Enhancing Singapore's Competitiveness: Some Fundamental Rethinking*

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Abstract

Singapore's economy faces some major concerns resulting from intensified regional competition and the transformation from being investment-driven to innovation-driven. This paper examines (1) the accumulation and utilization of huge government surpluses in the past 40 years; (2) the country's total cost structure (e.g., land, wages, and regulatory costs); (3) the relationships among small and medium-sized enterprises, government-linked companies, and multinational corporations; and (4) the product and market diversification that is needed to mitigate the impacts on unemployment resulting from structural changes and the transition from manufacturing to services. Singapore's comparative and competitive advantages as a strategic hub of economic activities in Asia are examined and policy recommendations are put forward.

1. Introduction: From growth prosperity to growth discontinuity

In October 2001, the Singapore government announced the establishment of the Economic Review Committee under the leadership of Deputy Prime Minister Lee Hsien Loong "to fundamentally review our development strategy and formulate a blueprint to restructure the economy, even as we work and ride out the current recession," and the government promised that "no stone will be left unturned" in the reinvention of the "Singapore Inc." developmental state model (Lee 2001).

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In contrast to the economic prosperity in the era of growth from 1987 to 1997, when Singapore experienced sustained high growth in both the manufacturing and services industry, the Singapore economy is currently going through a new era of growth discontinuity with some swings from double-digit growth in one year followed by a swift contraction in the next. For example, the economy contracted by 0.1 percent in 1998 after growing by 8.5 percent in 1997; thereafter it expanded robustly by 6.9 percent and 10.3 percent in 1999 and 2000, respectively, only to contract again by 2.2 percent in 2001. The economy grew by 2.2 percent in 2002 but slipped back to 1.1 percent growth in 2003 as a result of the outbreak of Severe Acute Respiratory Syndrome (SARS). Although Singapore's GDP rebounded to 8.8 percent in 2004, the economy's momentum could decelerate if down cycles in the global electronics set in.

Such growth discontinuity can be explained by several new global, regional, and domestic developments. From a global perspective, studies have shown that global semiconductor and related electronics cycles have shortened increasingly since 1996, reflecting the shortening life spans of such products. Since the electronics sector still constitutes about 40 percent of the republic's manufacturing activities as of 2004, manufacturing is therefore likely to experience volatile growth before the full cushioning impact of diversification, such as the move into chemical-related products, life sciences, and precision engineering, sets in. From a regional perspective, Singapore's traditional neighboring hinterland, including Malaysia, Indonesia, and Thailand, has become much weaker economically and more unpredictable politically since the 1997 Asian financial turmoil. In terms of competition in export-oriented manufacturing activities and attracting foreign direct investment (FDI), the unexpectedly strong emergence of China as a regional economic powerhouse, coupled with the sharpened competitive edge and growth strategies of Malaysia, has resulted in the weakening of Singapore's relative cost competitiveness. In terms of the domestic economy, Singapore has developed from being a factor-driven, input-cost-effective economy in the 1960s and 1970s to an investment-driven, highly efficient economy in the 1980s and 1990s. As the economy moves into an innovation-driven phase, the pace of the restructuring process is likely to quicken further in the new millennium.

1.1 "Before you discuss your future, remember how we got here . . ."

As Singapore moves forward in the international arena, remembering the past, and how the republic got where it is, is still highly relevant when trying to fundamentally rethink and restrategize. There are at least six basic tenets of the Singapore economy that we adhere to closely in developing the arguments presented in this paper:

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1. Singapore will always be more rather than less dependent on external demand, as its small size limits the scope for domestic demand, unless the population is doubled to 8 million to achieve a critical-mass effect.
2. As Singapore has no natural endowment, the only resources it can create are financial and human capital that can grow with wealth accumulation and recruitment of foreign experts.
3. Policy formulations, be they related to taxes, labor, infrastructure, business incentives, or education, will always aim at two economies, namely, the international economy and the domestic economy.
4. Housing space, land use, transportation, water, and electricity supply can be made available more efficiently, but they will increasingly become more costly for the citizens, unless subsidized.
5. Since the East Asian financial crisis in 1997, Singapore is deemed to have moved into an era of economic discontinuity in which future potential growth is likely to be more volatile compared with the largely uninterrupted and prolonged growth prosperity over the past four decades.
6. Given the size of the Singapore economy, there will always be a positive role for the government, first and foremost as a business facilitator or market enabler, and second as a national moderator of the social well-being of its citizens.

In light of the wide scope implied by the topic of Singapore's competitiveness and the space constraints of this paper, we shall concentrate on government surpluses and total costs structure, which we think have the greatest impact on competitiveness. This paper is intended to serve as a useful source of reference, along with the 1986 *Report of the Economic Committee,* the 1991 *Report on the Strategic Economic Plan,* and the 1998 *Report by the Committee on Singapore's Competitiveness,* for future policymakers, business practitioners, and academic researchers who are interested in a small open economy such as Singapore.

Our analysis is organized as follows. Section 2 reviews the accumulation, management, and utilization of massive government surpluses that Singapore has accumulated over the past four decades, and section 3 addresses Singapore's total cost structure in terms of land and related costs, wages and labor costs, and regulatory and statutory costs. Section 4 looks into the interrelations among small and medium-sized enterprises (SMEs), government-linked companies (GLCs), and multinational corporations (MNCs). Section 5 explores the efforts to diversify production and markets and to entrench manufacturing and services clusters. Finally, section 6 rethinks Singapore's comparative and competitive advantages as a viable hub for diversified economic activities and as an economic leader in global trading.

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2. Reviewing the accumulation, management, and utilization of government surpluses

2.1 Background and issues at stake

In this section, we focus on the economic analysis of the accumulation, management, and utilization of government surpluses, which have considerable implications for Singapore's longer-term competitiveness.

For a small, resource-scarce, open economy like Singapore, financial resources can and should act as a substitute for natural endowments such as minerals or oil. As financial resources grow with economic success and prosperity, government surpluses are accumulated for a variety of reasons. After economic takeoff, the next long-term concerns are consolidation, intergenerational distribution, and sustainability. National surpluses graduate from being mere capital for current production to being a reservoir of funds for future investment and capacity building, and as the assets, security, and wealth of the nation.

Concerns about accumulation, management, and utilization of Singapore's government surpluses have intensified since the 1980s. These concerns are essentially a reflection of an increasingly better educated and hence more demanding population arising from decades of high income growth. The Monetary Authority of Singapore (MAS), the Government of Singapore Investment Corporation (GIC), and Temasek Holdings Private Limited (Temasek), all reporting to the Ministry of Finance, are responsible for managing Singapore's government surpluses. Currently, accumulated government surpluses, according to our estimate, amount to about S$800 billion, of which GIC manages about S$200 billion; MAS, which manages shorter-term liquidity under tighter rules, manages probably another S$100 billion; and Temasek manages the remaining S$500 billion, through its listed and unlisted equity shares in GLCs.

Since the Singapore economy entered an era of growth discontinuity following the July 1997 Asian financial crisis, in contrast to the era of continuous growth between 1987 and 1997, its steadily growing government surpluses have become the subject of intense and open debate. Both members of parliament and the general public now question and often object to the philosophy of surplus generation by the government, which has been returned to power in every election since Singapore's independence in 1965. The issues of concern naturally revolve around the role of the government and the principles, justifications, and mechanisms of surplus accumulation. Some overriding concerns are that surplus generation should not crowd out economic growth, suppress employment creation, and exacerbate income disparity.

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Of late, there have been demands for more information and transparency on the management and performance of financial investments handled by GIC, which is designated under the Constitution of Singapore as a "Fifth Schedule" institution—a wholly government-owned company. With mounting government surpluses, it is inevitable that requests from various interest groups will surface from time to time, especially as the domestic economy becomes more saturated, the external economy becomes more competitive, and the population ages. Considerations such as *when, how, for whom,* and *for what purposes* the surpluses are to be utilized will be vital. Caution must be exercised so that future utilization of government surpluses will not bring about welfare dependency or a "handouts syndrome," or worst of all, lead Singapore down the path to becoming a welfare state.

2.2 Surplus accumulation: Role of the government, principles, justifications, and mechanisms

Singapore has recorded budget surpluses almost every year for more than three decades. The budget surpluses are the outcome of the government's prudent fiscal policy, which has become a cornerstone of the macroeconomic stability underpinning Singapore's impressive economic growth. While economists have long advocated sound fiscal policies to sustain long-term growth, few countries display the level of commitment to long-term goals that has come to characterize Singapore's formulation of budgetary policies. Singapore's experience is generating considerable interest in the role public sector savings can play in the wealth accumulation of a nation and the circumstances under which such saving is justified.

In 1980 the size of the government in Singapore (measured by government expenditure as a percentage of GDP) was slightly below that computed for a country at Singapore's level of per capita income (see figure 1). But by 1998, public expenditure fell to a significantly lower level. Figure 1 also shows the same trend in the share of tax revenue in GDP. However, it is well known that the influence of the Singapore government in economic activity extends beyond the government's expenditures. A significant part of the government's functions is in fact channeled through statutory boards (SBs). These are semiautonomous agencies that were set up in the 1960s to handle specific concerns, initially in the areas of housing and economic development, and subsequently in almost every important economic and social field. In addition, there are various GLCs, which are incorporated entities that are either wholly or partly government-owned and are found in a wide range of basically private sector activities, including manufacturing, shipbuilding and ship repair, trading, financial services, construction and property development, tourism, and leisure. GLCs are also active in areas of strategic importance such as military ordnance and resource supply.

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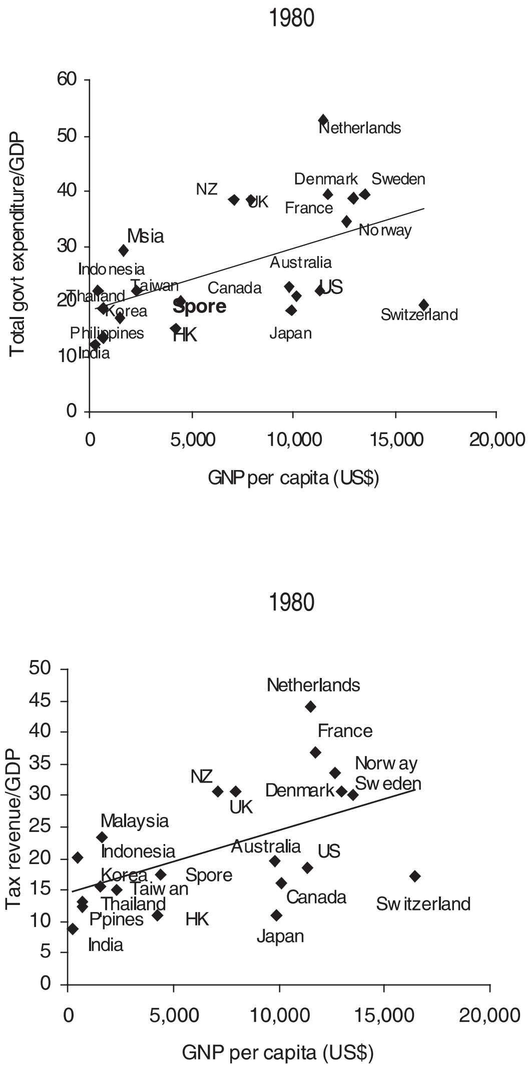
Figure 1a. Size of government: International comparisons of total government expenditure for 1980 and 1998



Note: AU = Australia; CAN = Canada; DEN = Denmark; FR = France; HK = Hong Kong; IN = India; IND = Indonesia; JP = Japan; KOR = South Korea; MAL = Malaysia; NL = Netherlands; NOR = Norway; NZ = New Zealand; PHL = Philippines; SING = Singapore; SWD = Sweden; SWZ = Switzerland; THL = Thailand; TW = Taiwan; UK = United Kingdom; US = United States.

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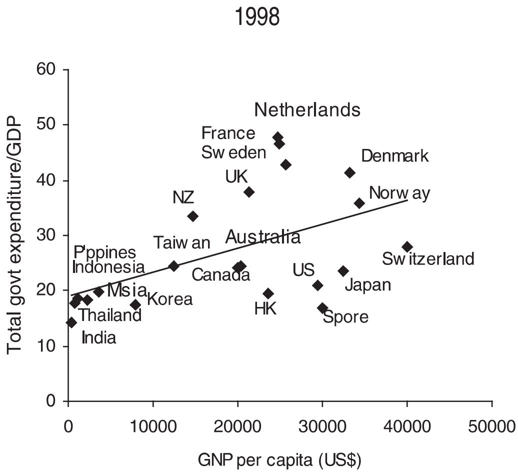
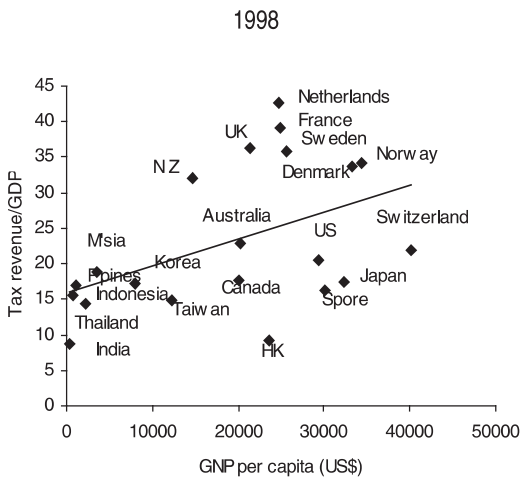
Figure 1b. Size of government: International comparisons for tax revenue/GDP in 1980 and 1998





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The share of these two sectors (i.e., SBs and GLCs) in Singapore's economy is large, although it has been declining with privatization in line with its objective to give the private sector a greater role in the economy. According to the latest official statistics, the share of GLCs in overall value-added is 13 percent. The corresponding share of government and statutory boards is 10 percent. Hence the full extent of government involvement in the Singapore economy is about 23 percent of the gross domestic product. The fiscal strategy underpinning the formulation of the government's budgetary policies over the decades can be traced through the following budgetary statement made more than a decade ago, which was reiterated in the FY2004 Budget Statement (p. 4):

> Objectives of government's long-term budget policy are three-fold: (1) there must be an overall balanced budget. Over a five-year planning period, recurrent and development outlays should not exceed the total revenue collection; (2) the share of national resources taken up by the public sector must be gradually reduced; (3) the effectiveness and efficiency of public services should be enhanced. As far as possible, programmes should be self-financing and subsidies kept to the minimum. In general, public services should be provided at least cost to the taxpayer.

The journey toward substantial surplus accumulation started as a modest but laudable transition from deficit financing, under the same government. The government of the People's Action Party has wisely regarded accumulated surpluses as financial resources in lieu of natural resources, as assets and wealth for protection and security, and not least, as evidence of political and regime legitimacy. Concerned with the rectitude and reliability of future governments, the incumbent government has highlighted the risks involved in failing to protect surpluses of such magnitude.

However, there is now greater public scrutiny of the manner in which fiscal surpluses have been garnered from taxation and expenditure policies and channeled to entrepreneurial GLCs. The same kind of scrutiny has begun to focus on income maintenance in a recession and on redistribution measures—including the dubious nature of the New Singapore Shares as political dividends—making surplus utilization more complex and wide-ranging.[1] In a nutshell, the whole modus operandi of Singapore's fiscal processes is under scrutiny.

There are at least eight compelling reasons, reflecting both long-standing and new concerns, that justify the Singapore government's continued accumulation of surpluses whenever possible:

1 New Singapore Shares are government surpluses distributed to Singapore citizens as part of the "fruit sharing" resulting from good economic growth.

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1. Singapore does not possess any natural resource endowment. The significant pool of financial capital represented by the country's surpluses allows Singapore to invest in new growth areas and further diversify the economy in the interest of increasing its resilience.
2. It will be crucial to continue heavy investment in human resources—in terms of education and information technology infrastructure in schools and tertiary institutions—as Singapore transforms itself into a knowledge-based economy.
3. The accumulated surpluses also better prepare the government to deal with the social challenges of economic restructuring and Singapore's aging population, including structural unemployment and the increasing burden on public health care facilities.
4. Housing space, commercial land, transportation, and electricity can be made available to citizens more efficiently, but they will increasingly become more costly for the citizens unless subsidized. The accumulated surpluses will enable the government to embark on infrastructure projects without slipping into debt.
5. The shift from Singapore's long-standing policy of water dependency to its new strategic aim of self-sufficiency, by way of both desalination and water recycling methods, will require an extra reserve buffer, the extent of which will be determined by energy prices and cost of technology.
6. Significant changes in the political environment and the new economic circumstances emerging since the 1997 financial crisis can no longer guarantee Singapore decades of economic expansion averaging 8 percent, punctuated only by brief recessions lasting not more than a year. It is quite likely that future potential growth will be lower and more volatile, while recessions can be long and drawn out, if government policymakers fail to keep the economy more flexible and nimble.
7. Following the terrorist attacks of 11 September 2001, global security has worsened, and so has the vulnerability of Singapore as a city-state. An increase in defense and security spending is expected, at least in the medium term.
8. The Singapore economy has been undergoing structural changes resulting from decades of intensifying competition from neighboring economies and its traditional hinterland. Thus, government surpluses may be needed to buy time, by containing business costs and speeding up structural changes.

At the root of surplus management, two features remain salient. One is that budget surpluses that do not crowd out the private sector can remain a core component of financial accumulation. The other is that accumulated reserves should be utilized strictly for longer-term protection and for increasing productive capability, capacity, and sustainability. To ameliorate hardships from recessions, current fiscal surpluses—not reserves—should be tapped.

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While government surpluses are crucial to Singapore's sustainability as a nation without natural resource endowments, there are concerns that a surplus-driven fiscal process could lead to increases in prices of public services or to the creation of a profit-oriented mindset in the government, without regard for the larger goal of providing affordable public services. Such concerns are real, and the basis on which government agencies are funded therefore becomes crucial.

2.3 Surplus management: Government's flow of fund analysis, corporate governance, and transparency

One peculiar and off-the-mark area in the budgetary track record of the government for decades, as pointed out in the 2002 parliamentary budget debate, is the persistent and significant underestimation of the actual budget surpluses. Although the government's accounts are organized around 10 funds, the budgetary data presented in government publications include transaction figures covering the revenue and expenditure of only the Consolidated and Development Funds. Interfund transfers such as those to the Sinking Fund, a fund set up for the redemption of loans, are treated as expenditures, as are transfers to various endowment funds such as Edusave and Medisave. Hence the official data tend to overstate expenditures, because intrafund transfers and transfers to endowment funds are recorded as expenditures. Budget revenue also tends to be underestimated, because the Ministry of Trade and Industry has a consistent record of conservative growth projections at the beginning of each year during the era of continuous growth between 1987 and 1997 and in the more volatile era since 1997.

The prudent nature of government accounting has one simple implication: the Singapore government has the resources to mount fiscal expansion without adversely increasing public sector debt. In the medium term at least, the development of a structural deficit in Singapore, given the current government's budgetary philosophy, is a most unlikely prospect.

Government surpluses are national assets belonging to the citizens of Singapore, with the incumbent government serving as the custodian and the elected president as additional protector under the current dual-key system. Protection of national assets is not limited to guarding against unconstitutional use and abuse. It also encompasses prudent and optimal investment of the assets and protecting them against mismanagement. Four contentious issues are often highlighted by critics of the government: efficiency in terms of yields, performance-based accountability, the risk appetite of GLCs in the global marketplace, and the strategic role of the state with regard to surplus management.

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Regarding the role of the state in corporate investments by Temasek (which owns most of the GLCs), Temasek stated in the FY2002 Budget Statement that it intended to publish the mission charter soon to clarify the role of the Temasek companies in the Singapore economy. As for accountability and transparency in regard to surplus management, Suppiah Dhanabalan, chairman of Temasek, clarified in June 2002 that appointments to executive positions in the GLCs are based on merit. He also reiterated that the corporate investment arm of the government would be more active in strategizing for the stability of companies in terms of growth direction and business diversification.

The public is often suspicious that Singapore's government surpluses may not be properly managed. To allay these concerns, the government could make available information about the returns on global bonds and equities in which government surpluses have been invested, without disclosing details of the exact asset and country mix. A comparison of the performance of a globally balanced portfolio in Singapore dollars over the period 1986 to 2001 with the yield on a Singapore-dollar-based three-month certificate of deposit vividly demonstrates the superior performance of a globally balanced approach, whatever combination of global bonds and equities was put into such a portfolio mix (see figure 2). The GIC 2001 yearbook explicitly spells out the various benchmarking criteria being adopted in various categories of financial investments. This is a positive step toward satisfying the strong public desire to understand GIC's genesis, mission, and scope of work and toward generating a better appreciation of its involvement in fund management and the development of the financial sector in Singapore.

2.4 Surplus utilization: When, for whom, for what, and how

It would appear that government surpluses have been deployed during both "sunny days" and "rainy days." During good years, regular refurbishing of public housing units under a co-payment scheme for asset enhancement (albeit by rotation) is to give Singaporeans a greater stake in the country. The New Singapore Shares Scheme is supposed to be an income-based, progressive approach to redistribute some of the government surpluses generated. The public sector also receives budgetary bonuses from productivity gains.

During bad years, the handouts become the "sweets" to go with the "bitter medicine." The Economic Restructuring Shares Scheme uses an approach based on type of property owned, with the option of instant cash-out to help Singaporeans adapt to structural changes, and as a bonus for national servicemen who contribute to the security of Singapore. Cash handouts are in the form of lump-sum top-ups of Singaporeans' Central Provident Fund (CPF) accounts, across-the-board

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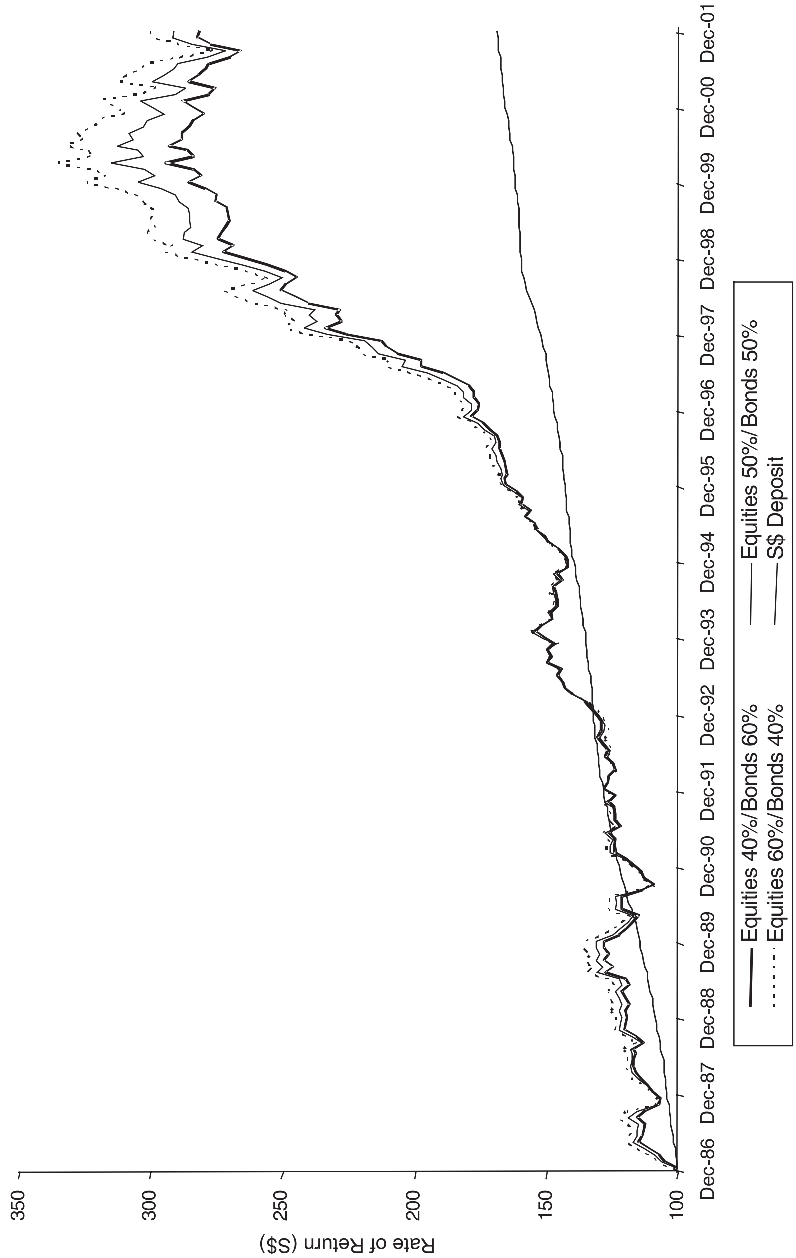
Figure 2. Global bonds and global equities, rate of return in S$, 1987–2001 (15 years)



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distributions in the name of sharing the wealth of the nation or helping less fortunate Singaporeans to tide over difficult periods, direct rebates, and subsidies.

Accumulation of government surpluses in Singapore has evidently slowed since the 1990s. It has become increasingly difficult for the government to sell the idea of reserve accumulation and to resist demand for more handouts. Distributing handouts to those who do not need them is a waste of precious financial resources. A more focused approach to assist targeted social groups or purpose-oriented projects, which generate wider benefits or spin-offs, may be more effective and cost less.

The government's operating revenue has been on the decline since the middle of the 1990s, from about 23 percent to 15 percent in 2004, and has begun to trend lower than total government expenditures since 2001. This partly reflects the transition process for putting in place a competitive tax structure and the shift from a reliance on direct taxes to one relying on indirect taxes. At the same time, total government expenditure—excluding special transfers—continue to hover around 15–20 percent of GDP. If these trends persist, and if long-term unemployment rises and economic growth moderates, there is indeed a potential structural bias toward deficit generation in the future.

Some economists have pointed out that Singapore's budgetary accounting is highly conservative and not in line with international norms, in the sense that investment income and land revenue are not included in government revenue streams and development expenditures are regarded as part of government expenditures. Hence, the argument goes, if Singapore were to adopt international norms of budgetary accounting, there would be a very comfortable fiscal surplus each year. Our rough calculations indeed suggest that the government would have racked up substantial surpluses for past decades if it had adhered to international norms in its budgetary accounting.

However, such arguments can lead to unwarranted public pressure to force the government down the road of welfarism and other forms of populism. Net investment income can fluctuate from year to year, and land revenue will not last forever. But welfare expenditures, once incurred, are recurring and difficult to retract. Such is the current dilemma of the Hong Kong budgetary position. It would require considerable public persuasion and political will to roll back institutionalized social spending and health care obligations.

The lack of precision in policy statements on surplus accumulation, management, and utilization has led to negative public perceptions on all three counts. People are

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in general unwilling to accept further saving or wealth accumulation without a good purpose. Since Singapore's citizens have not been clearly informed and cannot see when reserves will be deployed, they do not appreciate the need to maintain moderate government budget surpluses over business cycles. Consequently, the government is under intense pressure to provide handouts, because it has accumulated a substantial pool of reserves. In fact, past experiences elsewhere have shown that successive governments have increasingly been unable to withstand such pressure without making concessions. The strong national surplus position also helps to explain the public's general resistance to any increase in taxes and charges for public services. There is a considerable gap between the viewpoints of the government and the public on the issue of surplus accumulation, management, and utilization. It is therefore important for the government to inform, educate, and convince people on this issue and narrow the gap.

2.5 Major policy recommendations

On surplus accumulation The government should continue to operate at a moderate budget surplus during years of economic expansion and create wealth through optimal investment returns based on the existing pool of reserves. The government should not succumb to political pressure or pressure from business interests to run budget deficits (including those generated via off-budget measures) unless conditions warrant doing so. The rationale for further surplus accumulation is justifiable and defensible, provided that the channels of surplus generation do not crowd out private sector activities.

On surplus management and redistribution The government should continue to aim for optimal yield and returns, in terms of both financial and direct investments. While it may not be practical for the government to be entirely transparent in regard to the returns on its financial investments, data on the returns of an equivalent portfolio (such as a 50/50 global bonds plus equities portfolio, as shown in figure 2) should be released to the public on a periodic basis. The government should clearly define "extreme conditions" for surplus redistribution under a set of principles and guidelines, which could be determined after extensive public debate and discussion.

The proposed triangular strategy The government should use our proposed *triangular strategy* (summarized in figure 3) to rationalize the need for budget surpluses, to build up the flexible wage system, and to contain business costs by freezing government fees and charges. First, budget surpluses could be used to absorb (wholly or partly, depending on future budgetary constraints) the costs of capital

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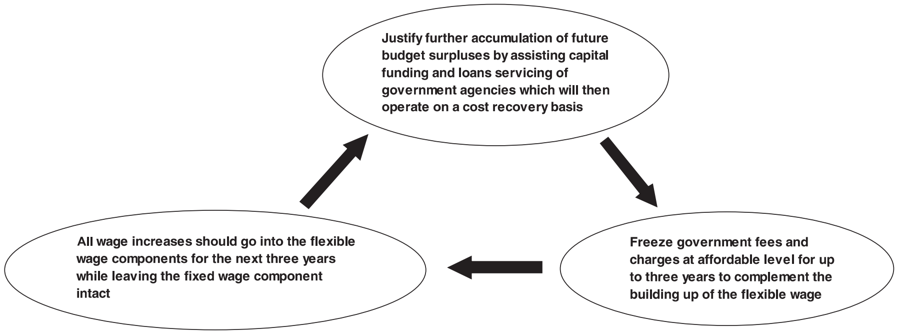
Figure 3. The concept of the triangular strategy



funding or servicing of government loans for all government agencies (e.g., the funding for mass rapid transit). Such an approach would ease the pressure on government agencies to price according to total costs and encourage them to budget on a cost recovery basis. It is imperative that a fixed proportion of accumulated budget surpluses be recycled back to government coffers.

Second, in order to achieve a sustainable economic recovery, Singapore must have a highly competitive economy, including a flexible wage system for a mobile labor market. The best chance of building a flexible wage system will come when the economy begins to recover. We propose that for the next 3 years, all wage increases should go into the flexible component, including both the monthly variable component and the variable bonuses, leaving the fixed wage component intact. Singapore should work toward the objective of achieving a 30 percent flexible–70 percent fixed wage system. Such a flexible wage system would give Singapore room to cut wages without cutting the CPF in future economic downturns.

Third, the government can better argue for and convince the public of the need for building up the flexible wage system by complementing it with a freeze on all increases in government fees and charges at affordable levels, for up to 3 years. Such a policy, as part of the overall effort to contain business costs, would be vital given the weak and uncertain economic recovery ahead. Our proposed triangular strategy would add price—and wage—resiliency to Singapore's economy through the achievement of sustainable budget surpluses and would provide a more convincing rationale for maintaining these surpluses.

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3. Assessing Singapore's overall costs structure

3.1 Background and issues at stake

Singapore, as a city-state, has been constrained by land scarcity and labor shortages, which have, in turn, led to high business costs and the erosion of Singapore's competitiveness. While it is important to constantly improve labor productivity and reorient the economy toward high-value-added industries and services, it is equally important to review and re-examine the existing cost structure and to remove those factors that have artificially inflated business costs. We review Singapore's overall cost structure by classifying it into four main categories, namely, land and business-related costs, wages and labor costs, regulatory and statutory costs, and transportation costs, and by analyzing and discussing in detail the main issues associated with the existing cost structure in each category.

3.2 Land premium, business-related costs, and policy-induced distortion

With about 90 percent of the land in Singapore owned by the government and statutory boards, the price of land is essentially a function of land allocation, which in turn is based on inputs from various government agencies. State lands are released through the government land sales program, supplemented recently by a reserve list system. The Urban Redevelopment Authority (URA) land releases are based on projections of economic and population growth, whereas the Jurong Town Corporation (JTC) bases its land allocation mainly on Economic Development Board inputs, which are derived from projections of the type and level of investments that the board should attract, given the year's desired growth rate and the share of manufacturing in the economy. The JTC also serves the needs of smaller industrialists through its Open Land Launch Scheme.

It is recognized that land-scarce Singapore will necessarily have higher land cost than those countries that are vastly endowed with land. But is the price level of Singapore land artificially high, distorted by nonmarket factors? Some cost data obtained from industry are presented below to provide a crude comparison.

Land premium Singapore land leases comprise an annual land rental and a land lease premium determined at the beginning of the lease. Singapore's land rental is almost 34 times that of the Philippines, 26 times that of Vietnam, and 19 times that of China. Whereas the cheapest up-front land premium for a 30-year lease at Tuas View in Singapore is S\$227/m^2, the comparable figure for a 60-year lease in Nilai, Malaysia, (near the Kuala Lumpur airport) is approximately S\$100/m^2, and for a 50-year right of use in Suzhou Industrial Park, Shanghai is approximately S\$36/m^2. Furthermore, local governments in China often propose to refund the cost of land

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expended by foreign investors; for example, in one case, the land rental price is 3 cents/m^2 after 2 years of free rental. Granted that there could be differences in infrastructure, the rental differentials between Singapore and other Asian countries remain large.

Share of land in production costs For firms producing similar products, land rental as a proportion of total production costs constitutes a much higher share in Singapore than in other Asian countries. As an example, in the oil industry, land cost makes up 30 percent of total expenditures in Singapore, about 5 percent in China, and less than 1 percent in Vietnam.

Price indexes An indication of price movements of land is the URA price index for private property. Between 1990 and 1996, the index for residential property prices tripled, that for industrial property prices rose 2.5 times, and for the price of office space, the index almost doubled. Over the next 3 years, following antispeculation measures in 1996 and the Asian financial crisis of 1997, the indexes fell by 30–40 percent. In 2000, the indexes rose again at double-digit rates (that for residential property by 13 percent, that for industrial property by 14 percent, and that for office space by 25 percent).

Recent survey findings show that Singapore has become comparatively less expensive in terms of office occupancy and living costs. According to the Global Research and Consulting Survey of Occupancy Costs in 2002 by CB Richard Ellis,[2] Singapore was the 31st-most-expensive office location at the end of December 2001, as against a 25th rank 6 months earlier. In a study conducted by *The Economist*'s Intelligence Unit in 2002, among 134 major cities in 86 countries, Singapore ranked as the 9th-most-expensive to live, compared to the 7th position 6 months earlier. The recent recession has brought down costs, but inflationary pressures on asset prices might strengthen again, and Singapore will need to monitor its competitiveness carefully. Table 1 presents some comparative data on apartment and office rentals in various countries.

Policy-induced distortions A number of government policies and market imperfections caused the escalation of land prices prior to the 1996–98 downturn in the property market. These include the tender system, land pricing policies, property tax rebates, government acquisition of land, concessionary grants and rates, and a lack of readily available data on rents.

2 The firm of CB Richard Ellis provides consulting services for property owners and investors, such as financial analysis, management of commercial properties, and valuation and sales.

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Table 1. Singapore's competitiveness in rental prices, 2000

Office rent: Total occupation cost (m^2/year)			Monthly rent for three-room apartment in major cities		
Rank	**Country**	**US$**	**Rank**	**Country**	**US$**
3	Thailand	106	13	Malaysia	660
6	Malaysia	150	17	Thailand	720
8	Indonesia	168	32	Australia	1,010
9	Philippines	175	37	Taiwan	1,440
11	Australia	223	38	China	1,460
14	China	275	39	Philippines	1,490
35	United States	484	41	South Korea	1,580
37	Taiwan	521	42	United States	1,675
40	**Singapore**	**559**	44	Indonesia	2,010
42	South Korea	671	45	Japan	2,160
45	Hong Kong	992	46	Hong Kong	2,330
46	United Kingdom	1,051	**47**	**Singapore**	**2,340**
47	Japan	1,478	48	United Kingdom	2,450

Source: *IMD (2001).*

The tender system and reserved price The government sells leasehold land through an open-tender system for a defined use, provided that the tendered price is above the reserved price, which is not known to those who bid for the land. Under the government land sales program, government valuers examine the last few tender sale results and determine a "fair" reserve price for a given property. A minor criticism sometimes heard is that the government's reserved price may be based on results tendered before a market change for the worse and may therefore be unrealistically high. Since there is rigidity when prices are falling but free movement when prices are rising, price escalation results.

In the recently introduced reserve list system, the reserve price is made known in the tender exercise. This system avoids the administrative costs of an unsuccessful tender exercise for which no award is made, but because of low bidding, the downward rigidity of prices remains.

Industrial land valuation Land should be recognized as a factor of production that contributes to the value creation process in business. As Singapore's largest industrial landowner, the JTC is capable of producing externalities (both positive and negative) and should strive to avoid pricing policies that are inflexible and unrelated to market realities. It should take into account both cyclical problems and structural changes in Singapore's economy. Land should be priced at a level that is justifiable in terms of enabling existing competitive businesses to stay on and new businesses to operate efficiently.

Currently JTC's lease agreement for industrial land is structured such that rental is subject to upward revision every year (7.6 percent per year in previous years, re-

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vised downward to 4 percent recently). This lease structure simply assumes that the lessee's business will grow at a certain rate each year, and hence it should pay more as the lease progresses. Unfortunately, this assumption no longer holds, given that Singapore has experienced two downturns within a short period of four years, that is, between 1997–98 and 2001. Moreover, while continuous rental increases may have served the purpose of squeezing out land-intensive industries from Singapore, they could also push viable firms to relocate if artificial increases are not closely monitored and frequently scrutinized. Recently, JTC introduced the Market Adjustment Scheme, under which rentals are adjusted annually subject to a maximum increase of 5.5 percent from the lessee's prevailing rental rate.

Policymakers may argue that the price of vacant land is not the cause of high property prices; that even if land is given free to developers, they will sell the finished buildings at the highest prices they can fetch in the market; and that the culprits in the inflation of property prices are the owners. However, high land prices have indeed led to high property prices and rentals, as the small number of suppliers practice markup pricing, and land management does have a role in preventing the final sale or rental price from rising unfairly.

Property tax and rebate Vietnam, China, and the Philippines, unlike Singapore, do not levy a property tax on rentals. To counter the recent economic downturns, the Singapore government has provided rebates on property taxes in off-budget measures introduced to ease the cost burden of businesses. Unfortunately, not all landlords share or pass the benefits on to tenant firms.

Land Acquisition Act The Singapore government has the power, under the Land Acquisition Act (LAA), to unilaterally acquire land or buildings (shop houses) from individual owners for redevelopment. Owners are compensated at 1995 prices or the market rate, whichever is lower, and compensation is inevitably below the replacement value. This practice has hurt small landowners. Because some acquired land has been left undeveloped for years, not only is potential output foregone, but former occupants were also displaced unnecessarily.

The government should acquire land only for national security, national development, or other purposes that serve the national interest. The powers that the Land Acquisition Act currently gives the government are too wide, such that the Singapore Land Authority seems to be able to acquire land for whatever purpose it thinks necessary. The phrase "any public purpose" in the LAA should be redefined to mean only national security, national development, or other purposes that serve the national interest. If a statutory board needs land for its own purpose, it should buy

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the land in the open market at the private treaty price. Private landowners should not be forced to subsidize statutory boards by being compelled to sell their property to the boards cheaply, as this will distort the price and the true cost of the land and lead to waste.

The LAA was useful in the early days of independence, as many parts of Singapore were swampland, squatter land, or rubber estates. The LAA could be used to pay moderate compensation to large landowners who gained through sitting on large pieces of land for many years. When the Master Plan of 1958 was introduced, many of these landowners benefited from the new zoning practices put into place as a result. Bukit Sembawang and Lee Rubber, for example, gained from large tracts of land being zoned residential.

However, there is distortion even in this case. Because the LAA defines compensation rather cheaply, it enables authorities to acquire in excess of what is truly required. The compensation scheme imposes less discipline to use private land sparingly to save owners from the agony of being dispossessed.

Small business owners who happen to own shop houses or properties that stand in the way of new public projects should not be called upon to make extra sacrifices. It would be fairer if such owners, when called upon to give up their properties, were paid full market value as compensation, and not a "market value" that has been statutorily truncated. It is time to redraft the Land Acquisition Act.

Government grants and concessionary rates Government grants to foreign investors and concessionary rates given to large local companies help to support the demand for factories and land at high prices and high rentals. With the grants, these foreign investors can afford to bear higher costs (if not bid up factor prices), unlike local businesses.

Database on rental values A lack of information for one party in a transaction could result in a higher price being paid for a good or service. For small businesspersons, cheap and readily available sources of information on property sale prices are the Singapore Institute of Surveyors and Valuers sales database and the Registry of Titles. Alternatively, they can also use URA price indexes.

There are, however, no cheap and readily available sources of information on rental prices, which are a sizable expense item. Singapore's tax agency has rental information reported by landlords, but because of the confidentiality of tax information, a wealth of public data collected at taxpayers' expense cannot be made available to as-

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sist small businesspersons in bargaining for good rental deals. A scheme that encourages easy availability of rental information would help to contain high business costs.

3.3 Wages and labor costs

In making comparisons between Singapore and other host countries in regard to FDI, high labor costs often stand out as the key factor that makes Singapore less competitive. However, this does not mean that Singapore should compete on the basis of labor cost alone, because labor productivity should also be taken into consideration. Moreover, the focus should not be on cutting labor costs, since the ultimate goal of economic development is to increase income and improve living standards.

Data provided by Singapore's Department of Statistics show that the share of remuneration in GDP in Singapore has been maintained at a relatively stable level of around 42 percent since 1993. Although considerably higher than that for Thailand and the other ASEAN countries, it is the lowest among the four Asian Tigers and substantially lower than those for the developed countries. This suggests that labor costs in Singapore are not too high in relative terms. There are, however, government policies that distort Singapore's labor market such that the cost does not reflect the true scarcity levels.

Policy-induced distortions in the labor market There are distortions arising from the labor market structure and government interventions in the labor market. Singapore has two segregated labor markets: one for low-end unskilled labor, in which wage inflation is contained by the abundant supply of cheap labor in the region, and another for skilled labor and professionals, in which salaries have to be as competitive as those in the international market. While welcoming foreign talent, the government tries to discourage the use of unskilled foreign workers in order to help less-educated Singaporean workers find jobs. Many policy measures have been adopted for this purpose, including the following:

1. Varying of the foreign worker levy with the skill level of foreign workers. The levy also jumps to a higher level when the number of foreign workers for a particular employer exceeds the specified ceiling.
2. A $5,000 bond for each worker in certain categories of work permit holders.
3. Imposition of a foreign- to local-worker ratio (which is often evaded by listing dummy local workers on the payroll).
4. Other policy restrictions, including a nationality restriction for workers in the hotel industry.
5. Man-year entitlement in the construction industry.

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Table 2. Singapore's competitiveness in wages, 2000

Manufacturing workers: Hourly compensation (wages + benefits)			Services professions: Annual income (including bonuses)			Management: Annual remuneration (base salary, bonuses, and incentives)		
Rank	**Country**	**US$**	**Rank**	**Country**	**US$**	**Rank**	**Country**	**US$**
1	Indonesia	0.137	2	Indonesia	2,700	2	China	50,189
2	China	0.465	4	Philippines	4,100	6	Indonesia	65,492
8	Philippines	1.777	6	China	5,800	7	Malaysia	83,926
9	Malaysia	1.958	10	Thailand	9,000	10	South Korea	101,574
19	Hong Kong	5.378	13	Malaysia	10,100	11	Thailand	100,900
21	Taiwan	6.243	**24**	**Singapore**	**15,900**	19	Australia	133,820
23	**Singapore**	**7.060**	25	Taiwan	22,400	26	Philippines	156,266
26	South Korea	8.683	28	Australia	19,800	31	Taiwan	181,938
31	Australia	14.258	31	South Korea	26,500	**33**	**Singapore**	**194,642**
33	UK	15.492	32	Hong Kong	19,800	35	UK	203,595
40	United States	19.200	40	UK	36,600	41	Hong Kong	260,776
45	Japan	22.038	44	United States	35,875	42	Japan	277,045
			46	Japan	75,800	43	United States	440,767

Source: *IMD, 2001.*

As a result of these policies and regulations, manual laborers are more expensive in Singapore than in other countries in the region (table 2). In many cases, the foreign worker levy and the other barriers instituted do not serve their intended objective of providing more jobs for Singapore residents because the latter do not want to take up the jobs the foreign workers are filling, and the government policies result only in higher costs for employers.

Labor costs and employability Since the Asian financial crisis in 1997, Singapore's economy has undergone rapid structural change. Unemployed workers are finding it more difficult to get a suitable new job, and the pay from the new job, if they find one, is usually significantly lower than what they previously made. The problem is more serious for those above 40 years old and with lower qualifications. Recently, it was suggested that in order to improve the employability of Singapore's older and less-educated unemployed workers, the employer CPF contribution rate should be lowered. The government should study this problem and proposed solution carefully, because the CPF system is very complex, and the proposed solution would affect savings for retirement, health care, and housing.

3.4 Regulatory and statutory costs

Excessive regulation In many cases, companies face an excessive burden of regulation. One example is those in the building and construction sector, in which duplication of assessments is required to ensure compliance with regulations. Two examples illustrate the problems:

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1. The owners of a new restaurant were required by regulators to install new exhausts even though the premises they took over had well-functioning ones.
2. In the implementation of Factories Act provisions on fire safety measures in a plant with a steel furnace and hot metal works, regulators initially demanded that sprinklers be installed even though this was impractical. The process of obtaining a waiver proved to be long and tedious.

Excessive costs Regulatory and statutory authorities have been slow in removing obsolete requirements that have led to excessive costs. There is a tendency to "go by the book," not to take risks by making new decisions, and not to undertake additional work by venturing into new areas. Here are three examples:

1. A valve in a tank farm of an oil company broke down owing to a manufacturing fault and caused a minor oil spill at a jetty front. Even though the company felt it was able to handle the cleanup of the oil spill, the regulatory body, the Maritime and Port Authority of Singapore (MPA), was notified, according to regulations. The MPA in turn contacted a subsidiary of a GLC to assist in removing the oil spill. A cash payment amounting to S$12,000 was demanded up front. The bill totaled S$70,000 (even though the company assisted in the cleanup), while the fine imposed by the MPA was S$500. A boat ride by a company staff member to inspect the spill was billed at S$2,500 by the MPA (even though the rental rate for a cruise boat for eight persons for 8 hours is only S$800).
2. The certification costs of a shed built for shade amounted to S$7,000, which was equal to the construction cost.
3. A company was charged S$60 per month for 12 years for a fire hydrant meter that was no longer in use.

There is also some evidence to suggest that the principle of cost recovery is sometimes taken to extremes. For instance, the URA charges $1,200 per development plan, based on cost recovery, but buyers do not know the basis of the costing.

While many functions previously handled by the government have been privatized, the public is not convinced that this reduction in publicly provided services has been matched by a reduction in taxes. The concern is that the government might be pushing the public to pay higher costs for services while still collecting taxes for such services, without any savings to taxpayers resulting from the privatization. There could also be double charging for the same services. For example, in buying plans and making searches for information from government agencies, many consumers do not understand why, despite restructuring and streamlining of agencies

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and extensive computerization, the cost of extracting information does not seem to decrease and in many instances seems to be higher than previously.

An unintended result of administrative disorganization may be at work here, whereby too many government agencies are collecting fees and charges from private firms, making the regulatory burden excessive if not prohibitive for the creation or running of profitable private businesses. However, this situation can be avoided by having an independent body monitor overall regulatory and statutory costs.

Since the mission of the Accountant General's Department is to ensure that government ministries maximize efficient use of public resources and that government services are priced according to prevailing policies, the accountant general's duties can be widened to ensure that government ministries and statutory boards are charging fees and prices at the cost recovery rates based on the most efficient use of resources. By extension, the Public Accounts Committee can inquire into any apparent overcharging of costs for public services.

3.5 Transportation costs

Anecdotal evidence suggests that higher costs in various components add up to a very high total transportation cost in Singapore.

Port charges Data show that the Port of Singapore Authority (PSA) earns more per container than do ship owners. For example, freight charges for shipping a container from Singapore to Jakarta are only US$55, whereas port charges are US$33. Even though the local transportation cost of moving a container to or from the port is as high as $85 (US$46), repacking of transhipment cargo at PSA is still more expensive than moving the cargo from the port, repacking it, and sending it back to the port for onward delivery.

Local-transportation-related costs The high local transportation cost can be broken down into a number of components.

Equipment cost The purchase price for a prime mover in Malaysia is about S$35,000. However, the same prime mover costs S$120,000 in Singapore because of the certificate of entitlement (COE) and additional registration fees (ARFs).

Driver cost The monthly salary for a driver of a prime mover is S$3,000 in Singapore, which is twice that in Malaysia (M$2,000–3,000).

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Parking cost Vehicle-parking certificates are required for renewal of licenses for commercial trucks, lorries, and other heavy vehicles. Although these certificates are supposed to provide parking spaces in government lots, companies owning these vehicles nevertheless have to pay for parking in private lots, because there are insufficient government parking lots. Moreover, the government parking lot system is not working well, because drivers prefer to park their vehicles near their homes. As a result, the designated lots are not used and illegal parking occurs.

Costs of car ownership and usage Currently, there are many costs associated with car ownership and usage. These include

1. excise duty, which has recently been reduced from 31 percent of the open market value to 20 percent;
2. the ARF, which again has been reduced recently from 140 percent of OMV to 130 percent;
3. COE;
4. road tax;
5. electronic road pricing (ERP);
6. petrol tax or fuel tax;
7. parking fees

All of these fees and charges are supposed to control traffic congestion, but the role of each is not clear. The existing system has caused distortions: for example, many car owners have found it worthwhile to scrap cars that are only 4 or 5 years old.

The insidious effect of higher transportation costs cascading through various levels of the distribution system and adding substantially to the costs of intermediate inputs for a whole range of businesses should not be underestimated. Virtually all raw materials and intermediate goods have to be transported over land routes in Singapore. Higher costs of fuel, vehicles, road usage, road taxes, and wages all ripple through the economy, adding costs at every layer for which transportation is an input.

3.6 Major policy recommendations

Review the outdated Land Acquisition Act The LAA was written at a time of urgent need to provide basic housing to a population that was desperately short of it and for swift urban and industrial redevelopment. Today, with basic housing needs fundamentally fulfilled and the urgency of housing and redevelopment firmly in the

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past, the harsh provisions of the LAA should be dispensed with. Specifically, it is recommended that

- the definition of market value in the LAA be revised to provide for a fairer compensation that is equivalent to open-market value without statutory restrictions;
- it be spelled out clearly that dispossessed owners can obtain compensation for losses due to forced sale of their stock and loss of business; and
- the law placing the onus of proving that a sales transaction is genuine on the owner be rescinded (as all relevant information is in government hands and not in the hands of owners).

Peg industrial land price to an index that better reflects market realities Good market practices should be adopted in property valuation and rental agreements. The JTC's method of increasing rental rates by a fixed percentage each year makes little economic sense. Moreover, the JTC's formula is not as flexible downward, whereas in the private sector, lease agreements (e.g., 3 + 3) allow for downward adjustments of price (e.g., in the +3 period). Valuation procedures could also follow common practices in the private sector by having a representative from each party—one nominated by the lessor and the other by the lessee—provide a valuation and adopting the average value of their valuations.

Abolish property tax where it is paid in addition to land rental The JTC, during the building agreement period or even when a building is under construction, often passes on the property tax to the land licensee by contract because Section 2(7) of the Property Tax Act treats every lessee of the JTC and other statutory boards as an owner for tax purposes. In private market practice, however, the lessor or landlord pays the tax on the property being leased. As this practice of the JTC increases costs for businesses, this section of the law should be reviewed.

Make residential, office, and factory rental information more readily available Currently, information on transacted sale prices is obtainable from public sources, whereas information on rental prices is difficult to obtain. Landlords of commercial and industrial properties should be induced to list all the details of their vacant premises (asking rental price, floor area, and date vacant) to a neutral body or company, say one formed by the Real Estate Developers' Association of Singapore, the Institute of Estate Agents, the Singapore Institute of Surveyors and Valuers, or some other government-linked company. They should also be required to report the new rental and floor area details when their premises are leased. The neutral company can then sell these rental data cheaply to all small businesspersons to help them bargain and secure the lowest rental from the landlords. To persuade landlords to pro-

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vide this information, the government can insist that only those landlords who disclose full rental and vacancy details of their commercial or industrial premises will qualify for rebates, tax incentives, and other benefits provided by the government.

Abolish foreign worker quotas and retain the levy scheme to achieve government targets for the usage of foreign workers in the economy A market price system is preferred over regulations, as it is economically more efficient and eliminates hoarding of foreign workers in some cases while restricting the productive employment of foreign workers in bona fide cases of real demand. However, a proper monitoring system should be established to ensure a balance between achieving policy targets and moderating increases in levies that add to higher business costs.

Introduce greater flexibility in the foreign worker allotment To utilize foreign workers more efficiently, the government should allow companies to supply part-time foreign workers or part-time domestic helpers.

Reduce the costs arising from policy duplications, which are not necessarily effective For instance, the government could allow companies to post bonds only for a portion of the foreign workers they hire, instead of their entire foreign workforce.

Widen the powers of the auditor general to audit government administrative rules, regulations, and statutory costs The auditor general would conduct regular studies, identifying distortions and excessive regulations; monitor overall costs imposed by government agencies on businesses; and review cost recovery computations used by government agencies to ensure that their charges are justified and free of duplications.

Use international comparisons to ensure that supernormal profits are not being made by statutory boards and government agencies involved in industrial parks' development at the expense of the local business community In the 1985–86 recession, studies were conducted to determine which statutory boards were making exorbitant profits. This led to the government's creaming off large profits by these boards as income tax. In a similar vein, the government should judge whether each statutory board is performing its statutory functions of land development efficiently. Although a statutory board should not incur losses, making large profits should not be its objective either. This is because when operating costs are high, it is easy for the statutory board in a crunch to pass these high costs on to the private sector, thus spreading negative externalities to the economy.

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Encourage more day workers from Malaysia The use of more day workers from Malaysia would introduce more flexibility and allow more workers to be available to Singapore businesses without the attendant concerns about housing and other costs related to foreign workers.

Devolve regulatory activities and business activities to different entities The government should relieve regulatory agencies of any involvement in related business activities of any kind, either directly or indirectly through subsidiaries and affiliates.

Abolish charges on public services that are covered by taxes The auditor general should compile a list of charges on public services that are covered by taxes. One clear example in which user charges should be minimal is charges for access to economic and business data. The collection of such data imposes costs on businesses and taxpayers, yet they are charged if they seek to use such data. The free flow of economic and business information should be seen as a vital ingredient of a well-functioning market economy.

Simplify the structure of ownership costs of motor vehicles Ownership-related costs such as ARF should be gradually reduced and eventually removed. The excise duty and road tax should be abolished. Where the government still seeks to impose an ownership cost, this should be achieved through the COE system.

Simplify the structure of usage costs for motor vehicles The petrol tax and tax on industrial diesel for machinery, trucks, forklifts, etc., should be reduced and eventually removed. This will enable owners of vehicles to have a clear idea of usage costs. Recovery of usage-related costs should be achieved through the ERP system.

4. Interrelationships among SMEs, GLCs, and MNCs

4.1 The background and issues at stake

The nexus of SMEs, GLCs, and MNCs needs to be reconfigured according to their separate and distinctive strengths, contributions, and needs within the framework of the Singapore economy. Despite the clearly stated interest of the government in fostering SMEs and its considerable efforts in this regard, some problems remain with a dispersed support system that involves many agencies, a mismatch between affordable and available finance in the private sector, and a weak research development environment among SMEs.

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GLCs were created in the 1970s to initiate economic activities in areas which the private sector was unable or unwilling to enter. At that time, there was wide consensus that GLCs were a beneficial institution, but the consensus began to fray at the edges in the 1980s when the GLCs moved into nonstrategic areas, in seemingly unfair competition with other local businesses. By the end of the 1990s, there was widespread criticism of the government's role in the economy, especially of the ever-extending tentacles of GLCs into local business. Thus, there is a clear need to reorient GLCs and redefine their mission within the Singapore economy.

Even as the government struggles hard to compete with other countries to attract more MNCs to Singapore and retain those that are already there, it should also endeavor to nurture local companies and encourage them to grow in competence and performance. MNCs are expected to continue playing a pivotal role in the Singapore economy, according to the September 2005 blueprint unveiled by the Economic Development Board.

4.2 Major policy recommendations for SMEs, GLCs, and MNCs

SMEs: Dedicate a statutory board for local enterprise Right now the de facto statutory board for SMEs is the Standards, Productivity and Innovation Board (SPRING Singapore). However, its mission statement and its ranking of its priorities give the impression that SME development is not the main function of SPRING. The mission statement states that SPRING Singapore aims to raise productivity so as to enhance Singapore's competitiveness and economic growth for a better quality of life, and its three areas of focus are productivity and innovation, standards and quality, small and medium-sized enterprises, and the domestic sector.

At a practical level, SPRING had adopted a "first-stop" approach to dealing with public needs (compared with the "one-stop" approach the government took some time back). SPRING has also introduced this idea to business associations such as chambers of commerce and encouraged them to set up their own first-stop centers to serve their respective members. The first-stop approach, however, could lead to the need to make several more stops in order to accomplish a particular task, thus giving the impression that there is an unnecessary dispersal of government services.

It would be useful to examine just how far different government services could be concentrated in one agency and also how the different agencies' work could be made to appear integrated at the user interface level while remaining separate beyond that level. One existing example of such coordination is the concept of approved-in-principle (AIP) agency status, wherein one government agency acts as an AIP agency for the funding schemes of another agency. Greater interagency

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integration along these lines would ameliorate some of the problems of the SMEs related to seeking and taking advantage of various government assistance schemes.

If a truly centralized organization could be set up which specifically and comprehensively dealt with all or most of the issues related to SMEs, it would be a tremendous assistance in itself. Perhaps the statutory board could address the needs of all local enterprises and be charged with facilitating a company's transition from an SME to a large local enterprise to a global champion. The centralized functions for such a proposed SME organization would include (1) integrating funding schemes for SMEs, (2) promoting the establishment of an SME credit bureau, (3) improving manpower quality, (4) building comprehensive information and technology platforms, (5) creating a Web community, and (6) coordinating licensing and regulatory requirements.

GLCs: Confine government's business role to select areas and resist the temptation to go into areas that the local private sector is capable of undertaking on its own A 2002 report by the Institute for Policy Studies Forum for Economic Restructuring (IFER) listed the following areas as proper concerns for GLCs or statutory boards:

1. areas which involve the provision of public goods (transportation, health care, education);
2. areas of strategic interest (defense related, security, resource supply);
3. businesses which help to regionalize and internationalize Singapore's products and services;
4. businesses which require extraordinary capital outlay and involve large-scale infrastructure development.

For projects in areas 1 and 2, the government should activate its statutory boards or agencies instead of utilizing GLCs which, by definition as corporations, have to be profit-driven, especially if private shareholders are also involved. If necessary, a corporatized entity (100 percent government-owned) could be used. This would avoid situations in which basic services are delivered to citizens by an entity with overzealous profit motivation and yet ensure that efficiency is maintained. GLCs, on the other hand, should be directed to focus on projects in areas 3 and 4, which are beyond the capability of most local private enterprises.

Set up an independent GLC Review Committee While the existing problems with GLCs are being tackled, the government should establish, as a mechanism of checks and balances, a GLC Review Committee to prevent more GLCs from being

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formed unless these are absolutely necessary. The GLC Review Committee should be given the following tasks:

1. Screening the setting up of any new GLCs to ensure that the government does not enter into businesses which the private sector is already in or is capable of embarking on.
2. Reviewing and monitoring the government's plan for the divestment of GLCs. Reports on the results of such review should be published at regular intervals, perhaps on a yearly basis.
3. Setting the criteria for the appointment of directors to GLC boards and objective performance criteria for nonexecutive directors.
4. Receiving and deliberating on public feedback or complaints regarding any unfair practices purportedly carried out by GLCs.

Accelerate the government's divestment process As the role of GLCs has indeed gone beyond that implied by their original objectives, the government's own divestment committee has recommended the following:

1. For listed GLCs, the privatization process should be accelerated to bring down the government's stake to as low a level as possible, having factored in the government's strategic interests, if any. (The process will increase liquidity in the stock market. The government can also use the opportunity to distribute assets to Singaporeans.) Although it is recognized that no timetable can be fixed for these activities, as market conditions will be a governing factor in divestment decisions, it will still be useful to have an indicative time frame so progress can be measured against it. The Public Sector Divestment Committee's 1987 report should be reviewed, and those recommendations that are still relevant should be followed up on.
2. For nonlisted GLCs which are nonstrategic, the companies should be listed as soon as practicable (if they are qualified for public listing), with the government reducing its stake to as low a level as possible over time. For those not qualified for listing, there should be a plan for the divestment of the government's stake through open bidding from the private sector. Nonlisted GLCs which are strategic could remain nonlisted.

MNCs We have the following recommendations in regard to MNCs:

1. Incentives should be provided for MNCs to bring along suitable SMEs as potential equity partners when expanding their businesses into emerging big markets such as China and India.

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2. Incentives should be provided for MNCs to include SMEs in their expansion into emerging industries such as biotechnology and life sciences, as they hold great potential for growth.
3. Before MNCs can be motivated to play a role in collaborating with and helping to nurture the growth of SMEs, however, it is only logical for GLCs to lead by example. One possible way is for GLCs to "co-invest" with MNCs in selected SMEs on a shared-risk basis.
4. Incentives should be provided for MNCs to nurture the growth of SMEs through the transfer of technology and best practices, joint research, and process and product development efforts resulting in co-ownership of intellectual property rights.
5. Incentives should be provided for MNCs to move up the value chain from manufacturing to more R&D investments as well as to establish their global shared services centers in Singapore. The services provided by such centers can be very wide-ranging, from information technology, auditing, and corporate governance to global treasury functions, purchasing, human resources training, and human resources management of their global expatriates.

Although SMEs, GLCs, and MNCs have separate and distinctive strengths and contributions within the framework of the Singapore economy, there are also clear advantages in creating linkages among them to a much greater degree than has been done so far. Their positive and pro-active interrelationships and the nexus that can be created among them will be one of the key competitive advantages of Singapore in times to come.

5. Strategic products, services, and markets diversification drive to better cope with structural changes

5.1 The background and issues at stake

The overall structural adjustment in the Singapore economy is clearly reflected by the gradual decline in the share of manufacturing output in nominal GDP, which fell from 27 percent in 1966–73 to 25 percent in 1987–97, in contrast to the rising share of the services sector, from 15 percent of GDP to 29 percent over the same period. Singapore's Economic Development Board (EDB) has committed itself to maintaining the share of manufacturing output in GDP at a minimum of 25 percent for decades to come and to expanding the breadth and depth of the services sectors through the new millennium.

Can Singapore as a city-state break away from the norm of the developed OECD countries, which saw their economic activities transferred from manufacturing into

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services as the economies matured? In our opinion, the EDB's long-standing policy of developing Singapore's manufacturing and services clusters may still be valid. This is because even if ultimately Singapore is expected to lose its position as a manufacturing hub, it may still make sense for the government to attempt to retain it, if only to "buy time" before the full impact and benefits of the drive to diversify products and markets diversification set in.

In the context of manufacturing sector restructuring, expansion into new markets and seeking out new business opportunities outside Singapore through the building up of the external economy appears to be the next logical move to diversify the manufacturing sector further and reduce vulnerability. As the economy matures into a more developed state, Singapore needs an enhanced strategy for manufacturing activities that goes beyond just hosting MNCs to building up a staple of indigenous MNCs. Singapore needs to nurture local manufacturing enterprises, which are clustered in transport engineering, contract electronics manufacturing, and precision engineering. Deliberate efforts along such lines would help to mitigate unemployment, since local enterprises are responsible for about 60 percent of the employment in Singapore, though less than a third of the value-added GDP. Meanwhile, the government should continue its efforts to establish in Singapore viable hubs in electronics, aviation, transportation, logistics, biomedicals, life sciences, precision engineering, information technology, petrochemicals, pharmaceutical products, technology patenting, nanotechnology, water technology, offshore financial services, education, health care, business conventions, professional services, gaming, and tourism.

However, Singapore's ongoing economic restructuring is further complicated and burdened by a small population that lacks critical-mass effect and an aging demographic profile whose ratio of dependency will shoot upward by 2010 unless the population mass is doubled to an estimated 8 million by 2030 through active skilled immigration policies. In this context, equally important and sensitive issues such as the local- to foreign-labor ratio, population racial mix, and social-political friction have to be carefully attended to.

5.2 Major policy recommendations

The drive for diversification of strategic products, services, and markets needs to be complemented with other efforts on different fronts so that a comprehensive and multifaceted strategy can provide support for stakeholders in making the critical leap into the next rung of the value chain that will allow better control of the profit zone within the value chain (see figure 4). The multipronged effort should include creating and/or acquiring global brands; implementing a strategy for retention of MNCs, with incentives to upgrade them to higher-value-added products and

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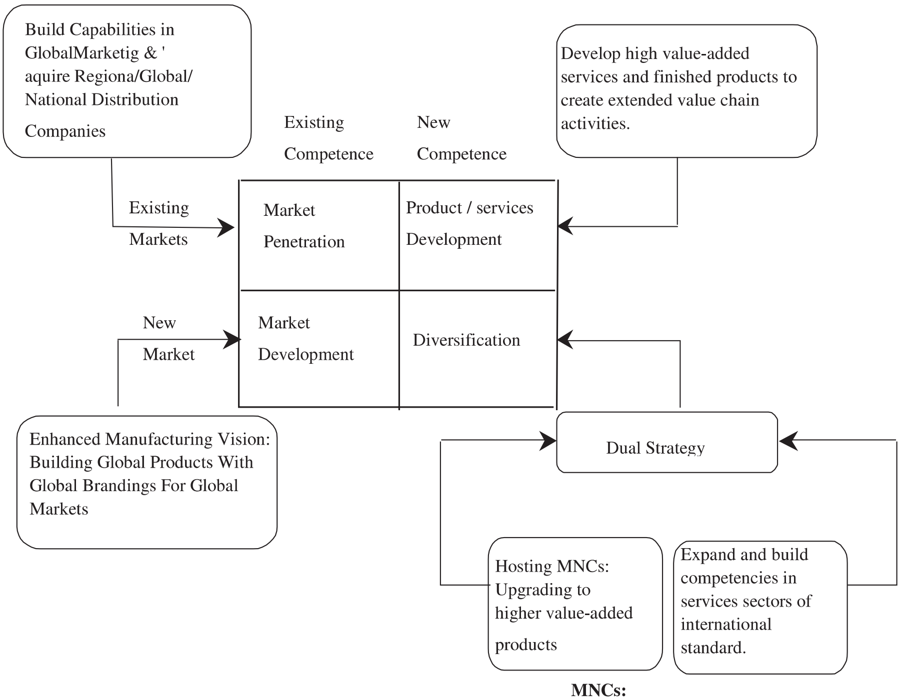
Figure 4. Strategic products, services, and market diversification drive



services; encouraging new MNCs to relocate to Singapore with services and products to create extended value chain activities; enhancing manufacturing vision with a new strategy to promote global branding, marketing, and distribution capabilities; expanding and building core competencies in services sectors according to international standards; building capabilities in global marketing and distribution; and developing an entrepreneurship culture.

Consolidate Singapore as a major financial center in Asia by establishing a financial sector development agency with MAS as the nucleus that works closely with other government agencies Singapore possesses many characteristics that can promote its development as a major financial center, but there are some domestic weaknesses that need to be addressed. These include a weak institutional base for managing domestic savings, a corporate infrastructure that lacks size and depth,

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and the possible weakening of its intellectual and innovation infrastructure. As a financial center, Singapore also faces a number of external challenges. Its critical mass depends on its hinterland's continued dynamism. Technological developments are changing the nature of the financial sector, especially in reducing the geographical spread of large financial firms. The local banking sector in Singapore has gone through a relatively rapid consolidation, but it still suffers from relatively small global asset size and footprint, low return on equity compared with major international banks, and arguably, a rigid and conservative mindset.

MAS has done much to grow the domestic bond market since 1998 but still faces the challenges of developing a more liquid secondary market, greater price transparency, and more sophisticated products. The publicly listed Singapore Exchange (SGX), as a monopolistic equities and derivative exchange operator, has been subjected to regular review. Costs of operating and trading on SGX have to be competitive or alternative trading systems and markets will emerge as challengers to it, which might not necessarily be a negative development, provided these systems and markets can attract more liquidity to Singapore. GIC has led the way in outsourcing some of its assets to Singapore-based fund managers. However, the local fund management industry can be further enhanced if the CPF board is able to issue direct mandates to private sector fund managers. Regional processing centers for in-house activities and third-party outsourcing services are two key trends in back-office processing that bear watching.

Develop and promote services sectors to include integrated resorts and a business convention hub to add economic resiliency in anticipation of the emerging middle class and potential international demand in leisure and business services from growing China and India As one of the world's most internationally oriented economies, Singapore is right in the center of the most dynamic growth region of the 21st century and must seize the occasion and develop initiatives to reposition itself as the tourism and business convention hub of Asia to capture a significant piece of this potentially growing pie. A combination of strategic location, safety, cleanliness, efficiency, English language proficiency, telecommunications, aviation, and financial infrastructure has rendered Singapore a very competitive and advantageous destination for attracting international visitors. The core challenge to the policy initiative proposed above lies in Singapore's ability to attract world-class integrated resort operators to commit to longer-term investment and development in Singapore to provide a catalytic effect for international investors to participate in other infrastructure developments, such as building international convention centers, quality museums, world-class hotel accommodations, and catering

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businesses. Not only would such a proposed policy initiative, once it took off, diversify the local economy further, but more importantly, it would serve to mitigate the potential structural unemployment currently developing in Singapore.

Extend the global trading network through extensive bilateral and regional free trade agreements and intensifying cooperation with regional economies In the early 1970s and 1980s, Singapore's economy was heavily dependent upon entrepôt trade with and thrived on financing the growth of Singapore's resource-rich neighboring economies, such as Indonesia, Malaysia, and Thailand. Since the Asian financial crisis in 1997, these three neighboring economies have been seriously hurt, and the growth momentum of ASEAN has begun to slow down, which has trimmed Singapore's growth prospects. The lack of progress on multilateral trade talks by the World Trade Organization has prompted Singapore to initiate and conclude various bilateral free trade agreements (FTAs) with international economies including the United States, Japan, India, Australia, New Zealand, Chile, Mexico, and South Korea. Singapore has also initiated bilateral economic cooperation with various provinces in China and actively participated in and supported other proposed regional FTA talks, such as those regarding the ASEAN-China and ASEAN-Japan FTAs. Being a small and highly open economy, Singapore will have no choice but to become increasingly dependent on external demand by plugging into the globalization process in order to stay viable and relevant.

Reduce structural unemployment through the setting up of a job development agency to look into job redesigning, job skill rematching, job retraining, raising the official retirement age, and building up a greater flexible wage component to cushion hollowing-out effect resulting from manufacturing migrations and to minimize the impact of employment transition from manufacturing to services activities In Singapore, structural unemployment is likely to persist due to (1) slower growth and an aging population resulting from falling fertility and mortality rates in which the depreciation rate of human capital tends to be high; (2) the implicit cost of employing Singaporeans presented by the CPF, which may cause employers to favor hiring foreigners over local (particularly older) workers; (3) the mindsets of employers, whose preference is in favor of hiring younger foreign workers over older locals, and of local employees, who are reluctant to take up low-paying and low-prestige jobs, (4) the pedagogical framework of the education system, which is too rigid, too structured, and requires early specialization and tends to encourage inflexibility and poor adaptability to fast-changing environments; and (5) the small population as a result of being a city-state, which makes it difficult for a displaced workforce to find jobs in the rural sector and results in the lack of a critical

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mass of educated workers and of the skilled work force necessary to create sufficient externalities in the domestic economy.

Institute a government agency to lead by investing in and grooming human capital, beef up research and development capability, and increase expenditures to upgrade education institutions in order to attract, develop and retain the best talented workforce globally A proposed policy initiative of this kind can be complemented with active immigration measures to attract younger skilled professionals, scientists, and entrepreneurs so as to reduce Singapore's high dependency ratio, which will rise vertically by 2010 given Singapore's rapidly aging demographic profile.

6. Concluding remarks and moving forward

Over the past four decades, sound economic and financial fundamentals, a sound and conducive regulatory environment for business, a skilled and disciplined workforce, excellent telecommunications and other infrastructure, high living standards, and a strategic and secure location have attracted many prominent international financial institutions and MNCs to set up operations in Singapore. From its previous position primarily servicing the regional hinterland, it now has to confront competitive forces that are global in nature. As the services sectors of neighboring economies develop, Singapore will find itself potentially crowded out.

An increasingly knowledge-based, innovation-driven economy does provide new opportunities for Singapore. There must be a fundamental shift from the traditional physical-manufacturing-oriented mindset to one that can handle the borderless, innovative, and mobile nature of high-quality productive activities in global services. Singapore is fortunate to be situated in a multiresource oasis with a fast-growing, capital-hungry, talented human resources pool and vast market accessibility within the Asian region. The crux of the matter lies in seizing the moment and developing initiatives.

In 1984, Goh Chok Tong, then the First Deputy Prime Minister, set the following target for Singapore: "to attain the 1984 Swiss per capita GNP by the year 1999." From a statistical standpoint, this may be regarded as a mission accomplished. In Singapore's 1991 Strategic Economic Plan (SEP), the vision set for Singapore was that of catching up with the first league of developed nations, on a moving target basis, by the year 2020–2030. The latest vision, set in 1998 by the Committee on Singapore's Competitiveness (CSC), was for Singapore to become an advanced and globally

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competitive knowledge economy within the next decade, with manufacturing and services as its twin engine of growth.

Although it is good to have a long-term vision or target, unpredictable political events and external economic development can very often render such visions or targets obsolete or irrelevant. A case in point is the ambitious projection of the 1991 SEP, envisioning for Singapore, among other things, a high growth rate in 2000 from the Singapore-Johore-Riau Growth Triangle which failed to materialize. The vision of the 1998 CSC to harness manufacturing and services as the twin engines of growth is now encountering serious challenges. The recently established (2002) Economic Review Committee is focused on upgrading, transforming, and revitalizing the Singapore economy, which is troubled by volatile and possibly unsustainable high growth rates and facing greater risk of income disparity.

Economic restructuring should be an ongoing process of self-renewal, not just one-time ad hoc measures taken as a reaction to economic crisis. It is in this light that we propose a continuous series of periodic economic forums, to be held perhaps once every 5 years, even when the economy is functioning smoothly. It is critical that more effort be made not just to formulate policies, but also to implement them, as some good policies recommended by past committees have remained unimplemented, for whatever reasons. Tracking the record of policy implementation itself is also vital, as difficult and unexpected outcomes tend to reveal themselves only during the implementation process. It is important to recognize that execution foundation in terms of policy implementation, coordination, and a regular bottom-up review process among government agencies. From our findings, it seems that some of the key recommendations put forth in the 1991 *Report on the Strategic Economic Plan* and the 1998 *Report by the Committee on Singapore's Competitiveness* on consolidating and improving Singapore's manufacturing core capabilities have not been fully or effectively implemented.

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