DESIGNING STRATEGIES AND POLICIES
FOR MANAGING STRUCTURAL CHANGE IN ASIA

by

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INTRODUCTORY NOTE

The Asian Development Bank Staff Paper Series presents the results of selected preliminary research undertaken by the Economics and Development Resource Center. It is designed to stimulate discussion andcritical comment on socioeconomic issues facing the developing countries of Asia and the Pacific. It is hoped that in some small way thediscussion generated by the series will increase our understanding of the
development process in the region.

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ABSTRACT

The core of the development process consists of the structural transformation of economies from rural to urban, from agriculture to industry to services, from production for household consumption to production for markets and from largely domestic trade to a higher ratio of foreign trade. The development process is influenced on the one hand by objectives and constraints and on the other by strategies and policies. This paper deals with the subject of designing strategies and policies for managing structural change in Asia.

A historical perspective of strategies and policies pursued by the Asian developing countries (ADCs) since the 1950s provides the backdrop against which issues related to their structural transformation in the 1990s are examined. This examination is conducted in the framework of the international and national environment that will be relevant for the ADCs. Export prospects, foreign capital inflows and transfer of technology are highlighted as the important external factors having a bearing on the development process of the ADCs. The opportunities offered by these factors require flexible responses. Growing flexibility becomes both a condition for and an objective of the structural transformation process.

The national environment in the ADCs should be conducive to impart the flexibility that is required to respond appropriately to change. Apart from the factors in the international environment, the elements of change include the adoption of alternative objectives, the emergence of new constraints, shifts in development strategies and reformulation of policies. Given the international environment, development objectives and constraints of the ADCs, the paper examines the issues in designing and formulating strategies and policies in a rapidly changing world.

Twelve strategies of development are analyzed in a three dimensional framework consisting of sources of demand, nature of outward versus inward orientation and sources of supply. The stage of development would be important in determining the development strategy that will be adopted in a country. A major lesson of the 1980s that will continue to be relevant in the 1990s is that export growth as an instrument for ensuring efficiency will have a key role in economic growth regardless of the strategy adopted.

The link between strategies and policies emerges from issues pertinent in determining the volume, allocation and efficiency of investment. Macroeconomic fiscal and monetary policies will help to determine the volume of investment. Trade, exchange rate, and fiscal policies together will have significant influence on the allocation and efficiency of investment. These in combination with sectoral policies will determine the sectoral sources of growth and supply.

Prudent macroeconomic management which ensures a sustainable current account position, a reduced rate of inflation and a manageable level of foreign debt is a necessary condition for ensuring a stable and
high rate of economic growth. Trade and exchange rate policies should aim at achieving neutrality between export and import activities. As an interim measure when anti-export bias continues in the process of trade liberalization, export promotion policies have an important role to play. In terms of sectoral policy reform, the first stage would consist of reducing and eliminating the effects of distortions introduced by bureaucratic failure.

The industrial sector is likely to play a key role in the structural transformation of the ADGs. A competitive environment is effective in cutting waste, improving technical parameters of production, forcing firms to restructure outdated operations, introduce new product lines and search for new markets. Ensuring a competitive environment is likely to be the most effective means of stimulating modernization and structural change in industrializing countries. Competition, however, is a necessary but not a sufficient condition for industrial transformation.

The issues of incentives, inputs, innovation, information, infrastructure and institutions are all relevant in facilitating structural transformation. The public good nature of innovation, information, infrastructure and institutions justify public sector involvement in these areas. Policy interventions should be based on certain guidelines: (i) they should be supportive of market trends and forces, and should facilitate rather than hinder change; (ii) they should be targeted to address specific failures or imperfections; (iii) they should have time limits and be self-eliminating; and (iv) they should be designed to foster evolution of competitive markets.

Public sector investment will be constrained by the availability of resources. To the extent possible, public investment should be directed at areas with high social returns like infrastructure, poverty alleviation and environmental protection. The public good nature of these investments justify state intervention. If this is inhibited by budget stringency, then innovative solutions may have to be attempted, including user-pays cost recovery, aggressive pursuit of foreign aid and involvement of the private sector through arrangements like build-operate-transfer and build-own-operate systems.

Public investment in social infrastructure to ensure growth and equity will distinguish the role of the state in the next decade. High growth rates will be essential to generate the investible resources for this public investment. The provision of public goods and services that characterized the neoclassical arguments for state intervention will provide the raison-d'être for governments in many ADGs to continue to play an important role. Public investment targeted to improving equity and environmental protection and public policy targeted to facilitate the workings of the price mechanism through reduction of artificial market failure and elimination of natural market failure provide the broad parameters of the role of the state.
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I. INTRODUCTION

1. The performance of the Asian developing countries (ADCs) during the last three decades has been spectacular. As compared to overall GDP growth of about 5 per cent in the 1960s, their overall GDP growth increased to 6.5 per cent in the 1970s and to 7.3 per cent in the 1980s. Within the ADCs, growth rates have varied widely. These high growth rates have been accompanied by significant structural transformation of the ADCs in terms of the shares of GDP and employment originating in agriculture, industry, and services. Both external and internal factors have contributed to high growth rates, variations among countries and differences in structural transformation. The external factors have included buoyant export markets caused by relatively high growth rates in industrialized countries and a favorable international trading environment and transfer of capital and technology to the ADCs. Since all ADCs faced the same external environment, differences in growth rates and structural transformation among countries could be explained by internal factors like differing resource endowments, socio-cultural environment, growth strategies, economic policies and stages of development. Growth strategies and economic policies have been widely held as the most important factors in explaining high growth rates in the ADCs and variations within them.¹

2. Rapid changes that are likely to occur in the global environment in the 1990s, the pursuit by ADCs of a different mix of objectives and the sequential nature of binding constraints suggest the need for appropriate responses by the ADCs. The purpose of this paper is to highlight the issues that will be relevant in designing strategies and policies for managing structural change in Asia in the 1990s. Given the differences in initial conditions and socio-political environment among countries, the nature of appropriate strategies and policies will be country specific. However, in discussing strategies and policies for managing structural change in Asia, this paper focuses on issues which are likely to be broadly relevant for many of the ADCs. It does not attempt to make country specific recommendations.

3. Strategies and policies pursued in one period are likely to be influenced by those adopted earlier. Hence, the paper begins by briefly examining the objectives and constraints that influenced the adoption of alternative development strategies in the 1950s, 1960s and 1970s. The policies that were adopted to implement the strategies are briefly described. This examination together with the changed perspective of the ADCs in the 1980s provides the starting point for designing strategies and policies for managing structural change in the 1990s in light of the emerging objectives and constraints.

4. A discussion of factors in the external environment that are likely to be relevant for the ADCs in the 1990s provides the interface with issues in the national environment. Trade, foreign investment and

technology are highlighted in the external environment. The interaction of these factors with objectives and constraints facing ADCs are considered in the section on the national environment to describe alternative development strategies. Issues pertaining to the implementation of the development strategies through the adoption of macroeconomic and sectoral policies are considered next. The paper ends with a brief description of the likely role of the state in the 1990s as the ADCs structurally transform their economies in pursuit of sustainable growth with equity.

II. EVOLUTION OF DEVELOPMENT STRATEGIES AND POLICIES

5. As the Asian developing countries (ADCs) embarked on the growth process in the 1950s and 1960s, they were concerned with the structural transformation of predominantly agrarian economies. Constraints imposed by the levels of domestic savings and investment on economic growth influenced the adoption of various development strategies. The issues raised by the impact of the nature of the binding constraint on the adoption of a particular development strategy can be seen in the framework of a simple paradigm which was explicitly or implicitly used by many ADCs as they launched their development efforts. This paradigm emphasizes the supply aspects of growth.

6. Consider a labor surplus economy with two sectors, agriculture and industry. Land, labor and capital are the factors of production in agriculture while capital and labor are the factors of production in industry. Capital and labor are used in fixed proportions in industry. Existing capital is immobile between the sectors. The industrial sector produces new capital goods which are needed to augment capacity in both sectors of the economy. To begin with, the economy is closed with underutilized capacity in the industrial sector. Industrial output could be raised by increasing the level of industrial employment. Food for the employment of additional workers and industrial raw materials would be needed. Both are linked to the agricultural sector. As long as there exists underutilized capacity in the industrial sector, the surplus generated by the agricultural sector would determine the level of employment and output in the industrial sector and hence the growth rate of the economy. This is a "flow" problem that emphasizes the importance of raising savings to finance growth. There are no structural problems of transforming savings into industrial goods. This situation can be described as one where the wage goods or savings constraint is binding. In the case being considered, given an overall capital-output ratio, the Harrod-Domar model would suggest that an increase in the savings rate would lead to an increase in the growth rate.

7. Alternatively, in the closed economy context, one could consider a case where the industrial sector was operating at full capacity. Even if agricultural surplus could be generated, industrial production would not increase because the stock of capital in the industrial sector was limited. Here, the problem is a structural one and consists of transforming agricultural surplus or savings into capital goods. The capital goods constraint is binding. In this situation, an increase in
the growth rate would depend on overcoming the structural transformation problem by building up the capital goods sector. The greater is the allocation of investment to the industrial or heavy capital goods sector, the greater is the long-run rate of growth.\textsuperscript{2} The emphasis on heavy capital goods results from the fact that machines are needed to produce machines.\textsuperscript{2}

8. Dropping the assumption of a closed economy, one can consider foreign trade as a separate activity using domestic products as inputs which are transformed through exports into imported goods as outputs. Alternatively, savings generated in the economy are transformed into capital goods through foreign trade. When this transformation of savings into investment goods is not possible due to inelastic demand for exports from developing countries, the foreign exchange constraint or bottleneck will operate.\textsuperscript{3} In this situation, the building up of the domestic capital goods sector becomes necessary for overcoming the structural transformation problem.

9. Though highly simplified, these paradigms highlight some major issues. First, when the savings constraint is binding, increasing the growth rate would depend on augmenting investible surplus in the economy in either or both sectors of the economy. Second, in the case of inelastic demand for exports and existence of the capital goods constraint, industrialization through build-up of the heavy capital goods sector and economic growth become synonymous. Third, in an open economy framework with possibilities of transforming savings into capital goods through international trade, the savings rate would determine the growth rate given the capital-output ratio. Fourth, constraints imposed by the levels of domestic savings and investment would differ among countries according to economic structure and international trading possibilities. Fifth, demand is not a factor in determining growth. Alternatively, growth is supply driven. This constituted the point of departure of growth models that were applied to the ADCs from the Keynesian approach used in the industrialized countries where effective demand was considered to be binding constraint.

10. The rationale for development strategies adopted by the ADCs in the 1950s and 1960s can be explained in terms of the wage goods, capital goods or foreign exchange constraints, objectives adopted and economic structure that were prevailing then. In a broad sense, a strategy is defined in terms of an outline of what is to be achieved and the approaches to be used to achieve the goals. A development strategy sets


out the philosophy, a vision of the desired future and the general principles on the basis of which policy decisions will be made.

11. The major objectives of most ADCs were to achieve growth with equity. In the 1950s and 1960s, the emphasis was on growth which was expected to alleviate poverty automatically. In the 1970s, explicit consideration was given to employment generation, poverty alleviation and income distribution as optimism on the trickle down effects of growth decreased. The adoption of these general objectives combined with the identification of the binding constraints were the critical considerations in the determination of alternative strategies for development by the ADCs.

12. The broad strategies that emerged can be classified into industrial versus agricultural-led and outward versus inward orientation. Many ADCs initially adopted industrial-led growth strategies. Though not mutually exclusive, development strategies for industrialization could be broadly divided into import substitution and export orientation. Import substitution can be divided into the first stage of "easy" import substitution (IS1) when non-durable consumer goods are produced, and a second stage of "difficult" import substitution (IS2) for the production of durable consumer, intermediate and capital goods. The first stage is easy because production is consistent with comparative advantage. In contrast, the second stage is initially subject to increasing costs due to limited economies of scale, dependence on foreign resources and expertise and development of monopolistic controls.

13. Export orientation can also be distinguished by a first stage of exporting labor intensive manufacturers (EO1) and a second stage of exporting more capital and technology intensive products (EO2). The following significant differences between the two stages of export orientation are noteworthy: (i) labor-intensive light manufactured products based on existing comparative advantage are exported in the first stage while capital-, technology- and knowledge-intensive light and heavy manufactured products based on acquired dynamic comparative advantage are exported in the second stage; (ii) growth is sustained by rapid adaptation of products and techniques in the first stage while growth is sustained by rapid transformations of industries and technologies in the second stage. In some countries, tourism and personal services are associated with the first stage while there is a growing importance of the service sector, especially financial services in the second stage. This can be attributed to the skill mix availability of labor and the stage of development.

14. In terms of development strategies for industrial-led growth various combinations of import substitution and export orientations were adopted. The following strategies can be broadly identified: (i) Republic of Korea and Taipei China: IS1/EO1/IS2-EO2; (ii) Hong Kong and Singapore: EO1/EO2; (iii) Malaysia and Thailand: IS1/EO1/IS2; and (iv) India and People’s Republic of China: IS1/IS2/EO1. The transition from

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EO1 to EO2 is extremely difficult as it is associated with the adoption of major policy changes resulting in the acquisition of advanced technology and higher levels of investment. With the exception of Hong Kong and Singapore, almost all the ADCs started with import substitution strategies. Where they differed was in the sequence of changing from import substitution to export oriented and industrial-led growth strategies. Countries, like the Republic of Korea and Taipei, China which moved from ISI to EO1 took a more optimistic view of the availability of export markets than countries like India and People's Republic of China which moved from ISI to IS2. Factor endowments also played a role in the adoption of export oriented strategies.

15. Between the mid-1960s and early 1970s, some ADCs faced severe shortfalls in the agricultural sector. Relative neglect of this sector in terms of investment combined with adverse weather conditions, resulted in many ADCs facing the wage goods constraint. Inflationary recession caused by a shortage of agricultural goods followed. Recession in industry was caused by a wage goods constraint, industrial raw material scarcity associated with shortfalls in agriculture and depressed demand for industrial goods from the agricultural sector. Cost push factors associated with shortfall of agricultural goods led to inflation. In these countries, growth strategy shifted from emphasizing industrial to agricultural growth to meet domestic foodgrain needs. In other words, there was an abrupt shift to the adoption of inward-looking import-substituting and agricultural-led growth strategies. The shift in strategy in some ADCs from industry to agriculture was also accompanied by a greater concern for attaining the equity objective, particularly the alleviation of poverty in rural areas. However, with the achievement of the threshold of foodgrain self-sufficiency in the ADCs by the early 1980s and falling non-oil primary commodity prices in world markets, strategies for growth in the 1980s focused again on industrialization. In contrast to the earlier periods, a marked decline in export pessimism meant that the importance of the capital goods constraint receded. Strategies for industrial growth in the 1980s incorporated the opportunities offered by foreign trade possibilities.

16. Having briefly described the development strategies and the rationale for them in terms of their relationship to objectives and perception of binding constraints, it would be useful to consider the instruments or policies adopted to implement the strategies. Regardless of the strategy adopted, a striking feature in the ADCs was the almost universal belief in market failure and the adoption of strong interventionist approaches by governments. However, there were differences in the nature of the intervention and the role given to markets.

17. Issues relevant for the adoption of alternative policy instruments to implement strategy included: (i) public versus private sector policies; (ii) price versus non-price measures; (iii) trade and exchange rate policies; and (iv) financial sector policies. In the 1960s, almost all ADC governments played a major role in investment and in its sectoral allocation through public sector initiatives. The role of public investment in basic capital goods industries and infrastructural services such as power and transport was crucial in industrial development.
strategies. Agricultural development strategies were based primarily on public investment in areas like irrigation, research and extension. The public sector assumed a major role on the ground that the private sector would be unable or unwilling to invest in certain areas which were considered of national importance by governments.

18. The most direct evidence of government intervention in ADCs was seen in the allocation of investment across sectors and industries. Both price and non-price measures were used to allocate investment. Given the emphasis on industrialization in all ADCs, policy interventions were most explicit in the industrial sector. However, other sectors like agriculture, infrastructure and services indirectly felt the effects of policies directed at industry and were also subject to direct policy measures. Promotional, regulatory and pricing policies were used to influence the industrial sector. Investment incentive systems were frequently used to provide tax and exemption benefits to favored industries. These had significant fiscal impact. Some ADCs used capacity licensing policies to control the extent of domestic capacity and its allocation among sectors, firms and locations. In India, for example, industrial licensing was extensively used to promote growth in certain industries and to balance supply with demand. Capacity licensing effectively shuts out domestic competition with incumbents filing for additional licensing capacity to pre-empt entry. With imports being licensed in relation to capacity, excess capacity was encouraged. In addition to entry barriers, governments often introduced exit barriers to protect workers from unemployment. Constraints were introduced on labor mobility, asset transfer, financial restructuring and bankruptcy. While these led to the continued operation of unprofitable firms, they discouraged entry and expansion by others. Exit barriers were an important impediment to resource reallocation in some ADCs.

19. Price and distribution controls were used to allocate resources to priority areas and to alleviate the impact of supply shortfalls. In the agricultural sector, public policies in the form of price support, procurement, input subsidies and the provision of concessional credit provided the necessary incentives to farmers for adopting modern agricultural practices and undertaking private investment for exploiting groundwater resources.

20. Turning to exchange rate and trade policies, overvalued exchange rates, multiple exchange rate systems, import controls, high tariffs and quantitative restrictions on imports were used to support import substitution strategies for industrialization. These policies were important in the allocation of investible resources between traded and non-traded sectors.

21. Import trade controls were important policy instruments in influencing the volume and composition of imports in all ADCs. Both tariffs and quantitative controls were extensively used by governments to prevent the domestic market for tradeables from being directly integrated with the international markets. Initially, the infant industry argument was used to protect certain sectors which were viewed as potential high growth areas. However, import controls have been most extensive in
sectors which have benefited from them for the longest periods. In the process, many infants did not grow up or their growth was stunted.

22. One implication of import trade controls was the resulting anti-export bias. Countries responded through a variety of measures. The cases of India and the Republic of Korea provide extreme examples. In India, a highly complex and bureaucratic import licensing system was accompanied by an equally complex system of export incentives.\textsuperscript{6} The major policy instrument was import entitlement for exporters in the form of import licenses which provided a subsidy to exporters. This led to a new set of distortions in the export sector with subsidized import intensive exports being encouraged at the expense of high domestic value added exports. The Indian case provides a good example of one policy induced distortion requiring another. Import substitution and export promotion policies were pursued without reference to economic costs. These policies could be summed up by the implicit objective, "India should produce whatever it can and India should export whatever it produces".\textsuperscript{7}

23. One example of the advantage of sharply distinguishing strategies from policies is the Korean case of export promotion. However, initially it adopted import substitution policies but promoted exports by pursuing "neutral" and "extended neutral status" policies for exports. Neutral status is defined as a set of arrangements that will enable exports to compete with foreign exports in world markets on an equal footing with regard to undistorted markets and policies. Extended neutral status is defined as a situation in which the level of exports incentives is as high as the level of incentives for import substitution.\textsuperscript{8} Through these second best policies, the anti-export bias of the import substitution regime was alleviated by ensuring access to imported inputs, credit and factors of production at economic prices. This is one of the most important lessons of the Korean export-led growth strategy: automatic and transparent policies for assisting exports in an otherwise import substituting regime.

24. In nearly all ADCs, the commanding heights of finance were controlled by the government in order to channel cheap credit toward the sectors that were thought to be at the forefront of the growth process. Interventions were of five main types: lending requirements imposed on banks; refinance schemes; loans at preferential interest rates; credit

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\textsuperscript{6} C. Staelin, "Export Promotion in the Less Developed Countries: A Case of India" (Ph.D. dissertation, University of Michigan, 1971).


guarantees; and lending by development financial institutions. Directed credit programs were used to allocate investible resources to industry; public sector enterprises, agriculture, small and medium industry and exports. The industrial sector gained from relatively cheap long-term finance and foreign exchange. Rural credit was directed at increasing the use of a package of intermediate inputs and adoption of high yielding remedies. Employment generation was often the objective of credit allocated to small and medium-sized firms. Export credit was provided to alleviate the anti-export bias of trade and exchange rate policies.

25. In economies with weak capital markets, government intervention in credit-based financial systems had a profound impact on firms which depended heavily on credit for raising finance beyond retained earnings. Firms were heavily dependent on whoever controlled credit i.e. on banks which in turn were controlled by the government. The industrial sector, both through public sector operations and bank credit allocation dictated by governments was significantly influenced by policy intervention. Selective or directed credit allocation was an important element in all state-led industrial growth strategies.

26. Through setting financial prices and influencing allocation of bank lending more directly, governments in ADCs exercised powerful influence over their economies' investment patterns. Individual sectors benefited from directed credit. While natural market failure in the financial sector could be used as the rationale for directed credit, cases of artificial market or bureaucratic failure were also witnessed. Artificial market or bureaucratic failure is defined as (i) policy interventions which are designed to correct natural market failure but which are either inappropriate, insufficient or excessive; or (ii) policy interventions which disrupt an otherwise efficiently functioning market. For example, interest rates charged on directed credits were often significantly different from non-preferential credit resulting in large implicit subsidies. Similarly, ability to borrow at cheap rates often encouraged unproductive investment and distorted allocation of resources.

27. Having described broadly the strategies and policies adopted by the ADCs in the 1960s, 1970s and 1980s, it would be instructive to examine how they performed. The average GDP growth rate per annum in the ADCs was 5.0 per cent in the 1960s and 6.5 per cent in the 1970s. The newly industrializing economies (NIEs) consisting of Hong Kong, Republic of Korea, Singapore and Taipei, China grew at 8.8 and 9.7 per cent per annum in the 1960s and 1970s, respectively. The Southeast Asian countries or quasi-NIEs comprising Indonesia, Malaysia, Philippines and Thailand grew at 5.1 per cent per annum in the 1960s and 7.4 per cent in the 1970s. The South-Asian countries grew slowly at 3.8 per cent in the 1960s and

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3.5 per cent per annum in the 1970s. The People’s Republic of China grew at about 5 per cent per annum between 1960 and 1978. Two features about the GDP growth performance of the ADCs were noteworthy. First, growth rates in all ADCs in the 1960s and 1970s were appreciably higher than their historical growth rates over the previous three decades. Second, disparities in growth rates among countries widened over time.

28. It is extremely difficult to attribute reasons for differing growth rates which depend on resource endowments, socio-cultural environment, stages of development, growth strategies, economic policies and external factors. However, it is useful to indicate some of the features which characterized high growth countries like the Republic of Korea and Taipei, China. Human resource development was at a relatively advanced stage in these countries with a well-educated, dedicated and motivated labor force resulting in high labor productivity. In addition, the development of a strong upper primary schooling system facilitated the process of demographic transition thereby sustaining economic growth.¹¹ Second, in terms of the stage of development agriculture was advanced in these countries with relatively high labor and land productivity. Consequently, they did not face the wage goods constraint witnessed in the South Asian countries in the late 1960s. In terms of strategies, both countries adopted outward-oriented export-led growth strategies switching quickly from the first stage of import substitution to the first and second stages of export orientation.

29. The macroeconomic policy environment in the Republic of Korea and Taipei, China were basically sound with respect to exchange rates and fiscal and monetary management that kept inflation at relatively low levels.¹² Sound macroeconomic management enabled them to adjust quickly to the external environment and facilitated domestic resource mobilization. At the sectoral level, three features of government intervention were noteworthy.¹³ Government interventions were aimed at promoting competitive production. In Korea, protection was combined with competition through encouraging infant industries to export early. In Taipei, China, the government relied on the threat of loosening imports when domestic prices of import substitutes rose substantially above international prices. In addition, government intervention was selective between industries. Well established internationally competitive industries faced a neutral policy regime while infant industries were provided with incentives. This promoted dynamic comparative advantage. Lastly, government interventions were cumulative in their impact. The credit based financial system which the government controlled, centralized


¹³ R. Wade, "The Role of Government in Overcoming Market Failure: Taiwan, the Republic of Korea and Japan" in Achieving Industrialization in East Asia, ed. H. Hughes.
decision-making structure within the state and a high degree of public-private cooperation were important factors in making the effects of government intervention cumulative. It is also noteworthy that strong linkages of these two countries with the economies of the United States and Japan were important for the success of their export-led growth strategies.

While the spectacular performance of the NIEs has led to the advocacy for market-oriented export-led growth, the heterogeneity of the NIEs precludes any easy generalizations of their growth experiences. It should be realized that though the success of the NIEs are market-based, they are hardly examples of laissez-faire economies free of government intervention. The NIEs success is attributable as much to neo-classical interventionism as the working of the invisible hand. This is perhaps the most important lesson that emerges from the NIEs experience that is highly relevant for the ADCs. While no clear paradigm of development has emerged from the experiences of the NIEs, it is important to assess areas of relevance and possibility for replication in other ADCs. The aspects of the NIEs experience that could be directly relevant to the ADCs would include: (i) development experience in terms of achieving demographic, agrarian and industrial transition, institutions, flexibility in policy response and timing; (ii) institutions and policies used for internalizing uncertainty and which facilitated mid-stream changes; and (iii) sectoral responses and methods of adjustment.

III. STABILIZATION AND STRUCTURAL ADJUSTMENT

The aim of the strategies and policies described in the previous section was to ensure the structural transformation or adjustment of the ADCs from rural to urban, agriculture to industry, barter systems to markets and domestic trade to a higher ratio of foreign trade. In the broadest sense of the term, development and structural transformation or adjustment are synonymous. However, from the late 1970s, the terminology structural adjustment took on a narrower meaning with countries having to adapt to major disruptions which were sudden and large. In the 1980s, the debates on development strategies focussed on issues relating to structural adjustment in its narrower sense. Trade and other types of economic reform including the role of the price or market mechanism featured prominently.

The advent of the 1980s was accompanied by macroeconomic instability in many ADCs. This was the result of not only external shocks but also of the growth strategies and policies that they had pursued in the 1960s and 1970s. The second oil shock in 1979 followed by higher real interest rates, reduced international capital flows resulting from the debt crisis and lower primary commodity prices, had severe macroeconomic implications for the ADCs. These external shocks precipitated a crisis

in the early 1980s. However, it was the internal structures of ADCs that determined how countries responded.

33. Before examining the immediate and direct impact of the external shocks, it would be useful to consider three features that emerged in many ADCs in the early 1980s as a result of strategies and policies that they had adopted earlier. First, they had borrowed heavily abroad to finance their development efforts. Large foreign loans, most of which carried high real interest rates and short maturity, led to very heavy debt-service burdens. Second, there was a steady erosion in public sector resources available for development. While the burden of debt from domestic and external borrowing had grown, the income that accrued to governments from investments financed by these borrowings had been small and in some cases negative. At the same time, the recurrent expenditure resulting from past investment continued to mount. The net result was that resources available for development steadily dwindled. In fact, in some developing countries, a stage was reached where virtually the entire public sector development expenditure was being financed through domestic and external borrowing. Third, most countries were slow to adjust their exchange rates and instead depended upon external assistance to meet their growing balance-of-payments deficits. Inappropriate exchange rates discouraged exports and encouraged imports. Rather than increasing taxes or keeping development outlays within available budgetary resources, governments relied on domestic borrowing to maintain current expenditure. As a result, the private sector which remained the principal source of savings and foreign exchange earnings in most developing countries, experienced a lack of resources. Interest rates were kept low which discouraged private saving. These three factors led to disequilibrium in the balance-of-payments and the government budget and were caused by highly distortionary trade, exchange rate, fiscal and financial policy interventions. However, the balance-of-payments and government deficit problems were aggravated by the external shocks.

34. ADCs initially responded to the second oil shock through domestic stabilization policies particularly with respect to management of macroeconomic policies through the control of aggregate demand. Industrialized countries responded to the second oil shock through restrictive macroeconomic policies which slowed down their growth rates and increased real interest rates. These led to the collapse of international commodity prices in the mid-1980s turning the terms of trade sharply against the developing countries. This collapse aggravated the credit worthiness of the developing countries and commercial banks severely curtailed their exposure to developing countries. A decline in

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export earnings and increase in real interest rates led to difficulties of servicing the external debt of some ADCs. In addition, falling primary commodity prices adversely affected the revenues of both the public and private sectors directly as well as indirectly.

35. On account of growth strategies and policies pursued by ADCs in the 1960s and 1970s as well as the external shocks in the 1980s, many ADCs faced macroeconomic instability in the 1980s. Balance-of-payments and government budget deficit constraints reached crisis proportions in some ADCs and were threatening their growth process. Up to the mid-1980s, the critical medium-term objective of adjusting to external shocks was to ensure that the balance-of-payments situation remained manageable and that domestic financial stability was maintained by containing the government budget deficit. Since the external debt problem made it inadvisable to borrow externally to overcome the balance-of-payments deficits, export earnings net of debt service had to be used to meet the import requirements of existing capacity. Capital imports declined resulting in a reduction in the volume of investment.

36. Aggregate demand policies curtailing aggregate investment and government expenditure were the first set of instruments used to meet the challenge emerging from the external environment.\footnote{Lee, op.cit.} The importance of macroeconomic aggregate demand policies in ADCs came to the forefront in the 1980s. This was in sharp contrast to the previous two decades where the emphasis was on aggregate supply policies through capacity augmentation.

37. In terms of the Harrod-Domar growth model, given an overall capital-output ratio, a decrease in the volume of investment will lead to a decline in the growth rate. The conventional wisdom that emerged in the 1980s was that after or accompanying a decline in aggregate demand, steps must be taken to reduce the overall capital-output ratio. This was to be achieved through improved efficiency by rationalizing government policy whereby distortions were reduced or removed leading to resource allocation into sectors enjoying comparative advantage and improving capacity utilization by alleviating supply constraints. A reduction in the overall capital-output ratio would mitigate the adverse impact of the lower volume of investment on economic growth. In addition, the improved efficiency of the economy would make manufactured exports more competitive, thereby increasing export earnings to alleviate the initial problem caused by the adverse movements in the external environment. This was essentially the rationale of the structural adjustment programs advocated by the World Bank.\footnote{F. Yagchi, S. Kamin and V. Rosenbaum, \textit{Structural Adjustment Lending: An Evaluation of Program Design}, Staff Working Papers, no. 735 (Washington, D.C.: World Bank, 1985); and D. Lal, \textit{The Real Effects of Stabilization and Structural Adjustment Policies}, Staff Working Papers, no. 636 (Washington, D.C.: World Bank, 1984).} A critical assumption was that efficiently produced manufactured exports would find ready markets.
38. The foregoing discussion suggests that developing countries needed to successfully meet four major challenges. First, they had to intensify their efforts in the mobilization of domestic resources. Second, they had to undertake policy reforms aimed at improving efficiency on a broad front. Third, they endeavored to generate foreign exchange earnings from non-traditional exports. A precondition to successfully meeting these three challenges was the adoption of "right" macroeconomic policies, especially relating to exchange rates and inflation. Balance-of-payments problems were frequently the symptoms of commitments by governments to expenditures that could not be financed. Hence, the fourth challenge was to find a non-inflationary government role in the adjustment process. These concerns were reflected in the growing recognition in the 1980s that policies, and not investment projects, were the cutting edge of development. In terms of the evolution of the development experience, the emphasis had changed from plans (aggregate investment) in the 1960s to projects (allocation of investment) in the 1970s to policies that influenced the aggregate volume, allocation and efficiency of investment in the 1980s.

39. During the 1980s, governments of most ADCs realized the need for reforms to increase economic efficiency and flexibility. The importance of policies to shift the aggregate supply function through improved workings of the price mechanism was recognized. This was in sharp contrast to the 1960s and 1970s where aggregate supply shifts were related to the volume and allocation of investment decided by governments. In addition, there was a shift in philosophy underlying government intervention from supplanting the workings of the price mechanism to a need for government intervention to improve the workings of the price mechanism.

40. Linking the discussion of this section to the proceeding section, the three significant changes at the macroeconomic level in the 1980s were the following. First, in terms of constraints, the savings constraint of the ADCs was binding to growth rather than the transformation constraint associated with the capital goods or foreign exchange constraints. The experience of the NIEs had greatly undermined the export pessimism hypothesis which had influenced the development literature in the 1950s and 1960s and led to the highlighting of the capital goods constraint.

41. Second, on growth strategies, the limitations of the inward-looking import substitution strategies were being increasingly realized. While the experience of the NIEs with their export-led growth strategy has attracted widespread attention, no paradigm of development emerged. Factors such as initial conditions, country size and endowments as well as absorptive capacity constraints for manufactured imports in industrialized countries needed to be considered in the suitability of

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export-led versus domestic demand-led growth strategies for each country. The distinction between export as a strategy for growth and exports as an instrument for achieving economic efficiency became important. A major lesson of the 1980s was that export growth as an instrument of ensuring efficiency had a key role in economic growth regardless of the growth strategy adopted.

42. Third, in terms of government intervention to implement strategy, there was a heightened recognition of the need to guard against government or bureaucratic failure as against market failure. The backlash against government intervention in the 1980s was linked to the excesses associated with bureaucratic or artificial market failures in the 1960s and 1970s. While the case for policy intervention to correct for natural market failure still existed, it was felt that there was a need to weigh the costs and benefits associated with intervention. This type of reasoning led to a line of thinking which suggested that imperfect markets were superior to imperfect planning.22

43. To summarize briefly the change in policies that occurred from the 1960s and 1970s on the one hand and the 1980s on the other, it is useful to consider the macroeconomic framework of aggregate demand and supply popularized in the 1970s.22 The policies followed by many ADCs suggest that growth in the 1960s and 1970s was to be achieved through the outward shift of a vertical aggregate supply schedule made possible by augmenting capital stock. In the 1980s, aggregate demand policies in countering short-term macroeconomic instability were given prominence. These were combined with policies to increase efficiency such that aggregate supply shifts and upward movements along aggregate supply schedule could occur independently of changes in capital stock. The micro-foundations of macroeconomics began to feature prominently in designing policy reform in the 1980s. These issues will continue to be important in the 1990s in determining the supply response associated with policy reforms.

IV. EMERGING ISSUES IN STRUCTURAL TRANSFORMATION

44. Drawing from the development experience of the ADCs in the last three decades, it would be useful to take stock of the emerging issues in structural transformation that will be pertinent in the decade ahead. The commonality of the description in sections II and III lies in the attempts made by the ADCs to undertake structural transformation of their economies in the light of changing objectives and constraints on the one hand and the strategies and policies pursued by them on the other. The very process of development implies that objectives, constraints, strategies and policies will change over time. It is the management of change or

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adjustment that will determine the success or failure of economic performance in the ADCs.

45. At a broad level, development objectives of the ADCs are likely to include the attainment of growth, equity, poverty alleviation and environmental protection. The weight attached to each would vary by country. Combined with the sequential nature of binding constraints in the development process, countries would have to adapt their strategies and policies to meet their objectives. In pursuit of their development objectives, the ADCs could be faced by major shocks to which they would have to adjust. An important lesson of the 1980s is the need for flexibility to overcome challenges and exploit opportunities. Flexibility will be needed in both product and factor markets.

46. In the context of the 1990s, the general or wider interpretation of structural adjustment or transformation would be more appropriate than the narrower interpretation used in the 1980s of relating it to responses to external shocks. The relevant questions then become adjustment for what, to what and of what.22 The objectives of adjustment could then include responses to changes in objectives and constraints. In fact, the relaxing of certain constraints could become intermediate objectives. For example, the reduction of balance of payments and government budgetary deficits are likely to become major objectives in the early 1990s for some ADCs in South Asia as well as the Philippines. Structural changes to attain higher levels of sustainable economic growth without balance-of-payments deficits could be another objective.

47. Second, the ADCs would need to adjust to shocks which could be external or internal and favorable or unfavorable. A deterioration (improvement) in a country's terms of trade would be an example of an unfavorable (favorable) external shock. A good (bad) monsoon resulting in surplus (deficit) agricultural production would constitute a favorable (unfavorable) internal shock. Regardless of whether a shock is favorable or unfavorable, an ADC would need to respond in terms of flexible stabilization (demand management) or adjustment (supply augmenting) policies or both. In addition, ADCs would have to adjust to changes in development strategy from import substitution (IS) to export orientation (EO). Adjustment could also be needed to move from a set of distorted to a set of better policies.

48. Third, there is the issue of adjustment of policies or institutions or both. In the 1980s, emphasis was placed on getting prices right through reforms to decrease barriers to domestic, import and export competition. However, getting prices right is a necessary though not a sufficient condition for ensuring growth. In other words, only if price policies are combined with non-price measures will adequate supply response be forthcoming. In this context, it has been pointed out that the following six "ins" are relevant: incentives, inputs, innovation,

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22/ Street, op.cit.
information, infrastructure and institutions. Each in itself is a necessary condition for supply response, together they constitute necessary and sufficient conditions. Investment is associated with innovation. In the 1990s, the emphasis is likely to shift from a concern for efficient use of existing resources to the need for higher volumes and efficiency of investment.

49. While the structural adjustment in the 1980s was linked to an emphasis on the role of incentives, inputs and institutions, issues related to innovation, information, and infrastructure were relatively neglected. The public good nature of investments associated with the latter three "ins" may justify significant public sector involvement. However, given budget stringency, imaginative solutions to public-private sector mix would be required in the decade ahead.

50. While market failures were emphasized in the 1960s and 1970s, bureaucratic failures were highlighted in the 1980s. The issue for the 1990s is to minimize both market and bureaucratic failures. Governments should be selective in areas where they intervene and should conduct the interventions efficiently. This will constitute a major challenge in the decade ahead.

51. Against the background of the emerging issues, the rest of the paper is developed. First, the major global changes that are likely to be important to the ADCs are described. Second, given the objectives and constraints of the ADCs and the global environment, issues in strategies for development are raised. Third, the national or macro policy environment and its implication for the various sectors of the economy are taken up. Fourth, sectoral issues pertaining to agriculture, industry and services are considered. Finally, some aspects relating to the likely role of the state in the 1990s are raised.

V. INTERNATIONAL ENVIRONMENT

52. In the 1990s, the ADCs are likely to be confronted by three major challenges that will be externally driven. In trade, the international trading environment will be under challenge because of global imbalances and by pressures to form regional trading blocks. In foreign investment, the dramatic changes in Eastern Europe and the opportunities for participating in its economic rehabilitation, are likely to direct capital away from the third world. In technology, rapid innovation is confining advantages to the innovators at the expense of developing countries trying to "move up" the technology ladder. In terms of trade, foreign investment and technology, the international environment will have to be carefully taken into account in the formulation of strategies and policies by the ADCs.

53. The international trading environment will be influenced mainly by industrialized country growth rates; impact of events now occurring in

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"Ibid."
Eastern Europe and the Soviet Union; and international trading arrangements. They will have a bearing on growth and stability of export earnings of ADCs. As the expansion since the mid-1980s of the world economy continues, there are signs that all the major industrial countries are encountering supply constraints. Capacity utilization rates are close to previous peaks and unemployment rates have fallen in some countries. Growing inflationary pressures will lead to tighter monetary policies in the industrialized countries. Higher real interest rates will discourage both investment and credit-financed consumption expenditures. Growth rates in industrialized countries are likely to be lower in the 1990s compared to the 1980s. Consequently, there will be a deceleration in the volume of world trade. A slowdown in growth rates of the industrial countries and in the growth of world trade will have a negative impact on export growth from the ADCs. With a deceleration in the growth rates of industrialized countries, trade protection which will slow down structural adjustment in developed countries can be expected to increase. Trade protection could take two forms. They could be directed at products or sectors of interest to the ADCs like textiles, steel and agriculture. In addition, they could take the form of market sharing through the formulation of regional trading blocks that would exclude imports from the ADCs. The polarization of the world into various regional trading entities could threaten the credibility of an open multilateral trading system. The impact of the opening up of Eastern Europe on trade prospects for the ADCs is not clear.

54. The evolution of the international trading system will be an important factor in determining access to export markets for ADCs. The Uruguay Round of GATT negotiations, launched in 1986, is due for completion by the end of 1990. This Round was by far the most complex and wide-ranging and focused on curbing the intensifying protectionist movement in industrialized countries, strengthening GATT, and extending GATT coverage to services. Three features of the international trading system are relevant for the ADCs. First, the post-Tokyo Round trade-weighted average most favored nation (MFN) tariff rate of 4.7 per cent is likely to decrease after the completion of the Uruguay Round. However, there are considerable variations in tariff rates and MFN rates on products of export interest to the ADCs are generally higher than the average. Further, tariff rates often vary with the degree of processing resulting in the phenomenon of tariff escalation which penalizes the exports of processed and value added products of developing countries. Second, a formidable obstacle to trade flows is presented by non-tariff barriers (NTBs) which are growing in numbers and variety. As they involve administrative discretion rather than open rules of protection, NTBs are far more dangerous to the ADCs than tariffs. Third, while the Generalized System of Preferences (GSP) granted unilaterally by industrial to developing countries have been of benefit to ADCs, the narrowness of product coverage has meant that GSP imports of industrial countries constitute less than ten per cent of total imports from GSP beneficiaries. Furthermore, GSP is not costless to the recipients since preferences are not granted unconditionally.

55. The volume, terms and conditions of external capital flows to the ADCs will have an important bearing on them. Two aspects are relevant: multilateral and bilateral aid flows versus foreign direct
investment. The historic changes in Eastern Europe, continuing concern with the need for fundamental changes in Africa and alleviation of the debt crisis in Latin America combined with aid fatigue on the part of industrialized countries are likely to divert attention as well as multilateral and bilateral aid flows away from Asia.

56. In terms of direct foreign investment (DFI), the dramatic transformation of the United States from a creditor to a debtor nation is likely to continue to draw badly needed funds from capital deficient developing countries. Japan has emerged as the major source of direct foreign investment in Asia. In the 1980s, it is pertinent to point out that there was a major change in the regional distribution of Japan's DFI. The share of East and Southeast Asia declined while there was a massive increase in the share of Japanese capital to the OECD countries, particularly the United States. Unless the United States can decrease its trade deficit, it will continue to crowd out developing countries from the international capital markets. On the positive side for Asia, it is important to note that while the share of Japan's DFI to developing countries was declining in the 1980s, its total flow was rising so rapidly that many countries in East Asia continued to receive absolute increases. The United States will remain a foreign investor in Asia though on a diminished scale. Future trends of European investment in Asia are uncertain because of the economic integration of the European community in 1992 and the demands of Eastern Europe. Overall, the outlook for foreign investment is mixed. While international capital markets are better integrated with rapid flows of information and capital, factors like the U.S. trade deficit, the possibilities in Eastern Europe and fear of third world debt and instability will make the flow of DFI to developing countries more difficult.

57. International technology markets are complex, imperfect and rapidly evolving. However, some trends are significant. First, the pace of technological innovation is quickening. This has been caused by both demand factors like growing global competition and supply factors such as breakthroughs in genetic engineering and solid state physics. Second, life cycles of technological processes and products are shortening. These have been caused by new electronics based technologies and increased participation in technology-intensive industries. Third, rapid automation is transforming factor intensities of certain industrial processes. As a result, certain industries may be losing their labor intensive character.

58. Given the nature of technology markets and the fact that technology transactions involve a close relationship between the two

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parties, the notion of 'strategic alliances' is gaining acceptance. The notion incorporates the fact that firms do not surrender their identities during technological contacts and at the same time transactions do not occur only through the market. These alliances can vary greatly from a close relationship of subcontracting ties to "off-the-shelf" transactions in the market place. These strategic alliances are becoming more important over time.

59. In terms of transfer of technology to developing countries, the notion of strategic alliances has important implications. DFI flows would be conducive to such alliances. However, non-equity relationships like licensing arrangements, management contracts, franchising or subcontracting are possible between multinational corporations and the developing countries. While these non-equity forms offer greater host country control, they imply that the domestic partners absorb all or most of the financial risk of the projects. Foreign partners are more interested in maximizing their returns to their technology than ensuring the financial health of the enterprise. In addition, given the uncertainty of technology sharing agreements, foreign partners are reluctant to engage in comprehensive technology transfers. Despite these shortcomings, there could be scope for non-equity arrangements in cases where national ownership is required on grounds of security or public opinion or where neither party has a strong desire for an equity tie-up.

60. The main channels of technology transfer would follow from the above description. At one end, technology may be transferred as part of a DFI package, i.e., technology flows embodied in investment. At the other end, ADC governments could invest heavily in technical education and encourage inflow of foreign technical expertise. The development of indigenous technological capacity by imitation and absorption through skilled labor transfers would follow. A variant of the second approach has been the investment by the NTIs in high technology industries in the United States. Staff from the investing company are sent abroad to hasten the process of reverse engineering of skills to the home country. The non-equity arrangements already described would constitute the remaining channels of technology transfer from the industrialized to the developing countries.

61. Having briefly highlighted the three major factors in the international environment which will be relevant for the ADCs, it would be instructive to draw some implications. The technology factor is considered first. The major issues to be considered are: (i) Given the importance of technology in the economic growth process, the ADCs should react positively to technology change; (ii) While the latecomer status of ADCs enables them to move up the technology frontier quickly, rapidly changing technology together with imperfect technology markets restrict applications by ADCs; (iii) ADCs should seek at least a partial interface with world technology markets and it is in their interest to keep these markets open; and (iv) There are many ways of entering international

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capital markets, but none is costless. These could vary from a gradual acquisition of technology capability to a big push strategy to enter the market.22/

62. The Asian experience suggests that even when total foreign capital flows to developing countries decrease, well managed economies will continue to attract foreign capital. The host countries should provide a conducive environment. The importance of direct foreign investment and the associated transfer of technology will require appropriate policy responses by the ADCs. Interestingly, developing countries which attracted such funds by offering special incentives to compensate for unfavorable macroeconomic policies have not attracted much direct investment in recent years. On the other hand, direct foreign investment has steadily flowed into countries where the overall policy environment has been favorable.23/ This indicates that the policy reforms which are required for growth are not different from those required for attracting direct foreign investment. In fact, an export oriented development strategy not only promotes direct foreign investment but also increases its development impact in the recipient developing country.

63. Uncertainty in the international trading environment in the 1990s could lead to export pessimism on the part of some ADCs. It has been argued that emulation of the NIEs model of manufactured export-led growth by other ADCs would exert enormous pressure in developed country markets leading to more and more protectionist interventions.24/ In this context, the following factors are pertinent. First, ADCs will reach significant manufacturing export capacity at different points in time. Such staggering will reduce pressure. Second, manufactured exports are highly diversified which will diffuse pressures over a wide range of activities. Third, the developing country share in industrial countries consumption of manufactures is just over 2 per cent which suggests that there is considerable room for expansion. Fourth, the growing trend of globalization of industries with direct foreign investment may help contain protectionism. Thus, the prospects for manufactured exports may not be all that bleak.

64. The discussion on trade, foreign investment and technology and its implications for the ADCs suggests that the inherent dynamism of the international environment will throw up opportunities which could be seized by ADCs which are willing and able to adjust rapidly. Management of change will require resilience and flexibility. Alternatively, the


adoption of appropriate "domestic fundamentals" which will be discussed in the succeeding sections of the paper will distinguish the ADCs which will transform challenges into opportunities from those that will not.

65. Before concluding this section, it is pertinent to point out that the north-south polarization within Asia also offers the ADCs some challenges and opportunities. Two aspects are important. First, Japan's closer market integration with the newly industrializing economies (NIEs) has important implications for the international division of labor. The NIEs' increased export intensity and diversity in manufactured goods in relation to Japan will imply that the range of the horizontal division of labor will expand between them. Initially, this resulted from a change in industrial structure in Japan and improved comparative advantage of the NIEs. The rapid appreciation of the yen has greatly accelerated this process. Since the greater horizontal division of labor implies that industrialization in one country will induce the expansion of industries in another, the dynamic effects have enormous potential for Asia as a whole. Second, the impact of technological change will affect the composition of exports from NIEs. The share of knowledge-based export products will increase at the expense of traditional labor intensive and raw material-based exports. An important aspect in the rising share of high technology products in the NIEs is related to pre and after-care servicing. Services of highly skilled human resources have become a key factor for exports. Exports of high technology products are increasingly becoming transactions of packages rather than of individual products. With rising real wages and exchange rate appreciation, the NIEs are already moving in the direction of shifting their exports to high value added products. One consequence of these changes could be a decline in the raw material and labor content of the NIEs' exports.

66. The changing comparative advantage implied by these factors opens up possibilities for manufactured exports by other ADCs at a lower stage in their development process.\(^{30}\) A multi-stage catching-up process is taking place in Asia in which groups of countries have been moving up the market, catching up one after another. This multi-stage process of catching up is a unique feature of developing Asian countries, and it requires constant restructuring of industries in their respective development stages.\(^{31}\) This flying geese pattern of Asian development where countries at different stages of development are continuously trying to catch up with countries ahead of them is likely to be accentuated thereby providing export niches for the ADCs. Timely identification of these niches for individual ADCs will be important in exploiting the resulting export market opportunities which will be changing rapidly over time. It could be argued that because of their size and thus potential, India and the People's Republic of China may present a problem for smaller ADCs. For example, if they were to follow the pattern of the NIEs they could


\(^{31}\) T. Watanabe and H. Kajiwara, "Pacific Manufactured Trade and Japan's Options", The Developing Economies, vol. 21, no. 4 (December 1983).
squeeze out other ADCs from doing the same. The problem, however, would be alleviated by considerations described earlier on the issue of replication of the NICs strategy of export-led growth. The positive and negative factors described on the availability of export markets will need to be carefully assessed by the ADCs to enable them to respond appropriately to the opportunities and challenges in the decade ahead.

67. Technological change, currency appreciation and wage increases, in addition, will lead to the shift of industries from Japan and the NICs to the ADCs as the former move up the market. Japanese direct foreign investment had played a key role in fostering the horizontal division of labor with the NICs. An important issue in the 1990s will be the role of direct foreign investment by Japan and the NICs in augmenting intra-industry trade within Asia. Though industrial relocation and large foreign investment flows within Asia have been recorded mainly since 1987, the size of the phenomenon in 1988 and 1989 makes it a very significant development in the region. The evolving scene in Asia suggests that Japan and the NICs could emerge as major sources of capital for the ADCs. While official development assistance from these sources will grow, the major movements will be through private capital flows.

68. Finally, the issue of non-oil primary commodity prices is likely to be important for some ADCs. An important side effect of the two oil shocks in the 1970s was the heightened concern about the continued availability of material resources. This spurred major technological change which resulted in (i) new materials being developed leading to substitution away from traditional commodities; (ii) development of raw material saving technologies; and (iii) development of improved technologies for secondary recovery that have reduced the demand for primary output of numerous minerals and metals. All these developments are likely to continue in the next decade. In addition, structural shifts in demand in industrial countries from manufacturing to services will continue. On the supply side, technological improvements will lead to increased productivity and lower costs for both metals and agricultural goods. All these demand and supply factors will accentuate the secular decline in the real prices of non-oil primary commodities.

VI. NATIONAL ENVIRONMENT

69. The major development objectives of many ADCs in the 1990s will include growth, equity, poverty alleviation and environmental protection. On the question of whether there is a tradeoff or complementarity between growth and equity, there is growing consensus towards complementarity. All that is needed is the right kind of balance between the two. Furthermore, growth has been observed to be closely related with the improvement in the quality of human labor devoted to production. Human resource development combined with institutional reforms relating to land

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22/ Chakravarty, op.cit.

ownership and access to public goods could promote growth with equity. It is becoming obvious that sustainable growth will require explicit consideration of issues pertaining to environmental protection. Thus the development objectives in the 1990s of the ADCs will be far more comprehensive and complex than of the earlier decades.

70. Progressing along a wide front will require appropriate responses in terms of strategies and policies in the light of objectives and constraints. The major constraints would include the availability of investible resources, human resources, relevant technology, infrastructure and institutions. The stage of development of a country in terms of its demographic, agrarian and industrial transition will also be an important factor. Against this background, the discussion on the national environment will include development strategies, macroeconomic framework, trade and exchange rate regime and an illustration of the linkage between strategies and macroeconomic policy environment with a discussion of issues in the formulation of export policies.

Development Strategies in the 1990s

71. The suitability of a particular development strategy will be country specific and will depend on initial conditions like resource endowment, economic structure, stage of development, objectives and constraints. The discussion in section II described the structuralist and flow viewpoints associated with growth strategies. The former was pessimistic on exports prospects, bullish on ability to generate wage goods (savings) and assumed that the inability to transform savings into capital goods was the binding constraint. The latter was bullish on exports and considered that the flow of savings constrained growth. Given this basic orientation, the strategies adopted for growth followed.

72. The experience of the ADCs in the last two decades and the issues raised in section V suggest that countries will have opportunities to export manufactured goods. Effective supply responses to changing export niches will determine whether countries can succeed in exploiting these opportunities. An important element that should determine the strategies to be adopted by ADCs in the 1990s is that the severity of the foreign exchange bottleneck situation will be significantly lower for most ADCs. The transformation constraint of turning savings into capital goods is likely to be less relevant. Instead, the savings constraint will be binding. The existence of foreign trade possibilities suggests that growth strategies in the 1990s should be guided by careful observation of the international competitive environment which will influence the appropriate choice of industries at each stage of development.

73. A strategy will be defined in terms of three attributes, namely, demand source, supply source and inward-outward orientation. The demand source is classified into domestic demand and export demand. The components of domestic demand include consumption, investment and government expenditure. The distinction between domestic demand and export demand is made to highlight the major source of growth in terms of components of demand, i.e., domestic demand-led versus export-led growth.
74. The sources of supply consist of agriculture, industry and services. Agriculture includes foodgrains, commercial crops and livestock. Industry would incorporate manufacturing and mining (traded) as well as construction and utilities (non-traded). The non-traded service sector includes trade, transport and communication, public administration, while the traded service sector includes tourism and financial, technical and professional services.

75. The concepts of import substitution and export orientation are refined. In section II import substitution was defined in terms of catering to the domestic market whereas export orientation was associated with the targeting of sales in overseas markets. The concept of effective exchange rate (EER) is introduced.\(^{34}\) The effective exchange rate on exports (EER\(_e\)) is defined as the number of domestic currency that can be obtained for a dollar's worth of exports, taking into account export duties, subsidies and surcharges, special exchange rates, input subsidies related to exports, etc. The effective exchange rate on imports (EER\(_m\)) is defined as the number of domestic currency that would be paid for a dollar's worth of imports, taking into account tariffs, surcharges, interest on advanced deposits, etc. EER\(_m\) would include premia on import licenses. Import substitution (IS) is defined as one where EER\(_m\) is greater than EER\(_e\) and there is a bias against exports. The characteristic feature of IS is that it creates a net incentive to import substitute relative to what international prices dictate. Export orientation (EO) strategy is defined as one where EER\(_m\) is equal to EER\(_e\) and the anti-export bias is eliminated. It is important to note that EO is defined in terms of neutrality. Thus, IS: EER\(_e\) < EER\(_m\); EP: EER\(_e\) ≈ EER\(_m\); and Ultra EP: EER\(_e\) > EER\(_m\).

76. At this stage it would be instructive to provide a rationale for the choice of these three attributes to describe a strategy. A strategy is defined in terms of an outline of what is to be achieved and how it is to be achieved. The supply side would indicate the origins of growth. The components of demand would describe its source and composition. For example, in the case of domestic demand consumption, investment and government expenditure would influence the composition of demand. Within consumption, the intratemporal distribution would determine the extent of poverty. The import substitution versus export orientation distinction would describe the adoption of an inward versus outward-looking philosophy.

77. In the framework developed, it is important to keep the attributes of domestic demand-led versus export-led and import substitution versus export orientation distinct. The former deals with components of demand while the latter is defined in terms of the policy environment facing exporters and importers. In addition, while an export-orientation would be conducive to export-led growth, export-led growth would be possible in an import substituting regime as will be shown later in the section. Similarly, export orientation is consistent with domestic demand-led growth. For example, alleviation of poverty may require a

significant boost in domestic consumption but this may be undertaken in the framework of neutrality between export and import incentives. In fact, on efficiency considerations such as strategy is advisable.

78. A point that needs to be clarified is that in the discussion so far, the three attributes define a strategy. This has to be distinguished from consequences of development strategies or changes in environment. For example, during 1988-89 growth in the Republic of Korea was domestic demand-led because of a slowdown in export growth due to wage hikes, labor, strikes, currency appreciation and rise in domestic consumption caused by import liberalization. Whether an attribute or an element is cause or effect will depend on the perspective being taken. When a strategy is being formulated, the viewpoint is ex-ante. However, when a consequence is being analyzed, the viewpoint is ex-post. All discussions on strategy in this paper are related to the ex-ante viewpoint or perspective.

79. In Figure 1, twelve strategies for development that are likely to be broadly relevant for ADCs in the 1990s at various stages of development are represented. The perpendicular axis in the matrix measures domestic demand-led (C) versus export-led (C). The further away from the origin, the greater is the importance of export demand. The two horizontal axes measure industrial origin: agriculture (A), Industry (A), service (A') and import substitution (B) versus export orientation (B). Five strategies can be rejected a priori: (i) ABC which reflects an import substitution domestic demand-led agricultural (foodgrain) strategy adopted by many ADCs in the 1970s will be inefficient in terms of cost and availability of relatively cheap foodgrains from world markets; (ii) ABC and ABC are unlikely to succeed because of lack of export markets for non-oil primary commodities; (iii) ABC which describes the import substitution domestic demand-led industrial growth strategy adopted by many ADCs in the 1950s and 1960s that resulted in high cost inefficient industries is unlikely to be repeated; and (iv) A'BC does not appear feasible since it is unlikely that sufficient domestic demand will exist for growth to be powered by the service sector.

80. The remaining seven strategies showing promise are considered next. ABC is a domestic demand-led agricultural growth strategy which would be relevant for countries with a significant rural poverty problem. Here, the issue of the creation of domestic demand becomes a critical factor. For example, in a country where the majority of the population resides in the rural areas, creation of rural demand will be important in sustaining such a growth strategy. Creation of demand will now need to be explicitly related to creation of supply. The explicit linkage of supply creation to demand generation makes this strategy particularly appropriate for poverty alleviation. It is useful to describe the rationale for this agriculture-led growth strategy originally recommended by Singer who advocated a strategy which was agriculturally driven rather than export driven for the realities of the 1980s and 1990s with uncertain

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Figure 1

MATRIX FOR DIFFERENTIATING STRATEGIES FOR GROWTH
export prospects for some developing countries. Unlike earlier pro-agricultural strategies which were associated with self-sufficiency and closed economy ideologies, Singer’s strategy called for a shift in the sectoral emphasis of public investment in agriculture while maintaining or even switching to export orientation. He described this strategy as one of basing the “national development on agriculture as the primary sector and developing industries with strong emphasis on agriculture industry linkages and interactions”. Such a strategy was adopted in the Medium-term Development Plan of the Philippines for the period 1987-1992.

81. This strategy emphasizes the importance of increasing productivity in agriculture and thereby creating a domestic mass consumption market. Small and medium-sized farmers with their larger linkage effects with domestic industry will have a pivotal role. These farmers are likely to devote a larger marginal share of their consumption to locally produced textiles, clothing, footwear and simple consumer durables. Therefore, an increase in agricultural productivity, especially among small and medium-sized farmers is the key to industrialization. This strategy accomplishes the industrialization goal by expanding internal demand for intermediate and consumer goods produced by domestic industry. While this strategy of fueling industrialization through generating domestic demand is motivated by a certain degree of export pessimism, it rests on an export orientation growth strategy. The key factor in this strategy is the strengthening of agriculture industry linkages through which a self-sustaining dynamic system emerges. Clearly, this strategy cannot be appropriate for all times and all countries. However, this agriculture demand-led industrialization strategy will be suitable in the medium-term for countries which are not anticipating rapid growth in world demand for their non-traditional exports but which have potentially large domestic markets in which there already exists an industrial base with an established supply responsiveness.

82. Having achieved the self-sufficiency threshold in major foodgrains and as export prospects for them are weak, some ABCs will find that future growth in these crops will be demand constrained. The challenge will be to maintain the growth momentum in agriculture while the growth of major foodgrain output slows from 4 and 5 per cent to 2 and 3 per cent. New sources of growth should be selected efficiently so as to avoid enlarging a high cost agriculture base that would jeopardize the future growth of employment and income. To sustain high agricultural growth rates, developing countries must fully exploit the potential for agricultural diversification and away from an excessive dependence on foodgrains. Achieving agricultural diversification will be a massive and far more complex task than achieving the self-sufficiency threshold in foodgrains. Agricultural diversification should be based on an economy’s comparative advantage.

83. The adoption of the Singer strategy is based on the assumption that trade is an element of growth. Agricultural growth must be based on comparative advantage considerations. The cornerstone of industrial

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growth will be based on achieving an efficient and competitive industrial system through strengthening the incentives for export and efficient import substitution rather than catering to a highly captive protected market. In that sense, there is neutrality in incentives between export and import activities implying an export orientation for strategy ABC.

84. The next three strategies to be considered are industrial based. Strategy ABC which is export-led in an import substituting environment was pioneered by the Republic of Korea in the 1970s. The first (IS1) and second (IS2) stages of import substitution as well as the first (EO1) and second (EO2) of export orientation were described in section II. A more advanced stage of export orientation, namely EO2 complex is identified with a situation in which import substitution of capital and intermediate goods or secondary import substitution occurs at the same time with export orientation.\(^{32}\) EO2 complex is associated with rapid growth of financial, technical and professional services. Strategy ABC could have many variants IS1/EO1/IS2/EO2/EO2complex, IS1/IS2/EO1/EO2/EO2complex and IS1/EO1/EO2/EO2complex. Variants of ABC have already been adopted by some ADCs like Indonesia and more are likely to do the same in the 1990s. As described in Section II, the major problems in structural transformation are associated with movements from EO1 to EO2 and to EO2complex.

85. Strategy ABC which is both export oriented and export-led was adopted in the 1960s and 1970s by Hong Kong and to some extent by Singapore where IS1 was short-lived. In this strategy, the stages of industrialization would include EO1/EO2/EO2complex. The third industrial strategy ABC consists of an export orientation combined with a domestic demand-led growth. For countries like the Republic of Korea and Taipei, China where the concerns for equity and environmental protection are increasing, strategy ABC may be relevant. An expected slowdown of export growth combined with a need for increased domestic consumption and public investment associated with equity and environmental considerations could lead to the adoption of this developmental strategy. Strategy ABC could also be relevant for countries like India and People's Republic of China with large domestic markets. The stages of industrialization would be IS1/EO1/IS2/EO2/EO2complex.

86. A logical outcome of strategy ABC is A'ABC which refers to a strategy which is a domestic demand-led service driven growth with an export orientation. This happens because demand for certain non-traded services like trade, transport and communication, education and health which will result in a better quality of life increases. At the same time as economies approach a certain stage in the development process, services become the engine of growth. At the next stage strategy A'BC which is export-led with an export orientation may follow. As the NIEs catch-up technologically with the industrial countries and integrate themselves more closely with them, the transition from EO2complex to A'BC is likely. The increasing importance of financial and technological services in this next stage of development may make it necessary for countries to adopt strategy A'ABC.

\(^{32}\) Chen, op.cit.
87. Strategy A'B'C which is export-led with services in an import substituting regime deserves careful consideration for countries like India and the Philippines which possess vast pools of technically qualified people. The technological revolution now occurring in the industrialized countries will require substantial amounts of services which could be provided relatively cheaply by some ADCs.

88. The ADCs are at different stages of development and the appropriate strategy will be country specific. However, the flying geese pattern of development in Asia suggests that as countries catch-up with one another, development strategies could have important elements of commonality. In terms of the strategies described, one sequence of development strategies from the least to the most developed could take the following pattern: A'B'C, A'B'C, A'B'C, A'B'C, A'B'C and A'B'C. Here, an economy goes from (i) an agriculturally driven domestic demand-led export oriented regime to (ii) an industrially driven export-oriented strategy which is export-led to begin with and then followed by domestic demand-led to (iii) a service driven export-oriented strategy which is domestic demand-led and then export-led.

National Policies

89. The adoption of a strategy of development will determine the volume and allocation of investment across sectors. National and sectoral policies would be used to implement the strategies in terms of influencing the volume and allocation of investment. The nature of the policy mix would appreciably affect the efficiency of investment and hence overall sectoral and economy-wide growth rates. While national and sectoral policies together determine the sectoral policy environment, only national policies are considered in this subsection for analytical convenience. Section VII deals with sectoral issues. The macroeconomic issues briefly considered are fiscal and monetary including exchange rates. Subsequently, trade policy issues are raised.

90. One of the most important lessons of the 1980s was the need for prudent macroeconomic management which would ensure a sustainable current account position, a reduced rate of inflation and a manageable level of foreign debt. Without these, it would not be possible to ensure a stable and high rate of economic growth. Macroeconomic policies that will be required to keep aggregate demand and supply in balance would include: (i) monetary and fiscal policies for demand management; (ii) capacity augmenting structural policies which will promote public savings (fiscal policy) and private savings (monetary policy and interest rates); (iii) exchange rate policies which are simultaneously expenditure-reducing and expenditure-switching and contain elements of both demand management and structural policies; and (iv) external resource mobilization policies. As already discussed in section III, balance-of-payments problems are frequently the symptoms of commitments by governments to expenditures that cannot be financed. Keeping budget deficits under control would be a major macroeconomic challenge to governments in ADCs. This package of

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macroeconomic policies must be designed to simultaneously restrain aggregate demand and increase the availability of resources.

91. As already indicated in section II, the public sector in many ADCs was given a key role in development. One of the reasons was that it was expected that the public sector would generate domestic savings through budgetary surpluses and profits of public enterprises to finance development expenditure. The public sector in many ADCs have failed to generate savings. Government expenditures grew more rapidly than revenues. At the same time, the performance of public enterprises have been below expectations. Consequently, public investment has been financed largely by domestic and external borrowing. This has led to a heavy burden of interest payments on government budgets thereby further undermining the capacity of the public sector to generate savings. The external debt service of many ADCs also greatly increased. Thus, public sector reform has major implications for the macroeconomic environment. Alternatively, the role of the state and the need for public enterprise reform in the 1990s will be shaped by macroeconomic considerations. These issues are also raised in section VIII.

92. As discussed in section V, the flow of foreign capital to the ADCs in the 1990s may be uncertain. However, direct foreign investment combined with technological, marketing and management skill transfers are potentially important in the context of rapid technological changes. A necessary condition of the flow of direct foreign investment to a country is macroeconomic stability in terms of a sustainable current account position, low rates of inflation and a manageable level of foreign debt.

93. The relationship between the macroeconomic environment and development strategy can be established through the volume, allocation and efficiency of investment. The macroeconomic issues discussed so far would influence the volume of investment. When these policies are combined with exchange rate and trade policies, their link to strategy is established through the allocation and efficiency of investment.

94. The exchange rate will be the crucial macroeconomic variable in establishing the right mix between the traded and non-traded sectors of an economy. The most important function of the exchange rate is to assist in achieving external equilibrium. Overvalued exchange rates which do not reflect market fundamentals penalize exporters and inhibit international competitiveness. Prudent exchange rate management presupposes a sound macroeconomic policy environment with moderate inflation. A basic lesson of the Asian experience which will continue to be relevant in the 1990s that a necessary condition for successful export is the observance of these 'domestic fundamentals'. In this context, the major issues involved are: (i) determining the extent of overvaluation and hence the magnitude of the real depreciation that is needed; (ii) policies to achieve the

32/ Kohli, op.cit.
target value of the exchange rate; (iii) establishing the effects of
depreciation; and (iv) deciding on exchange rate rules to adopt. 40

95. An element of the national policy environment that is closely
related to the exchange rate is trade policy which has both external and
domestic dimensions. Internationally, the ADCs have a strong vested
interest in keeping the international trading system open thereby gaining
access to export markets. Domestically, trade policy is concerned with
implementing a trade regime which is neutral between export and import
sectors and which minimizes the resort to non-tariff barriers. Trade
policy has a key role in ensuring an open competitive environment, to
induce firms to adopt appropriate technology and to discourage rent-
seeking behavior. Also the effectiveness of direct foreign investment in
terms of contributing to higher productivity levels is linked to an open
trade regime.

96. The concept of the effective exchange rate (EER) discussed in
the previous section is related to import substitution and export
orientation. Thus the exchange rate and tariffs and subsidies which
influence the EER are instruments in implementing development strategy.
Also, the combination of fiscal, exchange rate and trade policy would have
a bearing on the terms of trade between agriculture and industry. Lastly,
macroeconomic management through the use of fiscal and monetary policy
combined with an outward or inward orientation would have to be consistent
with the domestic demand-led or export-led growth strategy adopted by a
country.

97. The issues raised on national policies will have to be dealt
with by many ADCs. While there is likely to be general agreement on the
desirability of the broad reforms described, the problem of the specific
sequence of reforms will be difficult. Depending on initial conditions,
alternative sequencing paths are possible. The subject of the sequencing
of economic liberalization in developing countries is still evolving with
only some general principles being enunciated. 41 Related to resource
mobilization is the sequencing of the liberalization of the domestic
financial market and of the capital account of the balance of payments.
It is generally accepted that the capital account of the balance of
payments should be opened only after the domestic financial market has
been reformed and domestic interest rates are appropriately restructured.
Otherwise there will be capital outflows. A precondition to raising
interest rates is control of the fiscal deficit without which inflationary
pressures will quickly build up.

98. On the issue of external sector reforms and the real exchange
rate, the second element of sequencing policy is that it is more prudent
to liberalize the current account before relaxing capital controls.

40/ Khan, op.cit.

41/ S. Edwards, "The Sequencing of Economic Liberalization in Developing
Countries", Economic Policy Notes, ODI (World Bank, 1989); and Wolf,
op.cit.
Otherwise, if the fiscal deficit has already been controlled and domestic financial markets liberalized, interest rate differentials will result in foreign capital inflows. These will lead to real appreciation whereas a successful liberalization of the trade account will require a real devaluation of the domestic currency provided the trade elasticities are "right". Real devaluation is needed to increase exports and limit imports.

99. The third element of sequencing policy reform deals with the trade account. Since adjustment costs associated with import liberalization preclude instant elimination of import restrictions, export promotion policies provide a means of offsetting the anti-export bias inherent in a distorted trade regime. The sequence of reform in import liberalization is in the following three steps: (i) replace quantitative restrictions by tariffs; (ii) reduce the level of nominal tariffs; (iii) move towards a more uniform tariff structure. Within (i), restrictions on imports of inputs should be eliminated or relaxed first. A first step within tariff reform would be to shift from specific to ad valorem duties.

100. While the implementation of development strategies will be significantly influenced by the national policy environment, the other aspect of the national policy environment is its all pervasive effect on the major sectors of the economy: agriculture, industry and services. The effects will be in terms of the availability of investible resources in a sector as well as in terms of intra-sectoral incentive structure. Consequently, sectoral issues considered later can not be analyzed independently of the national environment. Furthermore, inter-sectoral linkages are affected by development strategy as described in the previous subsection.

Trade Policy and Development Strategy: An Illustration

101. An issue that is likely to be relevant to many ADCs as they adjust their strategies for development from import substituting domestic demand-led industrial growth (ADCl) to import substituting export demand-led industrial growth (ABC), or to export oriented domestic demand-led industrial growth (ABC) is the policy package that will be required for such a transition. Combining the discussion on the international trading system in the 1990s, strategies and trade policies, the purpose of this subsection is to sketch the design of a possible policy package.

102. Unilateral import liberalization reflects concerns over weak economic performance and a desire to improve it through greater openness. Participation by ADCs in multilateral fora reflects increased outward orientation in development thinking. Involvement by ADCs in setting multilateral rules of the trading system suggests that the external market environment, could to some extent, be shaped by the ADCs. A concern of many ADCs is that they will be given no credit during the Uruguay Round for the unilateral liberalization that they have already undertaken. This has been partly caused by the decision to set 1986 as a baseline date for including unilateral liberalization in the Uruguay Round. Thus, the ADCs are concerned that instead of industrialized countries being prepared to make matching concessions for unilateral liberalization already undertaken, ADCs will be asked to make additional concessions in any new
deal. In the process, the issues of unilateral liberalization and multilateral trade negotiations could become increasingly intertwined.

103. The rationale for unilateral trade liberalization by ADCs in a small open economy framework is analytically straightforward and is derived from a small economy trade model. The possibility of linking trade liberalization to market access through individual or collective action makes the sequencing of decision making extremely complex. This is a new area with an additional dimension that will be relevant in the 1990s. The costs and benefits associated with unilateral versus linked liberalization will need to be determined to separate fact from fancy. The realism of the expected gains from linked liberalizations will need to be established. The sustainability and direction of trade policy reform in ADCs will depend on such analyses.

104. While movements in both exchange rates and import policy liberalization have been in the right direction in most ADCs, there are political and economic limits for reform in these two critical areas in the medium term. Successful export growth, so important in an open economy setting that should be adopted by the ADCs in the 1990s, depends on two key elements: (i) maintaining a competitive real exchange rate, as it is the single most important variable affecting any exporter's earnings in local currency; and (ii) keeping import restrictions and protective tariffs to the lowest feasible levels, both because they not only lead to less efficient use of resources, but also, by defending an overvalued exchange rate, they impose penalties on exports. Movements along both these fronts though desirable are likely to take considerable political will.

105. Since it is not possible to instantaneously eliminate all import distortions, the role of export promotion policies will be crucial in the 1990s. Such policies by stimulating export growth relax the balance-of-payments constraint thereby increasing the degrees of freedom for import liberalization. The Republic of Korea and the other newly industrializing economies provide good examples of countries pursuing export promotion policies through creating a free trade status of exporters and even more active support for exports, even prior to trade liberalization. Two different types of arguments can be made for export development policies. They put potential exporters on an equal footing with world market competitors. However, if the country provides positive protection for import substituting activities, neutral status for export activities does not provide incentives equivalent to import substituting activities. With high effective protection for import substitution, anti-export bias in the domestic economy will be alleviated, but not eliminated, through achieving neutral status which puts exporters on an equal footing with foreign competitors. Anti-export bias can be eliminated by "extending" neutral status for export activities such that export is not discouraged relative to import substitution. Firms would then have equal incentives for import substitution and for export.

106. These policies can play a transitional role in offsetting disincentives to exports, while distortions introduced by import protection are gradually being reduced. This is the second best argument for intervention. Since the removal of import barriers are likely to
proceed gradually, special measures are required to alleviate the anti-export bias. Second, export development policies might be justified because of the existence of externalities associated with exports.

107. Two key concepts have been introduced in the context of the second best policies: neutral status and extended neutral status. Neutral status is defined as a set of arrangements that will enable exporters to compete with foreign competitors on an equal footing in regard to undistorted markets and policies. The major competitors operate under a more flexible and realistic exchange rate, free trade in inputs and outputs, competitive financial and money markets, competitive primary input markets, and non-discriminating domestic taxes. Neutral status for export activities can be achieved by providing a combination of these five elements or equivalent compensating incentives in all activities that generate export value added.

108. An implication of providing neutral status to exporters through duty free import of inputs is a zero effective rate of protection. This puts potential exporters on an equal footing with world market competitors. However, if the country provides positive protection for import substituting activities, neutral status for export activities does not provide incentives equivalent to import substituting activities. With high effective protection for import substitution, anti-export bias in the domestic economy is alleviated, but not eliminated, through achieving neutral status which puts exporters on an equal footing with foreign competitors. Anti-export bias can be eliminated by "extending" neutral status for export activities such that export is not discouraged relative to import substitution. Extended neutral status is defined as a situation in which the level of export incentives is as high as the level of incentives for import substitution activities.

109. The concepts of neutral and extended neutral status and the notions of import substitution and export orientation introduced earlier are now linked. Extended neutral status for exporters would imply that firms would be indifferent between import substituting and export activities. Therefore, by achieving extended neutral status for exports through policy interventions, an export promotion strategy (ABC or ABC) would be achieved. Since neutral status provides less incentives for exports compared to extended neutral status, policy interventions would imply the pursuit of an import substituting strategy (ABC). The immediate question that comes up is whether phased policy changes associated with achieving neutral status for exporters has any welfare theoretic justification.

110. Neutral status for export activities can be achieved by providing a combination of a more flexible and realistic exchange rate, free trade in inputs and outputs, competitive financial and money markets, competitive primary input markets, and non-discriminating domestic taxes or equivalent compensating incentives in all activities that generate

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export value added. Policies to ensure neutral status are being adopted by many ADCs.

III. The rationale for phased policy changes associated with achieving neutral status for exporters rests on the following important theorem, "In a multi-commodity world with no complementarity in production, it is necessary in order to achieve a second best solution and sufficient for an increase in welfare that variable extreme distortions be eliminated." This theorem provides a general guideline to policy formulation in a world where first best conditions cannot be immediately attained. These guidelines have two aspects. First, a general rule is to reduce extreme distortions as far as possible - all distortions which are variable are intermediate to the highest and lowest distortions which cannot be altered. Second, if a policy of trade liberalization is to be carried out, even when all tariffs are variable, it may not be feasible to carry out all required changes in trade policy simultaneously. In these circumstances, policy makers can follow the general rule of eliminating extreme distortions until the first best solution is eventually reached.

II. Having indicated that achieving neutral status for exporters constitutes a phased policy change which has welfare theoretic justification even in a second best situation, it is appropriate to note certain features associated with export promotion policies. First, the discussion of these policies in the context of export promotion and import substituting policies clearly indicates that export promotion must be seen as complementary to general trade policy reforms. Second, in light of the above, most export promotion measures are likely to be appropriate only on a transitional basis. Once general reforms of the protective structure have substantially reduced the anti-export biases in the trade regime, special measures designed to put exporters on an equal footing with their international competitors will no longer be required. Third, the scope for export promotion policies will be increasingly circumscribed by international and bilateral rules and practices which limit the allowable or accepted forms of intervention. This reinforces the case for speedy general trade policy reform. Fourth, budgetary constraints put severe limits on financial incentives or export subsidies. In light of the above, the recommendations for export policy and administration reform is likely to be limited to achieving neutral status for exporters. This implies pursuit of an import substituting strategy. Therefore, a switch to export orientation may have to wait until significant import liberalization is possible.

43/ Rhee, 1984, op.cit.

113. Four major elements can be identified for effective government intervention in the area of export promotion policies. These are: (i) automaticity and transparency, i.e., clear rules for all actual and potential exporters, and speedy and non-discretionary assistance; (ii) equal treatment of all export value added, whether produced by direct or indirect exporters; (iii) prevention of abuse through strict but fair application of rules; and (iv) administrative convenience achieved through delegation of authority to commercial banks or export associations. The achievement of the above will involve institution building and improved administration in the ADCs. These tasks are not only time consuming and painstaking, but they also require substantial preparatory work and development of a phased prioritized plan of action.

114. The overall rationale for the framework for export policy reform can be summed up by two considerations. First, since it is not possible to instantaneously eliminate all import restrictions, export promotion policies provide a means of offsetting the anti-export bias embedded in the trade regime. Second, the constraints on the budget deficit and threats of countervailing action on the part of importers make it necessary and feasible to concentrate on export promotion policies that ensure neutral status for exporters. The emphasis should be on phased policy reform which will lead to welfare improvements. As already emphasized, the long-term goals is the rationalization of the trade regime.

115. Export promotion policies which provide neutral status to exporters are likely to play a key role initially. Extreme care will need to be taken in designing the export promotion policies. The likelihood of industrialized countries using countervailing measures against such policies that ensure trade neutrality will increase sharply. The links to the multilateral trade system must be explicitly incorporated in evolving ADC trade policy in the future. This is an important lesson of the 1980s.

VII. SECTORAL TRANSFORMATION

116. In its broad interpretation structural transformation is associated with movement from rural to urban, agriculture to industry to services and from domestic trade to a higher ratio of foreign trade. Thus intersectoral changes or structural transformation are at the core of the development process. Major sectoral transformation issues are considered in this section. Sectoral production, income generation, demand creation result in certain growth and equity patterns. Thus changes in transformation, growth and equity are closely related to by sectoral changes. In terms of Figure 1, while the discussions on the international

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45/ Rhee, 1985, op cit.

and national environment cover two axes, namely, domestic demand versus export-led and import substitution versus export orientation, issues relating to agriculture, industry and services are considered in this section. Therefore, the sectoral issues raised in this section are narrowly confined to those that are directly related to the broad developmental factors raised in section VI.

117. Sectoral transformation or adjustment policies can be put into two broad groups: (i) policies to improve efficiency and resource allocation; and (ii) policies to expand productive capacity of the sector. Under (i) the major factors would be incentives, inputs and infrastructure whereas investment, innovation and information would be important under (ii). Innovation is linked with technology, investment is related to the adoption of new technology and information is needed to diffuse technological knowledge. Appropriate institutions would be required to implement both sets of policies.

118. Before discussing the issues related to designing policy reforms to reduce distortions, it is pertinent to point out some practical problems. First, efficiency gains resulting from resource reallocation attributable to reform require factor mobility. Unless labor and capital can move from sector to sector, reforms could result in unemployment and high adjustment costs. Second, government interventions resulting in distortions could arise because of objectives other than economic efficiency. Political and social realities associated with these objectives should influence the design of the reform package. Third, the theory of second best suggests that if an economy has several significant distortions, eliminating only some of them may not necessarily lead to an increase in overall economy efficiency. 27

119. Policies to improve efficiency and resource allocation will play an important role in augmenting growth rates. Policy reforms to improve efficiency will be guided by the need to reduce distortions that drive a wedge between prices and marginal costs. Hence, they will be sector specific. As discussed in section II, these distortions have been caused by trade restrictions, price controls, taxes and subsidies, government controls on exit and entry and imperfect competition. The resulting rigidities and inefficiencies have affected the entire economy including agriculture, industry, electricity generation, banking and others. The starting point for policy reform would be to reduce the cumulative impact of distortions introduced by bureaucratic or artificial market failure. The need for sectoral policy reforms arises from the necessity of augmenting aggregate supply through efficiency improvements. These reforms are associated with static efficiency gains linked to movements up to and along a production possibility schedule. The rationale for the emphasis on static efficiency stems from the consideration that static efficiency is a precondition for dynamic efficiency which in turn

influences movements of the production possibility schedule or long-run growth rates.49

120. Turning to issues pertaining to expanding the productive capacity of an economy, investment flows to a sector would be determined by public and private investment. While the former would be determined by the strategy of development and role assigned to the public sector, the latter would be influenced by the overall sectoral policy environment which in its turn would depend on the interface of national and sector specific policies. The strategy of development adopted by a country would have a significant impact on the sectoral allocation of investment.

121. Innovation and the acquisition of technology linked with investment are closely related. In this context, the complexities in the process of technological development need to be highlighted. It is useful to delineate seven stages of technological know-how and acquisition: planning; negotiations between suppliers and recipients of technology; place and equipment design; procurement and construction; installation and start-up; production and improvement; and subsequent innovation.49/ Apart from deepening an understanding of the complexities, such a delineation facilitates an analysis of the role of public policy in accelerating the pace of development. Technological knowledge would need to be diffused to the enterprise, firm or farm level which would require suitable conduits for information dissemination.

Agriculture

122. The achievement of an appropriate degree of self reliance in foodgrains combined with crop and livestock diversification in a cost-effective manner will be a major objective in some ADCs. Failing non-oil primary commodity prices should be explicitly incorporated in designing structural transformation in agriculture. In addition, poverty alleviation and environmental protection are likely to influence adjustment. Productive employment creation through increasing the labor intensity of agricultural production deserves serious attention.

123. A major recommendation made to the ADCs in the 1980s was to raise agricultural prices where they were below border prices to stimulate agricultural production. Price policy reforms took center stage in the 1980s compared to the emphasis on investment in irrigation and adoption of high yielding varieties (HYVs) of food grains in the 1970s. Here the concern is with the identification of the major issues in the agriculture sector in the 1990s as it undergoes a process of structural transformation.

124. Two aspects are important in the analysis of the policy environment facing agriculture. First, in the short term, agricultural


producers respond primarily to changes in relative prices between agricultural commodities and between price of output and prices of purchased inputs. In the long term, when resources are mobile, net resource flows to the agriculture sector depend on the terms of trade between the agriculture and non-agriculture sectors. While policies aimed directly at agriculture will be important in the short term, the indirect effect of macroeconomic policies such as exchange rate and the trade regime will have a bearing in the long term. The combined impact of direct and indirect policies will provide an assessment of the policy environment facing agriculture.

Direct intervention in agriculture would include: (i) export quotas and taxes which reduce the domestic price of agricultural commodities below international prices; (ii) subsidies on imports of agricultural commodities; (iii) purchases by marketing boards at low prices; and (iv) input subsidies. The major indirect interventions would include: (i) the maintenance of overvalued currencies which lower the returns to agriculture because the products of agriculture are usually more tradable than those of the non-agriculture sector; and (ii) the protection of the manufacturing sector from which agricultural inputs have to be purchased at high prices.

The effect of economywide or indirect policies on relative incentives in agriculture is incorporated in the terms of trade between the agriculture and non-agriculture sectors. The terms of trade are influenced by the real exchange rate and the price of goods produced in the non-agriculture sector. These, in turn, are affected by economywide policies. The non-agriculture sector consists of tradables and non-tradables. While exchange rate policies will affect the prices of tradable agricultural commodities and tradable non-agricultural products relative to the price of non-tradable non-agricultural products, trade policies to protect the non-agriculture sector will affect the price of tradable non-agricultural products.

In many Asian countries, the effect of the indirect macroeconomic interventions dominate direct interventions. Consequently, any discussion of reform of the price policy in agriculture will have to be in the context of the macroeconomic policy environment. It is noteworthy that the efficiency gains from trade and exchange rate reform can be considerable with substantial long-run resource reallocation to agriculture. Thus, if price policy initiatives in agriculture are viewed as second best interventions to alleviate the anti-agriculture bias resulting from macroeconomic policy biases, then the speed and nature of

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51 Krueger, Schiff, and Valdes, eds., op.cit.

agricultural price policy reforms will depend on the speed and nature of macroeconomic policy reform.

128. The discussion on price policy bias against agriculture is linked to output through the supply function. Agricultural output can be increased through: (i) movements along the supply function through improvements in agricultural price incentives; and (ii) shifts in the supply function through increases in total factor productivity. The direct price interventions described earlier are related to (i) above. Increase in agricultural productivity can be achieved by shifting investment toward rural areas and providing greater support for agricultural research and extension that will generate and disseminate new technologies. As indicated earlier, the steady erosion of public sector resources for development is of considerable concern in some Asian developing countries. Consequently, in many countries, the private sector will have to play a leading role in increasing agricultural productivity. Given the positive correlation between favorable terms of trade for agriculture and resource flows to agriculture, the indirect price interventions described earlier assume heightened importance for increasing factor productivity in agriculture. Thus, while price policy reforms associated with direct intervention will lead to movements along the supply function, price policy reforms associated with indirect intervention will result in shifts of the supply function by augmenting investible resources in agriculture.

129. Against this framework, two sets of issues will need to be addressed. First, on the question of movements along the supply schedule, will an increase in agricultural price lead to an increase in supply? Unless complementary inputs, infrastructure and institutions are available, an increase in price need not lead to an increase in supply. For example, a failure of infrastructure in terms of inadequate roads to transport agricultural goods would imply that higher output could not move to demand centers. Without access to credit farmers may not be able to respond to higher prices. The lack of marketing institutions resulting in high transaction costs and lower returns to farmers also act as disincentives. Apart from supply response, an important issue is that higher prices for agriculture goods could have serious adverse effects on the rural poor who are net buyers of goods. Creation of productive employment opportunities for those that are adversely affected must therefore be given priority.

130. This leads to the importance of shifts of the supply schedule associated with investment, innovation, information and institutions. Given the serious development budget constraints facing governments of many ADCs, the era of mega public sector irrigation projects is over. Instead, private investment is likely to play an increasingly important role in agriculture. Both foodgrain and commercial crop production will require new technology. While foodgrain research is a public good, in the case of cash crops, a lot of the research is commercially driven. The dichotomy between public and private costs and benefits will require government intervention. The effectiveness of institutions conducting research and disseminating their results will need to be improved for shifting agricultural supply schedules.
131. The creation of additional production, employment, income to alleviate poverty as well as absorb the ever increasing labor force is directly linked to the supply shifts. Price signals, private sector investment and research as well as strategic public interventions will be required to impart the necessary dynamism that will ensure an agrarian transition in some ADCs. An area where public sector initiative will have to be significant will be in environmental protection. The public good nature of these investments, and their high social returns, justify public sector investment. If this is inhibited by budget stringency, then the challenge will be to identify innovative alternatives.

132. In short, getting prices right in agriculture is a necessary but not a sufficient condition for agricultural growth. The improved policy environment associated with sectoral adjustment programs that are likely to yield long-run benefits must be accompanied by measures to compensate specific farmers for short term losses of income resulting from higher input prices and higher food prices. Policies to improve efficiency and resource allocation and to expand productive capacity of the sector must be coordinated for ensuring growth with equity.

Industry

133. Development strategies where the industrial sector plays a key role are likely to be crucial in the 1990s. These strategies are likely to have an export orientation or there will be neutrality between export and import activities. This will require major restructuring in the manufacturing sector in countries which had earlier adopted import substituting strategies. The restructuring will need to be undertaken in the context of changes occurring in the global economy: (i) emergence of new products associated with changes in technology, design and production processes; (ii) shorter product life cycles and cost reduction; (iii) changing consumer tastes; and (iv) factor intensity reversals caused by technological breakthroughs have reduced labor intensity of production in footwear, clothing, electronics thereby eroding the comparative advantage of some ADCs. In short, the dynamics of the market place are affecting the competitiveness of ADC exports. The restructuring of the manufacturing sector will have to be designed with a view to facilitating its ability to respond more rapidly to developments in world markets.

134. The efficient use of existing resources to increase supply in the short-run and the creation of a broader industrial base that will stimulate growth in output, employment, productivity and exports in the long-run will constitute some of the major objectives of the industrial sector. These objectives are directly linked to development strategies that are likely to be adopted in the 1990s. In this context, a major lesson of the 1980s that will continue to be relevant in the decade ahead is that export growth as an instrument for ensuring efficiency has a key role in economic growth regardless of the growth strategy adopted. Competition and efficiency are closely related.

135. There is growing evidence that competition is effective in cutting waste, improving technical parameters of production, forcing firms to restructure outdated operations, introduce new product lines and search
for new markets.\textsuperscript{53} This has led to the conclusion that ensuring a competitive environment is the most effective means of stimulating modernization and structural change in industrializing economies. Competition is a necessary but not a sufficient condition for industrial transformation. Access to skilled human resources, physical infrastructure, supplier networks, and technology are also required. In addition, an entrepreneurial class with an ability to mobilize resources in the face of market opportunities must exist in the industrial sector.\textsuperscript{54}

136. A competitive environment has three major elements: (i) competition among domestic producers; (ii) competition between domestic producers and foreign exporters to the domestic market, and (iii) competition between domestic exporters and foreign exporters in the international markets. The issues related to import competition (ii) and export competition (iii) have already been discussed in section VI. Given the description of government interventions in the industrial sector in section II, the existence of imperfectly competitive markets is to be expected in most ADCs.

137. Imperfection in domestic markets are caused by barriers to entry and exit. Barriers to entry include: (i) investment incentives that are biased towards capital intensive highly concentrated industries; (ii) credit incentives which reinforce the position of large incumbents; (iii) regulatory controls like capacity licensing and market reservation policies which are anti-competitive; and (iv) public sector procurement policies which lack transparency and encourage collusion among preferred suppliers. Barriers to exit are partly caused by the need to protect workers from unemployment and conserve capital. Exit barriers discourage investment in areas characterized by rapid changes in demand and short product cycles and block the introduction of new technologies that would lead to the elimination of certain product lines and scrapping older plants. In addition, imperfect competition is caused by pricing and distribution policies which have been used to allocate goods on a priority basis and to minimize the impact of short term supply shortfalls. Controlled prices encourage collusion among firms, discourage entry because of inadequate profits and hence reduce incentives for modernization and growth.

138. In the presence of functioning markets and a dynamic entrepreneurial class, competition is likely to be more effective than government controls and incentive systems in promoting industrial adjustment and efficiency. Furthermore, a competitive environment will be conducive to exploiting the opportunities offered by direct foreign investment. Rent seeking behavior by multinationals will be reduced thereby removing one of the major concerns of ADCs associated with direct foreign investment.


\textsuperscript{54} C. Frischtak, V. Zachau and B. Hadjimichael, "Competition Policies for Industrializing Countries", Industry Development Division (March 1989, Mimeographed).
An issue of considerable importance is the sequencing of reforms to ensure a competitive environment. Should external (import and export) competition precede or follow internal (domestic) competition? Reforms for external and internal competition must be simultaneous if resource reallocation is to occur. However, a case can be made for reforms for ensuring internal competition to precede reforms for ensuring external competition. Given the complex controls that exist in many ADCs, internal competition will have to proceed significantly and will require substantial effort and time before the stage can be set for external competition. Once internal competition has been achieved and the accompanying adjustments have occurred, the manufacturing sector or activity in question can be exposed to external competition with a reasonable chance for survival. A via media with progressive reforms to ensure internal competition accompanied by selective liberalization of imports and a replacement of quantitative controls by tariffs is another possibility.

A change in the competitive environment resulting in a change in the incentive structure will lead to industrial adjustment or restructuring which will take the form of (i) emergence of sunrise and decline of traditional sunset industries; (ii) adoption of new technology resulting in product quality improvement and cost reduction; (iii) substitution of existing by new industrial raw materials associated with the adoption of new technologies; (iv) growth of new industrial areas and shifting of industrial units to new location for reasons like environmental considerations; and (iv) change in size category of industrial establishments. The process of industrial restructuring will include: (i) technology absorption and adaptation; (ii) management reorganization; (iii) labor displacement; (iv) training of displaced labor; (v) induction of new skills and expertise; (vi) sale and redeployment of assets as part of the rehabilitation of individual enterprises.55/5

This description of industrial adjustment or restructuring leads to the identification of the following issues: (i) any restructuring will have associated adjustment costs; (ii) the financial system must facilitate the process of industrial restructuring; and (iii) responses at the firm or enterprise level will be a key factor in the restructuring process. The form and process of industrial restructuring will determine the nature of the supporting finance system. Unless the financial support system itself is viable, it will not be able to generate the resources required for restructuring. The viability of the financial support system will depend on the financial viability of the projects and schemes forming part of the industrial restructuring at the national, sectoral and enterprise levels. The industrial financial support system consists of financial institutions, instruments and regulations in the credit market; capital market; financial infrastructure services market like credit rating and merchant banking; and the links these markets have with the money market and the monetary authority. Given these requirements and

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financial repression characterizing many ADCs as described earlier, industrial restructuring and financial sector reform must proceed simultaneously.

142. The environment facing industrial enterprises embraces both the national and the international environment. Having already highlighted the issues emanating from the international environment, the national environment would include factors like the policy framework and infrastructural issues. The key policies of relevance are the regulatory policy (affecting entry, exit, capacity, pricing, location, etc.); trade policy (neutrality between import competing and export industries); monetary (exchange rate) and fiscal policy. The interaction of these policies can be labelled as competition policy (which include regulatory and trade policies), promotional policy (fiscal and monetary policies) and "picking winners" policy (fiscal, monetary and regulatory policies).

143. Infrastructure for industrial development, adjustment and restructuring can be defined to include software as well as hardware. Software would include skills and human resource development, marketing, information and consulting services and research and development (technological capacity). Hardware infrastructure would include utilities, roads, ports and industrial wastes disposal. The availability of software infrastructure will be important in ensuring flexibility at the enterprise level. The movement of goods and services and the uninterrupted supply of universal intermediate inputs like electricity and water require adequate hardware infrastructure.

144. The importance of enterprise or firm level responses in industrial adjustment is clearly seen in the context of technological development. While the availability of software and hardware infrastructure and conducive macroeconomic policies are important in determining the "technological environment" in a country, it is the microeconomic behavior which determines the success of technology transfer, adoption, adaptation and assimilation. Whether the international or domestic transfer of industrial technology does or does not contribute significantly to technological development as well as productivity increase depends largely on the active technological behavior of recipient firms — both with respect to the behavior at the technological transfer phase and the subsequent phase of production.

145. The process of technological capability acquisition and accumulation has two inherent characteristics. Firstly, it has a cumulative nature; i.e., the greater the quantity and quality of the existing stock of capability, the greater the increments to that stock. Secondly, there is a dynamic relationship between the investment-related and post-investment capability accumulation. Some of the capability accumulated during the post-investment phase maybe useful for further post-investment changes and future investment projects. A part of the capability acquired during the investment phase may be useful for subsequent post-investment phases and future investment projects. These two characteristics will thus generate a "virtuous circle" for the more technologically dynamic firms.
The basic function of all technology-related policies is to stimulate and foster efforts by firms to set the virtuous circle into rapid motion. To achieve this stage, there needs to be a redesigning of many policies and restructuring of policy instruments, e.g., industrial development policy and policies relating to international technology transfer and endogenous technology development. As for technology transfer policy, it might be useful to divert some of the efforts, from the hope of changing the behavior of technology-suppliers to the development of policy measures to generate demands by firms for pursuing an aggressive strategy to ensure that optimal outputs of knowledge, skill and experience are acquired by them along with their acquisition of production facilities.

The issue raised is that industry's capability to use technology and assessment of economic impacts are critically linked to individual firm level behavior. Firm level behavior in turn, is influenced by a set of complex issues which have been indicated in the earlier paragraphs. The interface between the "technological environment" and firm level behavior needs to be strengthened for better assimilation, adoption and innovation of technology.

The major thrust of industrial adjustment will have to be on efficiency based on competition and competitive conditions. In many ADCs, public enterprises play an important role in the industrial sector. Therefore, in the restructuring process, the objective of public enterprise reform should also be to enhance efficiency. Efficiency improvements can be divided into allocative and operational efficiency. These two dimensions of efficiency should emerge as two strands of public enterprise reform. The first strand of reforms encompasses the environmental changes which need to be effected for public enterprise restructuring at the enterprise level. These reforms should focus primarily on (i) reducing areas of public enterprise investment and (ii) redefining areas of future public enterprise investment. The second strand of restructuring should emphasize the operational dynamics of public enterprise toward the incorporation of efficiency aimed at (i) better performance of public enterprise, given their larger repercussions on the efficient functioning of the economy, and (ii) resource mobilization and generation of financial surplus. Within this strand, a distinction needs to be drawn between macro policies and micro reforms. Some aspects of macro policies are general and that they affect both public and private enterprise, while others related only to public enterprise functioning. Planning, project appraisal techniques and financing of public enterprise are specific to public enterprises. Monetary, fiscal, price and personnel policies comprise the general macro policies.

Micro policies for public enterprise restructuring constitutes the core of the reform process. Micro policy should aim at enhancing efficiency. Three micro areas of public enterprise restructuring aimed at efficiency should be distinguished: (i) ownership transfer (total versus partial divestiture); (ii) transfer of management control and (iii) marketization which is a process which permits the market to dictate the major activities of public enterprises. The three major areas of concern in the context of (iii) are (a) freedom in pricing; (b) freedom of
investment and financial autonomy; and (c) freedom with regard to personnel policies.

150. The link between the discussion on the national environment and public enterprise reform is straightforward. Budgetary constraints arising from the fiscal burden of subsidies and inefficiencies of industry and in particular of public enterprises imply that public enterprise restructuring with an emphasis on increased efficiency is inevitable. Three areas need to be highlighted in public enterprise restructuring: (i) the financial stringency which necessitates public enterprise restructuring itself hinders restructuring because it involves modernization and technology upgrading which depend on government finances; (ii) modernization and technology upgrading require rationalization of the labor force; and (iii) the political economy implications of reducing overstaffing could derail public enterprise restructuring. The tradeoffs between equity and efficiency will need to be carefully assessed in the design of a feasible restructuring of public enterprises.

Service

151. Depending on the stage of development, the service sector could either constitute the binding constraint to growth or the leading edge of development. The service sector is divided into non-traded and traded categories. The non-traded sector consists of hardware infrastructure (transport and communication); software infrastructure (health and education); and environmental protection. The traded sector comprises tourism as well as financial, technical and professional services. While the non-traded service sector may become the binding constraint in some ADCs, the traded service sector could be the leading edge of development in the more advanced ADCs. In this subsection, the discussion will be confined to the non-traded service sector.

152. In the three sector framework of Figure 1, an input-output or inter-industry relationship exists between agriculture, industry and services. Hardware infrastructure will be the important intermediate input in agriculture and industry. Two characteristics of hardware infrastructure are that it is capital intensive and most of it is in the domain of the public sector. Any supply constraints would need to be immediately relaxed if the growth process is not to be retarded. If public investment is inhibited by budget stringency, then innovative solutions may have to be attempted including user-pays cost recovery, aggressive pursuit of foreign aid and involvement of the private sector through such arrangements as the build-operate-transfer and build-own-operate systems.

153. Government budgetary constraints, need for resource mobilization and efficiency considerations will require a far reaching revamp of pricing structures of public utilities. In this context, it is pertinent to point out that recent literature on public finance indicates that the imposition of financial targets on enterprises can be an inefficient method of achieving fiscal objectives, because they neglect the differences in the distortionary costs of raising revenue in different
industries. These financial targets generally specify requirements such as the need to reach certain rates of return on investment or for the enterprise to break even. It is better to decide prices on the basis of their economywide efficiency effects without regard to financial targets. If financial targets are important to enterprises, these levels can be determined on the basis of pricing policy that is best for each enterprise. This approach would reverse a common situation where prices are determined by financial targets.

154. Issues raised in the previous subsection on public enterprise reform would also be relevant for the hardware infrastructure sector. The high capital intensity and crowding out effect of investment in this sector imply that the macroeconomic implications of public enterprise reform are likely to be substantial. Further, the fiscal burden of subsidies to public enterprises in hardware infrastructure will need to be reduced and this issue is related to both public utility pricing and efficiency improvements expected from public enterprise reform.

155. Some ADCs will have to make a significant effort in the 1990s in health and education to hasten the demographic transition as well as ensure growth and alleviate poverty. Increasing budgetary allocations to software infrastructure when budgetary constraints are increasing will require fundamental changes in approach. In social services like health and education, the policy of uniform and heavy public subsidization will need to be reviewed for a number of reasons. First, despite significant improvements in health and education in most ADCs, massive investment is still required. Human resource sectors will be adversely affected if they have to solely rely on government budgets and hence additional sources of funding will be needed. Second, uniformly low prices for social services imply that high cost services are much more subsidized than low cost ones. The poor have little access to high cost services. Third, limited resources devoted to social services are badly allocated with little going to cheap and cost effective alternatives. On account of all these reasons pricing policies for social services will need to undergo major change.

156. One of the most important lessons of the NIEs was the role of productivity through people in the age of changing technology in sustaining growth. Human resource development is an integral component of establishing resilient economies with an export orientation. Building up a pool of skilled and disciplined labor through vocational training initiatives will be required to promote the adoption of newer technology. Despite considerable increase in the spread of literacy, the shortage of technical personnel continues to be a major impediment to the growth of many ADCs. The greatest constraint is at the lower and middle levels.

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As the different sectors of the economies grow, particularly the industrial sector, these constraints would become more binding. It is, therefore, essential that facilities for technical, vocational and science education are expanded to meet the growing needs of the ADCs. At the same time the quality of education needs to be improved to ensure the relevance to the changing environment.

157. The public and quasi-public good nature of many of the activities in the service sector require public sector intervention. Against the background of growing budgetary deficits, aid fatigue on the part of the industrialized countries and the enormous investment and outlays associated with current expenditures of many of the service sectors, a reordering of priorities on the role of the state is likely in the decade ahead.

VIII. ROLE OF THE STATE

158. The Asian development experience has been characterized by strong state intervention caused by the almost universal belief in market failure. Market failure can be natural or artificial. Under certain conditions, free markets will automatically lead to the achievement of economic efficiency. When markets depart from these conditions in the absence of government intervention, natural market failure is said to exist.\textsuperscript{58} Natural market failure can be caused by monopolistic elements, external economies, public goods and paradoxes and fallacies. Natural market failure provides the rationale for two sets of roles of governments: (i) macroeconomic interventions designed to augment growth rates, stabilize prices and ensure external balance; and (ii) sector and market-level interventions designed to correct for specific market failures. Artificial market failure is defined as (i) policy interventions which are designed to correct natural market failure but which are either inappropriate, insufficient or excessive; or (ii) policy interventions which disrupt an otherwise efficiently functioning market.

159. At the macroeconomic level, reference has already been made to the problems caused by growing budgetary deficits. These have, in many countries, been aggravated by sectoral interventions which resulted in artificial market failures leading to the belief that imperfect markets are superior to imperfect planning.\textsuperscript{59}

160. While misallocation of resources associated with artificial or bureaucratic failure provides a partial explanation for the low productivity of investment in some ADCs, there is another aspect that is important. Subsidies, controls and licenses associated with directed credit, import policies and industrial regulation led to alliances between


\textsuperscript{59} Lal, 1983, op.cit.
government and various vested interests. This is appropriately summarized for the Indian case in the following manner:

"Even those of us who had actively promoted the earlier policies of the fifties and early sixties have come to realize for some time now that we had underestimated the long-term deleterious effects of controls and had not appreciated sufficiently the potential for a self-serving alliance between political leaders and civil servants on the one hand and captains of industry or the large farmers who have sufficient clout both socially and financially on the other."\textsuperscript{56/}

Alliances associated with government intervention encouraged activities like tariff-seeking, lobbying, tariff evasion, premium seeking for import and industrial licenses. These activities which lead to financial gains for those who engaged in them did not produce goods or services as are generally understood though they resulted in resource use. They have been termed directly unproductive profit (DUP) seeking activities which shrinks the production possibility of an economy.\textsuperscript{61/} These DUP activities while prevalent in most ADCs have been particularly harmful in those ADCs where government policy interventions have completely stifled any form of competition both in the external and domestic sectors of the economy.

161. The discussions in sections II and III indicate that the role of state from the 1950s to 1980s underwent modification owing to changing perceptions of objectives and constraints that are inherent in the development process. In the 1950s and 1960s, the state intervened to invest in physical infrastructure and capital goods industries to alleviate constraints in savings and foreign exchange. In the 1970s, concerns shifted to alleviate poverty. The 1980s witnessed the movement towards 'pricism' or get prices right and state minimalism in terms of recommendations for decentralization, deregulation and privatization. This movement was triggered by the excesses associated with earlier government interventionist policies, dwindling development resources and a concern to improve efficiency of resource use.

162. In the 1990s, the role of the state should be designed with a view to integrating the lessons of the 1970s and 1980s in terms of the efficient use of resources but with a renewed concern for social justice, poverty alleviation and protection for the environment. A major constraint that will influence the role of the state will be the availability of development resources at its command. Given the objectives of growth, equity and environmental protection and the constraint of resources, the challenge to the ADCs in terms of the role


of the state would be to design an optimal mix of instruments in terms of public investment and policy interventions.

163. Establishing a conducive macroeconomic environment in terms of attaining a low rate of inflation and current account equilibrium will be a necessary condition for facilitating structural changes and attaining high growth rates. The state by tailoring its propensity to spend with its ability to raise revenues will play an important role in establishing a conducive macroeconomic environment. Public enterprise reforms would be high on the agenda on account of both macroeconomic and sectoral efficiency considerations.

164. At the sectoral level, public intervention will take two forms: investment and policy reform. The constraints on the availability of public sector resources and the inefficiencies and inequities associated with government induced artificial market failure imply that the role of the private sector and the market mechanism in determining the volume and allocation of investment will increase significantly in the decade ahead. In agriculture and industry, the private sector is likely to play the lead role in resource mobilization and investment. Policy reform will be accompanied by restructuring from agriculture to industry to services as well as within the industrial sector among subsectors. The role of the government would be to encourage efficient restructuring by helping increase factor mobility, reduce transition or adjustment costs and minimize political opposition which might lead to rigidities in the system. The areas of policy reform indicated in this paper would lead to transparency and automaticity in policy intervention thereby reducing the arbitrary exercise of power by governments. This would provide a link between integrity in public life and economic efficiency thereby reducing opposition to the reform process among the general public.

165. Both inter and intra sector restructuring may require government intervention in situations when natural market failure occur through externalities in information, research and development, training, etc. or market imperfections occur as in capital markets. Interventions, when necessary, should be based on certain guidelines: (i) they should be supportive of market trends and forces, and should facilitate rather than hinder change; (ii) they should be targeted to address specific market failures or imperfections directly; (iii) they should not stifle efficient private initiative and not limit competition; (iv) they should be part of a coordinated effort to reach the desired policy framework; and (v) if intervention is caused by non-existence of markets, then the intervention should be so designed that whenever possible competitive markets evolve over time.

166. The design of policy reform and government intervention should be such that they provide "functional" support across entire sectors. Past experience in the ADCs suggests that government intervention on the subsectoral level or for specific firms or entities should be minimized. Implicitly, a case has been made against agricultural, industrial or export "targeting" or "picking the winners". Instead, reforms should be directed at improving the policy environment for entire sectors.
167. An area where functional support will be crucial is technology development. With the expected increase in the relative importance of cash crop and industrial sectors, an issue that is likely to become important is the distribution of benefits from science and technology. Unlike foodgrain research which is a public good and whose dissemination was relatively easy, in the case of cash crop and industrial research there is likely to be a dichotomy between private and public costs and benefits. This dichotomy is linked to external economies associated with research activities and the risk of investment in research. Subsidization of private research, direct public sector involvement in research and the introduction of institutional arrangements that encourage research in the private sector constitute some of the approaches that can be used by governments to increase the areas of research. In general, the private sector can be expected to conduct research activity in areas where it is relatively easy for the investor to capture the benefits, but to shy away from research with a biological or organizational orientation where the appropriation of gains is much harder. Issues related to private versus public incentive versus directly funded research, and large scale versus small scale, etc. are areas which will require careful state intervention.

168. A factor that needs to be considered is the relationship between the role of the state and stage of economic development. In this context, countries at advanced stages of industrialization could require significant state intervention. Countries exporting goods which are technologically intensive will require significant research and development (R&D). The following points are noteworthy. First, the output of R&D activities has some attributes of a pure public good. Second, owing to diffusion of benefits over time, social benefits of R&D activities could exceed private benefits. Third, the risk of doing research is high. This can become an important factor if an economy has not developed adequate risk markets to shoulder a part of the investor’s risks. Fourth, technological development requires software infrastructure and a legal framework to enforce property rights. On account of all these factors, significant state intervention may be required to foster technological development even in relatively advanced countries.\textsuperscript{66}

169. Structural transformation of any economy will have winners and losers. State intervention will be required to minimize the adjustment costs that are to be borne by the losers. The nature of the intervention should be guided by: (i) maintaining a floor for minimum nutrition, health and education levels; (ii) complementing the organized sector in the adjustment process through greater integration with the small scale informal sectors; and (iii) restructuring social services like education, health, water and sanitation to improve access for the vulnerable sections of society.\textsuperscript{67}

170. The greatest challenge to the state would be in the service sector in terms of hardware and software infrastructure and protection of the environment. The public good nature of these facilities provides the

\textsuperscript{66} Chen, op.cit.

\textsuperscript{67} Streeten, 1987, op.cit.
case for strong state intervention. On both growth and equity considerations, significant public investment will be needed in this sector. For example, the alleviation of poverty in rural areas will require the provision of certain basic infrastructure like rural roads and drinking water supply. Left to the normal development process, many people may not get access to these facilities and get by-passed. A target oriented program to establish facilities for elementary and adult education, rural health, rural roads, rural water supply, rural housing, rural electrification and nutrition would then be required. Public investment would be essential to get the process started.

171. Given the enormous public investment required for social infrastructure, the effectiveness and sustainability of that investment become important. The following issues are pertinent. First, public investment projects should pass the economic cost-benefit test. Second, elements of cost recovery must be inbuilt at the outset. Third, the subsidy element, if any, should be self-eliminating over time. Each project must be subject to a market test in terms of the beneficiaries being willing to compensate the losers. Cost recovery and subsidy elimination go together. Given the constraints associated with fiscal deficits, project sustainability would depend on cost recovery.

172. In hardware infrastructure like the power sector, major state initiatives will be needed for public enterprise restructuring with the aim of improving efficiency and resource mobilization. An important aspect of public enterprise restructuring is the need for providing transparency and accountability in their activities. The major issues in this area are: (i) total ownership transfer versus partial divestiture of equity; (ii) transfer of management control through dilution of equity and/or subcontracting; and (iii) marketization associated with autonomy from government, freedom in pricing policies, freedom in investment and financing policies and freedom in personnel management. The political economy ramifications of public enterprise reform makes the issue of restructuring particularly complex.

173. The above discussion suggests that the role of the state in the structural transformation of Asia in the 1990s should be an active one. It will be a via media between the state minimalism or pricism advocated in the 1980s and the strong interventionist public investment approach adopted in the 1960s and 1970s. Instead of supplanting the price mechanism, the role of the government would be to create the policy and institutional framework to ensure competitive market conditions, to correct market failure and to provide the necessary incentives and investments in such areas as human resource, infrastructure and technology development.

174. The sustainability of policy reforms will ultimately depend on sector and aggregate supply response associated with more efficient resource allocation. Supply response will be determined by firm and farm level behavior. Therefore, the administrative changes and required

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institutional strengthening to make the impact of policy reform operational at the firm and farm levels will need to be carefully considered as well. In addition, the availability of the infrastructure and support services at the firm or farm levels will be crucial to ensure adequate supply response. Public support for policy reform which is essential for its sustainability, will increase if reform is demonstrably related to improvements in integrity and public morality.

175. Public investment in social infrastructure to ensure growth and equity will distinguish the role of the state in the 1990s. High growth rates will be essential to generate the investible resources for this public investment. The provision of public goods and services that characterized the neoclassical arguments for state intervention will provide the raison-d'être for governments in many ADCs to continue to play an important role. Public investment targeted to improving equity and environmental protection and public policy targeted to facilitate the workings of the price mechanism through reduction of artificial market failure and elimination of natural market failure provide the broad parameters of the role of the state in the 1990s.

IX. SUMMARY AND CONCLUSION

176. The purpose of this paper was to examine the issues involved in designing strategies and policies for managing structural change in the ADCs. The ADCs consist of a wide spectrum of countries at different stages of development. While strategies and policies will be country specific, an examination of the broader issues is useful for countries as they leapfrog from one stage to another. The concept of change has many aspects: external environment, development objectives and constraints, strategies and policies. The point to note is that change in any of these elements requires appropriate responses.

177. The responses in this paper have been analyzed in the context of the structural transformation that economies undergo in the development process. The structural transformation is described in terms of the movements from rural to urban, from agriculture to industry to services, from production for household consumption to production for markets and from largely domestic trade to a higher ratio of foreign trade. In this paper, the nature of the responses have been analyzed in terms of the external environment facing the ADCs and the internal environment which includes development objectives, constraints, strategies and policies.

178. The three major external factors considered are the international trading environment, foreign capital inflows and transfer of technology. Though uncertainty about industrialized country growth rates may dampen export prospects, the emerging dynamism within Asia resulting in a 'north-south' polarization offers the ADCs challenges as well as opportunities in terms of export markets for manufactured goods. While the transformation of the United States from a creditor to debtor nation will draw badly needed funds from capital deficient developing countries and the historic changes in Eastern Europe is likely to divert European interest and capital away from Asia, the Asian experience in the
1980s suggests that well managed and thriving economies can still attract foreign capital. The important lesson is that countries should provide an attractive economic and political environment to draw foreign capital. Technological innovation is proceeding more rapidly than ever before and confer major advantages on the innovators to the detriment of developing countries attempting to move up the technology ladder.

Against this background, growing flexibility constitutes both a condition for and an objective of structural transformation. The paper discusses development strategies and policies with a view to achieving resilience and flexibility given the development objectives and constraints. The major development objectives in the 1990s are likely to include growth, poverty alleviation, equity and environmental protection. The stage of development in terms of the demographic, agrarian and industrial transition and constraints consisting of resource availability and absorptive capacity will also be important considerations in terms of the choice of strategy and policies.

Development strategies are described in terms of three dimensions: domestic demand versus export demand; inward versus outward orientation; and agriculture versus industry versus services. Twelve development strategies are analyzed and seven are singled out for consideration for countries at various stages of the development and growth process. An important lesson of the 1980s and which will continue to be relevant in the 1990s is that export growth as an instrument for ensuring efficiency has a key role in economic growth regardless of the growth strategy adopted. This aspect is explicitly considered in the description of the strategies.

The paper links strategies to policies through determination of the volume, sectoral allocation and efficiency of investment. While macroeconomic monetary and fiscal policies will determine the volume of investment, the interaction of macroeconomic policies with exchange rate, trade and sectoral policies will influence the sectoral allocation and efficiency of investment. An important issue in sectoral reform is that if policy initiatives in a sector are viewed as second best interventions to alleviate bias resulting from macroeconomic policies, then the speed and nature of sectoral reform will depend on the speed and nature of macroeconomic policy reform.

A legacy of the 1980s for many ADCs at the macroeconomic level will be the policy implications of external and government budget deficits. Both aggregate demand and supply policies through fiscal, monetary, exchange rate, resource mobilization and other measures will need to be carefully tailored to control external deficits and inflation as well as to ensure growth. To ensure growth, aggregate supply policies to (i) improve efficiency and resource allocation and (ii) expand productive capacity of the economy have been emphasized. The micro foundations of macroeconomics must feature prominently in the design of policy reforms in the 1990s.

Reform in the financial sector will be crucial for growth on both capacity augmenting and efficiency considerations. Adjustment of interest rate structures consistent with inflation rates and other market
forces will have an impact on the volume as well as the composition of savings resulting in an increase in investible resources. Reduction in directed credit programs will facilitate capital mobility across sectors. Allowing different lenders to charge different interest rates to different users will ensure that credit is allocated to activities with the highest rates of returns. A major reform in the 1990s is that the commanding heights of finance held in the public domain will have to be relinquished by governments.

184. In the management of the external sector, the exchange rate will be the crucial macroeconomic variable in establishing the right mix between traded and non-traded sectors. A development strategy with an outward orientation whether it is export-led or domestic demand-led will hinge on the adoption of the right real exchange rate. Reform in the external sector will also involve both import and export policy reform. While the direction of import liberalization to ensure efficiency is straightforward, the process of reform and rationalization will be long and difficult. In this context, the role of export promotion policies will be crucial in the 1990s. Such policies by stimulating export growth will relax the external deficit constraint thereby increasing the degrees of freedom for import liberalization. Export policy design would be influenced by the need to put potential exporters on an equal footing with world market competitors. A feature that will become increasingly important in the next decade is that the links to the multilateral trading systems must be explicitly incorporated in evolving the trade policies of the ADCs.

185. The centerpiece of policy reform will be in the domestic sector. The sustainability of reform hinges on adequate supply response associated with efficiency gains and investment. Adjustment or restructuring critically depends on resource reallocation which requires factor and resource mobility. The rationalization of regulatory controls, incentive schemes, price and distribution controls, and public sector procurement policies will be important in removing exit and entry barriers in industry. These, in turn, will improve the competitive environment. In agriculture, policy reforms would be required in the areas of stabilization and relative price structures. Public sector pricing policies in both social and other sectors would require significant changes on both efficiency and equity considerations. It should be noted that focus on efficiency improvements should not be confined to the public sector or industry but on the entire economy. Rigidities in agriculture, generation of electricity, banking and many others would need to be removed.

186. In this paper, policy reform to ensure a competitive environment has been stressed. This has three major elements: (i) competition among domestic producers; (ii) competition between domestic producers and foreign exporters to the domestic market; and (iii) competition between domestic exporters and foreign exporters in international markets. A competitive environment will not only stimulate efficiency and modernization but will also reduce the arbitrary exercise of authority by governments. Further, the benefits of competition are independent of the nature of asset ownership since both public and private sector enterprises
that face a competitive environment advocate and use resources more efficiently.

187. While the reforms described will improve the efficiency of resource use by rationalizing the incentive structure, it is important to note that the availability of complementary inputs and infrastructural services are equally important in generating adequate supply response. Furthermore, investment, innovation and information must be considered together to augment productive capacity. The availability of suitable institutions for designing and implementing policy reforms is also necessary.

188. Alternatively, in terms of a static framework, an improvement of incentives is a necessary but not sufficient condition for supply responses. The availability of inputs, infrastructure and institutions together with improved incentives constitute necessary and sufficient conditions. In a dynamic context, in addition to the above, the availability of investment, innovation and information constitute the necessary and sufficient conditions for growth. The dynamic aspects will become increasingly important in the 1990s.

189. Any process of structural transformation will have winners and losers associated with sunrise and sunset activities. Adjustment costs associated with change should be alleviated and state intervention may become necessary on equity considerations. The role of the state in the structural transformation of Asia in the 1990s should be an active one. It will be a via media between the state minimalism or pricism advocated in the 1980s and the strong interventionist public investment approach adopted in the 1960s and 1970s. Instead of supplanting the price mechanism, the role of the government would be to create the policy and institutional framework to ensure competitive market conditions, to correct market failure and to provide the necessary incentives and investments in such areas as human resource, infrastructure and technology development.

190. Public investment in social infrastructure to ensure growth and equity will distinguish the role of the state in the 1990s from the earlier decades. High growth rates will be essential to generate the investible resources for this public investment. The provision of public goods and services that characterized the neoclassical arguments for state intervention will provide the raison-d'être for governments in many ADGs to continue to play an important role. Public investment targeted to improving equity and environmental protection and public policy targeted to facilitate the workings of the price mechanism through reduction of artificial market failure and elimination of natural market failure provide the broad parameters of the role of the state in the 1990s.

191. A judicious mix of private sector initiative and public sector intervention will be required in the decade ahead. The nature of the mix will vary across countries depending on the stage of development and growth. Given the magnitude of the challenge in achieving a comprehensive set of objectives in the face of mounting pressures on public finances, selective and strategic public investment and public policy interventions will be required to relax binding constraints to speedily achieve the
development objectives. Through the design of appropriate strategies and policies, the role of the state in the ADCs in the 1990s should be to act as a catalyst for economies to manage change.