Introduction

In this section we will look at the economic background of the three NAFTA countries, focusing on some of the key factors explaining their development (or lack of it) as well as their trade relations with the rest of the world. Each of the three countries has developed in its own way, struggling with its unique endowment of geographic, climatic, demographic, social and political characteristics which, in turn, led to different development and international trade policies.

One factor that was common to all the countries was a colonial experience; however, that experience was certainly different for each. The United States began as a colony of Great Britain in the early 1600s and was, in the 1770s, the first to break its colonial ties. Mexico was colonized by Spain in the early 1500s. It did not break its ties until the early 1800s. Europeans have fished off Canada's east coast since the early 1500s-possibily even earlier, but more permanent settlements did not come until the French settled in the early 1600s. British settlers did not come until even later. The Peace of Paris in 1763 resulted in Canada becoming a British colony. Canada was the last to gain its independence.

While it clearly goes too far to say that Mexico's colonial experience was 'bad' and those of the United States and Canada 'good', it is certainly true that Spain's administration of Mexico, with its focus on gold and silver extraction, left Mexico with fewer possibilities for economic development than did Britain's looser administration of its North American colonies. Many other factors, however, contributed to the differences between the three countries' current level of development. Since this is not a text on economic development, it is sufficient to say that theories of economic development center on a wide variety of factors, ranging from religion, culture and entrepreneurship to capital

investment, education and institutional development.

In the next few pages we will present a series of figures to describe the current economic differences between the three countries and some of the factors which underline these differences. Most of the indicators used are fairly standard (for example, GDP per capita) and may not need explanation; however, others (for example, openness) may be somewhat less familiar. We have provided a brief description for each indicator and then interpreted what the differences mean within the context of this book.

The three chapters following this graphical introduction provide an overview of the development experience of each of the three NAFTA partners within the context of the global economy generally, and more specially within the context of NAFTA. As we have already seen in earlier chapters, NAFTA has from the very beginning been strongly debated in each country. As the agreement is fully implemented over the next decade or so, we can expect both the intensity and nature of the debates to change, depending on the performance (and its perception) of each country's economy, the rulings on trade disputes by the various trilateral institutions and what is happening with other international institutions such as the WTO and other trade blocs such as the EU. Nevertheless, a basic understanding of each country's economy and related politics is necessary to understand the dynamics of NAFTA over the long term.

GROSS DOMESTIC PRODUCT PER CAPITA

Gross domestic product, or GDP, is defined as the market value of all final goods and services produced in a nation over the course of a year. When GDP is divided by population, it is GDP per capita. This is one of the simplest indicators of living standards that is available. Of course, no single number can capture all the subtleties of a nation's quality of life. For example, GDP and GDP per capita ignore a number of important issues such as the distribution of income, the condition of the environment, the degree of congestion and the state of personal safety, to name just a few.

Figure II.1 Real GDP Per Capita at Market Exchange Rates, 1997
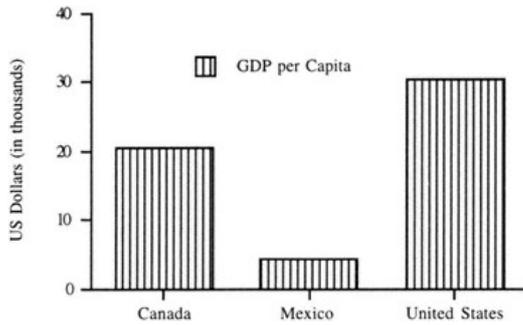
Source: International Monetary Fund (1998), *International Financial Statistics*, August.

Nevertheless, if the total value of the nation's output were to be evenly divided among all its inhabitants, then they would each have an amount equal to GDP per capita. Figure II.1 compares the level of this indicator for the three NAFTA nations. In order to make this comparison, Canadian dollars and Mexican pesos are converted to US dollars. As described in the next indicator, this is a source of bias when international comparisons are made.

PURCHASING POWER PARITY GDP

International comparisons of living standards such as those in the previous graph encounter the problem of radically different prices for similar goods. For example, if the US dollar is chosen as the standard for comparing Canadian, Mexican and US incomes, then Canadian and Mexican GDP are converted into dollars. This is what the previous graph did. This may not always give an accurate impression of living standards, however, because prices are usually vary between countries. For

example, Mexico has a surplus of labor and consequently personal services such as haircuts, housecleaning, and cooking are relatively cheaper than they are in the United States or Canada. Consequently the peso equivalent of a dollar goes farther in Mexico than a dollar will in the United States.

This problem is compounded by the fact that sudden shifts in the value of one currency will dramatically alter the number of units it buys of another currency. For example, if the peso falls in value, it looks like Mexican GDP is falling by the same percentage when we convert it out of pesos into dollars.

In order to overcome these problems, economists have constructed an artificial exchange rate which converts one currency into another at a constant level of purchasing power. For example, 1,000 pesos will convert into dollars at a rate that keeps their ability to buy goods and services constant, whether in Mexico in pesos, or in the US in dollars. These artificial exchange rates are called purchasing power parity exchange rates.

The comparisons of real GDP per capita in Figure II.2 is based on purchasing power parity (PPP) conversions of Canadian dollars and Mexican pesos into US dollars. Note the difference between this and the previous graph. In terms of market exchange rates, average incomes in Canada were about 68 percent of the US level and in Mexico they were abut 14 percent. In terms of the purchasing power of Canadian and Mexican income this is an understatement, however. In the purchasing power parity graph, Canadian incomes are about 78 percent of the US level and Mexican ones are around 24 percent.

Which graph is more accurate, the first one or this one? The answer depends on the purpose to which the numbers will be applied. If we want to know something about the ability of countries to buy foreign goods, then we should use an income estimate that is converted at market exchange rates since that tells us their ability to buy goods in another currency. If, however, we want to know something about the ability of citizens to buy goods domestically, then purchasing power parity rates are better because they tell us about the ability to buy goods in one's own currency. Therefore economists generally regard

Figure II.2 GDP Per Capita at Market vs PPP Exchange Rates, 1996
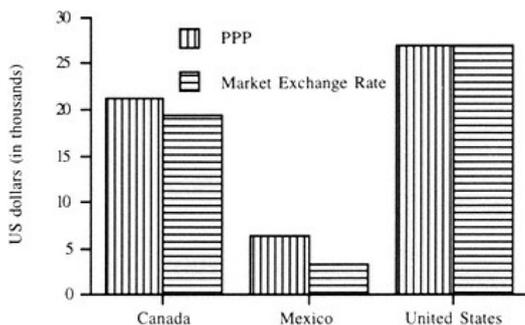

Source: World Bank (1997b).

purchasing power parity exchange rates as a better measure of economic welfare.

TRADING PARTNERS: CANADA, MEXICO AND THE UNITED STATES

The Canada-United States trade relationship is the single largest bilateral trading relationship between any two countries in the world. Exports and imports of merchandise trade totaled well over US$300 billion in 1997 (see Figure II.3).

Both Canada and Mexico are dependent on their trade with the United States to a much greater extent than the US depends on them. Canada sent about 83 percent of its merchandise exports to the United States in 1997. Mexico sent about 85 percent of its exports to the US. The US is also by far the greatest source of both countries' imports. About 68 percent of Canada's imports come from the US and 75 percent of Mexico's (see Figures II.4 and II.5).

Figure II.3 US Rading Partners (Merchandise), 1997
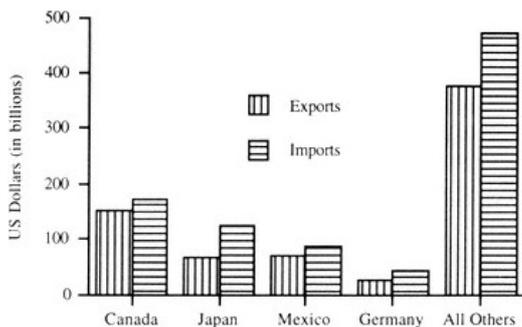
Source: International Monetary Fund (1998), *Direction of Trade Statistics*, June.
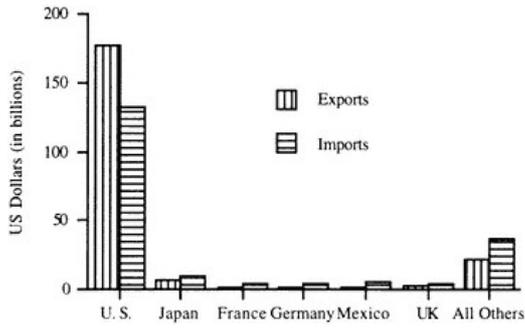
While US trade is less concentrated with Canada and/or Mexico, both nations are important to overall US trade. Canada is the single largest consumer of US exports (22 percent) and the most important supplier of US imports (19 percent).

The pattern of trade indicates that the large US market is a hub for North American trade which radiates both north and south, into Canada and Mexico. Although Canadian-Mexican trade is relatively undeveloped, trade with the US is so large and so important that NAFTA can be viewed as an extension of a naturally occurring North American trading pattern that has been developing over the last several decades. Consequently, NAFTA is not likely to divert very much trade from third parties but, rather, is more likely to extend trade relations in the same direction they would go with or without the agreement.
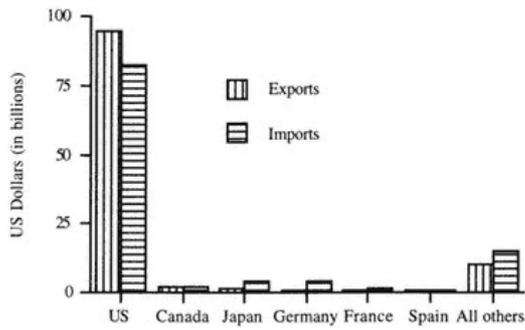
OPENNESS

Openness is defined by trade economists as exports plus imports divided by GDP: (Exports + Imports)/GDP. Openness does not measure the

Figure II.4 Canadian Trading Partners (Merchandise), 1997

Figure II.5 Mexican Trading Partners (Merchandise), 1997

trade policies or rules of trade, but rather it conveys a sense of how important trade is to a national economy. The larger the number, the greater its importance.

As can be seen from Figure II.6, Canada is by far the most open economy of the three NAFTA countries, although trade is of increasing importance to Mexico's economy. The patterns exhibited by the openness indicators are not coincidental given that Canada has the smallest population, the US the largest and Mexico's is intermediate. Canada's smaller population leads it to depend more on international trade because by focusing its production on a fewer number of items, it can capture the scale economies that come to firms as they grow larger. If Canada tried to produce more goods for its own consumption, it would have to produce on a smaller scale and, in some industries, would lose the efficiencies that are derived from large scale production.

At the other end of the spectrum, the US has a huge internal market. In many cases, US firms can produce solely for the domestic market and still achieve a sufficiently large production scale to obtain the benefits of size. Consequently, in order to achieve scale efficiencies, US firms are not required to search out additional markets in foreign lands for their goods.

Notice also that a large share of the change in the openness measure happened in the 1970s. In the US, the 1970s explain almost all the increase in the importance of trade since 1950. In Mexico, the increasing importance of trade in the 1970s, late 1980s and 1990s made up for its decreased importance in the 1950s and 1960s during the years of import substitution industrialization.

INVESTMENT

The ratio of investment to GDP tells economists a great deal about a nation's economy. Since investment is one of the components of GDP (along with consumption expenditures, government expenditures on final goods and services and net exports) the ratio must be between 0 (no investment) and 100 percent (GDP = investment). For most countries in the world, the ratio varies between 10 percent and 40 percent.

Figure II.6 Openness of the NAFTA Economies
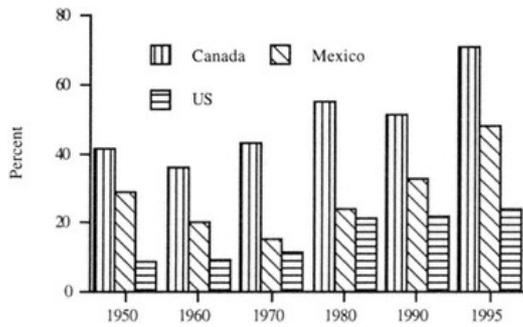
Source: Heston, A. *et al*. (1994); World Bank (1997b).

Investment is defined as expenditures on relatively long lasting goods and services that increase the ability of the economy to produce more goods and services. In other words, investment is the purchase of new factories and machines to go in them. Since houses and apartments are very long lasting, they are included as well, as are the inventories of firms that are necessary to conduct business. To recap, the main items of investment are new plant, new equipment such as machines and computers for businesses, new residences and any additions to business inventories.

The down side to investment is that the higher the level, the lower the level of consumption, government spending and exports. In other words, the cost of investment is that we give up some consumption, government spending, or net sales to foreigners. The up side, however, is that investment will ultimately enable an economy to produce more of all goods.

There are essentially two sources of funds for investment. There are domestic savings which are created whenever households, businesses

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or government bring in more income than they spend, and there are foreign savings that can be borrowed from abroad but must eventually be paid back.

One of the key pieces of Mexico's strategy within NAFTA was to increase the amount of foreign savings that entered the country. The reason can be clearly seen in in Figure II.7 which shows real investment as a share of GDP. Mexico invested around 16 percent of its GDP in the late 1980s and early 1990s. By comparison, Canada invested between 25 percent and 28 percent and the US invested between 20 and 23 percent. If Mexico's investment were compared to other developing countries, such as the high-growth economies of East Asia, the comparison would be even less favorable. The newly industrializing economies of East Asia typically have investment levels equal to 30–40 percent of their GDP. Mexico's relatively lower investment rate is ultimately a result of lower levels of domestic savings. Its rate of economic growth could be higher if it supplemented its investment with some other source of savings. Hence the strategy of trying to pull in the savings of foreigners through increasing capital flows into Mexico.

HUMAN CAPITAL INVESTMENT.

Human capital is defined as the education, skills and expertise of the labor force. The data in Figure II.7 focused only on physical things that add to an economy's capacity to produce goods and services but in reality the accumulation of human capital has the same effect. Human capital is particularly important for countries that want to raise their living standards and for countries that already are industrially developed but that wish to hold on to a comparative advantage in high technology goods and services. That is, human capital is important for every economy.

Measures of human capital are varied. In Figure II.8 school enrollments are used as a measure of new investment in human capital. The numbers are derived by taking the ratio of enrollment in primary schools (or the other levels) to the population in a particular age group. For primary, all 6–11 year olds are in the numerator, secondary includes

Figure II.7 Investment as a Percentage of GDP
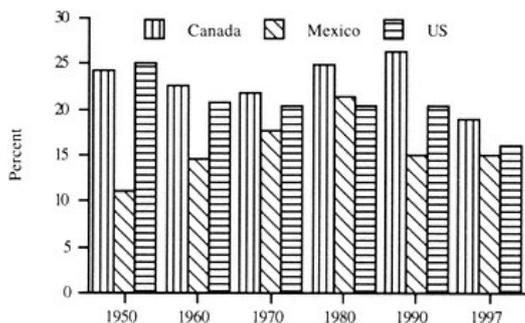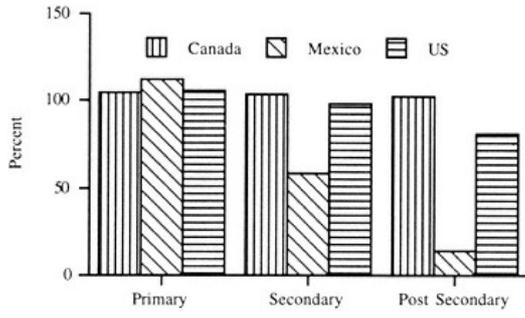

Source: World Bank (1997b).

12–17 year olds and tertiary includes 20–24 year olds. Note that this method allows the ratio to exceed 100 percent since many of the students enrolled may come from other age groups. Nevertheless, it gives a picture of the situation with respect to education and the higher the number, the greater the economy's investment in human capital.

POPULATION

The United States is by far the most populous of the NAFTA nations (see Figure II.9). Canada, on the other hand, is only about 10 percent of the size of the US. The United States' large population has made it the least dependent on trade of the NAFTA countries. Mexico is intermediate between the US and Canada with a population which is over one-third the size of the US. It is important to note how these relative sizes have changed. In 1950, Mexico's population was approximately one-sixth that of the US. Forty years later, in 1990, it had grown fast enough to equal about one-third of the US's population.
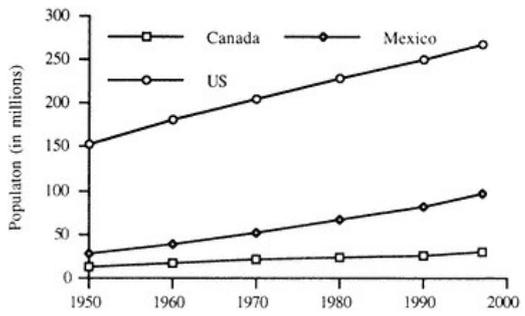
It is interesting to note that Mexico's rapid population growth dur-

Figure II.8 School Enrollment, 1993

Source: World Bank (1997b).

Figure II.9 Population (in millions)

Source: Heston, A. *et al*. (1994); IMF (1998), *International Financial Statistics*, August.

ing the last fifty years is no faster than the growth that the US experienced in the nineteenth century. Nevertheless, relatively rapid population growth puts additional strains on savings and investment when economic growth and rising standards of living are goals. Mexico's ability to save is probably much less than the rates that were achieved in the US a century earlier.