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Can NAFTA be a stepping stone to monetary integration in North America?

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Abstract. Monetary integration refers to the sharing by a group of nations a common currency and central bank. It is most unlikely that the United States will accept a common currency within NAFTA (even if it were the dollar) and a common central bank. With NAFTA not being an optimum currency area, there is little need and benefit for Canada and Mexico to unilaterally dollarize. This, together with strong political opposition to dollarization, leaves little chance that Canada and Mexico will dollarize or even fix their exchange rate *vis-à-vis* the dollar in the foreseeable future.

JEL Classification: F36.
Keywords: Common Currency; Dollarization; Monetary Integration; NAFTA; Optimum Currency Area.

Résumé. L'intégration monétaire signifie le partage, par un groupe de nations, d'une monnaie et d'une banque centrale communes. Il est très improbable que les États-Unis acceptent l'introduction d'une monnaie unique au sein de l'ALENA (même s'il s'agit du dollar) et d'une banque centrale commune. L'ALENA n'étant pas une zone monétaire optimale, le Canada et le Mexique n'ont ni vraiment besoin ni intérêt à dollariser unilatéralement. Ceci, couplé à une forte opposition politique à la dollarisation, laisse peu de chance que le Canada et le Mexique optent pour le dollar, voire même qu'ils fixent leur taux de change par rapport au dollar dans un avenir proche.

Classification *JEL* : 36.
Mots-clefs : Monnaie commune ; dollarisation ; intégration monétaire ; ALENA ; zone monétaire optimale.

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Introduction

Monetary integration refers, in its deepest form, to a group of nations sharing a common currency and a central bank, as in the Euro Area. Only an economic union, like the U.S. economy, where the participating states or units also share a common fiscal policy and are bound by political union, is or represents a deeper form of economic integration. Monetary integration presumes and requires free trade and the free movement of resources among member countries (i.e., a custom union) to work properly. In Europe, on the other hand, monetary integration was also used to facilitate and accelerate general economic integration. Smaller countries, which are very closely linked by trade with a much larger neighbor, could unilaterally adopt the currency of the large neighbor (thus giving up monetary autonomy) without being formerly tied with it in a customs union or even in a free trade area. This is, for example, the case of Ecuador, which is fully or officially dollarized.

This paper examines whether NAFTA can be a stepping stone or building block for regional monetary integration in North America. After briefly reviewing the theory of optimum currency areas and whether NAFTA is an optimum currency area, I will examine whether NAFTA could lead to a common currency and common central bank for North America; the unilateral dollarization of Canada and Mexico, or simply fixed exchange rates for the Canadian dollar and the Mexican peso *vis-a-vis* the U.S. dollar.

The theory of optimum currency areas

The theory of optimum currency areas was developed mostly by Robert Mundell during the 1960s. An optimum currency area or bloc refers to a group of nations which would benefit from *permanently and rigidly* fixing the exchange rate of their currencies and even or eventually adopting a common currency. The formation of an optimum currency area eliminates the uncertainty that arises when exchange rates are not permanently fixed, thus stimulating specialization in production and the flow of trade and investments among member regions or nations. The formation of an optimum currency area also encourages producers to view the entire area as a single market and to benefit from greater economies of scale in production.

With permanently fixed exchange rates (or a common currency), an optimum currency area is likely to experience greater price stability than if exchange rates could change between the various member nations. The greater price stability arises because random shocks in different regions or nations within the area tend to cancel each other out, and whatever disturbance remains is relatively smaller when the size or dimension of the area is increased. This greater price stability encourages the use of money as a store of value and as a medium of exchange, and discourages inefficient barter deals arising under more inflationary circumstances. An optimum currency area also saves the cost of official interventions in foreign exchange markets involving the currencies of member nations, the cost of hedging, and the cost of exchanging one currency for another to pay for imports of goods and services and when citizens travel between member nations (if the optimum currency area also adopts a common currency).

The greatest disadvantage of an optimum currency area is that each member nation cannot pursue its own independent stabilization and growth policies attuned to its particular preferences and circumstances. For example, a depressed region or nation within an optimum currency area might require expansionary fiscal and monetary policies to reduce an excessive unemployment rate, while the more prosperous region or nation might require contractionary policies to curb inflationary pressures. To some extent, these costs of an optimum currency area are reduced by the greater flow (arbitrage) of capital and labor from regions and nations of excess supply (where returns and earnings tend to be low) to regions and nations of excess demand (where returns and earnings are higher). However, while helpful, this is not likely to eliminate interregional and international differences within the optimum currency area, as proved by the persistent relative poverty in depressed regions of the same nation (e.g., Appalachia in the United States, the South of Italy, and the Northeast of Brazil).

The formation of a currency area is more likely to be beneficial on balance under the following conditions: (1) the greater is the mobility of resources among the various member nations, (2) the greater are their structural similarities, and (3) the more willing they are to closely coordinate their fiscal, monetary, and other policies. It is, however, very difficult to actually measure the net benefits accruing to each member nation from forming an optimum currency area.

Within the national framework, few would suggest that depressed regions would do better by seceding and setting themselves up as separate nations in order to better address their special problems. Instead, what is usually done in these cases is for the central government to provide special aid, such as investment incentives, to depressed regions. However, East Pakistan, charging exploitation, did break away from West Pakistan and proclaimed itself Bangladesh, and from time to time Quebec has threatened to secede from Canada for economic as well as cultural reasons.

Since some of the benefits provided by the formation of an optimum currency area can be obtained under the looser form of economic relationship provided by fixed exchange rates, the case for the formation of a currency area is to some extent also a case for fixed as opposed to flexible exchange rates. The theory of optimum currency areas can be regarded as the special branch of the theory of customs unions that deals with monetary factors.

Is NAFTA an optimum currency area?

Although the United States and Canada had a free trade agreement in autos since 1965, a comprehensive economy-wide, free trade agreement had proved elusive for over a century. In 1988, such a free trade agreement was finally negotiated. By the time the CUSFTA pact went into effect in January 1, 1989, Canada was already by far the largest trading partner of the United States, with two-way yearly trade of about $150 billion (75 percent of which was already duty-free). The pact called for the elimination of most of the remaining tariff and nontariff trade barriers between the two countries by 1998. As a result of the agreement, Canada was estimated to have grown 5 percent faster and the United States 1 percent faster than without the agreement (Hufbauer and Schott, 1992), but there is disagreement on the effect of the agreement on occupation. Hufbauer and Schott (1992) indicated that CUSFTA led to the creation of hundreds of thousands of jobs on both sides of the border, while Trefler (2004) concluded that the agreement was associated with a 5 percent net loss of manufacturing jobs in Canada. Trefler also pointed out the conflict that arose in Canada between those who bore the short-run adjustment costs of the agreement (displaced workers and stakeholders of closed plants) and those who received the long-run efficiency gains (stakeholders of competitive plants and users of final and intermediate goods).

The pact also established for the first time a set of rules governing trade in services, with each country agreeing to treat each other's service sector in the same way it treated its own service sector and reducing the red tape for accountants, lawyers, engineers, and other professionals in crossing the border. In addition, the pact dropped all remaining restrictions on the shipment of energy between the two countries and reduced restrictions on investments in each other's market.

In September 1993, the United States, Canada, and Mexico signed the North American Free Trade Agreement (NAFTA), which took effect on January 1, 1994. This agreement is to eventually lead to free trade in goods and services over the entire North American area. It is also to phase out many other barriers to trade and reduce barriers to cross-border investment among the three countries. With $40 billion of exports to and $41 billion of imports from the United States in 1993, Mexico was already the United States' third largest trading partner after Canada and Japan at the time the agreement took effect. The main impact of NAFTA was on trade between the United States and Mexico. (Canada's trade with United States was already mostly free in 1994 and Canada joined in the negotiations primarily to protect its economic interests.)

The implementation of NAFTA benefits the United States by increasing competition in product and resource markets, as well as by lowering the prices of many commodities to U.S. consumers. In fact, between 1994 and 2004, two-way trade between the United States and Mexico increased 166 percent. Because the U.S. economy is more than 15 times larger than Mexico's economy, the U.S. gains from NAFTA as a proportion of its GDP were much smaller than Mexico's, however. Furthermore, with wages more than six times higher in the United States than in Mexico, NAFTA was expected to lead to a loss of unskilled jobs, but to an increase of skilled jobs, for an overall net increase in employment in the United States of between 90,000 and 160,000 (Inter-American Development Bank, 2002). A more recent study by Hufbauer and Schott (2005), however, concluded that the net gain in U.S. jobs as a result of NAFTA may have been much smaller (and may even have resulted in a small net loss). States (such as Alabama and Arkansas) suffered while high-wage areas gained, but with a 15-year phase-in period and about $3 billion assistance to displaced workers, the harm to workers in low-income areas in the United States was minimized.

Free trade access to Mexico allows U.S. industries to import labor-intensive components from Mexico and keep other operations in the United States rather than possibly losing all jobs in the industry to low-wage countries. Some of the jobs that Mexico gained have not in fact come from the United States but from other countries, such as Malaysia, where wages are now roughly equal to Mexico's. As a condition for congressional approval of NAFTA, the United States also negotiated a series of supplemental agreements with Mexico governing workplace and environmental standards (to prevent U.S. firms from moving their operations to Mexico to take advantage of much more lax labor and environmental regulations), as well as to protect some American industries against import surges that might threaten them.

The implementation of NAFTA benefited Mexico by leading to greater export-led growth resulting from increased access to the huge U.S. market and by increasing inward foreign direct investments. Mexico suffered a net loss of jobs and incomes in agriculture, but these losses were more than matched by net increases in industry. With time, increasing employment opportunities and rising wages in industry are also expected to reduce the pressure for Mexicans to migrate to the United States. Mexico's ability to benefit from NAFTA has been limited, however, by weak economic institutions and inadequate structural reforms of the economy (see APPENDIX 1).

But is NAFTA an optimum currency area? As indicated in APPENDIX 2, intra-regional-trade-agreement (RTA) exports increased significantly from 1990 to 2004 as a result of the U.S.-Canada Free Trade Agreement and NAFTA (as compared with decline for intra-European Union or intra-EU-15 trade over the same period). Capital moves freely between the United States and Canada and fairly freely with Mexico, but labor does not. Structural similarities are high between the economies of Canada and the United States (even though Canada's economy is much more natural-resource oriented than the U.S. economy), but not with Mexico. Thus, NAFTA does not seem to meet the conditions for customs union. It is simply a (nearly) free trade area. One could say, that not even the Euro Area satisfies the conditions required for a successful optimum currency area (OCA), and yet it did adopt a common currency (and central Bank) and is coordinating fiscal policies in the expectation that the economies of the member nations will converge and become structurally less unequal over time. Such political will is missing in NAFTA.

CAN NAFTA BE A STEPPING STONE TO MONETARY INTEGRATION IN NORTH AMERICA?

The deepest form of monetary integration is given by a common currency and a common central bank. There is little or no chance that NAFTA could lead to this type of monetary integration in North America anytime soon. The United States would not accept a common central bank and a common currency, even if the common currency were the U.S. dollar. Besides, the Constitution of the United States (Article I, Section 8) assigns the power to coin money and to regulate the value of money to the U.S. Congress, and so it would be unconstitutional for any other nation to share the power to issue dollars and regulate its value with the U.S. Congress. Even if the Constitution could be changed, the United States is simply not interested in this type of deep monetary integration in North America.

With the adoption of a common currency and common central bank out of the question for NAFTA, monetary integration in North America could take the weaker form of unilateral dollarization on the part of Canada and Mexico. The benefits that Canada and Mexico would receive from dollarizing are: (1) avoid the cost of exchanging the domestic currency for dollars and the need to hedge foreign exchange risks, (2) face a rate of inflation similar to that of the United States as a result of commodity arbitrage, and interest rates would tend to fall to the U.S. level, except for any remaining country risk (i.e., dollarization removes the currency but not the country risk), and (3) by eliminating foreign exchange crises, dollarization reduces or eliminates the need for foreign exchange and trade controls, fosters budgetary discipline, and encourages more rapid and full international financial integration.

Dollarization, however, would impose the following costs on Canada and Mexico. (1) The nations would have to sustain the cost (which could be as high as 4 or 5 percent of GDP) of replacing the domestic currency with the dollar, or alternatively having to face the (flow) cost resulting from the loss of interest on their central bank's holdings of foreign bonds or other interest-earning assets (which has been estimated to range between 0.5 to 1.3 percent of GDP per year; see U.S. Senate, 2000). (2) They would lose independence of monetary and exchange rate policies and face the same monetary policy of the United States. It is true, that by dollarizing, the economies of Canada and Mexico are likely to become even more closely integrated with the U.S. economy and their business cycles more synchronized over time, and thus to have less of a need for an independent monetary and exchange rate policy (see Frankel and Rose, 1998; and Salvatore, 2002a). Furthermore, in a world of large capital flows and integrated capital markets, the effectiveness of an independent monetary policy is, in any event, very limited – unless Canada and Mexico accept higher exchange rate volatility or restricted international capital flows, which could seriously dampen their growth. Similarly, correcting a balance of trade deficit or dealing with an oil shock by devaluing or allowing the currency to depreciate, usually leads to high inflation, which nullifies most of the effectiveness of the devaluation. Thus, the real cost of giving up an independent monetary or exchange rate policy on the part of a Canada and Mexico would be, for the most part, rather small (Larry Schembri, of the Bank of Canada, pointed it out that this was not true for Canada under the recent 45 appreciation of the Canadian dollar vis-à-vis the U.S. dollar). A "real" economic shock usually requires real economic adjustment and pain, which an exchange rate change can only temporarily soften but not eliminate.

Finally (3), by dollarizing, Canada and Mexico would lose their central bank as a lender of last resort to bail out domestic banks and other financial institutions in a crisis. However, the lender-of-last-resort capability of an emerging-market central bank is largely illusory without inordinately large international reserves, which are beyond the reach of most market economies. Furthermore, nothing prevents a dollarizing country from setting aside liquid funds to lend to domestic banks in a crisis and/or arranging lines of credit with foreign banks (as Argentina did in the late 1990), or for foreign banks to provide credit to domestic banks (as they did in Panama). A system-wide banking crisis is also less likely to occur in a fully dollarized country that is moving toward international financial integration. Of course, dollarization cannot solve the problem of a country living beyond its means and facing an unsustainable budget deficit or debt burden, as in the case of Argentina in 2001. Dollarization does, however, expose the problem sooner and impose a discipline that a non-dollarized country does not face. But living beyond its means is not the problem of Mexico today and certainly not the case of Canada.

According to the above, good candidates for dollarization are small open economies for which the United States is the dominant economic partner and which have a history of poor monetary performance, and hence very little economic – and monetary-policy credibility. Most of the small countries of Latin America, especially those in Central America, as well as the Caribbean nations, fit this description very well. In fact, Panama, Ecuador, El Salvador, and Guatemala are now more or less fully dollarized, and Honduras, Nicaragua, and Costa Rica are seriously considering it. Once we move from small to large countries, however, it becomes more difficult to come up with clear-cut answers.

Although the topic has been and is being amply discussed, Canada regards dollarization as neither necessary nor desirable. Canada has had a better inflation record than the United States (the average inflation of 2.3 percent per year in the past five years in Canada as compared with 2.6 percent in the United States) and does not face a currency crisis. By dollarizing Canada would loose seignorage, all monetary independence, and its central bank as a lender of last resort. Canada is doing very well economically without dollarization because it is highly integrated both financially and economically in the global economy, and it pursues sound economic policies. Thus, Canada does not feel the need to dollarize and does not see the benefit of dollarization. There is also a strong political opposition to unilaterally dollarization in Canada.

The situation is somewhat different in Mexico, which does have an inflationary problem and could face a currency crisis. At the same time, Mexico's economy is less integrated and structurally less similar to the economy of the United States than Canada's, and hence, not as a good a candidate for dollarization. Dollarization would make sense for Mexico if it would lead to (1) faster integration into the world economy (2) encourage Mexico to follow better economic policies and, (3) significantly stimulate economic growth. But clearly, these are questions, not answers. Although somewhat more subdued than in Canada, there is significant political opposition to unilateral dollarization in Mexico also.

Thus, if we are looking to NAFTA to be a steppingstone or building block for more rapid and deeper monetary integration in North America, the economic and political conditions do not seem to be there. There is little possibility of free labor migration within NAFTA, especially between Mexico and the United States, the economy of Mexico is structurally different and not highly integrated with the U.S. economy, and there is strong political opposition to such a move in Mexico, but especially in Canada.

When the question is then asked as to why North America should not have a common currency (the dollar) as Europe (the Euro Area) does, the answer is that Europe created a European Central Bank and all participating nations, no matter how small, have a voice in the making of the common monetary policy. The members of the Euro Area share a common currency; they do not adopt some other country's currency (which would be the case in unilateral dollarization). Members of the Euro Area share in the seignorage from the euro and their aim is full monetary, economic, and political integration. None of these things is true for NAFTA. The case for dollarization for Canada and Mexico could only be justified on the basis of traditional optimum-currency-area analysis, as supplemented or superseded by other financial sector developmental issues (Harris, 2002; von Furstenberg, Alexander and Mélitz, 2004), or from the economic discipline that it would impose on a country that is unable to effectively and efficiently manage its economy. None of these conditions seem to exist for Canada. Although dollarization could make a little more sense for Mexico, the economic costs and the political opposition remain significant stumbling blocks. Indeed, Kemin (2006) reported that U.S. Federal Reserve Board's counterfactual simulations of dollarization by Canada and Mexico in 2001 would have been destabilizing for both Canada and Mexico.

With the adoption of a common currency and common central bank out of the question for NAFTA and with unilateral dollarization on the part of Canada providing little or no economic benefit or even a net loss (and politically impossible at this time), the only other (weaker) form of monetary integration for Canada and Mexico would be to keep their exchange rate permanently and rigidly fixed with respect to the U.S. dollar. But here, Bank of Canada economists (Murray, Schembri and St-Amant, 2003) have convincingly argued that this would not be in the best economic interests of the nation. They pointed out that since changes in the U.S. dollar/Canadian dollar exchange rate have been driven primarily by asymmetric commodity-price shocks, fixing the exchange rate would have deprived Canada of an important adjustment mechanism. Beine and Coulombe (2003), however, have pointed out that because of the heterogeneity across Canadian provinces, it could economically be advantageous to the provinces of Ontario and Quebec, and to a lesser extent of British Columbia, but not the other provinces, to actually adopt the U.S. dollar as their currency. As for Mexico, flexible exchange rates operated fairly smoothly after the 1994-1995 crisis, and so the case for fixing the peso exchange rate to the U.S. dollar does not seem very strong (except, maybe for Northern Mexico, which is much more closely integrated with the U.S. economy than the rest of Mexico).

What about dollarization for South America?

Even though not the primary aim of this paper, let me dwell a little on the related question of the usefulness and feasibility of dollarization for South America. Since a common currency (other than the dollar) for NAFTA would not be acceptable to the United States and unilateral dollarization by Canada and Mexico does not seem justified on the basis of optimum currency area theory and is, in any event, politically unacceptable to those countries, the question of dollarization for South America seems an even more distant possibility, except for Argentina, which considered it at the end of the last decade, and for Ecuador, which actually dollarized in September 2000. The economic integration of South American countries with the United States is much less than with Canada and less than even with Mexico, and political opposition to unilateral dollarization is even greater than in Canada and Mexico, particularly in Brazil.

It is true that in 1993, the United States launched the Enterprise for the Americas Initiative (EAI), which led to the formation of the Free Trade Area of the Americas (FTAA) in 1998, with ultimate aim of hemispheric free trade among the 34 democratic countries of all of the Americas. Negotiations, however, proved very difficult and in fact now seem entirely side-tracked. Furthermore, for a country such as Brazil, that considers itself the leader of South America, dollarization seems to be out of the question. It is inconceivable that Brazil would give up its central bank and its currency without having a strong say in the conduct of the dollar-area monetary policy – something that the United States is clearly not about to grant. And a monetary policy *à la* European Union is not even being considered for the Americas. In any event, it makes little economic sense for Brazil to dollarize in view of its very different economic structure than the United States.

At the height of its economic and financial crisis at the beginning of this decade, Argentina considered dollarization. Argentina set up a currency board in 1991 and this operated reasonably well until 1999, when Brazil was forced first to devalue the real and then allowed it to sharply depreciate. With the peso rigidly tied to the dollar, Argentina suffered a huge loss of international competitiveness *vis-a-vis* Brazil (its largest trade partner) and plunged into recession. Besides having had a grossly overvalued currency, Argentina also had an out-of-control budget deficit and these conditions resulted in a serious economic and financial crisis in fall 2001. Tightening up its public finances in order to encourage foreign investments only deepened the recession and led to riots in the streets without succeeding in attracting many more foreign investors because of their fear that Argentina would abandon its currency board and devalue the peso. This left Argentina only two choices: devaluing the peso or fully dollarizing. Argentina was afraid that abandoning its currency board and devaluing the peso could lead to a falling back into hyperinflation, as in the late 1980's. Dollarization was not without risks either. Specifically, while it would have eliminated the foreign exchange risk and very likely attracted more foreign investment inflows, dollarization would not have eliminated Argentina's international competitiveness problem, especially with respect to Brazil, nor would it have solved Argentina's budget problems. As it was, Argentina abandoned its currency board and first devalued the peso first, and then decided to let it float, rather than dollarize.

Summary and conclusions

Monetary integration refers to the sharing by a group of nations a common currency and central bank, as in the Euro Area. It presumes and requires a customs union to work properly. Smaller countries, closely linked by trade with a much larger neighbor, could unilaterally adopt the currency of the large neighbor, thus giving up monetary autonomy, without being tied to it in a customs union, or even in a free trade area. Monetary integration can take the form of a common currency, unilateral dollarization, or fixing the exchange rate.

The theory of optimum currency areas postulates that permanently fixing the exchange rate or, better, adopting a common currency benefits member states by facilitating specialization in production and the flow of trade and investments among member nations, increased competition, and economies of scale. The cost is that member countries have to give up monetary autonomy and thus be unable to deal with asymmetric shocks. An optimum currency area is more likely to be beneficial the greater is the mobility of resources among member nations, the greater their structural similarities, and the more willing they are to closely coordinate their fiscal, monetary, and other policies.

Despite high and growing trade integration and high capital mobility, NAFTA does not seem to be an optimum currency area because of little labor mobility, different economic structure (especially between the United States and Canada with respect to Mexico), little if any actual coordination of fiscal, monetary, and other policies among the three countries, and fluctuating exchange rates for their currencies. This is in sharp contrast to the conditions that lead to the creation of the Euro Area.

Since there is practically no chance for the United States to accept a common currency within NAFTA (even if it were the dollar) and a common central bank, the only other route for monetary integration in NAFTA would be for Canada and Mexico to unilaterally dollarize. But with NAFTA not being an optimum currency area, with the structure of the Mexican economy being very different from that of the United States and Canada, and with Canada doing very well economically, there seems to be little need and benefit for Canada and Mexico to unilaterally dollarize. This, together with the strong political opposition to dollarization, leaves little chance that Canada and Mexico will dollarize in the foreseeable future.

Finally, permanently and rigidly fixing their exchange rates to the U.S. dollar would deprive Canada of an important adjustment mechanism to asymmetric commodity-price shocks and in Mexico flexible exchange rates seem to have worked reasonably well since the 1994-1995 crisis. Thus, even this weaker form of monetary integration does not seem to be really needed or beneficial for Canada and Mexico. Although we can expect the economies of the three nations to become more integrated in the future, the possibility that NAFTA will be stepping stone or building block to deeper monetary integration in North America in the foreseeable future is slim.

D. S.[2]

Appendix 1

Mexico's gains from NAFTA – Expectations and outcome

The TABLE A1.1 shows long-run simulations results of NAFTA's impact on Mexico to the year 2005 and compares these to the actual outcome using the United Nations LINK Model of the world economy. During the 1995-2005 decade, Mexican real GDP was estimated to grow at a rate of 5.2 percent per year with NAFTA, as compared with 3.8 percent without NAFTA. NAFTA was also expected to (1) reduce the Mexican inflation rate from 14.5 percent to 9.7 percent per year and the short-term interest rate from 18.3 percent to 13.0 percent, (2) increase the inflow of foreign direct investments (FDI) from $6.0 billion to $9.2 billion per year and the growth of exports from 8.3 to 10.4 percent, and (3) raise the trade deficit from $9.7 billion to $14.9 billion and the capital inflows from $10.6 billion to $14.7 billion per year.

The actual results, as yearly averages from 1994 to 2005, were as follows: a growth rate of real GDP of 3.0 percent, a rate of inflation of 13.6 percent, a short-term interest rate of 16.4 percent, an inflow of FDI $ 14.8 billion, a growth of exports of 9.5 percent, and net financial capital inflows of $12.8 billion. Thus, Mexico did not realize most of the expectations from NAFTA because of the deep economic crisis in Mexico in 1995, the slow growth in the United States in 2001-2002, and, more importantly, because of weak economic institutions and inadequate structural reforms. If we remove the years 1995 and 2001-2202 from the data, the average annual growth of real GDP in Mexico was 4.6 percent.

Table A1.1 - NAFTA's impact on the Mexican economy, yearly averages to the year 2005

	Estimates with NAFTA	Without NAFTA	Difference	Actual results
Growth of real GDP (%)	5.2	3.8	1.4	3.0
Inflation rate (%)	9.7	14.5	–4.8	13.6
Short-term interest rate (%)	13.0	18.3	–5.3	16.4
Inflow of FDI (billion $)	9.2	6.0	3.2	14.8
Growth of exports (%)	10.4	8.3	2.1	9.5
Trade Deficit (billion $)	14.9	9.7	5.2	8.6
Net financial capital inflows (billion $)	14.7	10.6	4.1	12.8

Sources: Hufbauer and Schott, 2005; Klein and Salvatore, 1995.

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APPENDIX 2

Changes in trade patterns with economic integration in the EU and NAFTA

The TABLE A2.1 shows the value of total exports, intra-regional-trade-agreement (RTA) exports, and intra-RTA exports as a percentage of the total RTA exports of the European Union (EU) and NAFTA in 1990, 1995, 2000, and 2004. The table shows that the EU has a larger percentage of intra-RTA trade than NAFTA, but intra-RTA declined for EU-15 from 1990 to 2004, while NAFTA's increased significantly.

TABLE A2.1 - Total and intra-EU* and NAFTA** exports in 1990, 1995, 2000, and 2004

In billion dollars and percentages

	Total	Intra-EU	Intra-EU as % of total	Total	Intra-NAFTA	Intra-NAFTA as % of total
1990	$1,482.4	$979.7	66.1	$561.9	$239.6	42.8
1995	1,936.8	1,295.3	66.9	856.5	394.3	46.0
2000	2,251.0	1,392.3	61.9	1,224.9	681.6	55.6
2004	3,449.9	2,132.0	61.8	1,324.4	740.4	55.9
2004 (EU-25)	3,714.2	2,510.4	67.6			

* EU (15) exports in billions of dollars.
** NAFTA exports in billions of dollars.
Source: WTO, International Trade Statistics (Geneva: WTO, 2005).

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