Capitalism in Human Scale

ARE THERE "VIRTUOUS CIRCLES" IN ECONOMIC GROWTH AND HUMAN DEVELOPMENT IN ACHIEVING A NEWLY INDUSTRIALIZED COUNTRY STATUS?

by

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INTRODUCTION

The people of Sri Lanka live longer than those of South Korea. The life expectancy of Sri Lanka was 72 years compared to 71 in South Korea in 1992. Over the last 32 years (1960-92), Sri Lanka has consistently led in longevity. This phenomena still seems to continue in the Asian region. In contrast, South Korea raised its current GNP per capita income from $310 in 1970 to $6,790 in 1992, an increase of over 2000%. Despite this miraculous economic growth by any standard, South Korea still needs to catch up with the life expectancy rate of Sri Lanka whose GNP per capita income was $540 in 1992, an increase of less than 185% during the same period (Table 1). Why does Sri Lanka demonstrate a relatively common feature in longevity with South Korea despite a significant real income gap?

Table 1: Life Expectancy and GNP Per Capita Income in Sri Lanka and South Korea

<table>
<thead>
<tr>
<th>Country</th>
<th>Years</th>
<th>Life Expectancy (Years)</th>
<th>GNP Per Capita (Current US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>1970</td>
<td>66</td>
<td>190*</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>69</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>71</td>
<td>470</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>72</td>
<td>540</td>
</tr>
<tr>
<td>South Korea</td>
<td>1970</td>
<td>65</td>
<td>310*</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>66</td>
<td>1620</td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>71</td>
<td>5450</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>71</td>
<td>6790</td>
</tr>
</tbody>
</table>

Note: *1971 data.


Many observers have cited, explained, and even questioned the experience of Sri Lanka as an "exceptional achievement" or a "superior performance" or even as an "aberration" (Ahluwalia et al., 1979; Bhagwati, 1988; Bhalla, 1988; Bhalla and Glewwe, 1986; Grant, 1978; Hopkins and Joganathan, 1990; Isenman, 1980; Kakwani, 1986; Mendis, 1992a and 1994; Morris, 1979; and Sen, 1981, 1983, and 1988). South Korea's economic success, on the other hand, is not only breath-taking but has been
a miraculous achievement in the world. One might still ask: if the goal of
development is to improve the living standard of its people, why not think about
finding ways to achieve higher human development as in Sri Lanka? Professor
Amartya Sen (1983: p. 453), who initially made the analogy between Sri Lanka and
South Korea, states that:

If the government of a poor developing country is keen to raise the level of
health and the expectation of life, then it would be pretty daft to try to achieve
this through raising its income per head, rather than going directly for these
objectives through public policy and social change, as China and Sri Lanka
have both done.

These commentators still continue to raise questions in order to understand
the experience of Sri Lanka and the Four Tigers of East Asia, especially South Korea.
This on-going discussion is a part of the major debate between economic growth and
human development, the market approach vs. public policy intervention, and
growth vs. equity.

The purpose of this paper is two-fold: the first part is to understand the
"virtuous circles" of economic growth and human development; the second part is
to review the development literature related to this discussion. For this, the
evolving development strategies of Sri Lanka and South Korea and the seemingly
convergent two schools of thinking are briefly outlined in Section II. Section III
surveys the pace of economic and human progress to give a broad background of the
debate. Section IV analyzes the economic growth and human development in
selected Industrialized Countries, Newly Industrialized Countries (NICs), Emerging
NICs, and Aspiring South Asian neighbors of Sri Lanka. Selected Industrialized
Countries include Japan, Sweden, and USA; Newly Industrialized Countries (NICs)
are referred to as the four East Asian tigers of Hong Kong, Singapore, South Korea,
and Taiwan; Emerging NICs are Indonesia, Malaysia, the Philippines, Sri Lanka, and
Thailand whose real GDP Per Capita PPP$ exceeded $2,000 in 1992. Aspiring NICs
include Bangladesh, India, Nepal, and Pakistan (members of the South Asian
Association of Regional Cooperation, SAARC). Sri Lanka is also a member of
SAARC. In the second part of the paper, a discussion of economic development
literature and the experience of NICs are reviewed to learn from their policies and
strategies in Section V. Section VI ends with some concluding remarks.
II
BACKGROUND: VARYING STRATEGIES AND SCHOOLS OF THOUGHT

At the time of independence from Great Britain in 1948, Sri Lanka had reached a relatively high level of living standard in Asia. For example, Dr. Sarath Rajapatirana (1988: p. 1143), a World Bank's Policy Advisor, writes that "Sri Lanka enjoyed the third highest per capita income in Asia after Japan and Malaysia" in the late 1940s. In A Survey of South Korea, The Economist (1995: June 3, p.1) highlights that "three decades ago the average Korean earned around $100 a year, less than the average Indian or Ghanaian. Today South Korea's GNP per head is $8,500, 30 times India's and 20 times Ghana's." And, it is now 12 times that of Sri Lanka.

South Korea, after the brutal colonization by Japan (1910-45) and the civil war with communist North Korea (1950-53), was an economic basket case before it took off as an affluent nation in Asia. This economic progress has been achieved within a generation by the military dictator, Park Chung Hee (1961-79) who was educated in Japan. As the Korean leader, Park essentially emulated the Japanese model of economic development. Now, South Korea has become an economic model for others to follow.

Compared with South Korea, Sri Lanka has been seen as an economic failure and has even lagged behind the Emerging NICs of Indonesia, the Philippines, and Thailand. Why has Sri Lanka, who has achieved impressive human development compared to South Korea and others, been left behind in its economic growth? Does the varied success result from economic policies or other non-economic factors, such as cultural endowments?

The more obvious, and commonly identified, reason lies on the realm of macroeconomic policies. South Korea, over the last three decades, pushed for export-led industrialization. For more than four decades, Sri Lanka has followed two major policy choices as development strategies: First, the policy-makers emphasized the development of social welfare through public policy interventions in the areas of education, health, and food consumption, especially during the 1960-77 period. A series of land reform policies in 1972 and 1976 was followed by a nationalization of three major foreign exchange earners of tea, rubber, and coconut as well as several key industries. These policies were designed to achieve a more egalitarian and self-sufficient economy. The intellectual support for the socialist
SLFP (Sri Lanka Freedom Party) government to actively pursue these welfare and inward-looking development strategies came from the Latin American structuralists, particularly Raul Prebisch and Ragnar Nurkse. Second, this dirigisme approach was drastically changed into a package of more market-friendly, open economic policies with the change of government in 1977. The experience in 1960s and part of the 1970s was characterized by slow economic growth, rising unemployment, high inflation, increasing budget deficit, and difficulties in foreign exchange. Similar to the intellectual support of Latin American structuralists in 1950s, the high performing economies of the NICs, especially South Korea and Singapore, in the late 1970s gave the rationale for the 1977 UNP (right-wing United National Party) government to adopt out-ward oriented strategies. The new economic package included a wide range of liberalization of trade and exchange rate policies, removal of price controls and ceiling of domestic interest rates, and encourages foreign investment and privatization (Rajapatirana, 1994). These post-1977 outward-looking strategies helped achieve a relatively higher level of economic growth, which is similar to those of the Emerging NICs. The recent experience shows that the liberalization has been an irreversible process despite the change of government. The SLFP-led coalition government, which returned to power in 1994, has fully committed to pursue market-friendly policies for economic development.

The two contrasting development strategies have had their own merits which would serve well for the current development debate between economic growth and human development. It is widely believed that there exists a positive and mutual reinforcement between the two approaches. The World Bank has capsulated the basic premise of their argument (World Development Report 1991: p. 36):

Human development and poverty alleviation, on the one hand, and economic growth, on the other, seem to reinforce each other. Human development and poverty alleviation have always been development goals in the eyes of policy-makers and planners. Their methods, however, have varied, and have ranged from government interventions to market solutions. Elements of both are needed: Market-oriented policies to support growth, together with well-targeted social programs.

The advocates of human development have recognized the connection between the two. The emphasis, however, is different. The UN Development Programme in its Human Development Report (1994: p. 17) adds:
More important is the way growth of GNP influences human development. There is considerable evidence that the statistical connection between GNP per head and human development tends to work through the effect of higher GNP in raising public expenditure and in lowering poverty.

These assertions imply that there is neither a real debate nor a conflict between the two. Rather, it appears that there are obvious "virtuous circles" that would mutually reinforce economic growth and human development for higher human progress. Here, the distinction between the two needs to be clarified: if human progress means, in a broad sense, to increase the quality of overall livelihood of people, the economic growth is a means to achieve it. As a means, of course, economic growth is very important but not a sufficient basis in achieving the end itself. Human development in essence is an end.

The economic growth in South Korea has, for example, contributed to a higher level of human capacity development with an element of high cost while Sri Lanka achieved it at a relatively low cost. Still, South Korea needs to catch up with Sri Lanka. If the argument made earlier by Professor Amartya Sen, now the President of American Economics Association, is still valid, the methods of achieving development goals, not the means, should then be reconsidered.

III

LEGACY OF ECONOMIC AND HUMAN PROGRESS

It is always easier to emulate and catch up than to innovate and lead. The history of economic growth illustrates that it is quite possible for a country to develop faster than in the past by following a leader. Others, of course, take much longer, depending largely on the circumstances and their economic policies. In the 19th century, the UK took 58 years (1780-1838) to double its per capita income and the US took 47 years (1839-86). Japan did it in 34 years (1885-1919). The World Development Report (1991: pp. 12-13) further states that after World War II, several countries doubled their per capita output even faster than Japan: Indonesia in 17 years, South Korea in 11, and China in 10. By 1992, the fast growing East Asian high performing economies took a miraculously shorter time-span to double their per capita output. South Korea doubled its per head GNP approximately in four years by 1992 (Figure 1). Thailand in five and Japan in six compared to the US and Sweden in 12 years. Japan, whose income per capita surpassed the US in 1988 ($19,770) and
Figure 1: Doubling Years of GNP Per Capita Output by 1992, Selected Countries

Notes: GNP Per Capita (in current US$) doubling years are approximate. Years are indicated in parentheses for the corresponding GNP Per Capita.

Source: World Tables 1994
Sweden in 1987 ($15,870), maintained the lead at $28,190 in 1992. Sri Lanka needed closer to 17 years. Sri Lanka's neighboring countries of Bangladesh, India, Nepal, and Pakistan took well over 20 years to double their per capita output. South Korea and other East Asian neighbors who emulated the Japanese model grew faster than their leader. The policy-makers of the South Asian Association for Regional Cooperation (SAARC) have followed the lead of Sri Lanka which modeled after South Korea and Singapore in 1977.

It appeared that not only in the level of per capita income, progress is also made in life expectancy and literacy rate as reflected by the positive relationship between the GNP per capita and the Human Development Index (HDI) in selected countries (Figure 2). But, economic growth is not synonymous with development. The measure of economic growth in a per capita unit has a limited explanatory power to measure progress in education, health, and nutrition though traditionally it was assumed that GNP per capita captured the essence of human development. Beyond economic growth, development means the general improvement of the conditions of human livelihood including access to education, better health care facilities, adequate consumption of food, employment opportunities, and protection of the environment. The measure of human development as captured in HDI also excludes the broader changes in political, social, and cultural aspects of human endeavors. The HDI, however, represents a broader measure of human development than GNP per head. The Index has encompassed the triple components of human development: 1) life expectancy as a measure of health care delivery system and the ability of people to live longer to achieve their goals; 2) adult literacy as a component to get and maintain a job and to understand the surroundings and culture; and 3) purchasing power parity (PPP) which is calculated in a manner that per capita income is adjusted to account for national differences in exchange rates, tariff, and tradable goods. The PPP demonstrates the relative ability to buy a basket of commodities to meet basic human needs (Gall, 1991: pp. 4-12). Obviously, the positive relationship between the two in Figure 2 is not equally divided (in 45 degrees). The direction of the path indicates that social and human development at the initial stage has attributed relatively more to the progress of HDI in developing countries (cf. Aspiring NICs of South Asia) than to those of
Figure 2: Relationship between GNP Per Capita Income and HDI Value in 1992, Selected Countries

Industrialized Countries

Emerging NICs

Aspiring NICs

industrialized and East Asian countries. The push for relatively higher economic growth has more response from the developed countries because they have already reached closer to a plateau in human development potential relative to developing countries.

The general notion is, however, that high quality of life requires higher income. With economic growth strategies, it is assumed that people may have access to better education, higher level of health and nutrition, less poverty and more equitable opportunities, richer cultural and social life, cleaner environment, and greater individual freedom. In a traditional sense, this is what we primarily expect of economic development. The NICs of East Asia generally sustained a higher level of economic growth which in turn gave rise to a higher human development index.

The positive relationship between economic growth and human development as depicted in Figure 2 does not, however, explain the degree to which one influences the other. The conventional view is that economic growth led by export-pushed industrialization, especially in NICs, would enhance the level of the human development. Or, one might question: Is it the other way around? Investing in human capital, as these countries simultaneously did, would also enhance production and material prosperity and economic growth. In Sri Lanka, however, the relatively higher human development did not yield a higher level of economic and material advancement. Yet, the relatively low per capita GNP left Sri Lanka behind the other Emerging NICs because of a lower and slower pace of economic growth. Thus, experience has shown that economic growth naturally gives impetus to higher human development. But, many other factors, such as cultural, social, and various forms of structural rigidities in the economy may have inhibited economic growth. Whether these factors are represented in the measures of GNP per head or HDI, the degree of influence on each other is difficult to disaggregate. The composition of HDI may still serve as a better way to understand the influence of and impact on income and human capacity development, especially when HDI is internationally standardized for comparative analysis.
If economic growth is a means, not an end itself, to economic development, the expansion of human capabilities to their fullest would be the goal of development. Sen (1984), who pioneered this human capabilities approach, characterizes it as a process of expanding the capabilities of people. Furthermore, Sen (1983: p. 755) states that "economic growth is only a means and often not a very efficient means either." Griffin and Knight (1989: p. 9) remind us that:

The ultimate focus of economic development is human development. That is, we are ultimately concerned with what people are capable of doing or being. Can they live long? Can they be well nourished? Can they escape avoidable illness? Can they obtain dignity and self-respect? Are they able to read and write and communicate and develop their mind?

To expand human capabilities, there must be technologies, institutions, social and cultural values that can facilitate in order to enhance human potential. The increase of income in fact helps advance human capacity but merely adding more inputs may not guarantee proportional expansion of human capabilities. If economic growth is seen as a means to human development, the synergy between the two should exist for more innovations and efficiencies. It must then come from enhancing people’s capabilities. Income would, therefore, be an avenue to a certain point for proportional returns but beyond the optimum level it yields diminishing returns unless human capacity develops with more technical efficiency for higher human progress.

Some evidence indicates that over the past three decades or so (1960-91), economic growth has been accompanied by an increase in human capabilities. If one takes the HDI as an internationally comparable surrogate-indicator for human capabilities and economic growth as indicated by the GDP per capita PPP$, economic growth has generally shown a greater increase than the HDI (Table 2). Table 2, column C for example, indicates the absolute increase of real GDP per capita income for each country. Japan and Sweden raised their per capita income by 618% and 170% respectively from 1960 to 1991. South Korea increased it by 1,106%, US 122%, and Sri Lanka only 91%. The absolute increase of HDI during the 1960-92 period in column F was less dramatic: South Korea 116%, Sri Lanka 40%, Japan 35%, and Sweden and the US 7% each. With only 7% increase of HDI, Sweden and the US
Table 2: Relative Human Capacity Change with the Growth of Real GDP Per Capita and the Improvement of HDI, Selected Countries

<table>
<thead>
<tr>
<th>Country/Development Status</th>
<th>Real GDP Per Capita Growth PPP$ % Absolute Increase 1960-91</th>
<th>Human Development Index HDI Values % Absolute Increase 1960-92</th>
<th>Relative Human Capacity Index*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Industrialized Countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2701</td>
<td>19390</td>
<td>618</td>
</tr>
<tr>
<td>USA</td>
<td>9983</td>
<td>22130</td>
<td>122</td>
</tr>
<tr>
<td>Sweden</td>
<td>6483</td>
<td>17490</td>
<td>170</td>
</tr>
<tr>
<td><strong>NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>690</td>
<td>8320</td>
<td>1106</td>
</tr>
<tr>
<td>Singapore</td>
<td>2409</td>
<td>14734</td>
<td>512</td>
</tr>
<tr>
<td><strong>Emerging NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>490</td>
<td>2550</td>
<td>420</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1783</td>
<td>7400</td>
<td>315</td>
</tr>
<tr>
<td>Philippines</td>
<td>1183</td>
<td>2440</td>
<td>106</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1389</td>
<td>2650</td>
<td>91</td>
</tr>
<tr>
<td>Thailand</td>
<td>985</td>
<td>5270</td>
<td>435</td>
</tr>
<tr>
<td><strong>Aspiring NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>621</td>
<td>1160</td>
<td>87</td>
</tr>
<tr>
<td>India</td>
<td>617</td>
<td>1150</td>
<td>86</td>
</tr>
<tr>
<td>Nepal</td>
<td>584</td>
<td>1130</td>
<td>93</td>
</tr>
<tr>
<td>Pakistan</td>
<td>820</td>
<td>1970</td>
<td>140</td>
</tr>
</tbody>
</table>

Note: *The change of Relative Human Capacity Index (column G) is calculated by the change in absolute increase of HDI value which is (column F) divided by the change in absolute increase of PPP$ value (column C) between the two time periods.


have reached closer to a saturation point whereby the increase of income has relatively less impact on human development. This is shown in the Relative Human Capacity (RHC) Index in column G which has increased only 6% for the US and 4% for Sweden if both countries were to increase their per capita income by 122% and 170% respectively. Japan needed to increase 618% of its income in order to increase the HDI of 35% (column F) during the 30 year period. The Relative Human Capacity Index has changed only by 6% in Japan, similar to the US. The US needed only 122% increase of GDP per head (rather than 618% increase in Japan) in order to achieve the result of Japan. Japan, with a relative high increase in per capita and HDI, has also reached closer to a plateau of RHC Index. The highest level of human
development (i.e., humanly possible average life expectancy, say, up to 80 years, and
the literacy rate which is 100% in Japan, Sweden, and the US) can only be extended
to a point. Beyond that, the increase in income to raise human capacities would be
diminishing. At this point two things can occur: First, the quality of human life can
be expanded in a form of more leisure time for personal, family, and civic
fulfillment which are seemingly declining as countries become more developed.
Second, economic progress can be enhanced by more innovations and technical
efficiency. Over the past 30 year period, for example, the US with relatively less
increment in GDP per capita (column C) has shown the least cost effective way to
enhance human capabilities (column F). In other words, industrialized countries
have achieved their fullest potential in human development; therefore, the
increase in income per capita must then be diverted to more innovation to increase
efficiency and productivity.

The impact of other groups of countries significantly differed, however:
South Korea with its impressive growth in per capita product of 1,106% from 1960 to
1991 also increased human development more than any other NICs or
industrialized countries. But, the level of RHC was only 10% which indicates the
reaching of a plateau similar to those of industrialized countries. The increase in
per capita did not proportionally raise the HDI; thus, the additional increase in
human capability must then be focused more on increasing the quality, efficiency,
and productivity. South Korea's record, according to the World Bank's study on
The East Asia Miracle (1993), shows that nearly two-thirds of the growth between
1960 and 1989 reflects the accumulation of inputs rather than improvements in
efficiency. This implies that South Korea's achievement has not come chiefly
because the level of human development arrived with a relatively higher price as
well as more inputs than other countries.

Among the Emerging NICs, Thailand was the one that achieved a relatively
better result: by increasing its per capita product (435%), Thailand's HDI changed
114%, giving a 26% of RHC. This increase resulted in higher economic growth but
the HDI also increased simultaneously. Malaysia, however, raised its HDI higher
than Thailand (column F in Table 2) but it was achieved by increasing the relatively
lower level of economic growth (column C). Sri Lanka with the least increase of
GDP per capita of 91% raised the HDI by only 40%. It demonstrates that the RHC in
the Emerging NICs ranged from 26% in Thailand to 45% in Malaysia and the
Philippines. These numbers indicate that there still exists more potential to enhance the RHC by increasing both income and human development. These patterns also suggest that relatively higher increase in income growth would still yield higher human development but the returns for human development have been diminishing as economic growth increased.

Nepal as one of the poorest in the region had the greatest potential for increasing its RHC. With a relatively low increase in income of 93% during this 30-year period, Nepal’s HDI hiked 126%. This implied that Nepal’s human development capacity was less responsive to economic growth. The change in HDI (especially in health and education sectors) has greater impact in Nepal than its neighbors of SAARC. The increase of per capita in India and Bangladesh has been more or less proportional to the increase in human development with a RHC Index of 99 (column G).

The figures in Table 2 suggest that countries in various levels of economic growth responded differently to the change in human development or vice versa. It appeared that human development in industrialized countries was less influenced by economic growth. The NICs are catching up to the plateau of the industrialized countries. The Emerging NICs, especially Indonesia, Malaysia, and Thailand, pushed for higher economic growth because their responsive rate was relatively greater in changing human development. The Aspiring NICs were the least responsive to economic growth, especially Nepal; thus, this experience implies that more emphasis on public policy intervention in social infrastructure would be more appropriate than increasing economic growth in the poorest countries. This can be explained in part by the relatively non-existence or poor social and capital infrastructure for markets to operate in order to impact on economic growth. Thus, this analysis may point to a direction that the level of "virtuous circles" and their mutual re-inforcement come at various stages based on the country’s level of development.

**Quality of Life with Industrial Growth**

Life expectancy, one of the three components of HDI, has become the most attentive measure of social welfare because it reflects the progress in nutrition level and the improvement in health delivery and treatment and control of disease.
Education plays an important role in this process by diffusing the knowledge about micro-nutrients and treatment and prevention of diseases. With rapid income growth and high human development, most NICs are beginning to resemble a life expectancy and demographic profile of those industrialized countries. However, industrialization accompanied by an increase in the industrial related death pushed down the life expectancy. The World Development Report (1991: p. 62) summarizes:

In Korea, rapid industrial growth and urbanization have also changed lifestyles and shifted the epidemiological profile. In heart disease and stroke, and injuries from accident and violence; these accounted for 60 percent of deaths in 1987.

It is clear that environmental pollution and other negative externalities resulting from urbanization and industrialization are associated with the quality and longevity of life. In Sri Lanka, the level of urbanization and industrialization is low among the NICs (Figure 3). The success in Japan has evidently accompanied stricter environmental regulation and promotion of a health-conscious populous. Still, the quality of life has raised several concerns, such as stress, long hours of work etc., among Japanese workers.

Over the past 30 years, life expectancy has increased as well as the number of doctors. This positive relationship varies country to country but the direction of progress indicates that when countries become more industrialized or increase their per capita income, both life expectancy and the number of doctors increase (Table 3). The NICs, for example, are far behind the number of doctors per 10,000 people than those of Western industrialized countries. By 1990, per 10,000 people, the US had 24 doctors, Sweden 31, Switzerland 29 compared to those of Japan 16, South Korea 9, Malaysia 4, Thailand 2, and Sri Lanka 1.5. In Sri Lanka, the number of doctors had declined from 2.2 in 1960 to 1.5 in 1990 partly because highly trained physicians left the country. A similar pattern is shown in the Philippines: there were 6.7 doctors per 10,000 people in 1975 which was reduced to 1.5 in 1990. The causes for decline may be associated with the push and pull factors. The push comes from the ethnic and political situation in Sri Lanka and the Philippines. The pull factor may be related to brain drain. From an economic point of view, training doctors is also more costlier than producing teachers.
Figure 3: Rapid Urbanization, Selected Countries

Notes: Japan is taken as a benchmark (1920-92). Numbers indicate the percentage of urban population.

Table 3: Income, Life Expectancy, and Number of Doctors

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP Per Capita $</th>
<th>Life Expectancy (yrs)</th>
<th>Doctors Per 10,000 People</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrialized Countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2,130</td>
<td>26,840</td>
<td>68</td>
</tr>
<tr>
<td>USA</td>
<td>5,320</td>
<td>22,340</td>
<td>68</td>
</tr>
<tr>
<td>Sweden</td>
<td>4,960**</td>
<td>25,560</td>
<td>74</td>
</tr>
<tr>
<td><strong>NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>310</td>
<td>6,350</td>
<td>56</td>
</tr>
<tr>
<td>Singapore</td>
<td>14,734</td>
<td></td>
<td>68*</td>
</tr>
<tr>
<td><strong>Emerging NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>90</td>
<td>610</td>
<td>48*</td>
</tr>
<tr>
<td>Malaysia</td>
<td>410</td>
<td>2,520</td>
<td>57</td>
</tr>
<tr>
<td>Philippines</td>
<td>210</td>
<td>740</td>
<td>51</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>190</td>
<td>500</td>
<td>63</td>
</tr>
<tr>
<td>Thailand</td>
<td>210</td>
<td>1,650</td>
<td>59*</td>
</tr>
<tr>
<td><strong>Aspiring NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>130**</td>
<td>180</td>
<td>48*</td>
</tr>
<tr>
<td>India</td>
<td>240**</td>
<td>360</td>
<td>41</td>
</tr>
<tr>
<td>Nepal</td>
<td></td>
<td>44*</td>
<td>52</td>
</tr>
<tr>
<td>Pakistan</td>
<td>220**</td>
<td>370</td>
<td>49*</td>
</tr>
</tbody>
</table>

Note: *1970* data, **1972 data.

Learning for Innovation

If the NICs were to emulate the economic leadership of Japan, the economic edge must come from the propensity to adapt into new ways of doing things. In a South Korea Survey, The Economist (1995: June 3, p. 17) points out that:

The country is at that glorious stage of development when it is brimming with learning and ideas but has not yet become complacent. Anyone who is anyone in South Korea seems to have a doctorate, often from America; everyone is bent on mastering new technologies and business methods.

The increase in investment on productive economic sectors must then come with enhancing the capabilities of their human resources. The expenditure for education, as indicated in Table 4, has increased in Malaysia, Singapore, South Korea, and Thailand. As seen by the share of government expenditure on education, the salient characteristic of these economies is that they are consistently
### Table 4: Government Expenditures on Education in Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>*<em>Industrialized Countries</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>4.9</td>
<td>5</td>
</tr>
<tr>
<td>USA</td>
<td>5.3</td>
<td>7</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.9</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>NICs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.8</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Emerging NICs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>3.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.3</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Aspiring NICs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.6</td>
<td>2</td>
</tr>
<tr>
<td>India</td>
<td>2.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Nepal</td>
<td>0.4</td>
<td>-</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.1</td>
<td>3.4</td>
</tr>
</tbody>
</table>

**Note:** *As Percentage of GDP

**Source:** Human Development Report (1994).

committed to education. Sri Lanka, however, has shown a reduction during the period of 1960-90 but the number of teachers per 10,000 heads had increased during the same period (Table 5). The literacy rate in Sri Lanka rose from 61% in 1960 to 88% in 1990. Overall, the NICs and the Emerging NICs all shared a common value on education and had reached a higher literacy rate closer to those of the Western industrialized countries when they were at that stage. The progress of education and literacy rate is an indication of achieving a goal of human development.

The quality of education and training still must improve as these countries enter into a greater level of technology-based development. The duration of attending school is, however, consistently lower than those of industrialized countries whose years generally exceed 11. The mean years of schooling in Sri Lanka was 7 years as opposed to 4 years in Thailand. However, Thailand had a 93% literacy rate compared to 89% in Sri Lanka in 1990. Malaysia achieved an 88% literacy rate with only 6 years of schooling (Table 5).
### Table 5: Literacy Rate, Number of Teachers, and Years of Schooling in Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Literacy Rate %</th>
<th>Number of Teachers (Per 10,000 People)</th>
<th>Years of Schooling (Average Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrialized Countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>98</td>
<td>99</td>
<td>79</td>
</tr>
<tr>
<td>USA</td>
<td>98</td>
<td>99</td>
<td>89</td>
</tr>
<tr>
<td>Sweden</td>
<td>98</td>
<td>99</td>
<td>86</td>
</tr>
<tr>
<td><strong>NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>91*</td>
<td>96</td>
<td>32</td>
</tr>
<tr>
<td>Singapore</td>
<td>50</td>
<td>99</td>
<td>67</td>
</tr>
<tr>
<td><strong>Emerging NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>39</td>
<td>77</td>
<td>27</td>
</tr>
<tr>
<td>Malaysia</td>
<td>48</td>
<td>88</td>
<td>195</td>
</tr>
<tr>
<td>Philippines</td>
<td>72*</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>61</td>
<td>88</td>
<td>73</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>93</td>
<td>46</td>
</tr>
<tr>
<td><strong>Aspiring NICs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>10*</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>India</td>
<td>24</td>
<td>48</td>
<td>35</td>
</tr>
<tr>
<td>Nepal</td>
<td>10</td>
<td>26</td>
<td>6</td>
</tr>
<tr>
<td>Pakistan</td>
<td>16</td>
<td>35</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: *1970 data


The literacy rate itself does not reflect the quality of education and training. As countries become rapidly developed the quality of the labor force should be enhanced. Malaysia and Thailand may have a problem because when their economies enter into a upper league of NICs, workers need to be better equipped especially if they at least have secondary education. The highly educated labor force in Japan and South Korea, beyond just literacy level, is a leading edge. Japan’s rapid industrialization after the Meiji Restoration (1868-1912) was induced by its strong commitment to education and training, especially in technical skills. Since the 1960s, the industrialization in South Korea and Taiwan developed their most needed science and engineering skills by sending their students to American universities.

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1 For an analysis of international differences in the quality of human capital, see Peterson (1989).
universities. But the strong commitment to human capital accumulation in South Korea began during the period of 1910-45 (Japanese occupation) with foreign assistance and on-the-job-training. In the late 1940s and 1950s, South Korea focused on adult literacy and started sending many students overseas for advanced technical training (Pack and Westphal, 1986: pp. 87-128). This advantage is lacking in emerging Malaysia and Thailand where they need to prepare for a technically sophisticated labor force to compete in the world economy (The Economist, 1994: p. 31). Education and training becomes one of the most important factors in increasing technical efficiency and producing innovation.

**Income Disparity and Economic Growth**

The mainstream economists and policy-makers have long been convinced to believe that economic growth fosters greater equity. Theoretically, it is logical to assume the existence of such a positive pattern between the two. Japan and the NICs have a pattern of relatively more equitable income and wealth distribution as their income rises (Figure 4). The Kuznet curve also demonstrates that inequality exists to a point before more equality appears as countries increase their GNP per capita. In practice, the theory then tends to prove the conventional notion of the positive linkages between economic growth and equity. With higher income, people have better access to education and the health delivery system; therefore, the trickle down of economic growth is said to reach to many people through education and the health care mechanism. Thus, education and health would serve as the wealth and income equalizing forces. Here, it is assumed that countries would already have a sufficient social infrastructure. In this case, one still can raise the question: At what level, does a country decide to pursue a human development approach vs. economic growth strategies? In the case of Nepal, as seen earlier, the viability of economic growth strategies has been weak because the Nepalese have not yet acquired the basic social infrastructure for economic growth to take place. The growth-led strategies of the NICs, for example, were followed by a range of social infrastructure policies as well as land reforms, especially in Japan and South Korea. A relatively higher income equality in the East Asian countries was not completely attributed to economic growth strategies alone. The necessary foundation for a greater distribution of income may have resulted from social and
Figure 4: Relationship Between GNP Per Capita Income and Gini Coefficient, Selected Countries

Notes: A smaller coefficient implies greater equality of income. Numbers indicate the survey year(s) of income distribution. Dotted line indicates the direction of previous survey's Gini coefficient.

land reform policies (Haggard, 1992: pp. 223-253; Mason et al 1980; and Rao, 1988). The concurrent economic growth strategies have complemented the process of human development.

In Sri Lanka, however, a variety of social welfare programs and land reform legislation did not yield an anticipated greater income distribution as they did in South Korea. Instead, the income disparity in Sri Lanka has widened during these years (Figure 5). The post-1977 economic strategies have further increased the inequality in contrast to both the Kuznet curve and the path of NICs which have come to share similar experiences. Sri Lanka, afflicted by entrenched ethnic conflict and guerrilla warfare, may have potentially blocked the path of NICs status. But, similar experiences in South Korea, in the form of repression and authoritarian governance, have caused some set backs even after Park Chung Hee (military strongman from 1961 to 1979). The negative impact on economic growth has appeared to be milder in South Korea than in Sri Lanka with relatively more democratic leaders.

The experience suggests that the "best way" would not always grant a more equitable income distribution as shown in Figure 4. Some countries, particularly Sri Lanka, Malaysia, and even the US, have not necessarily followed the path ascribed by the mainstream which advocates that greater equity follows with economic growth. Other factors may have influenced the direction of change. A host of public policy interventions could well be associated with such a change. The experience in Sri Lanka illustrates that the gap between the rich and poor has been increasing despite land reforms (in 1972 and 1976) and trade liberalization (after 1977); however, after the massive income transfer through the Poverty Alleviation Programme (known as Janasaviya), Sri Lanka for the first time reached a .32 Gini coefficient in 1990 (Figure 5). With the Janasaviya Programme, a target group of people below the poverty line (estimated one-half of the population) were eligible to receive income in a form of cash and food items (Mendis, 1992b).

In general, this analysis suggests two possible outcomes: First, the equality of income distribution tends to follow the direction of economic growth if the necessary conditions prevail in the economy. The NICs of East Asia, with their efficient and broad base employment-intensive, economic growth promoted social infrastructure and vice versa. It was a virtuous circle for them. The best way then
Figure 5: The Direction of Income Inequality in Sri Lanka

Notes: *If all incomes are equal, Gini coefficient is zero; if one person has all the income, Gini coefficient is one. Numbers in parentheses indicate the Gini coefficient with respective year(s).

Sources: Data for 1993, 1963, and 1973 (Fields, 1980: p. 197); others are calculated by the income distribution data provided in the World Development Report (Table 24, 1986; Table 30 in 1989, 1990, and 1994).
for NICs to achieve a more equitable income distribution is by investing in human
capital as a long-term investment for high rates of return. Second, a government
intervention in a policy of income transfer to poor people could change the income
distribution more effectively and rapidly than the trickle down of economic growth.
The question of funding for such income transfer without economic growth is
challenging for some countries, especially the Aspiring NICs of South Asia. The
best way to achieve a higher human development is by promoting economic growth
and by ensuring that growth is closely linked with human well-being.

V
NICs IN RETROSPECT: LESSONS FOR SRI LANKA AND OTHER COUNTRIES

The common characteristics of these East Asian high performing economies
are not well understood. For some, these countries provide the lessons of the right
development path for others to emulate; others have questioned the way in which
these miracles are being performed. In the second part of this paper, recent research
findings are reviewed to understand better the critical areas of development
literature: growth and human development, mechanics of economic growth, the
role of state and market, and economic growth and environment.

Growth and Human Development

Those who advocate the economic growth strategies, especially the Britton
Wood institutions, emphasize that the maximization of wealth and income is
inherent in the leisser-faire, market economics; therefore, free market economics
naturally bring about further growth. It is assumed that growth strategies will
eventually lead to a more equal income distribution, as shown in some of the NICs.
Thus, it is argued economic growth is the better strategy for development.
Economic growth is definitely important to human development and has shown
that there exists a positive relationship between the two. On the other hand, a
strategy of human development could well be a better way to advance economic
growth because the development of human capabilities provide the necessary
foundation for the market system to work. Those who believe in the human
development approach argue that their approach is inherently ascribed to greater
equality as opposed to the promoters of economic growth. Economic growth is
more concerned with income maximization, not distribution.
The emerging human development school of thought is more vigorously advocated by the UN Development Programme and UNICEF which assert that "Improving human capital does, of course, enhance production and material prosperity -- as it has in Japan and East Asia" (Human Development Report 1994: p. 17). The World Bank, the long advocate of economic growth strategies, has recently revised its view closer to the people-centered development. A former World Bank President, Barber Conable (World Development Report, 1991: p. iii) has captured the change in thinking:

First, investing in people requires an efficient public role. Markets alone generally do not ensure that people, especially the poorest, receive adequate education, health care, nutrition, and access to family planning. Second, essential for enterprises to flourish is an enabling climate -- one that includes competition, adequate infrastructure, and institutions. Competition fosters innovation, the diffusion of technology, and the efficient use of resources. Third, successful economic development requires the integration of countries with the global economy. Openness to international flows of goods, services, capital, labor, technology, and ideas spurs economic growth. Fourth, a stable macroeconomic foundation is essential to sustained progress.

The experience of NICs illustrates the importance of economic growth (associated with market forces) and human development (associated with state intervention). The issue, however, is: Has free market really fostered economic growth? or was it promoted by a carefully guided government intervention? Two World Bank's economists, Summers and Thomas (1993: pp. 241-54) argue that all NICs combined the best of state and market by recognizing their limits and capabilities. It appeared that the NICs fully understand the Keynesian principle on state and market which states that "the important thing for government is not to do the things which individuals are already doing, but to do those things which at present are not done at all" (Keynes 1926, reprinted in 1972). The NICs have used the mechanism of government aggressively to guide the statecraft so that the industrial-pushed economic growth within a framework of market has operated cooperatively. For the World Bank, the ingredients of the Korean Model, for example, are (The Economist, 1995: June 3, p. 4):

... a judicious mixture of macroeconomic stability, private enterprise, competition, investment in education, and strikingly successful (for the most part) subsidies for exporters. At the same time, South Korea's example sustains those who emphasize that prices need not be free nor markets open.
Development, they say, is not a job for the invisible hand. The state can successfully lead a charge into "strategic" heavy industry.

The assumption of the World Bank was that the NICs have used the state in fostering free markets in economic development. A World Bank economist, Husain (1995: p. 174)) concurs that "encouragingly, most High Performing Asian Economies (HPAEs) have consistently maintained macroeconomic stability, avoided high inflation, and implemented fiscal discipline." The reality, however, was that South Korea's economic growth, like those of other East Asian tigers of Hong Kong, Singapore, and Taiwan has been accompanied with more repressive regimes which led to believe that autocracy is a good thing for development. Beyond the macroeconomic policy and management, those leaders ventured in to the life of individual workers. The Economist (1995: June 3, p. 5) characterizes that:

South Korea's labour policies were especially unpleasant. The country was built by men who worked appalling hours, led by obsessive bosses who, along with their workers, slept on the docks and construction sites. . . . Anybody who protested got fired, or jailed. Under Park Chung Hee as well as under South Korea's next soldier-president, Chun Doo Hwan, labour disputes were generally resolved by troops, tear gas and truncheons.

Despite the popular belief, the free market forces were hardly at work in these countries. Similar to some progressive East European countries in the 1950s and 1960s, the HPAEs resembled some characteristics of communist regimes: more labor out of people, command economics for output targets, imposed savings which were taxed for investment, and less human freedom. Singular-minded economic growth has been achieved by South Korea and other NICs mainly through human sacrifice. During these years, the literacy rate and life expectancy, however, have improved but the quality of education and life is still subject to question.

The government has, of course, intervened in the macroeconomic stability by managing the government budget which has often been deficit spending in the NICs and other Emerging NICs. Without a well-guided macroeconomic policy and management, the domestic savings and foreign funds must be used to balance the budget which could otherwise be allocated for development programs. The deficit in the government budget often leads to inflation which in turn fuels a greater deficit by creating a vicious cycle. The budgetary deficit can also create overvalued exchange rates which lead to export contraction and frustrated domestic producers. Furthermore, the overvalued currency would make import less expensive which in
turn impacts on the domestic producers. The Emerging NICs demonstrate that governments attempted to maintain a well-disciplined macroeconomic management. In Thailand, for example, the budget deficit is limited to 20% of government expenditure and Malaysia contained its deficit to less than 20% of GDP. South Korea and Indonesia also managed to keep their macroeconomic policies to foster economic performance.

The common strategy of NICs was that the state intervened aggressively in investing in social as well as physical infrastructure as preconditions for markets to operate efficiently. When there were no explicit incentives and/or returns for market to enter into such investment, the state naturally intervened. Similarly, the state investment in social infrastructure (such as education and health) was justified because literate workforce and healthy population are a productive investment. The state investment in physical infrastructure (road, ports, irrigation) is needed because there again the private sector has less incentive to participate. The spillover effects of investing in social and physical infrastructure are that they provide employment, create social wealth (literate and healthy population) and provide the incentive and the foundation for the private sector to take over what they are cable of providing in the economy.

Mechanics of Economic Growth

The above evidence shows that the governments of South Korea and the other NICs have played a primary role in their economic development efforts; the governance of market forces was secondary. Professor Paul Krugman (1994) of Stanford University argues that leaders of NICs did not share the faith in free market economics nor in civil liberties. According to Krugman (1994: p. 62), the authoritative governments, especially in South Korea, Singapore, and Taiwan, were willing to:

limit individual liberties in the interest of the common good, take charge of their economies, and sacrifice short-run consumer interest for the sake of long-run growth would eventually outperform the increasingly chaotic societies of the West.

Sustained economic growth and increasing per capita income can only occur if there is a rise in per capita inputs. The so-called miracle of NICs, according to Krugman, was input-driven growth which is inevitably limited. He states that
"mere increases in inputs, without an increase in the efficiency with which those inputs are used--investing in more machinery and infrastructure--must run into diminishing returns" (p. 67). To support his assertions, Krugman cites a famous 1957 estimate of MIT Professor Robert Solow who concluded that "technological progress has accounted for 80 percent of the long-term rise in US per capita income, which increased investment in capital explaining only the remaining 20 percent" (p. 68). This is not necessarily true with new forms of capital. A study of 113 countries by Professor Willis Peterson (1989) of the University of Minnesota finds that the rates of return on capital do not vary significantly between the Less Developed Countries (LDCs) and the Developed Countries (DCs) even though the DCs have relatively more capital per worker than LDCs. According to Peterson, the variation between DCs and LDCs can be explained by the stock of physical capital per worker and schooling at the tertiary level.

The recent World Bank (1993) study *The East Asia Miracle* however notes that two-thirds of the economic growth in the High Performing Asian Economies (HPAEs) of Indonesia, Japan, Malaysia, Thailand, and the Four Tigers is derived from "input-driven" growth while the remaining one-third cannot be explained by mere accumulation of resources; therefore, it must be attributed to increased efficiency or total factor productivity.² Krugman thinks that compared to the former Soviet Union, the input-driven growth is an inherently limited process whereby the Soviet growth was virtually slowed down. Krugman claims that what he called the "Paper Tiger" achieved rapid growth as a result of rapidly increasing educational levels, heavy capital investment, huge savings, and "astonishing mobilization" of other resources "rather than gains in efficiency." Therefore, the miracle of NICs is not so much a miracle. Frank Gibney (1995), president of the Pacific Basin Institute, however, argues that the increased economic growth of these countries is attributed in part to the import of foreign knowledge and technology for their export-led industrialization strategy. The other part is that increased productivity is a continuous enhancement in educational opportunities, better industrial organization and management, and improved work practices. Gibney then emphasizes that "interlocking cooperation of free enterprise, government financial intervention, and a guidance-minded technocratic bureaucracy on the Japanese

²This depends on how allocative inputs are measured and defined, especially in the various forms of capital. See, for example, Professor Peterson's 1994 study which indicates that there is no residual.
model" is the most important (Gibney, 1995: p. 171). In a direct response to Krugman, Gibney remarks:

what the East Asian miracle demonstrates is that growth economics can be built rather quickly through a combination of modern technological adaptation, entrepreneurial push, and government supported international marketing -- all based on cultures that eschew adversarial give-and-take in favor of an ethic of group relationships, not individual responsibility (p. 172).

Dr. Ishrat Husain, a World Bank's chief economist (1995: p. 193), asserts that "miracle" is not probably too strong a word because

the High Performing Asian Economies are unique in combining rapid growth with both highly equal income distributions and reduction in poverty. . . . The conditions for social harmony and stability, which are essential for sustained growth, are also present in those countries.

Husain's characterization of the HPAEs has naturally raised questions from the perspectives of the way in which political stability and social harmony were achieved and maintained. The level of "highly equal income distribution and reduction in poverty" may not necessarily be attributed to "rapid growth." A range of government interventions in social welfare policies, such as housing projects in South Korea, have been associated with more equal income distribution. All commentators, however, agree that the level of investment in physical and human capital in HPAE exceeds those of other countries in terms of per capita income growth and human development. The Emerging NICs also follow investment-driven economic growth where Indonesia, Malaysia, Philippines, and Thailand have achieved a relatively higher human development as well as economic growth. In the early 1960s, both South Korea and Taiwan were considered to be in economic chaos but since then the investment as 10% of the GDP rose to 30% in 1990s. This investment effort and the increase in educational level and skilled labor force attribute to the economic growth. Similarly, the Emerging NICs have emulated their more developed neighbors by using the input-driven growth.

The notion of economic growth, driven by inputs, is not new. Economists have long believed that savings and investment bring economic growth. In 1952, Professor Hans Singer by using the Harrod-Domar model, argued that a country with 6% saving and a population growth rate of 1.25% would be a "stationary economy." Singer then emphasized that by raising the rate of saving to over 16.25%
with a rate of population growth of 1.25% (1952), at least a 2% growth of per capita income would be achieved. Prior to this, the Cambridge model of the 1940s and 1950s assumed that output would grow in proportion to inputs (i.e., capital) used. Similarly, Rosenstein-Roden (1943) put forward the notion of a big push for an economy to propel into the process of self-sustaining industrialization and then to rapid economic growth. These ideas at the beginning of the Development Economics convinced policy-makers and economic planners to pursue growth strategies in economic development. When saving and investment cannot be found within their underdeveloped economies, an injection of imported capital was an answer to resuscitate the economy. In 1957, Solow (pp. 312-20) found that sustained economic growth was possible only through exogenous technological change. But later, however, Romer (1986) and Lucas (1988) found that technological change is endogenous, and that education and knowledge produce positive externalities or increasing return. Whether technology comes from within or outside, one thing in Asian growth debate is certainly clear as Krugman (1995: p. 177) concludes: “... one way to get a lot of output is to use a lot of inputs.” It is true that Japan and the NICs used external assistance initially in the development of their human resources (especially by sending their young people to American universities) and obtaining the financial resources. After their success, the East Asian countries are now exporters of technical expertise and financial assistance to other countries.

The Role of State and Markets

Conventionally, it is viewed that Japan and NICs achieved their economic success based purely on free market, open trade, and profit motive. Initially, Japan and South Korea undertook land reform and encouraged private entreprenuership in economic development. South Korea’s economic growth started with a series of liberalization policy reforms between 1963 and 1965. The leadership for liberalization was provided by the military following the coup of 1961. Subsequently, the Korean state, and the states in other NICs as well, exercised substantial power in designing and implementing development policy and in controlling the economy. The is a direct emulation of Japan.

Japan, despite its free market philosophy, has used a well-crafted mechanism by combining its cultural values based on Confucian ideology and economic realities
to guide their macroeconomic management. Fingleton (1995: p. 70-71) states that the Ministry of Finance (MOF) is the capstone of a Confucian system of power and "Japan's invisible leviathan" which is roughly pyramidal. Fingleton characterizes MOF men as truly Nobel-caliber: "brilliant, creative, tenacious, public-spirited" (p. 71). Under this MOF hierarchical structure is the rest of big banks, key bureaucratic agencies (in charge of taxing, spending, and defense) including the widely-known Ministry of International Trade and Industry (MITI) and the cabinet. Fingleton (1995) further emphasizes that the believers of laissez-fair economics in Japan now find that the foundation of Japanese higher economic performance is not necessarily the free market forces but the proper management of such forces for their national interest. The MITI for example, Fingleton argues, has recently given primary consideration to the so-called ABCD industries: automation, biotechnology, computers, and data processing. The rapidly changing national political leadership over the chaotic Japanese market tends otherwise to believe that their governance is in disarray. But, the truth of the matter is that Japanese economy is run by the powerful MOF whose invisible tradition has been kept in line with the Confucian notion that "power is exercised more effectively when its is least obtrusive" (p. 72). In Japan, Fingleton then concludes, that "politicians reign and bureaucrats rule" (p. 85). Japan, however, is not the only country with a strong bureaucracy; other high performing industrialized countries, especially France, Germany, and Switzerland do have elite bureaucrats as well (Fingleton, 1995: p. 70). This is also a common characteristic among the East Asian Four Tiger countries. But, Fingleton summarizes that "the Japanese civil service's power--especially that of the MOF--is in a league of its own" (p. 85).

In South Korea, a closely collaborated force between the private and public sectors has pushed its economic success. Gibney (1995) concurs that businessmen and bureaucrats have lost little time waiting for Adam Smith's "invisible hand" to operate. Under a system of Chaebols family-held conglomerates such as Daewoo, Hyundai, Lucky-Goldstar, and Samsung, South Koreans unite to formulate international strategies (Hodgetts and Luthans, 1994: p. 20). Many key managers, who attended school in the West, work closely with the government by exercising considerable political and economic power in South Korea to advance industrialization. In Japan, Keiretsu, the organizational arrangement among large corporations, also shows similar binding together by cross-ownership, long-term business dealings, interlocking directorates, and social ties (Cutts, 1992: pp. 48-55).
For example, according to Holstein et al (1990: pp. 98-104) Keiretsu of Mitsubishi Group consists of 28 core members including the triad of Mitsubishi Corporation (which is a trading company), Mitsubishi Bank (which finances the Keiretsu operations), and Mitsubishi Heavy Industries (which is a leading global manufacturer). Even in the US, according to Business Week (1992, January 27: p. 53 and p. 55), Ford, Deere & Company, and other multinationals are emulating Keiretsu-like arrangements.

Environmental Chaos and Worker Unrest

The credibility of development models that led to higher performing economies in East Asia has been undermined by their very success. The recent evidence shows an increase in labor unrest and ecological destruction, especially after the emergence of more democratic leaders. Broad et al (1990-91) illustrate a host of evidence that exists to suggest the cautions in the face of economic triumph. Broad et al (1990-91: p. 144) write that:

Warning signs are surfacing in South Korea and Taiwan, the miracle models of capitalist development. After decades of systematic exploitation, the South Korean labor force erupted in thousands of strikes during the late 1980s, undermining the very basis of that country's export success. Meanwhile, decades of uncontrolled industrial development have left large parts of Taiwan's landscape with poisoned soil and toxic water.

Some experts and environmentalists predict that certain areas of Taiwan will not be suitable for human habitation if the current rate of industrial pollution continues by year 2000. In South Korea, Broad et al (1990-91: p. 146) argue that:

In the South Korean centralized authoritarian development created a virtual time bomb. . . . Taking advantage of a small democratic opening between 1987 and 1989, more than 7,200 labor disputes broke out, compared with only 1,026 from 1981 through 1986.

Other information demonstrates that 14,000 policemen stormed the Hyundai shipyard in March 1989 to put down a 109-day strike. Overall, those who are familiar with South Korea know that growth has been achieved by authoritarian control by violent repression of political opposition, especially among the young. Similarly, the authoritarian and so-called democratic governments in Indonesia, Malaysia, the Philippines, Singapore, Taiwan, and Thailand have exercised their power in a manner that has violated human rights and basic political freedom.
A powerful environmental movement in Taiwan has challenged the island's fragile social consensus on export-oriented growth. According to a 1985 survey, 59% of Taiwanese favor environmental protection over economic growth (Broad et al.: 1990-91 p. 147). The evidence demonstrates that South Korea and Taiwan no longer maintain the status quo of their development path by repressing workers and by abusing the environment. Technocrats and authoritarian regimes in South Korea achieved a "miracle" growth by "command" economics. More recently, the government incentives, subsidies, and even coercion pushed for the industrial drive in heavy industry (iron and steel). This is the pattern of the industrial push of the 1960s in the light industries (textile) and recently into the heavy and electronic industries (cars, VCR, and computers).

Despite the relative greater income equity in South Korea and Taiwan, it is ironic to see rising labor and environmental movements that threaten the traditional growth model. Japan on the other hand seems to be less misled by the free market vision and more conscious of the role of the state in these two critical areas of worker satisfaction and environmental protection. Some countries achieved redistribute reform in the process to industrialization by providing significant advancement in health and education. But, many countries have failed to integrate the areas of ecological sustainability and political participation. As seen in South Korea and Taiwan, the free market on the face value is not the panacea. Ordinary citizens should be involved in the decision making process to reflect the civic responsibility of the state.

VI
CONCLUDING REMARKS

It has long been the tradition of the Britton Woods institutions to advise poorer countries to adopt a set of policies within the framework of a prescriptive structural adjustment package. Every package includes: reduce the government expenditure to balance the budget, eliminate trade barriers and social subsidies, encourage exports, tighten the monetary policy to combat inflation, devaluate currency to promote export and discourage import, dismantle nationalist barrier to foreign investment, and guarantee foreign direct investment. For a better macroeconomic management, this is a good, practical model assuming other factors,
such as the environment and the response and social cost emanating from poor and hungry people, which are outside the parameters of economic policy considerations.

But the legacy behind the emergence of NICs is that Japan, South Korea, and other East Asian countries after World War II realized that they need to pay back the loan and the debt. A package of structural adjustment would be the best way to pay back the heavy borrowings. The NICs have followed the strategies and become better off than those who did not re-adjust their economies. Broad et al (1990-91: p. 150) provide the underline explanation for the development trap that “creditor banks, using the World Bank and IMF as enforcers, conditioned debt rescheduling on acceptance of export-oriented structural adjustment package.” The commodity exporting developing countries had to deal with severe difficulties for two reasons: gradual decline of market prices and the increasing level of trade protectionism in the Western countries. For those countries, the re-payment of loans and debt servicing has become problematic and the structural adjustment program turned out to be costly. More critical of the consequences, Broad et al (1990-91: p. 150) conclude that “structural adjustment in practice has damaged environments, worsened structural inequities, failed even in the very narrow goal of pulling economies forward, and by-passed popular participation.” For the NICs, Western support continues in a form of financial, technical, and market opportunities.

One of the unique characteristic of Japan, South Korea, and other NICs is that government is not adversarial to economic growth; the state is a partner in every aspect of development. The experience suggests that the success depends on the ability of government to stay above the vested interest groups to help create a social and physical environment with a “reasonable” political and economic freedom for the market to operate openly. For that, government must first ensure that there is a market to operate. Market only exists when they have consumers with purchasing power and producers with products and services. One of the major problems in the developing world is that there is no purchasing power to create effective demand (Nepal, for example). One way to foster this, as other NICs did, is to have land reform, progressive taxation, and advancement of workers’ rights and income. At the start of their industrialization process, Japan, South Korea, Taiwan, and other East Asian countries at varying degrees gradually developed the income of their workers by creating domestic market and by opening up their market to global forces and to foreign investment and competition. South Korea and Taiwan may have
been even more successful if they had combined their early land reform with strong commitment to environmental protection, equity consideration, and worker participation in decision-making. The advantage of low wages in South Korea and Taiwan was that they needed to maintain the comparative advantage in exports. As these economies shifted into value added products with higher technical education, it is anticipated that raising the salary level and enhancing domestic market development will result.

The NICs also had other advantages as well. The experience of World War II and the Korean War gave rise to extraordinary determination to succeed. This was complemented by the Confucian motto of “hard work, obedient, and courteous.” The ideology of Confucian has well served the NICs to achieve their national goal. Moral education emphasizes the submergence of individual wishes for the state's goal; loyalty to the authority; the respect for harmonious and just social order; and diligence, moral obligation, and personal responsibility. The authoritarian leaders of South Korea, Taiwan, and Singapore took the advantage of this deep-rooted Confucian cultural heritage to advance the cooperative and harmonious relationship that led to high growth. The economic advantage of this cultural endowment is that they could reduce the opportunity cost and other externality costs. These so-called benevolent leaders, who acted on the teachings of Confucian, have been served by the ideology that says “ruler is the wind, people are the grass. When wind blows, grass sure to be bent.” As these societies become more open and democratic the wind may change direction as has already been shown in South Korea and Taiwan with signs of labor unrest and the environmental movement.

South Korea’s economic and human development progress has to be attributed to their cultural endowments, particularly the Confucian ideology to which their leaders have adhered in advancing their economic growth through authoritative rule and a harmonious way of life. Fareed Zakaria (1994), Managing Editor of Foreign Affairs (Council on Foreign Relations), who interviewed Lee Kuan Yew, former Prime Minister of Singapore, for the article “Culture is Destiny” explained how their Confucian culture impacted the economic development in East Asian countries. In Sri Lanka, their cultural traditions and Buddhist teachings

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3For a discussion on the aspect of cultural endowments in economic development, see Professor Vernon Ruttan (1988 and 1995). In his well-known Induced Innovation Model of the relationships between changes in resources endowments, cultural endowments, technology, and institutions, Professor Ruttan emphasizes the importance of cultural endowments which are largely absent in mainstream economic discussion.
have played a significant role in promoting physical well-being and developing mental-faculties (Caldwell et al., 1989; Mendis, 1992a and 1994). The way in which Confucian ideology was deep-rooted in South Korea and other NICs (specially Singapore and Taiwan) and how it was used by their strong-will leaders gave rise to economic growth by minimizing social and opportunity costs which otherwise retarded export-led development with labor unrest, environmental cost, individual rights, and political freedom. The advocacy of cultural traditions which were nurtured by Buddhist teachings gave rise to primacy of health and knowledge in the Sri Lankan society. The emphasis of cultural endowments, which are difficult to quantify in economic terms, has likely laid the necessary underpinning for South Korea to launch a breath-taking economic growth while Sri Lanka launched a snail-pace growth accompanied with a relatively literate and higher longevity population.

REFERENCES


Ahluwalia, Montek; Nicholas Carter; and Hollis Chenery; (1979), "Growth and Poverty in Developing Countries," Journal of Development Economics, September, Vol. 6, pp. 299-341.

Broad, Robin; John Cavanagh; and Walden Bello; (Winter 1990-91), "Development: The Market is Not Enough," Foreign Policy, Vol. 81, pp. 144-162.


Caldwell, John; Indra Gajanayake; Pat Caldwell; and Indrani Peiries; (1989), "Sensitization to Illness and the Risk of Death: An Explanation for Sri Lanka's Approach to Good Health for All," Social Science and Medicine, Vol. 28, No. 4, pp. 365-379.


Human Development Report (various issues), (New York: Published by the Oxford University Press for the United Nations Development Programme).


World Development Report (various issues), (New York: Published by the Oxford University Press for the World Bank).

World Tables (various issues), (New York: Published by the Oxford University Press for the World Bank).