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THE ORDER OF LIBERALIZATION OF
THE EXTERNAL SECTOR IN
DEVELOPING COUNTRIES

SEBASTIAN EDWARDS



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

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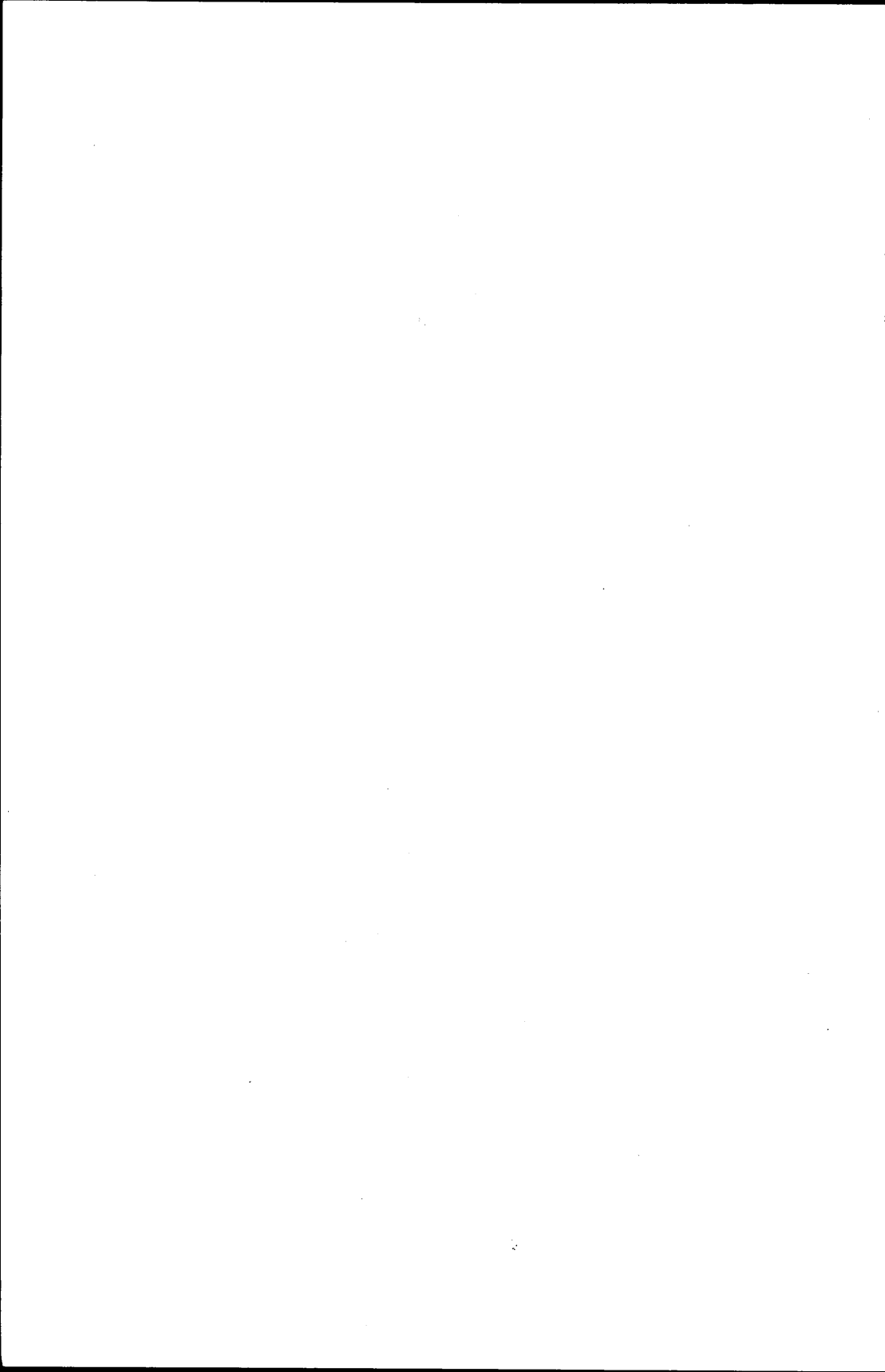
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The Order of Liberalization of the External Sector in Developing Countries

1 Introduction

During the 1970s, a number of developing countries embarked on major attempts to liberalize their economies through reforms aimed at increasing the role of the market mechanism and reducing existing barriers to international trade and capital movements. The more dramatic of these episodes took place in Latin America, where major liberalization reforms were pursued in Argentina, Chile, and Uruguay. These Latin American cases were particularly interesting since, at least on paper, the policies implemented corresponded closely to what many economists have been advocating for a long time: quantitative restrictions on trade were eliminated, tariff levels and dispersion were reduced, domestic capital markets were developed, and restrictions on international capital movements were lifted. The main objective of these reforms was to transform these countries into open export-oriented economies.¹

A decade after these reforms were first implemented, the evidence indicates that they were to a large extent failures. In all three countries the liberalization reforms have been partially reversed. Tariffs have been raised, so that these economies are tending once again to become isolated from the rest of the world. Severe financial crises have resulted in the collapse of virtual nationalization of the banking sectors. There is no clear agreement among the experts on the main causes for the failure of the liberalizations, but it can be argued that it was due to the implementation of inappropriate macroeconomic policies. A particularly serious problem was the timing of the reforms: they took place at the same time as major stabilization programs aimed at reducing rates of inflation of up to 600 percent. Generally speaking, then, the failure of these reforms had more to do with the macroeconomic policies that were being

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¹ On the advantages of liberalized export-oriented economies see, for example, Krueger (1978, 1980, 1983), Bhagwati (1978), Bhagwati and Srinivasan (1979), McKinnon (1973, 1982), Little, Scitovsky, and Scott (1970), and Balassa (1982). On the recent experiences of the Southern Cone countries see, for example, Dornbusch (1983b, 1984), Harberger (1982, 1984), Edwards (1985a, 1985b), and Hanson and de Melo (1983).

pursued alongside them than with the type of liberalization itself (see Edwards, 1985b, and Sjaastad, 1983, for detailed analyses of the Southern Cone experiments).

These recent experiences also indicate that a number of issues related to the *dynamics* of the liberalization are not well understood (see Krueger, 1983, for a discussion of these issues). The most important of these pertain to the speed and the order of economic liberalization. In a textbook world without externalities or distortions, the problems of speed and order would be simple. All markets should be liberalized immediately and simultaneously. In the real world, however, these questions are important and complex. With respect to the speed at which an economy should be liberalized, considerations related to efficiency gains, income distribution, and the credibility and feasibility of the reforms should be taken into account (see Leamer, 1980; Mussa, 1983). With respect to the order of liberalization, the main question is which markets should be liberalized first. This question has both microeconomic and macroeconomic implications. At the microeconomic or welfare level typical second-best problems are present, while at the macroeconomic level different orders of liberalization will imply different paths for the critical variables, including the real exchange rate, aggregate output and unemployment.

This Essay deals with a particular aspect of the order of economic liberalization: the order of liberalizing the current and capital accounts of the balance of payments. Until recently, very little effort had been devoted to analyzing this problem. Attention has been drawn to it, however, by the experience in the Southern Cone. Argentina and Uruguay opened the capital account first; Chile opened the current account first. McKinnon (1982) has compared the Argentinian and Chilean experiences, and Kahn and Zahler (1983, 1984) have conducted simulation studies on alternative orders and speed of economic liberalization. (See also Frenkel, 1982; Lal, 1984; and Edwards, 1983, for discussion of the subject.) Typically, these studies attempt to answer the following question: If for some reason—political or economic—the current and capital accounts cannot be liberalized simultaneously, which account should be liberalized first? This Essay reviews and critically analyzes three aspects of this problem: the relationship among the order of liberalization, macroeconomic management, and the real exchange rate (section 2); the welfare effects of alternative orders (section 3); and the order of liberalization and adjustment costs (section 4). Insights from several models are integrated as these issues are discussed. A problem with this approach, however, is that in some instances the assumptions on which the models are based may not be entirely consistent. Whenever this is the case, I have

tried to point out possible sources of inconsistency. Throughout the discussion, reference is made to the recent experiences of the Southern Cone countries.

2 The Order of Liberalization, Macroeconomic Management, and the Real Exchange Rate

Some of the major liberalization episodes during the last decade, such as those in Argentina, Chile, and Uruguay, took place in highly unstable macroeconomic environments that eventually contributed to their failure. There is a growing belief that this macroeconomic instability was not completely exogenous but was in some sense related to the liberalization strategies followed in these countries. In particular, the effect that opening the capital account had on the real exchange rate has been cited as a major reason for the failure of these liberalizations. Harberger (1983, 1984), Rodriguez (1983), Dornbusch (1983b, 1984), and Edwards (1983, 1985b) have analyzed these experiences.

A number of authors have suggested that opening the capital account will result in large destabilizing capital flows in the short run (see, e.g., McKinnon, 1973, 1982; Dornbusch 1983b, 1984). If the capital account is opened when the domestic capital market is still repressed and interest rates are fixed at artificially low levels, massive capital outflows will take place. For this reason, most, if not all, authors who have discussed this issue have indicated that the capital account should be opened only after the domestic capital market has been liberalized and domestic interest rates have been raised.

It is also generally accepted that in an inflationary environment the domestic financial market should be liberalized only after the fiscal deficit has been controlled. As McKinnon and Mathieson (1981) emphasize, if there is a large fiscal deficit that is financed by an inflation tax, reserve requirements must be kept high and interest payments on deposits kept low to prevent erosion of the base on which the inflation tax is collected—the stock of high-powered money. In fact, Rodriguez (1983) and Sjaastad (1983) have suggested that Argentina's inability to control its fiscal deficit was one of the major causes for the failure of its recent liberalization and stabilization attempt. Also, Dornbusch (1984) has pointed out that capital flights played a key role toward the latter part of the Argentinian experience of 1978-82.

If, on the other hand, the fiscal deficit has been controlled and the domestic financial market liberalized, the opening of the capital account may result in large inflows of foreign capital, triggered by substantial interest-rate differentials (see McKinnon, 1973). Under a fixed exchange

rate, these inflows will be monetized and will result in inflation and a real appreciation of the domestic currency (see Diaz-Alejandro, 1981; Harberger, 1984; and Harberger and Edwards, 1982). Under a floating exchange rate, the inflows will result in an appreciation of the nominal and real exchange rates. Since financial markets adjust much faster than goods markets, this real appreciation will be quite abrupt, as Frenkel (1982, 1983) points out.

While the opening of the capital account may generate a *real appreciation* of the domestic currency, Balassa (1982), among others, has argued that a successful liberalization of the trade account will require a *real depreciation*, in order to help the exportables sector to expand as the new structure of relative prices replaces the old protective structure. If this devaluation is precluded by the opening of the capital account, the transition in the goods sector from a protective to a freer environment will become more difficult. The appreciation generated by the opening of the capital account will tend to squeeze profitability in the tradable-goods sector at a moment when this sector (or that part of it involved in import substitution) is going through a costly readjustment. Consequently, it has been suggested that the capital and current accounts should *not* be opened simultaneously, and that capital inflows should be tightly controlled during the transition period after trade has been liberalized. For example, as early as 1973, McKinnon (p. 160) wrote:

... unusually large inflows of foreign capital . . . inhibit the exchange rate to depreciate sufficiently. . . . Previously protected competing industries, which face a significant adjustment problem, could have their difficulties magnified. . . . Hence the capital inflow could trigger a decline in overall domestic output. . . .

McKinnon went on to recommend that an economy that liberalizes its foreign trade should "*deliberately avoid an unusual or extraordinary injection of foreign capital*" (1973, p. 161, emphasis added). More recently, this line of reasoning has been followed by Dornbusch (1983b) and sustained by McKinnon (1982). As Dornbusch (1983b, p. 176) put it, "The worst thing to do is to liberalize the capital account . . . before the required real depreciation has been achieved."

A critical question regarding this argument is the extent to which freeing the capital account will result in an "extraordinary" injection of foreign capital, in McKinnon's sense. If it results in large capital inflows that are sustainable in the long-run, the resulting equilibrium appreciation should be viewed as a long-run equilibrium phenomenon. Under those circumstances, it is not clear that the opening should be delayed for fear of its effect on the real exchange rate. It turns out, however, that it is not difficult to build simple models of an economy that restricts capital

inflows in which an opening of the capital account will result in short-term overshooting of the long-run level of capital inflows.

Possibly, one of the simpler ways of modeling this behavior is to assume that capital inflows (ΔK) respond to the following equation:

$$\Delta K = \min[\Theta(D^* - D_{-1}), \overline{\Delta K}], \quad *$$

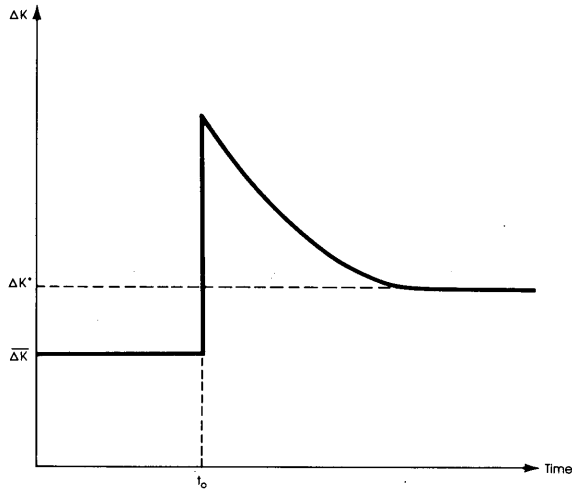
where D^* is the desired or sustainable level of external debt, which will depend on the level of world interest rates, real income, and real wealth, among other things. D_{-1} is the actual stock of external debt in the previous period, Θ is a partial-adjustment coefficient, and $\overline{\Delta K}$ is the maximum (possibly zero) amount of net capital inflow allowed by the economic authority in every period. The term $\Theta(D^* - D_{-1})$ embodies the idea advanced by Harberger (1982, 1984) and Edwards (1983), among others, that there is a *long-run* equilibrium ratio of foreign debt to GDP. If GDP grows at g percent per annum, so will the desired stock of debt. If the real interest rate on the external debt is r , *net* capital inflows will then grow at a rate of $(g - r)$. Notice that this formulation looks only at the phase during which foreign debt is accumulated and does not explicitly incorporate the existence of an intertemporal budget constraint. (On the different phases of the balance-of-payments accounts, see Fischer and Frenkel, 1972.)

Clearly, if $\overline{\Delta K} < \Theta(D^* - D_{-1})$, the gap between desired and actual debt will increase through time. Once restrictions on capital inflows are lifted, actual inflows will become equal to $\Theta(D^* - D_{-1})$. That means that, immediately following the opening of the capital account, capital flows will jump to a fraction Θ of the accumulated gap between the desired and actual debt. As this gap is closed, the level of capital inflows will slowly fall until it reaches a new equilibrium level. For the case of a simple economy, the behavior through time of capital flows that emerges from this formulation is represented in Figure 1. Alternatively, it is possible to assume that once the capital account is liberalized, the perceived profitability of domestic investment will dramatically increase. This will result in a substantially higher D^* and the same sort of jump in the level of capital inflows shown in Figure 1.²

The sudden increase (i.e., overshooting) of capital inflows will produce a large current-account deficit, as was the case in Chile from 1979 to 1981. As has been pointed out by McKinnon (1976) and Harberger (1982, 1984), whenever a fraction of these additional foreign funds is

² In the present (post-1982) circumstances, this capital-inflows equation may not be adequate for those countries that face credit rationing by foreign financial institutions. Under more normal circumstances, however, this equation will capture the behavior of capital flows reasonably well.

FIGURE 1
 BEHAVIOR OF CAPITAL FLOWS FOLLOWING
 A CAPITAL-ACCOUNT LIBERALIZATION



spent on nontradable goods, their absorption will require an increase in the relative price of nontradables and a real appreciation of the domestic currency. Harberger (1982) actually calculated that the increase in capital inflows into Chile is capable of “explaining” a real appreciation of the peso of up to 25 percent between 1979 and 1981. Once the gap between desired and actual debt begins to close, the relative price of nontradables will decline toward its new long-run equilibrium. If the nominal price of nontradables is inflexible downward, however, the country will run into difficulties under a fixed exchange rate. If real wages are inflexible downward, as was the case in Chile during the late 1970s, there will be problems with the adjustment process even under a flexible exchange rate. (See Dornbusch, 1984, and Edwards, 1985, for a discussion of the role of real-wage-rate inflexibility in the Chilean case.) In general, it is possible to say that overshooting in the rate of capital inflows will cause adjustment difficulties with either exchange-rate regime. As Harberger (1984, pp. 2-3) has pointed out, “High rates of capital inflow drive the real exchange rate down (i.e., cause it to be highly appreciated), a situation that then has to be sharply reversed when the rate of capital inflow is curtailed.”

The dynamic effect of capital-account liberalization resembles that of

the so-called "Dutch Disease": in order to adjust to a large increase in absorption, a real appreciation of the domestic currency will have to take place.³ There are other possible reasons besides a jump in the level of capital inflows why opening the capital account could result in a short-run appreciation of the domestic currency that exceeds the long-run appreciation. One such reason is related to the differences between short- and long-run elasticities of supply in the nontradables-goods sector.

The conflicting movements of the real exchange rate that result from opening the capital account (appreciation) and opening the current account (depreciation) capture the fact that these policies will exert pressures for resources to move in opposite directions. At least in the short run, opening the capital account will generate an expansion of the nontradables sector and a contraction of the importables and exportables sectors. This actually happened when Argentina, Chile, and Uruguay opened their capital accounts. After the capital account was opened in Chile in 1979, an important fraction of the massive capital inflow was used to finance the expansion of the construction sector. This was also the case in Argentina (see Nogues, 1983) and Uruguay (see Hanson and de Melo, 1983). Opening the current account, on the other hand, will result in an expansion of the exportables sector, a contraction in the production of importables, and either an expansion or a contraction of the nontradables sector. (See Edwards, 1983, for a detailed analysis of the direction of resource movements under alternative orders of liberalization.)

Consider, for example, the case where the capital and current accounts are opened simultaneously. Since financial markets adjust faster than goods markets (see Frenkel, 1982; Khan and Zahler, 1983, 1984), we will observe an immediate flow of capital, as in Figure 1. In the goods-market sphere, however, little or nothing in the way of commodity arbitrage will happen in the very short run. As a result, the capital-account effect will dominate at this early stage, with the real exchange rate appreciating and capital and labor tending to move into the nontradable-goods sector. As time passes, the goods market will begin to adjust, while the capital account, after the initial overshooting, will enter the phase where capital inflows slowly decline toward their new long-run equilibrium (see Figure 1). At this point, the effect of the trade liberalization will begin to be felt and resource movements will be reversed, with capital and labor now moving out of the nontradables sector.

If there are adjustment costs associated with resource movements be-

³ On Dutch Disease, see, for example, Corden (1982), Edwards and Aoki (1983), and Van Winjbergen (1984).

tween sectors, it could be advisable to implement policies that would avoid these reversible resource switches.⁴ Frenkel (1982, 1983) has suggested *synchronizing* the effects of opening the capital and current accounts. Given the differential speeds at which the goods and capital markets adjust, he has proposed opening the current account first and only after some time opening the capital account.

Lal (1984) has presented an alternative view. Since the behavior of the exchange rate is critical during the transition from a protected to a liberalized trade account, Lal believes that is better *not* to let the government manipulate the nominal exchange rate during this transition. In many cases, he argues, exchange-rate management has been inappropriate and has resulted in the ultimate collapse of the trade reform, as recently happened in Argentina.⁵ For this reason, Lal has proposed that a floating-exchange-rate system with full currency convertibility be implemented before the trade reform takes place. This means, of course, that the capital account should be liberalized before the trade account. But Lal does not explain how to handle the real-appreciation problem that will result from opening the capital account (although, admittedly, its effects will be less severe if the trade side has not yet been reformed), nor does he specify how much in advance the capital account should be opened. Furthermore, he does not describe the institutional setting that would be required for a floating-exchange-rate system to succeed in a developing country. This is a critical problem, since a number of authors (e.g., McKinnon, 1979a,b) have indicated that the lack of certain basic institutional requirements precludes freely floating exchange-rate systems in developing countries.

3 The Welfare Effects of Alternative Orders of Liberalization of the External Sector

Welfare considerations are at the center of the discussion of the order of economic liberalization in developing countries. McKinnon (1973),

⁴ See Friedman (1953) for an early discussion of the costs associated with reversals in the direction of resource movements during the adjustment process. A critical question at this stage is why the private sector wouldn't take these costs into account when making their decisions about production and resource movements. Surprisingly, most authors who have analyzed the ordering problem have not even mentioned this question.

⁵ Other authors who have discussed how to handle the exchange rate during the transition period after a trade reform include McKinnon (1982), Kapur (1983), Michaely (1982), and Balassa (1982). One way to deal with the exchange-rate problem during the transition is to adopt a dual system with a fixed or managed rate for trade transactions and a floating rate for financial transactions. Such a system, however, becomes very cumbersome and difficult to manage. On dual-exchange-rate systems, see, for example, Flood (1978) and Lanyi (1975).

Krueger (1983), and Frenkel (1982, 1983), among others, have argued, for example, that when all markets cannot be liberalized simultaneously, there might be negative welfare implications in reducing or eliminating one distortion while others are kept in place. These authors have generally concluded, on the basis of welfare considerations, that the current account should be liberalized first. Only after tariffs have been reduced and the adjustment process completed should the capital account be opened. This policy recommendation is based on the belief that the negative welfare effect of opening the capital account in the presence of trade distortions will exceed the negative effects arising from the opposite sequence. McKinnon (1973, p. 157), argues that the liberalization of capital inflows increases the distortion in the economy. Krueger (1983, p. 19) notes:

Since exchanges of assets are exchanges of capitalized values of income streams, income streams generated by distorted prices are probably the inappropriate ones at which to trade. It would then follow that capital account liberalization should not be undertaken unless both current account and domestic financial transaction are already liberalized.

According to Frenkel (1983, p. 167):

When the trade account is opened first the cost of the remaining distortion (i.e., the closed capital account) . . . is likely to be relatively small. On the other hand, when the capital account is opened up first the cost of the remaining distortion (i.e., the closed trade account) . . . is likely to be very large. Thus a comparison of the costs of distortions . . . supports the proposition that the trade account should be opened first.

Such reasoning, which focuses on the welfare effects of opening the capital account in the presence of trade distortions, is related to the argument about immiserizing capital accumulation originally advanced by Johnson (1967). He showed that if there are tariffs and the importable good is capital intensive, capital accumulation may reduce welfare. When capital is accumulated, production of the capital-intensive (importable) sector will increase (Rybczynski, 1955), and the negative welfare effect of the pre-existing distortion will be reinforced. This effect can be strong enough for the accumulation of capital to result in a reduction of welfare (Johnson, 1967). If this is the case, why would the recipients of capital flows from abroad use them to accumulate capital? The answer is that the private domestic real return to capital will exceed the world's real interest rate when importables are capital intensive. Therefore, the accumulation of capital will be beneficial from a private perspective but will be less desirable from a social perspective—and could even be immiserizing.

The welfare effects of foreign investment in the presence of tariffs have been analyzed by Brecher and Bhagwati (1982) and Brecher and Diaz-Alejandro (1977), among others. Their work is also relevant to the order of liberalization. Brecher and Diaz-Alejandro (1977) have shown that a small amount of foreign investment will always reduce welfare if foreign capital is paid its marginal product and the import-competing good is capital intensive. This will happen even if the conditions required for the Johnson (1967) immiserization do not hold.⁶

This discussion and the arguments of McKinnon (1973), Frenkel (1982, 1983), and Krueger (1983) focus exclusively on the case where the additional borrowing induced by the liberalization of the capital account is used to increase investment. This need not be the case, of course. A fraction of the new borrowing could be used to increase present consumption. Indeed, that will happen as long as the domestic rate of time preference exceeded the world interest rate prior to the liberalization. It is easy to show that under these circumstances and according to the traditional trade model, welfare will not deteriorate even if there are tariffs and even if all the new foreign borrowing is used for additional present consumption. This suggests that, contrary to the conventional wisdom, capital flows used to finance investments should be taxed but those used to finance consumption should not be. There will be no need to tax these capital inflows, however, if the investment decisions are made using shadow prices rather than tariff-distorted market prices (see Edwards and Van Wijnbergen, 1983).

It is also possible to think of the borrowing process as a positive transfer from abroad taking place today—when the loan is obtained—plus a larger negative transfer taking place at a future date—when the loan plus interest must be repaid. It is well known from the work of Brecher and Bhagwati (1982) that in a small country and in the absence of induced distortions, welfare cannot be reduced by tariffs when a positive transfer from abroad is fully used to increase consumption. On the contrary, to the extent that part of the loan is used to increase consumption of the importable good, a *positive* welfare effect will emerge. Consequently, as long as the social domestic rate of time preference exceeds the world interest rate, foreign borrowing used to finance increases in current consumption will improve welfare (in a present-value

⁶ The welfare effects of additional investment resulting from the liberalization of the capital account can also be analyzed within the context of the emerging literature on factor trade developed by Grossman (1983), Bhagwati and Srinivasan (1983b), and Brecher and Findlay (1983). If the private domestic rate of return to capital exceeds the world rate of return before the liberalization process begins, liberalizing the capital account will result in some of these funds being used for the importation of machines. This is formally equivalent to allowing trade in machines today, and thus it can be analyzed within the factor-trade framework.