Social Policy in Singapore: A Confucian Model?

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Abstract

According to this paper, Singapore' success in economic and social development in recent decades has been due to pragmatic policies and general public acceptance of a limited government role in such areas as health, social security. Pragmatism has consisted of placing a significant part of the burden of social welfare on families and individuals rather than on the state while, at the same time, using government policies to ensure that citizens do take social welfare objectives seriously. The pre-eminent example of this is Singapore's social security system which is based on compulsory savings by individuals and firms, and are managed and invested by the Central Provident Fund (CPF). This provides income security for retirees in their post-working years without placing an excessive fiscal burden on the state. Similarly, the health care system is characterized by a pragmatic mix of personal payments, limited national insurance coverage, and employment-based health care benefits. However, in the sphere of education, government spending has been substantial in recognition of the fact that Singapore's economic prospects were tied to the availability of a highly-skilled workforce. At present, higher education in Singapore remains highly subsidized and private sector involvement_especially in terms of funding and management_remains low.

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Foreword

This paper, entitled *Social Policy in Singapore: A Confucian Model?* By Professor Habibullah Khan of National University of Singapore, was prepared for a project on Social Development in East Asia. The project was organized by the World Bank Institute under the auspices of the Program for the Study of the Japanese Development Management Experience which is financed by the Human Resources Development Trust Fund established at the World Bank by the Government of Japan.

The principal objectives of this Program are to conduct studies on the Japanese and East Asian development management experience and to disseminate the lessons of this experience to developing and transition economies. Typically, the experiences of other countries are also covered in order to ensure that these lessons are placed in the proper context. This comparative method helps identify factors that influence the effectiveness of specific institutional mechanisms, governance structures, and policy reforms in different contexts. A related and equally important objective of the Program is to promote the exchange of ideas among Japanese and non-Japanese scholars, technical experts and policy makers.

The outputs of the project on Social Development in Asia include seven papers on topics such as pension systems, health insurance, education, and employment policies which are scheduled to be published in the WBI Working Paper series. In addition, a set of papers focusing on the social policy experience of Japan over the past fifty years is being processed separately as a book-length manuscript.

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Social Policy in Singapore: A Confucian Model?[*]

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Singapore was merely a fishing village with an estimated population of 150 when the island was founded as a British colony by Stamford Raffles in 1819. It attained self-rule in 1959 and political independence in 1965. Today, the city-state Republic is inhabited by roughly 3 million people, and its economy is characterized by full employment, high savings and investment rates, a 90 percent home ownership 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 country of merely 648 square kilometers can be transformed into an economically powerful nation within a short span of time. In the World Bank's classification, Singapore is listed under "high-income economies" with a per capita gross national product (GNP) that is higher than that of many developed countries such as Australia, Canada, France, Italy, and the United Kingdom (see table 1).

A remarkable feature of Singapore's success story is its simultaneous progress in both economic and social areas (though the progress in the former is more pronounced than the latter), which can be clearly observed from the rising trends in virtually all socioeconomic indicators. This result obviously reinforces the earlier hypothesis of close inter-correlations between social and economic factors regarding development but it does not show any causal relationship between the two. Although the main thrust of government policies in the past was to promote growth-enhancing activities such as a large-scale industrialization program implemented in phases, progress in various social areas such as housing, education, and health was carefully monitored and nurtured by giving generous subsidies. However, as the policies are mainly motivated by "efficiency" and "pragmatism," the long-term objective of the government is to reduce such subsidies so that the problem of excess demand for social services (resulting in what is known as the "free rider problem") can be avoided. The government also has refrained from making any firm commitments to equality and welfare in order to avoid conflicts with its growth objective, which constituted the foremost and single-minded priority of state action. Such a development philosophy received strong support from the well-known "Developmental State model"(Johnson 1982), which is often used to explain the rapid growth in East Asia's newly industrialized economies (NIEs).

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Table 1. *Core Development Indicators for Selected Countries, 1995*

Countries	*GNP per capita (US $)*	*Real GDP per capita (PPP $)*	*Growth rate (percent) 1985–95*	*Life expectancy (years)*	*Adult literacy rate (percent) 1994*	*Infant mortality rate (per 1,000 live births)*	*Human development index (rank) 1994*
Australia	18,720	18,940	1.4	77	99.0	6	14
Canada	19,380	21,130	0.4	78	99.0	6	1
Denmark	29,890	21,230	1.5	75	99.0	6	18
France	24,990	21,030	1.5	78	99.0	6	2
Germany	27,510	20,070	n.a	76	99.0	6	19
Hong Kong	22,990	22,950	4.8	79	92.3	5	22
Indonesia	980	3,800	6.0	64	83.2	51	99
Italy	19,020	19,870	1.8	78	98.1	7	21
Japan	39,640	22,110	2.9	80	99.0	4	7
Korea, Rep.	9,700	11,450	7.7	72	97.9	10	32
Malaysia	3,890	9,020	5.7	71	83.0	12	60
New Zealand	14,340	16,360	0.8	76	99.0	7	9
Philippines	1,050	2,850	1.5	66	94.45	39	98
Portugal	9,740	12,670	3.6	75	89.6	7	31
Singapore	26,730	22,770	6.2	76	91.0	4	26
Spain	13,580	14,520	2.6	77	97.1	7	11
Switzerland	40,630	25,860	0.2	78	99.0	6	16
Thailand	2,740	7,540	8.4	69	93.5	35	59
United Kingdom	18,700	19,260	1.4	77	99.0	6	15
United States	26,980	26,980	1.3	77	99.0	8	4

n.a. = not available.
Sources: World Bank (1997), UNDP (1997).

How did Singapore achieve a "balanced" development in both social and economic sectors? Most investigators in the past sought to answer this question from a political economy perspective and their conclusions tend to highlight the "interventionist" role of the government in pursuing various economic policies pertaining to industrialization, foreign investment, trade, and so on. While such an approach is useful in understanding the country's outstanding economic success, it does not explain how social progress came about. It is necessary to study the social expenditure policies pursued by the government in order to see how social indicators improved over the years. Although significant progress has already been made in social indicators research,[1] relatively less attention has focused on the evaluation of social policies pertaining to education, health, social welfare, and other social issues. As a result, the impact of rising social spending on economic growth is still an unsettled issue. According to some economists—for example, Ram (1986)—government expenditures on public goods and services play a key role in economic growth as they enhance the productivity of private sector inputs, harmonize conflicts between private and social interests, and prevent exploitation by foreigners. However, supply-siders argue that government regulations impose additional costs on firms, and increased taxes associated

[1] See Khan (1991: 153–75) for a survey on social indicators.

with more government spending create inefficiencies and reduce the incentives to work, save, and invest, and thus hinder economic growth.[2] This paper seeks to reexamine the issue by adopting a case-study approach, which is usually considered more useful for policy purposes, rather than a traditional econometric approach.[3] Singapore offers an interesting case for study since it has achieved unprecedented growth in the past three decades and yet shown significant progress in key social areas.

The paper is organized in six sections including this introduction. A brief outline of Singapore's economy is presented in the following section, which highlights the country's impressive socioeconomic performance over the years using relevant statistics. The government's overall development philosophy is also briefly discussed in this section. We turn to educational policies in the third section, which presents key data on public expenditure in education. This is followed by a section devoted to a discussion on health financing. The section's central focus is on the MEDISAVE scheme and its equity and efficiency considerations. The fifth section presents Singapore's social security and welfare programs and highlights its unique method of financing social security by using the mandatory national provident fund mechanism (known as "Central Provident Fund" or CPF). Concluding remarks are in the final section, which also identifies some "lessons" for other developing countries.

The Singapore Economy: Performance Indicators and the Main Features of State Policies

Rapid growth in Singapore for the past three decades is viewed by most[4] as an "economic miracle." The size of the economy in 1996, as measured by real gross domestic product (GDP), was more than 16 times[5] that of 1965, the year when Singapore attained political independence. On average, the economy grew by more than 9 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 owing mainly to 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 Singapore's history. A number of corrective measures, based on the recommendations of a powerful economic committee,[6] were undertaken immediately and the economy returned to its normal growth path in less than two years.

Table 1 presents the main development indicators for Singapore and a few other selected countries. It can be clearly observed that Singapore is far more developed than its Association of Southeast Asian Nations (ASEAN) counterparts. The striking similarity between Singapore and Hong Kong is also clearly visible from the data. Although Singapore has outperformed many extremely advanced nations such as Australia, Canada, France, and the United Kingdom in terms of per capita GNP, it still lags behind these countries in terms of some social indicators such as literacy rate and the Human Development Index (HDI).[7] Singapore is particularly deficient with regard to educational indicators, which can be seen in its relatively small proportion of the work force with postsecondary and tertiary education compared with other NIEs and some industrialized countries and in the large proportion of foreign workers in the top gross monthly income category of employees.[8] The government is fully aware of this problem and the thrust of the present social policy is to concentrate on various educational investment programs so as to broaden the country's educational base, and at the same time upgrade the quality of

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2 For example, Barro (1989) found a negative relationship between social expenditure and economic growth.

3 These studies are usually based on correlation and regression analyses and are largely inconclusive. For a recent survey, see Nah (1997).

4 For example, Lawrence B. Krause used the phrase "economic miracle" in describing the success stories of Singapore and Hong Kong in Krause (1988: 545–566). The World Bank in its recent publication, The East Asian Miracle (1993), included Singapore in "high-performing Asian Economies (HPAEs)" and described the growth performance of this group as "miraculous." W. G. Huff suggested in his review of Singapore's economic performance (Huff 1994: 31), however, that the city-state's economic success, though remarkable, was 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.

5 The estimated GDP (at 1990 market prices) in 1996 was S$109,787.1 million—see Yearbook of Statistics Singapore 1996, p. 57—and the actual GDP (based on 1985 market prices) in 1965 was S$6,626.8 million (see Singapore National Accounts 1987, p.45).

6 See Ministry of Trade and Industry (1986).

7 The HDI is based on three indicators: longevity, as measured by life expectancy at birth; educational attainment, measured by a combination of adult literacy (two-thirds weight) and combined primary, secondary, and tertiary enrollment ratios (one-third weight); and standard of living, measured by real GDP per capita (PPP$). For details, see UNDP (1997).

8 For details, see Lim, Khan, and others (1988, ch.6).

the existing work force. Given the small size of the population and the declining labor force growth rates, the government has also further liberalized its immigration policy to ensure the continuing inflow of skilled and semiskilled labor, which is needed badly for sustaining its rapid growth. With these new measures, it is hoped that Singapore will soon "catch up" with the West's advanced nations based on all social indicators including those reflecting educational performance. Looking at the overall results of table 1, however, one gets the impression that Singapore has already become a "developed country," although there is some reluctance on the part of political leaders to admit this fact owing mainly to the anticipated loss of trade concessions. It is also generally believed that Singaporeans lack the "social grace" characterizing most developed nations.

Besides rising standards of living, several other features can be discerned from Singapore's growth experience. First of all, economic growth has been accompanied by fundamental structural transformation (that is, the share of manufacturing in the economy rose gradually over the years and in 1996, it was nearly 27 percent of total GDP). Second, the structure of trade (exports in particular) has changed drastically and Singapore has been transformed from a predominantly entrepot economy into an industrialized city-state economy. Third, Singapore has experienced a balance of payments surplus virtually every year since its independence. The obvious consequence of a positive balance of payments is the accumulation of foreign reserves and a strong currency. International reserves grew continuously from a meager US$496 million in 1967 to a staggering US$76.8 billion in 1996.[9] In fact, Singapore's present level of foreign reserves is one of the highest in the world. Finally, Singapore's economic development occurred with remarkably low rates of inflation. The annual inflation rate averaged 3.9 percent during 1985–95,[10] and in previous decades it was even below 3 percent in most years. Relatively lower prices in Singapore resulted in the country's having one of the highest real GDPs per capita in the world (in PPP$, as the computation of this index requires *purchasing power relationships* across countries).

Why was Singapore so successful? According to most observers, the government[11] played a crucial role in the country's economic development. The government had no ideological commitment to any particular economic system. Its only concern was the betterment of living for Singaporeans and in order to achieve this objective, it implemented a host of "pragmatic" policies that involved extensive government intervention in several areas such as population control, housing, education, medical and health services, compulsory savings, industrial relations, wage policy, and so on. The economic pragmatism also motivated the government to adopt an open-door policy not only to foreign investment and technology, but also to foreign managers, engineers, and technicians.[12] The same pragmatism also prompted the government to reject any prestigious project that had little promise for lucrative returns (for example, steel mills)—and in sourcing foreign investment, to prefer multinational corporations (MNCs) from the United States, Japan, and Western Europe over MNCs from Hong Kong and Taiwan (China).

The political leaders in Singapore firmly believe in the principle of meritocracy, which dictates the establishment of systems of reward and advancement at various levels. The perception is that the country's progress depends quite heavily on its ability to identify talents and groom them so as to develop their potentials to the fullest extent. The belief in meritocracy has created a system in which only the "best" in terms of educational qualifications and training can move up the ranks and into positions of power and responsibility. An important by-product of meritocracy is the "government knows best" attitude, which is often reflected in statements made by government officials and political leaders. The meritocratic style has also given rise to "paternalism," which characterizes the political leaders in Singapore. The paternalistic approach has led to

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9 IMF (1997: 741).

10 World Bank (1997: 217).

11 For details on the role of government in Singapore, see Khan (1997: 87–107).

12 In the mid-1980s, it was estimated that foreign managers, engineers and technicians constituted 20 percent of the work force in these categories. For details, see Ow (1986: 234).

government intervention in virtually all areas of life (marriage, procreation, education, and so on) as reflected in the following statement of Lee Kuan Yew:[13]

> I am accused often enough of interfering in the private lives of citizens. If I did not, had I not done that, we wouldn't be here today.

What made intervention work so well in Singapore? Effective state intervention to bring about economic as well as social transformation requires the state to be able to formulate and implement coherent economic and social policies. The 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. The government of Singapore initially faced the risks of being captured by certain interest groups backed by the Chinese business class, which tried to promote China-oriented economic and social policies. The People's Action Party (PAP) government led by Lee Kuan Yew successfully neutralized these interest groups with the help of a carefully designed combination of control mechanisms and achievement-oriented policies. Consequently a stable political environment prevailed when Singapore emerged as an independent nation on August 9, 1965. After independence, the government extended and consolidated its control over trade unions and mass media to enhance "stability," another crucial factor in determining the effectiveness of state intervention. Finally, the "efficiency" of Singapore's leaders is undoubtedly quite high. They have consistently been demonstrating good economic judgment and making sound economic policies, which have resulted in unprecedented economic growth. A small group of leaders led by Lee Kuan Yew[14] dominated Singapore's politics right from the beginning and the distinguishing features of these men are their personal integrity, honesty, dedication, and a high level of formal education. Corruption, endemic in most developing countries, is virtually absent in Singapore.

The quality of interventionist policies that are applied to a particular sector (or to the economy as a whole) depend on four key factors: flexibility, selectivity, coherence, and market-friendliness. Singapore's policies, economic or social, are 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," emerged in 1961 when protective measures such as tariffs and quotas were introduced, and it continued until about 1968. The second, called "export-oriented manufacturing strategy" began during 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[15] in industrial policies is also reflected in gradual shifts in "priorities" announced by the Economic Development Board (EDB).

Like other successful NIEs, Singapore has adopted policies that 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 the performance of selected projects is continuously reviewed.[16] Another feature of government policies is the high degree of "coherence" among them. There has always been broad agreement on economic goals, and policies have been coordinated to achieve these goals.

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13 Cited in Lim (1988: 66).

14 Lee Kuan Yew was the Prime Minister of Singapore for more than thirty years (1959–90) and currently 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 system with a dictatorial political system" [cited in Huff (1994: 359–60)].

15 The government is also quite flexible in social policies pertaining to education (for example, a graduate mother scheme once introduced for the priority placement in schools of certain categories of children was later withdrawn), population (for example, the change from a two-child policy to a three-child policy in the late 1980s), immigration (for example, liberal policies introduced in the early 1990s to attract foreign talent), housing (for example, recent upgrading programs in public housing to enhance the value of the property as well as the quality in relation to private property, and the decision to give priority in allocating public flats to applicants who want to live in estates near their parents),and so on.

16 In fact, planning in Singapore is based on microeconomic-level project evaluations. Unlike most other countries in the region, Singapore does not have a five-year Development Plan. The only available planning document, the 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 (EDB) on August 1, 1961 can, however, be considered the outcome of the Plan as it was strongly recommended by the U.N. Mission.

Finally, government policies have been directed toward the promotion[17] rather than regulation of private enterprises, and have been "market-friendly" rather than "market-repressing." Regarding the market's role, 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 ownerships to be issued in each month but then uses an auction mechanism to allocate them. Even the public enterprises are run on a commercial basis. They are expected to be efficient, turn profits, and expand whenever feasible. The government does not provide them with subsidies or any other privileges. 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.

Public Policies on Educational Financing

Singapore's sole resource is its people, so the need for educating the population remains paramount. The highly achievement-oriented government placed utmost importance on education right from the beginning and its education policy sought to incorporate all private and public schools into a unified national system of education through direct state funding or generous grants-in-aid. The rationale for government funding of education includes both social and economic factors. Building nationhood in a multicultural society requires the development of a common identity and a sense of belonging. These values could only be inculcated through the adoption of a uniform school system. With independence, social equity issues also became quite important. Free primary education followed by secondary education with equal access to all races and religious groups muted these issues, which could otherwise have lead to polarization, and ultimately, hostilities. The economic rationale behind the state funding of education was equally strong. The serious problem of unemployment prevailing during the 1960s and the need for an economic plan that could provide a solid foundation for the economic takeoff suggested that the country badly required a critical mass of literate and numerate workers. It was strongly believed that educational investment would enhance economic growth by raising the productivity of the work force and by providing a cutting edge for technology transfer.

Education has become a major industry in most countries in terms of the number of people involved and the fiscal resources allocated to it. The share of public expenditure in education varies from country to country, ranging from a low 2 percent to a high 23 percent (table 2). Education in Singapore received the highest proportion of public budget in 1995 among all the countries listed in table 2. In fact, all the fast-growing economies in the region (such as the Republic of Korea, Malaysia, and Thailand) seem to have invested heavily in education, while the matured industrialized economies (such as the United States, Canada, and the United Kingdom) are having difficulties in maintaining the same level of state funding for the educational sector. Japan was an exception until recently, where roughly 20 percent of the public budget had consistently been spent on education. It should be noted here, however, that in many developed countries the bulk of educational spending comes from state or local government sources, and since the data in table 2 reflect the share of central government expenditures alone, the relative positions of these countries[18] may be understated. Ironically, the distribution of total public expenditure (including various levels of government) among three selected social sectors cannot be studied as cross-national data on such distributions are not available from any international source.

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17 In fact, after the 1985–86 recession, the call for privatization got a fresh push and the government announced its privatization program in its 1987 report of the divestment committee. Some experts feel, however, that the privatization 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. For details, see Asher (1994b: 795–804).

18 For example, education received 14.1 percent, 13.7 percent, and 11.4 percent of total government expenditures (central and state governments combined) in the United States, Canada, and the United Kingdom in 1993. For details, see the UNESCO Statistical Yearbook 1997.

Table 2. *Share of Central Government Expenditure (percent) in Social Sectors for Selected Countries, 1995*

Countries	*Education*	*Health*	*Social security and welfare*
Australia	7.61	13.43	33.57
Canada[a]	2.89	4.89	33.79
Denmark	9.37	0.82	43.22
France[b]	6.99	15.47	45.05
Greece[b]	8.50	7.44	13.42
Indonesia[a]	9.77	3.25	5.27
Japan[b]	6.03	1.60	36.80
Korea, Rep. of[c]	21.10	0.55	10.52
Malaysia[c]	22.12	5.99	8.28
Netherlands	10.63	14.64	37.04
New Zealand	15.25	15.61	36.91
Norway[a]	6.70	3.67	36.68
Philippines[b]	15.87	3.04	3.06
Singapore[a]	22.64	7.30	2.86
Spain[b]	4.42	6.25	39.04
Sweden	5.29	0.26	51.89
Switzerland[b]	2.57	20.46	48.17
Thailand	22.00	7.93	3.74
United Kingdom	4.94	13.96	31.12
United States	1.77	19.21	29.23

a. Data for 1994.
b. Data for 1993.
c. Provisional estimates for 1996.

Note: All data are in current prices and for the most recent available year, from the same international source. Data from individual country sources are not reported here for the sake of comparability.

Source: IMF (1995, 1996).

Public expenditure on education in Singapore has been rising over the years (tables 3 and 4) owing to increasing costs as well as enrollments at various levels. The country could afford to spend increasing amounts for educational development as the economy was growing at a much faster rate. However, the rate of increase in educational spending was effectively checked so as to ensure that it did not exceed the GDP's growth.[19] This goal was reached (and surpassed) as can be seen from table 4. In fact, the public expenditure on education as a percentage of GDP consistently declined in the past decade and it presently hovers around 3 percent. The state's share of financial commitment to schooling (both primary and secondary) is quite heavy and almost all operating costs come from public funds (table 5). The share of "private investment" in education is also quite high and has been rising over the years. Owing to increasing competition among students and rising awareness in the community for better performance, private expenses for education (for example, private tuition, better texts and learning aids, home computers, foreign education, and so on) have gone up significantly. Though precise estimates of such expenses are not currently available, their overall significance and the rising trends can be

[19] There is a common perception among leaders in Singapore that the government can raise its social expenditure only if it can "afford" to do so. Given that growth is the single-minded objective of the government, such affordability is often defined in terms of growth rates. As growth rates go up, more money is likely to be spent on education and other social services. Also, in order to sustain a high level of social budget, the government makes a deliberate attempt to ensure that the GDP always grows faster than expenditures in social sectors.

observed from the data for private consumption expenditures on "recreation and education" published by the Department of Statistics.[20] Higher education in Singapore is also heavily subsidized. The average subsidy to educate a student at the National University of Singapore, for example, was S$21,090 in 1996.[21] The long-term aim of the government is to reduce the subsidy gradually but to ensure that less wealthy students are not denied a college education; to that end, loans with low interest rates are provided from a revolving fund.

Table 3. Public Expenditure (S$ Million) on Education, Health, and Social Security and Welfare in Singapore, 1984-93

Year	*Education*	*Health*	*Social security*
1984	2113	649	97
	(20.2)	(6.2)	(0.9)
1985	2284	684	167
	(21.6)	(6.5)	(1.6)
1986	2076	464	182
	(18.2)	(4.1)	(1.6)
1987	2204	548	196
	(14.4)	(3.6)	(1.3)
1988	2231	608	236
	(19.0)	(5.2)	(2.0)
1989	2369	613	282
	(18.1)	(4.7)	(2.2)
1990	2828	652	300
	(19.9)	(4.6)	(2.1)
1991	3655	994	344
	(22.9)	(6.2)	(2.2)
1992	3532	964	365
	(22.3)	(6.1)	(2.3)
1993	4047	979	626
	(24.7)	(6.0)	(3.8)

Note: Data refer to the financial year beginning April 1 and the numbers in parentheses show the percentage shares of total expenditure.

Source: IMF (1995).

Although government involvement in education is quite high by any standard and is likely to remain so in the foreseeable future, private initiatives in educational funding as well as management have received renewed focus in Singapore's recent educational policy. It is increasingly being felt that high subsidies may lead to the deterioration of educational standards as both students and teachers tend to become more complacent. The common perception that private academic institutions inculcate "creativity" by promoting competition while public institutions tend to produce "stereotypical" graduates owing to highly regulatory environments has also

[20] For example, such expenditures rose from S$2,752 million in 1986 to S$8,609 million in 1996, showing more than a three-fold increase in the past decade—see DOS (1996: 59). Compared with the government's educational expenditures presented in table 4, these figures are found to be much larger but it is difficult to ascertain the exact share of private educational expenses from these numbers as they are lumped together with private recreational expenditures.

[21] The Budget for fiscal 1996–97, published in Singapore in 1996 (p.203).

been reflected in recent policy changes. The introduction of "independent schools" on a selective basis in the early 1990s is a culmination of such thoughts.[22]

Table 4. *Real GDP Growth (Annual Percentage Change) and Government Expenditure on Education (S$ Million) in Singapore, 1985ñ96*

Year	*Real GDP growth (at 1990 market prices)*	*Recurrent*	*Development*	*Total*	*Total as percentage of GDP*
1985	–1.6	1388.3	387.3	1775.6	4.56
1986	2.3	1277.3	361.5	1638.8	4.24
1987	9.7	1352.6	301.4	1654.0	3.88
1988	11.6	1461.9	142.4	1604.3	3.21
1989	9.6	1619.8	145.3	1765.1	3.11
1990	9.0	1794.5	260.6	2055.1	3.03
1991	7.3	2356.8	459.6	2816.4	3.74
1992	6.2	2066.7	602.0	2668.7	3.21
1993	10.4	2210.3	692.6	2902.9	3.08
1994	10.5	2486.2	832.7	3319.0	3.07
1995	8.8	2682.6	761.4	3444.0	2.84
1996	7.0	3034.5	960.8	3995.3	3.01

Note: Data refer to the financial year, which begins in March and ends in April of the following year. These figures are slightly different from those presented in table 3.

Source: DOS (1995, 1996).

Table 5. *Government Subsidies on Education in Singapore (percent)*

Sector	*Subsidy rate*
Schools:	
Primary	100
Secondary	98
Junior college	99
Institutions:	
Vocational	94
Polytechnics	83
University:	79
Laboratory-based	76
Non-laboratory-based	75
Medical and dental	80

Source: Ministry of Trade and Industry (1994).

22 The government also allowed several schools to become "autonomous" in 1994. These schools function like independent schools but are not allowed to set their fees. They receive more funds from the government and enjoy more freedom in staff recruitment and tailoring school programs. The overall performance of students in these schools has improved since the schools received autonomy.

Tertiary education has received more private stimulus in recent years. The University Endowment Fund (UEF) was officially launched on October 8, 1991 to tap alumni support for the Republic's two public universities (the National University of Singapore and Nanyang Technological University). The target was to raise S$1 billion in five years; to show its support, the government contributed half of the targeted sum, pledged to match all donations dollar-for-dollar up to S$250 million, and granted tax-exempt status for all donations. Despite these motivations, the target was not reached and as of June 29, 1996, funds raised by the two universities stood at only S$81.4 million before government matching. The UEF was then decentralized[23] for the sake of efficiency in fund-raising and the two universities started separate campaigns in 1997. Government support for the Fund saw an additional boost as it agreed to match three dollars for every dollar donated, to be effective from March 13, 1997. Although individual contributions to the Fund still remain modest, the creation of the UEF institutionalized the tradition of private giving and reinforced the need for making tertiary education in Singapore a joint venture enterprise between the government and the people. The government has also announced its plan to restructure the tertiary education in many ways that include the introduction of a more broad-based curriculum, new admission criteria, and the promotion of more collaborative research with the private sector and reputable foreign universities. Singapore's first private university, the Singapore University of Management (SUM) is set to begin its operation in 2000.

The economic and social impacts of educational investment are well documented. The real social rate of return of investment in education in Asia, Latin America, and Africa is found to be higher than the real social rate of return of investment in physical capital (Psacharopoulos 1985). This is less true in industrial countries where large investments in human resource development have already been made. Rate-of-return studies undertaken in Singapore also indicate that returns are more than commensurate with returns from investment in other sectors (Eng 1996). In brief, it pays for society to invest in education. It is also widely known that the inequality in income distribution in fast growing Asian NIEs is relatively low compared with that in most developing countries. According to a World Bank study (World Bank 1993), this is partly because high rates of investment in primary and secondary education have made basic education universal in all of these Asian countries and thereby have spread earnings more evenly in the population. A recent study (Rao 1996), however, after computing Gini ratios for Singapore's work force by level of education concluded that educational expansion may not guarantee an eventual reduction in income inequality, even though it greatly assists in raising living standards and improving the quality of life.

Public Policies Governing Singapore's Health Care System

The health care financing system has become one of the most complex systems in developed urban societies today. Individual countries have developed their own national health systems and methods of financing in accordance with their predominant social values and priorities. The choice of a particular system is often complicated by the fact that there is a clear tradeoff between the efficiency and equity objectives of health care. At the one end is universal public health care service, which seems to maximize the social objective of equitable distribution but not efficiency (that is, consumer satisfaction). At the other end, a completely privatized health care system seeks to maximize profits and growth targets but may exacerbate the problem of inequality by making health services inaccessible to the lower-income group. One system rations health care according to need while the other is built on the ability-to-pay criterion. It is necessary to create some sort of balance between the two.

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[23] The National University of Singapore, for example, started its own fund-raising campaign under the NUS Endowment Fund (NUSEF), which was officially launched on May 12, 1997. It aimed to raise S$50 million in five years and as of September 30, 1998, the NUSEF stood at S$22.5 million before government matching. The funds are utilized in accordance with donors' wishes. One method of fund-raising that gained popularity was the setting-up of endowments for professorships to honor in perpetuity outstanding staff and friends of the Universities (for example, the David Marshall Professorship in Law, the Goh Keng Swee professorship in Economics, the Lien Ying Chow professorship in Medicine, the Mobil-NUS Engineering chair, the Chartered Semiconductor Manufacturing professorship in Microelectronics, and so on). Detailed information on fund-raising and the utilization of funds can be obtained from the Alumni Affairs and Development Office, National University of Singapore, 95 Lower Kent Ridge Road, Singapore 119078.

The system in Singapore seeks to strike an ideal balance between equity and efficiency objectives by financing health care services through a mixture of personal payments, limited insurance coverage, and employment benefits—which include company plans for workers and their families. The National Health Plan (NHP), announced by the government in 1983, seeks to provide a health service of the highest quality that is not only available and accessible to the population but also affordable and paid for largely through private funds. In addition to promoting individual responsibility for maintaining good health, the Plan aims to build up financial resources so as to create the means to pay for medical care during an illness. The Medisave Scheme, introduced in April 1984, was designed to fulfill this aim. Although details on its financing will be discussed later, it should be mentioned here that the Scheme is based on the principle that healthcare is predominantly a "private" responsibility and one should always set aside a certain portion of one's savings for meeting such needs. Although the government helps in administering the Scheme in many ways, it does not provide funds for paying someone's medical or hospitalization bills until all individual as well as group efforts fail to meet such expenses. It thus overcomes the problem of "moral hazard" that characterizes most other health insurance systems run by private institutions or government bodies.

While the Medisave scheme represents a major improvement over other tax-based financing schemes in terms of efficiency, it has certain disadvantages, as pointed out by experts. Phua Kai Hong (1996), for example, claims that the scheme has encouraged a lot of immediate spending even among younger groups for more expensive hospital-based services that are commonly perceived to be of a higher quality. There has been a dramatic shift of demand from government hospitals to restructured and private hospitals and a discernible upgrading from lower-class to higher-class (in other words, more expensive) beds. There is considerable ignorance on the part of the public with regard to the limits of Medisave coverage, creating an illusion of more money being available than what really is. Many also erroneously perceive Medisave funds as frozen assets that, if unspent, would be retained by the government. All these misgivings have induced many to opt for more luxurious services than they would have consumed otherwise, Phua argues. Other experts such as Asher (1994a) have questioned the social "adequacy" of the scheme and recommended supplementary measures. In view of rising health costs, the government has already accepted the need for supplementing the scheme with private and public health insurance programs. The Medishield and the Medifund schemes,[24] introduced in recent years, are designed to meet the extra health needs of Singaporeans.

The public expenditure on health care in Singapore is also quite substantial and as a share of total government expenditure it presently hovers around 6–7 percent (tables 2 and 3). Although the data show an overall increase in health expenditure in the past decade (table 6), increases are effectively checked and trends reflect the government's determination to keep its health budget as low as possible. It is evident that a larger proportion of health spending is increasingly coming from the private sector, and that the public expenditure on health as a percentage of GDP shows a downward trend. Hospital services usually account for the bulk of government expenditure on health; the "restructuring" program (which actually implies the privatization of certain hospitals), initiated in 1985, aimed to shift the burden of financing expensive health care to the individual, the family, the employer, and the private sector. It has been observed that admissions into private and restructured hospitals are rising at a faster rate than those into government hospitals (table 7), which reflects the citizens' increasing affluence and preferences for better-quality health services.

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[24] These schemes are particularly designed to meet the health care needs of relatively lower-income people. The annual premiums of Medishield are quite low (ranging between S$12 and S$240 depending on coverage) and the scheme covers a large portion of daily expenses in class B2 and C wards of public hospitals. The Medifund is an endowment fund and citizens can apply for assistance in paying their medical bills from the Fund only as a last resort, if all other means fail to procure the necessary amounts. For details, see CPF Board (1996).

Table 6. Health Expenditure in Singapore, 1985–96 (S$ Million)

Year	Private[a]	Government[b]	Total	Private as percentage of total	Government expenditure as percentage of GDP
1985	702.2	496.8	1199.0	58.6	1.28
1986	898.1	440.9	1339.0	67.1	1.14
1987	962.8	437.3	1400.1	68.8	1.03
1988	1139.3	474.5	1613.8	70.6	0.95
1989	1244.8	519.8	1764.6	70.5	0.91
1990	1526.1	505.4	2031.5	75.1	0.74
1991	1682.8	620.4	2303.2	73.1	0.82
1992	1917.2	681.7	2598.9	73.8	0.84
1993	2049.0	750.3	2799.3	73.2	0.80
1994	2258.9	927.8	3186.7	70.9	0.86
1995	2402.8	1011.9	3414.7	70.4	0.84
1996	2616.5	1057.8	3674.3	71.2	0.80

a. Private consumption expenditure on medical services at current market prices.
b. Recurrent and development-related expenditures.
Source: DOS (1995, 1996).

Table 7. Hospital Admissions in Singapore, 1985–96 (Numbers)

Year	Total	Public[a]	Private
1985	280,152	232,988(83)	47,164(17)
1986	290,322	237,014(82)	53,308(18)
1987	310,302	247,659(80)	62,643(20)
1988	336,498	265,380(79)	71,118(21)
1989	329,013	257,407(78)	71,606(22)
1990	337,103	259,541(77)	77,562(23)
1991	336,937	259,752(77)	77,185(23)
1992	348,126	265,535(76)	82,591(24)
1993	342,591	259,446(76)	83,145(24)
1994	343,342	257,843(75)	85,499(25)
1995	357,555	266,142(74)	91,413(26)
1996	373,395	277,785(74)	95,610(26)

a. Includes government hospitals, government-restructured hospitals, and the National University Hospital. The numbers in parentheses indicate the percentage of total admissions.
Source: DOS (1995, 1996).

Public Policies on Social Security and Welfare

> We want to teach the people that the government is not a rich uncle. You get what you pay for.... We want to disabuse people of the notion that in a good society the rich must pay for the poor. We want to reduce welfare to the minimum, restrict it only to those who are handicapped or old. To the others, we offer equal opportunities.... Everybody can be rich if they try hard.
>
> [Mr. Rajaratnam, former Senior Minister, quoted in Vasil (1984)]

Singapore's policy on social security and welfare is clearly reflected in this frequently cited statement. The government does not believe in giving unemployment allowances or any other transfer payments, as these transfers would undermine work incentives. The state should rather concentrate on providing conditions for full employment and low inflation, which in itself will make it feasible for the vast majority of the population to fulfill their social security and welfare obligations. An obvious implication of this policy—which views social security as an individual or family responsibility—is that public expenditure on social security and welfare in Singapore is very small compared with other high-income economies (tables 2 and 3). How long the government can keep these expenditures at such a low level, particularly in view of the changing demographic circumstances, remains to be seen.

The Central Provident Fund (CPF),[25] introduced by the British colonial administration in 1955, is the main instrument of social security in Singapore. The scheme was revised gradually after independence so as to allow members to use their savings for a variety of purposes (table 8). It is presently characterized by the following features:

Table 8. *The Various Schemes under the CPF System*

Type	*Scheme*	*Year introduced*
Home Ownership	Approved Housing Scheme	1968
	Approved Residential Property Scheme	1981
Investment	Singapore Bus Services (1978) Ltd. Share Scheme	1978
	Approved Investment Scheme	1986[a]
	Approved Non-Residential Properties Scheme(ANRPS)	1986
	CPF Investment Scheme(CPFIS)	1997[b]
	Shared Ownership Top-Up Scheme(SOTUS)	1993
Insurance	Home Protection Insurance Scheme	1982
	Dependents' Protection Insurance Scheme	1989
	Medishield Scheme	1990
Others	Company Welfarism through Employers' Contribution Scheme(COWEC)	1984
	Medisave Scheme	1984
	Minimum Sum Scheme	1987
	Topping-Up of the Minimum Sum Scheme	1987
	Financing of Tertiary Education in Singapore	1989
	Edusave Scheme	1992
	CPF Top-Up Scheme	1995

a. Since October 1993, divided into the Basic and Enhanced investment schemes.

b. Since January 1, 1997, CPFIS has replaced the Approved Investment scheme, thus eliminating the distinction between the Basic and Enhanced investment schemes.

Source: Asher, M. G. (1996).

25 It must be emphasized here that the CPF represents a *compulsory* savings scheme, which is fundamentally different from a *public* pension scheme. In the former, though the contribution rates may be set by the government or the private institution managing the scheme, the benefits workers ultimately receive will depend on their investment earnings (which in turn will depend largely on the state of the economy) and longevity. Under the Public pension plan, usually both contribution rates and benefits are predefined and the workers receive a minimum guaranteed income upon retirement. For details on various retirement programs, see World Bank (1994).

First, participation is compulsory[26] for employers and employees. The major categories not covered by the scheme include casual and part-time workers, certain categories of contract workers, and foreign workers earning below a certain wage. The self-employed are compulsorily covered under the Medisave scheme only and they can make voluntary contributions to the CPF. It is evident from the data presented in table 9 that roughly two-thirds[27] of the total labor force is presently being covered by the CPF scheme.

Table 9. Selected Indicators Pertaining to Singapore's Central Provident Fund (CPF), 1990–96

Indicators	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*
Members (thousands)	2195	2256	2323	2456	2522	2684	2742
Contributors (thousands)	1022	1052	1074	1107	1139	1175	1194
Contributors as percentage of labor force[a]	65	68	66	68	67	67	66
Contributor or member (percent)	47	47	46	45	45	44	44
Contributions (S$ million)	7,174	8,101	9,028	10,427	11,279	13,536	14,623
Contributions as percentage of GNS	24	24	24	25	21	22	22
Contributions as percentage of GDP	11	11	11	11	10	11	11
Withdrawals—Total (S$ million)	3,995	4,656	5,413	10,944	7,292	7,253	10,530
Withdrawals—Housing[b] (percent)	57	65	67	32	48	63	48
Withdrawals—Retirement[c] (percent)	25	20	19	11	19	20	11
Withdrawals—Medisave (percent)	5	5	4	2	4	4	3
Withdrawals—Others[d] (percent)	13	10	10	55	29	13	38
Members' balance (S$ million)	40,646	46,049	51,527	52,334	57,649	66,035	72,567
Members' balance as percentage of GDP	60	61	64	56	53	55	55

a. Labor force data refer to persons aged 15 and above.

b. Housing includes both public and private sectors

c. Includes withdrawals on following grounds: reached 55 years of age, leaving Singapore and Malaysia permanently, and death.

d. These include withdrawals by persons who are physically or mentally incapacitated and various other schemes such as Minimum Sum, Medishield, Dependent's Protection, education, investment, and so on.

Sources: DOS (1996);CPF (1996).

Second, the scheme is financed through mandatory contributions from employers and employees. At the time of its inception in 1955, the rate was 10 percent of net wages, with a maximum of S$50 per month. As new schemes were introduced, the rate increased steadily and reached a high of 50 percent of one's net wage in July 1984. In April 1986, the rate was reduced to 35 percent to align it with Singapore's cost-competitiveness, which had largely eroded in the mid-1980s, leading to a recession during 1985–86. As the economy recovered, the government started revising the rate upward and since July 1994 the rate has been fixed at 40 percent (split equally between employer and employee) with a maximum joint contribution of $2,400 per month. The government has announced that the CPF contribution rate is going to stay at the present level over the long

26 Apart from certain categories of high-level government officials (the President, political-office holders, Members of Parliament, and certain categories of civilian and military officials), no government employees are currently on a pension scheme. Since April 1, 1995, the Pension Fund has been set up to meet pension liabilities. Previously such pension liabilities were met on a pay-as-you-go (that is, a method of financing whereby current outlays on pension benefits are paid out of current revenues from an earmarked tax) basis.

27 It is important to mention here that nearly half of the CPF members do not contribute to the Fund. For example, in 1996, only 44 percent of the members contributed to their CPF accounts.

term .The contribution rates are different for older workers (for example, 20 percent for those aged 55–60, 15 percent for workers between 60–65, and 10 percent for those over 65); this was done to reduce the cost of hiring the elderly, resulting in increasing demand for such workers.[28]

Third, contributions by both employers and employees, interest credited to members' accounts, any capital gains earned on approved property, shares and commodity investments, and withdrawals at age 55 are all exempt from income tax. Fourth, a CPF member maintains Ordinary, Medisave, and Special Accounts. When one joins the Minimum Sum Scheme (MSS) at age 55, he or she also has a Retirement Account. Under the MSS, an individual must keep a minimum amount of $45,000 (as of July 1996), of which at least $8,000 must be in cash, the rest being tied to property. This will be gradually increased to $80,000, of which at least $40,000 must be in cash, by July 2003. This is to ensure a steady flow of cash income to retirees. The minimum sum must be left with the CPF Board or an approved bank, or used to purchase a lifetime annuity from an approved insurance company.[29] Of the total CPF contribution of 40 percent, 30 percent is credited to the Ordinary Account, which can be used for housing, approved investments, CPF insurance, tertiary education, and topping-up of parents' Retirement Accounts. The Medisave Account (6 percent of total contribution) can be used for approved hospitalization expenses. Since July 1, 1993, the Medisave contribution rate for members aged 45 and over has been set at 8 percent. At age 55, in addition to the Minimum Sum, members who wish to withdraw their savings are required to set aside up to $14,000 in their Medisave Accounts to meet healthcare needs during retirement. Savings in the Special Account (4 percent of total contribution) is also meant for old age and contingencies.

Finally, the CPF system is characterized by a wide range of schemes (see table 8) introduced by the government from time to time to attain different objectives. Although the system was originally designed to fulfill the purely economic criterion of generating sufficient savings[30] for the future, it has subsequently been used for various social purposes such as creating a sense of belonging and nationhood by encouraging home ownership (through approved housing and residential property schemes) and by investing in public limited companies (through approved investment schemes). The Approved Housing Scheme was set up in 1968 to allow members to use their CPF savings for buying public flats built by the Housing and Development Board (HDB). In 1981, the government allowed CPF balances to be used to purchase private residential properties and in 1986, nonresidential properties. Recently the government also started the program of upgrading older public housing estates on a cost-sharing basis, with 25 percent borne by homeowners and the remaining 75 percent by the government. This is a part of the government's asset enhancement program, which has been highly successful in raising people's confidence on the PAP government and its policy of redistributing wealth. Withdrawals from the CPF by members have clearly been dominated by housing schemes, accounting for between 32 and 67 percent of all withdrawals during 1990–96 (table 9). The Approved Investment Scheme[31] was introduced in 1986,under which a proportion of balances (initially 40 percent and later raised to 80 percent) was allowed to be invested in approved stocks (the ones traded in the Singapore Stock Exchange), unit trusts, convertible loan stocks, and gold. The scheme has been gradually liberalized, resulting in a wider choice of investments (including foreign

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28 The lower contribution rates may, however, create a disincentive for labor force participation and skill acquisition. The government has announced that the retirement age will be extended from 55 to 67 years gradually and a new wage policy for older workers is currently being studied so as to maintain competitiveness without any loss of incentives for labor force participation.

29 The monthly payments are being made, however, from age 60 onward. Annuity options seem to provide somewhat higher returns than the CPF board or approved banks.

30 The savings ratio (measured by Gross National Savings as a percentage of GDP in current prices) in Singapore increased from 17.2 percent during 1965–70 to more than 50 percent in 1996 (see DOS 1996—and previous issues of this publication).

31 The Basic Investment Scheme (BIS) and Enhanced Investment Scheme (EIS) were introduced on October 1, 1993. Under the BIS, members can use up to 80 percent of their investable savings (after setting aside a minimum reserve of S$40,000) to invest in trustee stocks, loan stocks, and unit trusts. Ten percent of these investable savings may also be invested in gold and nontrustee shares. Enhanced Investment Scheme members have to set aside S$50,000 cash balance in their Ordinary and Special Accounts. Additional financial instruments (such as government bonds, fixed deposits, fund management accounts, and endowment insurance policies) are allowed under the EIS. The two schemes were merged on January 1, 1997 and investment areas were further broadened (for example, individuals can now invest in regional stock markets).

shares and bonds listed locally and in the stock exchanges of Hong Kong, Malaysia, Korea, Thailand, and Taiwan) for CPF members. Another investment scheme is the Share-Ownership Top-Up Scheme (SOTUS), under which the government provides small grants of about $200 to $300 to CPF members to enable them to purchase shares of state enterprises being divested. Withdrawals for investments and other purposes have fluctuated over the years (reflecting an overall upward trend) and in 1993, 55 percent of total withdrawals were accounted for by these purposes (owing mainly to the offer of Telecom shares).

In addition to the above-mentioned investment schemes, three types of insurance schemes are included in the CPF system. First there is the Home Protection Insurance Scheme (HPIS), which is compulsory and aims to provide mortgage-reducing insurance for members purchasing public flats by using their CPF savings. Second, the Dependents' Protection Scheme (DPS) is a term-life insurance that covers members against permanent incapacity or death before age 60. The scheme pays $36,000 to the insured member or his or her family to help them tide over the initial difficulties if the breadwinner is permanently disabled or dies suddenly. The DPS is optional and about 80 percent of the eligible contributors have enrolled in it. Third is the Medishield Scheme, which is the national catastrophic illness insurance scheme providing members and their dependents with financial protection against high medical expenses arising from serious illness. It covers only those opting for it up to age 75 (85 percent of eligible members participated in in 1996) and the yearly premiums are between $12 and $240 depending on one's age. The annual deductible is S$1,000 for members staying in class B2 wards and above, and S$500 for class C wards. Another insurance scheme, Medishield Plus, was introduced on July 1, 1994. The rates are much higher (between S$60 and $1200 for plan A and between $36 and $720 for plan B) for this scheme but it also provides larger benefits.

Asher (1993: 153–67, 1994a, 1996) has thoroughly examined the CPF system and claims that it suffers from several limitations. First, it does not cover the entire labor force and at least a proportion of those not covered by the scheme will have inadequate funds for retirement. Since August 1, 1995, all foreign workers including professionals whose monthly salary exceeds S$2,000 are ineligible for participation in the CPF scheme. As a result, their tax liabilities have increased, leading to a substantial cut in their take-home pay. In view of Singapore's dependence on foreign labor (currently foreign employees number around 300,000, which is one-fifth of the total work force), particularly engineers, technicians, and other professionals,[32] this measure is somewhat disturbing. Second, it does not provide automatic protection against inflation, and any significant inflation or currency depreciation could adversely affect the real value of CPF balances. The available evidence, however, indicates that for most of the years between 1961 and 1996 the real rate of return[33] has been positive. Moreover, for those purchasing property or participating in investment schemes, the real rate of return is likely to be substantially higher than one based on CPF balances. Third, the CPF system provides extremely limited opportunities for members to share in Singapore's economic growth once a member has ceased to participate in the labor market. This is inherent in any provident fund system because the accumulated savings received at the time of withdrawal reflect the past performance of the economy and past behavior of wages. The length of a member's retirement life could approach that of his or her working years, and unlike social insurance, the provident fund mechanism cannot automatically adjust for differing life spans of individuals. Fourth, the CPF does not provide members with adequate retirement income. The average cash balance of members aged 55 years and over in 1996, for example, was only about S$8,000 (table 10),

[32] It should be noted here that under the present rules, foreign professionals are encouraged by their employers to take up permanent residence so as to qualify themselves for CPF benefits.

[33] The CPF interest rate is a simple average of the 12-month deposit and month-end savings rates of the four major local banks subject to a minimum rate of 2.5 percent. It is revised every six months. The interest rate for January–June 1996 was 3.52 percent and 3.48 percent for July–December 1996. Since July 1, 1995, savings in the Special and Retirement Accounts receive an additional interest of 1.25 percent above the normal CPF interest rates (CPF Board 1996). In view of the fact that the inflation rate in Singapore has always been one of the lowest in the world—for instance, average inflation rate during 1980–92 was 2 percent, according to World Bank (1997)—it can be argued that CPF savings earned positive real returns.

which is grossly inadequate for covering retirement needs.[34] One should remember at this point that the basic purpose of the CPF is to ensure a modest living (for example, food, shelter, clothing, and health care services for later years) for its members after retirement and it is likely that members will have to accept a drop in living standards when they stop working. However, if members invest their savings wisely (in property, stocks, education for their children, and so on) and plan for retirement well ahead of time, they may be able to maintain or even enhance their living standards. The Household Expenditure Surveys, conducted by the Republic's Department of Statistics, show that living standards in general (including the living conditions of senior citizens) have been improving over the years. Finally, the transparency of the CPF system has been significantly reduced owing to its extensive coverage and to the lack of information about the ultimate deployment of and returns obtained on members' balances.[35]

Table 10. *Distribution of CPF Balances by Age Group in Singapore (as of December 31, 1996)*

Age group	*Number (in thousands)*	*Balances (in thousand S$)*	*Average balance (in S$)*
All age groups	2,741	72,566,560	26,474
Below 35 years	1,033	21,737,634	21,043
Between 35 and 55 years	1,209	47,131,290	38,984
Over 55 years	470	3,626,738	7,716
Unspecified	30	70,889	2,363

Note: The figures represent cash balances with the CPF Board only and do not include amounts withdrawn under the Investment, Education, SBS shares, Residential Properties, and Public Housing schemes. The contributions made by self-employed persons are also included in these figures.
Source: CPF Board (1996).

Despite the above-mentioned limitations, the CPF system has made enormous contributions to Singapore's socioeconomic development. It has certainly minimized the explicit budgetary expenditure on social security, though hidden tax expenditures remain owing to its tax-exempt nature.[36] The public assistance schemes are extremely limited in scope (table 11) and they are strictly administered.[37] They are not intended as unemployment, retirement, or disability support. The recipients are categorized as follows: (a) the aged destitute; (b) the disabled, the mentally ill, and the chronically sick who are unfit for

[34] From an actuarial point of view, the benchmark retirement income for an individual is equal to two-thirds of his or her final income. Applying that criterion, Asher has estimated that low-, middle-, and high-income earners who are single individuals would need to fund the balance of 18.6 percent, 32.6 percent, and 46.6 percent of monthly income, respectively, to meet the benchmark "replacement rate." Peter Heller (1997) has recently provided strong support for Asher's viewpoint by applying the concept to other Aging Asian Tigers. The replacement rate (that is, postretirement monthly income, if available cash balances are converted into annuity), truly speaking, should not be compared with monthly pensions provided by the public pension system. To make a more meaningful comparison; the replacement income should also include annuity on the portion of the CPF that is used for housing, investment, and education (in other words, "in-kind" balances as opposed to remaining-cash balances). For example, a retiree under the CPF system may have very little in terms of a cash balance (resulting in a low so-called replacement rate) but may own a couple of houses (or approved stocks, endowment policies, a combination of these, and so on) which may yield substantial rental (or investment or both) earnings. Indeed, 90 percent of Singaporeans are homeowners and many of them have multiple properties and investments. The replacement ratio, as computed by Asher (1996) and Heller (1997), should therefore be applied to cases in which individuals preferred to leave their entire CPF balances with the government rather in any other form of approved investments.

[35] Central Provident Fund balances are invested in government securities and a portion is believed to be invested abroad (for example, in long-term U.S. government bonds) but no details are available on investment returns. It is commonly believed that the returns are higher than the interests paid to the CPF members.

[36] The loss caused by the CPF's tax exemption was estimated to be S$443 million in 1987, which was 9.5 percent of total contributions in that year. For details, see Deutsch and Zowall (1988: 5). Another study (Heller 1997: 13) claimed that the CPF's tax cost is currently 1 percent of GDP. Given that the government has had healthy budget surpluses over the years, the hidden tax cost should not be a major concern.

[37] It should be noted that public assistance schemes in Singapore were an accidental outgrowth of the circumstances prevailing at the end of the Japanese occupation. Destitution became a problem after the war and the schemes underwent several revisions since 1946. Presently, the Ministry of Community Development, created in 1984, administers the various community and welfare services. For details see Lim and others (1988, ch.14).

work; (c) widows or deserted wives with children under 12 years of age; and (d) orphans. The current public assistance rates (table 12) are below the Minimum Household Expenditure (MHE) covering only basic items calculated by the Republic's Chief Statistician. The government also runs some welfare homes for the aged but the policy has always been to encourage charities and other voluntary organizations to run such homes. The data presented in table 13 reflect how this policy has been successful as more and more destitute individuals went to privately-run Homes for the aged (rather than government-run "old folks' homes") in recent years. In general, the number of residents living in welfare homes increased only marginally during 1990–96.

Table 11. *Public Assistance and Supplementary Grants in Singapore, 1985–95 (S$ Million)*

Year	*Public assistance*	*Supplementary grants*	*Total*
1985	3.54	0.50	4.04
1986	3.51	0.55	4.06
1987	3.42	0.58	4.00
1988	4.15	0.65	4.80
1989	4.36	0.76	5.12
1990	4.35	0.74	5.09
1991	4.38	0.70	5.08
1992	4.24	0.65	4.89
1993	4.39	0.67	5.06
1994	4.32	0.76	5.08
1995	4.59	0.78	5.37

Source: Ministry of Community Development (1996 and previous years).

Table 12. *Public Assistance Rates (Monthly) by Household Structure in Singapore, 1994–95*

Household structure	*1994 (in S$)*	*1995 (in S$)*
1 person:		
1 adult	155	180
2 persons:		
2 adults	240	270
1 adult, 1 child	290	330
3 persons:		
3 adults	305	340
2 adults, 1 child	355	400
1 adult, 2 children	390	445
4 persons:		
2 adults, 2 children	420	495
1 adult, 3 children	445	535
5 persons and above:		
All combinations	445	535

Source: Ministry of Community Development (1996, 1995).

Table 13. Residents in Welfare Homes for the Aged in Singapore, 1990–96 (Numbers)

	1990	1991	1992	1993	1994	1995	1996
Government "old folks'" home[a]	794	798	763	766	720	703	587
Sheltered housing and community homes	n.a.	n.a.	n.a.	449	442	488	529
Voluntary nursing homes[b]	2,074	2,070	2,147	1,833	1,905	1,945	2,398
Commercial nursing homes	996	970	938	989	1,129	1,235	1,286
Total	3,864	3,838	3,848	4,037	4,196	4,371	4,800

a. Figures include only those aged 60 years and over.
b. Data prior to 1993 include certain sheltered housing and community homes figures.
n.a. = not available.
Source: DOS (1995, 1996).

Concluding Remarks

Singapore has set an example of how a nation can enable its citizens to live well without deliberate public assistance. Although the educational expenses of the student population are still heavily subsidized, the long-term strategy of the government is to reduce the subsidies gradually. In such other areas of social expenditure as health and social security, the principle of self-help has been the main guiding force behind all the policies undertaken so far. The results seem to indicate that these policies are working well. On health financing, the success of the government's National Health Plan (NHP) can be seen in the growing popularity of private and restructured hospitals. Although experts are suggesting that Medisave savings do not adequately meet members' health requirements, the adoption of various supplementary schemes (such as Medishield and Medifund) has perhaps met the criteria of "social adequacy." The government has reassured people that no citizen would be allowed to die without proper medical care (the Medifund provides a safety net for those who fail to meet their medical expenses from all other sources). On social security and welfare, the available evidence suggests that the CPF system, with its umbrella of protective and investment measures,[38] has provided an extremely powerful shield against all conceivable odds of life. Those who are not covered by the program and are desperately in need of some outside help can apply for public assistance, which will partly meet their financial needs. In line with the stated policy objective by which social security predominantly remains an individual (and family) responsibility, the government has recently introduced the Maintenance of Parent Act (1995) through which neglected parents can claim maintenance from their children.

Although there is a gradual reduction of subsidies in health and education provisions with a rise in one's income, the government's interest in these crucial areas of human resource development and work force planning has not been diluted. The privatization of social service delivery mechanisms (such as housing, education, and health) has not been seriously considered a viable option as these services often represent a

[38] The recent stock market crisis (as well as the currency crisis) shows, however, that CPF investments may not always yield the expected capital gains. According to a report, over half of CPF trustee stocks underperformed when compared with the STI index in 1997. From the start of the year until the end of October 30, trustee stocks fell by 48–65 percent, while the STII lost over 30 percent since the start of the year (*The Business Times*, 30 October, 1997). Although CPF investors made profits in the previous years (for example, according to CPF Board (1996: 33), as of December 31, 1996, 373,895 members had invested a gross amount of $15,165.1 million of their CPF savings, 85,083 members had withdrawn $362.9 million in profits through their agent banks), the recent experience suggests that the members should be extra cautious in putting their hard-earned savings into the stock market. They should perhaps reduce the risk by channeling their savings into other alternative forms of investments such as approved unit trusts, gold, government bonds, fixed deposits, and fund management accounts. The government (or the approved banks) should provide necessary counseling services to potential CPF investors and perhaps increase (and extend) the coverage of family protection schemes (such as the Dependents' Protection Scheme) to meet the extraordinary circumstances arising out of investment losses caused by unforeseen global (or regional) crises.

"double coincidence of wants." While citizens fulfill their basic needs by gaining access to these merit goods, the political leadership perceives them as essential social engineering instruments that lay the foundation for continued economic progress and political stability. Privatization in other areas has also been debated in Singapore and the prevailing perception is that any change in government ownership need not necessarily imply change in control mechanisms. Given the small domestic base and lack of entrepreneurial ability, government intervention through public enterprises can be considered an important policy option in the city-state Republic.

As Singaporeans are becoming more and more affluent and as demand for purely private goods is increasingly satisfied, demand for public goods is likely to become more intense.[39] This may provide the basis for "reluctant collectivism"—that is, the state responding to such populist pressure. One may thus observe that the size of the government increases with the level of development. This phenomenon has sometimes been referred to as Wagner's Law and there seems to be some empirical support for this so-called law.[40] The increasing demand for public goods generates the "free rider" problem. As consumers, citizens seek higher government expenditure (for example, on social security and welfare, education, health benefits) but as taxpayers, they are unwilling to finance the provision of these public services. This puts pressure on the state to bear the burden of public spending and thus sows the seeds of "fiscal disequilibrium," which in turn stifles growth by diverting resources from productive activities.

Will Singapore be able to overcome such populist pressures? Perhaps yes. The main reason behind such optimism is that there is a remarkable degree of social conformism in Singapore. This conformist attitude could partly be attributable to the paternalistic attitude of the government, which often results in the inculcation of approved social values. However, one cannot ignore the importance of culture and tradition in affecting the process of socialization. It is often said that the Confucian ethic has exerted a favorable impact on the economic development of Singapore, and so long as there is widespread affiliation to such an ethic the so-called social limits to growth are unlikely to be effective. The following observation from Mr Lee Kuan Yew,[41] the main architect of modern Singapore, shows that the Confucian ethic is the central element in containing social dissension and industrial unrest in Singapore:

> Looking back over the past 30 years, one of the driving forces that made Singapore succeed was: The majority of the people placed the importance of the welfare of the society above the individual, which is a basic Confucianist concept. The society is more important than the individual. The family is the most important unit and all the families together form society. There is a willingness to sacrifice individual gains for a common good. It means a certain social cohesion that enables us to avoid industrial strife, which has plagued so many countries, even developing ones.

Although social expenditures in Singapore are not likely to be influenced by populist pressures, demographic changes might have an impact. According to current projections, by 2030 one in every four persons in Singapore is expected to be over 60, compared with one in every 11 persons in 1990. Such rapid aging will call for more supplementary health care and social security measures in the future. At the same time, traditional family ties and social values will be subject to increasing pressure owing to the modernization of society, and the government might have to expand its public assistance programs.

What lessons can be learned from Singapore's experience? Although Singapore is a small city-state and unique in many ways, the brief assessment of its social policies undertaken in this paper has revealed some

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39 This is usually referred to in the literature as "social limits" to growth. For details, see Hirsch (1977).

40 See Heller and Tait (1983).

41 Excerpted from Lee Kuan Yew's interview with The New York Times on December 16, 1986 at Istana. For a full transcript of the interview, see The Straits Times, January 8, 1987, pg. 11.

important lessons. First of all, Singapore has successfully demonstrated how savings,[42] an essential input for economic growth, can be generated domestically by using the compulsory provident fund scheme. For example, in 1996, the CPF contributions accounted for 22 percent of Gross National Savings (GNS) and the total CPF balances stood at a staggering S$72.6 billion, which was 55 percent of the country's GDP. Second, the Singapore experience has shown that it is possible to subsidize important social sectors such as education and health without slowing down the process of growth. While the government spends increasingly on education and health, it has planned its expenditure judiciously so as to ensure that GDP growth always remains ahead of expenditure growth.[43] Although growth was the single-minded priority of the government, subsidies were targeted mainly toward lower-income groups (for example, full cost-recovery policy for A and B1 class hospital beds and subsidized rates for lower-class beds such as B2 and C; more generous subsidies for small public flats built by HDB compared with near-market rates for executive apartments) so that overall wealth distribution would improve as economic growth proceeded. Third, the Singapore system of social security has shown how generosity can be combined with the criterion of international competitiveness. While the CPF contribution rates were gradually raised, they were kept at a more "competitive" level for old-age workers. Such a policy, though nonoptimal from a welfare point of view, helped Singapore maintain its high growth consistently for the past three decades, resulting in higher living standards for everyone including senior citizens. Fourth, the Singapore model has shown that the redistribution of wealth rather than income is a better strategy for achieving equitable development. The main rationale behind the model's asset enhancement program is to allow Singaporeans to have a direct stake in the growth and prosperity of their country. Enhancing their assets through prudent investments (in housing or approved shares) have also put many Singaporeans in a better position to secure a comfortable retirement. Such a strategy can also avoid the "moral hazard" problem, which often arises in traditional income-transfer programs. Finally, the success of Singapore's social security policy has largely been attributed to the conformist attitude of its population. Although changes in attitudinal and behavioral patterns cannot easily be brought about, "social consciousness" (so that people voluntarily place the common good above self-interest) can perhaps be inculcated through appropriate educational and mass media programs.

Can other developing countries "model" their social policies based on Singapore's experience? Perhaps not. While they can draw on useful lessons outlined above, the adoption of the system and its successful implementation would require a conducive sociopolitical environment. Interventionist strategies, as practiced in Singapore, tend to work well in a Confucian society characterized by altruism and close family ties. They may not yield the same results in liberal democracies plagued with corruption, inefficiency, union militancy, and political instability.

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[42] The critical role of savings in economic development is well established both theoretically and empirically (for example, through the works of noted economists such as Adam Smith, Rostow, Harrod-Domar, Lewis, and so on). See World Bank (1994, ch.6) for details on the economic impact of various Savings Plans.

[43] Lindert (1996a, 1996b) has thoroughly examined the theory of the limits to social spending, which predicts that the rising marginal dead-weight costs (that are attributable to discouraging efforts both for the taxed and for the subsidized) will choke off either the ability or the willingness to go on raising taxes and transfers. By using 1960–80 data for Organisation for Economic Co-operation and Development (OECD) countries, Lindert finds that larger social-spending shares of GDP are not accompanied by lower income levels or lower income growth. This holds true whether the comparisons are made between different governments or different years. Within the United States, however, there is some evidence that a negative relationship (though the correlation is not overwhelming) exists between big social transfer budgets and slower rates of income growth. The author argues that the big social-spending countries have largely been successful in reducing the costs of spending by planning the expenditures wisely and maintaining growth incentives as part of their social transfer programs.

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