How did East Asia grow so fast? Slow progress towards an analytical consensus

Singh, Ajit

University of Cambridge

17 November 1994

Online at https://mpra.ub.uni-muenchen.de/53435/
MPRA Paper No. 53435, posted 08 Feb 2014 16:05 UTC
HOW EAST ASIA GREW SO FAST?  SLOW PROGRESS TOWARDS AN ANALYTICAL CONSENSUS

Ajit Singh,
Faculty of Economics,
University of Cambridge,
Cambridge,
England.

DRAFT, October, 1994.  Comments most welcome.
CONTENTS

HOW EAST ASIA GREW SO FAST? SLOW PROGRESS TOWARDS AN ANALYTICAL CONSENSUS.

1. PROLOGUE: THE BRETTON WOODS INSTITUTIONS ECONOMIC POLICY PROGRAMME

2. THE DEVELOPMENT CHALLENGE AND THE EAST ASIAN MIRACLE: THE MAIN THESSES

3. PRODUCTIVITY, GROWTH AND INVESTMENT
   3.1 The total factor productivity (TFP) approach to economic growth
   3.2 TFP and the East Asian growth process

4. EFFICACY OF INDUSTRIAL POLICY: CONCEPTUAL ISSUES
   4.1 What is Industrial Policy?
   4.2 Assessment of Industrial Policy

5. THE INDUSTRIAL POLICY INEFFECTIVENESS DOCTRINE

6. OPENNESS: 'CLOSE' VERSUS 'STRATEGIC' INTEGRATION WITH THE WORLD ECONOMY
   6.1 Degrees of Openness of the East Asian Economies
   6.2 Protection and Export Promotion: Alternative Interpretations
   6.3 Foreign Direct Investment
6.4  Price Distortions

6.5  The Optimal Degree of Openness and Strategic Integration with the World Economy

7.  COMPETITION IN THE DOMESTIC MARKETS

7.1  Collusion and Competition in Japan

7.2  Large Firms and Domestic Competition in Korea

7.3  Capital Markets

7.4 An Assessment

8. WHY DID THE EAST ASIAN COUNTRIES NOT HAVE A DEBT CRISIS IN THE 1980S

8.1 The Great Continental Divide

8.2  Competing Explanatory Hypotheses

8.3 Evidence

8.4 Assessment

9. SAVINGS AND INVESTMENT IN EAST ASIAN ECONOMIES

9.1 The main issues

9.2 How Were High Rates of Savings and Investment Achieved in East Asia?

9.3 Assessment

10. INDUSTRIAL POLICY, NATIONAL TECHNOLOGICAL SYSTEM AND INTERNATIONAL COMPETITIVENESS

10.1 National System for Enhancing Technological Capabilities

10.2 Macro-economic Stability and Industrial Policy

11. UNRESOLVED ISSUES: AN AGENDA FOR FUTURE RESEARCH

11.1 Unresolved Issues
1. Prologue: The Bretton Woods Institutions Economic Policy Programme

Although in the post-World War II period as a whole, developing countries have made substantial economic and industrial progress, during the last decade or so, many of them, particularly in Latin America and Africa, have been in an acute economic crisis. As a consequence, these countries have been obliged to go to the Bretton Woods institutions (BWIs) for economic assistance for stabilisation and structural adjustment. Such assistance has, however, normally only been forthcoming subject to conditionality, both short and long term. Implicit in this conditionality is a specific approach to economic policy for achieving long term economic growth. Central to this perspective are two elements:

i. An increase in the role of free markets and private enterprise as far as possible and a diminution in that of the state. Hence the BWI espousal of measures such as privatization, deregulation, financial

---

1 This paper brings together my previous work in this area. It draws on and extends the analyses in Singh (1992b, 1993a, 1993b, 1994a, 1994b).

2 For an analysis of the reasons for this crisis, see among others Dornbusch (1985); Singh (1986a, 1992a); World Bank (1991) and various issues of UNCTAD'S Trade and Development Report. For a discussion of the intercontinental differences and specifically for the reasons why the Asian countries by and large escaped the economic crisis of the 1980s and the Latin American countries did not, see the analysis in Section 8 below and the literature cited therein.

3 For an analysis of the increasingly detailed and overlapping conditionality of the World Bank and the IMF, see Avramovich(1988). In principle the IMF is supposed to deal with the short-term adjustment problems and the World Bank with the long-term questions of economic development. Avramovich suggests that in practice, because of cross conditionality, the IMF's own structural adjustment loans, and the greater co-operation between the two institutions, the distinction has become much blurred.
liberalization, changes in taxation and other incentive systems. This reduced role for the state, is encapsulated in the World Bank concept of a 'market-friendly' approach to development.

ii. A close integration with the world economy. Hence the emphasis in BWI structural adjustment programmes on export promotion, import liberalization, bringing domestic prices in line with the world market prices through changes in the exchange rate, promotion of foreign investment.

Denying any philosophical or ideological proclivities, the IMF and the World Bank as well as many orthodox economists argue that they favour such a policy programme on the basis of its empirical validity and its proven record in promoting fast and "efficient" economic growth. Thus De La Rosiere (the former Managing Director of the IMF): "Advocacy of these policies is not a matter of theology. It is instead grounded in the lessons of actual country experience."  

In two widely influential studies - World Bank(1991), hereafter referred to as the Development Challenge, and World Bank(1993), hereafter referred to as the East Asian Miracle - World Bank economists have also explicitly set out this policy perspective and provided analyses and evidence in support of it. The economic experience of the outstandingly successful East Asian economies over the last three decades plays a key role in these studies. The East Asian Miracle, which deals with the economic record specifically of these countries, argues that notwithstanding evidence of widespread and heavy government intervention in these economies, their experience is fully compatible with the World Bank structural adjustment programmes and the kind of policy advice outlined above, that the Bank has been offering to developing countries around the globe.

The World Bank's views on East Asian economic development are controversial and have been

---

4 De La Rosiere (1986), page 308. For an expression of similar views by the current managing director of the IMF, see the IMF Survey, 10 December, 1990.
vigorously challenged by a number of economists, not all of whom are heterodox.\textsuperscript{5} World Bank economists, however, apparently believe that the East Asian Miracle basically closes the chapter on the analyses and the lessons to be learnt from the economic record of that region. Thus, Lynn Squire (1993), Director, Research Department at the World Bank:

"Let me now turn to the question of future research. In very broad terms, I see two possible directions. One avenue would take as its starting point the view that there is still a lot to learn about the East Asian experience, and that the focus should be on the still-unanswered questions. The other approach while acknowledging that there are a lot of unanswered questions, would take as its initial position the view that the real issue is the relevance of the East Asian experience for other developing countries.

While there is undoubtedly scope for research in both areas, I would like to suggest that the emphasis ought to be on the second. . . . now the East Asian study is completed, the research agenda lies more in Africa and other developing countries than it does in East Asia".

This paper will argue that Mr. Squire's proposed closure of the debate on East Asian development record is a trifle premature. It will be suggested that this debate has certainly made progress and has led to a degree of convergence between the Bank and its critics on some analytical and empirical issues. However, key questions are still unresolved and the analyses of the East Asian Miracle have raised fresh matters. More importantly, there is a wide chasm between the two schools on the policy implications of the East Asian experience.

The chief purpose of this paper is to carry this debate further by identifying and commenting on some of the most important issues which still remain in contention. The paper will, \textit{inter alia, also} outline an alternative framework for examining the question of the nature and degree of a country's desirable integration with the world economy, which leads to a rather different policy conclusion than that at (ii) above. It will be argued here that, in contrast to the recommendations of the Bretton Woods institutions (BWIs), developing countries should actively seek 'strategic' rather than 'close' integration with

\textsuperscript{5} See the review articles on the East Asian Miracle in Amsden (1994). For earlier contributions see, in particular, Amsden (1989); Wade (1990); Boltho (1985); Singh (1993b).
the international economy. Further, with respect to (i), the present paper will suggest that government needs to have a far bigger role in economic activity than is envisaged in the 'market-friendly' approach. It will be contended that in mixed economy countries with reasonably effective states, the government should pursue a dynamic industrial policy to bring about the desired structural transformations in the economy as speedily as possible, in order to achieve fast economic growth. These, it will be argued, are the correct lessons to be learnt from the East Asian economic record.

Taking into account previous contributions to the debate, the paper concentrates on the following specific issues:

(a) the question of the effectiveness of industrial policy;

(b) the issue of 'openness'; how open were the East Asian economies during their periods of fast growth?

c) the nature of competition in domestic product and capital markets;

(d) the role of savings and investment in East Asian economic growth.

(e) the question why the East Asian countries did not have a debt crisis whilst the Latin Americans did.

(f) the relationship between technology policy, industrial policy and international competitiveness.

(g) the relationship between the 'fundamentals', macro-economic stability and industrial policy.

Particular attention will be paid here to the theoretical underpinnings of the World Bank analyses of these issues. Specifically, the neglect of the role of 'demand' in such analyses will be highlighted. This,
it will be shown, leads to incorrect interpretations of the East Asian development record at key stages of the Bank's argument. For space reasons, and also to sharpen the debate, the empirical analysis will be confined here to Japan and South Korea - two of the most important exemplar countries. It will be shown that a proper consideration of the role of the balance of payments constraint and of demand leads to a rather different interpretation of the experience of these economies from that provided by World Bank economists.

The paper is organised as follows. Section 2 presents the main analytical theses and the policy recommendations of both the Development Challenge and the East Asian Miracle. Section 3 comments on the total factor productivity approach to economic growth which is the theoretical foundation of the Bank's analysis. Section 4 considers the central issue of the efficacy of industrial policy in Japan and South Korea. It outlines the conceptual issues involved in defining industrial policy and assessing its success or failure. The East Asian Miracle's industrial policy ineffectiveness theorem is examined in section 5 in the light of the foregoing analysis. Section 6 considers the question of openness and section 7 that of competition in domestic markets. The salient question of how the East Asian countries were able to avoid the debt crisis in the 1980s which so completely crippled the Latin Americans in that 'lost decade' is considered in section 8. Section 9 considers the role of savings and investment in East Asian economic growth. The inter-relationship between industrial policy, technology policy, international competitiveness and macro economic stability are examined in section 10. Section 11 concludes and outlines the main issues for further research which the East Asian experience raises and which continue to be extremely important and relevant for both development theory and policy.

2. THE DEVELOPMENT CHALLENGE AND THE EAST ASIAN MIRACLE: THE MAIN THESES

World Bank(1991,1993) are seminal works which provide a comprehensive account of the Bank economists' thinking on development problems and their conclusions on public policy. The 1991
Development Challenge is important because, in the words of the then President of the World Bank, Mr Barber Conable, it "synthesises and interprets the lessons of forty years of development experience" by Bank economists. The significance of the 1993 East Asian Miracle lies in the fact that the Bank economists invariably justify their policy advice to developing countries around the world by reference to the experience of the sustained fast growth of the East Asian economies. However, the two studies complement each other and need to be studied together. The first provides the Bank's general analytical framework and its broad market-oriented approach to development issues. The second, as noted earlier, argues that, notwithstanding heavy government intervention in East Asia, the experience of these countries is still compatible with the 1991 Report's recommendation of a 'market-friendly' approach, and therefore does not necessitate any significant departures in the Bank's policy advice.

The starting point for the Development Challenge is the question: why during the last four decades some developing countries have been successful in the sense of substantially raising their per capita incomes whilst other have not? The central analytical argument is that economic growth is determined essentially by the growth of total factor productivity of capital and labour. The Development Challenge's analyses comes to the conclusion that the more open an economy, the greater the degree of competition and the higher its investment in education, the greater would be its growth of total factor productivity and hence its overall economic growth. Although the significance of the international economic factors was recognised, a major argument of the study was that domestic policy matters far more for raising per capita incomes than world economic conditions.

The Development Challenge stated: "Economic theory and practical experience suggest that (government) interventions are likely to help provided they are market-friendly" (p. 5). In order for 'market-friendly' not to be a mere tautology, the study, to its credit, defined the concept fairly precisely in the following terms:

a. Intervene reluctantly. Let markets work unless it is demonstrably better to step in...  [It] is usually a mistake for the state to carry out physical production, or to protect the domestic production of a good
that can be imported more cheaply and whose local production offers few spillover benefits.

b. Apply checks and balances. Put interventions continually to the discipline of international and domestic markets.

c. Intervene openly. Make interventions simple, transparent and subject to rules rather than official discretion.

Overall, the state's role in economic development in this 'market-friendly' approach is regarded as being important but best limited to providing the social, legal and economic infrastructure, to creating a suitable climate for private enterprise, but also, significantly, to ensure a high level and appropriate composition of human capital formation. Even this limited role for the state is, nevertheless, an advance over the earlier neo-classical thinking which enjoined governments simply to avoid distortions, and just provide a stable macro-economic environment and a reliable legal framework.

Both the neo-classical and the 'market friendly' analyses have encountered serious intellectual difficulties since neither can satisfactorily explain the outstanding success of East Asian economies. Heterodox authors, such as Amsden(1989), Wade(1990), Singh(1993a,1993b), Boltho(1985) have pointed out that in countries like Japan, South Korea and Taiwan, the government has played a leading and a heavily interventionist role in the course of their economic development.

The Development Challenge stated, "The central question of this Report is why countries like Japan have succeeded so spectacularly while others have failed." Singh(1993b), therefore, suggested that the relevant issue is to what extent, if any, the Japanese followed the Report's prescriptions and a 'market-friendly' approach to development. Did the Japanese government intervene in the markets 'reluctantly': did it for example leave the prices and production priorities to be determined by the market forces and simply provide the necessary infrastructure for private enterprise to flourish? How
'transparent' was the government intervention in Japanese industry? To achieve this colossal economic success, how closely did the Japanese economy integrate with the world economy?

The Development Challenge did acknowledge the inescapable fact that there was considerable government intervention in the course of post-War Japanese development. The important issue, however, is whether the Report’s characterisation of this intervention and lessons to be drawn from it are valid. Singh called attention to the overwhelming evidence which showed that the governments in Japan, South Korea and Taiwan did not intervene (a) either reluctantly or (b) transparently in any of these economies. Specifically, in their periods of fast economic growth, the governments in Japan (1950-73) and South Korea used a wide array of interventionist instruments including: import controls; control over foreign exchange allocations; provision of subsidised credit, often at negative real interest rates, to favoured firms and industries; control over multi-national investment and foreign equity ownership; heavy subsidisation and 'coercion' of exports, particularly in Korea; a highly active state technology policy; restrictions on domestic competition and government encouragement of a variety of cartel arrangements in the product markets; promotion of conglomerate enterprises through mergers and other government measures (Korea). The government in these countries, not only intervened at the sectoral level, but also far more intrusively at the level of the individual firm through the so called 'administrative guidance'.

Singh concluded that between them, Japan, South Korea and Taiwan did all the things which the 'market-friendly' approach to development is not supposed to do. Above all, all three countries followed an 'industrial strategy'- a set of policies to deliberately change the market prices and production priorities - which is explicitly ruled out by this approach. The Development Challenge acknowledged that there was significant state intervention in all these three countries but argued that 'these economies refute the case for thoroughgoing dirigism as convincingly as they refute the case for 'laissez-faire' (p.5). Heterodox economists agree that the experience of these countries is certainly an argument against laissez-faire; nor does it provide any support for "command" planning of production of the
Soviet-type, which in effect supplants the market altogether. However, for mixed economy developing countries with effective governments, these economists suggest that the post-War East Asian economic history is unequivocally an argument for adopting an industrial strategy, for guiding the market, and not following the hands-off 'market-friendly' approach as enunciated in the Report.6

2.1 As a response to these criticisms,7 the East Asian Miracle has produced a new analysis of the economic development of the high performing Asian economies (HPAEs) including Japan. This study fully acknowledges the facts of enormous government interventions in these countries. Thus, the Report:

policy interventions took many forms - targetted and subsidised credit to selected industries, low deposit rates and ceilings on borrowing rates to increase profits and retained earnings, protection of domestic import industries, the establishment and financial support of government banks, public investment in applied research, firm- and industry-specific export targets, development of export marketing institutions, and wide sharing of information between public and private sectors. Some industries were promoted while others were not (p.6).

However, the Report goes on to suggest that such interventions, particularly in the sphere of industrial policy, had in general a limited effect. Some of these worked for some of the time in a few countries, but overall they were neither necessary nor sufficient for the extraordinary success of these countries.

Thus, the East Asian Miracle:
"What are the main factors that contributed to the HPAE's superior allocation of physical and human capital to high yielding investments and their ability to catch up technologically? Mainly, the answer lies in fundamentally sound, market oriented policies. Labour markets were allowed to work. Financial markets, ... generally had low distortions and limited subsidies compared with other developing economies. Import substitution was ... quickly accompanied by the promotion of exports. ... the result was limited differences between international relative prices and domestic relative prices in the HPAE's. Market forces and competitive pressures guided resources into activities that were consistent with comparative advantage ...". (Page 325).

---

6 The question of 'openness' of the East Asian economies during the period of fast economic growth is considered later.

7 Apart from these academic attacks on the World Bank's theses on the East Asian economies, there was importantly criticism from the Japanese government. See Shiratori(1993) and Lall,(1994).
In other words, the final policy conclusion, is still essentially the 'market- friendly' approach to development, albeit, in a new packaging. Developing countries are recommended to seek their comparative advantage, to get the prices right, to have free markets as far as possible. Such policy conclusions are very much in accord with the basic analytical paradigm of the Development Challenge: "Competitive markets are the best way yet found for efficiently organising the production and distribution of goods and services. Domestic and external competition provides the incentives that unleash entrepreneurship and technological progress"(page 1).

3. PRODUCTIVITY, GROWTH AND INVESTMENT

3.1 The Total Factor Productivity (TFP) Approach to Economic Growth

The theoretical foundation of the World Bank analyses is the TFP approach to economic growth. It is suggested that inter-country and inter-temporal variations in growth rates are caused by variations in total factor productivity of capital and labour. Changes in the latter variable are thought to be determined mainly by economic policy - the degree of openness of an economy, the extent of competition in the product and factor markets, and investment in physical and human capital (education), particularly the latter. The underlying chain of causation is that competition and education promote technical progress, and therefore TFP growth and hence economic expansion. "Free mobility of people, capital, and technology" and "free entry and exit of firms" are regarded as being particularly conducive to the spread of knowledge and technical change.

Now at a theoretical level, there are several well-known objections to the causal model underlying the TFP approach to economic growth. The model assumes for example full employment of resources and perfect competition, none of which obtain in the real world. Moreover, it is a wholly supply-side model which ignores altogether the role of demand factors. The latter, as we shall see below, is a

---

8There is an enormous literature on the subject. For a lucid analysis of the relevant issues under
critical weakness which creates serious difficulties for the Bank's analyses of the East Asian as well as other economies.

With respect to empirical evidence, even a cursory consideration of the data presented by Bank economists themselves in the Development Challenge (see table 1) reveals the serious limitations of the TFP approach. The table provides figures for the growth of GDP, capital and labour inputs and TFP, separately for each of the sub-periods, 1960-73 and 1973-87, for each of the five developing regions as well as for a group of 68 developing economies; in addition, it also provides similar information for each of the four leading industrial economies. These data show that in every region, and for each country or group of countries shown in the table except South Asia (ie. in nine out of ten observations), the rate of growth of TFP fell substantially during 1973-87, compared with 1960-73. For example, TFP growth fell in East Asian developing economies from 2.6 percent p.a. in the first period to 1.3 percent p.a. in the second period; in Latin America, the corresponding figures were 1.3 percent p.a. and -0.4 percent p.a.; for the group of 68 developing economies, the TFP growth fell from 1.3 percent to -0.2 percent over the two periods. However, in South Asia - notably the only region which registered a trend increase in its GDP growth between the two periods - TFP growth rose from zero in 1960-73 to 1.2 percent p.a. during 1973-87.

In terms of the causal model underlying the World Bank analysis, this almost universal fall in TFP growth in the recent period would be due to policy mismanagement - low rates of technical progress caused by distortions, lack of competition, lack of integration with the world economy, etc. The evidence, however, is not compatible with such an analysis, since as Bank economists themselves note there has actually been more competition, greater integration of the world economy, less distortions in most developing countries in the latter period (particularly in the 1980s) than in the former.

These facts are much more in accord with an alternative theoretical model (Verdoorn's Law) which discussion here, see Nelson [1981].
would suggest that the fall in the world and the national economic growth rates in the post-1973 period was responsible for the decline in the rate of growth of productivity in most regions. Verdoorn's Law\(^9\) predicts that the faster (slower) the growth of production, the faster (slower) the growth of productivity. Regression analysis shows the following relationship between the two variables in Table 1.

\[ p = -0.17 + 0.59q \]

\(^{-0.54}\) \((3.8)\)

\[ R^2 = 0.60 \]

Where \(p\) is the change in the growth rate of productivity and \(q\) is the change in the growth rate of output between the two periods. Parentheses give t values of the coefficients.

The decline in world economic growth after 1973, in terms of this model, was due to a lower rate of growth of world and national demand caused by a whole range of factors (e.g. the collapse of the Bretton Woods system, the growth of real wages in a number of industrial countries outstripping productivity growth in the wake of the first oil shock) connected with the fall of the Golden Age of development of the OECD economies.\(^{10}\)

### 3.2 TFP and the East Asian Growth Process

The specific analysis of the East Asian growth process in the East Asian Miracle also raises similar

---

\(^9\)The classic references here are Verdoorn (1949) and Kaldor (1966). For a review, see Mcombie (1987).

\(^{10}\) The period 1950-73, when the OECD economy grew at an unprecedented rate of almost 5% per annum — twice its historic trend rate of growth — has rightly been termed the Golden Age of capitalism. Glyn, Hughes, Lipietz and Singh, (1990) provide a detailed analysis of why the Golden Age rose in the first place and why it fell following the 1973 oil shock. See also Maddison [1982]; Bruno and Sachs [1985]; Kindleberger [1992]. To avoid misunderstanding, it must be emphasised that we are not considering here the question of short term monetary demand management, but rather that of the forces which affect the long term rate of growth of real demand.
serious intellectual difficulties. The empirical analysis of the East Asian Miracle shows that the high rates of investment in the East Asian countries made an important contribution to their economic growth. However, this analysis also points to the conclusion that investments in these countries were more efficiently utilised and hence were more productive than elsewhere. The study's estimates of the TFP growth rates indicate that these were considerably higher in the 'Miracle' countries than in other developing economies. The East Asian Miracle notes: "What is most striking, however, is how little we are able to account for differences in growth rates between the HPAEs and other economies on the basis of conventional economic variables. We are able, in the end, to predict only about 17% of the actual differences in growth rates between the HPAEs and Latin America. We do somewhat better between Sub-Saharan Africa and the HPAEs, predicting about 36% of the difference. Controlling for their superior rates of accumulation, the HPAEs still outperform while Sub-Saharan Africa and Latin America underperform the statistical relationship between accumulation and growth, leaving much of the regional difference in per capita income growth unexplained (even though a large fraction of HPAE success is explained). They have been apparently more successful in allocating the resources that they accumulated to high productivity activities and in adopting and mastering catch up technologies." [P54; underlining added. Endnotes in the passage omitted as these did not affect the argument.]

However, important empirical studies on TFP growth in East Asian countries by Young(1994) and Lawrence and Lau (1992) contradict the World Bank findings and provide indirect support for the UNCTAD\Rodrik view. To illustrate, Young's cross-country estimates of TFP growth (reproduced in table 2 for a selection of countries), based on purchasing power parity data, show that Korea and Taiwan had lower TFP growth than did Bangladesh! Similarly Kim and Lau's econometric analysis (1992) of "meta production functions" across countries shows that South Korea and Taiwan have experienced hardly any technical progress at all. In other words, in terms of the TFP methodology, most if not the whole of economic growth of countries like Korea can be explained by the fast expansion of factor inputs, including \textit{inter alia} capital inputs arising from very high rates of capital accumulation
An interesting neo-classical interpretation of these new empirical findings on TFP growth in East Asia is provided by Krugman (1994). He argues on the basis of these results that the high growth rates of the East Asian miracle economies are not sustainable. This in his view is for the following reasons. It is unrealistic to expect that countries which are already investing 40 % of their GDP will be able to raise their rate of investment much higher still. Krugman goes on to point out that these countries similarly already have highly educated and high quality labour forces which limits the scope for further improvement in these sphere as well. In these circumstances, without technical progress, eventual decreasing returns to investment will set in and limit the growth potential of these economies.

However, on the basis of the classical (non neo-classical) paradigm, UNCTAD economists [see UNCTAD, 1994; Akyuz and Gore, 1994] provide a radically different interpretation of these empirical phenomena. UNCTAD economists suggest that the high growth rates of the exemplar East Asian countries were mostly, if not entirely, due to their high rates of accumulation. In this paradigm, there is no reason why eventual decreasing returns should set in with high rates of investment since technical change is regarded as being 'embodied' in new capital goods, high rates of investment lead to faster technical progress, greater learning by doing, and through cumulative causation to a virtuous circle of greater competitiveness and faster economic growth. So what matters most in the UNCTAD view is not static resource allocation and getting prices 'right' or 'wrong', but the dynamics of the accumulation process and the associated technical change and the growth of productivity.11

4. EFFICACY OF INDUSTRIAL POLICY: CONCEPTUAL ISSUES

The TFP approach is prominently used in the East Asian Miracle's critique of the industrial policy thesis of the revisionist economists. One of that study's most controversial findings is what may be called, by

11. Rodrik(1994b) also regards high rates of investment as the key variable in East Asian success, although his underlying causal model is rather different from that of the UNCTAD economists.
analogy to Lucas' well known theorem, the industrial policy ineffectiveness doctrine. The study asserts that contrary to popular perceptions, rigorous analysis shows that these policies were largely ineffective. Thus the East Asian Miracle in relation, for example, to Korea:

"Moving away from the anecdotes about individual chaebol, the quantitative importance of government intervention to alter the structure of production is not confirmed at the sectoral level." (p.333)

The clear message of the study is that if industrial policies could not succeed in the East Asian countries with their highly efficient bureaucracies, ipso facto these would be inappropriate for the rest of the developing world which is not blessed with such high quality administrative assets.

Before examining the specific analyses put forward in the East Asian Miracle in support of this contention, there are two important conceptual issues which require attention: what is industrial policy?; how should the "success" or otherwise of such a policy be assessed?

4.1 What is Industrial Policy?

Governments in almost all market economy countries intervene to a greater or a smaller degree in the operation of their industries. For example, even the US government, normally regarded as non-interventionist, in fact, intervenes in industry through a variety of measures, e.g. anti-trust laws, industrial standards, pollution regulations, labour laws, infrastructural and defense expenditure as well as in a variety of other ways. However, most people would agree that despite such extensive interventions, the US does not have an 'industrial policy', while Japan and East Asian countries do.

What makes Japanese interventions into an industrial policy and the US interventions not? An essential answer to this question is that in Japan, the myriad of government policies affecting industry are coordinated and viewed as a coherent whole, and the government has a strategic view of the
country's industrial development in relation to the world economy. In this sense South Korea, and other East Asian countries also have an industrial policy. Japan's strategic view in the 1950s and 60s was eloquently expressed by Vice Minister Ojimi of MITI as follows:

The MITI decided to establish in Japan industries which require intensive employment of capital and technology, industries that in consideration of comparative cost of production should be the most inappropriate for Japan, industries such as steel, oil-refining, petro-chemicals, automobiles, aircraft, industrial machinery of all sorts, and electronics, including electronic computers. From a short-run, static viewpoint, encouragement of such industries would seem to conflict with economic rationalism. But, from a long-range viewpoint, these are precisely the industries where income elasticity of demand is high, technological progress is rapid, and labour productivity rises fast. [OECD, 1972].

At the end of World War II, the bulk of Japanese exports consisted of textiles and light manufactured goods. In the view of Ojimi and his colleagues at MITI although such an economic structure may have conformed to the theory of comparative advantage (Japan being a labour-surplus economy at the time), it was not capable of raising, even in the long run, the Japanese standard of living to that of the European and American levels. One interpretation of Ojimi's argument above would be that the purpose of the Japanese industrial policy was no more than to pursue the country's dynamic comparative advantage, but to do that as quickly as possible. The other non neo-classical interpretation, which does not necessarily exclude the previous one, is that the purpose of the industrial policy was to guide the market to deliberately create a competitive advantage in areas where world demand was likely to rise rapidly and in which it would therefore be in Japan's long term interest to specialise. As Magaziner and Hout (1980) note: "On balance, Japan's industrial policy has been anticipating rather than reacting to international competitive evolution".

Support for the non-neoclassical interpretation is provided by the fact that although in the 1950s and 1960s, MITI's structural programme could be justified in orthodox terms by the infant industry argument, these structural policies have continued, albeit in an attenuated form, right up to the present day. MITI continues to provide blueprints and to seek wide business and social agreement towards its future structural visions for the evolution of Japanese economy in the years ahead, as the world
competitive situation and Japan's role in the world economy changes. As Johnson, Tyson and Zysman [1989] note with respect to what they term Japan's developmental policy: "The purpose of policy was domestic development, and it grew out of a conviction that comparative advantage can be created by intentional government policy."

Parenthetically, although this paper concentrates on the Japanese economic record for the period 1950-1973 (because of its greater relevance to problems of developing countries), it is important to emphasize that there have been important changes in the subsequent period in the conduct of MITI's industrial policies. In general, MITI does not now have the same kind of coercive policy instruments (e.g., allocation of foreign exchange) as it did in the high growth period. Moreover, the economy is much too complex to be effectively controlled by government edicts. In addition, there has been continuing relentless pressure from abroad for liberalisation of the economy to which the government has reluctantly submitted. Nevertheless, as Johnson, Tyson and Zysman point out, the country's traditional developmental policy - based on protection of the home market and promotion of domestic industries through a variety of measures - continues. MITI has to use more indirect instruments as well as moral persuasion to a far larger degree than it did before. 'Administrative guidance', MITI's close links with industry and trade associations and importantly, business practice, are the important policy tools in the new context. The industry policy focus would now appear to be on the so-called sunrise industries (i.e., industries of the future such as biotechnology, new materials) and sunset industries (i.e., declining industries such as textile, steel and shipbuilding where Japan has lost its competitiveness). Johnson, Tyson and Zysman suggest that in response to liberalisation pressures of the post 1973 period, the government has implemented a "moving band of openness" in which "restrictions on the ability of foreign firms to develop a permanent presence in the Japanese market have been removed only where Japanese firms have already achieved a dominant position at home and a strong often dominant position abroad. In other words restrictions have been removed when they don't matter anymore". This may be an extreme position but its basic truth is corroborated by other students of Japanese industrial
4.2 Assessment of Industrial Policy

How does one assess the success of an industrial policy like that of Japan during 1950-1973, the reference period for the present analysis? It is not a straightforward question since one needs a credible counter-factual - what would have happened in the absence of industrial policy? Would Japanese industrial production still have grown by nearly 13 per cent a year between 1953 to 1973, its GNP by nearly 10 per cent and its share in world exports of manufactures change by a huge 10 percentage points? Since it is impossible to carry out a controlled experiment, one has to seek other ways of making such an assessment. However, this is not a new problem raised by the consideration of the Japanese industrial policy, but one which always confronts applied economists in their everyday work.

One way to answer this kind of question in the absence of a controlled experiment, would be to compare the performance of countries which were in other relevant ways similar to Japan, but which did not have an industrial policy like that of Japan. This after all is the broad methodology underlying the Development Challenge itself which compares the experiences of different countries to find out why some were successful and others were not. A closer analogy would be the studies which assess the success of Bank’s structural adjustment programmes by comparing countries which did have such programmes with those which did not. There are of course well recognised problems with such comparisons: to be able to provide satisfactory evidence on the issue the two groups of countries should be as similar as possible in all other ways.

Similarly, a second way of assessing the success of Japanese industrial policy would be to compare the country’s post-war economic record under an industrial policy, with its own performance in the

---

12. See further Okimoto [1989]; Dore [1986].
pre-war period when it was not pursuing such policies. A third way of assessing the policy would be to examine it in terms of the goals which the country may have set for itself. In the Japanese case, during the period 1950-73, a very important proximate goal of MITI was to ensure a current account balance at as high a growth rate as possible. In other words, the balance of payments was seen as the main constraint on fast economic growth in this period. (Shinohara, 1982; Tsuru, 1993). The government pursued this objective by a wide range of measures including _inter alia_ a policy of extensive import controls, together with the promotion of exports of certain key industries, which changed over time.

Boltho (1985a, 1985b) examines the Japanese industrial policy on these criteria and concludes that the policy was successful. Boltho's analysis is complemented by Magaziner and Hout's (1980) detailed and careful evidence based on case studies of several specific industries. These strongly suggest that the industrial policies were successful in propelling the targetted industries into pre-eminence in international competition. So how do World Bank economists conclude that industrial policy in countries like Japan or South Korea was ineffective?

5. THE INDUSTRIAL POLICY INEFFECTIVENESS DOCTRINE

The first reason for such a negative assessment of industrial policy by the East Asian Miracle is that it has a very narrow definition of industrial policy. The study states: "We define industrial policies, as distinct from trade policies, as government efforts to alter industrial structure to promote productivity-based growth." (p.304). In other words industrial policy is regarded only as a policy to upgrade industrial structure. The East Asian Miracle makes no attempt to consider the industrial policy as a whole in all its various aspects. It also departs, without any justification, from the standard methodology outlined above for assessing the effectiveness of industrial policy. Instead, it adopts a so-called functional approach to examine three types of government interventions: (a) directed credit, (b) export promotion, and (c) structural policy. It comes to the conclusion that whereas (a) and (b) were successful, (c) was not.
There is no acknowledgement that (a) and (b) as well as other policies such as extensive import protection for the whole economy and not just the favoured sectors were closely connected with (c), and all three, together with other industrial policies should therefore be judged together. To recall the analogy with Bank's own structural adjustment programmes, the Bank's procedure in the present case amounts to an assessment of a single component of the structural adjustment programmes such as say devaluation, without reference to the interconnections with the rest of the programme. This is not to say that it is not an interesting and a legitimate exercise to consider the effectiveness of a single component of a structural adjustment programme (or of an industrial policy). However, to do that its links with the other components must be explicitly recognised. It also requires a much more elaborate counter-factual exercise e.g. simulation of a macro-econometric model, first with the structural adjustment programme, and then with one in which the component under reference is not considered.

However, Bank economists have not carried out such research. The interconnections between different aspects of industrial policy in countries like Japan or Korea have either not been examined at all or as shown below, not correctly interpreted\(^{13}\). Nevertheless, within its own terms, the reasons for the rejection of the efficacy of industrial policy by the East Asian Miracle rests on two propositions:

1. That the industrial structure which emerged in industrial policy economies like Japan and South Korea was not all that different from what it would have been had these countries not had an industrial policy (i.e., the observed industrial structure was ex-post market conforming and accorded with the changing relative factor intensities and prices).

2. That the total factor productivity growth of the industrial policy favoured sectors was no different from that of the unfavoured sectors.

---

\(^{13}\) Rodrik (1994a) provides an alternative critique of Bank economists' methodology on this issue. He regards it as inappropriate to lump the three elements together because a) and b) are instruments and c) is an objective.
As tests of the ineffectiveness of industrial policy, even in this narrow sense, (1) and (2) are inadequate. To illustrate, suppose we take the neo-classical interpretation of Vice-Minister Ojimi’s rationale for Japan's industrial policy noted earlier. In this interpretation, all that MITI was doing was pursuing Japan's dynamic comparative advantage, helping to create an industrial structure to accord with it. However, it was attempting to do so in as short a time as possible. The resulting industrial structure would of course in equilibrium be market conforming. So that even if it were true that the market forces, left to themselves, may have generated the same kind of industrial structure, it may have taken a much longer time to do so and hence resulted in a much lower rate of economic growth. Bank economists do not address this crucial issue of the speed of adjustment at all.

The problem with the test (2) above is that it overlooks the effects of industrial policy on a country’s balance of payments and its long term rate of growth of domestic demand. By confining its attention only to the supply side effects of productivity growth and technical change, as predicted by the TFP approach, the East Asian Miracle hypothesises that 'spillovers' of these activities will be confined only to the favoured sectors, or their close sub-sectors within the two digit industrial classification which they have analysed. However, to the extent that industrial policy helps to relieve the balance of payments constraint, most sectors will benefit from higher rates of growth of production and hence productivity (by Verdoorn's Law), and not just the favoured sectors. In other words, the spillovers will be universal.

Thus test (2) cannot discriminate between industrial policy and non-industrial policy states\textsuperscript{14}. To do that, one needs to look at the costs and benefits of industrial policy interventions in terms of their relieving the balance of payments constraint in the short and the long run. More specifically, it would require \textit{inter alia}, an examination of the contribution of the favoured sectors to the growth of exports or

\textsuperscript{14}On test (2), Kwon (1994) presents an empirical critique of Bank economists conclusions with respect to Korea. He provides alternative estimates of TFP growth to show that in Korea, contrary to the East Asian Miracle, TFP growth in the favoured sectors was in fact higher than in the non-favoured sectors.
to the reduction in the growth of imports over time.

It is the failure to consider such factors which leads Bank economists to conclude that South Korea's Heavy Chemical industry (HCI) in the 1970s was unsuccessful, while heterodox economists suggest that it was a success. The reasons for these conflicting judgements are that Bank economists consider only the cost of the HCI drive but not its benefits to the long term trajectory of the country's balance of payments and hence to overall economic growth. Amsden(1994a) points out that the mainstay of Korea's celebrated export success in the 1980s was precisely these HCI industries.\\footnote{The question of the time horizon over which the costs and benefits of industrial policy interventions are assessed is of course crucial. Amsden and Singh(1994) point out that for thirty years there were few foreign cars to be seen on Korean roads and few Korean cars to be seen on foreign roads. In other words, the Korean government provided protection to the car industry for long periods of time because of the difficulties involved in the learning and the assimilation of foreign technology in developing countries.}

Parenthetically, a related point which is relevant here is that the Bank economists ignore the fact that in Korea the industrial policy favoured sectors were not just the high capital intensity sectors but importantly these included textiles (precisely because of its contribution to the balance of payments) for most of the period. (see Chang, 1994). However, the Korean government knew as did the Japanese before them, that howsoever successful a country may be in the export of textiles, to sustain fast overall rates of growth of exports over time, it needs to regularly add new export products to the list. Hence the need to continuously upgrade the industrial and export structure of the economy, albeit, if it pleases the Bank in accordance with the country's dynamic comparative advantage. However, it will be appreciated that the factor proportions Heckscher-Ohlin theory does not yield any precise predictions where a country's dynamic comparative advantage lies as it accumulates capital and skills. The theory predicts a movement towards skill intensive exports but does not specify which ones. In Japan and Korea, the government selected and nurtured these industries where it thought the country did, or should (in non neo-classical interpretation) have dynamic comparative advantage.
Bank economists seem to be unaware of an ironic implication of their analysis. If despite heavy government intervention, the Japanese and the Korean industrial structures still conformed to these countries' dynamic comparative advantage, a reasonable inference must be that on average the government was correctly able to 'pick the winners'! Hence, at this level of analysis, in Bank economists' own terms, the Japanese or the Korean industrial policies should be regarded as a success.

To sum up, the above analysis indicates the Bank economists arrive at their industrial policy ineffectiveness doctrine by (a) considering industrial policy in a very narrow sense; (b) by ignoring its multi-facted character and the important linkages between its different components; and (c) even within their own terms by using inappropriate tests for assessing the success or otherwise of industrial policy. The first of their tests is flawed because it does not consider the critical issue of the speed of adjustment to a country's dynamic comparative advantage; the second is marred by the fact that it abstracts from the effects of industrial policy on the balance of payments constraint and hence on overall demand - issues which are critical in the real world of imperfect or incomplete markets in semi-industrial economies. The theoretical paradigm of TFP, with its assumptions of full utilisation of resources and perfect competition, which the Bank economists use is inappropriate for such analyses.

6. OPENNESS: 'CLOSE' VERSUS 'STRATEGIC' INTEGRATION WITH THE WORLD ECONOMY

6.1 Degrees of Openness of the East Asian Economies

The virtues of openness, international competition, close integration with the world economy, are stressed in several Bank publications (see in particular the Development Challenge). Evidence suggests, however, that these virtues were not in fact practised by either Japan or Korea, the two East Asian countries we concentrate on here.
With respect to the nature and extent of "openness" practiced by the East Asian economies, Table 2 provides some relevant data on Japan. It gives comparative figures on imports of manufacturers into Japan and other industrial countries between 1961 and 1979. During this period, as a proportion of GDP, Japanese imports rose by 66 percent. This compares with a threefold increase in the corresponding U.S. imports, more than tripling of the U.K. imports and a nearly 250 percent growth in the imports of other European Economic Community countries. In 1979, manufactured imports constituted only 2.4 percent of the Japanese GDP; the corresponding proportion in Britain and other countries of the EEC was five to six times larger. Even in the United States which traditionally, because of its continental size, has a relatively closed economy, the volume of imported manufacturing goods in the late 1970s was proportionally almost twice as large as in Japan. Clearly, during the 1960s and 1970s (and even more so in the 1950s) the Japanese economy operated under a regime of draconian import controls, whether practised formally or informally.

Table 2. Import-Penetration in Manufactures in Advanced Industrial Countries, 1961-1979 (ratio of manufactured imports to GNP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>1.5</td>
<td>2.1</td>
<td>3.4</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td>U.K.</td>
<td>4.6</td>
<td>6.7</td>
<td>8.0</td>
<td>11.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Rest of EEC 9</td>
<td>6.1</td>
<td>7.6</td>
<td>10.1</td>
<td>13.0</td>
<td>15.8</td>
</tr>
<tr>
<td>Japan</td>
<td>1.8</td>
<td>1.5</td>
<td>2.2</td>
<td>3.0</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: CEPG (1979).

Thus, despite the strong export orientation of the Japanese economy, it was far from being open or closely integrated with the world economy. The stories of Taiwan and South Korea, subject to certain modifications, also point in the same general direction.[see further Amsden (1989) and Wade (1990)].

6.2 Protection and Export Promotion: Alternative Interpretations
What was the role of this high degree of protection in the East Asian economies? The East Asian Miracle acknowledges the facts of this protective regime but essentially argue that this was generally a negative influence which was kept in bounds only by the government pursuit of export targets and export contests. (p.18).

However, as noted earlier, Bank economists fail to see, first, that generalised protection was one of the mechanisms used by the Japanese and the Korean governments to alleviate the balance of payments constraint. Secondly, and equally significantly, there is little recognition of the fact that protection played a very important, positive role in promoting technical change, productivity growth and exports in these countries. To appreciate how the policy of protection worked at a microeconomic level, consider the specific case of the celebrated Japanese car industry. Magaziner and Hout (1980) point out that "government intervention in this industry was characterized by three major goals: discouragement of foreign capital in the Japanese industry and protection against car imports, attempts to bring about rationalization of production, and assistance with overseas marketing and distribution expenditure" (p. 55). The government imposed comprehensive import controls and adopted a variety of measures to discourage foreign investment in the car industry. Quotas and tariffs were used to protect the industry; the former were applied throughout the mid-1960s, and prohibitively high tariffs till the mid-1970s. Moreover, "the government controlled all foreign licensing agreements. To make technology agreements more attractive to the licensor, it guaranteed the remittance of royalties from Japan. The policy stipulated, however, that continued remittances would be guaranteed only if 90 percent of the licensed parts were produced in Japan within five years"—about as powerful a domestic content arrangement as one can get.

Just as importantly, protection provided the Japanese companies with a captive home market leading to high profits which enabled the firms to undertake higher rates of investment, to learn by doing and to improve the quality of their products. These profits in the protected internal market, which were further enhanced by restrictions on domestic competition (see Section 7), not only made possible
higher rates of investment (see Section 9), but also greatly aided exports. Yamamura (1988) explains the mechanism involved:

Because increased output meant reduced cost per unit it translated into increased profits on the product sold at high fixed prices in the domestic market, even if the increased output had to be exported at no profit or even at a loss. . . . Manufacturers enjoyed a margin of error when making . . . major investment decisions. Essentially, even in the face of the high probability that the increase in output would have to be sold unprofitably on the international market the expansion was still worth the risk. The stronger the "home market cushion"—or the more effective the cartels and protection on the domestic arena—the smaller the risk and more likely the Japanese competitor was to increase capacity boldly in anticipation of demand growth. This can give the firm a strategic as well as a cost advantage over a foreign competitor operating in a different environment who must be more cautious (page 177).

6.3 Foreign Direct Investment

An important feature of both, the Japanese and the Korean governments' industrial policy has been the discouragement of the foreign direct investment. Available statistics indicate that among the developing countries Korea was second only to India in its low reliance on FDI inflows. Foreign capital stocks totalled just 2.3 per cent of GNP in 1987 in Korea, above the 0.5 per cent estimate for India, but far below the levels of 5.3 per cent for Taiwan, 17 per cent for Hong Kong, a massive 87 per cent for Singapore, 10 per cent for Brazil and 14 per cent for Mexico. UN (1993). In the view of the World Bank economists, this discouragement was a self-imposed handicap which was compensated for by the fact that both countries remained open to foreign technology through licensing and other means. [East Asian Miracle, p.21]. The Bank economists do not ask the question that if the Japanese and the Korean governments were as efficient and flexible in their economic policy as they themselves suggest (to account for their long term overall economic success), how come they have persisted with this apparently wrong-headed approach for so long?

An alternative interpretation is that the approach was perhaps not so wrong-headed. It was 'functional' within the context of the overall industrial policies which the two countries were pursuing. First, it would have been difficult for MITI or for the Korean authorities to use 'administrative guidance' to the same degree with the foreign firms as they were able to do with the domestic ones. Secondly, as
UN(1993) rightly emphasises, there is a link between the national ownership of the large Korean firms (Chaebols) and their levels of investment in research and development. Korea has, in relative terms, by far the largest expenditure on R and D among developing countries: 1.9 per cent of GNP in 1988, compared with 1.2 per cent in Taiwan (1988), 0.9 per cent for India (1986) and Singapore (1987), 0.5 per cent for Argentina (1988), 0.6 per cent in Mexico (1984) and 0.4 per cent in Brazil (1985). The country's performance in this area outranks that of many developed countries - for example Belgium (1.7 per cent in 1987), Denmark (1.5 per cent in 1987), Italy (1.2 per cent in 1987). It is of course still below that of industrial super powers, Japan (2.8 per cent in 1987) and Germany (also 2.8 per cent in 1987).

Thirdly, Freeman (1989) stresses another important advantage of the policy of mainly rejecting foreign investment as a means of technology transfer. This, he argues, automatically places on the enterprise, the full responsibility for assimilating imported technology. This is far more likely to lead to total system improvements than the 'turn-key plant' mode of import or the foreign subsidiary mode.

### 6.4 Price Distortions

A quantitative measure of openness used in the East Asian Miracle in its econometric analyses is the so called 'Dollar-Index'- the degree to which the relative domestic prices in the HPAEs differed from international relative prices. On that measure, it turns out that both Japan and Korea (as well as Taiwan) were among the least open of the economies. Relative prices in these countries were more distorted than in countries such as Brazil, India, Mexico, Pakistan and Venezuela.¹⁶ Most of the latter countries are often held up by the Bretton Woods institutions as prime examples of countries which do not 'get the prices right'.

---

¹⁶ This important fact is noted by the East Asian Miracle (p. 301) but its significance is not appreciated.
It is also relevant to note in this context that the Japanese Government maintained exchange controls and kept a steady nominal exchange rate with respect to the U.S. dollar over almost the whole of the period of that country's most rapid growth (1950-73). Purchasing power parity calculations by Sachs (1987), using Japanese and U.S. price indices, show a 60 percent real appreciation of the exchange rate between 1950 and 1970.

6.5 The Optimal Degree of Openness and Strategic Integration with the World Economy

To sum up, the experience of Japan and Korea comprehensively contradicts the central theses of many World Bank Reports that, the more open the economy, the closer its integration with the global economy, the faster would be its rate of growth. During their periods of rapid growth, instead of a deep or unconditional integration with the world economy, these countries evidently sought what might be called 'strategic' integration, i.e. they integrated up to the point that it was in their interest to do so as to promote national economic growth. If (as stated in the Development Challenge), the purpose of the Bank economists was to find out why countries like Japan have been so successful in economic development during the last forty years, they have clearly been using the wrong paradigm for examining Japanese economic history. The basic problem is that the underlying assumptions of this paradigm are greatly at variance with the real world of static and dynamic economies of scale, learning by doing, and imperfect competition. In such a world, even neoclassical analysis now accepts that the optimal degree of openness for a country is not "close" integration with the global economy through free trade.\footnote{See for example Krugman (1987) and Rodrick (1992).} In that case, what is the optimal degree of openness for the economy? This extremely important policy question however is not seriously addressed by the orthodox theory.\footnote{On this point, see the interesting review by Lucas (1990) of Helpman & Krugman (1989).}

Chakravarty and Singh (1988) provide an alternative theoretical perspective for considering this issue.
To put it briefly, they argue that "openness" is a multi-dimensional concept; apart from trade, a country can be "open" or not so open with respect to financial and capital markets, in relation to technology, science, culture, education, inward and outward migration. Moreover a country can choose to be open in some directions [say trade] but not so open in others such as foreign direct investment or financial markets. Their analysis suggests that there is no unique optimum form or degree of openness which holds true for all countries at all times. A number of factors affect the desirable nature of openness: the world configuration, the past history of the economy, its state of development, among others. The timing and sequence of opening are also critical. They point out that there may be serious irreversible losses if the wrong kind of openness is attempted or the timing and sequence are incorrect. The East Asian experience of "strategic" rather than "close" integration with the world economy is fully comprehensible within this kind of theoretical framework.

It is also useful to consider the experience of the second tier of South East Asian NICs - Malaysia, Thailand, Indonesia - within such a framework. As noted earlier, in the South-East Asian economies, foreign direct investment has played a far more important role than it did in Japan or South Korea. One interpretation of this phenomenon is that as a consequence of the fast development of the East Asian countries, the second tier NICs are faced with a different historical situation, which makes the optimal degree of openness different for these countries. In this new situation it is advantageous for the south east Asian NICs to attract industries which are no longer economic in the first tier countries because of the growth of their real wages - as suggested by the so called "flying geese" model of Asian economic development.

It may be observed that this model and the associated intra-regional pattern of trade and investment in Asia can itself be regarded as in part a product of the industrial policy in Japan, Korea and other countries. Unlike many other advanced countries which try to protect declining industries, the Japanese practice a 'positive' industrial policy of encouraging structural change by assisting the replacement of old industries by the new. This, however, involves an orderly rundown of the older industries (see next section), including inter-alia their transfer to less developed countries in the
Consequently, Felix (1994) suggests that East Asian foreign direct investment in the region has been structurally more conducive to sustaining backward linkage development in the participant economies than has been the case of foreign direct investment in Latin America. He ascribes this to the fact that the East Asian intra-regional pattern has evolved along a dynamic comparative advantage path dominated by cost minimising trade and investment. The Latin American pattern, he suggests, has been shaped largely by mercantilist market access rather than by cost minimising objectives. As a result, it is more vulnerable to disruptive shifts of trading advantages deriving from changes in the marketing and financial strategies of foreign firms. At this stage, the above interpretation of the south east Asian NICs’ high propensity to seek foreign investment in terms of the changing optimal degree of openness can only be regarded as a suggestive hypothesis. An alternative interpretation will of course be that the second tier NICs do not really absorb FDI in the context of a national or regional industrial policy but simply welcome it as it arrives. It may also be the case that notwithstanding Felix's analysis, there is no great difference between U.S. FDI in Latin America and Japanese FDI in south east Asia. It may well be the case that Japanese FDI in south east Asia is no more inherently conducive to development than U.S. FDI in Latin America. This is an important subject for systematic empirical research.

7. COMPETITION IN THE DOMESTIC MARKETS

Many Bank Reports stressed the virtues of "free mobility of capital and labor" and "free entry and exit of firms" and the importance of competition in the domestic markets. However, the practice of the successful East Asian countries in this respect also has been rather different. As in relation to the question of integration with the world economy, Japan and Korea appear to have taken the view that from the dynamic perspective of promoting investment and technical change, the optimal degree of competition is not perfect or maximum competition. The governments in these countries have therefore managed or guided competition in a purposeful manner: it has both been encouraged, but
notably also restricted in a number of ways.

7.1 Collusion and Competition in Japan

In Japan, in the years immediately following the war, the Zaibatsu were disbanded, and anti-trust laws of the U.S. type were enacted under the tutelage of the occupation authorities. However, over time these pro-competition measures were greatly diluted. During the period of Japan's fast growth, the government permitted or encouraged a variety of cartel arrangements in a wide range of industries--export and import cartels, cartels to combat depression or excessive competition, rationalization cartels, etc. Table 3 provides information on cartels which were exempted during the period 1964 to 1973 from Japan's anti-monopoly laws. According to Caves and Ukeusa (1976), cartels accounted for 78.1 percent of the value of shipments in textiles; 64.8 percent in clothing; 50.0 percent in non-ferrous metals; 47 percent in printing and publishing; 41.2 percent in stone, clay and glass; 34.5 percent in steel products, and 37.2 percent in food products.

Although these cartels functioned for only limited periods of time and there was wide variation in their effectiveness, Caves and Uekusa observed that "their mere presence in such broad stretches of the manufacturing sector attests to their importance." (page 147).

However, these restraints on competition were only a part of the story. An equally significant part was MITI's strong encouragement of vigorous domestic oligopolistic rivalry and international competitiveness. In general, whether competition was promoted or restricted depended on the industry and its life-cycle: in young industries, during the developmental phase, the government discouraged competition; when these industries became technologically mature, competition was allowed to flourish. Later, when industries are in competitive decline, the government again discourages competition and, as noted earlier, attempts to bring about an orderly rationalization of the industry (Okimoto, 1989).

Table 3. Japanese Cartel Agreements Exempted from Antimonopoly Law by Fair Trade Commission or
### Competent Ministry, by Exempting Statute, 1964-73*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression cartels</td>
<td>2</td>
<td>2</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Rationalization cartels</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Export cartels</td>
<td>201</td>
<td>208</td>
<td>211</td>
<td>206</td>
<td>213</td>
<td>217</td>
<td>214</td>
<td>192</td>
<td>175</td>
<td>180</td>
</tr>
<tr>
<td>Import cartels</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Cartels under Medium and Small Enterprises Organization Act</td>
<td>588</td>
<td>587</td>
<td>652</td>
<td>634</td>
<td>582</td>
<td>522</td>
<td>469</td>
<td>439</td>
<td>604</td>
<td>607</td>
</tr>
<tr>
<td>Cartels under Environment Sanitation Act</td>
<td>106</td>
<td>122</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
<td>123</td>
</tr>
<tr>
<td>Cartels under Coastal Shipping Association Act</td>
<td>15</td>
<td>14</td>
<td>16</td>
<td>15</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>21</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Cartels under other statues</td>
<td>43</td>
<td>50</td>
<td>44</td>
<td>44</td>
<td>47</td>
<td>48</td>
<td>56</td>
<td>53</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>970</td>
<td>999</td>
<td>1,079</td>
<td>1,040</td>
<td>1,003</td>
<td>948</td>
<td>898</td>
<td>844</td>
<td>976</td>
<td>985</td>
</tr>
</tbody>
</table>


*Number in force in March of each year.

Students of Japanese economy provide many examples of the above pattern from a number of different industries. In steel, for example, Scott (1991) observes that during the expansion phase of the industry, individual companies were not allowed to build new plants except at world class scale. This meant "spacing out investments to build large-scale plants without at the same time generating an excess capacity. Japanese firms were required to wait their turn to build a new plant while a competitor built new capacity and achieved high volumes. Next time the roles will be reversed. This kind of coordination was carried out under the aegis of the government—by MITI. Later the system required the scrapping of old capacity as a condition for permission to build new. As a result Japan with a smaller home market than the U.S. built ten plants larger than any in the U.S." (p. 54)
Yamamura (1988) provides a useful model of Japanese industrial policy and the role of competition within it. The government essentially organized an "investment race" among large oligopolistic firms in which exports and world market share were significant performance goals. As in the real world markets are always incomplete, such a race without a coordinator may lead to ruinous competition, price wars and excess capacity, inhibiting the inducement to invest. In the Japanese economic miracle, MITI provided this crucial coordinating role (with the help of industry associations) and orchestrated the dynamic combination of collusion and competition which characterizes Japanese industrial policy. "In a nutshell," Yamamura observes "what MITI did was to `guide' the firms to invest in such a way that each large firm in a market expanded its productive capacity roughly in proportion to its current market share—no firm was to make an investment so large that it would destabilize the market. The policy was effective in encouraging competition for the market share (thus preserving the essential competitiveness of the industrial markets) while reducing the risk of losses due to excessive investment. Thus it promoted the aggressive expansion of capacity necessary to increase productive efficiency in output" (p. 175).

7.2 Large Firms and Domestic Competition in Korea

Turning to Korea, that country also did not follow a policy of maximum domestic competition or unfettered market-determined entry or exit of firms. The Korean government, if anything, went one step further than the Japanese in actively helping to create large conglomerates, promoting mergers, and directing entry and exit of firms according to the requirements of technological scale economies and world demand conditions. The result is that Korea's manufacturing industry displays one of the highest levels of market concentration anywhere - whether among the developing or the developed countries. The top 50 chaebols accounted for 15 per cent of the country's GDP in 1990. Among the largest 500 industrial companies in the world in 1990, there were eleven Korean firms, the same number as Switzerland. UN(1993) observes in relation to the Korean industrial structure: "Such a structure is the deliberate creation of the Government, which utilised a highly interventionist strategy to push industry into large-scale, complex technologically demanding activities while
simultaneously restricting FDI inflows tightly to promote national ownership. It was deemed necessary to create enterprises of large size and diversity, to undertake the risk inherent in launching in high-technology, high-skill activities that would remain competitive in world markets. The chaebol acted as the representative and spearheads of the Government's strategy: they were supported by protection against imports and TNC entry, subsidised credit, procurement preference and massive investments in education, infrastructure and science-technology network”.

Nevertheless, there is ample evidence that the big business groups still exhibited highly rivalrous behaviour (Kim, 1992). This was because under rapid growth conditions, as well as the rules of the game which the state had established, there was neither the incentive nor the ability for big business to collude. The Korean government went out of its way to ensure that big business did not collude, by allocating subsidies only in exchange for strict performance standards (Amsden, 1989). After 1975 inter-group competition in Korea became even more fierce as each chaebol, or diversified business group, tried to qualify for generous subsidies to establish a general trading company by meeting government performance standards regarding minimum export volume and number of export products (Cho, 1987).

7.3 Capital Markets

Turning briefly to the capital markets, as in the case of the product markets, the East Asian Miracle distances itself from the Development Challenge with respect to the virtues of a freely functioning capital market. It recognises that capital markets are particularly subject to information imperfections and

Table 4. Percent Distribution of Manufacturing Value-Added* by Firm Size, Selected Countries, 1973

---

19 It is argued in the East Asian Miracle that small and medium sized firms and competitive forces have played a greater role in Taiwan's economy than in South Korea. That may well be true but it is interesting to observe that Taiwan's industrial structure, nevertheless, displayed a high degree of concentration. See table 4.
<table>
<thead>
<tr>
<th>Country</th>
<th>1-9</th>
<th>10-99</th>
<th>100-499</th>
<th>500 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>5.8</td>
<td>13.8</td>
<td>27.7</td>
<td>52.7</td>
</tr>
<tr>
<td>Taiwan</td>
<td>4.4</td>
<td>16.7</td>
<td>22.5</td>
<td>56.4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>7.4</td>
<td>30.2</td>
<td>32.1</td>
<td>30.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.4</td>
<td>23.7</td>
<td>36.1</td>
<td>36.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>11.7</td>
<td>10.1</td>
<td>27.5</td>
<td>48.4</td>
</tr>
<tr>
<td>Peru</td>
<td>4.0</td>
<td>23.9</td>
<td>46.4</td>
<td>25.7</td>
</tr>
<tr>
<td>Japan</td>
<td>8.7</td>
<td>28.4</td>
<td>24.9</td>
<td>37.9</td>
</tr>
<tr>
<td>Canada</td>
<td>2.0</td>
<td>21.1</td>
<td>37.4</td>
<td>39.3</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>0.2</td>
<td>5.4</td>
<td>18.2</td>
<td>76.11</td>
</tr>
<tr>
<td>Austria</td>
<td>0.8</td>
<td>21.5</td>
<td>36.2</td>
<td>41.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td>15.7e</td>
<td>24.4</td>
</tr>
<tr>
<td>United States</td>
<td>2.4</td>
<td>18.3</td>
<td>30.5</td>
<td>48.7</td>
</tr>
</tbody>
</table>


co-ordination failures, and that there is therefore a sound analytical foundation for appropriate government action to address such failures through for example subsidised credit, or through socialisation of risk by government guarantees of specific investments.
Indeed, in none of the exemplar East Asian countries did a competitive capital market play a significant role in financing industrial growth. The banks in South Korea were state owned until the early 1980s. Although some of them are now under majority private ownership, the state has an enormous influence and control over their activities. Taiwan's leading banks continue to be under state ownership even today. The Japanese financial system, during the period of the economic miracle (1950-73), although not under state ownership, was bank-based, oligopolistic and subject to considerable state direction.

Similarly, with respect to the stockmarket, a growing number of scholars in the U.S. and the U.K. today believe that the Japanese economic success is also in part due to the fact that the industrial corporations in that country have been spared, unlike their Anglo-Saxon counterparts, the tender mercies of a stock market and a freely functioning market for corporate control (see Dore, 1985; Odagiri and Hase, 1989; Cosh, Hughes, and Singh, 1990). There are good analytical reasons for the view that the stock-market-based competitive financial systems may lead to "short-termism" and may not therefore be conducive to promoting industrial investment, technical progress and productivity growth.20

7.4 An Assessment

At one level, the Miracle Study marks a major advance in the Bank's thinking about the relative roles of competition and cooperation in economic development. Implicitly rejecting the view embodied in many previous Bank documents and specifically in the Development Challenge that, "Competitive markets are the best way yet found for efficiently organising the production and distribution of goods and services", it accepts the argument that the optimal degree of competition from the perspective of dynamic efficiency (i.e. for maximising the long term rate of growth in productivity) is not maximum

20 There is a large literature on the subject. For the U.K., see Cosh, Hughes and Singh (1990), Singh (1992c). For the U.S. see for example, MIT Commission on Industrial Productivity [Dertouzos et. al. 1989] and Porter (1992). For an opposite perspective on the question of the stockmarket and short-termism, see Marsh (1992).
competition. More importantly, both at a theoretical level and empirically in relation to Japan, South Korea and Taiwan, it accepts the case for cooperation (or restrictions on competition) in order to correct what it calls, the coordination failures, which particularly characterise industrialising country markets. In this analysis, a much larger role of the government as a referee to mediate these cooperative arrangements is explicitly recognised. The theoretical as well as the empirical conclusion of the East Asian Miracle is unequivocal: that a policy regime with the right combination of competition and cooperation, of the kind successfully implemented in the East Asian countries, is superior to that of competition alone. Thus, intellectually, the study accepts the revisionist argument that the governments in these East Asian countries guided the market and the competitive process and that this guidance was conducive to their fast growth.

Nevertheless, after this giant conceptual step forward, in its policy recommendations to other developing countries, the East Asian Miracle retraces that step and comes back full circle to the position of free and flexible markets and competition alone as prescribed in the earlier Bank documents. The central argument that is made here is that other countries do not have the institutional capacity to successfully implement such an amalgam of competition and cooperation despite the latter's theoretical attraction and its evident success in East Asia. This argument will be examined in the concluding section.

There are, however, other important aspects of the nature of domestic competition which are neglected in the East Asian Miracle but which deserve comment. Firstly, Bank economists applaud the "vigorous competition" which has existed in the Japanese and Korean domestic product markets without fully appreciating that this was largely oligopolistic competition among the giants rather than the price competition of the text-book variety. The former tends to be non-price 'strategic' competition which does not necessarily have the welfare properties ascribed to a competitive economy in conventional theory. Although this kind of Schumpetrian market structure is often conducive to technological change, it can also lead to social waste, and the loss of consumer welfare. To avoid the
latter and to exploit its full potential for technological development, this kind of market structure very much requires the visible hand of the government to regulate its operations.

Secondly, the underlying causal model of competition in the East Asian Miracle is still one in which competition or non-market competitive contests are required for economic growth. However, as demonstrated in Amsden and Singh (1994), in Japan and Korea, it was growth which led to increased competition and reduced industrial concentration rather than the other way round. Paradoxically, without the government restrictions on competition and monitoring of investment races, such high investment and growth rates may not have materialized in the first place.

Despite the major intellectual advances with respect to the role of competition and cooperation in the product markets and that of socialisation of risks in the financial markets, the discussion of labour markets in the East Asian Miracle is disappointing. Here, the study falls back on labour market flexibility as the characteristic feature of these economies which allowed them to achieve efficient allocation of their human capital and hence fast economic growth. It is implicitly acknowledged that the causation here could be the other way around, i.e. that fast economic growth made possible the labour market flexibility since as the study itself notes, "rapid growth was a key factor in making the wages more flexible in the HPAEs". (p.269). The authors of the East Asian Miracle do not however tell us that even though wages grew rapidly, productivity growth was even faster. Nor do they comment on the role of political repression (constraints on trade union activity, etc.) in many of these countries for much of the relevant period in ensuring this outcome.

However, World Bank economists have overlooked the fact that, like physical capital formation, human capital formation is equally subject to extensive coordination failures. This is particularly so in a

---

21 In these chapters of the Report, the healthy influence of Professor Stiglitz, one of the consultants to the Report, is very much in evidence.

22 For a discussion of these issues with respect to Korea, see You and Chang [1993].
fast-growing developing economy undergoing huge structural changes. It becomes necessary for the government to intervene to ensure that a labour force with the required skills and training is available to meet the needs of the growing economy. Contrary to the East Asian Miracle, evidence suggests that that is exactly what the state in a country like Korea did do. It intervened heavily in the labour markets, not just to maintain industrial peace, but also to ensure that the growth process is not thwarted by the lack of skills and training. [You and Chang (1993). See also Section 11 below].

Similarly, the East Asian Miracle does not appreciate the fact that as in the case of the product and financial markets, some "rigidities" in the labour market may also be functional and dynamically efficient. Thus in Japan a significant part of the labour force has effectively a life-time security of employment, and seniority is an important determinant of workers' wages in these large firms. Many leading scholars of the Japanese economy ascribe the international competitive success and technical leadership of the Japanese corporations precisely to these "rigidities" in the labour market. Security of employment encourages workers to undertake firm specific investments in human capital, to promote technical change rather than to thwart it (for the fear of being made redundant). Not least, it also lets workers identify their interest with those of the corporation (see further Aoki, 1990; Dore, 1986, among others).
8. WHY DID THE EAST ASIAN COUNTRIES NOT HAVE A DEBT CRISIS IN THE 1980S

If the Development Challenge had been written in 1981 rather than in 1991, it would certainly have included one important Latin American country namely Brazil, and probably also Mexico and Columbia as outstanding examples of successful economic development. Between 1965 and 1980, Brazil was a "miracle" economy, recording a growth rate of 9 per cent per annum - almost equal to that of Taiwan or South Korea during this period. Similarly, the Mexican economy expanded at a rate of nearly 6 per cent per annum over the three decades 1950-80, which would also put that country among the top performers in the league tables of economic growth for that long time span. Yet both Mexico and Brazil stumbled badly during the 1980s whilst Korea and other East Asian, as well as South Asian countries were able to maintain, or even to improve upon their previous pace of economic expansion. The main reason for this was that Brazil and other Latin American countries had a debt crises in the 1980s which Korea and most other Asian countries did not. This raises the crucial question: why did a country like Brazil have a debt crisis in the 1980s whilst Korea did not?

8.1 The Great Continental Divide

This question is one of a number of analytical, empirical and policy issues currently under debate. At the empirical level, an outstanding feature of the world economy during the decade of the 1980s was what Singh (1986b) called the "great continental divide": the striking differences in economic performance of the three developing continents of Asia, Africa and Latin America. During this decade, economic growth collapsed in Latin America and Africa while it continued at much the same rate, if not faster than before in most Asian countries (not just Korea and high performing East Asian countries, but also South Asian countries like India). [See Table 5]. What is remarkable about the development experience of this decade is not only the very large inter-continental differences which emerged in this period but rather the intra-continental uniformity of experience.
The comparison between Asian and Latin American countries is especially significant in this context. Tables 6-8 provide more detailed comparative information for a sample of nine Asian and nine Latin American countries. Table 6 highlights the intra-continental uniformity of economic experience of the two groups of countries during the 1980s. In the 1960s and 1970s, the median growth rates of the two groups were much the same. However in the 1980s none of the Asian countries except Phillipines recorded a growth rate of less than 4 per cent. In sharp contrast no Latin American country managed to grow at 4 per cent during that decade - only two of them (Columbia and Chile) achieved a growth rate of more than 3 per cent.

This intra-continental uniformity of economic experience is particularly surprising for the Asian countries since these countries not only have followed rather different economic policy regimes but also have very different political systems. The Asian sample contains communist countries like China as well as democratic regimes like India and authoritarian governments like Indonesia. Among the capitalist countries, Korea has followed a rather different economic policy regime (it has been export oriented) than India's (the country has been a prime example of inward orientation). Yet all these countries managed to
Table 5

**Growth Performance in the Developing Countries by Category (a) and Region (b) 1965-80 and 1980-90**

Average Annual Growth Rate of GDP %

<table>
<thead>
<tr>
<th>Category</th>
<th>1965-80</th>
<th>1980-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income economies</td>
<td>4.9</td>
<td>6.1</td>
</tr>
<tr>
<td>China</td>
<td>6.8</td>
<td>9.5</td>
</tr>
<tr>
<td>India</td>
<td>3.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Other low income</td>
<td>4.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Middle income economies</td>
<td>6.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>4.2</td>
<td>2.1</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>7.3</td>
<td>7.8</td>
</tr>
<tr>
<td>South Asia</td>
<td>3.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>6.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Notes:

(a) The World Bank defines "low income countries" as those with per capita income of $ 580 or less in 1989.

(b) For the lists of countries included in each region, see the source listed below.

Table 6  
GDP Growth rate in Asia and Latin American countries (% per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>5.2</td>
<td>5.8</td>
<td>9.5</td>
</tr>
<tr>
<td>India</td>
<td>3.4</td>
<td>3.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.9</td>
<td>7.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Korea</td>
<td>8.6</td>
<td>9.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.5</td>
<td>7.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Pakistan</td>
<td>6.7</td>
<td>4.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Philippines</td>
<td>5.1</td>
<td>6.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>4.6</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.4</td>
<td>7.2</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>5.2</td>
<td>6.3</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>4.2</td>
<td>2.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>Bolivia</td>
<td>5.2</td>
<td>4.8</td>
<td>-0.1</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.4</td>
<td>8.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Chile</td>
<td>4.5</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Colombia</td>
<td>5.1</td>
<td>5.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Ecuador</td>
<td>...</td>
<td>8.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>7.2</td>
<td>5.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Peru</td>
<td>4.9</td>
<td>3.0</td>
<td>-0.3</td>
</tr>
<tr>
<td>Venezuela</td>
<td>6.0</td>
<td>5.0</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>5.1</td>
<td>5.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 7

Rates of inflation in Asia and Latin America, 1960-1990 (average annual percentage growth of consumer price index) [a]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>7.1</td>
<td>8.5</td>
<td>5.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>20.5</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>17.4</td>
<td>19.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-0.3</td>
<td>7.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.3</td>
<td>13.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>5.8</td>
<td>13.2</td>
<td>14.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1.8</td>
<td>12.6</td>
<td>11.0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>3.5</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>1.8</td>
<td>9.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Median</td>
<td>3.4</td>
<td>12.6</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>21.7</td>
<td>130.8</td>
<td>395.1</td>
</tr>
<tr>
<td>Bolivia</td>
<td>3.5</td>
<td>22.3</td>
<td>318.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>46.1</td>
<td>36.7</td>
<td>284.4</td>
</tr>
<tr>
<td>Chile</td>
<td>33.2</td>
<td>185.6</td>
<td>20.5</td>
</tr>
<tr>
<td>Colombia</td>
<td>11.9</td>
<td>22.0</td>
<td>24.8</td>
</tr>
<tr>
<td>Ecuador</td>
<td>...</td>
<td>14.4</td>
<td>36.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.6</td>
<td>19.3</td>
<td>70.4</td>
</tr>
<tr>
<td>Peru</td>
<td>10.4</td>
<td>30.7</td>
<td>233.7</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1.3</td>
<td>12.1</td>
<td>19.3</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>11.1</td>
<td>22.3</td>
<td>70.4</td>
</tr>
</tbody>
</table>

[a] GDP deflator for 1980-90

Table 8: Current account balance in Asian and Latin American countries, 1965-1985 (current account balance/GNP, %)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>India</td>
<td>-0.5</td>
<td>-0.3</td>
<td>-2.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-2.2</td>
<td>0.1</td>
<td>-2.8</td>
</tr>
<tr>
<td>Korea</td>
<td>-3.6</td>
<td>-5.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-0.7</td>
<td>0.6</td>
<td>-2.9</td>
</tr>
<tr>
<td>Pakistan</td>
<td>...</td>
<td>-5.6</td>
<td>-4.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.0</td>
<td>-4.8</td>
<td>-4.1</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-1.2</td>
<td>-7.2</td>
<td>-10.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>-1.1</td>
<td>-5.1</td>
<td>-4.1</td>
</tr>
<tr>
<td>Median</td>
<td>-1.1</td>
<td>-5.1</td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>0.0</td>
<td>-0.6</td>
<td>-4.3</td>
</tr>
<tr>
<td>Bolivia</td>
<td>-0.2</td>
<td>-6.7</td>
<td>-10.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>-1.7</td>
<td>-4.5</td>
<td>-1.8</td>
</tr>
<tr>
<td>Chile</td>
<td>-1.4</td>
<td>-5.2</td>
<td>-3.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>-1.8</td>
<td>0.4</td>
<td>-10.3</td>
</tr>
<tr>
<td>Equador</td>
<td>-2.7</td>
<td>-5.5</td>
<td>-4.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>-1.5</td>
<td>-3.9</td>
<td>-1.8</td>
</tr>
<tr>
<td>Peru</td>
<td>-0.5</td>
<td>-4.1</td>
<td>-4.2</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.7</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Median</td>
<td>-1.5</td>
<td>-4.1</td>
<td></td>
</tr>
</tbody>
</table>

either maintain or to improve upon their economic performance in the 1980s, whilst the Latin American countries were afflicted with collective economic failure.

8.2 Competing Explanatory Hypotheses

How can then we explain the almost universal success of Asian countries and the similarly universal failure of the Latin American countries during the post-1980 period. This issue is a subject of a major debate in the literature.23

A central thesis of the Development Challenge is that domestic policy matters far more than international conditions in determining a country's economic performance. Thus Bank as well as other orthodox economists argue that these remarkable inter-continental performance differences are not due to external shocks, which in any case both groups of countries were subject to. Rather these arose from the short and long-term policy choices which were made. The East Asian success and Latin American failure is attributed to the greater openness of the former group of economies to international trade and financial flows, and the relatively closed nature of the Latin American countries. Moreover, it is argued that the latter group followed inappropriate macro-economic policies, particularly the exchange-rate policies. East Asian countries are also supposed to have invested their foreign borrowings in export oriented industries which allowed them to service their debts. In Latin America, on the other hand, it is suggested that the state had much too pervasive a role. This led to rent-seeking, corruption and economic mis-management. It also resulted in these countries using their foreign resources for wasteful current consumption and inefficient investments in long gestation lag, import substitution projects.

The heterodox view on these intercontinental differences in economic performance varies greatly from the above catalogue of East Asian virtues and Latin American sins. The heterodox economists point out, first of all, that it is not just the East Asian NICs which did well in the 1980s, but as seen earlier, so did a whole range of other Asian countries, including the South East Asian as well as the previous lagards in the region, the South Asian economies (e.g. India). Secondly they point to the fact that this continent-wide economic success in Asia occurred despite very considerable diversity in the (a) economic policy regimes, (b) political systems and (c) governance capacities of these countries.

However, the main heterodox argument is that world economic slow-down at the end of the 1970s and the early 1980s had a markedly different impact on the two regions. The Asian success and the Latin American failure in the last decade is attributed to the fact that at the beginning of the decade, the latter group of countries were subject to much more severe external shocks than the former. These large shocks to the Latin American economies were compounded by further external shocks during the rest of the decade, all of which resulted in the observed prolonged economic decline in these countries. The Asian economies, on the other hand, 'succeeded' because they were able to adjust quickly to the relatively less severe external shocks which they experienced at the beginning of the decade. They were also not subject to further shocks of the same magnitude as the Latin American and the Sub-Saharan countries suffered during the rest of the 1980s.

8.3 Evidence

1. The external shocks of the early 1980s: In 1979, in the wake of the second oil price increase and domestic inflation, the US Federal Reserve began to implement a new kind of monetary policy. This was based on the monetarist doctrine and it involved targetting particular money supply aggregates. The policy was deeply contractionary and it resulted in a quantum jump in
interest rates (the so-called Volcker shock) - real interest rose fourteen fold in the early 1980s compared with the mid-seventies. The US policies were soon imitated by other industrial countries which resulted in a long recession in these economies. (Singh, 1986a). The effect of these changes in the international economic environment on the developing countries was devastating. Sachs(1985) and Balassa(1984) suggest that the Asian and the Latin American countries were equally affected by these world economic changes.

The evidence, however, does not bear out this thesis. Developing countries during this period were subject to four different kinds of external shocks: a demand shock, a terms of trade shock, an interest rate shock and a capital supply shock. In a world of imperfect wage-price flexibility, balance of payments disequilibria, capital rationing and foreign exchange constraints, all four shocks are relevant and important. 24 Sachs considered only the first two of these shocks. Balassa examined the impact of the demand shock as well, but in a limited form. However, neither of the two authors considered the capital supply shock whereby following the inability of the Mexican government in 1982 to service its debt, the banks suddenly stopped lending to all Latin American countries.

However the banks continued to lend to East Asian economies even though their current account deficits as a proportion of GDP were no smaller than those of the heavily indebted Latin American countries. As table 7 shows, in the period 1973-80, the median current account deficit of the Asian countries was 5.1 per cent. The corresponding figure for the Latin American countries was lower, 4.1 per cent. Korea's deficit during this period was 5.3 per cent of GDP, compared with 4.5 per cent for Brazil and 3.9 per cent for Mexico. Yet Korea which was as heavily indebted as Mexico or Brazil escaped the capital supply shock while the banks stopped voluntary lending to the latter two countries, precipitating a huge crisis in their real

24 See further Dornbusch, 1985.
Perhaps the most important single reason why the Asian countries escaped the debt crisis of the last decade was that they were not subject to the capital supply shock. This raises the question why did the banks stop lending to Mexico and Brazil while they continued to lend to Korea financing its large current account deficits? Larrain and Vergara (1993) suggest that Koreans were just lucky. The two authors note that "in the period 1979-82 the Korean current account deficit was, on average, 6.3 per cent of GDP. The budget deficit surpassed 4 per cent of gross domestic product (GDP) in 1981 and 1982 (4.7 per cent and 4.4 per cent respectively), inflation averaged 18.9 per cent. By 1982 external debt had climbed to more than 50 percent of GDP."

Williamson (1985) ascribes the differences in the banks' treatment of Mexico and Brazil on the one hand, and of Korea on the other, to a herd-instinct on the part of the banks and to a 'contagion' effect. He suggests that had Korea been a Latin American country, it would have also been subject to the contagion effect and not turned out so lucky.

2. Other factors.

Evidence on other factors which helped the Asian countries to ward off the debt-crisis may be summarised as follows.

a. The initial conditions' were more favourable to the Asian countries. Their median debt-service ratio was only half as large as that of the Latin American countries at the end of the 1970s. Hughes and Singh (1991).

b. The world economic recession at the beginning of the decade had a dissimilar effect on export demand for the countries of the two regions. The demand for Asian exports was
relatively less affected since despite the world recession, there was a boom in the Middle-Eastern markets. More importantly, the Asian countries benefitted greatly through an enormous increase in the remittances from the migrants who went to work in the Middle-East.

c. Not only did the world economic slowdown of the early 1980s had a smaller impact on the Asian economies (if all the external shocks are considered), the latter also enjoyed much better terms of trade than the Latin American and the African countries during the rest of the decade. The terms of trade of the South Asian countries and the East Asian NICs either remained the same or improved in the 1980s while those of the Latin American countries deteriorated by more than 15 per cent and those of Sub-Saharan countries fell by nearly 30 per cent. (Ross, 1991). Moreover, the Asian countries, unlike the Latin American, did not face the reverse capital flows in the middle and the late 1980s.

d. Fishlow (1991) provides detailed evidence to show that foreign borrowings were no more used to increase consumption rather than investment by Brazil or Mexico than by Indonesia or Korea. He points out that the NICs in both continents used the market opportunity provided by the extraordinarily low, indeed, negative interest rates in the mid 1970s to borrow foreign funds in order to establish a heavy industrial base to further deepen their industrialisation process. This was done as much by Brazil as by Korea. The main reason why, in the event, the Korean heavy industry programme succeeded while the Brazilian did not was the far more severe foreign exchange constraint which Brazil experienced as a consequence of the debt crisis.

e. The mainstream theory of 'openness', ie, that the reason the Asian countries were able to

---

25 As noted in Section 5 the East Asian Miracle regards this programme as a failure. However, it was also pointed out there that this assessment was not valid since the HCI investments more than redeemed themselves in the 1980s by providing the main basis of the highly successful Korean export drive during that decade.
avoid the debt-crisis was because their economies were much more open and therefore more efficient, is not supported by evidence. First, Hughes and Singh (1991) note that the Asian countries were much less open to the international economy, on at least one important dimension than their Latin American counterparts. Unlike the latter, most Asian countries implemented fairly strict exchange controls, and therefore their financial markets were far less open. Secondly, with respect to the question of trade openness, Hughes and Singh observe that the least open Asian countries, like China, India, Pakistan, for example, were able to cope as effectively with the economic crisis of the 1980s as the more export-oriented economies. Moreover, they observe that Mexico's and Argentina's manufactured exports grew much faster than India's in the relevant period, and yet the latter did not have a debt-crisis while the former did.

8.4 Assessment

For the reasons detailed above, Bank economist's treatment of the impact of external shocks on developing countries is very unsatisfactory. One unfortunate consequence of this is that they are led into a number of other analytical errors by not properly considering the effects of world economic conditions for national economic performance. In view of the significant external shocks suffered by Latin American economies in the 1980s, it is not valid to aggregate their performance in that period with those of the 1960-1980 period, as it would produce misleading results. Rather different rankings of economic performance of developing countries and hence very different conclusions with respect to 'successful' economic policies would emerge if the periods 1960-80 and 1980-90 are examined separately rather than together.

9. SAVINGS AND INVESTMENT IN EAST ASIAN ECONOMIES

9.1 The main issues
As noted earlier, an outstanding feature of the high performing East Asian economies is their high rates of savings and investment. These countries top the international league tables not just in terms of the longterm growth of their GDP, but also with respect to their national savings and investment rates. This was, however, not always the case. For example, UNCTAD(1994) notes with respect to Japan that gross domestic fixed capital formation in that country increased from 24 percent of GNP in the early 1950s to almost 40 percent in the 1960s. The ratio of private equipment investment to GNP doubled between the early 1950s and the late 1960s, reaching 17 percent. Similarly, in Korea, gross domestic fixed investment as a proportion of GDP rose from less than 10 percent in the mid-1950s to about 25 percent in the mid-1970s, and to over 30 percent by the mid-1980s. In terms of Purchasing Power Parity Summers-Heston data, Young (1994) estimates that between 1960 and 1980, gross fixed investment to GDP ratio doubled in Taiwan, tripled in Korea and quadrupled in Singapore.

It was seen in Section 3 that an important issue in contention in explaining East Asian economic growth is the nature and the extent of the contributions made by these high rates of investment. Whether or not the latter were the primary factor in the East Asian miracle (the non-neoclassical view), everyone agrees that their contribution was substantial. This raises the next important question, how were these high savings and investments rates achieved? Specifically, what was the role of the government in this endeavour. The debate also centres around the efficacy of the particular instruments used by governments (eg directed or subsidised credit) for accomplishing these tasks.

9.2 How Were High Rates of Savings and Investment Achieved in East Asia?

26See Roderik (1994b), figure3.
The conventional neoclassical view ascribes East Asia's unusually high rates of savings and investment basically to sound 'fundamentals'. Specifically, it is suggested that prudent macroeconomic management, consequent low rates of inflation and low exchange rate fluctuations, coupled with good initial conditions (land reform, and hence relatively equal distribution of income and wealth, favorable human capital endowment due to universal primary education) led to fast growth of household incomes and savings. In this account, some countries were subject initially to financial repression (e.g., Korea in the mid 1960s). But once this was eliminated and real interest rates became positive, household savings rose further, as did investment.

The East Asian Miracle represents a considerable advance on this simple orthodox story. In response to the criticisms of the neoclassical analysis, it accepts that fast growing East Asian countries did not eliminate financial repression. It also acknowledges that governments in these countries adopted a host of measures to raise both the levels of savings and investment, as well as to influence the allocation of investments. It is, however, argued that the financial repression practised in these countries was relatively mild and that this did not adversely affect savings.

UNCTAD (1994) and Akyuz and Gore (1994), in contrast, set out a more complex analysis of these issues. They argue that the wide range of measures in this sphere which the government in a country like Japan used during that country's rapid growth period were designed not just to promote household savings and national investment. Rather, an essential government aim was to encourage corporate profits and savings. The policy of protection against foreign competition as well as lax domestic competition policies, discussed earlier, were important factors in the growth of corporate profits in Japan. High profits did not lead to high corporate dividends but rather to greater corporate savings and investment.
for two reasons: a) fiscal measures encouraging corporate retentions and b) the structure of share ownership which insulated the corporations from the pressure for greater dividend distributions from the shareholders and the stock market. During its high growth period from 1950 to 1973, Japan’s gross corporate savings ratio (retained gross profits as a proportion of corporate disposable income) averaged around 75%. Corporate savings as a proportion of GNP rose from about 7% in the mid-1950s to over 17% in the late 1960s. [UNCTAD, 1994, page 73.]

In support of their contention, UNCTAD economists also point out that what distinguishes the exemplar East Asian countries from others is not their household savings, but rather their high corporate savings. They note that countries for which sectoral data are available, such as Colombia, Ecuador, India, Philippines and Turkey have had saving rates similar to or higher than those of the East Asian NICs. However, business savings in Korea, Malaysia and Thailand reached 9% of GNP, and in Taiwan 14%, in the 1970s and the early 1980s, whilst they were almost zero in the Philippines, under 2% in India, under 4% in Ecuador and Turkey and around 5.5% in Colombia.

Similarly, Rodrik argues that, as a consequence of government interventions to address the problems of coordination failures with respect to investment, the corporate rates of profit in Korea rose considerably. The real rates of return to capital in Korean manufacturing are estimated to have ranged from 9 -18 per cent in the mid to late-1950s, 9-26 per cent in 1962 to 1966, 16-38 per cent in 1967-1972, and 17-40 per cent after 1972. 28

9.4 Assessment

27. There is a large literature on this subject. See UNCTAD (1991), Singh (1993c).

28. Quoted in Rodrik (1994b). The original source of these figures is Hong (1977).
Although the East Asian Miracle represents a considerable advance on the simple
neo-classical analysis, and recognizes the positive role of government interventions in the
savings-investment process in the East Asian economies, it does not delve into the
complexity of the process. UNCTAD economists have provided a much more interesting
and comprehensive analysis of the issues involved. If the UNCTAD/Rodrik analytical
hypotheses are confirmed by more detailed evidence, their analyses would have very
important policy lessons for other semi-industrial countries.

10. INDUSTRIAL POLICY, NATIONAL TECHNOLOGICAL SYSTEM AND
INTERNATIONAL COMPETITIVENESS

10.1 National System for Enhancing Technological Capabilities

In addition to protection, domestic competition policy and other measures already discussed
above, another important component of industrial policy in the exemplar East Asian
countries has been a national strategy for technological development. Many Bank reports
including the East Asia Miracle, stress the importance of primary and secondary education
for achieving economic growth. However, they do not pay sufficient attention to tertiary
education and to the technological infrastructure both human and physical which late
industrialisers require to catch-up with the advanced countries. Yet, it is precisely in these
areas that the East Asian countries have excelled which in turn has played a major role in
enhancing their international competitiveness and their outstanding export success.

A national system of technological advancement was first advocated by Friedrich List in the
first half of the 19th century to enable Germany to catch up with Great Britain. Although
"catch up" was much easier then than it is for today's developing countries, many of List's
insights continue to remain valid. Following the end of World war II, the Japanese adopted a national technological system which spans the government, the firms, the universities, and indeed, the society as a whole. Freeman(1989) identifies following to be the principal elements of this national techno-economic strategy.

a. The ability to design and redesign entire production processes, whether in shipbuilding, machine tools or any other industry.

b. The capacity at national, government level to pursue an integration strategy which brings together the best available resources from universities, government, research institutions, private or public industry to solve the most important design and development problems.

c. The development of an educational and training system which goes beyond the German level in two respects. First, in the absolute numbers of young people acquiring higher levels of education, specially in science and engineering. Second, in the scale and quality of industrial training which is carried out at enterprise level.

d. The policy of eschewing, as noted earlier, foreign investment as a principal means of technology transfer.

e. The emergence of a far more flexible and decentralised management system, permitting both greater horizontal integration of design, development and production and more rapid response to change.

---

29 See further Freeman(1989)
f. Close co-operation between the central government and Keiretsu (large conglomerate groupings in Japanese industries) in identifying future technological trajectories, and taking joint initiatives, to adopt these to enhance the country’s prospective competitiveness.

It is notable that many Asian countries including, Korea, Taiwan and currently China have been consciously following the Japanese model and building their own national technological systems in the light of their resources and requirements. It is striking that several Asian countries now have a higher annual output of graduate engineers per hundred thousand of population than Japan. These countries are thus trying to outdo Japan in this respect, just as Japan outstripped the United States. Freeman (1989) calls attention to the fact that the third country in the world to introduce and export 256K memory chips after Japan and USA was not an advanced industrial country but South Korea. It took that country less than thirty years, starting from a position of barely any industry at all, to become a leading player in the world electronics industry.

None of the above is to under-estimate the formidable problems which the late industrialisers face just to keep in step with the fast pace of technological change in the world economy, let alone to catch up, Lall (1994) and others have pointed to the formidable technological and other barriers to entry in the world markets which LDC firms face. To meet these technological challenges, developing countries require a continuing build-up of national technological capability through an integrated system in the ways outlined above. It is an incremental and long-term process requiring concerted national effort in which the government necessarily plays a leading direct, as well as a crucial coordinating role. Without such effort, countries like Korea or Taiwan would not have been able to hold their share of world manufacturing exports, let alone greatly increase them as they have so

---
30 See Box 3.3 on Samsung industries, page 130, of the East Asian Miracle, which also confirms these points.
successfully done over the last two decades or more.

To sum up, the World Bank emphasis on early education would not appear to be an adequate way of enhancing the international industrial competitiveness of semi-industrial countries. To compete in the world industrial economy, it is also essential to have higher educational institutions, scientists, technologists and engineers. Universal primary and secondary education is a worthy goal in its own right, but it does not provide the wherewithal to compete in the international market place. It is undoubtedly far more expensive on a per capita basis to provide higher education, than to provide primary or secondary schooling. The former is also necessarily elitist, but this is the price that has to be paid for seeking international competitiveness, a price that the East Asian countries have been willing to pay\textsuperscript{31}. It is also useful in this context to go back to our earlier discussion of changing factor proportions and its implications for comparative advantage and structural changes in the economy. The essential point here is that the changing factor proportions (in the sense of human capital and skill formation), over time in the East Asian countries, werw not simply an outcome of 'natural market forces' as per capita income rose. Rather these developments were very much guided by the visible hand of the government in terms of its national priorities.

10.2 Macro-economic Stability and Industrial Policy

Finally, we come to another aspect of industrial policy which is not addressed in the World Bank documents. An important argument of the documents is that to achieve fast economic growth it is essential to get the "fundamentals" right; one of the most important of the latter is macro-economic stability. The East Asian Miracle\textsuperscript{31} recognises that macro-economic stability

\textsuperscript{31}It is notable in this context that a considerable part of higher education and training in countries like Korea is financed privately, rather than being paid for entirely by the state.
stability is not a sufficient condition for fast economic growth, but insists that it is a necessary condition. It does not however explore the important links between industrial policy and macro-economic stability. To the extent that industrial policy was effective in Japan or Korea in relieving the balance of payments constraint, it will also have aided macro-economic stability. A current account balance at the desired growth rate can help to avoid the stop-go cycles which many economies experience. This in turn will lower the cost of capital since for a given savings rate in the economy, other things being equal, the more variable and unstable the economic performance, the higher the interest rate. Similarly, as noted earlier, faster economic growth also leads to faster growth of real wages and hence enhances social stability and political legitimacy of the socio-economic order. Thus, macro-economic stabilisation and industrial policy interact with each other in a virtuous circle of cumulative causation.

11. UNRESOLVED ISSUES: AN AGENDA FOR FUTURE RESEARCH

As detailed in the previous pages, there has been some progress in the debate between the World Bank and its critics concerning the outstandingly successful development experience of East Asian economies like Japan or Korea. There is now general agreement that governments in these countries intervened heavily in all spheres of the economy in order to achieve rapid economic growth and fast industrialisation. It is also common ground that during the course of their development these countries did not have free, flexible internal or external product and capital markets. Although these countries were export-oriented, they eschewed close integration with the international economy in terms of imports, foreign direct investment and capital flows.
The experience of the exemplar East Asian countries thus comprehensibly contradicts a central thesis of Development Challenge that free, flexible, competitive internal and external markets are necessary for achieving fast long-term economic growth. The East Asian Miracle accepts that the governments controlled and guided the competitive process in these economies through a highly effective combination of inter-firm cooperation and oligopolistic competition. Moreover, as noted earlier, these countries achieved strategic integration with the world economy by integrating up to the degree and only in those spheres where it was desirable for them to do so in order to promote long term economic growth.

Despite this perceptible narrowing of differences between Bank and heterodox economists, there clearly remain a number of important unresolved analytical and policy issues. Some of these have been discussed at length in this paper and will therefore only be listed below. Others, which for reasons of space could not be examined in the paper, will be commented on briefly here.

The purpose of future research in this area is not simply to understand more fully East Asian development in all its complexity, but also to see how the lessons learned from that experience can be applied to other countries in different individual circumstances and in changed world conditions. Based on the historical experience of East Asia and on trends in other developing regions, this research will therefore need to be imaginative and global.

11.1 Unresolved Issues

1. Industrial policy
The role of industrial policy in East Asian development. In the light of the discussion in section 4, the specific questions in this area that need to be addressed are:

a) What constitutes an industrial policy? What is the inter-relationship between its various
b) How should the effectiveness of industrial policy be assessed?

c) In the context of the new international trade regime which is soon to be instituted under the auspices of the World Trading Organisation (WTO), how will the industrial policy options of the developing countries be affected? The broader related question here is, what will be the feasible and desirable degrees and forms of openness for developing countries under this new post-Cold War international economic system.

In both these spheres, developing countries have a lot to learn from the post-1973 experience of Japan. Most students of the subject would say that Japan has been carrying out a modified form of industrial policy even when it "graduated" from a developing into a developed country and therefore had to forego many of the industrial policy instruments which it was able to use in the 1950s and 1960s.

d) the role of industrial policy in achieving macro-economic stability particularly in the long term, or to put it in terms of Bank economists' language - how does industrial policy affect the 'fundamentals' themselves?

2. Savings and investment

Here, as is evident from the discussion in section 9, the central issues are:

a) The role of the government in fostering corporate savings and investment;

b) The related issue is how precisely were household savings translated into investment either by the government or by corporations. Why were countries like India with as large household savings unable to achieve equally high corporate savings and investments as
those recorded by the East Asian economies?

c) How does the corporate sector finance its growth in the fast growing East Asian NICs? How has the emergence and development of stockmarkets in these countries affected the patterns of corporate savings and investments?

d) What is the contribution of physical capital accumulation and equipment investment to long term economic growth in these economies? Can capital accumulation by itself explain most of the economic growth in these countries, as some recent research suggests?

3. The Role of Demand and the Foreign Exchange Constraint

Here, the central issues are:

a) How did the exemplar East Asian countries manage to achieve their desired balance of payments at such high long term growth rates of demand and output?

b) How did these countries succeed in changing their propensities to export and import manufactured products?

c) Arising from the recent literature, an important analytical question is whether or not the East Asian development has been export-led?

d) Why did the long-term rates of growth of total factor productivity fall in most regions, including East Asia, in the post-1973 period?

4. Corporate Organization, Corporate Governance and Economic Development
Development economics, whether theoretical or empirical, has paid little attention to the role of the LDC firm. The literature discusses questions of capital accumulation by and large at the macroeconomic level. The question of investment allocation is indeed examined at the microeconomic level, but this is done within the context of cost-benefit analysis of investment projects. However, the literature has not adequately recognised that the leading actors in industrialisation in today's semi-industrial countries, including the exemplar East Asian economies, have been large domestic firms and their managements. We have not so far begun to develop an analytical perspective on the ways in which these entities carry out developmental tasks.

The empirical research issues here are, how are these large firms organised in these economies? Who owns them and what is the nature of their governance structures? Are there particular forms of corporate organisation, and ownership and governance structures, which are particularly conducive to industrialisation and development?

5. Domestic Competition Policy and the Relationship between Small, Medium and Large Firms

Here, the central issue is what kind of competition policy will be most conducive to achieving dynamic efficiency, i.e., maximum long term rates of growth of productivity? What can other developing economies learn from the experience of the exemplar East Asian countries in this respect?

6. Institutional Capacity and Economic Development

An important argument of the East Asian Miracle is that most LDCs lack the institutional capacity to implement the state directed industrialisation of the Japanese or the Korean
variety. This argument is plausible but not necessarily valid.

The important point to note here is that the Japanese model was itself imitated by the Koreans and by the Taiwanese. When Korea decided to embark on the Japanese model in the 1960s, as World Bank economists themselves admit, that country did not have the necessary institutional capacity. The Korean bureaucracy at the time was incompetent and corrupt, as indeed was the case with the Kuomintang bureaucracy when it arrived in Taiwan from mainland China. Yet these countries were able to create the right kind of bureaucracy and the other necessary institutions required for implementing the Japanese model. If these institutions can be created by Korea and Taiwan, and later on by Malaysia or Indonesia, surely it must be possible to establish them in many other countries elsewhere as well?

The most important research questions in this area are: what lessons with respect to institutional innovation and imitation can we draw from the experience of these East Asian economies? How did these countries enhance their institutional capacity to be able to impose performance standards on large firms with respect (a) to exports and (b) to the implementation of other aspects of industrial policy? What practical measures can the Bretton Woods Institutions take to help the developing countries in this area?

7. Asian Success and Latin American Failure in the 1980s

As noted in Section 7, our entire perception of which countries are the postwar successes and which are the failures depends crucially on our assessment of the nature and magnitude of the external economic shocks suffered by the leading Latin American and Asian countries during the decade of 1980s. Until then, as we saw, a country like Brazil was growing at much the same long-term rate as Korea or Taiwan. If more comprehensive and detailed research
were to confirm the heterodox view that the Latin American debacle in the 1980s was due largely to the greater magnitude of the external shocks that these countries suffered, rather than because of their inherent internal deficiencies, one's assessment of what are the right lessons of the last 40 years' development experience would be rather different from that of the Development Challenge or East Asian Miracle. In view of the crucial bearing the subject has on the entire BWI analytical and policy edifice, and in view of the conflicting analyses and conclusions of the leading scholars in this area, there is clearly a pressing need for further research. The specific research questions here are:

a) What is the relative importance of external economic shocks and internal factors in the Asian success and Latin American failure in the 1980s?

b) Apart from the question of inter-continental differences in economic performance, the related research question is that of the intra-continental uniformity of experience. In particular, how can one explain the more or less universal economic success of Asian countries in the 1980s despite their wide diversity of policies? It is significant in this context that a country like India was succesful in the 1980s even though it continued to implement by and large its traditional Brazillian type import substitution model.

8. Income and Wealth Distribution

A striking aspect of the successs of the examplar East Asian countries is that they have been able to achieve fast economic growth while maintaining relatively equal distribution of income. There are however important questions which arise in this context which require investigation.

What has happened to wealth distribution? It is well known that in Japan or Korea, the land
reform under US auspices, led to an initial equal distribution of income and wealth. However, as seen earlier, in the subsequent industrialisation of these countries, corporate profits and savings and investment increased enormously. Industrial concentration may not have increased but it has remained high. [Amsden and Singh, 1994]. One would expect in these circumstances, other things being equal, the wealth distribution in the urban economy to become more unequal. UNCTAD economists suggest that there is indirect evidence that this is what has actually happened. If so, this may require revision of political economy interpretations which are extant and which assume that neither income or wealth distribution worsened during the last three decades.

In the light of the above useful research questions in this area would be:

a) How did wealth distribution within the urban economy change during the periods of fast growth of these exemplar economies?

b) If the wealth distribution, despite high corporate profits, savings and investments in these countries did not become more unequal over time what market or non-market mechanisms prevented that? If it did become more unequal, what were its implications for the political economy of these countries?

9. Training, Skills and the Labour Market

The very fast economic growth of the exemplar East Asian economies was naturally accompanied by, and indeed was contingent upon, enormous changes in their economic structures. The governments in these countries therefore intervened in different ways in two crucial areas of labour markets.
1. Management of conflict arising from this structural change.

2. Provision and expansion of the necessary skills in the labour force required for bringing about the structural transformations.\textsuperscript{32}

The relevant research question here is, what lessons can other developing countries draw from the experience of state interventions in the labour markets in the East Asian countries in guiding and managing these huge structural changes?

\textsuperscript{32}For an excellent discussion of these issues with respect to the labour markets in Korea, see You and Chang (1993).