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Making Sense of the Asian Success Story: An Integrative Framework

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INTRODUCTION

Asia has a humble origin. Just after the Second World War, the Asian population was considered as one of the poorest in the world. Every indicator of economic and social development showed that the Asian countries were far behind Latin American countries. In 1950, it was estimated that the real per capita GNP of Japan was US$251. South Korea and Taiwan were among the poorest with less than US$100 real per capital GNP. Hong Kong and Singapore were relatively better off. Their real per capita GNP were about US$200 and US$400 respectively (Tan, 1992).

At that time, many development economists expected that Asia countries would face difficulties in growth and development due to their large population base and small domestic market in terms of purchasing power. Worse still, the Asian population was growing rapidly. In contrast, Asia is now considered as the fastest growing region of the world. In the past 35 years, Taiwan's GDP grew 19 times; Singapore and South Korea increased by 17 times; and Hong Kong by 12 times. As for Japan, its GDP doubled within eight years between

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1960 and 1968, and it doubled again in the next 14 years (Lee, 1996). If GDP is not a good measure of overall development, there are other indices like the Human Developement Index (HDI) that give global indication of socioeconomic development. Empirical findings of these indices also confirmed the outstanding performance of the Asian economies (Starker and Gaur, 1994).

These growth patterns are in marked contrast to the increasing problems faced by many developed nations in sustaining sufficient economic growth. The dynamic growth of Asian countries has defied the expectations of development economists even though a few of them may question the sustainability of Asia's growth phenomenon (Krugman, 1994). In fact, the development economists are so impressed by Asia's success that they even call the growth phenomenon a "miracle" (Woronoff, 1986; Lall, 1994a; Page, 1994).

Given the spectacular development of Asia, it is not surprising that Asian economies have become a subject of interest by both policymakers and scholars. For instance, recently, the World Bank identified eight High Performing Asian Economies (HPAEs) and completed a study on them.[1] These eight HPAEs are Japan, the "four tigers"—Hong Kong, the Republic of Korea, Singapore, and Taiwan—and the three newly industrializing economies (NIEs) of Southeast Asia—Indonesia, Malaysia, and Thailand (Page, 1994). The conclusion of the World Bank study mainly confirmed the importance of savings, investment in education, and sound macroeconomics in the high performance of the Asian economies.

Contrary to perceptions of some Westerners, Asia is not homogeneous. It is made of countries with varying cultural, historical, and political heritage. The economic developmental experiences of these countries are also diverse. Broadly, Asia can be grouped into the "needy" and "speedy" parts. The growth rate over the past 30–40 years for the "needy" part was about 3 to 3.5%, whereas the "speedy" part experienced a growth rate of 7 percent to 10 percent (Patel, 1994). Since we are interested in the success story of Asia, the focus of this article will be on those Asian countries that have experienced spectacular growth over the past 50 years. We will concentrate on the five most successful Asian countries, namely Hong Kong, Japan, Singapore, South Korea, and Taiwan. Specifically, we will provide an integrative framework to explain the success story of these countries. Admittedly, many ideas expressed in this framework will not be original since so much work have been done in this topic and almost every plausible explanations of Asia's success has been explored. Our

[1]The study is documented in varios background papers on "The East Asian Miricle" by the Policy Reasearch Department, World Bank, Washington D.C.

unique contribution to the literature lies in our effort to synthesize the thoughts expressed by scholars and policy-makers into a coherent framework that accounts for the dynamic developmental experiences of the five Asian countries.

THE MANY STORIES OF ASIAN SUCCESS

The debate on why Asia is so successful is still very much alive. Scholars and policy-makers use various approaches and perspectives to explain the Asian success story. One approach is to concentrate on in-depth analysis of individual Asian country (Amsden, 1979; 1989; Lee, 1973). Another approach is to examine Asian countries as aggregated wholes, for example, the "four dragons" of Asia, ASEAN, or East Asia (Huges, 1995; Tan, 1996; Woronoff, 1986). Still another approach is to conduct comparative analyses of Asian countries (Tan, 1992). Likewise, there are many interpretations on Asia's spectacular growth phenomenon depending on one's theoretical perspective. The advantage of having diverse approaches and theoretical perspectives is that they will enrich our understanding of Asia's economic performance. The disadvantage is that it can also lead to disagreement and confusion when scholars and policy-makers become dogmatic in their own approaches and perspectives.

One common theme among the various theories of Asia's development process is the attribution of a single-cause to explain the spectacular growth. These single-cause theories range from the traditional economic school of thought—neo-classical orthodoxy (Hopkinson, 1993; World Bank, 1993) to the interventionist school (Perkins, 1994), and from the technological imperative (Amsden, 1989; Kraemer and Dedrick, 1994) to the important role of culture (Dore 1987; Han, 1988).

Neo-classical Orthodoxy

The main argument of the neo-classical orthodoxy is based on the importance of "getting the prices right" to achieve economic growth. Assuming perfect market conditions exist, the neo-classicists believe that the market mechanism provides the essential framework for the country to allocate resources efficiently for productive outputs. Thus, they would advocate free trade of goods and services, export-oriented programs, free flow of capital investment, technology and management know-how, flexibility in the labor market, and freedom from excessive control by the government as recipes for economic growth. Among the successful Asian countries, it is generally agreed that

Hong Kong's developmental experiences come closest to the neo-classical model (Woronoff, 1986). It is well documented that Hong Kong's government exerts minimal interferences in the economy. The Hong Kong government mainly confines itself to investment in infrastructure, spatial planning, health and safety regulation, and the gathering of statistics for private and public sector consumption (Huges, 1995).

Recently, there is a softening of stand by neo-classicists with regards to the role of the state in economic development. Traditionally, they would argue that the state should only confine itself to creating a conducive economic environment for economic actors, households and entrepreneurs to operate. Examples of acceptable state interventions according to the neo-classicists are maintaining law and order, providing industrial, domestic and international peace, and intervening in areas of market failures such as natural monopolies (Riedel, 1988). Perhaps due to the experiences of the Asian economies, the more liberal neo-classicists would agree that the state could use "market-friendly" approaches to stimulate the economic growth. Briefly, the principles of "market friendly" approaches specify that they should be applied reluctantly (i.e., when the intervention is superior to market operation), cautiously (i.e., subject the intervention to the discipline of domestic and international markets), and openly (i.e., the intervention should be simple, transparent and not arbitrary) (World Bank, 1991).

Interventionist School

The neo-classical orthodoxy is based on the assumptions of perfect market conditions, such as, perfect information, factor mobility within the country, and freedom from dominance by a few active economic actors as in the case of monopoly or oligopoly. Given such assumptions, the neo-classicists believe that the market mechanism would be the most effective and efficient means to allocate resources for economic growth. However, there are economists who challenge this view. These economists, argue that market failures are pervasive, thus the state needs to intervene. The theoretical roots of this opposing school can be traced to the structuralist development theory in the 1950s and 1960s (Arndt, 1985; Onis, 1995).

The practical examples of the interventionist approach can be found in the developmental experiences of Japan and Singapore. Japan's Ministry of International Trade and Industry (MITI) and Singapore's Economic Development Board (EDB) are well known for their active role in the early development of their countries. After the postwar period, MITI was responsible for formulating the industrial policy of Japan, whereas EDB was tasked to promote foreign investment in Singapore to support its industrial program.

Proponents of the state-intervention school argue that the source of market failure is not due to policy and intervention distortions. Instead, market failures are the result of monopolistic behaviour in the economy. Other sources of market failure include lack of local entrepreneurship and technological know-how, and the irresponsible actions of middle-men and money-lenders who increase the operation cost of small businesses. Recently, Lall (1994a) observes that the invisible hand of the market "may not give correct signals to resource allocation between first, simple and difficult activities, and, second, between physical investments, technology purchase and internal technological effort" (648). In other words, if left to the market mechanism, too few resources would be channeled to difficult activities and endogenous research and development (R&D) investment.

Anyone familiar with the literature on Asian development cannot deny the active role played by the state. There is abundant support for the state-intervention school of thought in the Asian context (Amsden, 1979, 1989; Johnson, 1986; and Wade, 1990). Kwon (1994) even went to the extent of concluding that "the manner in which they (East Asians) organized and executed their development was uniquely East Asian, with the government playing a key role in almost every aspect of the endeavour" (635).

Technological Imperative

Supporters of the technological imperative believe that investment in technology can play a crucial role in stimulating economic growth and development. Theoretically, the technology imperative can be traced to the "technological ladder" hypothesis of economic development (Kaplinsky, 1984; Tan, 1992). Figure 1 gives the graphical representation of the hypothesis. Essentially, the "technological ladder" hypothesis predicts that as countries progress, they move from low technology products such as primary products to high technology, information-based products. Griffith uses the analogy of a relay race: "the first tier of manufacturing developing countries to start (industrialising), passes the baton to the second tier, and then limps behind" (Griffith, 1987: 67).

The Proton Saga project is a good illustration of the "technological ladder" hypothesis. In 1985, Japan's Mitsubishi Motor Corporation Limited transferred its technology in car manufacturing to Malaysia through a joint-venture. Since then Malaysia has progressed steadily in upgrading its car manufacturing processes and has its own research and development centre to cater to the needs

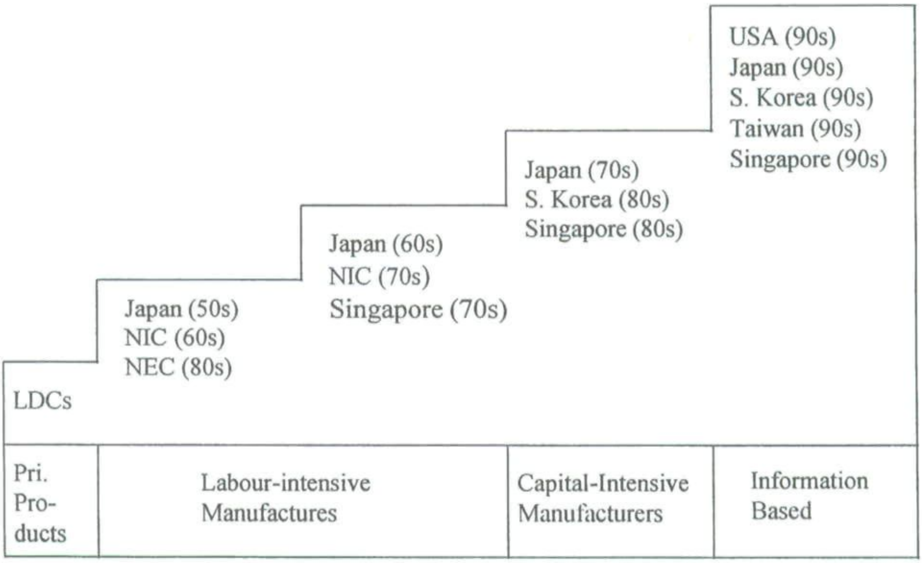

Figure 1. The Technological Ladder Hypothesis
Source: Adapted from Tan (1992: 62).

of the Asian markets. About a decade later, Malaysia is ready to help transfer the technology on car assembly to Vietnam. In March 1995, a joint venture project by Malaysia's Proton, Japan's Mitsubishi Motors Corporation and Vietnam's Vietranscimex would commence operations on vehicle assembly in southern Ho Chi Minh City (South China Morning Post, 1994).

In the economic literature, it is well documented that the Asian countries have actively sought to acquire technology to stimulate progress in their economies (Pack, 1993). For example, Japan and South Korea were actively involved in helping their infant industries to get acquire technology through capital good imports, invention and encouraging industries to be competitive (Hopkinson, 1993). Hong Kong and Singapore rely on their open-door policies to attract foreign direct investment to bring in the needed technology. In contrast, Taiwan restricted foreign direct investment but rely on other means, for example licences to acquire foreign technology.

The Important Role of Culture

Economists have been criticised for ignoring the role of non-economic factors, such as, national culture, in contributing to economic success in the Asian countries. There is intuitive appeal that culture can somehow influence economic performance of a country. This is because culture influences how individuals feel, think and act. Thus, cultural values such as thrift, diligence, respect for education, will help develop a competitive work-force to support and drive economic development. Theoretically, the idea of linking culture and economic success can be traced to the work of Weber (1958) who argued that the Protestant work ethics had contributed to the rise of capitalism in Western Europe. Likewise, McCelland (1961) demonstrated that it could encourage the development of entrepreneurs to support economic development by inculcating the right attitudes (need for achievement) among the people of a society. The cultural imperative has, therefore, a rich theoretical foundation.

Looking at the Asian context, Japan, Taiwan, Hong Kong, South Korea, and Singapore all share the common cultural heritage of Confucianism. Hence, there are some scholars who believe that there is a linkage between Confucianism and economic growth (Dore, 1987). These scholars would argue that Confucianism promotes values that are conducive for economic development. For example, the teaching on harmonious relationships, loyalty, and respect for authority explains why management and labour in Asian countries could work closely together and peacefully in pursuit of national goals (Tai, 1989; Tan, 1992). Likewise the teaching on diligence and respect for learning explains why the Asian labor-force is well trained, disciplined, and hard-working (Lim, 1994; Chen, 1985).

We have briefly reviewed four major schools of thoughts relevant to the developmental success of the five Asian countries. It is not the intention of this article to critique these theories or to resolve their differences. Proponents of each theory are able to cite evidence to support their arguments. Yet, their opponents are able to cite counter-evidence. The most obvious lesson from this brief review is that while each school of thought is not entirely wrong, it is never fully right. Each school of thought has its strengths and weaknesses, and it can only partially explain the Asia success story. The conservative neo-classicists underestimates the importance of state intervention, whereas the extreme interventionists totally ignore market fundamentals. Likewise, neither technology nor culture alone could be sufficient to drive economy growth and development. In the next section, we will try to offer an integrated framework to explain the Asian success.

AN INTEGRATIVE FRAMEWORK

Overview

As noted earlier, there is more than one success story regarding the developmental experiences of the five Asian "miracle" economies. We

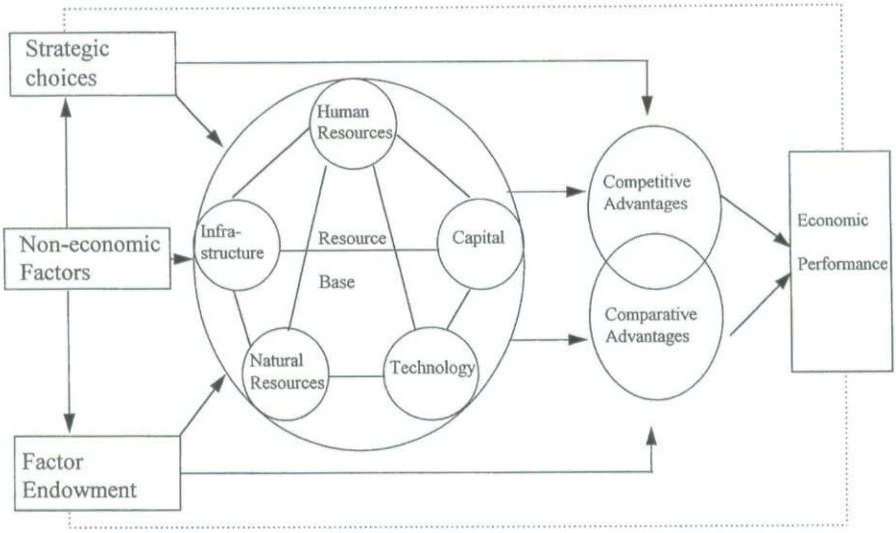

Figure 2. An Integrative Framework To Explain the Asian Success Story

know that each Asian country took a different route to success and pursued its own unique economic objectives (Woronoff, 1986). Yet, the challenge is to come out with a framework that can link these success stories into a coherent whole. Figure 2 gives a graphical illustration of such a framework. Our framework contributes to the literature in that, unlike previous studies which tend to be discipline-bound, our framework captures the research efforts of diverse field of studies ranging from economics to strategic management and sociology.

Briefly, the framework indicates that the strategic choices of the government, natural endowment of the country, and other non-economic factors will directly affect the quantity and quality of a country's resource base. The elements of a country's resource base are human resources, infrastructure, natural resources, technology, and capital. The accumulation and deployment of these resources will directly affect the country's competitive and comparative advantages, which, in turn, determine its economic performance. The framework also shows that strategic choices will directly affect competitive advantages, whereas, natural endowment will directly affect comparative advantage of the country. The arrows linking non-economic factors to strategic choices and natural endowment suggest that non-economic factors can affect these two factors. The dotted lines joining economic performance to strategic choices and factor endowment are feedback loops.

Strategic Choices and Factor Endowment

The five successful Asian countries as reviewed in this integrative framework commenced their development journey with varying starting positions. Each country is endowed differently in terms of resources, population characteristics, infrastructure, and geographical advantages, etc. Among them, Japan was the first to be industrialized and soon the other four began to pattern after the early success of Japan. Given the diversity in factor endowment among the five Asian countries, the mix of strategic choices available to each of them varies widely. Hence, it is not surprising that they each has chosen a different path to success.

Broadly conceived, strategic choices are policy options decided and implemented by the state to promote economic welfare. The tools available to the state implementing their strategies are many. For instance, the state can vary deposit and borrowing rates, impose import and export quotas, provide subsidies or tax incentives to selected industries, engage in direct investments, develop export-marketing institutions, establish avenues to share information between public and private sectors, etc. (Page, 1994).

In addition, there is also a wide variety of policy options available to the state in formulating their developmental strategies. At one extreme, the state can choose to adopt the neo-classical framework which emphasises the invisible hands of free market, and at the other extreme is the interventionist framework which emphasises governmental actions. In choosing the interventionist framework, there are two kinds of intervention—functional and selective (Lall, 1994b). Fundamental interventions are those that address the problem of market failure without favoring any industry or activity in particular. Examples of fundamental interventions are investing in human capital, ensuring macroeconomic stability, limiting price distortions, and encouraging transfer of foreign technology. Selective interventions are those that favour a particular industry or activities. Instruments for selected interventions include mild financial repression, selective industrial promotion programmes, and export-push policies.

With the exception of Hong Kong, the economic success of the Asian countries has been attributed to the interventionist framework. Japan's Ministry of International Trade and Industry (MITI) has played an important role in her post-war industrialization program (Johnson, 1982). Likewise, a good account of how the state intervenes in Taiwan's, South Korea's and Singapore's economies can be found in Amsden (1989), Gold (1986) and Lim (1983), respectively. Only Hong Kong comes close to implementing the neo-classical framework (Woronoff, 1986). Even there, Amsden (1994) observes that Hong Kong's textile industry has been strongly protected by direct state intervention. This is in agreement with Ho and Lin's (1991) observation that Hong Kong has moved more towards the interventionist framework to protect her textile industry.

The arrow in the figure connecting strategic choices to resource base shows that they are related. Essentially, strategic choices can affect the country's resource base in various ways, namely, accumulation, allocation, and technology catch-up (Page and Petri, 1993). Experience shows that the five successful Asian countries have made appropriate decisions on how to accumulate and deploy resources and how to acquire technology for their economic programmes. (Please refer to the section on Resource Base).

Export-orientation is one strategy that is most associated with the success of the five Asian countries (Pack and Page, 1993). Although, the five successful Asian countries had always been commended for adopting export-oriented strategies, in retrospect, all of them were in some ways compelled into adopting this strategy. At the early stage of development, they were resource-poor and since they had small domestic markets in terms of purchasing power, they could not rely on import-substitution industries to support their economy. The only option available to them was to engage in export-oriented activities to earn foreign exchange for importing food and raw materials.

The export-oriented strategy helped the five Asian countries in many ways. The ensuring growth of employment enabled the country to save and accumulate capital for reinvestment. The export-oriented strategy also positively affects the competitive advantages of the country. Export-orientation expanded the markets for the local firms; this enabled them to harness economies of scale and advantages of specialisation. The pressures of directly competing with foreign firms also kept the firms on their toes. To survive, they had to continually improve on quality and control cost. Besides bringing in the needed foreign exchange for their imports, the export-oriented strategy also encouraged the local firms to upgrade themselves technologically which in turn helped the country to industrialise.

Non-Economic Factors

It is undeniable that appropriate strategic choices made by the state have contributed to the success of Asia. Yet, we must not forget that there are other non-economic factors, such as culture, the need to survive, strong government, historical factors (for example, the role of imperialism), and even luck, that could have helped in the development process of these countries. These factors could indirectly affect the competitive and comparative advantages of the country through their impact on strategic choices, factor endowment, and resource. We can easily conceive how non-economic factors can influence strategic choices. For example, the success in applying interventionist framework will depend on having a strong and uncorrupted government. Likewise, having a strong and uncorrupted government will foster confidence among foreign investors leading them to invest in the country and bring in the needed capital and technology for development. Non-economic factors can also directly influence the resource base. For example, natural disasters such as famines and earthquakes can deplete the country's resources overnight. In the case of Singapore, unlike other Asian countries such as India and China, the fact that it has not been plagued with any natural disasters does help to account for its uninterrupted dynamic growth.

Need For Survival. We have already discussed how culture, and in our case, Confucianism, can contribute to economic progress. Siege mentality or the need for survival is one behavioural factor that is commonly associated with Asia's success (Grabowski, 1994; Tan, 1992). The experiences of the Second World War and Cold War have had profound influences on the people of Japan, Taiwan, and South Korea. During that time, there was so much uncertainties about their future. The humiliation of being defeated in Second World War became a source of motivation for the Japanese to succeed economically. In the case of South Korea and Taiwan, they were also faced with the real possibility of being invaded by their neighbours. These threats kept the Korean and Taiwanese on their toes motivating them to work hard for their survival. Even Singapore and Hong Kong faced some threats to their survival. In the 1960s, after the separation from the Federation of Malaysia, Singapore had to face the uncertainty of its viability as an independent state. As for Hong Kong, the flood of refugees from China in the 1950s and 1960s had caused intense competition for personal survival among its people.

Strong Government. When groups encounter external threats, they tend to be more cohesive. This is perhaps another reason why Asians are willing to put aside their personal interests in pursuit of national goals and even be willing to submit to strong, authoritarian governments (Migdal, 1986). South Korea and Taiwan have been subjected to military dictatorships for a long time. Singapore has been effectively governed by one political party since its independence. Generally, there has been no change of governments in the five successive Asian countries since the Second World War (Tan, 1992).

Having a strong government has its advantages. Since development is a long-term process, it requires the citizens to make short-run sacrifices in the interest of the future. A strong and active government is able to maintain internal stability to push through unpopular policies that will benefit the country in the long-run (Patel, 1994). Also, a strong government can overcome obstacles posed by sectional interest groups, and thus is better able to implement tough, corrective policies for the long-term benefits of the country (Griffith, 1987). In addition, as can be testified by the Singapore experience, a strong government is essential to instill the confidence of foreign investors to invest in the country. In the early 1960s, when the People's Action Party came into power, there were political uncertainties in Singapore which led to the withdrawal of capital by some foreign firms in Singapore. However, the trend quickly reversed itself when there were encouraging signs that the People's Action Party, under the leadership of Mr Lee Kwan Yew, could provide a strong government for Singapore.

Historical Factors. Some scholars acknowledge the role that imperialism played in the developmental process of the Asian countries (Patel, 1994; Tan, 1992). Korea and Taiwan were colonies of Japan under the end of Second World War. Likewise, Singapore was colonized by the British until she gained independence in the 1960s, and Hong Kong is still a colony of the British until 1997. Experiences had shown that the colonial masters did help their colonies to develop by establishing the basic infrastructure and foundations for economic development. Hong Kong and Singapore inherited an efficient civil service from the British which help to implement the countries developmental programmes. In addition, the British have established in both countries good communications, transport and education systems to support their development efforts.

Japan modernised and developed Taiwan's and Korea's agricultural industry when they were under its rule. It introduced new farming techniques and improved their irrigation systems. Like the British, Japan had also improved the health and education systems and helped develop the communications and transport systems of its colonies. Thus, the basic foundations were already laid out by Japan when these two countries embark on their export-oriented industrialization programs in the 1960s (Tan, 1992; Wu, 1987).

Developing At the Right Time. The search for reasons for Asian's success went beyond traditional fields of studies, such as, economics and sociology. Some scholars even attributed the Asian success to pure luck (Patel, 1994; Tan 1992). In retrospect, the Asian countries were fortunate to be developing at the right time. Firstly, during that period, the anti-communist sentiments were strongest. This opened up opportunities for developing nations to obtain generous aids from anti-communist nations. Secondly, there was certain technology breakthroughs that the Asian countries were able to harness; and, thirdly, world trade was growing quickly,

In the 1950s and 1960s, there was full support for economic recovery and development by developed, anti-communist nations, such as, United States and Britain (Wornoff, 1966). Japan was ruined after the Second World War. Yet, fortune was with Japan when suddenly the communist threats became stronger in Asia after the Chinese Communist Party took over China and North Korea attacked South Korea. These events caused United States to decide to help Japan re-industrialise by transferring technology, injecting capital and opening its markets for Japanese exports (Lee, 1996). The massive foreign aid from United States and other anti-communist countries have also helped South Korea and Taiwan in their economic development. To some extent, Hong Kong, and Singapore have benefitted from British aid (Woronoff, 1986). The anti-communist sentiment have also prompted the World Bank and International Development Associate to offer extensive loans to the Asian countries to assist them in their development programs.

Tan (1992) noted that the five Asian countries were lucky to be developing at the time when they could take advantage of certain breakthroughs in transport and communications and manufacturing technology. The development of container technology lowered the transport cost of exported goods. The Asian countries were amongst the first to exploit this new technology. The development of satellite communications also made it easier for multi-national corporations to control their subsidiaries in foreign countries. This has had a positive impact on foreign investment in the Asian countries. Another technological breakthrough that benefitted the Asian countries was miniaturisation. This new technology made it cost-effective for multi-national corporations to manufacture electronic products in the Asian countries and then re-export them back to their home countries.

The five Asian countries were also lucky in that they were industrializing at the right time when world trade was rising. This helped the Asian countries very much when they were embarking on their export-oriented programs. They had no problems exporting their goods to the more advanced countries, especially, the United States and Western Europe. These countries just opened their markets to Asia's manufactured goods (Tan, 1992).

In sum, while there may be an element of truth that the five Asian economies may be lucky to be developing at the right time, in final analysis, what makes them to be more successful than others is that they were proactive and managed to take prompt action to benefit from the windows of opportunities before others.

The Advantages of "Neo-Development"

Another factor of success attributed by Woronoff (1986) is what he called the "age of neo-development". In gist, there are certain advantages that the Asian countries could exploit being a latecomer in economic development. Earlier successes of other advanced countries could be a source of inspiration to the Asian countries and they could serve as models for the Asian countries to pattern after. The Asia's development follows a "flying geese" pattern with Japan leading the flock. The "four tigers"—South Korea, Taiwan, Hong Kong, and Singapore—were the closest followers and benefitted much from the Japanese experiences. Now, the other countries in Asia are learning from the "four tigers." Since the 1980s, the ASEAN countries like Thailand, Malaysia, and Indonesia have opened up their economies and promoted foreign investment. In the 1990s, India, Vietnam, and other closed economies in South East Asia are beginning to open their economies to promote growth. Being late-comers, the Asian countries had more ready access to technology, capital and market from developed countries. Technological advancement is a tedious process. However, the Asian countries need not reinvent the wheel and invest resources on endogenous R & D. They could acquire technology cheaper and easier by encouraging foreign investment. Alternatively, the Asian countries send their students overseas to learn from the more advanced countries. In sum, Asia's pace of development was speeded up, thanks to the advantages of being latecomers.

Resource Base

Our framework indicates that strategic choices, non-economic factors, and factor endowment influence the resource base of Asian countries, which, in turn, affect the country's competitive and comparative advantages. According to our framework, human resources, capital, technology, infrastructure and natural resources constitute the essential resource base for a country's economic activities.

Natural and Human Resources. The Asian countries were not richly endowed with natural resources. The only resource that they could rely on to develop their economies were human resources. Just around the time when the Asian countries were starting their development programs, Nobel Prize winner, Professor Schultz, had already established the link between education and economic growth (Schultz, 1960, 1961). According to Schultz, activities on human capital investment include formal education at the primary, secondary, and higher levels; informal/on-the-job training; study programs for adults; public health programs; migration programs to meet the demands of changing job opportunities.

In hindsight, the Asian countries followed quite closely Schultz's prescriptions for human resources investment. The quality of schooling in Asian countries has improved tremendously over the years, compared to other middle-income economies (Page, 1994). Investment on basic education had expanded over the years. For example, Taiwan had only four universities and four junior college in 1952. By 1989, the number of educational institutions increased to 42 universities and 75 polytechnics or colleges (Goh, 1993). It is common to see schools in Asia operating on two shifts during the day and operating at night for adult education (Huges, 1995). Overall, there is a bias towards vocational and technical education as opposed to general education (Lim, 1991). The Asian countries tend to be pragmatic in their education policies. They focus on disciplines that help to create economic values for the society. As noted by the Senior Minister of Singapore, Mr Lee Kwan Yew, East Asia needs a solid base of engineers and scientists to support its economic development programs. Hence, the education systems tend to emphasize hard discipline such as Mathematics, Sciences, and Engineering (Straits Times, 1996). Besides upgrading the educational standard of their nations, the Asian countries also upgraded the skills of their workers through promotion of enterprise training programmes, including many sponsored by the government (Page, 1994). To build a healthy and productive workforce, the Asian countries have comprehensive public health programmes, ranging from inoculation and vaccination to provision of pure water and waste disposal (Huges, 1995).

Capital, Technology, and Infrastructure. The developmental history of the Asian countries testifies that the economic performance of a country depends on its ability to acquire capital, technology and infrastructure. The Asian countries managed to increase savings and plough them into infrastructural development investment and technological upgrading. As shown in Table 1, over the past 30 years, on average, Singapore, Taiwan, Hong Kong, and South Korea saved and invested 30.6 percent of its GDP. For Japan, it was 33.7 percent. In comparison, the US saved and invested only 18.4 percent and Europe only 22.5 percent of their GDP (Lee, 1996).

Besides savings, another source of capital and technology is through foreign investment. In the 1980, foreign investment in the

Table 1. Saving Rates in United States and the Five Asian Countries (% of GDP)

Country	1966–69	1970–79	1980–89	1990–94	1966–94
United States	20.0	20.1	17.8	15.4	18.4
Japan	36.3	35.2	31.6	32.9	33.7
Four NIEs:					
Singapore	17.6	27.8	40.3	46.5	34.0
Hong Kong	24.0	30.8	33.4	34.3	31.4
Taiwan	22.9	31.2	33.6	28.2	30.3
Korea	17.9	22.3	30.4	36.4	26.9

Sources: *Straits Times,* June 18, 1996: 26.

East Asia countries amounted to $1.36 billion. By 1995, the amount increased to $36.5 billion (Beijing Review, 1996). Although, the five Asian countries used different approaches to attract foreign investment, all of them to some extent depended on foreign capital for their development. Relatively, Hong Kong, South Korea and Taiwan are less dependent on foreign investment (Tan, 1992). However, in Singapore, the dependence on foreign capital is very high. In 1983, about 92 percent of Singapore's external borrowing was derived from foreign investment compared to only 6 percent in Korea (Kim, 1990).

Governments in Asia use various interventionist mechanisms to increase savings and attract foreign investment. Singapore imposes mandatory insurance fund contributions as a form of forced savings for its development programs, including the building of housing flats for its population and developing industrial sites for its industrialization programs. The Singapore government is also a major actor in the financial sector. The two government-linked banks—Post Office Saving Bank and Development Bank of Singapore capture a large share of the national deposits and are a major investor in government bonds. To encourage savings, Japan, South Korea, and Taiwan maintain stringent control on loan-rates for consumer items and impose high tax on luxury consumption. The successful Asian countries are able to institute sound macro-economic policies to avoid inflation and volatility in real interest rates. These policies help promote confidence among private savers and foreign investors in the Asian economies.

Competitive and Comparative Advantages and Economic Performance

Our integrative framework in Figure 2 shows that the immediate precursors to economic performance are competitive and comparative advantages. The notion of competitive advantage is derived from the strategic management literature. Its relevance to economic success is well discussed in Porter's (1992) voluminious book, *The Competitive Advantage of Nations.* The concept of comparative advantage is based on conventional economic analysis. In essence, the principle of comparative advantage is about efficient allocation of resources among industries within a country.

Comparative Versus Competitive Advantages. Conceptually, comparative advantages tend to be more dependent on factor endowment whereas competitive advantages tend to be more amenable to strategic choices. Comparative advantage tends to be a static concept whereas competitive advantage is more dynamic. Warr (1994) suggests that the concept of comparable advantages is more applicable to country-level analysis, whereas the competitive advantages is more suitable for firm-level analysis. We believe that in reality the two concepts can overlap and even overlap substantially. For example, a government can improve the comparative advantage of its country by creating a conducive environment to support the competitiveness of both private-owned and government-owned firms within the country.

In our analysis of Asian successes, we believe that both comparative and competitive advantages are important. We agree with Warr (1994) that the two concepts "should be properly viewed as complements to one another and should not be seen as competitors for the minds of policy-makers" (13). Porter (1990) cites a good example of how South Korea improved the competitive advantages of its shipbuilding firms through upgrading and capital investment. Likewise, Grabowski (1994) notes that the governments of Japan, Taiwan, and South Korea have indirectly influenced the comparative advantages of their countries by manipulating the allocation of financial resources among industries. He notes that they have "either directly controlled the banking system via public ownership or indirectly through government influence" (414).

Economic Performance. The dotted lines connecting economic performance to strategic choices and factor endowment suggests that the growth process is cyclical and operates on the system concept. The country's ability to foster competitive advantages and harness its comparative advantages will positively affect its economic performance which in turn will affect its future strategic choices and its stock of factor endowment. Thus, our framework in Figure 2 depicts an economic system which reinforces itself either as a virtuous cycle of growth or as a vicious cycle of poverty.

One reason why the five Asian countries were so successful is that they are quick to respond to the feedback of their strategies. Except for Hong Kong, the other Asian countries had adopted the import-substitution strategy at the early stage of their development. However, they quickly switched to export-oriented strategy once they sensed that the import substitution strategy was not generating enough income for the country (Page, 1994). Singapore's experience is a good example of how a country could make the necessary adjustments in its strategies in order to achieve its growth objective. When Singapore first commenced on its industrialization program, it adopted the import substitution approach. However, after the separation with Malaysia in 1965, it was not feasible to continue the strategy due to its small domestic market. Thus, it quickly switched its approach to export orientation and focused on labour-intensive industries to create employement. However, in the 1970s, when Singapore achieved full employment, it directed its effort to promoting more capital-intensive projects. By early 1980s, Singapore embarked on a wage increase program to induce investors and entrepreneurs to upgrade to high-tech industries. However, by the mid-1980s, there were indications that the program was not working to its desired effect. The Singapore government then quickly froze the wages of its labour force to correct the situation (Tan, 1992). By the late 1980s and early 1990s, Singapore realized that to sustain the long term competitiveness vis-a-vis the world, it has to reduce its direct intervention in the market. Since then, it has started on its privatization program beginning with the privatization of Singapore Telecommunications.

Likewise, Japan's MITI also adapted its role to conform to market demands. During the post-war period, MITI played an active role as initator, agent and implementor of Japan's industrial policies. However, in the 1980s, MITI switch its role to being a helper to problematic industries (Smith, 1995). In the 1970s, South Korea directly intervened in its economy through its trade and financial policies to promote its heavy and chemical industries. However, this strategic choice proved fatal as many firms were indebted. By the 1980s, South Korea abandoned the direct intervention strategy and relied more on the private sector to make decisions (Smith, 1995; Tan, 1992).

CONCLUSION

We have traced the success stories of the Five Asian countries and captured the essence of their success in our integrative framework. Theoretically, the foundation of our framework is derived from diverse school of thoughts ranging from the the neo-classical orthology to the interventist, and from the technological to cultural imperative. We argue that the economic development of a country is a complex phenomenon and hence cannot be attributed to any single-cause explanations or major school of thoughts. One major contribution of the paper lies in our synthesis of the previous scholarly works by researchers of various disciplines. It provides a multi-cause explanation of the Asian success stories.

At the applied level, we believe that we can derive some practical lessons from the Asian success story, however, we want to caution that there is no such thing as a copy-cat approach in economic development. Indeed, economic development is a tedious and complex process. Every country is inherently different in terms of factor endowment, resource base, comparative and competitive advantages. There are also certain non-economic factors that make repeating the Asian success experiences difficult. For example, nowadays it will be harder for developing countries to rely on export-oriented strategies to stimulate economic growth when the world trading environment is not as conducive as in the 1950s and 1960s. Also, Smith (1995) feels that the interventionist policies as practiced by the Asian countries may not be replicable "given a less receptive trading environment for export subsidies, more open capital markets, and freer labor markets" (32). In view of the contingencies and complexities involved, policy-makers need a framework to help them diagnose their economies in order to devise a contextually relevant strategy for their countries' situation. Our framework will serve that purpose.

As reflected in our framework, many factors are involved in the development of a country, and these factors are interrelated in a complex systems. At the practical level, this means that there is no single-approach to remedy poor economic performance. Policy-makers must know how to use the total-systems approach to solving economic problems. In other words, policy-makers must know how to analyse their economies as complex systems. In formulating their growth strategies, policy-makers must consider the complex interrelations of various components of their economic systems. This implies that their strategies should be integrated and coherent since intervention at one component of the economy will have impact on the others. For example, investment on technology must be supported by corresponding investment on education and training.

Our framework depicts economies as dynamic and not static systems. A country's competitive and comparative advantages can change over time either due to conscious strategic choices or uncontrollable external events. For example, traditionally Singapore has a comparative advantage in entrepot trade. However, by the early 1960s, the Singapore government realized that it could not depend on entrepot trade for its survival and growth. Thus, it embarked on its industrialization program. Now, three decades later, Singapore's competitive and comparative advantages are not found in entrepot trade, but in other economic activities, such as manufacturing, banking, and tourism. The implication is that policy-makers must constantly monitor the economic performance of the country. They must know how to discern trends in the environment and take proactive measures to capitalize on the opportunities and avoid the threats of the environment. We have already mentioned how the Asian countries had capitalised on the certain technological breakthroughs in the 1960s to develop their economies. The environment now is more complex and turbulent. The challenge is for the policy-makers to make sense of this chaos and formulate appropriate strategies in response to them.

International business managers can also use our integrative framework as a diagnostic tool to analyze the Asian countries and decide how their firms can harness the competitive and comparative advantages of the various Asian countries. Since the Five Asian countries have dissimilar competitive and comparative advantages among themselves, it will be more lucrative for multinational corporations to invest in different countries to supply components for the final products. This arrangement will offer multi-national corporations opportunities to take advantages of different comparative and competitive advantages of different countries. It will also help them avoid import barriers since only intermediate products are involved. Lee (1990) gave an example of how a personal computer manufacturer multi-national corporation set up a regional network of low cost subsidiaries and joint-ventures in seven Asian countries to supply components for the final products.

Multinational firms can be powerful enough to exert an impact on the economic environment of their host countries. This means that international business managers need not be passive agents subjecting themselves to the limitations of their host countries. They should try to be active agents making effort to shape the competitiveness of their host countries. In other words, they can take proactive actions to initiate programs that help their host countries develop. For example, multinational corporations can support vocational training to help develop the human capital for their host countries. They can also invest in endogenous R&D to come out with innovative products that are closer to the Asian consumers' needs.

In response to the multinational corporations' interests in the region, the Asian governments have become more aggressive in their efforts to attract regional headquarters in their countries. Hong Kong and Singapore have already become the Asian hubs for regional headquarters and are among the top ten cities to do business (Saporito, 1994). Both countries offers many advantages as the preferred locations for regional headquarters. They have good infrastructures, availability of skilled workers, pro-business government, and, access to the China market. However, the ever spiraling cost of doing business and the potential personnel conflicts between Hong Kong and mainland Chinese employees are factors that weigh against Hong Kong's appeal as the preferred site for regional headquarters. Other Asian cities aspiring to pattern after Hong Kong's and Singapore's success include Shanghai and Taiwan. The governments are working hard to improve their infrastructures, streamline their administrative procedures and provide various tax incentives to attract multinational firms to set their headquarters in their cities.

Multinational corporations seeking to enhance their presence in the fast-developing Asian countries should consider setting headquarters in the region if they have not done so. Establishing regional headquarters in Asia provides distinct competitive advantages in the Asian market vis-a-vis those firms that are headquartered in non-Asian countries such as US and Europe. For example, Chrysler recently set up its Southeast Asian Regional Headquarters in Singapore (PR Newswire, 1996). It wants to get closer to the market and its consumers so that it can respond quickly to any changes in the market conditions. It believes that by being close to the market, it will be able to design models with styling, performance levels, and safety features that match the expectations of its Asian customers.

In addition to ancedotal evidences from news report and press releases, there are empirical studies that confirm the wisdom of establishing regional headquarters in Asia. For example, a recent study indicate that regional headquarters in Asia have important roles to perform. Broadly the roles could be classified as entrepreneurial and integrative roles (Lasserre 1996). Entrepreneurial roles include scouting for business opportunities, stimulating strategic planning through analysing changes in the regional environment and incorporating these analyses into business strategies, and, signalling commitment to local authorities and to internal stakeholders (e.g., product division). The integration roles include coordinating implementation of policies and ensuring businesses exploit synergies across the region, and pooling resources.

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