

Singapore

By A V Vedpuriswar

Singapore is today one of the most developed economies in the world. It has developed a formidable reputation as a business friendly nation where government bureaucrats are squeaky clean. Since its birth about 35 years ago, Singapore has come a long way. Besides its high per capita income and living standards, Singapore has consistently obtained top ranks in competitiveness surveys. (IMD's global competitiveness survey has ranked Singapore second for the past five years).

The 'wired city' with a population of just 3.9 million boasts a 59 percent penetration of PCs into households, more than the US (54 percent) and Japan (42 percent). The city state's broad band system supplies a stream of information to its residents. All taxis are equipped with a Global Positioning System. Nothing epitomises Singapore's opulence, more than its Changi International Airport, which looks like an upmarket shopping mall.

Over the years, Singapore has shown a remarkable determination to deal with seemingly unsurmountable problems. It has reclaimed land from the sea to deal with the problem of acute space shortage. By making itself an attractive place to work, it has been able to attract talented foreigners¹ and overcome its severe handicap of a small population.

In recent times, due to the recession in major economies like the US and Japan, there have been job cuts in Singapore. It is expected that by the end of 2001, unemployment could go up to 4 percent. Singapore's GDP fell at an annualized rate of 10.7 percent² in the second quarter of 2001 and by 5.6 percent in the third quarter. It is expected to contract by 3 percent during 2001. The government has announced a \$6.2 billion stimulus package (that has virtually wiped out the government's budget

surplus) to revive economic growth.

Key Concerns

A remarkable thing about Singapore is that in spite of its extraordinary success, its leadership is not complacent. In the wake of the Asian currency crisis of 1997 and 1998, when even rich countries were affected by turmoil in the global financial markets, Singapore has been taking various steps to strengthen its competitive position. The country has finalized a free trade agreement with New Zealand and is pursuing similar deals with other countries like the US and Japan. Singapore is also taking another look at the type of industries and businesses it needs to encourage. The country is aggressively targeting skilled manpower from foreign countries and making it easier for them to relocate to Singapore. It is tying up with foreign educational institutions to upgrade the skills of its local population. Seven prestigious western universities including MIT, John Hopkins and Chicago have set up campuses on the island. Other key issues which the country is attempting to address are financial sector reforms and withdrawal of the government from various sectors of the economy.

Traditionally, Singapore has excelled in capital intensive industries such as ship repairing and chemicals. The state has played a major role in the growth of these industries. Now, the government is trying to bring about a shift towards value-added sophisticated manufacturing and knowledge-intensive industries such as computer software. The Economic Development Board has identified four industries with tremendous potential – electronics, chemicals, engineering and biomedical sciences. The government is offering incentives to chemicals and pharmaceuticals manufacturers to move into more

¹ In the past 10 years, Singapore's population has expanded by 40%, almost entirely due to immigration. Singapore spends million of dollars on advertising in India, Malaysia, China and the west coast of the US.

² The Economist, September 15, 2001

sophisticated areas such as clinical research and life sciences. Notwithstanding Singapore's efforts to diversify its industrial base, electronics still makes up more than 50 percent of the manufacturing output. Consequently, the slump in the global computer industry has hurt Singapore badly.

Like many other countries in the region, Singapore has a dual economy, consisting of a manufacturing sector which is globally competitive and a services sector shielded from international competition (barring aside notable exceptions like Singapore Airlines). The government is now opening up various services markets to competition. Foreign legal firms have been allowed to enter the country, foreign institutions have been given licenses to compete with local banks and stock broking commissions have been liberalised. Government linked companies (GLCs) in the service sector have been asked to make overseas acquisitions. Singapore Airlines has taken a 49 percent stake in Britain's Virgin Atlantic. However, many GLCs are having a problem in making overseas acquisitions. Sing Tel was beaten in the race to buy Hong Kong Telecom by Richard Li's Pacific Century Cyber Works. Quite clearly, the GLCs not only have to be more nimble but also gain political acceptance in overseas markets.

In the past two years, Singapore's leaders have been attempting to encourage entrepreneurship. The country's industrial base, is today heavily dependent on the government and MNCs. Lee Kuan Yew, the architect of Singapore's success, recently wrote³: "The digital revolution and the convergence of communications, computers and the media require more from us than simply copying the software innovations of the developed countries. Our enterprising young people must be given the space and scope to create businesses for themselves."

Another concern for Singapore is that due to its small size, it is dependent on the attractiveness of the region as a whole to attract investments. Unfortunately,

Economic Summary

	2001 estimate	2001 forecast
Total GDP (\$bn)	98.8	106.1
Real GDP growth (annual % change)	4.5	5.5
GDP per head (\$)	25,000	26,500
Inflation (annual average % change in CPI)	1.1	1.3
Manufacturing output (annual % change)	7.0	6.3
Services output (annual % change)	3.5	5.2
Unemployment rate (annual % change)	3.2	3.0
Money supply, M2 (annual % change)	0	3.0
Foreign exchange reserves (\$bn)	80.0	82.0
Government of expenditure (% of GDP)	17.0	17.0
Total foreign debt (% of GDP)	8.9	7.9
Current account balance (\$bn)	21.3	19.9
Merchandise exports (\$bn)	140.6	151.5
Merchandise imports (\$bn)	-124.3	-138.3
Trade balance (\$bn)	16.3	13.2

Source: Department Statistics, Singapore

Singapore's status as one of the leading investment destinations in the region has been affected by political instability in countries like Indonesia and the Philippines. The September 11 terrorist attacks on the World Trade Centre in New York has not helped matters. The American war on terrorism has stirred anti-American sentiment in Islamic nations like Malaysia and Indonesia, scaring investors. Some analysts feel that Singapore's plans to emerge as a leading financial centre will fail if other countries in the region do not restructure themselves fast enough.

Industrial Base

Manufacturing, dominated by electronics, chemicals (including oil refining) and information technology-related products, accounted for 24 percent of total GDP in 1999. Multinational companies accounted for 75 percent of new manufacturing investment, which totaled US\$4.7 billion in 1999. Wholesale and retail trade represented 14 percent of GDP in 1999, reflecting Singapore's key role as a regional gateway. Financial services, which accounted for 13 percent of GDP in 1999, represent the third largest economic sector.

Though Singapore has a largely free-market business environment, GLCs account for about 60 percent of GDP. Established (in the 1960s to 1980s), primarily to catalyze industrialization and economic

³ Newsweek, Special edition, July–September 2000

development, they now account for over 60 percent of Singapore's GDP. The major GLCs like Singapore Airlines, Neptune Orient Lines, Chartered Semiconductors, Keppel and Sembawang are publicly listed, and are among the best known corporate names, locally and regionally. Many have foreign equity participation.

Deregulation has ranked high on the agenda of the Singapore government. The telecommunications sector was opened to full competition on April 1, 2000, two years ahead of schedule. Restrictions on the provision of value-added network services have been lifted, although the government bans the import of satellite receivers. The government is in the process

Overview of some important industries in Singapore

Electronic Components (ELC): The Asian economic downturn affected the performance of the electronics industry in 1998. But, the industry recovered quickly through strong electronics exports to the US and Europe. The electronics industry recorded an output of US\$41.5 billion in 1999. Growth was largely driven by info-communications products and semiconductors. The recent slowdown in the global computer industry has had a negative impact on the electronics industry.

Aerospace: Singapore's aerospace industry continues to experience good growth, riding on the strong demand for aerospace repair and overhaul services. Aerospace industry output grew by an estimated 6.0 percent in 1999 to reach US\$1.37 billion. Singapore has continued to grow as an aviation hub in the Asia-Pacific despite the Asian economic crisis. Today, over 60 international airlines fly scheduled services into Singapore from all over the world. Singapore serves as a transit hub for flights into Europe as well as Asia and the United States. Excellent connectivity and ground and aerospace repair support make Singapore an excellent stopover point for passenger transfer, aircraft servicing as well as refuelling. Singapore is poised to take on an even greater role as a key aviation hub in the Asia-Pacific region as it enters a new era of global airline alliances and ultra-long haul carriers. Airlines based in the Asia-Pacific region operate the largest share of large aircraft today and according to some projections may take over 40 percent of all wide-body deliveries over the next 20 years.

Telecommunication Equipment (TEL): Singapore has one of the most advanced telecommunication infrastructures in the world. It has invested \$3.0 billion in a high-speed nationwide internet backbone called, "Singapore ONE" to transform the country into an "Intelligent Island." Over 99.5 percent of homes in Singapore have telephones. With more than 1.8 million mobile phone users, Singapore has one of the highest mobile phone penetration rates (53 percent) in the world. It is one of the first countries to adopt number portability technology to facilitate switching between operators. Singapore also has a high paging penetration rate of nearly 34 percent, with more than 1.0 million subscribers serviced by four operators. The internet subscriber base jumped from 393,600 in December 1998 to more than 1.7 million, at the end of May 2000. One in two households in Singapore has a PC, while 42 percent of homes have internet access.

The Singapore telecommunications industry was fully liberalized two years ahead of schedule, on April 1, 2000. The government lifted direct and indirect foreign equity limits of 49 percent for all public telecommunications services licenses from January 24, 2000. The government is aggressively encouraging foreign companies to invest in Singapore, especially those which can offer new services and new technology. More than half of all telecommunication imports into Singapore are re-exported to other countries. Equipment approved in Singapore is generally accepted in the surrounding countries. Singapore depends heavily on imports as the indigenous manufacturing industry is small and dominated by foreign firms. Singapore firms look to the US and other developed countries for the latest technologies. The major telecommunication companies in Singapore are also seeking partners for regional ventures.

Medical Devices: Singapore's healthcare services are comparable to those of developed nations. In 1998, Singapore's total government healthcare expenditure was US\$1.1 billion (1.2 percent of its GDP) or \$350 per person. Government hospitals account for about 70 percent of the total number of hospital beds. Singapore has emerged as the healthcare hub for the region, catering to patients from Malaysia, Indonesia, Thailand, Brunei and the Philippines. From 2001, the Singapore Government will implement a nationwide screening program, costing \$4.0 million, for Singapore residents aged 55 and above. The economic recovery in neighboring countries following the Asian currency crisis contributed to higher patient admissions in 1999, thus motivating hospitals to increase purchases of new equipment to upgrade their services. Demand for equipment to diagnose and treat cancers and heart diseases will continue to be strong.

of opening the power generation and supply sectors to competition. The electricity and gas distribution network will become a regulated monopoly operated by a corporatized-government entity. The government has moved tentatively to open the legal services market. In August 2000 the government approved licenses for seven foreign law firms to form joint ventures with local firms to offer legal services. However, foreign lawyers are still not allowed to represent their clients in local courts, undertake litigation work, or to engage in other fields of law.

Singapore is attempting to transform itself into a

knowledge-based economy by moving up the value chain into manufacturing-related services (such as product design, research and development, marketing and logistics) and into sophisticated industries like electronics, life sciences, and “exportable services” such as finance, healthcare, education, communications and media. To this end, wide-ranging policies have been adopted to encourage entrepreneurship in technology-related fields or ‘technopreneurship’ as it is known locally.

The Financial sector

Shift of firms to China could hit Singapore's hub status hard

According to risk analyst Political & Economic Risk Consultancy (PERC), Singapore's status as Asia's premier business hub could take a hard hit if business shifts from South-east Asia to China in the near future. To enhance its hub status, Singapore will have to extend its influence way beyond its immediate neighbors, the Hong Kong-based firm says. Indeed, the Singapore government is talking about a seven-hour radius that covers India and China, it notes, but adds: ‘This goal will be easier said than done’.

In PERC's latest ranking of Asian business hubs, based on a poll of expatriates about the suitability of their country of residence as a site for specific industries and business functions, Singapore emerges tops among 13 countries - for 2001 and five years on.

On present conditions, Hong Kong is a close second, almost neck-and-neck. Notably, expatriates rate it ahead of Singapore as a location for financial services, trading and professional business services.

Singapore is seen as most suitable for regional marketing support, distribution and logistics, and as a technical support base.

But five years on, Singapore is expected to extend its overall lead over Hong Kong as the latter loses luster as a regional hub. Expatriates in Hong Kong, it seems, are far more pessimistic than those in other countries, about the city's medium-term economic and business prospects.

PERC, however, sees it another way. It could be that Hong Kong businessmen aren't too bearish, but simply that the expatriates in the other Asian countries, including Singapore, are way too upbeat about their cities, with ‘unrealistic’ expectations.

For instance, although Singapore's expatriates rate the city more strongly as a business hub than Hong Kong's businessmen rate theirs, ‘actual statistics in terms of the number of foreign companies and banks that are located in Hong Kong and use the SAR as a regional base are larger than in Singapore’.

‘The mood was (probably) better in Singapore at the time we took our survey than it was in Hong Kong,’ PERC concludes, adding: ‘We are not sure if this bias is justified’. The survey was completed in July.

In many ways, Singapore - which is least suited for labor-intensive manufacturing - is ‘in a worse position than Hong Kong’, PERC declares. ‘After all, there is a lot more to be said for having mainland China as your natural hinterland than having Indonesia and Malaysia.’

Singapore already has hub status, it says, so the key questions are what functions or lines of business it will lose to other countries like China as they develop, and what new business lines will develop to take their place.

What Singapore has going for it is ‘a government that thinks strategically’, PERC says. But then, when it comes to determining which business functions are located where, the ultimate factor is not government leadership but what local and foreign companies actually do, it points out.

And here, it remains to be seen if Singapore's managers ‘really understand that the onus for action is on them, not the government’.

Source: Business Times Online edition, November 2, 2001.

Singapore's efforts to liberalise the financial sector have been led by Deputy Prime Minister Lee Hsien Loong, the country's prime minister in waiting. He has been supported in his endeavours by MAS (Monetary Authority of Singapore). MAS an inflexible institution, till the early 1990s and famous for its tight regulations, has been revamped and a more pro business team of executives put in key positions. A key aspect of the liberalization process has been the introduction of competition in the local banking system. In May 1999, MAS announced that it would issue six new full service banking licenses and remove all limits on ownership of local banks. At the same time, the government is encouraging mergers of existing banks to create strong financial institutions that can hold their own even during bad times. In December 2000, the MAS eased limits on foreigners taking Singapore dollar loans to invest in stocks, bonds and non residential property. It has also become easier for foreign securities houses to obtain easily Singapore dollar funding to finance capital market activities.

The government wants banks to expand overseas, if required by mergers and acquisitions. As a step in this direction, the state owned Development Bank of Singapore, DBS has bought the Thai Dhanu Bank (Thailand), On Bank (Hong Kong) and taken a 20 percent stake in Bank of the Philippine Islands (The Philippines). The government has also made serious moves to deal with DBS' non performing assets, which amount to some \$4.1 billion. There is however, much more to be done. Recently, the government suffered a set back when John Olds, an American brought in to revitalise DBS put in his papers after what press reports described as two frustrating years on the job.

The progress of a country is often judged by the vibrancy of its capital markets. While Singapore has succeeded in attracting fund managers and has a strong bond market, it continues to lag behind rival Hong Kong in equities trading. Singapore's lack of openness and restrictions on the freedom of the press have been cited as reasons for this phenomenon. Equity analysts tend to be more outspoken than bank traders and seem to hesitate when asked to operate from Singapore. Hong Kong with its free wheeling culture is still a more vibrant financial center than Singapore.

Infrastructure

Singapore has a world class infrastructure that can compare with developed nations. Singapore's IT and telecommunications infrastructure is particularly well-developed. Singapore ONE, the nationwide, high-speed, fiber optic broadband network provides multimedia applications and internet services to all homes, schools and offices. Singapore is the world's busiest port in shipping tonnage terms for the fourteenth year running, attracting 877 million gross tons in 1999. Changhi airport is also frequently rated as among the best in the world. The road system is well-maintained, and road congestion is managed through the use of an electronic road pricing system (ERP) and through vehicle quotas. The public transportation system, which includes an efficient metro system, provides island-wide coverage at reasonable prices. The utilities networks provide reliable services. Health, safety and building codes have become stricter over the years, and provide adequate protection. The government has also taken advantage of lower building costs during the economic downturn in 1998 to intensify the construction and upgrading of the physical infrastructure. These include extending the metro line to the north-eastern part of Singapore and to the airport and reclaiming land to increase the land stock (Total land area in Singapore is a mere 650 square kilometers). In particular, significant resources have gone into Jurong Island, a \$4.0 billion project which now houses a vertically-integrated petroleum and chemicals industry. Other infrastructural enhancement projects include the development of tourist attractions and mega-exhibition facilities.

Foreign Trade

Singapore is extremely dependent on trade (more than two and a half times the country's GDP in 1999). It levies minimal import duties and has few non-tariff barriers. Singapore's major exports are: integrated circuits, computer parts, printed circuit board assemblies and petroleum products. Singapore's major imports consist of integrated circuits, parts of automatic data processing machines, crude oil, semiconductors and printed circuit board assemblies. Total trade in 1999 reached US\$226 billion, of which US\$111 billion were imports and US\$115 billion were exports.

The US is Singapore's largest trading partner, accounting for 16 percent of Singapore's total trade in 1999. US exports to Singapore amounted to US\$16.2 billion in 1999, while Singapore's exports to the US totaled US\$18.2 billion. Singapore was the tenth largest export market for the US in 1999. Over 1,300 US companies have facilities in Singapore, with total investments of US\$24.8 billion in 1999.

Foreign Investments

Attracting foreign investment into the country has been a key economic strategy of the government since independence in 1965. Consequently, the country's legal framework and public policies have always been foreign investor-friendly. The city state has a highly open investment regime, through which it has successfully transformed itself from a trading port into a modern industrial economy. As mentioned earlier, to become an innovation-driven knowledge-based economy (KBE) the government has been taking various measures – liberalization of the economy (particularly financial services, telecommunications and power); revamping the education system to emphasize computer and thinking skills; advanced manpower development, improvement of the country's physical infrastructure, financial incentives to encourage research and development, and entrepreneurship in technology-intensive fields. Singapore is actively encouraging multinational companies (MNCs) to establish knowledge-intensive manufacturing and service operations, and set up headquarters to manage their regional or global activities.

The Singapore government does not generally restrict foreign investment. However, notable exceptions exist in armament manufacturing, domestic news media and broadcasting industries. Investment opportunities are also relatively restricted in private property ownership. There has been a complete liberalization of the telecommunications sector as of April 2000, two years ahead of the original schedule. Foreign ownership limitations have also been recently lifted for local banking and insurance as well as power companies.

The Economic Development Board (EDB), the government's lead agency for the formulation and

implementation of economic and industrial development strategies, screens investment proposals to determine their eligibility for various incentive schemes. Investments that do not meet the criteria are not given incentives, but are not prohibited. As a one-stop service that helps foreign investors avoid red tape, the EDB has a reputation for being highly responsive to changing business conditions and investor needs.

Research and Development

In the past 20 years, Singapore has been taking various initiatives to strengthen its R&D capabilities. In 1981, the Science Council started to develop a science park to encourage multinational corporations (MNCs) to relocate their R&D facilities to Singapore. The excellent infrastructure together with its conducive environment prompted many MNCs to establish research laboratories in the park. The involvement of MNCs in the Science Park has provided many opportunities to both local and international research scientists and engineers.

In January 1991, the National Science and Technology Board (NSTB) was established in place of the Science Council, under the Ministry of Trade and Industry. The NSTB aims to develop the country into a centre of excellence in selected fields of science and technology and to enhance the competitiveness of the industrial and services sectors. It has actively promoted innovation by allocating a substantial amount of resources to R&D. According to the latest survey, gross expenditure on R&D (GERD) increased from S\$81 million (GERD/GDP = 0.26 percent) in 1981, to S\$571.7 million (GERD/GDP = 0.84 percent) in 1990, and to S\$1,792 million (GERD/GDP = 1.35 percent) in 1996. Private sector spending on R&D also expanded from S\$44.2 million in 1981, to S\$309.5 million in 1990, and to S\$1,133 million in 1996.

NSTB has funded private R&D projects through various schemes. It has assisted the setting up of research institutes such as the Institute of Microelectronics and the Institute of Molecular and Cell Biology and promoted joint ventures such as Singalab for undertaking high-risk research projects. The National University of Singapore and Nanyang

Main R&D indications

<i>Year</i>	<i>GERD</i>	<i>GERD/GDP</i>	<i>RSE</i>	<i>Labour Force ('000)</i>	<i>RSE per 10,000 Labour-Force</i>	<i>R&D Spending per RSE S\$'000</i>
1981	81.00	0.26	1,193	1,128.0	10.6	67.90
1984	214.30	0.54	2,401	1,304.4	18.4	89.25
1987	374.70	0.86	3,361	1,329.3	25.3	111.48
1990	571.70	0.84	4,329	1,562.8	27.7	132.06
1991	756.80	1.00	5,218	1,554.3	33.6	145.04
1992	949.50	1.17	6,454	1,619.6	39.8	147.12
1993	998.20	1.06	6,629	1,635.7	40.5	150.58
1994	1,174.98	1.09	7,086	1,693.1	41.9	165.82
1995	1,366.55	1.13	8,340	1,748.2	47.7	163.85
1996	1,792.14	1.35	10,153	1,801.9	56.3	176.53

Source: National Survey of R&D in Singapore 1996, National Science & Technology Board, Singapore.

Technological University also provide an infrastructure for the training of graduates in high technology and knowledge based areas.

Singapore's growing attractiveness for high tech industries is reflected in the fact that technology-based MNCs such as Motorola, Siemens and Hitachi have made the country a hub for their regional operations. Motorola has established a design centre for paging products. It has also established an integrated circuit (IC) design centre, an analytical and material development laboratory and a research team for wireless technology. Hitachi Electronics Devices has set up an R&D centre in order to reduce the dependence on engineering support from its parent company in Japan. Siemens has also been involved in various R&D activities in Singapore. As semiconductor technology is characterised by rapid innovation, Siemens has invested heavily in IC design, packaging technology and test software development. The IC design centre of Siemens in Singapore employs over 100 research engineers engaged in IC design and software development.

Human Resources

Since the 1960s, Singapore has attached great importance to the training and development of technical manpower. Early in 1967, the Science Council of Singapore (SCS) was set up to promote scientific and technological activities. In the late 1970s, the Singapore Science Centre (SSC) was opened to disseminate general knowledge of science and technology to the public (SSCa, 1981). SSC organized activities like technical courses, lectures, workshops and talks, to motivate young people to

take up careers in science and technology. NSTB has launched a series of manpower programmes collectively called the Manpower Development Assistance Scheme (MDAS) to assist companies in developing R&D personnel. MDAS offers both study and training grants to companies and the public. The Research Exchange Programme supports on-the-job training of scientists and engineers in local and international institutions.

Singapore is attempting to attract skilled manpower from foreign countries like India and tying up with foreign educational institutions to upgrade the skills of its local population. As mentioned earlier, many prestigious universities have set up campuses on the island.

Traditionally, Singapore's education system has expected students to learn many things within a very short period of time. The examination oriented system has not emphasised thinking and analyzing. Instead, it has encouraged memorizing the facts and reproducing them in the examinations. Singapore has been modifying the local educational system in recent times to encourage creativity and analytical thinking.

While Singapore welcomes foreign talent, it has taken various steps to control dependency on unskilled foreign labor. The government places a ceiling on the percentage of foreign workers certain industries may employ; and it charges a monthly levy for each foreign worker. At the same time, the government provides incentives and assistance to firms to automate and invest in labor-reducing technology. Generally, foreign workers who earn S\$2,000 (about US\$1,176) or less per month are given two-year work permits, usually

renewable for another two years. Skilled and professional staff and those earning more than S\$2,000 per month (about US\$1,176) are given two to three-year employment passes which are generally renewable as long as the skills and qualifications continue to be relevant. The government also grants residency, liberally, to foreign professionals, academics and artists who can contribute to the country's overall development. Apart from setting up an efficient system to process applications for employment passes and permanent residency permits, the government regularly extolls the contribution of "foreign talents" and offers companies a double tax deduction on approved expenses related to talent recruited from abroad.

Encouraging a risk taking culture

Already a prosperous country by any standards, Singaporeans are generally risk averse. The government have been taking various steps to encourage more people to get into business. As mentioned earlier, the education curriculum has been revamped to stimulate creativity among students. The government is also attempting to encourage entrepreneurship by making amendments in bankruptcy laws, attracting venture capital and promoting stock options.

On a trip to Silicon Valley, a Singapore delegation was stunned to see some US venture capitalists preferring to deal with entrepreneurs who have failed in their business endeavours, at least once. Drawing a lesson from this experience, the government has attempted to deal with the Asian paranoia about failure by announcing tax deductions for losses made by investors in start-ups. It has even set up a 'phoenix' award for failed entrepreneurs who make a strong comeback. Lee Kuan Yew⁴ articulates the new priorities of the government: "We've followed a safe, structured approach. Now, our talented young have to dispense with the safety net as they go on their own. Many will stumble and fall, but they must pick themselves up and try again."

Singapore: Important Statistics

	1998	1999
Median Age	33	33
Literacy Rate (%)	93	94
Mean Years of Schooling	8	8.1
Per capita GNP (\$)	38,418	39,721
Inflation	-0.3	0.0
Manufacturing output (\$ Billion)	121	135
Total External trade (\$ Billion)	354	382
Forex reserves (\$ Billion)	124.58	128.46

Source: Department of Statistics, Singapore

Singapore: Growing prosperity

Year	Per capital GNP (Current Market Prices in \$)
1960	1330
1965	1618
1970	2825
1975	5903
1980	9882
1985	14666
1990	22639
1995	35022
1999	39721

Source: Department of Statistics, Singapore

Singapore: GDP growth rate

Year	GDP Growth (%)
1990	9.0
1991	7.1
1992	6.5
1993	12.7
1994	11.4
1995	8.0
1996	7.5
1997	8.4
1998	0.4
1999	5.4

Source : Department of Statistics, Singapore

One of the main reasons for the lack of

⁴ Newsweek, Special edition, July–September 2000

entrepreneurship has been the dominance of the economy by GLCs. The GLCs though well managed and profitable conglomerates by and large, crowd out private investment and discourage potential entrants into the particular industry. GLCs operate airlines, banks, shipping, telecom and petrochemical companies and utilities. Deputy Prime Minister, Lee Ksien Loong recently admitted⁵, “The role of the state in business has become at best unnecessary and at worst dysfunctional. It has warped the development of the private sector. For a bright young person, the system has been totally biased against entrepreneurship.”

The agenda ahead

Singapore’s Confucian values that emphasize savings, discipline and hard work have stood the country in good stead as it has rapidly evolved from a Third World country into one of the richest nations in the world. There is now a distinct possibility of these values being challenged, as Singaporeans get exposed to western thoughts and ideas especially in the wake of the Internet revolution. Senior leader Lee Kuan Yew admits that the greatest challenge for Singapore is to protect its cherished core values. Yew is particularly worried about the impact of pornography on the Web and has called for international initiatives to remove harmful content from the Internet. He is, however, confident that Singapore’s core values will continue to give the country a competitive edge⁶. He says, “Confucianism must adjust and change with the changing structure of the economy and society. The young will be more knowledgeable than their parents and should speak up to point out the changes brought about by technology, but it is not necessary to be disrespectful.” Yew feels that Singapore’s basic family traditions, respect for elders and a strong sense of discipline are as relevant today as in the past⁷, “They have made for order and civility. Confucius expected the individual to aim to be a gentleman. If you are a gentleman and bring up your family in a proper way, society will look after itself. A Confucian epigram says of a woman, cultivate yourself, look after your home and all will be well. It’s different from western individualism, where the individual is glorified as the freewheeling, unrestrained creative

agent of progress.”

Along with the need to protect its core values, Singapore also needs to encourage entrepreneurship, which implies creative thinking. As a recent report in *Asia Week*⁸ has mentioned: “*Singapore’s long term recovery will depend more than ever on the Government’s ability to follow through on its most unlikely plan: creativity*”.

Even if it lacks broad based entrepreneurship, Singapore is one of the healthiest economies in the world. And there is no indication that its competitiveness will decline in the near future. The country’s enlightened political leadership and its disciplined citizens make Singapore one of the best countries in the world to do business. But as *Asia Week*⁹ has put it: “*The development model favored in the past by Singapore and many other Asian governments – directing money and contracts toward increasingly large conglomerates – no longer works. The challenge now is persuading a comfortable citizenry to do something about it.*” ■

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⁵ Asiaweek, May 4, 2001

⁶, ⁷Newsweek, Special edition, July – September 2000

⁸ October 26, 2001

⁹ May 4, 2001