Occasional Papers No. 6

GROWTH-ORIENTED ADJUSTMENT STRATEGIES: THE ROLE OF EXCHANGE RATE POLICIES AND TRADE LIBERALIZATION

Susan M. Schadler



The South East Asian Central Banks (SEACEN)
Research and Training Centre
Kuala Lumpur, Malaysia
April 1988

Ms. Susan M. Schadler

Ms. Schadler is with the Asian Department of the International Monetary Fund where she is a division chief. She joined the Fund in 1975 as an economist. She had also worked with the Fund's European and Research Departments.

A number of Ms. Schadler's articles have been published in the *IMF Staff Papers* and *Finance and Development*. The more recent ones include *Interest Rates and Exchange Rates* (1984) and *Effect of a Slowdown in Industrial Economies on Selected Asian Countries* (1986).

Ms. Schadler has a B.A. Economics from Mount Holyoke College. She obtained her M.Sc. Economics from the London School of Economics.

RM\$15/=

Occasional Papers No. 6

GROWTH-ORIENTED ADJUSTMENT STRATEGIES: THE ROLE OF EXCHANGE RATE POLICIES AND TRADE LIBERALIZATION

Susan M. Schadler



The South East Asian Central Banks (SEACEN)
Research and Training Centre
Kuala Lumpur, Malaysia
April 1988

FOREWORD

After the second oil crisis in 1979/80, the SEACEN countries encountered a number of disturbing trends. Their export performance was adversely affected by a weakening in primary commodity prices and wide fluctuations in the exchange rates of major currencies. The adverse international environment, together with the rising tide of protectionism and severe competition in international trade among developing and developed countries, dampened economic growth in the SEACEN countries.

A problem which arose out of this adverse international economic environment is the persistent current account deficit. This external imbalance prompted an urgent need for structural adjustment in the SEACEN countries' economies. In the last few years, the SEACEN countries initiated a number of adjustment programmes, success at which has been encouraging.

In connection with the foregoing, The SEACEN Centre and the International Monetary Fund (IMF) organized a seminar to provide a forum for senior officials of member central banks and monetary authorities to discuss and deliberate on the issues and problems related to structural adjustment. The Seminar, entitled *The Role of Exchange Rate and Trade Policies in Growth-oriented Adjustment Process*, also took stock of the performance on adjustment programmes which had been adopted. This activity was hosted by The Monetary Authority of Singapore and was held on 16-18 January 1988 at The Oriental Hotel, Singapore.

The Seminar had Ms. Susan M. Schadler for its resource person, a division chief at the Asian Department of the International Monetary Fund. For the benefit of those who were not able to participate in the said Seminar, the paper presented by Ms. Schadler forms the sixth in a series of *Occasional Papers* of The SEACEN Centre. Through this publication, it is hoped that the readers could somehow capture the substantive professional insights and experiences on the subject matter of Ms. Schadler, which made her a most effective resource person.

Dr. Vicente B. Valdepenas, Jr. Director
The SEACEN Centre

Kuala Lumpur April 1988

GROWTH-ORIENTED ADJUSTMENT STRATEGIES:

THE ROLE OF EXCHANGE RATE POLICIES AND TRADE LIBERALIZATION*

by Susan M. Schadler

During the past year, the design and objectives of adjustment programmes have come under increased scrutiny. Attention has been focused on whether adjustment programmes – those supported by Fund resources in particular but also those implemented by countries on their own – are adequately laying the foundation for growth over the medium-term as well as addressing short-term balance of payments problems. These issues have been discussed in a variety of fora: a major report by the G-24 and, within the Fund, a colloquium, including a wide range of academics and policy-makers, on growth-oriented adjustment programmes, and several Executive Board meetings to review conditionality and explore ways to strengthen the design of Fund programmes. The debate has also been active outside the Fund.

From this re-examination of the issues, views on the adjustment process have been refined. In particular, the contribution to adjustment programmes of measures to remove distortions and enhance production and investment incentives is now more widely appreciated. Also, consideration has been given to including explicit and quantified "growth-exercises" in adjustment programmes so as to spell out the implications of policies and financing constraints for growth. At the same time, however, the debate has reinforced the basic precept that balance of payments viability is essential for sustainable growth.

The present paper is an attempt to review some of the major strands of the debate on growth-oriented adjustment programmes. Section I looks at recent domestic and external trends in developing countries in order to highlight the motivation for increased emphasis on growth with adjustment. Section II discusses general issues underlying growth-oriented adjustment strategies, drawing upon the G-24 report and subsequent work in the Fund; Section III examines the role of the exchange rate in adjustment; and, Section IV examines the role of trade policies in adjustment. Section V offers some concluding thoughts.

I. The Setting for Adjustment

One key to understanding the recent focus on growth in adjustment programmes lies in the deterioration during recent years in the global economic environment facing developing countries; the growth of markets in industrial countries has slowed, protectionist policies have proliferated, the terms of trade of sizable segments of the developing world have deteriorated, and interest rates in industrial countries, both real and nominal, have risen above levels experienced for extended periods in the postwar period. Beyond their obvious direct

^{*}This paper reflects the views of the author but not the official position of the International Monetary Fund.

effects on growth and the balance of payments of developing countries, these changes rendered developing economies more vulnerable to earlier policy errors — excessive external borrowing, distorted relative prices, and inefficient public sector policies — and generally created a difficult environment for reorienting policies. Many developing countries have consequently been confronted with a vicious circle of poor export performance, reluctance on the part of foreign creditors to maintain financing flows, and low growth.

Table 1 provides a summary of several aspects of the global environment. Looking first at export markets – of which the expansion of GNP and domestic demand in industrial countries are good indicators – the early 1980s saw a clear break in the momentum of growth. After averaging about 3 1/2 per cent annually during the 1970s, the growth of both GNP and domestic demand in industrial countries fell to around 2 1/2 per cent per annum on average during the 1980s. Moreover, the suddenness of this slowdown made it particularly difficult to absorb; the increase in both GNP and domestic demand fell from about 3 1/2 per cent in 1979 to an average of less than 1 per cent per annum during 1980-82. Average growth rates since 1983 have measured up to those of the 1970s, but the appearance of a return to the "good old days" is deceptive. First, the recovery reflects in large part an exceptionally strong performance in 1984 immediately following the recession; since 1984 the growth of both GNP and domestic demand has leveled off at 2 1/2-3 per cent where it is expected to

Table 1
INDICATORS OF EXTERNAL DEVELOPMENTS¹

-	1969-79	1980-87	1980-82	1983-87
Growth in industrial countries ²			· ·	
GNP	3.4	2.3	8.0	3.2
Domestic demand	3.3	2.6	0.2	3.6
Terms of trade ²				
Developing countries	4.3	-0.4	6.1	-3.7
Non-fuel exporters	-0.8	-1.5	-4.0	_
Primary product exporters	-0.4	-3.1	-7.7	-0.2
Exporters of manufactures	-1.2	-0.5	-1.6	_
LIBOR ³				
Nominal	8.0a	10.9	14.8	8.6
Real ⁴	-2.4ª	10.7	13.4	9.6

Source: IMF, World Economic Outlook (October 1987).

¹Country groupings correspond to those in World Economic Outlook (1987).

²Average annual compound rates of change

³Three-month London Interbank Offer Rate on U.S. dollar deposits, period averages.

^{*}Adjusted for the average compound rate of increase of export unit values of non-oil developing countries

a1970-79

remain during the rest of the 1980s. Second, protectionism in industrial countries, which is notoriously difficult to quantify, has been intensified throughout the 1980s putting a wedge between effective market growth and measured increases in demand.

Terms-of-trade developments have been another major setback for many countries. Although large increases in energy prices early in the decade limited the deterioration in the terms of trade for developing countries taken together during the 1980s, non-fuel exporters have been hard hit. The most affected group has been primary product exporters, who after experiencing little net change in the terms of trade during the 1970s, suffered a deterioration of 3 per cent per annum during 1980-87. As with export market growth, this setback was concentrated during the period 1980-82 when the terms of trade worsened by almost 8 per cent per annum; subsequent developments have been less adverse as the large drop in energy prices has offset weakness in primary product prices. Exporters of manufactures have fared better with the terms of trade deteriorating only slightly during 1980-87.

Finally, the sharp increase in interest rates dealt a severe blow to indebted countries. Once again, the main impact of this change came during 1980-82 when the nominal Eurodollar interest rate rose from an average of 8 per cent during the 1970s to an average of almost 15 per cent. Moreover, this increase came as non-oil export unit values of developing countries fell, so that the real interest rate rose from minus 2 1/2 per cent during the 1970s to over 13 per cent. Subsequently, there has been a sizable reduction in the nominal interest rate, but continuing weakness in prices has left the real interest rate close to 10 per cent.

The summary indicators shown in Table 2 reflect the sharp and swift effect of these changes on developing economies. The global environment was, of course, not the only source of difficulty; for many countries, the cumulative effects of poor policies in the past were also to blame and at least some portion of the deterioration in their own performance could be regarded as inevitable. Nevertheless, the severity and timing of the downturn for most of these countries is largely related to external developments.

The overall adjustment problem for developing countries can be summarized in terms of several broad trends. First, per capita GDP growth of non-fuel exporting developing countries slowed sharply during 1980-82 when external conditions deteriorated. The brunt of this slowdown was borne by primary producers, who actually experienced a half a per cent per annum drop in per capita GDP. For exporters of manufactures, growth bore up much better. Although growth rebounded for non-fuel exporters as a whole during 1983-87, exporters of manufactures accounted for most of the strength, while growth remained slow for primary product producers.

Second, the current account deficit of non-fuel exporters rose from 13 per cent of exports of goods and services during the 1970s to 18 per cent during 1980-82, but then fell to 4 per cent during 1983-87. These developments reflected several influences. Among exporters of manufactures, there was a steady improvement across the sub-periods largely reflecting the gains of South Korea and Taiwan, which were able to increase markedly their penetration of industrial-country markets. In contrast, the current account position of primary

Table 2

MAJOR TRENDS IN DEVELOPING COUNTRIES:
DOMESTIC GROWTH AND THE EXTERNAL SECTOR¹

	1969-79	1980-87	1980-82	1983-87
Per capita GDP growth				
(percent per annum)				
Non-fuel exporters	3.2	2.3	1.0	3.0
Primary product exporters	2.8	0.4	-0.5	1.0
Exporters of manufactures	4.0	4.3	2.5	5.4
Market borrowers	4.0	0.5	0.2	0.6
Official borrowers	1.1	0.1	0.1	0.1
Gross capital formation				
(in percent of GDP)				
Non-fuel exporters	27.3ª	24.1	25.7	23.2
Primary product exporters	22.1ª	19.0	22.1	18.3
Exporters of manufactures	32.7a	28.8	29.0	28.6
Market borrowers	27.2ª	22.7	26.2	20.6
Official borrowers	18.9ª	17.6	18.7	17.0
Current account position				
(as percentage of exports of				
goods and services)				
Non-fuel exporters	-13.4	-10.1	17.9	-4.2
Primary product exporters	-18.1	-21.1	-32.5	-14.4
Exporters of manufactures	-8.6	-0.8	-6.4	2.5
Market borrowers	-11.9	-7.7	-16.2	-2.6
Official borrowers	-19.0	-26.4	-27.8	-25.5
External financing to capital				
importing countries (in billion				
of U.S. dollars per annum)				
Long-term borrowing from				
official creditors (net) ²	29.5ª	30.4	29.9	30.7
Other net external borrowing ²	46.8a	34.0	69.0	13.2
borrowing-	40.0	04.0	03.0	10.2
Debt service ratios (in percent				
of exports of goods and services)				22.1
Non-fuel exporters	10.1ª	18.0	10.6	22.4
Primary product exporters	26.3ª 11.1ª	35.0 12.6	32.9 13.0	36.3 12.5
Exporters of manufactures Market borrowers	21.8ª	12.6 25.1	23.6	26.0
Official borrowers	21.0° 13.3ª	22.8	23.0 15.7	27.0
Official Doffoword	10.0	0	10.7	_,.0

Source: IMF, World Economic Outlook (October 1987).

¹Country groupings correspond to those in World Economic Outlook. The category market borrowers comprises countries that obtained at least two thirds of their external borrowings during 1982-87 from commercial creditors. Official borrowers comprise countries except China and India that obtained two thirds or more of their external borrowings during 1978-82 from official creditors.

²Excluding reserve related liabilities (i.e., arrears, use of Fund credit and liabilities constituting foreign authorities' reserves). The principal component of this category is commercial credit.

^a1979 only

product exporters weakened sharply during 1980-82, but subsequently more than fully reversed itself. For many of these countries this reversal resulted from the improvement in the global environment together with sound adjustment policies. For others, however, severe external financing constraints necessitated rapid adjustment that relied heavily on the compression of domestic demand and resulted in the drop in investment ratios discussed below. External financing constraints played a particularly important role for market borrowers; their current account deficit rose from 12 per cent of exports of goods and services during the 1970s to 16 per cent during 1980-82, but then fell to 2 1/2 per cent during 1983-87. These countries accounted for the bulk of the drop in borrowing from commercial creditors ("other net external borrowing") from \$69 billion per annum during 1980-82 to \$13 billion per annum during 1983-87. Official borrowers, on the other hand, were able to maintain a broadly unchanged level of official external financing, and average annual external current account deficits exceeded those during the 1970s.

Third, owing to the sharp increase in external borrowing during 1980-82, the rise in interest rates, and the disappointing growth of exports, debt service ratios for almost all categories of countries rose during the 1980s to levels that only a few years earlier would have been considered intolerable. For market borrowers the ratio leveled off at about 26 per cent during 1983-87 because of the sharp contraction in available commercial financing. For official borrowers, however, the ratio increased throughout the 1980s reaching almost 36 per cent by 1987.

A final indicator of the serious plight of many developing countries is the almost continuous drop in the investment ratio during the 1980s. For many countries this reduction reflected a scaling back of unrealistically ambitious public investment programmes. But external financing constraints and the need to contain domestic demand to strengthen the current account position were also key factors. Thus, for two categories of countries, primary commodity exporters and market borrowers, the drop in investment ratios was particularly severe and posed a serious threat to the resumption of adequate growth. Indeed, it is the situation facing these two groups of countries – low growth, high debt-service ratios, underlying weakness in the current account position, and severe external financing constraints – that has reinforced the need for growth-oriented adjustment strategies.

II. Strategies for Growth-oriented Adjustment

The fundamental objective of growth-oriented adjustment programmes is the correction of external balance of payments problems while at the same time laying the foundations for strong growth over the medium-term. The problem most often faced is one in which the current account deficit at the inception of the programme, and as projected without policy changes, exceeds the available external financing less the desired accumulation of official foreign exchange reserves. The situation is therefore unsustainable and the immediate need is to bring the current account position into line with the externally imposed financing constraint. The question then arises as to whether such adjustment has relied excessively on a compression of domestic demand without adequate attention to the conditions necessary for a resumption of growth.

The problem of designing programmes to achieve adjustment with growth can be seen clearly in terms of the standard absorption identity. The initial current account disequilibrium implies that the gap between income and absorption exceeds the sustainable level of external financing plus the desired increase in reserves. The adjustment problem can therefore be solved either by reducing domestic absorption, by increasing domestic output, or by some combination of the two.1 Traditionally, adjustment programmes have relied heavily on absorption-cutting measures. This tendency has arisen for a number of reasons. First, for many countries the external disequilibrium corresponds to a large fiscal imbalance - the correction of which usually implies a short-term contraction of domestic demand. Second, demand-reducing measures, principally fiscal, credit and exchange rate policies, generally have a short gestation period; as adjustment programmes are often put in place during periods of acute balance of payments crises, there is little alternative to fast-acting solutions. Third, supplyside measures, such as removing distortions in relative prices (including through exchange rate changes), liberalizing foreign trade and financial markets and reforming taxes, frequently encounter more domestic political resistance from influential pressure groups than many kinds of macroeconomic measures. Again, when the need for adjustment is urgent, the process of designing, achieving the political consensus for, and implementing supply-side measures becomes too cumbersome.

What, then, are the essential features of an adjustment programme that places more emphasis on increasing domestic output? The determinants of growth are usually viewed in terms of supply conditions in the context of a neoclassical production function. In this framework, the rate of growth of potential output (abstracting from cyclical fluctuations) is related to inputs of capital and labour and a residual, called total factor productivity (TFP), which reflects many unquantifiable influences such as entrepreneurship, the efficiency of resource use, human capital, and the state of technology. The relative contribution to growth of each of these three broad types of inputs is at the heart of the debate on the requirements for growth. That is, for a given increase in population, should efforts to spur growth focus on increasing factor inputs or on improving productive efficiency? While judgments on this issue for any individual country must take into account that country's stage of development, current policies, and institutions, some perspective can be gained from the experience of developed and other developing countries.

Much of the empirical work on growth accounting examines the long-run (100 years or so) experience of industrial countries.² In one of the pioneering studies using U.S. data from 1979-82, Denison (1962 and 1985) calculates that increases in capital accounted for about 20 per cent of growth, while advances in knowledge, improved resource allocation and economies of scale accounted for most of the rest. These broad orders of magnitude are consistent with results of Solow (1957). Using a different methodology that attempts to capture the effect of improvements in the quality of inputs, however, Christianson, Cummings, and Jorgenson (1980) attribute only about 30 per cent of growth in the United States

¹ In a growing economy, the corresponding choice would be to lower the growth of absorption or increase the growth of output. In the remainder of the paper, I will, for simplicity, refer to cutting absorption or raising output, but the analysis applies equally to changes in growth rates.

² See Fischer (1987) for a review of some of these studies.

between 1947 and 1953 to increases in TFP; for other industrial countries, however, the share is as high as 55 per cent.

Empirical studies of growth in developing countries – although limited by data availability – tend to indicate a larger contribution to growth from increases in capital than for industrial countries. In one of the most comprehensive studies comparing the sources of growth in 12 developed and 27 developing countries, Chenery (1986) finds that increases in TFP account, on average, for some 50 per cent of growth in developed countries but only 30 per cent in developing countries. These results are broadly consistent with those in a study of seven Latin American countries by Elias (1978). Chen (1977), however, finds that for four high-growth Asian countries (South Korea, Taiwan, Hong Kong¹ and Singapore), the contribution of TFP growth during 1955-70 was on average greater than 50 per cent, approximately the same as many calculations for industrial economies. The empirical evidence, therefore, argues for the need to both increase capital accumulation and raise productivity in order to augment growth for any given rate of increase in the population.

The importance of adequate rates of capital accumulation to ensure growth in adjustment programmes is a central theme in the recent report of the G-24. In a simple growth exercise, the report relates growth to investment, or equivalently, the sum of domestic and foreign savings. Given the domestic savings rate, the framework is used to determine the foreign capital inflow necessary to finance targeted rate of potential output growth. This exercise places in sharp relief the effect on growth prospects for many developing countries of the sharp drop in external commercial financing. It leaves unaddressed, however, two questions that are central to the role of capital accumulation in growth. First, what steps can countries take to achieve adequate domestic savings? Second, can a specified amount of external financing ensure the targeted rate of growth?

Raising domestic savings – the corollary of restraining consumption – has long been a focus of adjustment programmes. In the Fund's traditional financial programming exercises, increasing domestic savings is one of the cornerstones of regaining external viability. It also plays a central role in the two gap model that underlies the longer-term analysis of the World Bank. In recent years, the importance of adequate domestic savings rates has also been underscored by the upward sloping supply curve for foreign funds. Portfolio considerations of foreign lenders usually dictate the need for higher risk premium as exposure to a single borrower increases. As foreign borrowing rises, concern also grows among existing investors, both domestic and foreign, that heavy debt servicing obligations could result in restrictions on capital movements, increases in taxes or, in the extreme, general financial instability.

The full range of macroeconomic policies plays a role in domestic savings decisions. In the broadest sense, the maintenance of stable economic and financial conditions is essential to savings incentives and the prevention of capital flight (or the repatriation of flight capital). More specifically, ensuring that financial conditions are responsive to market influences — with respect to both

¹It should be noted that the term Hong Kong used in this report does not in all cases refer to a territorial entity that is a state as understood by international law and practice. The term also covers some territorial entities that are not states but for which statistical data are maintained and provided internationally on a separate and independent basis.

interest rate determination and the allocation of savings – is likely to encourage private savings and promote efficient financial intermediation. Of course, where financial markets are subject to distortionary regulations or intrusions, we are in a second-best world and it is not clear that piecemeal reform helps. Khan and Knight (1985), for example, suggest that increases in controlled domestic interest rates raise the savings ratio and that financial reforms can induce inflows of foreign capital. Van Wynbergen (1983), however, argues that increases in interest ceilings reduce the efficiency of financial intermediation by attracting funds away from relatively efficient curb markets to official markets, where priority lending schemes detract from efficient resource allocation.

Typically, much of the burden of mobilizing domestic savings for investment must fall on fiscal policy. The current debate on debt neutrality – that is, the view that an increase in government dissaving elicits a perfectly offsetting rise in private savings as individuals seek to provide for expected future increases in the tax burden – has cast some doubts on this role of fiscal policy. While there is as yet little empirical study of this issue, evidence presented by Haque and Montiel (1987) rejects the debt neutrality hypothesis for a large sample of developing countries. Indeed, the experience of some Latin American countries suggests that increasing fiscal deficits may lead to large capital outflows as investors seek to avoid the incidence of future tax increases. Thus in general, there appears to be a significant role for cutting government consumption and raising revenues in the mobilization of domestic savings.

Turning to the second issue – the link between a given amount of external financing and a particular target for growth – several observations are relevant. The first concerns the need to account explicitly for the cost of foreign borrowing. The critical point here is that unless the marginal product of capital exceeds the cost of borrowing (the foreign interest rate plus any risk premium a country faces) the use of foreign savings may increase gross domestic product (GDP) without necessarily raising gross national product (GNP), which includes net factor payments abroad. Once this distinction is made, it is evident that it is not always possible simply to rely on foreign savings to reach a targeted level of GNP. Indeed, the addition to GNP from foreign borrowing declines as foreign borrowing increases (and its marginal product declines). Moreover, without appropriate structural policies, foreign borrowing may not be channeled into activities with adequate returns.

Second, it is important in this context to realize that rates of return on investment may themselves be distorted and thus give incorrect signals to investors. For example, rates of return for industries that are sheltered by trade restrictions may be artificially high. Even more problematic, perhaps, is the fact that an overvalued exchange rate may boost the rate of return on investments in industries producing nontraded goods. An investor may quite rationally borrow abroad to invest in the nontraded goods sector on the basis of the perceived cost of borrowing and rate of return. When the exchange rate is adjusted to a sustainable level, however, the investment will prove unwise. It is, therefore, essential for governments to avoid or correct policies that provide private investors with misleading signals.

The recognition that the rate of capital accumulation does not bear a fixed relationship to output growth reinforces the importance in growth-oriented

adjustment programmes of efforts to increase total factor productivity — the myriad factors affecting the efficiency of resource allocation, technological process, and the human capital embodied in the work force. It would not be possible to do justice in the present review to all the policies that bear on enhancing total factor productivity. In general terms, however, two particularly important conditions can be noted. First, it is essential that barriers to investment be eliminated. Limitations on foreign direct investment, for example, often block an important channel for the transfer of technology. Impediments to domestic investment — whether directly through industrial licensing requirements or indirectly through tax disincentives or redundant red tape — prevent many market participants (most often those that are smaller and politically less organized) from seizing viable investment opportunities. In addition, efforts to improve the flow of information and to foster entrepreneurship are critical to ensuring broad-based participation in investment decisions.

Second, a major factor affecting the efficiency of investment decisions from a macroeconomic perspective is the extent to which they are made in an environment where relative prices reflect market forces. As noted above, with distortions in relative prices – for example, from official intervention or from efforts to hold an exchange rate at an unsustainable level – investment decisions that are rational from the perspective of individual investors are frequently not compatible with adequate growth and external equilibrium. Pervasive distortions in relative prices in countries facing external adjustment problems have elicited considerable attention to structural policies in Fund-supported programmes. Indeed, the need to re-orient production toward the traded goods sector to achieve both the needed adjustment and sustainable growth, almost inevitably requires broadbased measures to restructure relative prices through, inter alia, changes in exchange rates, liberalization of foreign trade, elimination of subsidies, and removal of interest rate ceilings and preferential lending schemes. The remainder of this paper will examine the role in growth-oriented adjustment programmes of two of these - exchange rate changes and trade liberalization.

III. Exchange Rate Policy

A devaluation of the local currency is frequently a central feature of adjustment programmes. In this context, exchange rate policy plays a critical role both in constraining domestic demand in the short-term and in realigning relative prices so as to promote the production of traded goods over the longer-term. The effects of a devaluation are most clear when the exchange rate is viewed as the relative price of traded to nontraded goods. Assuming that domestic prices, in particular nominal wages, are not fully indexed, a devaluation reduces domestic incomes and financial wealth in terms of a basket of consumer goods. The resulting drop in demand, together with the inducement from the relative price shift to switch expenditure from traded to nontraded goods, generally brings about a rapid and strong improvement in the current account position.

From the production side, the reduction in prices of nontraded goods relative to those of traded goods provides immediate incentives to shift production to and concentrate new investment in the traded-goods sector. It is important to note that the boost to traded goods comes from the incentive to increase supply rather than an increase in foreign demand. Indeed, most developing countries face highly competitive world markets in which export prices can be

assumed to be given. The increase in traded goods production following a devaluation, therefore, reflects mainly the effects of enhanced incentives to domestic suppliers of traded goods. Often, however, such production decisions take time to come to fruition and the beneficial effects of a devaluation on the production of exports and import substitutes generally occur only over time.

There are, of course, alternatives to a devaluation for achieving any needed shift in relative prices. The need for a devaluation generally arises following a period of excessive growth of domestic demand or following some shock to the economy (such as a change in the terms of trade) which renders the existing structure of relative prices unsustainable. In the first case, with traded goods prices given from abroad, the rapid growth of domestic demand has resulted in a faster growth of nontraded goods prices than of traded goods prices. In the second case, the shock to the economy has weakened (or threatens to weaken) the external position so that domestic demand must be restrained and a new structure of relative prices that promotes the production of traded goods is achieved. In either case, the adjustment objectives, and in particular, the required shift in relative prices, could be brought about by measures to constrain domestic demand, which would depress nontraded goods prices relative to externally determined traded goods prices. The advantage of a devaluation, however, is simply that it achieves the relative price change immediately. In contrast, the price response to domestic demand restraint is likely to be slow and has a more prolonged depressing effect on domestic activity.

The shift in relative prices resulting from a devaluation, however, can only be sustained with supporting macroeconomic policies. This is, of course, fully intuitive because relative prices are real variables determined by supply and demand; the exchange rate, on the other hand, is a nominal variable that can at any value be consistent with the structure of relative prices determined by supply and demand. Thus, an exchange rate change can only be effective if some other nominal variable in the economy is fixed or, at least, sticky. The effect of a devaluation on relative prices will over time be eroded through increases in the price of nontraded goods unless the demand for nontraded goods is restrained. Critical parts of an adjustment programme including a devaluation, therefore, are measures to curtail the growth of domestic credit and reduce large fiscal deficits. This simple analysis underscores the inescapable fact that supply-side measures to improve the efficiency of resource allocation through changes in relative prices frequently involve macroeconomic policies that constrain demand.

There are many reasons why governments are often reluctant to undertake devaluations and it is instructive to examine them to sort out the good from the bad. The most common concern is the risk of inciting inflationary pressures. A devaluation itself, of course, only results in a one-time increase in traded goods prices. With appropriate credit restraint, the secondary effects on nontraded goods prices can be minimized. Indeed, a number of Asian countries that have undertaken large exchange rate adjustments in recent years — South Korea and Thailand, for example — have been extremely successful in containing inflationary repercussions, although they have been helped by a coincidental improvement in the terms of trade. Containing inflationary pressures becomes more difficult, however, in countries with a high degree of wage indexation or when a simul-

¹See Adams and Gross (1986) for an analysis of the necessary conditions for bringing about a real exchange rate change.

taneous deterioration in the terms of trade reduces incomes.

A second concern is the possible disruption to stable financial market arrangements. This is a particularly important consideration in countries that have for some time maintained a stable relationship to a major currency and have consequently come to rely on financial services, such as forward markets, in that currency's financial centre.

A third important concern is the shock to the domestic economy when there are significant amounts of external debt outstanding. This concern stems from the problem, discussed earlier, of allowing an overvalued exchange rate to distort relative prices. As described there, the unsustainable structure of relative prices encourages the use of financial resources for investment in nontraded goods. A devaluation, of course, renders many such investments unprofitable. At the same time, it increases, by the full amount of the devaluation, the domestic currency cost of servicing the external debt. The disruptions to the economy are obvious, but also unavoidable. Delaying the devaluation may well increase the ultimate cost.

Before leaving the subject of devaluation, it is worth mentioning a growing body of literature on the possible contractionary effects of a devaluation on economic activity. It would not be possible to do full justice to this literature in a short space, but the broad arguments can be presented succinctly. As mentioned earlier in this section, there are a number of channels via which a devaluation exerts a contractionary effect on demand, and, in so far as nontraded goods are involved, on output. These arguments have been developed by a number of authors and are summarized in Krugman and Taylor (1978). Of even more concern, however, is the possibility that devaluations have direct negative effects on aggregate supply. The core of these arguments is developed by Van Wynbergen (1986), who argues that the stagflationary effects of a devaluation on supply occur through three channels: the first is the increase in costs of imported inputs, which reduces aggregate supply both directly by raising the price of a factor of production and indirectly by raising working capital requirements and therefore putting upward pressure on interest rates;1 the second channel is higher wage costs when wages are indexed. As in the previous case, this reduces output directly through higher input costs and indirectly through the effects on financing costs; the third channel is a reduction in the real value of bank credit (assuming that the devaluation is passed through and that nominal money growth is constrained) which forces firms to resort to the unorganized money market and raises interest rates there. If the reduction in supply through these channels exceeds the depressing effect of the devaluation on demand, inflationary pressures emerge alongside the contraction in output.

There has as yet been relatively little empirical testing of these hypotheses. Indeed, data limitations make it particularly difficult to test the implications of a devaluation for the unorganized money market and in turn on production. Nevertheless, both Gylfason and Schmid (1983) and Branson (1987) have attempted to look at the effects of devaluation-induced increases in input prices and find little evidence of stagflationary effects. Further empirical work is needed.

¹In fact, Van Wynbergen builds into his model an unorganized money market, which in contrast to the official financial market is not subject to interest rate ceilings and absorbs all marginal financing needs. The increased need for working balances forces firms to increase borrowing in the unorganized market and therefore pushes up interest rates in that market.

Casual observation, however, suggests that the large devaluations or depreciations of several Asian currencies during the past few years have been extremely successful in boosting output and avoiding inflationary pressures.

IV. Trade Liberalization in Growth-oriented Adjustment

Assessing the role of trade liberalization in growth-oriented adjustment programmes is a difficult and complex process. First, unlike for demand management policies or some other supply-side policies, the beneficial effect of liberalization is often seen only after a long period of time. Second, the extent of existing trade restrictions and progress toward dismantling them are notoriously difficult to measure. Third, there are few theoretical guidelines for the timing and sequencing of trade liberalization programmes; at best, our view must be formed on the basis of a systematic appraisal of experiences to date. Fourth, liberalization, particularly the reduction of barriers to imports, can have short-term adverse effects on the balance of payments; consequently, measures to reduce import protection.

Trade liberalization is a catch-all term for a number of different measures. Halevi (1987) provides a useful definition in terms of four general types of policies: switching from administrative to price-based controls on trade; narrowing the differences in incentives between import substitution and export production so as to reduce the anti-export bias of the trade regime; reducing the range of rates of effective protection among sectors and products; and lowering the level of protection for domestic production that competes with imports.

Trade liberalization contributes to growth-oriented adjustment through several channels. The first and most obvious is in correcting distortions in relative prices; by definition, high and widely varying rates of effective protection drive wedges between actual prices of both inputs and final products and their market values. The second is through its role in eliminating scarcities of imported inputs that frequently result from quantitative restrictions (QRs). The third arises insofar as liberalization involves replacing QRs with tariffs which render more transparent both the scope and degree of protection.

The emphasis on trade liberalization in growth-oriented adjustment programmes is also related to considerations about the optimal development strategy – an issue on which, at least in broad terms, there is now a reasonable consensus. Whereas the case for protection based on a kind of generalized infant industry agreement and the need to save foreign exchange was much espoused during the 1950s, there is now widespread agreement that a strong export sector maximizes growth prospects and ensures adequate availability of foreign exchange. This view is supported by the outstanding growth of several newly-industrialized countries in Asia that have followed an aggressively outward-looking strategy as well as in a number of empirical studies of developing countries dating back to the 1970s. There remains, however, considerable debate about the precise mechanisms by which the openness of the economy affects growth; the studies mentioned above suggest that outward-oriented policies may lower production costs by enlarging markets, increase domestic

¹See, for example, Little, Scitovsky and Scott (1970), Bhagwati and Krueger (1978) and Chenery, et. al. (1986).

efficiency by subjecting domestic production to greater competition, and facilitate the transfer of technology through imports of intermediate and capital goods.¹

Beyond the broad endorsement of outward-oriented policies, controversy remains about what trade strategy most effectively creates conditions favourable to export production. On one side of the issue are proponents of active official intervention to channel resources toward export industries - through subsidies, tax incentives, and selective credit schemes - on the basis of predicted comparative advantage. In fact, there has developed over recent years a fairly large literature on the types of conditions under which "government policy can tilt the terms of oligopolistic competition to shift excess returns from foreign to domestic firms." While geared mainly toward industrial countries, these arguments could apply also to the more industrialized developing countries. Most economists, however, favour relatively free trade regimes. The argument is that in the absence of clearly identifiable distortions in either the domestic or international markets, market prices provide the most efficient signals of comparative advantage and optimal resource allocation. Moreover, governments may not be as efficient as the private sector in "picking the winners", while export promotion through subsidies may violate trade agreements.

The formulation of trade liberalization policies in an adjustment programme must address complex issues of sequencing and timing of measures. There is little dispute that, in the absence of adjustment costs or distortions, such as price rigidities and non-lump sum taxes, instantaneous liberalization of all sectors of the economy is optimal. Such a setting, of course, never exists, and it is rarely possible politically to undertake such a sweeping liberalization programme. A large literature has therefore emerged dealing with three broad issues concerning sequencing and timing: the optimal sequencing of liberalization of various sectors of the economy; the optimal manner in which to reduce and remove trade restrictions; and the period over which trade should be liberalized. Strong, generalizable conclusions on any of these issues are not possible in view of the diversity of initial conditions. It is, however, worth identifying some of the major issues surrounding these questions.

On the sequencing of economy-wide liberalization policies, there is considerable agreement that liberalization measures should be undertaken only after measures to stabilize the economy – for example, to bring inflation down to a manageable rate and to eliminate severe balance of payments difficulties – have taken effect. Beyond this, however, the debate is frequently mired in uncertainty about the welfare implications of second best policies. There has been some discussion of the interaction of changes in trade policy with liberalization measures affecting agricultural pricing, labour markets and tax systems. The linkages between the relevant sectors however tend to be indirect, and the discussion is rather inconclusive (see Krueger (1986) and Michaely (1986)). More concrete conclusions have been reached on whether or not trade liberalization should pre-

¹The role of these mechanisms in the manufacturing sectors of several developing countries and Japan is examined in Nishimizu and Robinson (1986).

²Krugman (1987). In this paper Krugman presents a succinct review of the new arguments for protectionism.

ceed capital market liberalization. There are arguments on each side of the issue — most revolving around the likely pressures on exchange markets when capital markets are liberalized first or simultaneously with trade policy changes. On balance, the view seems to be that liberalization of the current account should precede that of the capital account by a significant margin in order to avoid large swings in the exchange rate or official reserves that could result from the freeing of capital flows, particularly at a time when trade flows may be responding to pent up demand for imports.

With respect to the ordering of trade liberalization measures on their own, there is a surfeit of proposals. In most, the first step is the replacement of QRs by a structure of tariffs that provides the same degree of protection. Such a step often contributes to the removal of unintended discrimination, improves the transparency of the trade system, and facilitates the preannouncement of a programme of further liberalization. For the next step, proposals include: narrowing the range of tariffs (by raising the lowest rates and lowering the highest rates) so as to reduce the variance of effective protection rates; lowering tariffs across the board equi-proportionally or by the same absolute amount; and, lowering tariffs by a concertina method - that is, by lowering all rates above a given level to some specified ceiling and progressively reducing this ceiling. Among the major considerations in choosing among these techniques are the often-competing objectives of avoiding discriminatory treatment of various activities, minimizing the adverse implications of liberalization on employment, reducing the protection of domestic activities against imports, and narrowing the range of effective protection rates.

Recommendations on the timing of trade liberalization programmes are aimed at minimizing adjustment costs, enhancing the political credibility of the programme, and reaching final goals as quickly as possible. The bulk of opinion seems to support a multi-stage preannounced liberalization process phased over a period of, say, five years rather than a swift single-stage process. The rationale is that production in activities for which protection is being reduced is likely to contract quickly, while the building up of productive capacity in (export) activities for which effective protection is being raised takes time. During the adjustment period activity decelerates and frictional unemployment rises. Moreover, income distribution is affected as producers in previously protected industries suffer windfall losses, while those in sectors receiving more protection get windfall gains. With a preannounced phased adjustment these costs can be minimized by matching more closely the period over which previously protected activities are phased out with the period required for new investment in expanding sectors. Also, over a longer period of time, the depreciation of capital would help minimize income redistribution through windfall gains and losses.²

¹See Michaely for a summary of some of these proposals. Wolff (1987) reporting on a World Bank study of liberalization programmes in several developing countries concludes that the most effective procedure is to first narrow the range of tariff rates and then apply a concertina method of lowering the structure.

In one of the more theoretically rigorous analyses of the timing issue, Mussa (1985) concludes that the nature of distortions in the adjustment process determines the optimal pace of liberalization. Some distortions, such as those resulting from static expectations about incomes from various activities, call for a relatively slow pace of liberalization, but others, such as taxes on factor incomes that distort private perceptions of factor returns, warrant an immediate change in levels of protection to below their long-run equilibrium. His conclusions, however, on the optimal pace of liberalization from the perspective of minimizing unwarranted unemployment are more conventional.

Political considerations render the timing issue more ambiguous. On the one hand, it is argued that a relatively rapid and decisive liberalization programme is needed to establish the credibility of the programme. On the other hand, political support may be strengthened by undertaking measures gradually, with a strong emphasis in the beginning, on measures that will spur activity and incomes.

A final difficulty in formulating trade liberalization measures in an adjustment programme is that they are likely to intensify any current account problem in the short-run. Unless liberalization takes the form only of replacing quantitative restrictions by equivalent tariffs, imports are likely to increase, while the beneficial effects on exports take time to materialize. These considerations suggest that trade liberalization can best be undertaken during periods of a relatively strong external payments position; otherwise, it must be accompanied by more restrictive macroeconomic policies than would otherwise be necessary. Even when the external position is not a major problem, however, trade liberalization usually has to be accompanied by measures, such as a devaluation of the domestic currency to provide at least short-term support for the balance of payments. In most cases, liberalization must also be supported by a degree of monetary, fiscal, and wage restraint.¹

V. Concluding Observations

Often the term "growth-oriented adjustment" conjures up visions of a means of adjustment to external disequilibrium that is somehow less demanding, particularly in terms of foregone domestic absorption, than has traditionally been the case. On the basis of considerations discussed in this paper, it would be misleading to suggest that there are new mechanisms available to ease significantly the burden of adjustment. Indeed, an honest reading of the issues leads to the conclusion that adjustment programmes almost inevitably involve an important element of demand restraint. This is typically needed both to redress pressing external financing difficulties and, except where there is clear evidence of unused capacity, to make room for an expansion of traded goods production.

The extra dimension in growth-oriented adjustment strategies, however, is the emphasis on laying the foundation for more rapid growth in the future – eliminating over time the reliance that must be placed on demand restraint to remain within external financing constraints. This paper has discussed the types of policies that are needed to meet these objectives in typical circumstances. Such policies bear high potential returns in terms of increasing growth both by improving the efficiency of resource allocation and generating more resources – domestic and external – for investment. But, while growth-oriented adjustment policies offer the promise of higher growth without external crises, they require great effort and political will to sustain.

¹See Mussa (1987) for a complete discussion of macro-policy and trade liberalization.

REFERENCES

- Adams, Charles and Daniel Gross, "The Consequences of Real Exchange Rate Rules for Inflation", *IMF Staff Papers*, September 1986.
- Bhagwati, J., and A.O. Krueger, *Trade Strategies for Economic Development:*The Asian Experience (New York and Manila: NBER and Asian Development Bank), 1974.
- Branson, William, "Stabilization, Stagflation and Investment Incentives: The Case of Kenya, 1979-80", in Edwards, S. and L. Ahmed, eds., Structure Adjustment and Exchange Rate Policy in Developing Countries (University of Chicago Press and NBER), 1987.
- Chen, Edward, C.Y. "Factor Inputs, Total Factor Productivity, and Economic Growth: The Asian Case", *The Development Economies*, Tokyo, June 1977.
- Chenery, Hollis, Sherman Robinson and Moshe Syrquin, *Industrialization and Growth, a Comparative Study*, Oxford University Press, 1986.
- Christianson, L., D. Cummings, and D. Jorgenson, "Economic Growth, 1947-53: An International Comparison", in *New Developments in Productivity Measurement and Analysis*, in J. Kendrick and B. Vaccara, (eds.) University of Chicago Press for National Bureau of Economic Research, 1980.
- Denison, Edward F., "Sources of Economic Growth in the United States and the Alternatives Before Us," Supplementary Paper 13, New York, Committee for Economic Development, 1962.
 - , *Trends in American Economic Growth,* Washington, Brookings Institution, 1982.
- Elias, V.J., "Sources of Economic Growth in Latin American Countries", *The Review of Economics and Statistics*, August, 1978.
- Fischer, Stanley, "Economic Growth and Economic Policy", Paper presented at the World Bank/IMF Symposium on Growth-Oriented Adjustment Programs, February 1987.
- Gylfason, T. and Machael Schmid, "Does Devaluation Cause Stagflation", Canadian Journal of Economics, November, 1983.
- Halevi, Nadav, "Approaches to Trade Liberalization in Developing Countries", (International Monetary Fund, unpublished, 1987).
- Haque, Nadeem and Peter Montiel, "Ricardian Equivalence, Liquidity Constraints and the Yaari-Blanchard Effect: Tests for Developing Countries" (International Monetary Fund, May 1987).
- IMF, World Economic Outlook, Washington, D.C., October 1987.
- Khan, Moshin and Malcolm Knight, "Fund Supported Adjustment Programs and Economic Growth, "Occasional Paper No. 41, IMF, Washington D.C., November 1985. Krugman, Paul, "Is Free Trade Passe?", *Economic Perspectives*, Fall 1987.
- Krugman, Paul and Lance Taylor, "Contractionary Effects of a Devaluation", Journal of Development Economist, 1987.
- Krueger, Anne O., "Problems of Liberalization", in Armeane M. Choksi and Demetris Papageorgiou (eds), *Economic Liberalization in Developing Countries*, New York, Basil Blackwell, 1986.
- Little, I.T., Scitovsky, and M. Scott, *Industry and Trade in Some Developing Countries: A Comparative Study,* (London: Oxford University Press, 1976).

- Michaely, Michael, "The Timing and Sequencing of a Trade Liberalization Policy", in Armeane M. Choksi and Demetris Papageorgiou (eds). *Economic Liberalization in Developing Countries*, New York, Basil Blackwell, 1986.
- Mussa, Michael, "The Adjustment Process and the Timing of Trade Liberalization", in Armeane M. Choksi and Demetris Papageorgiou (eds.), *Economic Liberalization in Developing Countries,* New York, Basil Blackwell, 1986.
- _______, "Macroeconomic Policy and Trade Liberalization: Some Guidelines", Research Observer, 2, 1 (January) 1987.
- Nishimizu, Meiko and Shermen Robinson, "Productivity Growth in Manufacturing", in Chenery, Robinson and Syrquin, *Industrialization and Growth*, 1986.
- Solow, Robert M., "Technical Change and the Aggregate Production Function", Review of Economics and Statistics, 39, August, 1957.
- Van Wynbergen, Sweder, "Interest Rate Management in LDCs", Journal of Monetary Economics, September 1983.
 - , Exchange Rate Management and Stabilization in Developing Countries", *Journal of Development Economics*, 1986.
- Wolff, Martin, "Timing and Sequencing of Trade Liberalization in Developing Countries", Asian Development Review, 1987.

Occasiona Papers	ıl	,
No.	Title	Author
1	The Dynamics of Money and Prices and the Role of Monetary Policy in SEACEN Countries	Mohsin S. Khan
2	The Informal Financial Sector in Developing Countries: Analysis, Evidence, and Policy Implications	Anand D. Chandavarkar
3	The Role of External Auditors in the Supervision of Financial Institutions in Malaysia	Bank Negara Malaysia
4	The Impact of Exchange Rate Changes in Key Currencies on Trade	Richard P. Mattione
5	The Impact of Exchange Rate Changes Between Key Currencies on the Debt Structure and Debt Service Burden of Developing Countries	Helmut W. Mayer