

# Are Private Capital Flows to Developing Countries Sustainable?

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Will the spectacular surge in private capital flows to developing countries in the 1990s be followed, as some worry, by an equally spectacular reversal of flows, leading to a financial crisis like the one that followed the last such surge in the 1970s? A generalized reversal is unlikely. But individual countries may experience volatile financial flows and changing terms of access to capital markets.

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## Summary findings

The remarkable surge in private capital flows to developing countries since 1990 has greatly facilitated their rapid growth, at a time when OECD countries have been in, or passed through, recession. The importance of these flows to the current account of several large developing countries has caused concern about their sustainability, especially if international interest rates continue rising.

The form of these flows, and their source — investors rather than commercial banks — causes concern about their short-term volatility. To address the issue of sustainability, Dadush, Dhareshwar, and Johannes draw on analyses of international financial flows and economic prospects carried out by the Bank's International Economics Department. They conclude that private capital flows to developing countries are likely to be sustained at, or near, current total levels for the following reasons:

- Much of the private flow comes from direct investment. Foreign direct investment has increased as international businesses pursue globalization strategies. Firms are taking advantage of liberalization drives and rising incomes in developing countries, as well as dramatic changes in transport and telecommunications — factors that are structural rather than cyclical, and that are likely to be reinforced by implementation of Uruguay Round agreements.

- Sources of finance are more diversified. There is greater risk-sharing between creditor and debtor. Funds are predominantly going to the private sector (not sovereign governments). And developing countries still account for less than 1 percent of the investment

portfolios of OECD investors. In the 1970s, commercial bank loans accounted for proportionately more flows. Now, increasingly large roles are played by bondholders, equity investors, and money market funds.

- A prolonged major increase in international interest rates would jeopardize continuation of the flows at current levels, but the likelihood of such an increase in the next three to five years is slim. Any rise in interest rates in industrial countries will largely reflect rising demand for credit because of increased economic activity, which will benefit developing country exports. Commodity prices have surged in the past six months, but measures of core inflation, including unit labor costs, are at a historic low. This scenario is very different from the combination of high interest rates and economic recession the developing world faced in the early 1980s, as high and rising inflation induced sudden tightening of monetary policies.

Still, significant areas of risk deserve attention from developing country governments, international financial institutions, and industrial country investors. Some major recipients of private capital flows are vulnerable to sudden changes in both domestic or external environments. And portfolio equity flows are likely to be more volatile than other forms of private capital flows.

The policy response to large capital inflows should depend on whether the current account deficit is sustainable and the degree to which it is over- or under-financed. While the external environment is favorable, vulnerable countries have a window of opportunity to undertake adjustment.

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This paper — a product of the International Economic Analysis and Prospects Division and the International Finance Division, International Economics Department — is part of a larger effort in the department to understand the determinants of private capital flows to developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Jackie Queen, room 58-216, extension 33740 (41 pages). December 1994.

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# **ARE PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES SUSTAINABLE?**

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The recent big story in developing country financing has been the spectacular surge in private capital in the 90s. Is it the case, as some have worried, that a bigger story waiting around the corner is an equally spectacular reversal in these flows, leading to another financial crisis of the type that followed the last big surge in private financing for the developing countries in the 1970s? A generalized reversal in private flows is unlikely, because in large part they reflect structural changes, both in the international capital markets and in developing countries. Individual countries, however, are likely to experience volatility in financial flows and changing terms of access to capital markets.

## **ARE PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES SUSTAINABLE?'**

The big recent story in developing country financing has been the spectacular surge in private capital -- trebling in the last four years to over \$115 bn. in 1993. Some analysts worry that a bigger story waiting around the corner is an equally spectacular reversal in these flows, leading to another financial crisis of the type that followed the last big surge in private financing for the developing countries in the 1970s.

Our analysis suggests, however, that a generalized reversal in capital flows is unlikely for the following four reasons:

**Over half the flows are accounted for by foreign direct investment.** The acceleration in FDI is driven by the intensified pursuit of worldwide production, sourcing, and marketing strategies by international businesses. These firms are responding to the market potential offered by rising developing country incomes, to more welcoming trade and investment regimes in these countries and to dramatic changes in telecommunications technology. These factors are structural, not cyclical, and are likely to be reinforced by implementation of provisions of the Uruguay Round.

**Debt, as opposed to equity, still accounts for 40 percent of all international private flows, but unlike the generalized commercial bank loans of the 1970s, this is mainly in the form of bond issues by about 20 of the more creditworthy developing countries.** Bonds are not inherently more stable than bank loans, but the creditworthiness requirements for issuing bonds in the major financial centers reduce the risks of subsequent default. Underlying this renewed access is the fundamental reform in economic and financial policies these countries have undertaken over the 1980s.

**Despite the recent surge, developing countries still account for a disproportionately small share of the portfolios of OECD investors.** Less than one percent of pension fund holdings are invested in emerging markets, even though they account for a six percent share of world stock market capitalization, and developing countries are expected to account for over one-third of the growth in world trade and output in the next 10 years. Furthermore, the proliferation of mutual fund vehicles is

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<sup>1</sup> This note has been prepared by staff in the Development Economics Vice Presidency. Additional material can be found in a paper of the same title by U. Dadush, A. Dhareshwar, R. Johannes of the International Economics Department. Very useful suggestions and comments by M. Ahmed, M. Baird, A. Bhattacharya, S. Claessens, P. Da Cunha, M. Dooley, and M. Kiguel are gratefully acknowledged.

enabling private individuals to invest in emerging markets directly at moderate costs. Many studies have shown that OECD investors can get diversification gains from investing in emerging markets, since their correlation with stock markets in industrial countries is relatively low.

A large and prolonged increase in international interest rates would jeopardize continued growth in these flows, but the probability of such an increase is small in the next three to five years. Despite recent concerns on overheating in the US economy, the consensus is still that an increase in real interest rates over the medium term will be modest since inflationary pressures are muted. The rise in interest rates will largely reflect rising credit demand resulting from higher economic activity which will benefit the exports of developing countries. In the medium term, monetary policies in the G-3 seem set on a prudent course, and budget deficits in the industrial countries are expected to decline modestly as a percentage of GDP. Commodity prices, including oil, are expected to recover only gradually from historic lows. This is a very different scenario from the hike in interest rates and economic recession combination that hit the developing world in 1980-82, as high and rising inflation induced monetary policies to tighten suddenly.

**There are two important caveats to this overall positive outlook.**

**First, even with growing overall private capital flows, individual countries are likely to find that volatility and changing terms of access to capital markets are very real problems. Private investors respond with alacrity to a worsening of economic prospects or to the threat of political instability (e.g. a reputed \$10 bn. has flown out of Mexico in the past month).**

Take the 18 countries which, between them, account for over 80 percent of these inflows. Among them, vulnerability, as measured by a wide range of indicators, varies considerably. For example, based on the trend of the last five years, three of these countries—Argentina, India, and Mexico<sup>2</sup>—have accumulated foreign liabilities at a rate which greatly exceeds the growth of their exports. These countries, which account for 23 percent of private inflows to developing countries, will probably need to engineer a soft landing of their current account deficit in the not too distant future, or at least to show a steep progression in exports that would enable them to carry

Two other countries, Turkey and Venezuela, which together account for 6 percent of flows, have seen a marked deterioration in economic performance in the last two years on account largely of domestic policies. High fiscal deficits, appreciation of the real exchange rate, and deteriorating current account positions, have combined to force a retrenchment in demand and a deceleration in output. Venezuela is, in addition, suffering from the sharp fall in oil prices in the last year.

Second, portfolio equity, which accounts for only 10 percent of all private flows but gets the lion's share of media coverage, is likely to display more volatility both across countries and in the aggregate. Although the fundamental reasons for investing in emerging markets are sound, many analysts believe that periods of extraordinary appreciation have induced a herd instinct amongst investors--one that holds within it the seeds of subsequent disillusion. Some correction has already taken place in recent months, but a few emerging markets remain overbought. Recent P/E ratios in Argentina, Columbia, India, Hungary and Poland were more than double the average for US and European markets. More generally, emerging markets suffer from limited liquidity and poor regulation and infrastructure. A crisis in one market or the other may well develop as these markets mature; but the important thing is to keep this problem in perspective in looking at overall developing country financing.

**A policy response is needed in some cases.**

Governments cannot anticipate some adverse developments -- such as those in Mexico, but they can take steps to reduce their vulnerability to sudden reversals in market sentiment. Even among vulnerable countries, situations differ greatly and policies have to be specifically tailored. Steps to consider are:

- Reducing large budget deficits and high real interest rates where they are the factors primarily responsible for inducing the inflows.
- Strengthening the institutional and regulatory framework of capital markets and the banking sector; building firewalls as needed to strengthen the solvency and liquidity of the banking system in the face of unanticipated large external shocks.
- Ensuring that the policy and incentives structure encourages the use of capital (domestic and external) to support investment, and the growth of exports that will provide the basis for sustained creditworthiness. This requires an open trade regime, eliminating regulations and unnecessary tax or bureaucratic burdens to exports, and avoiding overvalued exchange rates.

- Restricting capital inflow is unlikely to be an effective long-term measure, but may serve at times to forestall speculative inflows. Opening up opportunities for residents to invest abroad also helps to buy the benefits of asset diversification while relieving pressure on the exchange rate.

The current international economic environment is more favorable than it has been for 20 years. World output, weighted by the share of developing country exports, is growing at close to 3% a year, and interest rates, inflation and oil prices are at near historic lows. This provides a window of opportunity for countries to adjust their domestic imbalances and achieve a soft landing. Policy measures to achieve this are likely to be much less disruptive while the countries have the confidence of international investors, and the external environment is favorable, than when a crisis is at hand.

## **ARE PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES SUSTAINABLE?<sup>1</sup>**

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### **I. INTRODUCTION**

Private capital flows to developing countries have quadrupled in the last three years to reach more than \$157 billion in 1993.<sup>2</sup> Although the projections for 1994 are that they will stabilize at near the 1993 level, the size of the flows, expressed in real terms, now exceeds the levels preceding the debt crisis by a wide margin. In contrast to the 1970's, when the dominant source of private capital inflow was commercial bank lending, they have largely taken the form of bonds and foreign direct investment (see Table 1 later in the text). Portfolio equity, which had been a small and growing component in the early 1990s, rose spectacularly in 1993 to reach \$47 billion. For the most part, the portfolio flows have been directed to some 20 middle-income countries in Latin America and East Asia, and to China.

The continuation of private capital flows at or near current levels conditions the current sanguine assessment of developing country prospects. The importance of the flows in financing the current account of several large developing countries has raised concerns about their sustainability, especially if international interest rates continue to rise. The form of these new flows, and their source—investors rather than commercial banks—has led to questions about their volatility in the short term. The size, autonomous nature, and suddenness of the inflows have created problems of macroeconomic management in some countries, especially potential overvaluation of the real exchange rate. In a world economy that is becoming more tightly-knit every year, the appropriate response of policies to the new phenomenon is a question for countries at all stages of development.

This note addresses the issue of sustainability directly by drawing together disparate strands of research. Among these are the analyses of international financial flows and economic prospects carried out in the International Economics Department of the World Bank. The issue of sustainability is distinct from, though related to, the macroeconomic and

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<sup>1</sup> Very useful suggestions and comments by M. Ahmed, M. Baird, A. Bhattacharya, S. Claessens, P. Da Cunha, M. Dooley, M. Kiguel, and R. Zagher are gratefully acknowledged without implicating them.

<sup>2</sup> Preliminary figures—currently being revised. Source: World Bank: World Debt Tables, 1994 (draft).



microeconomic management of the capital inflows by developing countries; hence, findings on the latter issue are only touched upon where it is felt to be directly relevant to the sustainability question.

The question of sustainability does not easily lend itself to generalization because the prospects for sustainability vary enormously by country, and considerably by type of capital flow. Changes in the international economic environment, at first sight a common factor, also affect countries and types of flow very differently. The opinions expressed in this note are qualified accordingly.

Much of the discussion of causes of private capital flows to developing countries has focused on the relative importance of external and domestic factors. These are referred to as "push" factors (e.g., lower international interest rates in industrialized countries, institutional and regulatory changes in industrial countries) and "pull" factors (e.g., improved developing country creditworthiness, liberalized codes of inward direct investment). If the latter are most important, then developing countries that perform well can be assured continued financing even if the international economic environment deteriorates. If, on the other hand, the "push" factors dominate, then recipients of the flows are at the mercy of the elements, so to speak. Some observers have in fact argued that push elements are the prime drivers of private capital flows to developing countries; others that push and pull have both been important.

The view taken here is that while historically low international interest rates are an important precipitating factor behind the increased flows, other equally important "push" factors have been at work which reflect structural changes in industrial countries, unlikely to reverse quickly. In addition, "pull" factors such as policies of trade reform, privatization and liberalization in developing countries have been a vital ingredient. Recently, it has become better appreciated that "pull" and "push" factors are in fact interdependent. For example, low international interest rates have enabled developing countries to pay a large premium to investors seeking to earn yields prevalent in the industrial countries in the 1980s. But they are also a prime cause of lower debt service ratios and improved creditworthiness of developing countries.<sup>3</sup>

## **II. SUMMARY OUTLINE**

**A. Our main conclusion is that, while private flows to developing countries will not continue to grow at rates seen in recent years, a generalized reversal in capital flows is unlikely for the following three reasons:**

**A.1. A large proportion (over 40 percent) of the private flows are accounted for by foreign direct investment. The acceleration in FDI is driven by the intensified pursuit of worldwide production, sourcing, and marketing strategies by international businesses. These firms are responding to the market potential offered by rising developing country incomes, to**

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<sup>3</sup> Fernandez-Arias, Eduardo, 1994. "The New Wave of Private Capital Flows," mimeo, in process for working paper series.

more welcoming trade and investment regimes in these countries and to dramatic changes in telecommunications technology and transportation costs. These factors are largely structural, not cyclical, and are likely to be reinforced by implementation of provisions of the Uruguay Round.

**A.2. The sources of finance are much more diversified, there is greater risk sharing between creditor and debtor, the private sector is increasingly important as recipient, and developing countries still account for a disproportionately small share of the portfolios of OECD investors. Commercial banks have been supplemented by bondholders, equity investors, and money market funds. Within private flows, equity now predominates over debt, and borrowers are predominantly private sector. Portfolio equity investment in developing countries accounts for an estimated less than one percent of OECD investment portfolios.**

**A.3. A large and prolonged increase in international interest rates would jeopardize continuation of these flows at current levels, but the probability of such an increase is small in the next three to five years. Despite recent concerns on overheating in the US economy, the consensus is still that an increase in real interest rates over the medium term will be modest since inflationary pressures are muted. The rise in interest rates will largely reflect rising credit demand resulting from higher economic activity which will benefit the exports of developing countries. In the medium term, monetary policies in the G-3 seem set on a prudent course, and budget deficits in the industrial countries are expected to decline modestly as a percentage of GDP. Although commodity prices have surged in the past six months, measures of core inflation, including unit labor costs, are at a historic low. This is a very different scenario from the hike in interest rates and economic recession combination that hit the developing world in 1980-82, as high and rising inflation induced monetary policies to tighten suddenly.**

***B. There are two important caveats to this overall positive outlook.***

**B.1. Even with sustained overall private capital flows, individual countries are likely to experience volatility in financial flows and changing terms of access to capital markets. Private investors respond with alacrity to a worsening of economic prospects or to the threat of political instability (e.g. a reputed \$10 bn. had flown out of Mexico in the second quarter of 1994).**

Take the 18 countries which, between them, account for over 80 percent of these inflows (see Table 2 later in the text). Among them, vulnerability, as measured by a wide range of indicators, varies considerably. For example, based on the trend of the last five years, three of these countries—India, Mexico, and to a smaller extent, Argentina<sup>4</sup>— would

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<sup>4</sup> Hungary, Poland, and the Republics of the FSU, which have attracted 10 percent of private capital flows, could be added to this list though they are clearly a special case in many respects.

accumulate foreign liabilities at a rate which greatly exceeds the growth of their exports. These countries, which account for 21 percent of private inflows to developing countries, will probably need to engineer a soft landing of their current account deficit in the not too distant future, or at least to show a step progression in exports that would enable them to carry increased foreign liabilities comfortably.<sup>5</sup>

Two other countries, Turkey and Venezuela, which together account for 6 percent of flows, have seen a marked deterioration in economic performance in the last two years on account largely of domestic policies. High fiscal deficits, appreciation of the real exchange rate, and deteriorating current account positions, have combined to force a retrenchment in demand and a deceleration in output. Venezuela is, in addition, suffering from the sharp fall in oil prices in the last year.

**B.2. Portfolio equity, which in 1993 represented about 30 percent of total private flows but gets the lion's share of media coverage, is likely to display more volatility both across countries and in the aggregate. Although the fundamental reasons for investing in emerging markets are sound, many analysts believe that periods of extraordinary appreciation have induced a herd instinct amongst investors—one that holds within it the seeds of subsequent disillusion. Some correction has already taken place in recent months, but a few emerging markets remain overbought. Recent P/E ratios in Argentina, Columbia, India, Hungary and Poland were more than double the average for US and European markets. More generally, emerging markets suffer from limited liquidity and poor regulation and infrastructure. A crisis in one market or the other may well develop as these markets mature; but the volatility in asset prices will, to some extent, mitigate the volatility in overall developing country financing.**

*C. A policy response is needed in cases where large current account deficits are unsustainable.*

Governments cannot anticipate some adverse developments — such as those in Mexico earlier in the year, but they can take steps to reduce their vulnerability to sudden reversals in market sentiment. All large recipients should strengthen the institutional and regulatory framework of capital markets and the banking sector, and build firewalls as needed to strengthen the solvency and liquidity of the banking system in the face of unanticipated large external shocks. Among vulnerable countries, situations differ greatly and policies have to be specifically tailored. An important first step is to estimate whether large current account deficits are sustainable in the longer term. Especially if the answer is a likely no, subsequent steps to consider are:

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<sup>5</sup> Exports of India have grown by 20% in the last year, but it is too early to conclude that this represents the affirmation of a new trend.

- Reducing large budget deficits and high real interest rates where they are the factors primarily responsible for inducing the inflows.
- Ensuring that the policy and incentives structure encourages both the use of capital (domestic and external) to support investment and the growth of exports, which will provide the basis for sustained creditworthiness. This requires an open trade regime, eliminating regulations and unnecessary tax or bureaucratic burdens to exports, and avoiding overvalued exchange rates.
- Restricting capital inflow is unlikely to be an effective long-term measure, but may serve at times to forestall speculative inflows. Likewise, widening exchange rate bands may serve to discourage speculation. Opening up opportunities for residents to invest abroad also helps to buy the benefits of asset diversification while relieving pressure on the exchange rate.

The current international economic environment is more favorable than it has been for 20 years. World output, weighted by the share of developing country exports, is growing at close to 3% a year, and inflation and oil prices are at near historic lows. This provides a window of opportunity for countries to adjust their domestic imbalances and achieve a soft landing. Policy measures to achieve this are likely to be much less disruptive while the countries have the confidence of international investors, and the external environment is favorable, than when a crisis is at hand.

### **III. THE SUSTAINABILITY OF PRIVATE CAPITAL FLOWS**

*A. Our main conclusion is that, while private flows to developing countries will not continue to grow at rates seen in recent years, a generalized reversal in capital flows is unlikely for the following three reasons:*

**A.1. A large proportion (over 40 percent) of the private flows are accounted for by foreign direct investment (See Table 1).**

Given the importance of FDI in net private flows, understanding its characteristics is central to the analysis of sustainability. FDI to developing countries has grown at a fairly steady rate of 30 percent a year since 1987. Behind the surge is the increased pursuit of globalization strategies by companies. These strategies have included investment in low-cost locations, building distribution channels in untapped markets, development of new sources of raw materials, and preemptive acquisition of privatized companies. Underlying the strategies have been improvements in communications and transportation, and a growing tendency of companies to focus their businesses on highly specialized niches which can, and need to be, exploited on a global scale.

**Table 1. Aggregate Net Long-Term Resource Flows to Developing Countries  
(U.S.\$ bill.)**

	1990	1993 <sup>a</sup>
<b>Total</b>	102.1	209.0
<b>Total less grants</b>	73.6	141.2
<b>Official</b>	59.1	53.0
<b>of which grants</b>	28.5	31.1
<b>Private loans (net) and banks</b>	12.9	45.0
<b>FDI</b>	26.3	65.0
<b>Portfolio equity (estimated)</b>	3.8	46.9
<b>Total private flows</b>	43.0	157.0

<sup>a</sup> Preliminary estimates; these are higher than the estimates given in World Debt Tables, 1993-1994, by more than U.S.\$B40. The upward revision is primarily in the portfolio debt category; even the above estimates are conservative.

Source: World Bank: World Debt Tables 1994-1995 (draft).

In recent years, developing countries have attracted a high share of FDI flows as industrial countries suffered recession. The share has risen from less than 15 percent in the second half of the 1980s to 31 percent in 1992, about equal to the proportion of world GNP accounted for by developing countries (although the share of GNP is higher on the basis of ICP prices which use purchasing power parity exchange rates). The spread of economic recovery to Japan and Europe will probably reduce the share of FDI going to developing countries somewhat. But it will also improve the confidence of companies and increase their cash-flow available for foreign investment. Reflecting the structural forces discussed above, the underlying trend rate of growth of worldwide foreign direct investment is very high, well in excess of that of world trade. Even before the onset of the latest recession in industrial countries, in the period 1987-89, the growth rate of FDI flows to developing countries was in excess of 20 percent a year in real terms.

Clearly, necessary conditions for FDI to continue to grow are that it is profitable and that dividend payments and capital can be repatriated in foreign currency. A rough estimate of the expected cost of servicing these flows can be derived from data about the outstanding stock of

FDI in developing countries and the flow of repatriated profits. In 1992 the stock was about US\$201 billion and the flow of remitted and reinvested profits about \$23 billion, implying a return on investment of about 12 percent. This is a lower than average on equity investment in industrial countries, and, on the face of it, does not adequately compensate for the higher risk associated with foreign investment. A possible reason might be that many of these investments are of recent vintage, and their book value may reflect market valuation more accurately than measures of the investment stock in industrial countries.

Profits (remitted or reinvested) amounted to 42 percent of new net inflows of FDI in 1993, and are likely to grow as a proportion of new inflows. Typically, remitted profits grow rapidly in the early years following new investment. But even if net FDI flows were to grow at one-third the rate seen before the recession, that would be in line with the growth of developing country imports. In the 1980s, in the industrial countries the share of FDI in their domestic capital formation increased substantially, reaching for example, 16 percent in Belgium, 12 percent in the Netherlands, and 10 percent in the U.K. (reflecting, in part, factors associated with the European Union). FDI still usually represents only a small fraction (2 to 3 percent, or even less for some countries) of the investment in developing countries.

Of all the sources of private finance, FDI is likely to be the least affected by a rise in international interest rates. As in the case of domestic investment, it is difficult to establish a direct empirical link between these variables. To the extent that FDI flows are interest-sensitive they will be more affected by long than short term interest rates. This is in contrast to commercial bank loans which still represent the bulk of liabilities of middle income developing countries. Economic activity variables and liquidity constraints, as well as confidence factors, appear to be much more important determinants of foreign direct investment. Only through the indirect effects of interest rates on FDI (e.g., through recipient country creditworthiness) are links likely to be significant.

Looking to the longer term, FDI often entails a high proportion of two-way intra-firm trade, sometimes in the neighborhood of 50 percent of final sales. It is not surprising, therefore, that efforts by a large number of developing countries to open up their trade and investment regimes in recent years have coincided with the acceleration of these inflows. At the same time regional initiatives in industrial countries, notably the single market program in Europe and the US-Canadian Free Trade Agreement, have stimulated foreign investment flows within the OECD. On a priori grounds, preferential agreements among industrial countries might have been expected to divert foreign investment away from developing countries. In practice, greater pressures to reduce costs and achieve scale economies as competition in the OECD has intensified, may well have increased interest in developing countries.

The completion of the Uruguay Round of GATT on December 15, 1993 is widely expected to reinforce the adoption of globalization strategies in the near term even though its provisions are not yet ratified and would only be implemented over a ten year period. Multilateral liberalization increases the expected return of foreign direct investment and reduces its risk. Though FDI in some protected markets will suffer from increased competition, the cost

of cross-border transactions between multiple manufacturing sites and markets will be reduced as tariffs are cut. The risk of reversal in policies of liberalization is reduced, and the likelihood that foreign exchange will be available to fund remittances increases.

The North American Free Trade Agreement between Canada, Mexico and the United States came into effect on January 1 1994. To a large extent it recognizes an already existing situation of intense cross-border activity. But it is, nevertheless, the first example of a far-reaching regional integration arrangement involving industrial countries and a large developing country. Mexico has a population of 90 million and income per capita one-fifth that of its two partners to the North. The prospect of its ratification has been an important factor encouraging capital inflow to Mexico.

While completion of the Uruguay Round is likely to lead to enhanced levels of FDI for most parts of the developing world, as far as NAFTA is concerned, there is some concern that is often expressed that it might adversely affect FDI flows to other developing countries. The concerns are valid to the extent that, on the first instance, NAFTA is expected to continue to lead to a modest amount of investment diversion away from other developing countries. But, if it is successful, its longer term implications may have the opposite effect for the following reasons:

1. Companies in Europe and Japan have already reacted and will continue to react to the prospect that their North American competitors are gaining the advantage of a larger "home" market and easy access to low-cost production sites. Because the competition is for global, not just regional markets, the reaction will go beyond increased European and Japanese investment in Mexico and in the larger NAFTA region. As they evaluate their next investment, companies will seek-out the lowest cost/largest market location with which they are most familiar. Thus, French companies may be encouraged to look to Morocco, Japanese companies to Indonesia, and German companies to Poland.
2. The exports of the United States are expected to become more concentrated in high-value-added-per-worker activities. European governments will become increasingly concerned that the United States is gaining in high-technology industries. They may then press ahead with more far-reaching regional integration arrangements with lower-income countries to their South and East. Worry about migration will play as important a role in justifying these trading arrangements as they did during the debate on NAFTA in the U.S. Congress.
3. Other Latin American countries, spurred by the prospects of the large gains which are expected to accrue to Mexico, are already pressing to join NAFTA. The experience of the European Union since 1956 suggests that there is a strong bandwagon effect in regional integration. This is in keeping with trade theory, which predicts that small countries gain disproportionately from a move to free trade. In the Americas, already over 90% of the region's GNP is produced within the free trade area. If NAFTA is enlarged foreign investment will be stimulated further.

The possibility that NAFTA might in the long term encourage investment in other developing countries, instead of diverting it to Mexico, contradicts the standard theory. In this case, the theory's main weakness is its failure to account for the response of parties excluded from the trading arrangement, those of governments, as well as those of companies operating in oligopolistic markets.

**A.2. The sources of finance are much more diversified, there is greater risk sharing between creditor and debtor, the private sector is increasingly important as recipient, and developing countries still account for a disproportionately small share of the portfolios of OECD investors.**

Since 1989, there has been a strong shift in the composition of private-source flows from bank to a varied set of non-bank sources. They have included transnational corporations investing directly, managed portfolio investment, money market funds, pension funds, and insurance companies. It has been argued that these investors are engaged in a once-for-all portfolio shift and are, therefore, likely to cause much greater short-term volatility than commercial banks. The preceding section has argued that Foreign Direct Investment is likely to be less volatile, despite the typically strong reflow of profit remittances. Most important, there can be little doubt that the diversity of the new sources of funds, and the large number of investors involved, lessens the probability of a sudden and simultaneous drying-up of voluntary lending, as has happened in the past with bank loans. A reversal of capital flows across the board is now more likely to be caused by a country-specific deterioration in creditworthiness rather than by international developments over which the country has no control.

Two important developments behind the diversification of sources of finance have been the internationalization of U.S. institutional funds and the growth of the mutual funds industry. U.S. Pension fund legislation in the 1970s, the so-called ERISA law, substituted prudential standards for quantitative guidelines resulting in a secular upward trend in the proportion of assets held in foreign securities. Mutual funds, too, have experienced a secular trend. The assets of the mutual-funds industry were only one-tenth the size of bank deposits in the United States in the early 1980s, but had grown to be 85 percent as large by 1992. Mutual funds allow small investors to hold a much diversified set of instruments by sharing the cost of information gathering and of effecting transactions. One result has been to greatly expand the market for equities and bonds issued by small and medium-sized companies in industrial countries. The more creditworthy developing countries have been only one group of borrowers among many that have been able to take advantage of the new investment vehicles. Many studies have shown that OECD investors can get diversification gains from investing in emerging markets, since their correlation with stock markets in industrial countries is relatively low. Nevertheless, emerging markets account for no more than one percent of pension fund holdings, even though they account for a six percent share of world stock market capitalization, and developing countries are expected to account for over one-third of the growth in world trade and output in the next 10 years.



Another structural factor that has facilitated the new flows to developing countries is increased integration of the global capital markets, including those in developing countries. Financial integration is measured by the extent to which financial assets are traded goods. An accompanying concept is the degree of capital mobility—that is, the degree of substitutability between domestic and foreign assets in investment portfolios (both domestic and foreign). Developing countries that have opened up their capital markets have participated in the greater global financial integration arising from reduced communications costs and a variety of other factors (e.g., changes in securities regulation and taxation, development of derivatives markets).

Although cases of strong financial integration are rare, the majority of developing countries should be regarded as de facto financially open.<sup>6</sup>

In the early years of the new private flows, repatriation of flight capital, some of it through managed funds, played an important role in Latin America. It probably accounted for more than half the flows. More recently, in 1993, the proportion appears to have dropped as institutional investment has gained in importance. Some have suggested that the limits to the amount of flight capital imply unsustainability. Two points suggest otherwise. First, the stock of flight capital is very great, amounting to roughly nine times the annual private inflows to developing countries according to World Bank estimates. Second, it can be argued that this source represents the "smart money" of insiders, first to recognize fundamental reforms.

It has also been argued that the recent equity flows are driven by opportunities to buy newly privatized public assets and that, hence, it is a transitory phenomenon. In fact, in the vast majority of developing countries the process of privatization has at best just started. In any case, future availability of investment vehicles would depend on growth prospects and the deepening of financial markets to cover many private as well as public corporations.

Debt, as opposed to equity, still accounts for 33 percent of all international private flows, but unlike the generalized commercial bank loans of the 1970s, this is mainly in the form of bond issues by about 20 of the more creditworthy developing countries. Bonds are not inherently more stable than bank loans, but the creditworthiness requirements for issuing bonds in the major financial centers reduce the risks of subsequent default. Underlying this renewed access is the fundamental reform in economic and financial policies these countries have undertaken over the 1980s.

Though bond issuance has surged, accompanying the shift from bank to non-bank sources has been a shift in the mix of financing from debt to equity. This has taken the form of foreign direct investment (as noted above) and equity portfolio flows. Equity is more expensive than debt and its return rises with growth and inflation. On the other hand, equity permits better risk sharing since profits vary with the fortunes of the corporate sector.

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<sup>6</sup> Montiel, Peter J. 1992. "Capital Mobility in Developing Countries: Some Measurement Issues and Empirical Estimates," Working Paper Series 1103, World Bank.

There has also been a striking revival of private sector borrowing in the international capital markets. Private to private flows now account for nearly 65 percent of net long-term flows to developing countries. About half of all bond issues in the past year (1993) have originated in the private sector, and direct and equity portfolio investments accrue entirely to the private sector.

Some have argued that, so long as a high proportion of capital flows is private to private, and the government's own accounts are balanced, policy should be indifferent to the size of the current account deficit. In view of many unfortunate experiences with speculative bubbles in the past, the argument seems specious. Indeed, the negative externalities of external borrowing point to an inbuilt tendency to overborrow. Nevertheless, *incentives* have certainly improved since the 1970s: lenders need to scrutinize the creditworthiness of private sector borrowers carefully, and the borrowers themselves are subject to market disciplines. The implication is that, over the long term, resources are likely to be allocated more productively than if the dominant borrower is the public sector. Though the possibility exists that both lenders and borrowers are discounting an eventual socialization of private sector liabilities, (as occurred, for example, in Latin America during the debt crisis; and this possibility has implications for the appropriate policy framework to deal with the inflows), on balance the role played by the private sector seems to enhance the prospects for sustainability.

**A.3. A large and prolonged increase in international interest rates would jeopardize continued growth in these flows, but the probability of such an increase is small in the next three to five years.**

As discussed, low international interest rates have been an important cause behind the surge in private capital flows to developing countries. Since the sharp rise in interest rates in the early 1980's was a precipitating factor of the debt crisis, there is a serious concern that the scenario might recur. But whatever form a new financial crisis might take, it is unlikely, at present, to emanate from this source. The debt crisis followed two large oil shocks which contributed to a large rise in inflation in industrial countries. It also contributed to large current account deficits in oil-importing countries. Some oil exporting developing countries overborrowed against future oil exports. The decision to shift to much tighter monetary policies in industrial countries in 1980 was designed to stem inflation. Tight money coincided with looser fiscal policies and led to a series of very large real interest rate shocks. Six-month LIBOR rose from 6.4 percent per year in 1977 to 16.7 percent in 1981. The deflationary policy succeeded, but induced a fall in demand that contributed to a large fall in commodity prices and developing country export volumes. As can be seen in Figure 1, the years preceding the debt crisis were the only case in the last 25 years when large interest rate shocks coincided with large falls in export volumes and a fall in commodity prices.

In contrast, although most commodity prices have gone up in recent months, inflation in the industrial countries is now at a historically low level, and industrial country output is well below potential though on its way to recovery. Programs of medium term fiscal consolidation have been legislated in the United States and enshrined in the Maastricht Treaty inaugurating the

European Union. Short-term interest rates are likely to rise in the United States as recovery progresses by perhaps as much as 100-200 basis points. In Europe, they are likely to stabilize near current fairly high levels. In light of the growing importance of FDI and bond financing at fixed rates of interest, long term interest rates are becoming more important determinants of the cost of borrowing of developing countries. Long term interest rates are, expressed in real terms, already close to consensus equilibrium levels, and have arguably exceeded these following the recent turning point in U.S. monetary policies. Provided inflation remains subdued they are not expected to rise significantly from current levels. The rise in interest rates is likely to be more than offset by higher export demand for developing country exports.

To illustrate, suppose higher interest rates result from a rapid investment-led recovery that spreads to other industrial countries from the United States. Model simulation suggests that growth in the industrial countries would be higher by one percentage point a year for 1994-96, compared to the current World Bank baseline forecast. In that contingency, the rise in international interest rates would combine with higher growth in world trade of 1.7 percentage points a year. Prices of primary commodities would improve by 1.1 percentage point a year and foreign direct investment would (probably) rise or remain near current levels. If, under this scenario, interest rates rise by, say, 300 basis points, the debt-service ratios of the 18 large private capital importers would stay unchanged provided their exports, in current dollars, rose by 8 percent above the baseline at the end of three years. Such a rise would be fully consistent with the assumption of this stronger recovery.<sup>7</sup>

***B. There are two important caveats to this overall positive outlook.***

**B.1. Even with sustained overall private capital flows, individual countries are likely to experience volatility in financial flows and changing terms of access to capital markets.**

On the "pull" side, the major determinants of sustainability are the recipient country's domestic policies, and its overall growth and export performance. Private capital inflows are more likely to be sustainable if they reflect a structural improvement in the country's ability to grow its exports and import-compete than if they are attracted by a tightening of credit conditions, or a bull run on its currency or stock exchange<sup>8</sup>. In assessing sustainability, we can distinguish in principle between changes in the real economy (arising from e.g., improved productivity, higher rates of investment, depreciation of real exchange rate, fiscal consolidation, tariff reform, privatization, etc.) and changes in financial conditions (e.g., availability of credit and the level of real interest rates). Reviews of country experience (e.g., Corbo and Hernandez, 1993)<sup>9</sup> suggest that the dominant factors attracting capital inflow have been structural changes

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<sup>7</sup> This is a standard result of econometric simulations of the effects of a demand expansion of industrial countries on developing countries. Especially if the initial condition is low capacity utilization, demand expansion has a more powerful favorable effect than the adverse effect of the subsequent rise in interest rates.

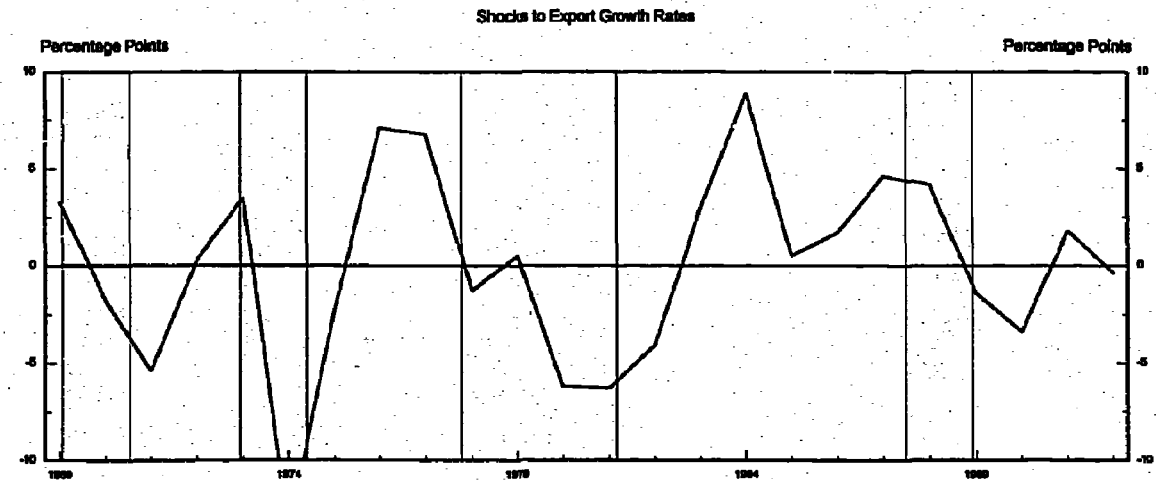
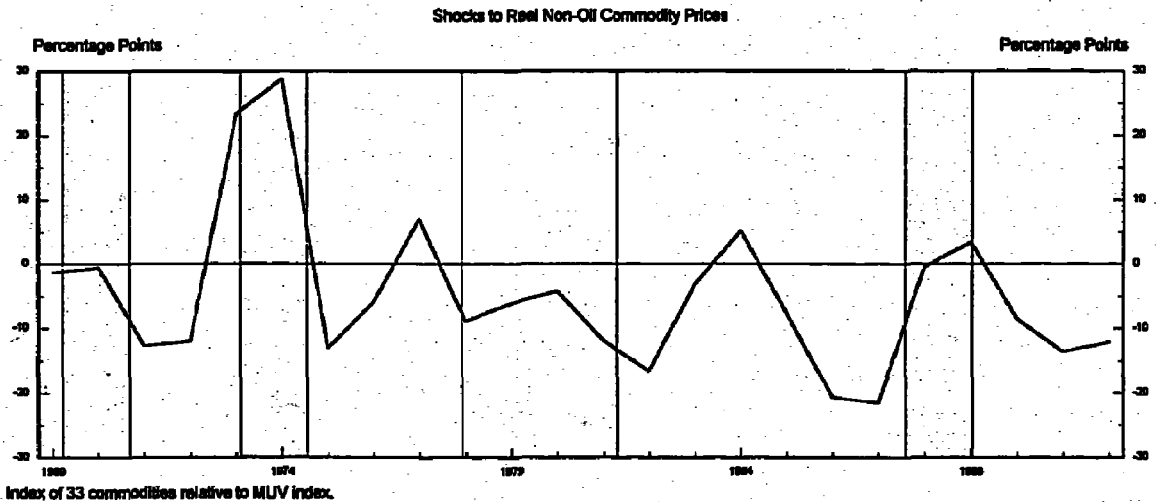
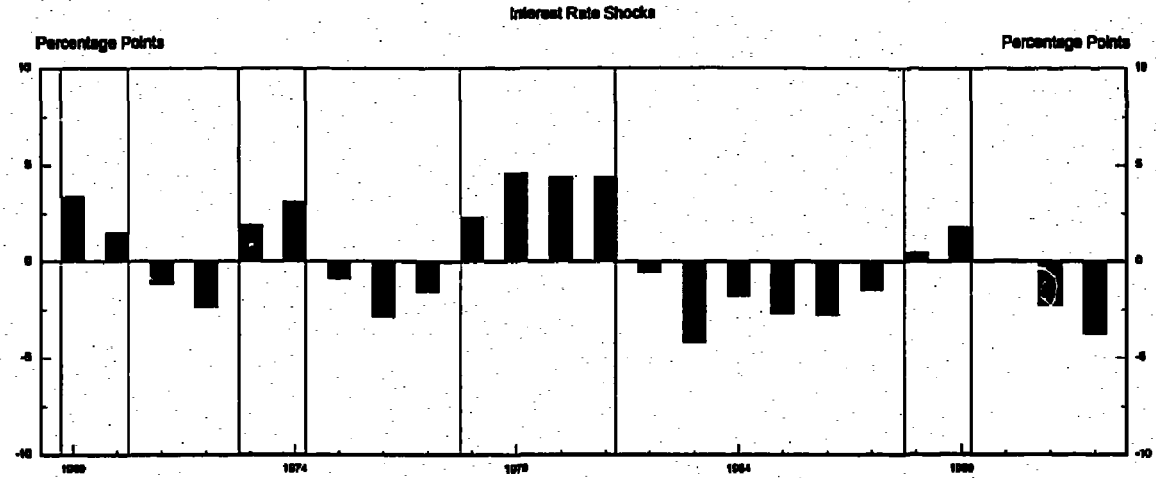
<sup>8</sup> See Schadler, et al. "Recent Experiences with Surges in Capital Inflows."

such as trade liberalization, privatization, tax reform, and financial sector liberalization. A proper assessment requires a country-by-country analysis that would replicate the work of credit agencies and is beyond the scope of this paper. This section, and the accompanying Appendix 2,

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<sup>9</sup> V. Corbo and L. Hernandez (1993). "Macroeconomic Adjustment to Capital Inflows" Portfolio Investment in Developing Countries, World Bank Discussion Paper, ed. S. Claessens and S. Gooptu: 353-371.

**Figure 1. Shocks to Short-Term Interest Rates versus Shocks to Real Commodity Prices and Export Growth**  
 (Shaded areas show periods of high/low interest-rate shock.)



Note: Shocks are defined as deviations from three-year moving averages.  
 Source: World Bank: BESD and IMF: International Financial Statistics.

aims to provide a birds-eye view of sustainability among major recipients by focusing on a few key variables: export growth, current account deficits, debt-ratios and investment performance.

As noted in the introduction to this note, the distribution of private capital flows has been uneven. For the most part, low-income countries have not benefited from increased private capital flows. Excepting China, India and Indonesia, the 18 that have accounted for 90 percent of the flows in the last three years are middle-income countries (Table 2). Judged by traditional measures of creditworthiness, the ability of these countries to attract and service capital inflows has improved markedly since the height of the debt crisis. From 1987 to 1993 their median debt/export ratio fell from 2.6 to 1.9, and their median debt-service/export ratio improved markedly, from 33 percent to 23 percent<sup>10</sup>. China has been by far the largest recipient of any developing country, accounting for 24 percent of the flows of private capital. Judging by the trends of the last 15 years, China's export potential is very high, and, since it has, until recently, run current account surpluses, its foreign liabilities are low.

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<sup>10</sup> Due to data limitations with respect to the FSU countries, some of the statistics quoted in the rest of the paper are for the remaining 17 countries.

**Table 2. Private Capital Flow Sustainability Analysis**

**18 Selected Countries**

	<i>Share in Private Flows to LMICs (%)</i>	<i>Debt/Export Ratio</i>		<i>Debt-Service/Export Ratio (%)</i>	
	<i>(1991-93)<sup>‡</sup></i>	<i>1987</i>	<i>1993</i>	<i>1987</i>	<i>1993</i>
China	24.0	0.9	0.9	10	11
Mexico	12.4	3.6	2.4	40	34
Korea	7.2	0.7	0.5	32	7
USSR/FSU	7.1	0.5	2.2	12	5
Argentina	6.6	7.0	3.9	74	35
Malaysia	6.0	1.1	0.5	21	6
Portugal	5.7	1.1	1.3	33	19
Brazil	4.7	4.3	2.7	42	30
Thailand	4.0	1.3	1.0	22	14
Turkey	3.3	2.5	1.9	36	28
Venezuela	2.5	2.7	2.3	38	25
Hungary	2.3	1.7	2.0	33	38
Iran	2.2	0.5	0.9	4	6
India	1.6	3.0	2.8	31	26
Chile	1.3	3.3	1.7	36	23
Indonesia	1.2	2.6	2.2	37	29
Philippines	1.2	3.1	1.9	35	20
Poland	1.1	2.7	2.4	13	9
Median	3.7	2.6	1.9	33	23
Median of all LMICs	0.0	2.7	2.3	22	14

<sup>‡</sup> The country numbers for 1993 are derived from World Debt Tables 1993-1994. Their sum is smaller than aggregate 1993 estimate in World Debt Tables 1994-1995 (draft) by U.S.\$30-40 billion.

Source: World Bank: World Debt Tables 1993-1994.

However, traditional measures of creditworthiness, such as the debt/export ratio and the debt service/export ratio, are of only limited use in addressing the question of sustainability of private capital inflow since most of the new inflows take the form of equity. Furthermore, traditional creditworthiness ratios measure *levels* of indebtedness rather than *trends*. For example, take two countries that have a debt/export ratio of 2, the export trend in one shows growth at 10 percent a year, but is flat in the other. Which can sustain the larger deficit? Clearly, the first country can sustain larger current account deficits than the second. Exports of many developing countries have accelerated markedly since around 1986-87, and measures capable of accounting for this factor are required.

To address this problem, we propose to use techniques which are commonly applied to assess the sustainability of another type of deficit, that of governments. Those techniques have led to what are by now familiar results. For example, that a country can run a primary government deficit (i.e. a deficit excluding net interest payments) indefinitely, but only if GDP growth rate exceeds the interest rate it pays on its debt. Analogous results can be obtained in the relationships governing current account deficits, foreign liabilities and the growth rate of exports (see Appendix 1).

Applying this line of thinking, we can define the "asymptotic liabilities/export ratio (ALE) as the ratio to which foreign liabilities/exports will converge on the basis of existing trends in exports and the current account."<sup>11</sup> We measure trends over a five-year interval to iron out the effects of the business cycle and other short-term disturbances. As shown in Appendix 1, the ALE can be computed simply as

$$\text{Current Account Deficit} \div \text{Change in Exports}$$

or, alternatively,

$$\frac{\text{Current Account Deficit}}{\text{Exports}} \div \frac{\text{Change in Exports}}{\text{Exports}}$$

The latter expression has the advantage that both numerator and denominator are unit free, allowing us to compare each across countries and over time.

What is a reasonable level of the ALE, one that does not imply excessively difficult problems in servicing foreign liabilities? The rule of thumb we can apply is the same as that commonly adopted in the case of the debt/export ratio, and that number is 2. This is roughly equivalent to a rule that the cost of servicing foreign liabilities should amount to no more than 40 percent exports, assuming that the foreign investors expect a 10 percent annual return and turn-over their capital every 10 years.<sup>12</sup>

We can use the ALE to track sustainability of private flows to large recipients (Figure 1). The central observation is that the median rate of growth of exports of the 18 large recipients has risen markedly since the debt crisis, and the median current account deficits has declined. As a result the median asymptotic liability/export (ALE) ratio of the 18 large recipients of private capital flows has improved markedly. Comparing the height of the debt-crisis with the last three years, the ratio is lower by a factor of 8 and is now close to its historic low. The median current



account deficit, expressed as a ratio to exports is lower than at any time since 1960, and less than half that during the run-up to debt crisis in 1982. The recovery in export growth rates in the second half of the 1980's and its persistence in recent years is especially noteworthy. It has occurred against the background of recession in the industrial countries and weakness in commodity prices.

Given a target liability/export ratio, the sustainable capital inflow is directly proportional to the difference between the export growth rate and the interest rate.<sup>13</sup> Let us say that the target ALE is 2, then the following relationship holds:

$$\frac{\text{Sustainable Net Transfers}}{\text{Exports}} = 2 \times (\text{Growth of Exports} - \text{Interest Rate}).$$

For example, since around 1987, the fall in interest rates and the acceleration in exports of developing countries has amounted to about 0.03 in each case. This has meant that sustainable net transfers have risen by  $2 \times 0.06 = 0.12$  of developing country exports or about \$120 billion a year.

Figure 3 shows how sustainable net transfers have evolved for the 18 large recipients of private capital inflow, and how they compare with actual net transfers. It has been assumed that the interest rate facing these countries is 300 b.p. above LIBOR. The charts show that, until about 1989, sustainable net transfers were negative reflecting the fact that the average export growth rate of these countries was below the interest rate. Actual net transfers were, in fact, negative though still higher than the sustainable level. Since 1989 actual net transfers were below sustainable net transfers, though they have converged recently reflecting a deceleration in

<sup>13</sup> Let  $L$  denote foreign liabilities;  $X$ , exports of goods and nonfactor services;  $M$ , imports of goods and nonfactor services; and  $r$ , the interest rate on foreign liabilities. The target  $L/X$  is set at 2. It follows that:

$$L = 2X$$

$$\Delta L = 2\Delta X$$

$$M + rL - X = 2\Delta X$$

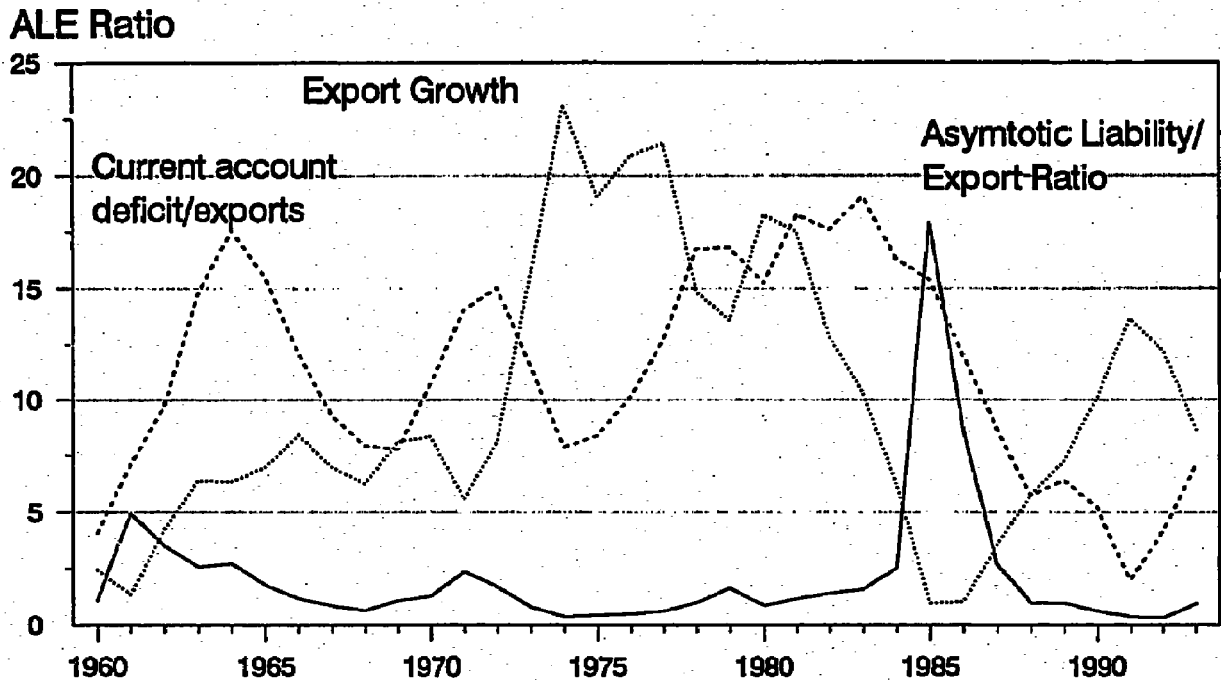
$$(M - X) = 2\Delta X - rL$$

$$\frac{(M - X)}{X} = \frac{2\Delta X}{X} - \frac{r2X}{X}$$

$$\frac{(M - X)}{X} = 2\left(\frac{\Delta X}{X} - r\right)$$

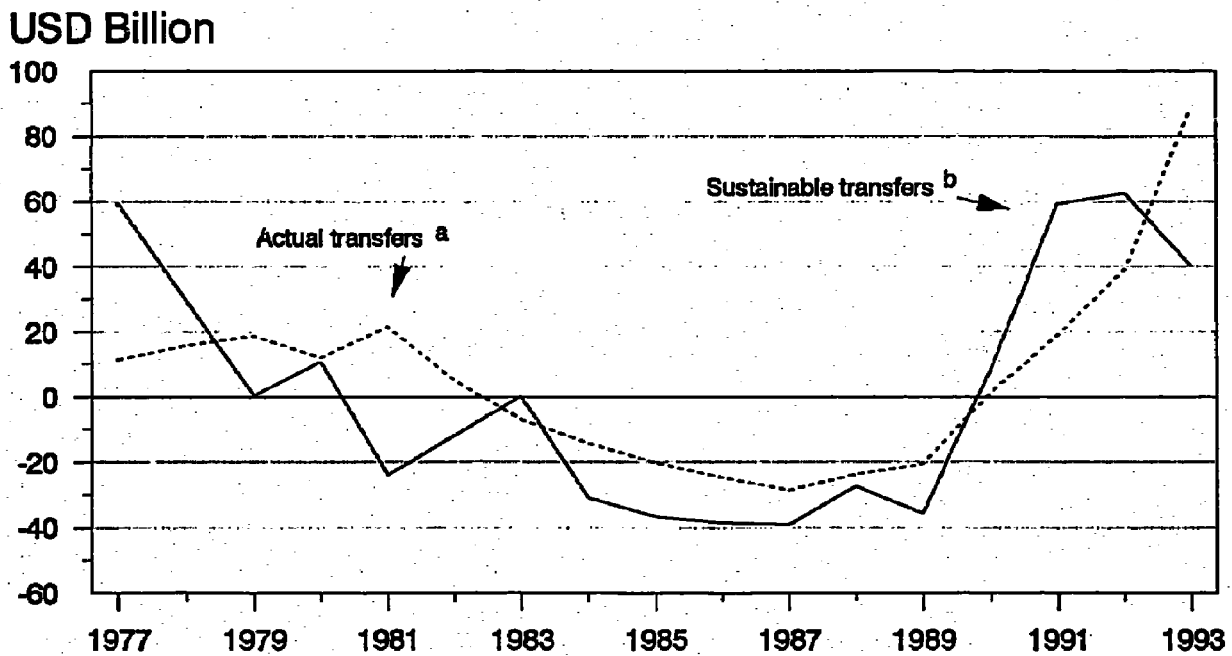
**exports. Overall, the model-generated sustainable net transfers tends to track actual transfers fairly well in overall trend, though deviations are often large.**

**Figure 2**  
**Asymptotic Liability/Export Ratio and Components**  
 (Moving averages with 4 lags)



Note: Medians over selected countries: 17 1976-93; 13 1965-75; 10 before.

**Figure 3**  
**Sustainable and Actual Transfers:**  
**17 selected countries**



a/ Aggregate net transfers minus official unrequited transfers.

b/ Using LIBOR plus 300 basis points and an ALE of 2.0.

Which countries are most vulnerable to external or domestic shocks that would induce a reversal of private capital flows? As already mentioned, even for the 18 large recipients of private capital flows a comprehensive review of vulnerability is well beyond the scope of this paper. Nevertheless, in Appendix 2, we provide a summary assessment for 8 countries in the sample of large recipients. Based on a first pass review of some 10 indicators of vulnerability, including the ALE, these countries ranked in the bottom half of our 18-country sample. The countries are: Argentina, Brazil, Hungary, India, Mexico, Poland, Turkey, and Venezuela. Some republics of the FSU would have been included had adequate data been available.

The reassuring fact is that only 5 of the 18 countries in the sample—FSU, Hungary, India, Mexico, and Poland—exhibit ALE ratios above the benchmark of 2, and of the remaining countries, only Argentina has a ratio somewhat close to 2 (Table 3). The countries of the FSU, like Hungary and Poland clearly a special case, have seen exports fall by 22 percent a year in the last three years. The ratio for the FSU (infinity) simply tells us that if the recent experience of falling exports persists, some of these countries cannot service liabilities of any level. Hungary (5.1) and Poland (13.6) also have unacceptably high ALE ratios and need to proceed steadily with their reforms if they are to reduce their vulnerability. Mexico's ratio is 3.6. This means that Mexico needs to cut its current account deficit by well over half or more than double its export growth rate if it is to avoid future difficulties in servicing its external liabilities. Without such adjustment, it will, on the trend of the last five years, need to devote more than a third of its exports to interest and dividends alone if the average expected return of investors in Mexico is, say, just 10 percent. India's ratio at 2.1 is also high and it needs to consolidate the gains made by the export sector last year in order to bring down the ratio. The ALE ratio for Argentina, at 1.6, is also on the high side. In the last three years, Argentina and Mexico have suffered real exchange rate appreciations of 19.1 percent and 8.6 percent respectively. The mere passage of time increases the vulnerability of these countries to external shocks or contagious currency crises which might begin in other countries.

**Table 3. Asymptotic Liability Export Ratio and Its Components  
18 Selected Countries**

	<i>Export Growth (% p.a.) (1989-93)</i>	<i>Current Account Deficit to Export Ratio (%) (1989-93)</i>	<i>Asymptotic Liability to Export Ratio (1989-93)</i>
China	12.5	-6.0	-0.5
Mexico	8.7	31.7	3.6
Korea	6.5	2.2	0.3
USSR/FSU	-12.0	...	$\infty$
Argentina	9.0	14.1	1.6
Malaysia	15.6	4.0	0.3
Portugal	8.6	-0.0	-0.0
Brazil	4.2	-0.4	-0.1
Thailand	14.5	17.3	1.2
Turkey	8.7	5.8	0.7
Venezuela	6.0	-5.4	-0.9
Hungary	1.3	6.3	5.1
Iran	11.7	15.5	1.3
India	8.3	17.3	2.1
Chile	7.5	7.2	1.0
Indonesia	13.4	7.8	0.6
Philippines	10.9	12.2	1.1
Poland	0.8	10.2	13.6
Median	8.7	7.2	1.0
Median of all	7.3	15.3	1.8

*Source:* World Bank: World Debt Tables 1993-1994 and IMF: International Financial Statistics.

There are two countries in the sample, Turkey and Venezuela, that through 1993 continued to exhibit favorable ALE's but where economic performance has deteriorated markedly in the last two years. Venezuela's ALE is highly volatile reflecting its reliance on oil exports. Both countries are suffering from the progressive spillover of internal imbalances, especially budget deficits, onto external performance.

Ten other countries in the sample, representing 60 percent of private capital flows to developing countries exhibit ALE ratios well below 2. Assuming prudent macroeconomic management, their situation should prove robust to plausible adverse scenarios in the international economy. For example, under the Low Case scenario of *Global Economic*

*Prospects 1994* (GEP '94), the World Bank's annual prospects publication, the growth rate of exports of these countries drops to 6 percent from 10 percent p.a. in the baseline. Their current account deficits, expressed as a percent of exports, increase from 5 to 6 percent in the baseline to 7.9 percent, implying an asymptotic liability/export ratio of 1.25, still within reasonable bounds.

Looking to the longer term, the history of the last 30 years suggests that the possibility of a renewed build-up of inflationary pressures in the industrial countries as recovery consolidates is considerable. Recent examples can be drawn from the experience of recovery phases in the United States. Consumer price inflation accelerated from 1.1% in 1986 to 4.5% in 1988, and the federal funds rate peaked at around 10%. In the run up to the debt crisis inflation rose from 4.9% in 1976 to in excess of 10% three years later. The risk of a surge in inflation increases if, in an attempt to sustain or stimulate demand, monetary policies in the industrial countries remain loose over an extended period. If, in conjunction, plans to achieve fiscal consolidation are not implemented, the risk rises further. We will come back to this contingency in the concluding section.

Rising inflation, especially when accompanied by a short-lived boom in commodity prices, may give developing countries a false sense of security as the nominal value of their exports increases in comparison to external debt and the real value of debt declines. The element of surprise clearly was a factor in the severity of the debt crisis. In the run-up to the crisis, export growth in developing countries was in the range of 20 percent a year combined with very high current account deficits, which were in the range of 15 percent of exports. Most of the export growth was due to price increases which could not be sustained once the tighter monetary policies had their effect. Mexico, Argentina and India have current account deficits which are proportionally much higher today than the median country at the start of the debt crisis and their export growth is lower.<sup>14</sup> They also exhibit less favorable ratios today than they did in 1982. Unless these countries take corrective measures they will be very vulnerable to a scenario of rising inflation followed by a monetary correction, or to other adverse scenarios such as a protracted demand recession in industrial countries.

**B.2. Portfolio equity, which in 1993 represented about 30 percent of total private flows but gets the lion's share of media coverage, is likely to display more volatility both across countries and in the aggregate.**

It is possible to imagine a series of balance-of-payments or exchange rate crises spreading from country to country, triggered by problems in one or two large recipients. The Latin American debt crisis in 1982 is an example.

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<sup>14</sup> In the last year India's export growth has picked up to a rate of 20% a year, suggesting that its policies of liberalization are beginning to work.

Longer term, as portfolio equity becomes more important, it could become the most probable source of a contagious crisis. The expected return on equity investments is, because of their risk, much higher than that on bonds or commercial bank loans. Their volatility is high reflecting the behavior of stock markets and the relatively liquid nature of these investments. Stock markets are strongly prone to overshoot and develop speculative bubbles. This is likely to be even more true of developing country markets, which are characterized by comparatively thin trading volumes, cumbersome settlement procedures, often weak disclosure requirements, and inadequate investor protection laws (e.g., against insider trading). Thus, it would not be surprising if from time to time some of these markets suffered sharp corrections. In that event, there might be a contagion effect on stock markets in neighboring countries, though the empirical evidence of the past few years suggests that it would not necessarily be the case. Probably some investors would withdraw entirely from equity investment in developing countries. But such consequences would not constitute a generalized financial crisis.

The probability of a contagion crisis increases greatly if the perception develops that many countries have become vulnerable. One way this can happen is if the countries represent a "risk cluster" in the sense that they are exposed to the same variable, and that variable (e.g., oil prices, interest rates) moves in a direction adverse to them.

Memories of the debt crisis are still fresh and many inexperienced investors have recently entered emerging markets. As discussed above, a few large recipients of funds are vulnerable to shocks. In the event of a generalized reversal of private capital flows, the effect on many developing countries would be severe, though less dramatic than at the time of the debt crisis. This is because current account deficits are proportionally about one-third as large as in 1982, and because of the greater equity component in outstanding liabilities. The effects on the world financial system would also be less pronounced than the debt crisis. This is, first, because the risk is much more widely shared among a wide range of investors, including non-bank corporations and individuals. And, second, because few investors will have staked a large proportion of their assets in developing country markets, especially in the high-risk equity instruments which represent the majority of the flows.

It can also be argued that the rapid restoration of credit to countries that suffered from the debt crisis represents a reassuring feature of the current international financial environment. In this regard, the aftermath of the debt crisis of the 1980s differs sharply from that of the 1930s. Then also, a combination of collapse of commodity prices and sharp decline of world trade led to major debt defaults. But, although most of the defaults were settled, other factors, such as a proliferation of capital controls and lack of a coordinated approach, led to a virtual extinction of the international capital markets. Consequently, it took nearly four decades for the defaulting countries to regain access to international sources of finance. By contrast, the management of the recent debt crisis was characterized by intensive cooperation on the part of the major actors—creditors, debtors, policymakers, and international organizations. The trend of capital and trade liberalization, which had been a salient feature of the post-war period, soon resumed. Thus, in the 1990s, there is probably greater confidence in the mechanisms of the international financial

system to alleviate free rider problems and to weather debt servicing difficulties without enormous disruption.

***C. A policy response is needed in cases where large current account deficits are unsustainable.***

Private capital flows bring important benefits, including lower cost of capital, improved reserve position, and, in the case of FDI flows, enhanced access to foreign technology, marketing channels, and management know-how. Beyond a certain point, however, private capital flows present considerable challenges. Most important among these are overvaluation of the real exchange rate, inflationary pressures, unsustainable current account deficits (induced through both price and income channels) and loss of monetary control associated with rapid monetary base growth.

Thus, a fine line is tread between extracting maximum benefits from capital inflows and losing control over key policy targets. Several recent studies have explored what does and does not work in the presence of "excessive" capital inflows--though there does not appear to be any accepted definition of "excessive." There is general agreement that, in the event of "excessive" capital inflow, reducing budget deficits is the most effective way of alleviating pressure on the domestic interest rate and exchange rate, thus accommodating the inflow. And there is also agreement that attempts to sterilize the inflows or to control them directly are ineffectual measures except in the short term.

In developing policy recommendations, it is useful to try to be more precise about what represents an "excessive" level of capital flows, and how policies should differ when the flows are below or above that level. Though there are no magic formulas, it is possible to clarify policy options by distinguishing among cases where the current account deficit is thought to be sustainable or not, and where the current account deficit is over- or underfinanced. For the purposes of this analysis we will say that the current account deficit is under-financed if long-term capital flows are less than the current account deficit, that is, the basic balance is in deficit. Implicitly, therefore, short-term capital flows are viewed as "hot money" and/or as compensating for the financing shortfall.

Figure 4 sets out the four possible combinations and, in each case, the broad policy measures to consider *on a first-pass*. Figure 5 indicatively applies the schema to 39 developing countries selected on the basis of their exports in 1993. For this purpose, countries with an ALE ratio less than 2.0 over 1989-93 are classified as having sustainable current account deficits. On the financing dimension, countries with aggregate net resource flows less than their current account deficits over 1989-93 are heuristically characterized as underfinanced.<sup>15</sup> While the focus of the paper is on countries receiving sizable private capital flows, for the sake of completeness, the following discussion includes brief comments on indicated policy measures for other combinations as well.

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<sup>15</sup> See World Debt Tables for the World Bank's definition of net resource flows.



**Figure 4. Policies To Manage Capital Inflow**

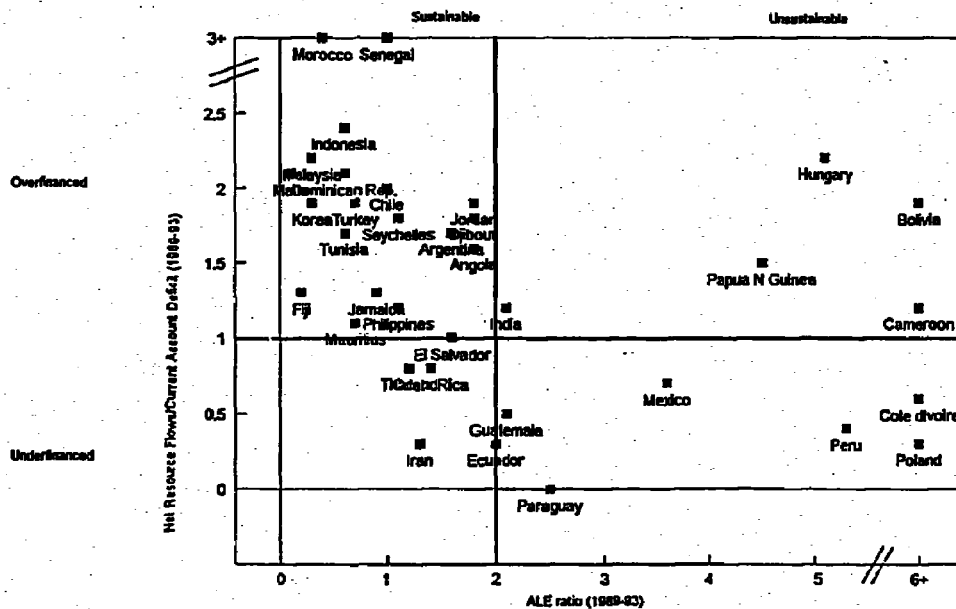
*Current Account Deficit is ...*

	Sustainable*	Unsustainable
Overfinanced**	<ul style="list-style-type: none"> <li>• Liberalize current account</li> <li>• Allow exchange rate to revalue?</li> <li>• Liberalize capital account?</li> </ul>	<ul style="list-style-type: none"> <li>• Prevent exchange rate revaluation if possible</li> <li>• Reduce Government Deficit</li> <li>• Avoid credit rationing, interest subsidies</li> <li>• Channel investment toward tradable sector</li> <li>• Discourage foreign borrowing?</li> <li>• Liberalize capital account?</li> </ul>
Underfinanced	<ul style="list-style-type: none"> <li>• Liberalize inward investment</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce domestic expenditure and switch domestic expenditure away from tradables</li> </ul>

\* ALE < 2

\*\* Long-term capital inflow is larger than the current account deficit.

**Figure 5 Selected Developing Countries:  
Sustainability and Financing of Current Account Deficits**



Note: Botswana, Brazil, China, and Venezuela had a surplus over 1988-93.  
Source: World Bank World Debt Tables 1993-1994 and IMF: IFS.

An important observation suggested by Figure 5 is that countries whose current account deficit is defined as unsustainable ( $ALE > 2$ ) were generally not able to finance sizable deficits with long-term capital inflow alone, Hungary being a clear exception and India to some extent. More than 20 countries whose current account deficit is defined as sustainable ( $ALE < 2$ ), on the other hand, were able to attract long-term capital in excess of their current account deficit, nine of them being large recipients. This suggests that markets "work"; investors are reluctant to commit long-term funds in countries that are *prima facie* suffering a fundamental current account deficit problem. Countries such as Peru, Cote d'Ivoire, and Poland represent extreme cases of underfinanced and unsustainable current account deficits.

Where the current account deficit is judged sustainable but is nevertheless underfinanced (the bottom left-hand quadrant), policies should be geared to encourage new long-term capital inflow by liberalizing the inward investment regime. Other policy responses will depend on initial conditions, but might include a looser fiscal (e.g., through tax cuts) and tighter monetary policy to simultaneously induce a rise in interest rates and stimulate short-term growth, both of which will tend to attract more inflow of capital.

The bottom right-hand quadrant illustrates the unsustainable and underfinanced case. This is a contingency where the choice of policy is usually clear-cut, though painful: a mix of expenditure-switching and expenditure reducing policies, possibly taking the form of devaluation, combined with restraints domestic absorption, usually in the form of reduction in government spending, tax increases, and encouragement of wage moderation.

The case where the current account deficit is within sustainable limits but *overfinanced* (the top left-hand quadrant) is in many ways the least problematic. A number of countries fit this class, including Chile and Malaysia. The effects of the capital inflow on demand, the exchange rate, and the money supply are offset to some extent by the current account deficit. Appropriate policies in this case may include further liberalization of the current and capital account and/or an appreciation of the real exchange rate.

The fourth case is where the current account deficit has reached unsustainable levels but is, nevertheless, overfinanced by long-term capital alone (the top right-hand quadrant). Especially where the inflow of long-term capital is accompanied by sizable short-term inflows, which sometimes constitute "hot" money, this is the contingency that presents policy makers with the greatest challenges. On the basis of the last 5 years' data, among the recipients of significant private flows, Hungary clearly belongs in this category, and Argentina, India and Mexico are borderline cases (although India's exports have staged a strong recovery recently). Because of the tendency of the exchange rate to become overvalued, the situation has often been compared with Dutch disease. The comparison is inappropriate, however. Since foreign loans have to be repaid, this is actually Dutch disease without the boom of natural gas finds! The precariousness inherent in an unsustainable yet overfinanced current account deficit suggests that the cause is either that the markets are reacting to herd instincts (e.g., a bull run on the stock market or an overheating economy), or that policy is artificially distorting private

sector behavior. The solution in either case is to deal directly with the distortion or anomaly-- be it excessive growth expectations, large government spending, overly tight monetary policy, or rationed domestic credit. There will be cases where the government simply needs to take steps to dampen expectations, and to make sure that, as a minimum, it is not encouraging the inflow directly by its own actions (e.g., borrowing abroad by government enterprises). Since, by definition, this is a case where the surge in capital inflows is temporary, it would not seem appropriate to incur the large adjustment cost implied first by revaluation then devaluation of the exchange rate. In fact, revaluing the exchange rate in this case is an implicit admission of policy failure to deal with the underlying source of the problem. Allowing the exchange rate to revalue may be the most expedient course but also the most damaging longer term.

Provided the problem of unsustainable/overfinanced current account deficits is diagnosed early enough, the solution can take the form of multi-year plans of adjustment, designed to achieve a soft-landing. Policies will often place the emphasis on gradually removing various hindrances to export growth, rather than painful and faster-working measures to restrain imports. Government deficits can be reduced gradually. The prescription is to ensure that the policy and incentives structure encourages the use of capital (domestic and external) to support investment, and the growth of exports that will provide the basis for sustained creditworthiness. This requires an open trade regime, eliminating regulations and unnecessary tax or bureaucratic burdens to exports, and avoiding overvalued exchange rates.

Eventually, countries in the top right hand quadrant will shift gradually either downwards, towards a currency crisis/devaluation scenario, or, if their current account and/or export position improves, leftwards to where policies of current account and capital account liberalization become clearly appropriate.

Should a country in the top right-hand quadrant (unsustainable/overfinanced) engage directly in liberalization of the current account (or even the capital account)? Further liberalization would relieve pressure on the exchange rate, on growth of money supply, and on domestic demand. However, since the initial condition is an unsustainable current account deficit, further liberalization in this instance can be a high risk strategy, which, in an environment of unstable expectations, could accelerate a foreign exchange crisis (movement to the South-East in the figure).

There may, of course, be cases where what looks like unsustainable current account deficits turns out to be a shift to a new higher growth path of exports. For example, new, and better, policies may induce a large inflow of capital which represents a one-time adjustment to a perceived improvement in competitiveness. In these cases one would expect to see a fairly rapid increase in investment (rather than consumption and government spending), and an improvement in profitability and acceleration of output growth in the economy's tradable sector. All this underlines the importance of looking at a wide set of indicators to form a view about sustainability of current account deficits, but does not detract from the need to form such a view before deciding on policies!

#### **IV. CONCLUSIONS**

This paper argues that the surge of private capital flows is beneficial for investment and growth and that these flows are likely to continue. However, there is a clear need to recognize the necessity of eventual adjustment in certain countries who are large recipients of these flows. And there is a need to persevere with policy reform since policy slippage can lead to a quick reversal of investor sentiment (as evidenced by Turkey and Venezuela, for example). This is especially opportune now since the current favorable international economic environment provides developing countries with a window of opportunity to take corrective measures while retaining the confidence of investors. A large rise in inflation in industrial countries in the next few years would provide the most important warning of deterioration in international risk factors affecting sustainability of private capital flows. A modest rise in short-term interest rates as recovery in the industrial countries consolidates is to be expected. Its effect on developing countries is likely to be more than offset by improved demand conditions, as well as by the prospect of more sustained growth and continued low inflation. Periodic, possibly large, corrections in equity markets affecting one or several emerging markets are also to be expected.

The probability that these will entail a contagious reversal of flows is modest—so long as the fundamentals are robust.

Sustaining private capital flows in the longer term requires an economic and policy environment where developing country exports continue to grow rapidly. Creating the stable environment where foreign direct investment in developing countries is more profitable than in industrial countries, to compensate for risk, is another necessary condition for sustainability of a large part of these flows.

Finally, although the questions relating to appropriate policy response to increased capital inflows are outside the scope of this note, their importance should not be underestimated. As noted earlier, borrowing abroad by private agents involves negative externalities. Further, developing countries generally have managed exchange rates as well as many imperfections in the domestic credit markets. In view of these considerations, a sound policy framework, on the part of the recipient country regarding the maximum exposure it should carry as well as the pace and composition of inflows, would itself be an important determinant of sustainability of capital flows.

*The relationship between sustainable capital inflow, the export growth rate and the interest rate*

In this appendix we will apply techniques derived in the literature on sustainability of government deficits to show that the size of sustainable capital inflows depends crucially on the difference between the growth rate of exports and the interest rate.<sup>1</sup>

Let  $x$ ,  $m$ ,  $L$ ,  $r$  denote exports, imports, foreign liabilities, and the return on foreign liabilities respectively. Let  $\dot{x}$  denote the change in  $x$  over time  $\left(\frac{\partial x}{\partial t}\right)$  and  $\hat{x}$  the percentage change in  $x$ ,  $\frac{\dot{x}}{x}$

In the steady state,

$$(1) \quad \widehat{\left(\frac{L}{x}\right)} = \hat{L} - \hat{x} = 0$$

This implies

$$(2) \quad \frac{\hat{L}/x}{\hat{x}/x} = \left(\frac{L}{x}\right)^*$$

where  $\left(\frac{L}{x}\right)^*$  is the steady-state liability export ratio. The expression on the left-hand side is the ALE as defined in the text. Thus, the ALE is the steady-state ratio. It is easy to show, under the assumption that  $\frac{\hat{L}}{x}$  and  $\frac{\hat{x}}{x}$  are constant, that the steady-state equilibrium is stable, by noting that if  $L/x > \left(\frac{L}{x}\right)^*$  then

$$\frac{L/x}{\hat{x}/x} > \frac{\hat{L}/x}{\hat{x}/x}$$

<sup>1</sup> See, for example, C. Wyplosz and M. Burda, Macroeconomics 1993.

and, provided  $L$  is positive

$$1 > \frac{\dot{L}}{\frac{L}{x}}$$

implying that  $\frac{\dot{L}}{L} < \frac{\dot{x}}{x}$  (provided  $x$  is positive) and  $\frac{L}{x}$  is therefore declining. The converse is true if  $\frac{\dot{L}}{L} < \left(\frac{L}{x}\right)'$ .

The steady-state condition (2) can be written as

$$\left(\frac{m+rL-x}{\hat{x}}\right)\frac{1}{x} = \left(\frac{L}{x}\right)'$$

where the numerator on the left-hand side is the current account deficit,  $\dot{L}$ . Moving the expression  $\left(\frac{rL}{\hat{x}}\right)\frac{1}{x}$  to the right hand side and rearranging, this can be written as

$$(3) \quad \frac{(m-x)\frac{1}{x}}{(x-r)} = \left(\frac{L}{x}\right)'$$

A number of useful propositions can be derived from (3) above.

Let us assume that  $L > 0$ , i.e. the country is a borrower. Then we have the following:

### *Proposition 1*

In the steady-state net transfers (equal to the non-interest current account deficit) are positive if and only if  $\hat{x} > r$ , the export growth rate is higher than the interest rate.

### *Proposition 2*

Given a target liability/export ratio, the size of net transfers that the country can attract indefinitely is directly proportional to the difference between the export growth rate and the interest rate.

For example, if  $\left(\frac{L}{x}\right)^*$  is 2,  $\hat{x}$  is 10 percent a year and  $r$  is 8 percent a year, then sustainable net transfer, expressed as a percent of exports, is 4 percent a year. If, however,  $\hat{x}$  accelerates to 15 percent a year, or, alternatively,  $\hat{x}$  stays at 10 percent,  $r$  falls to 3 percent, but the sustainable net transfers expressed as a percent of exports rises to 14 percent.

### *Proposition 3*

An increase in the world inflation rate that is fully included (discounted) in  $r$  and  $\hat{x}$  does not affect the ALE. If the inflation in  $\hat{x}$  is greater than the inflation premium in  $r$ , the ALE falls. This can be interpreted as an improvement in the country's terms of trade.

## **Sustainability Analysis for Selected Countries**

**This appendix presents 'country-at-a-glance' pages for 8 selected countries. Each country page provides key indicators for recent years, charts, and a brief exposition of special circumstances relevant for evaluating country prospects.**

**i Argentina**

**ii Brazil**

**iii Hungary**

**iv India**

**v Mexico**

**vi Poland**

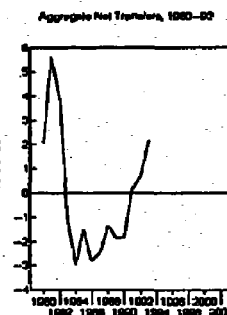
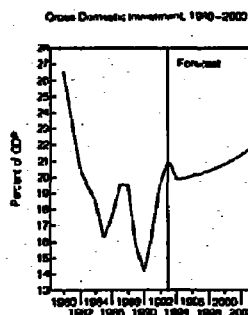
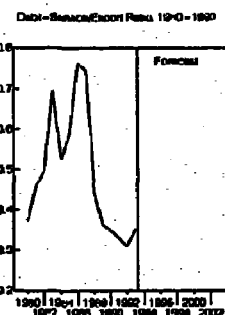
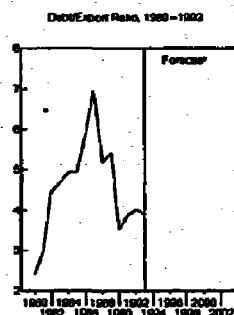
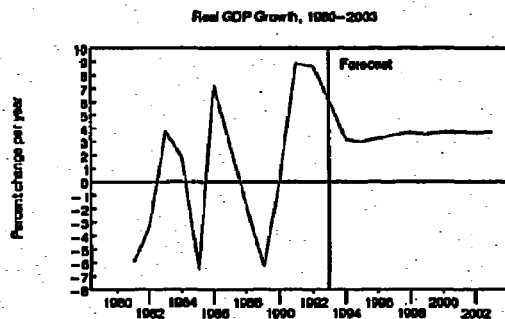
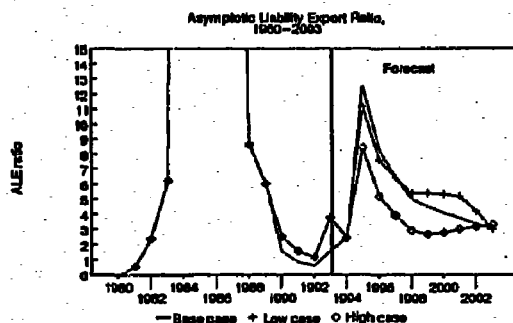
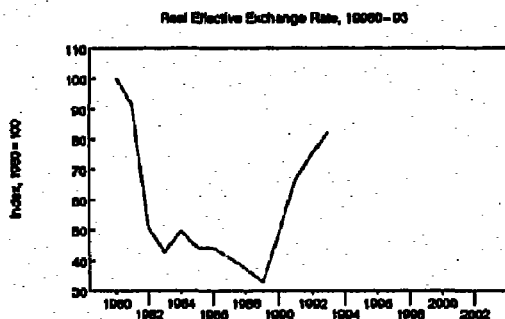
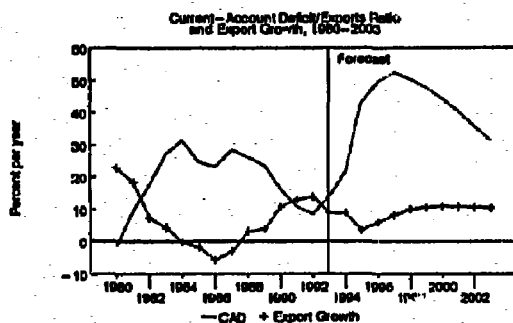
**vii Turkey**

**viii Venezuela**

**Sources: Bank Economic and Social Database (BESD),  
World Debt Tables 1993–1994,  
March 1994 forecasts used in Global Economic Prospects, 1994, and  
IMF: International Financial Statistics and Research Department .**



# Argentina



## Key indicators

(annual percentage changes and ratios)

	1980-90	1992	1993	1994
Real effective exchange rate	-6.9	13.6	9.3	...
GDP growth	-0.9	8.6	6.1	3.2
Investment/GDP ratio (%)	19.2	19.6	21.0	19.9
Export growth (value) 1/	3.7	13.9	9.0	9.1
Debt export ratio	4.9	4.0	3.9	...
Debt service export ratio (%)	54.3	31.0	35.2	...
Current account deficit export ratio (%) 1/	22.8	8.5	14.1	21.8
Asymptotic liability export ratio 1/ 2/	6.34	0.61	1.58	2.41

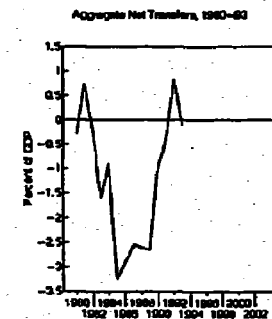
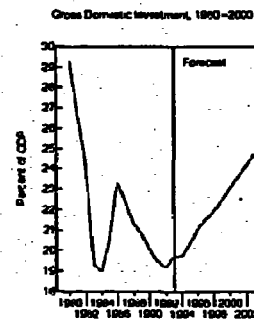
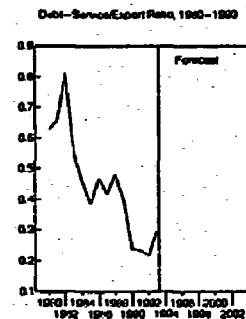
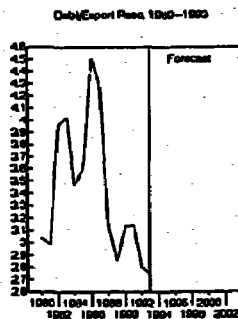
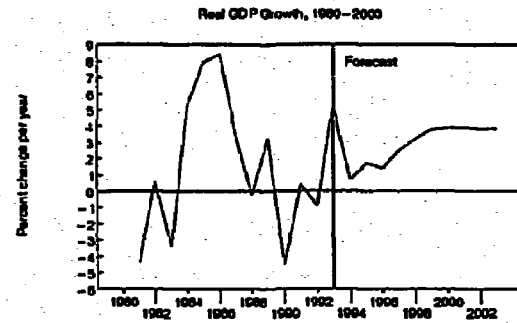
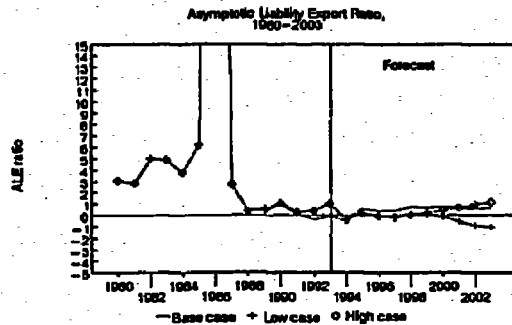
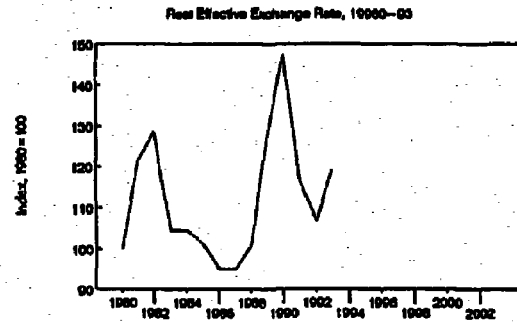
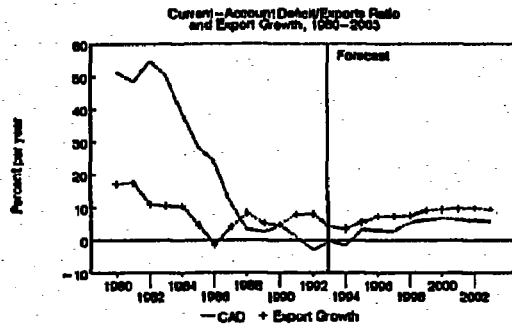
1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

Based on five-year moving averages, the country's current account deficit, equal to 20 percent of the exports, is forecast to rise through 1996 and decline gradually thereafter. Recent data show a marked increase in exports inspite of sharply appreciating real exchange rates, but a large proportion of Argentina's exports appears to be to its neighboring countries. Though the investment ratio has recovered to reach 20% from a low of 14% in 1990, it is still lower than the pre-debt-crisis levels. Debt-service ratio (35%) and debt/export ratio (4.00) are very high. The asymptotic liability-export ratio has been going up since 1992. It is likely to remain high for most of the forecast period. Argentina is expected to increase its exports to other regions, especially Europe, but this expectation is fraught with uncertainty in light of the currency appreciation and the forecast relatively high growth of GDP. The country will continue to be very vulnerable to any external or internal shock, which adversely affects the confidence of investors.

Source: World Bank: BESD, World Debt Tables 1993-1994, and March 1994 forecasts and IMF.

# Brazil



## Key indicators

(annual percentage changes and ratios)

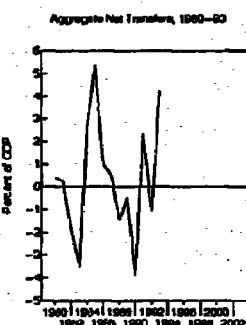
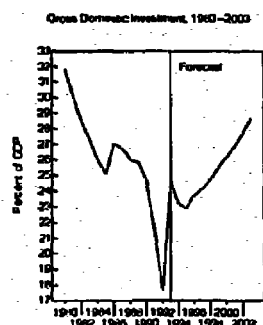
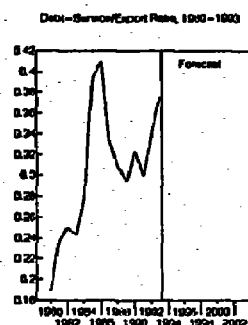
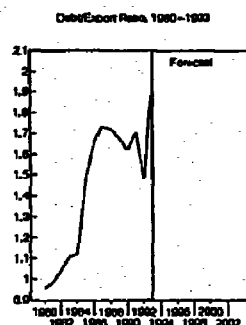
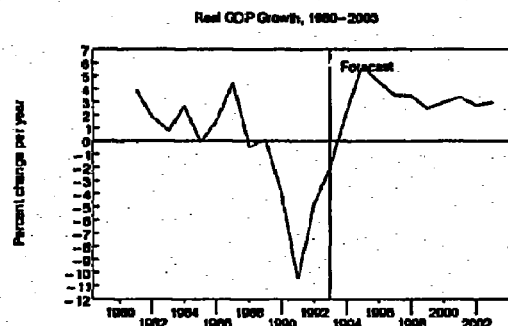
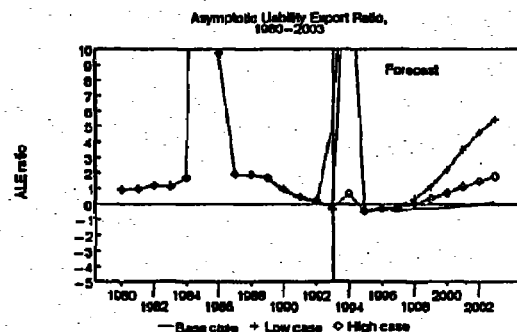
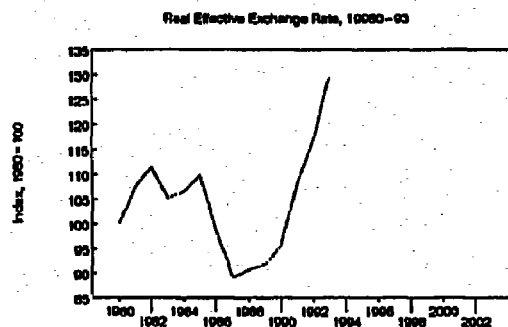
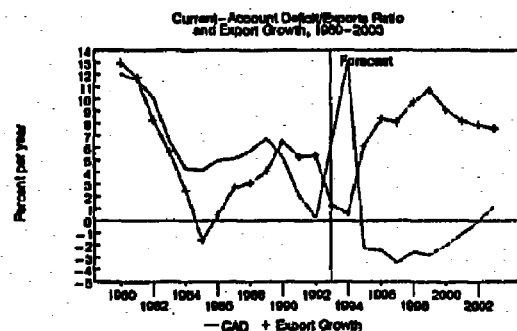
	1980-90	1992	1993	1994
Real effective exchange rate	4.0	-8.7	11.9	...
GDP growth	1.5	-0.9	5.3	0.7
Investment/GDP ratio (%)	22.4	19.2	19.7	19.8
Export growth (value) 1/	7.5	8.1	4.2	3.6
Debt export ratio	3.6	2.8	2.7	...
Debt service export ratio (%)	48.6	22.0	29.6	...
Current account deficit export ratio (%) 1/	26.7	-2.9	-0.4	-1.5
Asymptotic liability export ratio 1/ 2/	3.01	-0.36	-0.09	-0.40

1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

Brazil, along with Venezuela, lags behind many of its neighbors in the region in structural adjustment and, given its low ALE ratio, sustainability of capital flows is, in Brazil's case, more purely a function of macroeconomic management. Export growth has been feeble as real effective exchange rate has appreciated, mainly as a result of inflation. GDP growth has been very low for the past three years and investment ratio has been declining since 1986. In the near term, Brazil is likely to go through a recession as a result either of unchecked inflation or of fiscal belt-tightening. The debt-export ratio has been declining, but the debt-service ratio went up in 1993 and, conclusion of a DDSR deal would increase its debt-service obligations on a cash basis. Its ALE ratio has been relatively low mainly as a result of import compression.

# Hungary



## Key indicators (annual percentage changes and ratios)

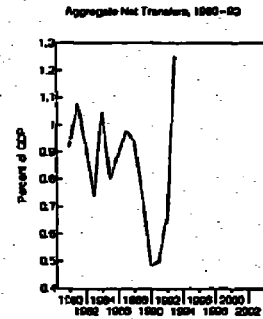
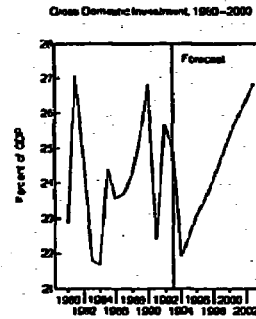
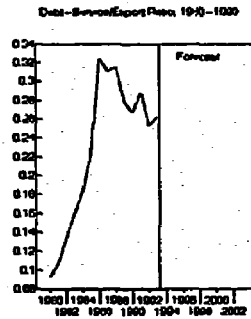
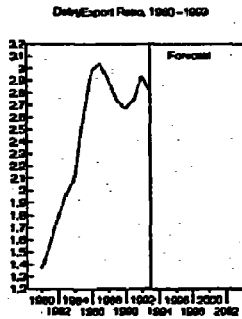
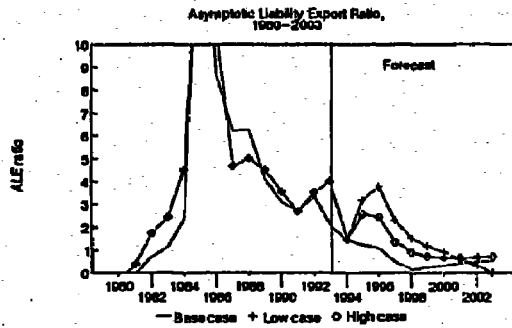
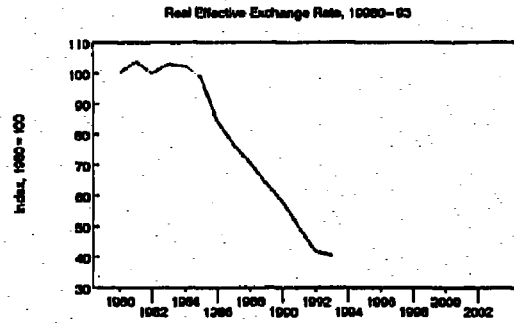
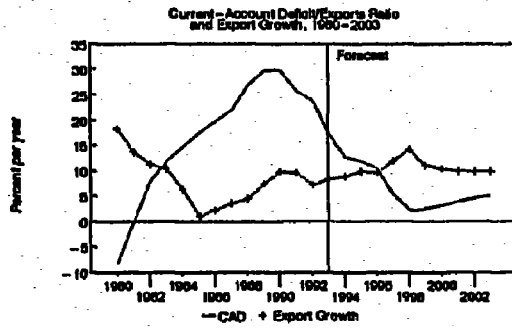
	1980-90	1992	1993	1994
Real effective exchange rate	-0.4	7.9	10.8	...
GDP growth	1.1	-4.8	-2.1	2.2
Investment/GDP ratio (%)	27.2	17.6	24.6	23.2
Export growth (value) 1/	4.4	5.4	1.3	0.7
Debt export ratio	1.4	1.5	2.0	...
Debt service export ratio (%)	30.7	33.6	37.5	...
Current account deficit export ratio (%) 1/	6.5	0.3	6.3	13.0
Asymptotic liability export ratio 1/ 2/	1.65	0.06	5.05	19.87

1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

Hungary's debt-service ratio (37.5%) is quite high, and the debt/export ratio has also been increasing. Based on five-year averages, its current account deficit to export ratio and the ALE ratio, which had been quite low in the early 1990s, have worsened sharply in recent years. Further, in view of the steady appreciation of the real exchange rate since 1987 its ability to promote exports to meet the obligations will be under scrutiny. There also have been serious lapses in fiscal discipline, and structural, banking and public-enterprise reforms have been slow. Main uncertainty from the external environment is regarding recovery in the EU. Without decisive action, Hungary risks sliding into a vicious cycle of financing gap and loss of creditor confidence, inspite of the favorable image it has enjoyed so far.

# India



## Key indicators

(annual percentage changes and ratios)

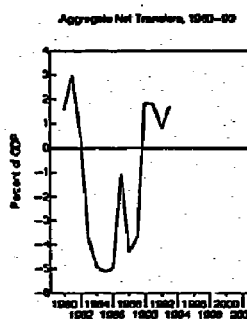
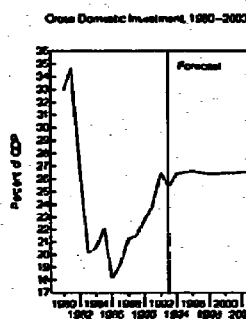
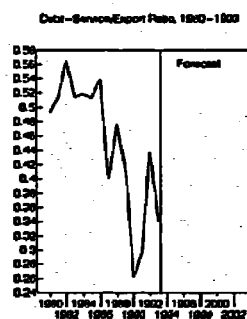
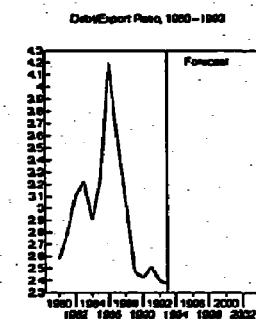
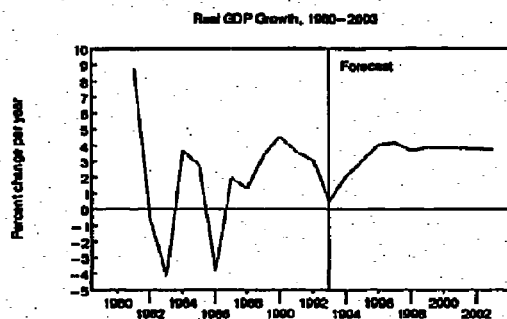
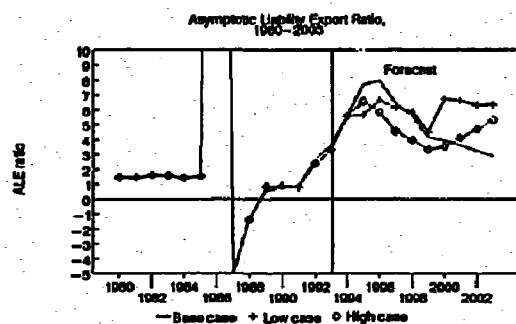
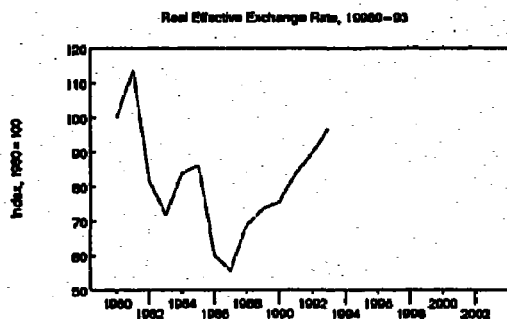
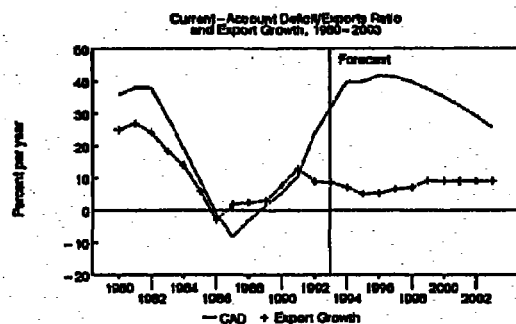
	1980-90	1992	1993	1994
Real effective exchange rate	-5.4	-15.5	-2.2	...
GDP growth	5.8	4.6	3.8	4.5
Investment/GDP ratio (%)	24.2	25.7	25.0	21.9
Export growth (value) 1/	6.9	7.2	8.3	8.8
Debt export ratio	2.4	2.9	2.8	...
Debt service export ratio (%)	23.0	25.3	26.3	...
Current account deficit export ratio (%) 1/	17.9	23.7	17.3	12.7
Asymptotic liability export ratio 1/	5.04	3.30	2.09	1.44

1/ Averages with four-year lags.

India exhibits a high Asymptotic Liability Export (ALE) ratio (above 2.0), based on five-year averages. The ratio has been on a declining path since 1990-91, when the country faced a currency crisis in the wake of the Gulf War. The improvement, however, has been achieved against the background of relatively slow GDP growth, reflecting a recession in the industrial sector, which has persisted, and of a sharp decline in the investment ratio, which is currently at a 15-year low. Slack domestic demand, combined with a large real depreciation of the exchange rate in recent years have contributed to an acceleration of exports in 1993. The debt/export ratio (2.8) and the debt-service ratio (26%) are high. These, and the high ALE ratio, are expected to decline very rapidly over the next 2 to 3 years. The main uncertainty in the forecast lies in the continued current account improvement as the growth rate accelerates to India's trend level. The uncertainty is exacerbated by the possibility of currency appreciation as capital inflows surge, and the possibility of the elasticity of imports with respect to GDP being higher than anticipated, in the wake of the trade liberalization.

Source: World Bank: BESD, World Debt Tables 1993-1994, and March 1994 forecasts and IMF.

# Mexico



## Key indicators

(annual percentage changes and ratios)

	1980-90	1992	1993	1994
Real effective exchange rate	-2.8	7.5	7.5	...
GDP growth	1.7	3.0	0.5	2.1
Investment/GDP ratio (%)	23.6	26.4	25.4	26.4
Export growth (value) 1/	10.1	8.9	8.7	7.1
Debt export ratio	3.1	2.4	2.4	...
Debt service export ratio (%)	47.1	43.8	34.0	...
Current account deficit export ratio (%) 1/	12.8	23.8	31.7	39.8
Asymptotic liability export ratio 1/ 2/	1.41	2.68	3.64	5.57

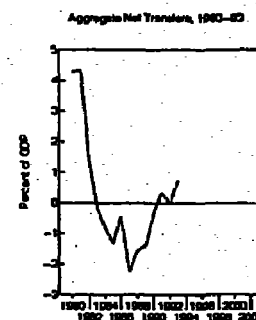
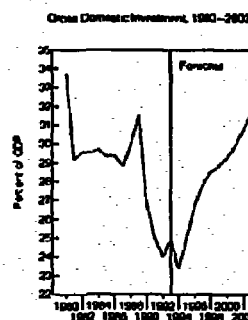
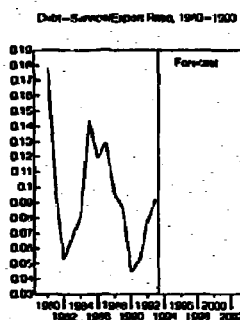
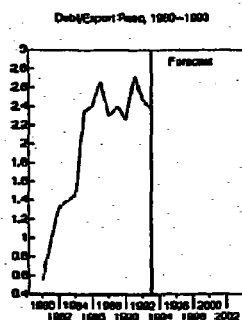
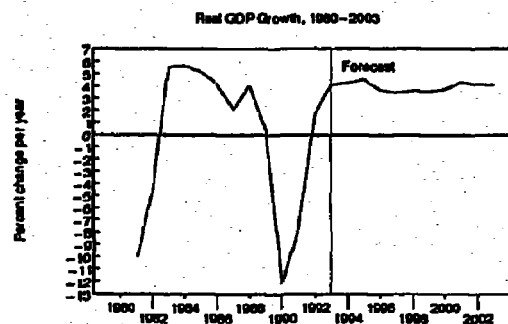
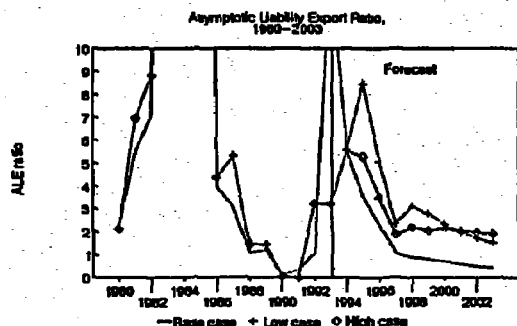
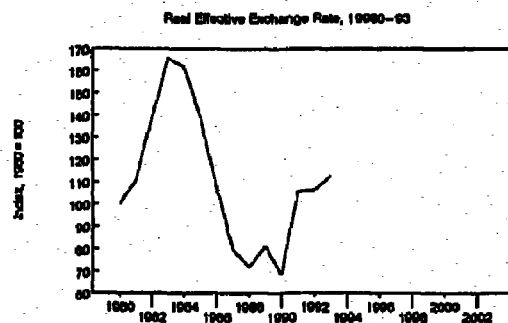
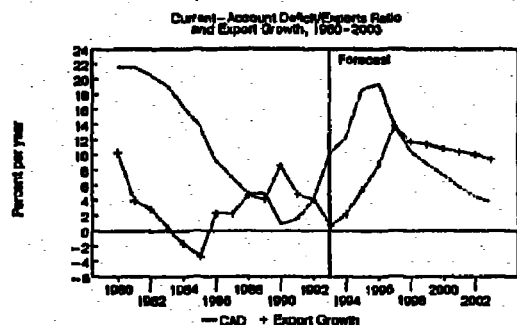
1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

Mexico's ratio of current account deficit to exports has been steadily growing, reflecting the steady appreciation of the real exchange rate. The turnaround is expected to be around 1996, assuming a 25% real depreciation, phased in over 5 years, beginning after the elections later this year, leading to an export growth of 4 to 6 percent a year. The GDP growth has been declining for the past three years, but is expected to recover gradually, reaching the trend level by 1996. The investment ratio has gradually recovered from the low reached in 1986, to reach 25%. The fiscal stance is likely to continue to be stringent, despite recent political events. The nature of external liabilities has shifted from the public to the private sector. The debt-service ratio (34%) and debt/export ratio (2.4) are on the high side, but declining. On the other hand, the ALE ratio, at 3.6, is high and increasing, pointing up the importance of adjusting the real exchange rate so as to boost exports. Failure to manage the real exchange rate also constitutes the main source of downside risk, along with the attendant possibility of a speculative attack on the peso. The authorities, however, have ably defended the peso so far, and the reserve situation is satisfactory.

Source: World Bank: BESD, World Debt Tables 1993-1994, and March 1994 forecasts and IMF.

# Poland



## Key indicators (annual percentage changes and ratios)

	1980-90	1992	1993	1994
Real effective exchange rate	-3.7	0.6	6.3	...
GDP growth	-0.2	1.6	4.0	4.2
Investment/GDP ratio (%)	29.8	24.0	24.9	23.3
Export growth (value) 1/	2.4	4.1	0.8	2.2
Debt export ratio	1.9	2.5	2.4	...
Debt service export ratio (%)	9.2	7.8	9.2	...
Current account deficit export ratio (%) 1/	11.8	4.3	10.2	12.3
Asymptotic liability export ratio 1/ 2/	3.91	1.04	13.56	5.57

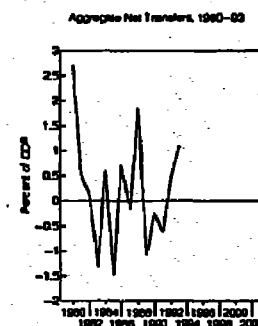
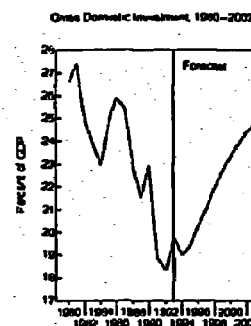
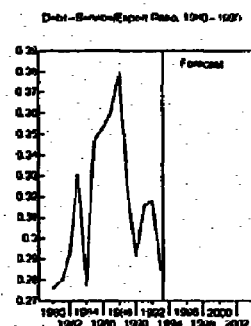
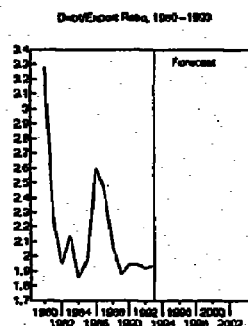
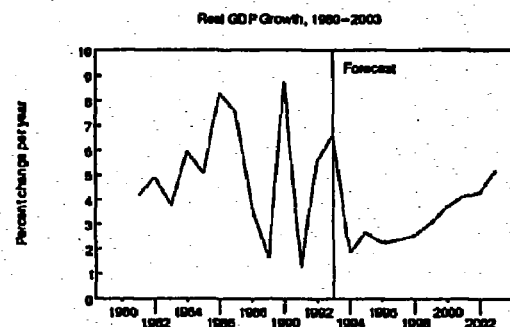
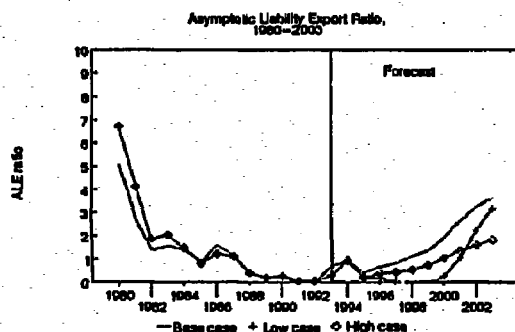
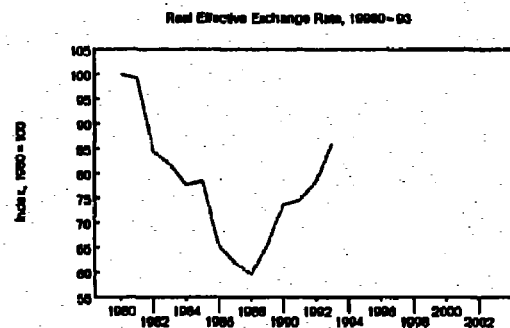
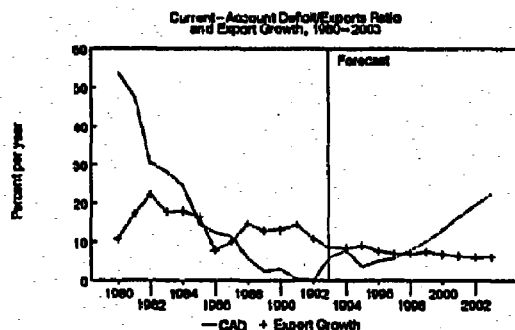
1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

The outlook for Poland is quite positive, especially in the short- to medium-term, but with significant downside risks. Given continued Government commitment for internal and external adjustment and privatization, it is likely that there will be healthy growth driven by export and investment. In addition to a faltering of the policy, uncertainty centers on the extent of import demand for Polish products in the EU, especially Germany. The debt-service ratio (9.2%) is quite low, but may go up depending on the extent of debt reduction worked out with the London Club. The debt/export ratio (2.4) is somewhat over the borderline. The ALE ratio has been high, but is perhaps acceptably so, given the restructuring needs of the economy and the high import content of exports; further the ALE ratio is likely to improve so long as the expectations regarding export growth are met. Thus, provided pickup in economic activity in Europe and maintenance of cost-competitiveness by Polish exporters the outlook for Poland, in terms of growth and continued external financing, is promising.

Source: World Bank: BESD, World Debt Tables 1993-1994, and March 1994 forecasts and IMF.

# Turkey



## Key indicators

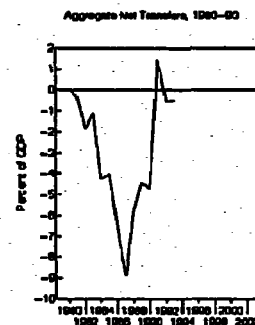
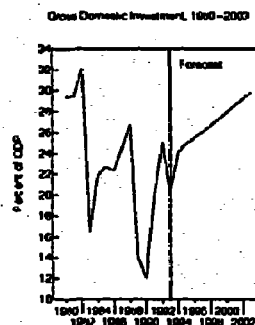
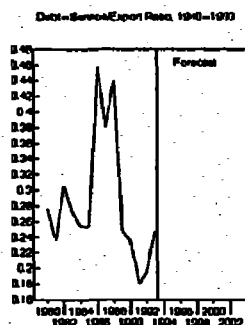
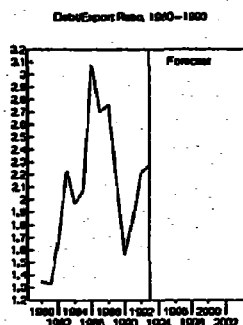
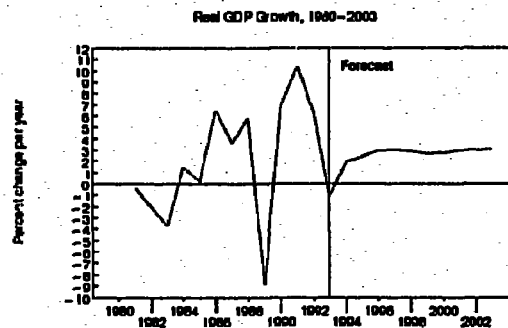
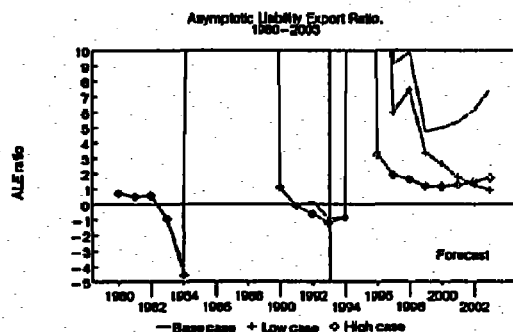
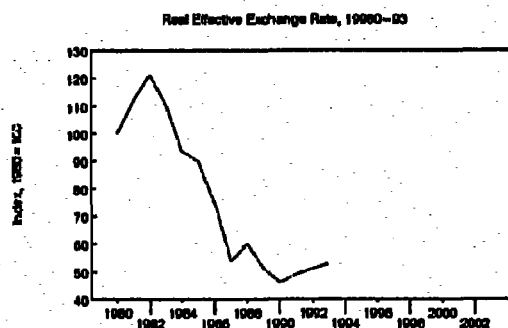
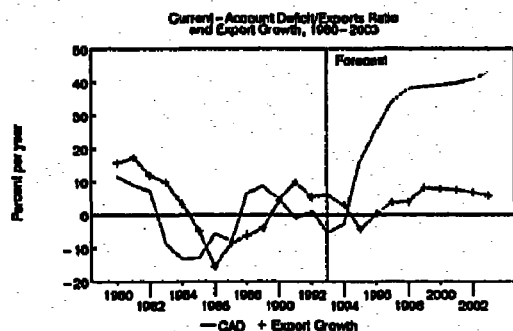
(annual percentage changes and ratios)

	1980-90	1992	1993	1994
Real effective exchange rate	-3.0	5.1	9.6	...
GDP growth	5.3	5.5	6.6	1.9
Investment/GDP ratio (%)	24.5	18.3	19.7	19.0
Export growth (value) 1/	14.9	10.8	8.7	8.2
Debt export ratio	2.1	1.9	1.9	...
Debt service export ratio (%)	32.3	31.8	28.4	...
Current account deficit export ratio (%) 1/	17.9	0.0	5.8	7.8
Asymptotic liability export ratio 1/	1.15	0.00	0.68	0.95

1/ Averages with four-year lags.

Turkey's debt-service ratio (28%) and debt/export ratio (1.9) are somewhat high, but have been improving. The ALE ratio has been very low, but there has been a recent surge in its current account deficit, which is masked by the lags utilized in the ratio. The surge represented a spillover of fiscal imbalance into the external accounts. The fiscal deficit has also been the cause of high real interest rates, which have resulted in very low investment ratios since the late 1980s. It appears that the government lacks political will for serious fiscal action and reform of state owned enterprises. Disappointment with the tax reform bill introduced earlier in 1994 led to an exchange rate turmoil, culminating in a depreciation. Turkey's export markets are mainly in Europe and, so far, management of exchange rates has been able to keep export growth at a steady rate, despite competition in textiles; this is likely to continue. Thus, the critical issues for Turkey are fiscal reform and the recovery of private investment.

# Venezuela



## Key indicators

(annual percentage changes and ratios)

	1980-90	1992	1993	1994
Real effective exchange rate	-7.5	4.5	3.1	...
GDP growth	0.8	6.2	-1.1	1.9
Investment/GDP ratio (%)	22.9	25.1	20.5	24.1
Export growth (value) 1/	0.8	5.4	6.0	3.0
Debt export ratio	2.1	2.2	2.3	...
Debt service export ratio (%)	30.8	19.7	24.8	...
Current account deficit export ratio (%) 1/	-1.3	1.2	-5.4	-2.5
Asymptotic liability export ratio 1/ 2/	1.10	0.22	-0.90	-0.84

1/ Averages with four-year lags.

2/ The 1980-90 value is the median of the 11 annual figures.

With declining oil prices, external environment is less favorable to Venezuela relative to oil-importing middle-income countries. It is also a country where policy slippages are very evident. Lower oil prices will decrease the room for maneuver on both internal and external accounts and may further act to lower foreign investment in the oil sector. The debt ratios have been within acceptable limits, but are rising. The ALE ratio has been low, even negative recently. The latter, however, is likely to worsen as oil revenues remain low. While a precipitous decline in oil prices is not a likely source of downside risk, failure on the policy front is. The latter can range from failure to deliver on the 1994 budget premises of raising domestic oil price and implementing value-added taxation to reversal of trade reforms and reimposition of exchange controls. While reserves are presently adequate, Venezuela is likely to experience a financing gap in the short to medium term. Thus, just as Brazil, the prospects for long-term growth, and continued external financing, depend essentially on staying the course so far as reforms are concerned.

Source: World Bank: BESP, World Debt Tables 1993-1994, and March 1994 forecasts and IMF.



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