A BRIEF ASSESSMENT OF SINGAPORE'S ECONOMIC MIRACLE

Habibullah Khan*

After reviewing Singapore's economic performance in the past three decades, the paper seeks to identify the reasons for Singapore's success by adopting a political economy approach. It is argued that Singapore adopted a balanced combination of market and government and its economic philosophy closely reflected the governed market theory based on developmental state model. Although government intervention in Singapore was fairly extensive, the interventionist measures did not distort market efficiency due to the high quality of political leadership, pragmatism, meritocracy and social conformism. The future outlook for Singapore economy remains bright and such an optimism is based on improvements in its educational standards, training programs, and stringent criteria of recruitment in the administrative service, as argued in the paper.

Introduction

Rapid growth in Singapore for the past three decades is viewed by most\(^1\) as an 'economic miracle'. The size of the economy in 1993, as measured by real GDP, was nearly

---

* National University of Singapore

\(^1\) For example, Lawrence B. Krause used the phrase 'economic miracle' in describing the success stories of Singapore and Hongkong in "Hong Kong and Singapore: Twins or Kissing Cousins?", Economic Development and Cultural Change, vol. 36, no. 3 (Supplement), 1988, p. 546. The World Bank in its recent publication, The East Asian Miracle (New York: Oxford University Press, 1993), included Singapore within "high-performing Asian Economies (HPAEs)" and termed the growth performance of this group (which is comprised of eight countries - Japan, Hong Kong, Republic of Korea, Singapore, Taiwan, Indonesia, Malaysia, and Thailand) as "miraculous" (see p. 1 of the above publication). W.G. Huff, in his most recent review of Singapore's economic performance (The Economic Growth of Singapore, Cambridge University Press, Cambridge, 1994), has however suggested that the city-state's economic success, though remarkable, is not a "miracle" for two reasons: First, Singapore started from a high base and second, the international economic forces were extremely favorable to Singapore's growth (see p. 31 in Huff's book).
eleven times\(^2\) that in 1965—the year when Singapore attained political independence. On an average, the economy grew 8.8 percent annually during this period and consistently maintained an upward trend with only two exceptions. In 1975, the economy experienced a slow real growth of only 4 percent due mainly to the oil price shock. Again in 1985, the economy underwent a short recessionary period and the growth rate fell to minus 1.6 percent for the first time in the history of Singapore. A number of corrective measures, based on the recommendations of a high-powered economic committee,\(^3\) were undertaken immediately and the economy returned to its normal growth path in less than two years.

Singapore not only enjoyed high economic growth but growth here has been accompanied by full employment, high savings and investment rates, nearly 85 percent homeownership ratio, a healthy balance of payments and growing foreign exchange reserves, a strong currency, and a low inflation rate. There is little doubt that Singapore has set an example of how a small city-state can be transformed into an economically powerful nation within a short span of time. In the World Bank classification, Singapore is listed in the "higher-income economies" group with a per capita gross national product (GNP) even higher than that of some developed nations, such as Ireland, New Zealand and Spain.\(^4\)

---

\(^2\) The estimated GDP (at 1985 market prices) in 1993 was S$71,211.9 million (see Singapore Yearbook of Statistics, 1994, p. 2) and the actual GDP (based on 1985 market prices) in 1965 was S$6,626.8 million (see Singapore National Accounts 1987, p. 45).


What caused Singapore’s success? This question was asked by many who sought to explain the East Asian economic miracle, particularly the phenomenal growth in “Four Asian Dragons” such as Singapore, Hong Kong, South Korea, and Taiwan, and the search for an appropriate answer led to the emergence of two important paradigms in development economics. The dominant paradigm usually called “Neoclassical political economy” is based on a market-oriented explanation and it maintains that the East Asian success provides a clear demonstration of vigorous market competition and free trade as the twin ‘engines of growth’. The alternative view often labeled “New political economy” stresses the role of government in East Asia and thus provides the notion of the state as an engine of growth. The paper examines Singapore’s economic performance in the light of these two competing paradigms and argues that a ‘balanced’ combination of market and government is required for success. Although government intervention in Singapore was fairly extensive, the interventionist measures did not distort market efficiency due to the high quality of political leadership, pragmatism, meritocracy, and social conformism, as argued in the paper.

Economic Performance of Singapore, 1965-1993

The highly-acclaimed success of Singapore in achieving rapid economic growth is displayed in Table 1. The first five years following independence in 1965, the city-state experienced a record growth rate of nearly 12 percent per annum. Quite surprisingly, the high growth of real GDP was sustained for the entire period of Singapore’s history, although the rate of expansion gradually diminished over the years until about 1992. The growth rate again entered into a double-digit phase in 1993 when the economy registered just about 10 percent real GDP growth. Although the data for 1994 are yet

---

to be finalized, the growth rate in the year is expected to exceed 10 percentage points. The future outlook, based on medium-term projections, also seems quite robust.

Although the periodic growth figures consistently show an upward trend, the yearly data indicates that Singapore also has had two 'bad years'. In 1975, Singapore's real GDP growth plummeted to a meager 4 percent. It was precipitated by the oil price shock which triggered off a worldwide recession. External demand fell and as incomes dropped, domestic activities were also adversely affected. Another bad year for Singapore was 1985 when the economy experienced a real GDP contraction of 1.6 percent. Since the country was not accustomed to such bad times and as high growth was virtually taken for granted, the 1985 recession shocked everybody. A high-powered economic committee was appointed by the government immediately to investigate the reasons for such a severe recession and it was found by the committee that the erosion of Singapore's cost-competitiveness vis-a-vis its trading partners, coupled with other adverse domestic factors such as over-supply in the hyperactive construction sector, mainly caused the downturn. The various cost-cutting

Table 1 - Per Annum Growth Rates of Main Economic Indicators for Singapore

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP(^1)</td>
<td>11.9</td>
<td>9.1</td>
<td>7.1</td>
<td>6.7</td>
<td>6.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Inflation rate(^2)</td>
<td>1.5</td>
<td>6.3</td>
<td>2.8</td>
<td>3.5</td>
<td>2.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Savings ratio(^3)</td>
<td>17.2</td>
<td>29.0</td>
<td>41.5</td>
<td>47.4</td>
<td>48.2</td>
<td>47.5</td>
</tr>
<tr>
<td>Investment ratio(^3)</td>
<td>26.4</td>
<td>41.2</td>
<td>42.2</td>
<td>38.0</td>
<td>40.4</td>
<td>43.8</td>
</tr>
</tbody>
</table>

Notes: 1) Based on GDP at 1985 market prices; 2) Annual percentage change in GDP deflators (1985=100); 3) The savings ratio and investment ratio are defined respectively as gross national savings and gross capital formation divided by gross domestic product at current market prices.

measures introduced by the government in mid-1985 together with the policy of wage restraint helped restore Singapore's international competitiveness, and the economy returned to its normal growth path by the end of 1987.⁶

The sustained economic growth and gradual appreciation of Singapore dollar have resulted in Singapore having the highest per capita GNP among developing countries. By the later part of the 1970s, Singapore had been variously labeled as a middle-income country, an advanced developing country, a semi-industrialized country, and a newly industrialized economy (NIE). There was growing concern amongst the political leaders over the premature graduation of Singapore as a 'developed' country and the consequent loss of 'Generalized System of Preferences (GSP)' benefits. It was argued that because of the large foreign presence in Singapore, a per capita GNP based on the indigenous Singaporean component better reflects the level of development and standard of living in the city-state republic.⁷ It may also be argued that the per capita income of a small city-state is likely to be higher than that of a regionally diverse country with large rural sector because of the higher degree of monetisation and higher costs of living in a city.

Due to the well-known limitations of per capita GNP as a general measure of economic development, the international agencies have been using various economic and social indicators for measuring levels of living for quite sometime. Table 2 presents a set of such indicators for Singapore

---

⁶ Singapore's real GDP growth in 1987 was 9.4 percent. See Singapore Yearbook of Statistics, 1993, p. 3

⁷ Singapore's Department of Statistics, publishes regularly a series on "indigenous per capita GNP" which excludes the foreigners' contribution. This involves the calculation of income accruing to foreign workers and foreign enterprises which are residents of Singapore and the exclusion of this amount from the GNP. The indigenous per capita GNP in 1993 was about 20 percent smaller than regular per capita GNP. For details, see Singapore Yearbook of Statistics, 1993, p. 2.
and a few other selected countries. It can be clearly observed that Singapore is far more developed than its ASEAN counterparts. The striking similarity between Singapore and Hongkong is also clearly visible from the data. Although Singapore is still far below other highly advanced nations such as Switzerland and Japan in terms of per capita GNP, it seems to be quickly ‘catching up’ in terms of other measures such as life expectancy, infant mortality, access to medical facilities, access to safe water, and so on. One gets an impression from Table 2 that Singapore has already become a ‘developed’ country, although there is some reluctance on the part of political leaders to admit this fact due mainly to the anticipated loss of trade concessions.

Besides rising standards of living, several other features can be discerned from Singapore's growth experience. First of all, economic growth was accompanied by fundamental structural transformation. Two important changes that occurred in the past three decades can be noticed from the data presented in Table 3. The share of manufacturing in total output increased rapidly from 19.6 in 1965 to 29.5 percent in 1980 and remained more or less stable thereafter, with the exception of year 1985, when the share of manufacturing fell rather considerably due to economic recession.

The other structural change can be seen in the composition of the tertiary sector. Between 1965 and 1993 the first two components of the tertiary or services sector, namely, transport and communications, and financial and business services, grew quite consistently in terms of their GDP shares. The share of the third service component which includes public administration, community, social and personal services, however declined gradually in the same period and in 1993 it contributed less than 10 percent to Singapore's GDP. The share of the commerce sector also declined over the years but despite the fall in relative terms it still remains as one of the four 'growth pillars' of Singapore. The three other pillars of growth are manufacturing, financial and business services, and transportation and communications.
<table>
<thead>
<tr>
<th>Country</th>
<th>GNP</th>
<th>GROW</th>
<th>INFLN</th>
<th>LIFEX</th>
<th>ILLIT</th>
<th>INFANT</th>
<th>DOCTOR</th>
<th>LOW20</th>
<th>PHONE</th>
<th>WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>17,260</td>
<td>1.6</td>
<td>6.4</td>
<td>77</td>
<td>&lt;5a</td>
<td>7</td>
<td>830b</td>
<td>4.4</td>
<td>456</td>
<td>100</td>
</tr>
<tr>
<td>Canada</td>
<td>20,710</td>
<td>1.8</td>
<td>4.1</td>
<td>78</td>
<td>&lt;5a</td>
<td>7</td>
<td>450</td>
<td>5.7</td>
<td>577</td>
<td>100</td>
</tr>
<tr>
<td>Greece</td>
<td>7,290</td>
<td>1.0</td>
<td>17.7</td>
<td>77</td>
<td>7</td>
<td>8</td>
<td>580</td>
<td>n.a.</td>
<td>391</td>
<td>98</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>15,360</td>
<td>5.5</td>
<td>7.8</td>
<td>78</td>
<td>na</td>
<td>6</td>
<td>1,510b</td>
<td>5.4</td>
<td>434</td>
<td>100</td>
</tr>
<tr>
<td>Indonesia</td>
<td>670</td>
<td>4.0</td>
<td>8.4</td>
<td>60</td>
<td>23</td>
<td>66</td>
<td>7,030</td>
<td>8.7</td>
<td>6</td>
<td>51</td>
</tr>
<tr>
<td>Italy</td>
<td>20,460</td>
<td>2.2</td>
<td>9.1</td>
<td>77</td>
<td>&lt;5a</td>
<td>8</td>
<td>210</td>
<td>6.8</td>
<td>388</td>
<td>100</td>
</tr>
<tr>
<td>Japan</td>
<td>28,190</td>
<td>3.6</td>
<td>1.5</td>
<td>79</td>
<td>&lt;5a</td>
<td>5</td>
<td>610</td>
<td>8.7</td>
<td>441</td>
<td>96</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>6,790</td>
<td>8.5</td>
<td>5.9</td>
<td>71</td>
<td>4</td>
<td>13</td>
<td>1,070</td>
<td>7.4</td>
<td>310</td>
<td>93</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2,790</td>
<td>3.2</td>
<td>2.0</td>
<td>71</td>
<td>22</td>
<td>14</td>
<td>2,590</td>
<td>4.6</td>
<td>89</td>
<td>78</td>
</tr>
<tr>
<td>New Zealand</td>
<td>12,300</td>
<td>0.6</td>
<td>9.4</td>
<td>7</td>
<td>&lt;5a</td>
<td>7</td>
<td>870b</td>
<td>5.1</td>
<td>437</td>
<td>97</td>
</tr>
<tr>
<td>Philippines</td>
<td>770</td>
<td>-1.0</td>
<td>14.1</td>
<td>65</td>
<td>10</td>
<td>40</td>
<td>8,120</td>
<td>6.5</td>
<td>10</td>
<td>81</td>
</tr>
<tr>
<td>Portugal</td>
<td>7,450</td>
<td>3.1</td>
<td>17.4</td>
<td>74</td>
<td>15</td>
<td>9</td>
<td>490</td>
<td>n.a.</td>
<td>241</td>
<td>92</td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>15,730</td>
<td>5.3</td>
<td>2.0</td>
<td>75</td>
<td>10</td>
<td>5</td>
<td>820</td>
<td>5.1</td>
<td>385</td>
<td>100</td>
</tr>
<tr>
<td>Spain</td>
<td>13,970</td>
<td>2.9</td>
<td>8.7</td>
<td>77</td>
<td>5</td>
<td>8</td>
<td>280</td>
<td>8.3</td>
<td>323</td>
<td>100</td>
</tr>
<tr>
<td>Switzerland</td>
<td>36,080</td>
<td>1.4</td>
<td>3.8</td>
<td>78</td>
<td>&lt;5a</td>
<td>6</td>
<td>630</td>
<td>5.2</td>
<td>587</td>
<td>100</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,840</td>
<td>6.0</td>
<td>4.2</td>
<td>69</td>
<td>7</td>
<td>26</td>
<td>4,360</td>
<td>6.1</td>
<td>24</td>
<td>77</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17,790</td>
<td>2.4</td>
<td>5.7</td>
<td>76</td>
<td>&lt;5a</td>
<td>7</td>
<td>810</td>
<td>4.6</td>
<td>442</td>
<td>100</td>
</tr>
<tr>
<td>United States</td>
<td>23,240</td>
<td>1.7</td>
<td>3.9</td>
<td>77</td>
<td>&lt;5a</td>
<td>9</td>
<td>420</td>
<td>4.7</td>
<td>545</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Notes: GNP-Per capita GNP, 1992; GROW-Average annual growth rate, 1980-92; INFLN-Average annual rate of inflation, 1980-92; LIFEX-Life expectation at birth (years), 1992; ILLIT-Adult illiteracy (male plus female), 1990; INFANT-Infant mortality rate (per 1000 live births), 1992; DOCTOR-Population per physician, 1990; LOW20-Percentage share of income by lowest 20 percent, latest available year; PHONE-Telephones per 1000 population, 1990; WATER-Percentage of population with access to safe water, 1990; a-according to UNESCO, illiteracy is less than 5 percent; b-data for 1970.

Table 3 - Percentage Share of Singapore's GDP (1985 market prices) by Industrial Sector 1965-90

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and fishing</td>
<td>2.9</td>
<td>1.5</td>
<td>1.1</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Quarrying</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19.6</td>
<td>26.0</td>
<td>29.5</td>
<td>23.6</td>
<td>28.9</td>
</tr>
<tr>
<td>Utilities</td>
<td>1.7</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Construction</td>
<td>9.6</td>
<td>8.9</td>
<td>7.1</td>
<td>10.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Commerce</td>
<td>21.3</td>
<td>20.9</td>
<td>18.9</td>
<td>17.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>7.3</td>
<td>9.1</td>
<td>11.9</td>
<td>13.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Financial and business services</td>
<td>16.5</td>
<td>20.0</td>
<td>20.3</td>
<td>27.1</td>
<td>26.1</td>
</tr>
<tr>
<td>Other services</td>
<td>19.5</td>
<td>13.8</td>
<td>11.8</td>
<td>12.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Less: imputed bank service charge</td>
<td>1.1</td>
<td>3.0</td>
<td>4.7</td>
<td>8.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Add: import duties</td>
<td>4.8</td>
<td>1.7</td>
<td>1.7</td>
<td>1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>GDP at 1985 market prices</td>
<td>6,626.8</td>
<td>19,171.4</td>
<td>28,832.5</td>
<td>38,923.5</td>
<td>57,271.9</td>
</tr>
</tbody>
</table>

Note: ¹ Figures may not add up to total due to rounding errors.  
Secondly, the structure of trade—particularly, exports—has changed drastically and Singapore has been transformed from a predominantly entrepot economy into an industrialized city-state economy. Due to its strategic location and good natural harbor, Singapore has long been serving as a vital trading post for countries in the Southeast Asian region, and in 1965 re-exports of the republic accounted for nearly 75 percent of the total exports (Table 4). The outward-looking industrialization drive undertaken in the early 1970s shifted the emphasis away from the re-exports character to the direct export of Singapore-made manufactures, and in 1975 the share of re-exports to total exports fell to only 41 percent. Although re-exports still remain an important component of Singapore’s international trade, domestic exports have grown quite sharply over the years and presently they account for nearly two-thirds of the republic’s total exports. The success of the industrialization policy can perhaps be more clearly indicated by the rising share of manufactured exports as a percentage of total exports and in 1993 the share of manufacturing stood at nearly 80 percent. The data contained in Table 4 also suggest that Singapore has always been an extremely ‘open’ economy and its heavy reliance on international trade can be seen from the export/GDP and import/GDP ratios.

Thirdly, Singapore has experienced a balance of payments surplus virtually every year since its independence. Although it has a persistent deficit in merchandise trade balance, the deficit has been more than outweighed by the huge surpluses in trade in services which include tourism, transportation, ship repairing and port services and by massive inflows of foreign capital. The obvious consequence of a positive balance of payments is the accumulation of foreign reserves and a strong Singapore dollar. The

---

8 Small deficits were however reported in 1964 and 1965. For details, see Lim Chong Yah and others, Policy Options for the Singapore Economy (Singapore: McGraw Hill, 1988), p. 17.
Table 4 - Singapore's Trade Statistics 1965-93

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value in S$million:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(at current market prices)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total exports</td>
<td>3,004</td>
<td>12,758</td>
<td>41,452</td>
<td>50,179</td>
<td>95,206</td>
<td>101,880</td>
<td>103,358</td>
<td>119,473</td>
</tr>
<tr>
<td>Re-exports</td>
<td>2,239</td>
<td>5,218</td>
<td>15,647</td>
<td>19,603</td>
<td>32,452</td>
<td>35,848</td>
<td>37,014</td>
<td>44,079</td>
</tr>
<tr>
<td>Domestic exports</td>
<td>765</td>
<td>7,540</td>
<td>25,805</td>
<td>32,576</td>
<td>62,754</td>
<td>66,031</td>
<td>66,337</td>
<td>75,394</td>
</tr>
<tr>
<td>Manufactured exports (SITC 5-8)</td>
<td>935</td>
<td>5,337</td>
<td>18,522</td>
<td>26,260</td>
<td>68,854</td>
<td>74,926</td>
<td>80,379</td>
<td>94,828</td>
</tr>
<tr>
<td>Total imports</td>
<td>3,807</td>
<td>19,270</td>
<td>51,345</td>
<td>57,818</td>
<td>109,806</td>
<td>114,195</td>
<td>117,530</td>
<td>137,603</td>
</tr>
<tr>
<td>GDP (at current market prices)</td>
<td>2,956</td>
<td>13,373</td>
<td>24,201</td>
<td>38,448</td>
<td>66,175</td>
<td>73,038</td>
<td>79,083</td>
<td>89,007</td>
</tr>
<tr>
<td><strong>Proportion in percent:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-exports/total exports</td>
<td>74.5</td>
<td>40.9</td>
<td>37.7</td>
<td>35.1</td>
<td>34.1</td>
<td>35.2</td>
<td>35.8</td>
<td>36.9</td>
</tr>
<tr>
<td>Domestic exports/total exports</td>
<td>25.5</td>
<td>59.1</td>
<td>62.3</td>
<td>64.9</td>
<td>65.9</td>
<td>64.8</td>
<td>64.2</td>
<td>63.1</td>
</tr>
<tr>
<td>Total exports/ GDP</td>
<td>101.6</td>
<td>95.4</td>
<td>171.3</td>
<td>130.5</td>
<td>143.9</td>
<td>139.5</td>
<td>130.7</td>
<td>134.2</td>
</tr>
<tr>
<td>Total imports/ GDP</td>
<td>128.8</td>
<td>144.1</td>
<td>212.2</td>
<td>150.4</td>
<td>165.9</td>
<td>156.4</td>
<td>148.6</td>
<td>154.6</td>
</tr>
<tr>
<td>Manufactured exports/total exports</td>
<td>31.1</td>
<td>41.8</td>
<td>44.7</td>
<td>52.3</td>
<td>72.3</td>
<td>73.5</td>
<td>77.8</td>
<td>79.4</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Singapore Yearbook of Statistics, various issues.
international reserves grew continuously from a meager US$430 million in 1965 to a staggering US$48.2 billion in 1993. In fact, Singapore’s present level of foreign reserves is one of the highest in the world, as revealed by the data presented in Table 5.

Fourthly, Singapore’s economic growth has been characterized by high savings as well as high investments. The savings rate, as measured by the ratio of gross national savings (GNS) to GDP, rose from 17.2 percent in 1965-70 to 47.5 percent in 1992-93 (Table 1). Both private and public sectors contributed to the high savings rate. Private savings have largely been boosted by the compulsory contributions to the Central Provident Fund (CPF). The public sector in Singapore is also a major saver and its savings constitute government budgetary surpluses and the operating surpluses of various statutory boards. The investment rate, as measured by the ratio of gross fixed capital formation (GFCF) to GDP, also increased quite significantly from 26.4 percent in 1965-70 to 43.8 percent in 1992-93 (see Table 1). A large proportion of the investment went to the construction of infrastructure and buildings (for housing, industry and business). While the public sector played a major role in infrastructural and housing development, investments in commercial buildings, machinery and equipments were largely undertaken by the private sector.

---

9 A working person in Singapore presently contributes 40 percent of his gross wage to the CPF, with 20 percent from the employee and a further 20 percent from his employer, subject to a certain ceiling. The CPF contribution rates were even higher (50 percent comprised of 25 percent employee’s share and 25 percent employer’s share) before the 1985-86 economic recession.

10 The public sector savings have taken an increasing share of GNS over time, a significant portion of which are invested overseas by the Government of Singapore Investment Corporation (GIC). For details, see Koh, Ai Tee “Saving, Investment and Entrepreneurship,” In Krause, L.B., Koh, A.T. and Lee, Yuan (eds.), The Singapore Economy Reconsidered (Singapore: Institute of Southeast Asian Studies), 1987, pp. 78-106.
Table 5 - International Reserves for Singapore and a Few Other Countries (US$ million) 1965-93

<table>
<thead>
<tr>
<th>Year</th>
<th>Singapore</th>
<th>Japan</th>
<th>South Korea</th>
<th>Taiwan</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>430</td>
<td>1,824</td>
<td>143</td>
<td>245</td>
<td>402</td>
</tr>
<tr>
<td>1970</td>
<td>1,012</td>
<td>4,308</td>
<td>606</td>
<td>480</td>
<td>2,401</td>
</tr>
<tr>
<td>1975</td>
<td>3,007</td>
<td>11,950</td>
<td>781</td>
<td>1,074</td>
<td>7,019</td>
</tr>
<tr>
<td>1980</td>
<td>6,567</td>
<td>24,636</td>
<td>2,925</td>
<td>2,205</td>
<td>15,656</td>
</tr>
<tr>
<td>1985</td>
<td>12,847</td>
<td>26,719</td>
<td>2,869</td>
<td>22,556</td>
<td>18,016</td>
</tr>
<tr>
<td>1990</td>
<td>27,748</td>
<td>78,501</td>
<td>14,793</td>
<td>72,441</td>
<td>29,223</td>
</tr>
<tr>
<td>1991</td>
<td>34,133</td>
<td>72,059</td>
<td>13,701</td>
<td>82,405</td>
<td>29,004</td>
</tr>
<tr>
<td>1992</td>
<td>39,885</td>
<td>71,623</td>
<td>17,121</td>
<td>82,306</td>
<td>33,255</td>
</tr>
<tr>
<td>1993</td>
<td>48,191</td>
<td>98,524</td>
<td>20,228</td>
<td>na</td>
<td>32,635</td>
</tr>
</tbody>
</table>


Finally, Singapore’s economic development occurred with remarkably low rates of inflation (Tables 1 and 2). The annual inflation rate averaged below 3 percent in every decade except the 1970s. Singapore’s success in containing inflationary pressure arising from rising world prices led to the significant betterment of people’s quality of life (by raising their real incomes) over the years.

Explaining the Success: Market versus Government

Two major schools of thought grew out of research undertaken in recent years to explain the East Asian economic miracles. The “market-supremacy” school, which is primarily based on the Neoclassical theory of markets and prices, has again produced two fairly distinct views on the roles of market and government in generating extraordinary growth, as experienced in the East Asian NIEs including Singapore. One view, which largely occupied the mainstream of the economics profession in the 1970s, suggests that the superior economic performance of the region can be attributed to
their reliance on free markets. This "Free Market (FM)" theory of East Asian success claims that in countries such as Japan, Taiwan, Singapore and Hong Kong, growth is the result of more efficient allocation of resources which comes from more freely functioning markets.\textsuperscript{11} State intervention in these countries is largely absent and what the state provides is simply a suitable environment for the entrepreneurs to perform their functions more freely, as argued by the proponents of the theory.

Another view, which can be considered a variant of the core Neoclassical theory and is often known as the "Simulated free market (SFM)" theory of East Asian success, believes that the governments of East Asia intervened fairly widely to offset various distortions but the results of activist policies were very close to those that would have prevailed under free market situation in any way. The main reason for the success of the NIEs, according to this theory, is the adoption of a 'neutral' trade regime (as opposed to 'free' trade regime advocated by the FM theory), which ensures that the effects of import control measures would be counterbalanced by export promotion measures.\textsuperscript{12}

These two market-oriented interpretations of East Asian economic performance have recently been challenged by a 'statist counter-revolution'. The central thesis of this new school of thought, often classified as "New political economy", is that the phenomenon of 'late development' should be understood as a process in which states have played a strategic role in taming domestic and international market

\textsuperscript{11} Milton Friedman and Rose Friedman (1980), p. 57) in their \textit{Free to Choose} made a similar remark: "Malaysia, Singapore, Korea, Taiwan, Hong Kong and Japan – relying extensively on private markets – are thriving... By contrast, India, Indonesia, and Communist China, all relying heavily on central planning, have experienced economic stagnation."

\textsuperscript{12} Jagdish Bhagwati in 1988 endorsed such a government intervention in support of his "export promotion (EP)" strategy. An EP strategy is a set of policies which results in the average effective exchange rate for importables being approximately equal to that for exportables.
forces and harnessing them to national ends. In other words, the key to rapid economic growth in East Asia is a strong and autonomous state, providing directional thrust to the operation of the market system. The market is guided by long-term national interests and key investment decisions are made by government officials. It is the "synergy" between the state and the market which provides the basis for rapid economic growth.

The statist model of East Asian political economy emerged from the concept of "developmental state"\(^\text{13}\) which embodies the following characteristics: First, economic growth constitutes the foremost and single-minded priority of state action. Conflict of goals is avoided by the absence of any commitment to equality and social welfare. Second, there is an underlying commitment to private property and market, and state intervention is firmly circumscribed by this commitment. The market however is guided by an elite bureaucracy staffed by the best available managerial talent in the system. Within the bureaucracy, a pilot agency plays a key role in policy formulation and implementation. Third, close institutionalized links are established between the elite bureaucracy and private business for consultation and cooperation. Fourth, an authoritarian political system in which the bureaucracy is given sufficient scope to take initiatives and operate effectively. The politicians "reign" while the bureaucrats "rule". Fifth, a cordial industrial relations system is established by implementing tough laws against union militancy and by adopting a sophisticated labor management style which encourages workers' loyalty to their bosses and competition among the workers themselves.

\(^{13}\) The concept of the developmental state was first put forward by Johnson in 1982 in the context of Japan. In a subsequent contribution (Johnson, 1987) he used the concept 'capitalist developmental state' (or simply the developmental state) to characterize the socio-political structures of Japan, South Korea, and Taiwan. The concept is not firmly entrenched in the development literature and variants of it have been used by others such as Amsden (1989) and Wade (1990). For a critical review of the concept, see Onis, Z., "The Logic of Developmental State", Comparative Politics, October 1991, pp. 109-126.
Based on the broad framework provided by Johnson's developmental state model, Wade (1990) proposed a new theory, which he calls the "governed market (GM)" theory of East Asian success, as an alternative to the Neoclassical free market or simulated free market explanations. Unlike other theories, the GM theory is formulated in such a way that it can be tested with real-world data. It says that the superiority of East Asian economic performance is due in large measure to a combination of: (1) very high levels of productive investment, making for fast transfer of newer techniques into actual production; (2) more investment in certain key industries than would have occurred in the absence of government intervention; and (3) exposure of many industries to international competition, in foreign markets if not at home. These are the proximate causes. At a more fundamental level, these outcomes themselves are the causes of a specific set of policies which enable the government to "guide" or "govern" the process of resource allocation so as to produce a different production and investment profile than would result under a free market system. The set of incentives, controls, and mechanisms to spread risk, which may all be implemented under the banner of strategic industrial policy, is in turn supported by a certain kind of organization of the state and the private sector. Wade claims that the corporatist\textsuperscript{14} and authoritarian political arrangements of East Asia have provided the basis for market guidance.

\textsuperscript{14} A useful distinction is often made in the political science literature between the 'corporatist' and the 'pluralist' regimes. In corporatist system, the state charters or creates a small number of interest groups, giving them a monopoly of representation of occupational interests in return for which it claims the right to monitor them in order to discourage the expression of narrow, conflicting demands. The state is therefore able to shape the demands that are made upon it, and hence maximizes compliance and cooperation. In pluralist regimes, interest groups are voluntary associations, free to organize and gain influence over state policy corresponding to their economic or political resources. The process of government consists of the competition between interest groups, with government bureaucracies playing an important but not generally dominant role.
foreign managers, engineers, and technicians constituted 20 percent of the workforce in these categories (Ow Chin Hock, 1986, p. 234). The same pragmatism also prompted the government to reject any prestigious project which has little returns, e.g. steel mills, and in scouring foreign investment, to prefer MNCs from U.S.A., Japan, and Western Europe over MNCs from Hong Kong and Taiwan.\textsuperscript{15}

The political leaders in Singapore firmly believe in the principle of meritocracy which dictates the systems of reward and advancement at various sociopolitical levels. The perception is that the country's progress depends quite heavily on its ability to identify the talents and groom them so as to develop their potentials to the fullest extent.\textsuperscript{16} The belief in meritocracy has created a system by which only the 'best' in terms of educational qualifications and training can move up the ranks into the positions of power and responsibility and this in turn, according to many, has given rise to "elitism". Another by-product of meritocracy is the "government-knows-best" attitude, which is often reflected in the statements made by government officials and political leaders. Such an attitude may have also come about because the government has access to data and information\textsuperscript{17} which are vital inputs to decision-making and

\textsuperscript{15} This conclusion was based on the survey by the Economic Development Board that during 1960-78, the failure rate of the American, Japanese, and European wholly-owned and export-oriented firms was 6.1 percent as compared to 12.8 percent for the wholly-owned foreign firms from other Asian countries such as Hong Kong and Taiwan. See Ow Chin Hock, 1986, op. cit., p. 235.

\textsuperscript{16} The education system in Singapore has been tailored accordingly and there are Special Assistance Program (SAP) in certain schools, streaming in primary, secondary, and tertiary levels, special awards for SAF scholars, and so on.

\textsuperscript{17} Government may not release data on certain sensitive areas. It may also like to withhold some information as it expects from the people a continuance in faith and confidence in its accuracy of judgement and policy formulation based on such privileged data. See Lim Chong Yah and others, Policy Options for the Singapore Economy, op. cit., 1988, p. 64.
evaluation of policies best suited for Singapore. The meritocratic style has also given rise to “paternalism” which characterizes the political leaders in Singapore. The paternalistic approach has led to government intervention in all areas including marriage, procreation, education, and so on.

It is clear from the above that the government of Singapore played a strong role in the economic development of the city-state republic. Although the share of government in GDP is not particularly large, the qualitative impact of government’s predominance can be felt everywhere. The government in Singapore has in fact played the roles of goal-setter, producer, regulator, and fiscal agent, in addition to its traditional roles as the custodian of the nation. While the rules of market mechanism remain paramount in Singapore, the government has interfered in a big way so as to ensure that the fruits of economic growth are more equally distributed. There is a progressive income tax whereby most taxes are paid by the upper and middle-income groups. The subsidized public housing, education, health and medical services benefit mostly the lower-income groups. However, the government does not believe in giving unemployment allowances or any other transfer payments as these will undermine work incentives. Regarding the role of the market, the prevailing perception in Singapore is that it can be used more effectively as an instrument of policies and goals rather than an ‘invisible hand’ mechanism. For example, the government decides on the number of certificates of entitlement (COEs) for car ownership to be issued in each month but then uses auction mechanism to allocate them. Similarly, the government also decides on the amount of levies, overall number, and the source of foreign labor, but then allows this labor to be allocated to those who are prepared to pay the resulting price. Thus market

---

18 The government expenditure to GDP ratio in Singapore is roughly 21 percent which is lower than that in most OECD countries. For details, see The World Bank, World Development Report, 1994, Oxford Press, London and New York.
is used as an instrument because it is regarded as more
economical in information and administrative costs, but not
as a mechanism. It should however be noted that such use of
market does not carry with it the normative efficiency
implications which are usually associated with market
mechanism leading to so-called Pareto efficiency (Asher,
1994, p. 796). The policymakers in Singapore however did
ensure that state intervention did not ignore the disciplining
functions of the market. Moreover, state intervention led
to the reduction of uncertainty and risks of business
through overall policy stability.

Why State Intervention was so Successful

With the exception of few East Asian NIEs such as
Singapore, state interventionism failed to achieve good
results, though it was applied extensively in most other
developing countries. What made intervention work so well
in Singapore? It is argued in this paper that it is not state
intervention per se that distinguishes Singapore as well as
other East Asian NIEs from other less developed countries
but it is the effectiveness of state intervention and quality
of interventionist measures that made the crucial difference
in results.

Effective state intervention to bring about economic as
well as social transformation requires that the state is able
to formulate and implement coherent economic and social
policies. Formulation of such policies in turn will depend
on the ‘autonomy of the state’ from the dominant class
or various interest groups so that the state can pursue
goals that do not reflect the interests of these groups and
if necessary may even go against their short-term interests.
Effective intervention also requires ‘stability’ which can be
attained through efficient structuring of the state apparatus
and by ensuring increasing material gains for the bulk of
the population. The ‘administrative capability’ of the government
leaders is also a crucial factor in determining the effectiveness
of state intervention.
The first of the above three factors, the autonomy of government from interest groups, which was emphasized earlier by the proponents of developmental state hypothesis, can rarely be found in less developed countries (LDCs). The government of Singapore also initially faced the risks of being captured by certain interest groups backed by the local Chinese business class who tried to promote China-oriented economic and social policies. The People’s Action Party (PAP)\(^{19}\) government led by Lee Kuan Yew successfully neutralized these interest groups, who even gained strong support of the leftist wing of the PAP, with the help of a carefully-designed combination of control mechanisms and achievement-oriented policies. The English-educated Chinese leadership, headed by Lee, saw the future of Singapore in rapid economic growth achieved by the adoption of western technology and capital brought by MNCs from the West, not in inward-looking business and investment strategies advocated by the leaders of the Chinese business community. The Lee Kuan Yew government maintained the position that the adoption of a Hong Kong development model reliant on small Chinese manufacturing enterprise and some local entrepreneurs would be disastrous for Singapore as it would tend to perpetuate the serious unemployment problem which existed during the period of independence and the city-state would permanently be stuck with traditional entrepôt trade activities yielding at best a modest economic growth. The idea received popular support and thus consolidated the position of the PAP government.

As far as stability is concerned, a stable political environment prevailed at the time of Singapore’s independence, as the PAP government fully neutralized the opposition parties during the transition period, 1959-1965. When Singapore emerged as an independent nation on August 9, 1965, a stable government, competent administration, efficient

\(^{19}\) The PAP formed the first government of the State of Singapore in 1959 and since then it has been in power until today.
institutions, and other factors needed for growth, were all in place. After independence, government extended and consolidated its control over the trade unions and the mass media. The Industrial Relations Act of 1968 played an important part in reducing the role of collective bargaining in Singapore, for it gave full discretionary powers to management in matters of promotion, transfer, recruitment, dismissal, reinstatement, assignment of duties and termination of employment for reasons of reorganization or redundancy. Further legislation in the eighties gave employers greater flexibility in the use of the labor force.\textsuperscript{20} The National Wages Council (NWC), set up in 1979, also contributed significantly to ensure stability in the labor market by producing a more orderly and systematic wage behavior. To promote the overall stability, the government also imposed various restrictions on the mass media so that the credibility of the government could not be undermined by making unnecessary criticisms. The issue of press freedom was debated recently in Singapore and the government maintains the following position (Chan Heng Wing, 1994, p. 26):

"Singapore is not America. It is small and fragile and needs a strong and fair government to survive. If its government is continually criticised, vilified and ridiculed in the media, and pressured by lobbyists as in America, then the government will lose control. The result will not be more freedom, but confusion, conflict, and decline".

Last but not the least, the administrative capability of Singapore's leaders was undoubtedly quite high. They have consistently been making good economic judgements and

sound economic policies which resulted in unprecedented economic growth. A small group of leaders led by Lee Kuan Yew\(^{21}\) dominated Singapore’s politics right from the beginning and the distinguishing features of these men were their personal integrity, honesty, dedication, and a high level of formal education. Corruption, endemic in most less developed countries (LDCs), was virtually absent in Singapore.

The quality of interventionist policies applied to a particular sector or to the economy as a whole would depend on four key factors - ‘flexibility’, ‘selectivity’, ‘coherence’ and ‘market friendliness’. Singapore’s policies, economic or social, were characterized by these factors. Flexibility, for example, can be seen in the republic’s changing industrial strategies. The first strategy, often called “labor-intensive import-substitution strategy”, began in 1961 when protective measures such as tariffs and quotas were introduced, and this strategy continued until about 1968. The second strategy called “export-oriented manufacturing strategy” began in 1968-69 when Singapore moved largely toward free trade. Import restrictions imposed earlier were withdrawn and exchange controls eliminated. A new strategy, popularly known as “industrial restructuring” began in 1979 with policies for economic and technological upgrading. Flexibility\(^{22}\) in industrial policies is also reflected in gradual shifts in ‘priorities’ announced by the Economic Development Board (EBB).

\(^{21}\) Lee Kuan Yew was the Prime Minister of Singapore for more than thirty years (1959-1990) and presently he is a Senior Minister in Goh Chok Tong’s cabinet. Milton Friedman remarked that Lee Kuan Yew was a ‘benevolent dictator’ and drew the lesson that “It is Possible to Combine a Free Private Market Economic System with a Dictatorial Political System” (cited in W.G. Huff, The Economic Growth of Singapore, op. cit., pp. 359-360).

\(^{22}\) Government is also quite flexible in its social policies pertaining to education (e.g. graduate mother scheme once introduced for the priority placement in schools of certain categories of children was later withdrawn), population (e.g. change from ‘two-child’ policy to ‘three-child’ policy in late (1980s), immigration (e.g. liberal policies introduced in early 1990s to attract foreign talents from the neighbouring countries), housing, and so on.
Like other successful East Asian countries, Singapore has adopted policies which have been highly selective, favoring certain industries or sectors in line with broad macroeconomic objectives. Projects are selected after careful evaluation, implemented with extreme precaution, and performance of the selected projects are then continuously reviewed. Another feature of government policies is the high degree of coherence amongst them. There has always been broad agreement on economic goals, and policies have been coordinated to achieve these goals. Finally, the government policies in Singapore have been directed toward the promotion rather than the regulation of private enterprises, and have been ‘market-friendly’ rather than ‘market-repressing’. Even the public enterprises are run on a commercial basis. They are expected to be efficient, make profits and expand whenever feasible. Government does not provide them with special privileges or subsidies. If they lose money, they are allowed to go bankrupt. It is the stated policy of the government not to buy failing firms—public or private—just to save jobs.

23 In fact, planning in Singapore is based on micro-level project evaluations. Unlike most other countries, Singapore does not have a Five-Year Development Plan. The only available planning document, First Four-Year Development Plan (1961-64), which was prepared under the guidance of the United Nations, was not fully implemented. The setting up of the Economic Development Board (EBB) on August 1, 1961 can however be considered the outcome of the Plan as it was strongly recommended by the UN Mission.

24 Currently, the broad economic goals include the attainment of GNP per capita of the United States by 2030 or the Netherlands by 2020. For details, see The Strategic Economic Plan: Towards a Developed Nation, (Republic of Singapore: Singapore, 1991).

25 Two main types of public enterprises in Singapore are statutory boards and government-linked companies (GLCs). Statutory boards are autonomous organisations set up by specific Acts of Parliament. Almost all infrastructural and public utility services are provided by statutory authorities in Singapore. The activities of the statutory boards are complemented by the GLCs which are in turn owned through three major holding companies. Many GLCs such as Development Bank of Singapore (DBS), Sembawang Group, Keppel Corporation, TDB Holdings, and Singapore Telecoms have been aggressively expanding abroad, often in partnership with domestic and foreign private sector firms. For details, see Tan, C.H. “Public Sector Management: Past Achievements and Future Challenge”, In L. Low and M.H. Toh (eds.), Public Policies in Singapore, Times Academic Press, Singapore, 1992, pp. 12-29.
Conclusion

Knowing that the government of Singapore intervened extensively in various economic and social areas, the question which naturally arises is: Has government intervention been 'excessive'? Economic theory does not provide an answer to the question. This is not because economic theory is an imperfect corpus of knowledge but simply because there is no 'right' answer to the question. Factors which might influence the size of the government intervention include socioeconomic conditions, ideological preferences, economic and political objectives, the capabilities of the government leaders, and the quality of private entrepreneurship. All these factors, excepting the last one, were considered in our earlier discussion on the pervasiveness of government role in Singapore. We now wish to comment briefly on the quality of private entrepreneurship.

There is a common contention that Singapore is seriously deficient in entrepreneurial activity. Local firms generally seem to be afflicted by low productivity and relatively inefficient management. Such a perception however needs to be carefully interpreted. Singapore has historically been a highly successful trade-based re-export economy and it is in such entrepot activities that local entrepreneurs have always thrived. The same can not be said about the manufacturing sector, particularly in export-oriented high-tech activities,26 where large multinational firms dominate. Why is there a shortage of such entrepreneurs?

There is a well-entrenched view that the dominant role of the government has discouraged private enterprises in many ways. First of all, the presence of well paid public sector jobs has attracted the bright young scholars to the

---

26 Singapore's Creative Technology Pte Ltd, which has earned international reputation in the manufacturing of computer chips and sound cards, is perhaps an exception to this observation.
government who could otherwise provide the essential base for domestic entrepreneurship. Secondly, the institutional arrangement of CPF with its high savings rate tends to dampen individual drive for accumulation. Thirdly, the public enterprises are perceived to enjoy certain privileges and advantages over private businesses. Finally, the government’s liberal policy towards MNCs has largely ‘crowded out’ domestic entrepreneurship.

Given the tremendous economic success of Singapore, it is difficult to establish the argument that government intervention, if excessive, can also inhibit economic growth. Serious concerns were however raised about government’s overpresence\textsuperscript{27} in the economy after the 1985-86 recession and the issue of public-private mix was hotly debated. The call for privatisation also got a fresh momentum at that time and government announced its privatisation program in its 1987 report of the divestment committee. Some experts\textsuperscript{28} have however claimed that the privatisation program will make the role of government even stronger and more extensive. This is because there is an overall budget surplus and so the divestment proceeds are not required to either reduce taxes or expand spending. Instead, these additional funds can be invested at home and abroad. In fact, government enterprises have continued to expand the scope of their activities and their number has also been rising. Thus, the public sector will continue to play a dominant role in Singapore.

\textsuperscript{27} It was alleged that the construction sector, which was predominantly under government control, expanded too rapidly leading to a serious glut in the property market. It was also pointed out that the success of state-owned enterprises has been at the expense of private enterprises, and this has led to weakness in the private sector. For details, see Lim Chong Yah et al. (1988). Policy Options for the Singapore Economy and L.B. Krause, Koh, A.T. and Lee Yuan (1987), The Singapore Economy Reconsidered, op. cit.

We wish to reiterate that it is not intervention per se but the quality of intervention that matters. With gradual improvements in overall standards of education and training programs, and with stringent criteria of recruitment for civil service—particularly the administrative service, it is likely that the quality of individuals in the government will further be enhanced. Government has also recently revised the salaries of Ministers and civil servants in order to maintain a

"continuing flow of man and women of ability and integrity, who will govern the country, mobilise the population, and chart future directions for the nation".29

References


BRIEF ASSESSMENT OF SINGAPORE’S ECONOMIC MIRACLE


