

CBO

MEMORANDUM

**ECONOMIC REFORMS AND CAPITAL
FLOWS IN TEN COUNTRIES**

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This memorandum, a companion to the Congressional Budget Office study *A Budgetary and Economic Analysis of the North American Free Trade Agreement*, describes the experience of 10 countries in liberalizing their economies. It was written by Victoria S. Farrell, under the direction of Robert Dennis and Kim Kowalewski, and with the assistance of Christopher Williams, Thomas Loo, and Blake Mackey. John Goddeeris provided valuable comments.

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INTRODUCTION

The United States, Mexico, and Canada must decide whether to ratify the North American Free Trade Agreement (NAFTA), an accord that aims to help all three economies by removing barriers to trade and to the flow of investment across borders. From the point of view of Mexico--where NAFTA will bring the largest changes--the treaty is only one component of a larger set of policy initiatives, including other actions to liberalize markets and change macroeconomic policies. The experience of other countries that have tried opening their markets strongly suggests that the other policies--particularly maintaining a stable macroeconomic environment--are crucial to the success of NAFTA.

The Congressional Budget Office (CBO) has examined 10 countries--Argentina, Chile, Greece, Mexico, Portugal, South Korea, Spain, Thailand, Turkey, and Uruguay. All 10 have attempted to improve their living standards during the past two decades by both opening their markets to international competition and instituting various types of domestic reform.

The success of these programs has varied widely. Five "core" countries--Chile, Portugal, Spain, Thailand, and Turkey--experienced on average a 2.9 percentage point increase in their real gross national product (GNP) growth rates after carrying out sufficiently broad-based reforms. The remaining countries other than Mexico were less successful, experiencing on

average only a 0.5 percentage point increase in their real GNP growth rates. The difference in success of these two groups of countries may be partly the result of the newness of some reform efforts and differences in the world economic climate when reforms began. But differences in the reforms themselves and in macroeconomic and exchange rate policies undertaken by these countries also matter. These differences over the last two decades, both between the two groups of countries and within groups of countries over time, provide important lessons for Mexico and other countries that hope to increase net inflows of private capital.

The lessons that are laid out below are subject to two major caveats. An examination of the experience of the last two decades cannot gauge with precision the size of the ultimate boost to internal economic development that higher net inflows of private capital bring about. Similarly, an examination cannot determine the total length of time over which higher net inflows of private capital are sustainable in response to broad-based economic reforms.

LESSON ONE: SUPPORTIVE MACROECONOMIC POLICIES AND DEREGULATION OF ECONOMIC ACTIVITY ARE NEEDED

Heavily regulated countries with low wage costs cannot attract high net inflows of private capital on a relatively sustainable basis by liberalizing their external sectors alone (that is, by eliminating restrictions on international transactions on both trade and capital accounts). Such countries must also pursue stable and consistent macroeconomic policies (both fiscal and monetary) and suitable exchange rate policies.¹ In addition, they must pursue domestic structural reforms and liberalization of their financial sectors. Not least, countries with large external debts must prevent those debts from growing too rapidly relative to their exports.

During the late 1970s and early 1980s, most of the 10 countries in CBO's sample experienced high net inflows of private capital over several years. These high inflows, however, came to an end in balance-of-payments crises, since these countries experienced rapid growth in current-account deficits that shook the confidence of international investors. The crises took place even though some countries had extensively liberalized their external sectors and a couple had made internal structural reforms and liberalized their financial sectors to some extent. After carrying out sufficiently broad-

1. An effective set of macroeconomic stabilization policies includes policies that yield low inflation, sustainable economic growth, sustainable government deficits, and sustainable current-account balances.

based economic reforms at both the macroeconomic and microeconomic levels, all of the core countries plus three others were able to resume high net inflows of private capital that may, for some, be sustainable for years to come.

A number of factors contributed to overly rapid growth in current-account deficits in the late 1970s and early 1980s, but probably the most important were macroeconomic policies that were overly expansionary and exchange rate policies that were too rigid. Unsustainable current-account deficits, of course, resulted in a new problem for many of the countries in CBO's sample--that of large external debts. Moreover, in many cases, high inflation--including hyperinflation--was the direct result of central banks' monetizing government deficits.

All 10 countries ultimately reacted to severe economic problems by undertaking broad-based economic reforms. Arguably, the 10 countries entered liberalization phases, characterized by beginning or achieving credible, broad-based reforms, at different times between 1981 and 1991 (see Table 1). Reform efforts included carrying out effective macroeconomic stabilization measures and adjusting exchange rates, as well as further liberalizing trade and capital accounts, undertaking domestic structural reforms, and liberalizing financial markets. To varying degrees, monetary policy was freed from the need to finance public-sector deficits, government deficits were cut, interest

TABLE 1. PRELIBERALIZATION AND LIBERALIZATION PERIODS FOR TEN COUNTRIES

	Preliberalization Period	Liberalization Period
Mexico	1970-1987	1988-present
Core Countries		
Chile	1970-1986	1987-present
Portugal	1970-1985	1986-present
Spain	1970-1985	1986-present
Thailand	1970-1985	1986-present
Turkey	1970-1980	1981-present
Other Countries		
Argentina	1970-1990	1991-present
Greece	1970-1985	1986-present
South Korea	1970-1990	1991-present
Uruguay	1970-1984	1985-present

SOURCE: Congressional Budget Office.

rates were deregulated, and inflation rates were lowered. In addition, external debt burdens for some Latin American countries were reduced through international cooperation.

In response to broad-based reforms, all but two of the countries in CBO's sample began to experience new periods of sharply higher net inflows of private capital by the late 1980s, or at least one or two years of sharply higher net inflow by 1991 (see Table 2). Note that Argentina and South Korea--which were not included in the core countries because of insufficient data to compute average statistics for a period of several years--also experienced high net inflows of private capital in 1991, at 3.0 percent of GNP for Argentina and 2.5 percent of GNP for South Korea.

The experience of the last two decades suggests that effective macroeconomic stabilization policies and suitable exchange rate policies are particularly important to sustain private capital inflows in the long run. Technically speaking, these policies dictate stability in the processes of accumulating public debt and net external debt. The former type of stability is generally ensured if the domestic interest rate is lower than the growth rate of GNP in nominal terms: a lower domestic interest rate slows the growth of

**TABLE 2. RATIO OF NET PRIVATE CAPITAL INFLOWS TO GNP
(In percent)**

	Preliberalization Period Average	Liberalization Period Average, Excluding First Year ^a	Change
Mexico	0.8	2.9	2.2
Core Countries			
Chile	3.9	7.1	3.2
Portugal	1.9 ^b	5.8	4.0
Spain	1.8	4.7 ^b	2.9
Thailand	3.9	6.0 ^b	2.1
Turkey	1.8	3.4 ^b	1.5
Average Change			2.7
Other Countries			
Argentina	0.4	c	c
Greece	4.3	3.4	-0.9
South Korea	3.3	c	c
Uruguay	3.3	0.9	-2.4
Average Change			-1.6

SOURCES: International Monetary Fund, *Balance of Payments Statistics Yearbook*, various issues; The World Bank, *World Tables (1992)*; The World Bank, *Trends in Developing Economies (1992)*; International Monetary Fund, *International Financial Statistics*, various issues; DRI/McGraw Hill, *World Markets Report*, various countries and issues; Consensus Economics Inc., *Consensus Forecasts: A Digest of International Economic Forecasts*, various issues; Congressional Budget Office estimates.

NOTES: Net private capital inflows and GNP were both measured in nominal U.S. dollar terms. Net private capital inflows were derived from data published in Table 2, Detailed Presentation: Transactions Data, in International Monetary Fund, *Balance of Payments Statistics Yearbook*, various issues. Net private capital inflows are proxied as minus the sum of the current-account balance, net errors and omissions, the change in Mexican international reserves, the change in other-country reserves in Mexico, and the net change in government-to-government loans. The change in other-country reserves in Mexico is the sum of lines 54, 57, 60, 65, 72, 73, 80, 86, 90, 91, and 95. The net change in government-to-government loans is the sum of lines 62, 63, 66, 67, 84, and 87.

Change may not equal difference between period averages because of rounding.

- a. The first year of the liberalization period was considered to be a transition year and, therefore, was excluded from the calculation. This assumption raises the magnitude of the reported change results but does not qualitatively alter the outcome.
- b. One or more missing observations excluded from the calculation.
- c. Insufficient data.

domestic debt service in relative terms.² The latter type of stability is generally ensured if the interest rate on external debt is lower than the growth rate of the total portfolio of foreign investors when expressed in a common currency, thereby slowing down the growth of external debt service in relative terms. Putting a brake on growth in debt service is particularly important to countries burdened with large external debts that bear variable (short-term) interest rates. Also of concern are "primary" deficits--the noninterest government deficit and net imports of goods and services excluding flows of investment income. For stability, primary deficits should not grow too rapidly.

In most of the core countries, average domestic investment rates have not yet increased much (see Table 3). In fact, official capital outflows have offset higher net inflows of private capital for some countries, as monetary authorities took advantage of the situation to increase their holdings of international reserves. Higher holdings of international reserves may have provided significant increases in welfare, but international reserve increases may have prevented rises in average domestic investment rates, at least thus far. Therefore, even though average real GNP growth rates have had sizable

2. See James R. Barth, George Iden, and Frank S. Russek, "Do Federal Deficits Really Matter?" *Contemporary Policy Issues*, vol. 3 (Fall 1984-1985), pp. 79-95; and James R. Barth and others, "The Economic Consequences of Federal Deficits: An Examination of the Net Wealth and Instability Issues" (unpublished, George Washington University and Congressional Budget Office, Washington, D.C., 1985). Barth, Iden, and Russek provide an overview of analyses of the stability of government debt accumulation in a closed economy. Barth and others use characterizations of the deficit excluding interest charges and the growth/interest rate differential to classify analyses into those that conclude the process of government debt accumulation is stable and those that conclude the process is unstable.

TABLE 3. RATIO OF GROSS DOMESTIC INVESTMENT TO GROSS DOMESTIC PRODUCT (In percent)

	Preliberalization Period Average	Liberalization Period Average, Excluding First Year ^a	Change
Mexico	26.5	22.7	-3.8
Core Countries			
Chile	16.3	19.1	2.8
Portugal	35.9	27.6	-8.3
Spain	23.0	24.9	1.9
Thailand	27.4	29.5	2.1
Turkey	26.8	23.8	-3.0
Average Change			-0.9
Other Countries			
Argentina	18.4	b	b
Greece	28.8	19.0	-9.8
South Korea	28.0	b	b
Uruguay	19.6	12.4	-7.2
Average Change			-8.5

SOURCES: The World Bank, *World Tables* (1992); The World Bank, *Trends in Developing Economies* (1992); DRI/McGraw Hill, *World Markets Report*, various countries and issues; Consensus Economics Inc., *Consensus Forecasts: A Digest of International Economic Forecasts*, various issues; Congressional Budget Office estimates.

NOTES: Gross domestic investment and gross domestic product were both measured in real national currency terms at 1987 prices.

Change may not equal difference between period averages because of rounding.

- a. The first year of the liberalization period was considered to be a transition year and, therefore, was excluded from the calculation. This assumption raises the magnitude of the reported average change results in absolute terms but does not qualitatively alter the outcome.
- b. Insufficient data.

increases so far, it is not clear whether real GNPs will be higher in the long run (see Table 4).

LESSON TWO: EXTERNAL CONDITIONS STRONGLY INFLUENCE NET CAPITAL TRANSFERS

If external conditions--like the level of world interest rates--are sufficiently unfavorable, it is not possible to attract high net inflows of private capital on a sustainable basis.

In fact, the balance-of-payments crises of the late 1970s and early 1980s were partially the result of external factors: a sharp hike in world interest rates, the collapse of world oil prices, and recession. Whether internal factors or external factors were more responsible for these balance-of-payments crises is difficult to determine, however. In addition, the resumption of high inflows of private capital in the late 1980s may largely have stemmed from external factors: a European Community-wide investment boom in the case of Portugal and Spain; a Latin American-wide investment boom in the case of Argentina, Chile, and Mexico; and, in the case of the Latin American countries, a decline in the profitability of investment in the early 1990s in countries like the United States.

TABLE 4. REAL GNP GROWTH RATES (In percent)

	Preliberalization Period Average	Liberalization Period Average, Excluding First Year ^a	Change
Mexico	3.9	4.0	0.1
Core Countries			
Chile	1.5	7.2	5.7
Portugal	3.0	4.4	1.4
Spain	2.6	4.4	1.8
Thailand	5.8	11.0	5.1
Turkey	4.6	5.3	0.7
Average Change			2.9
Other Countries			
Argentina	0.6	b	b
Greece	3.2	1.6	-1.6
South Korea	8.6	b	b
Uruguay	0.7	3.3	2.6
Average Change			0.5

SOURCES: The World Bank, *World Tables* (1992); The World Bank, *Trends in Developing Economies* (1992); DRI/McGraw Hill, *World Markets Report*, various countries and issues; Consensus Economics Inc., *Consensus Forecasts: A Digest of International Economic Forecasts*, various issues; Congressional Budget Office estimates.

NOTE: Change may not equal difference between period averages because of rounding.

a. The first year of the liberalization period was considered to be a transition year and, therefore, was excluded from the calculation. This assumption raises the magnitude of the reported average change results but does not qualitatively alter the outcome.

b. Insufficient data.

LESSON THREE: REAL EXCHANGE RATE ADJUSTMENT IS REQUIRED TO CHANGE NET CAPITAL FLOWS

Not only must real (inflation-adjusted) appreciation of the effective exchange rate take place, but it matters how that real appreciation comes about. If it comes about largely by accelerating inflation, international investors will lose confidence in the country's monetary policy, and net inflows of private capital may cease.

The forces--whether they be internal or external--that bring about higher net inflows of private capital require real appreciation of the exchange rate for the recipient country. Net inflows are gross capital inflows minus gross capital outflows. In order for a net transfer of capital to occur between two countries (or groups of countries), the donor country must run a current-account surplus and the recipient country must run a current-account deficit: the current-account surplus provides the wherewithal for the donor country to acquire the assets of the recipient country on a net basis, and the current-account deficit of the recipient country is the mirror image of the donor's surplus.

Some mechanism must exist to bring about the current-account deficit of the recipient country, and that mechanism is usually real currency appreciation. Real currency appreciation raises the price of exports in foreign

currency terms and lowers the price of imports for the recipient country, and the shifts in prices eventually induce a current-account deficit for the recipient country. (Ultimately, real currency depreciation is typically needed to stabilize the current-account deficit as a percentage of gross national product.)

If an increase in demand for the assets of the recipient country causes the nominal value of the recipient country's currency to rise, then the resulting current-account deficits may be sustainable. But if the monetary authorities of the recipient country resist nominal appreciation of the currency by purchasing foreign exchange reserves in the foreign exchange market, then growth in those foreign exchange reserves may result in inflationary increases in the domestic monetary-reserve base. If inflation accelerates, international investors are likely to lose confidence in the recipient country's currency and withdraw their financing of the current-account deficit, thereby precipitating a balance-of-payments crisis.

Similarly, if domestic macroeconomic policies are overly expansionary for other reasons--while nominal exchange rates are kept rigid--the result would be to overvalue the exchange rate in real terms because of high domestic inflation. Again, the confidence of international investors is eroded. In fact, for the countries in CBO's sample, this erosion of confidence was a

major cause of the balance-of-payments crises of the late 1970s and early 1980s.

LESSON FOUR: SUBORDINATING MONETARY POLICY TO EXCHANGE RATE MANAGEMENT CAN CREATE A CONFLICT IN POLICY GOALS

Subordinating domestic monetary policy to the external policy goal of a fixed or targeted exchange rate can--under certain conditions--create a conflict of policy goals that undermines the confidence of international investors and sacrifices domestic policy goals. Conversely, a suitable exchange rate policy allows external balances to adjust to market forces while domestic policy yields reasonable real growth and inflation.

A number of countries subordinate their domestic monetary policy to the external policy goal of a fixed or otherwise targeted exchange rate. This practice can, however, create conflict of policy goals by causing a level of inflation or a level of interest rates that is inconsistent with domestic policy. When goals for exchange rates are maintained by buying and selling international exchange reserves--which are part of the domestic monetary-reserve base--or by manipulating domestic interest rates, monetary policy may prove so tight as to produce austerity and weak demand for domestic

investment, or be so loose as to result in accelerating inflation. Severe austerity or spiraling inflation almost always puts off international investors.

Alternatively, if exchange rates are allowed to reflect market forces, then domestic policy can be directed toward domestic goals for inflation and real growth.

CHARACTERISTICS OF THE TEN COUNTRIES

CBO examined the experience of 10 countries, including Mexico, over the 1970-1991 period. These countries were chosen because they were similar to Mexico in a number of important respects. The most important similarities were their semi-industrialized and initial low-wage status, but many other initial conditions were also similar. At the same time, the 10 countries have exhibited a number of important differences. Some of these differences may influence whether the countries in CBO's sample can sustain recent high net inflows of private capital for years to come.

Initial Conditions

Initially, the economies of virtually all these countries were highly regulated. Both international trade- and capital-account transactions were subject to restrictions. Domestic controls included controls on interest rates, credit ceilings, price controls, and, in at least one case, controls on profit margins. In addition, for many of the countries, public sectors included numerous state-subsidized, public enterprises. Moreover, most of their governments had pursued overly expansionary macroeconomic policies and unsustainable goals for exchange rates.

Before the balance-of-payments crises of the late 1970s and early 1980s, four countries had liberalized their external sectors, and a couple had made internal structural reforms. South Korea had substantially liberalized many of its trade policies, whereas Argentina, Chile, and Uruguay had extensively liberalized both international trade- and capital-account transactions. In addition, Argentina began deregulating interest rates in 1977, and Chile had undertaken tax reform, labor-market reform, liberalization of internal investment, reform of financial markets, and privatization of some state enterprises.

How the Countries Differ

Although most (if not all) of the countries in CBO's sample now enjoy at least limited democracy, the 10 experienced a wide range of political climates and climatic changes over the 1970-1991 period, including revolutions and numerous coups d'état. The Chilean revolution in 1973, for example, replaced a Marxist government with a right-wing military dictatorship, whereas the Portuguese revolution in 1974 replaced a dictatorship with a Marxist military government. Many countries favored inefficient, inward-looking development strategies, but even the export-oriented South Korean government of the 1970s encumbered the Korean economy with numerous controls and macroeconomic mismanagement.

During the late 1970s and early 1980s, when most of the countries experienced unsustainable periods of high net capital inflow, Greece and Portugal did not. Greece experienced high net inflows of private capital on a sustainable basis, both before and after broad-based reforms. The motivation in this case was probably idiosyncratic: Greek emigrants habitually invested in their mother country (although at a declining rate) over time. Portugal only sporadically experienced high net inflows before broad-based reforms.

Although the 10 countries underwent reforms in all of the broad areas discussed previously, the sequencing of reforms varied widely among countries. Moreover, countries generally entered phases of liberalization on different dates over the 1981-1991 period (see Table 1). These dates were judgmentally chosen and are in fact highly arguable. Portugal and Spain, for example, entered liberalization phases in 1986, when they joined the European Community (EC), but this was after a period of limited reforms starting in the early 1980s for both countries (in the Spanish case reforms accelerated with the election of a Socialist government in 1982). Greece entered the EC in 1981, but arguably did not enter a liberalization phase until 1986. During the early 1980s, the Greek government nationalized private companies and imposed widespread price controls.

Some countries, like Mexico and Thailand, made dramatic progress in reducing their budget deficits, whereas most other countries were less successful. Progress in reducing government budget deficits signaled entry into the liberalization phase for Thailand in 1986, whereas it did not for many other countries. Some countries, such as Argentina in 1991 to 1992 and Mexico in 1988 to 1989, made vast improvements with a large number of reforms in only one or two years. Still others, such as Turkey and Chile, made progress over many years. Many of the 10 countries, such as Mexico, have a commitment to reform that is highly credible, whereas at least one

country, South Korea, may be viewed as less credible because of the likelihood of policy reversals.³

After entering recent liberalization phases, most countries experienced significant increases in net inflows of private capital as a percentage of GNP, whereas two countries--Greece and Uruguay--actually experienced declines. In the case of Greece, this decline stemmed from a number of factors, including the idiosyncratic character of capital flows previously mentioned; in the case of Uruguay, it was probably the result of a return to triple-digit inflation.

Only three countries--Chile, Thailand, and Spain--experienced significant increases in average domestic investment rates after entering liberalization phases. Changes in average domestic investment rates for most other countries were negative, although for some countries, such as Mexico, investment rates accelerated during their recent liberalization phases.

Generally speaking, the differences in results are the consequence of varying degrees of achievement in the liberalization process and differing external conditions. Although the 10 countries underwent economic reforms

3. On the latter point, see Deborah J. Lindner, "Foreign Exchange Policy, Monetary Policy, and Capital Market Liberalization in Korea," International Finance Discussion Papers, No. 435 (Board of Governors of the Federal Reserve System, August 1992).

in all of the broad areas of reform discussed in Chapter 2 of the CBO study *A Budgetary and Economic Analysis of the North American Free Trade Agreement*, they did so with different degrees of success, particularly with regard to reducing government deficits and inflation.

Finally, recent events and preliminary information for 1992 suggest that the prospects for sustaining high net inflows of private capital in the future are uncertain, and, at least temporarily, some countries may have dropped out of their liberalization phases. Portugal and Spain are struggling anew with large government deficits. In 1992, Portugal and Spain experienced significant declines in net inflows of private capital and domestic investment rates, as interest rates were kept high to maintain fixed bilateral parities within the exchange rate mechanism of the European Monetary System. Not unrelatedly, Europe in general continues to suffer a severe downswing in economic activity. Turkish inflation is extremely high because of a return to the practice of monetizing government deficits.

Higher short-term U.S. interest rates in the future could lower the net inflow of private capital to a number of Latin American countries, while raising the cost of their debt service. In Argentina, international reserves are now mandated to be the only form of domestic monetary reserves, and Argentina is now obligated to change its international reserves in order to fix

its exchange rate. Argentina could experience instability in its domestic monetary policy as a result. And Thailand has encountered serious infrastructural bottlenecks that may hinder future inflows of private capital.