.7	–34.4	–52.8	–53.2	–49.8	–54.7	–68.2			
Mexico																			
Exports	25.0	28.4	33.3	40.6	41.6	50.8	46.3	56.8	71.4	79.0	87.0	111.7	101.5	97.5	97.5	110.8	343.7	166.1	–0.8
Imports	27.2	30.2	31.2	35.2	39.9	49.5	61.7	73.0	85.9	94.7	109.7	135.9	131.4	134.7	138.1	155.8	473.3	290.3	14.7
Total	52.2	58.6	64.5	75.8	81.6	100.3	108.0	129.8	157.3	173.7	196.8	247.6	232.9	232.3	235.5	266.6	411.2	226.9	7.7
Balance	–2.2	–1.8	2.1	5.4	1.7	1.3	–15.4	–16.2	–14.5	–15.7	–22.7	–24.2	–29.9	–37.2	–40.6	–45.1			
World																			
Exports	363.8	393.0	421.9	447.5	464.9	512.4	583.0	622.8	687.6	680.5	692.8	780.4	731.0	693.3	723.7	816.5	124.5	75.7	4.6
Imports	473.4	473.4	496.0	488.8	532.1	580.5	663.8	743.5	870.2	913.9	1,024.8	1,216.9	1,142.0	1,163.5	1,259.4	1,469.5	210.4	176.2	20.8
Total	837.2	866.4	917.9	936.3	997.0	1,092.9	1,246.9	1,366.3	1,557.8	1,594.4	1,717.6	1,997.3	1,873.0	1,856.8	1,983.1	2,286.0	173.1	129.3	14.5
Balance	–109.6	–80.4	–74.1	–41.3	–67.2	–68.1	–80.8	–120.7	–182.6	–233.4	–331.9	–436.5	–410.9	–470.3	–535.7	–652.9			
NAFTA																			
Exports	103.2	111.3	118.4	130.8	141.8	165.1	172.3	189.3	221.5	233.2	251.0	288.2	265.2	258.3	266.9	298.5	189.1	110.5	3.6
Imports	115.4	121.5	122.3	133.7	150.9	178.4	206.8	229.5	253.9	269.6	308.0	365.1	348.4	345.3	362.2	411.8	256.8	173.0	12.8
Total	218.6	232.9	240.8	264.4	292.7	343.5	379.2	418.8	475.4	502.7	559.0	653.3	613.6	603.7	629.2	710.3	224.9	142.7	8.7
Balance	–12.2	–10.2	–3.9	–2.9	–9.1	–13.3	–34.5	–40.1	–32.4	–36.4	–57.1	–77.0	–83.2	–87.0	–95.3	–113.3			
Non-NAFTA																			
Exports	260.5	281.6	303.4	316.7	323.0	347.3	410.7	433.5	466.1	447.3	441.9	492.3	465.8	434.9	456.8	518.1	98.8	60.4	5.2
Imports	358.0	351.9	373.7	355.2	381.2	402.0	457.0	514.0	616.3	644.3	716.7	851.8	793.6	818.2	897.2	1,057.7	195.4	177.5	24.2
Total	618.5	633.5	677.1	671.9	704.2	749.4	867.7	947.5	1,082.4	1,091.6	1,158.6	1,344.0	1,259.3	1,253.2	1,354.0	1,575.8	154.8	123.8	17.2
Balance	–97.5	–70.2	–70.3	–38.5	–58.2	–54.7	–46.3	–80.5	–150.2	–197.0	–274.9	–359.5	–327.8	–383.3	–440.4	–539.6			

Source: USITC Interactive Tariff and Trade Dataweb, http://dataweb.usitc.gov (accessed on March 15, 2005).

Phaseout periods of up to 10 years were granted to give the Mexican industry (including foreign-owned assembly plants) time to adjust.

The growth in auto trade owes both to Mexican domestic reforms and NAFTA liberalization. Mexico has attracted substantial investment from the United States, Japan, and Germany, increasing its auto production from 1.1 million units in 1993 to 1.8 million in 2002 (Ward's Communications 2003).[38] Mexican auto trade in 2003 was five times greater than in 1993; the auto sector accounted for 22 percent of Mexico's total exports in 2003.[39] Much of the trade increase can be attributed to specialization, as parts manufacturers and assembly plants have been reoriented to take advantage of economies of scale. As a result, supply lines for finished vehicles routinely cross national boundaries, as parts and assembly work is performed wherever it is most efficient.[40] In Canada and the United States, this process was far along when NAFTA came into force, but it has deepened in the NAFTA decade. While international supply lines are a boon to efficiency, reliance on just-in-time manufacturing processes makes the industry very sensitive to border disruptions.

38. A unit is a passenger car, truck (light or medium/heavy), or a bus. Light trucks have accounted for most of the production increase in Mexico.

39. This figure includes engines, wire harnesses, motor vehicle seats, and fuel pumps, which are not classified in Harmonized Schedule chapter 87.

40. Because trade statistics are kept as gross value rather than value added, international supply lines probably inflate trade figures in the auto sectors. For example, the value of a part that is produced in Mexico and then shipped to the United States for assembly will be counted as intra-NAFTA trade again if the assembled vehicle is shipped back to Mexico for sale. It is not unusual for auto parts to cross national borders several times during the production process (Hart 2004).