ASEAN Economic Bulletin Vol. 15, No. 3

The Asian Financial Crisis

Singapore's Experience and Response

Chia Siow Yue

Although Singapore has a very open economy, both in the current and capital accounts, the impact of the crisis has not been as severe as in several less open regional economies; thus economic openness and globalization are not sufficient factors. Further, despite sound fundamental macroeconomic policies, Singapore did not escape the fallout from the regional crisis; thus these factors are insufficient insurance against overreactions and herd behaviour of currency traders and speculators. Finally, Singapore's policy response to the crisis is not to reject globalization and liberalization, but to undertake further reforms and restructuring to ensure international competitiveness.

Introduction

More than a year after the currency and financial crisis exploded in Southeast Asia, starting with floating of the Thai baht in July 1997, much has been written and debated regarding the causes and effects of the crisis and the necessary and appropriate responses at national and international levels.

Singapore's experience with, and response to, the regional crisis makes for an interesting case study. First, Singapore has a very open economy, both in the current and capital accounts, yet the impact of the crisis has not been as severe as in several less open regional economies because it has strong macroeconomic fundamentals, sound macroeconomic policies, a healthy domestic financial system, and political and social stability. Second, Singapore's policy response to the crisis is not to reject globalization and liberalization and impose capital controls but to strengthen the domestic financial system and improve the economy's international competitiveness.

Sound Macroeconomic Fundamentals and Policies

Economic Openness and Vulnerability

By any set of criteria, Singapore is one of the most open economies in the world which, together with its small size, renders it highly vulnerable to external developments beyond its control. The economy is continually subject to the discipline of the market and hence has to maintain strong macroeconomic and financial fundamentals and political and social stability to remain attractive to international capital, and pursue sound macro-economic and financial policies. Table 1 presents some indicators of economic openness. Total trade in goods and services reached US$327 billion or 331% of GDP in 1997, with external demand accounting for two-thirds of total demand. Foreign investment penetration is extensive — the stock of inward foreign equity investment (direct and portfolio) reached US$70 billion in 1995 or 81% of GNP, while foreign controlled companies (with foreign equity ownership of over 50%) comprised 18% of the total number of companies and nearly 60% of total corporate assets in Singapore. Outward equity investments are of a lesser order, but still reached US$34.2 billion by 1995 or 33% of GNP. Foreign participation in the Singapore financial sector is probably one of the highest in the world. As a financial centre, Singapore plays host to 142 foreign banks as well as a large number of other financial institutions, while the total assets of the Asian Dollar Market (ADM) reached US$375 billion by end-1997. Ranked as the world's eighth largest offshore lending centre, the ADM plays a crucial role in mobilizing global funds for onlending to the region. With full employment since the 1970s, the foreign workforce has also been on the rise, accounting for 20–25% of the total workforce in recent years.[1]

Sound Economic Fundamentals

That Singapore has been less affected by the regional crisis is in large part due to its strong macroeconomic and financial fundamentals. With financial liberalization and capital account convertibility, these have helped maintain investor confidence and fend off speculative attacks. Real GDP growth has been high and sustained, averaging 9% in the period 1990–97; as a result, per capita GNP reached US$26,475 in 1997, higher than several OECD countries. The incidence of poverty is low and the wealth and income gap has not raised serious social and political concerns.[2] Savings and investment rates have risen; national savings averaged 49% of GNP by the 1990s (among the highest in the world), fixed investment averaged 35% in the 1990s, and Singapore has been a net capital exporter since 1986. The chronic merchandise trade deficit has been more than offset by the services surplus to result in rising current account surpluses (15% of GNP in 1997). Official foreign reserves reached US$81 billion at end-1997 (among the largest in the world) and equivalent to cover seven months of gross imports of goods and services and over US$21,000 per capita. There has been no official external debt since 1995.[3] The government budget surplus has been growing; the surplus represents government operating revenue exceeding both government operating and development expenditures. In the private sector, Singapore has depended more on attracting foreign direct investment than foreign loan financing. Inflation as measured by the Consumer Price Index (CPI) has been moderate except for the oil crisis years and averaged 2.4% in the 1990s, largely due to a strong Singapore dollar keeping import prices down. However, asset inflation has been high in recent years. At the micro level, the equity ratios (shareholder equity to total debt liabilities) of the financial and corporate sectors have been rising and stood at a healthy 0.26 in 1995, while current ratio (current assets to liabilities) stood at 1.08.[4]

Sound Macroeconomic and Financial Policies

Singapore's sound economic and financial fundamentals reflect good governance and efficient and prudent economic management — a clean government and emphasis on meritocracy, the upholding of the rule of law, and emphasis on market discipline and efficiency.

Singapore's traditional free trade regime was temporarily suspended in the early 1960s to promote industrialization. However, the trade restrictions have been progressively dismantled and Singapore has reverted to a free trade regime with no export restrictions and minimal restrictions on imports. Together with the large presence of foreign investments, these have ensured domestic competition and international competitiveness.

The free trade policy was reinforced by the lifting of all exchange controls by 1978. Tyabji (1998) noted that Singapore's policy responses to the large capital inflows have been through management of the exchange rate, a sound

TABLE 1

Indicators of Economic Openness and Performance for Singapore

Indicators	
Per capita GNP, 1997 (S$)	39,310
GDP growth rates (%)	
1970–80	9.4
1980–90	7.4
1990–97	9.0
Gross national savings/GNP ratio (%)	
1970–80	19.3
1980–90	34.2
1990–97	48.5
Gross fixed capital formation/GNP ratio (%)	
1970–80	32.2
1980–90	42.2
1990–97	34.7
Unemployment rate, 1997, (%)	1.8
Consumer Price Index (annual % change)	
1970–80	5.6
1980–90	2.7
1990–97	2.4
Imports of goods and services, 1997 (S$ million)	231,122
As % of GNP	157.3
Exports of goods and services, 1997 (S$ million)	254,864
As % of GNP	173.5
Current account balance, 1997 (S$ million)	21,722
As % of GNP	14.8
Official foreign reserves, 1997 (S$ million)	119,617
As months of imports	7.3
Stock of inward foreign equity investment, 1995 (S$ million)	99,216
As % of GNP	81.4
Stock of outward foreign equity investment, 1995 (S $million)	48,498
As % of GNP	33.2
Assets (liabilities) of Asian Dollar Market, 1997 (S$ million)	557,182
Government budget, 1997 (S$ million)	
Operating revenue	30,613
Operating expenditure	15,159
Development expenditure	10,706
Financial & corporate sectors' equity ratio, 1995	0.26
Financial & corporate sectors' current ratio, 1995	1.08
Stock Exchange of Singapore Index, (1975=100)	
1992	386.2
1996	558.6
1997	492.3
URA private property price index (1990=100)	
1992	123.1
1996	283.6
1997	259.8

SOURCES: Singapore, Department of Statistics, *Yearbook of Statistics* (various years); Ministry of Trade and Industry, *Economic Survey of Singapore* (various years).

financial system capable of intermediating the inflow, and fiscal discipline. Singapore's exchange rate is managed against a trade-weighted basket of currencies of major trading partners and competitors. The Monetary Authority of Singapore (MAS) intervenes in the market to keep the exchange rate within an undisclosed target band. The exchange rate policy objective is to achieve a low inflation rate and a strong and stable Singapore dollar. While the nominal exchange rate varies, the real effective exchange rate has remained relatively stable.

Financial liberalization was actively pursued in the 1970s: in 1972 the abolition of the cartel system of exchange rate quotation by commercial banks, followed by floating of the Singapore dollar in June 1973; in July 1975 the cartel system of interest rate setting by commercial banks was abolished; exchange controls were lifted in June 1978 so that residents could borrow or lend in all currencies, including participation in Singapore's offshore Asian dollar market. Merchant banks were also permitted to freely engage in foreign exchange transactions, offshore banks (which had been restricted to dealing with banks and approved financial institutions) could deal with resident non-bank customers, and non-residents could hold Singapore dollar denominated assets. The earlier restrictions on the "internationalization" of the Singapore dollar, for fear of destabilizing speculation, have been replaced by a more moderate stance. It was announced in October 1996 that 40 foreign currency denominated stocks quoted on the Singapore stock exchange could apply to have their shares converted to Singapore dollars (*Business Times*, 16 October 1996). Also, foreign shareholdings were allowed in Singapore stockbroking firms.

For years, the Monetary Authority of Singapore (MAS) has exercised strict prudential regulation and supervision to maintain a sound domestic banking and financial sector. Tyabji (1998) noted that there is no deposit insurance (except for Post Office Savings Bank deposits guaranteed by government); prudential regulations and supervision are tight; reserve requirements have been at 6% since 1975; liquid asset requirements are 18% for commercial banks and 10% for finance companies. As liberalization has proceeded, prudential regulations have been strengthened to raise the standards of financial and corporate governance. Banks are efficient and well managed and have some of the highest capital adequacy ratios in the world. At the micro level, there are efforts to ensure that banks manage their risks prudently. These efforts have contained the incidence of non-performing loans (NPLs).

Monetary and fiscal disciplines have been exercised through prudent budgetary policies, the Currency Board and the Central Provident Fund (CPF). MAS is responsible for central banking functions except currency issue. The Currency Board, a colonial legacy, issues and redeems currency on demand; the currency issue is backed 100% by foreign reserves, so that capital inflows expand the currency base and subsequently the money supply. The control on fiduciary issues has imposed fiscal discipline. Under the CPF, both employers and employees have to compulsorily contribute a percentage of salary (at the time of writing 20% each). Up to the present, total contributions have exceeded total withdrawals, and as the funds must be invested in government securities and the government budget is generally in surplus, these funds are often invested overseas. The resultant capital outflow tightens liquidity in the economy and, together with government and public sector budget surpluses, dampens monetary growth.

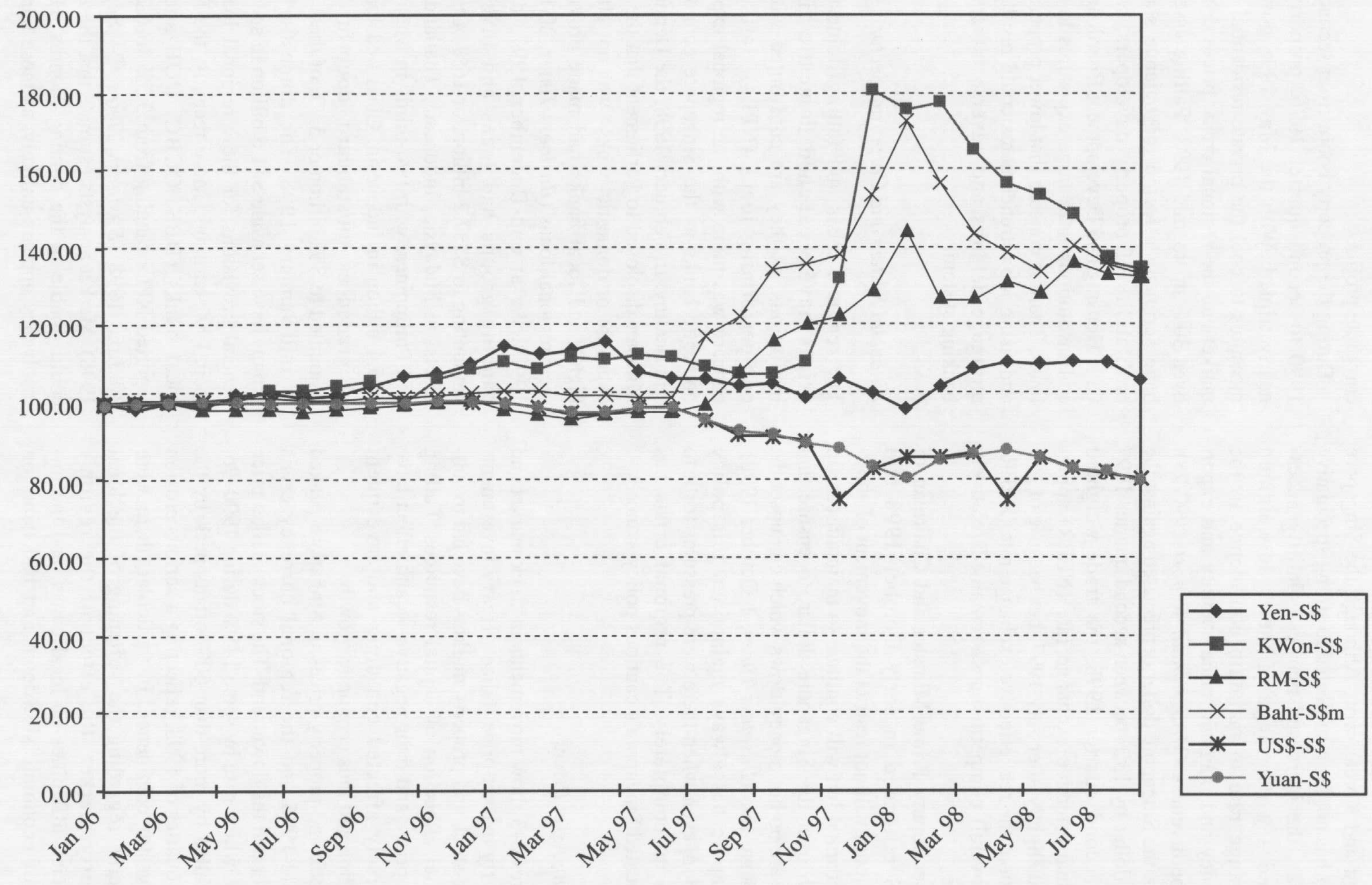
Impact of Regional Contagion

The regional crisis has adversely affected Singapore through the currency and asset markets, the banking and corporate sectors, and prospects for economic growth.

Currency Contagion

Figure 1 shows the exchange rate movements against the Singapore dollar. The Singapore dollar depreciated against the U.S. dollar but rose sharply against other Asian currencies, especially the Indonesian rupiah, Thai baht, Malaysian

FIGURE 1
Index of Singapore Dollar against Foreign Currencies



SOURCE: CEIC.

ringgit and Korean won. Although the Singapore dollar has not been subjected to strong speculative attacks, the increased market volatility necessitated a wider range of the trade-weighted exchange rate to maintain confidence in the currency and maintain price stability and export competitiveness (*MAS Annual Report 1997/98*). While the Singapore dollar depreciated against the U.S. dollar by 13% between second quarter 1997 and second quarter 1998, the trade-weighted nominal effective exchange rate (NEER) appreciated slightly after July 1997, but because of low inflation, the real effective exchange rate (REER) and overall competitiveness remained relatively stable.

The Deputy Prime Minister and Chairman of MAS reiterated in early October 1998 that Singapore will not restrict the movement of short-term capital but will continue to maintain careful watch over the Singapore dollar, to ensure that there are no hot money flows which can upset the exchange rate (*Business Times*, 1 October 1998). Singapore has always maintained this policy position, even when there were pressures for it to open up completely. The regional crisis has vindicated Singapore's cautious policy stance.[5]

Falling Asset Prices

Figures 2–3 show movements in stock market and property market price indices. Heavy investments in the stock and property markets have led to sub-optimal allocation of capital resources. Falling asset prices and their negative wealth effect have adversely affected consumer and investment spending and thus economic growth.

Stock and property prices in Singapore peaked in mid-1996 and the regional currency crisis accelerated the downtrend. The stock market price index, which rose by some 145% during 1990–96, had fallen by more than 60% off its peak by the third quarter of 1998, reflecting a serious erosion of investor confidence. In particular, there were concerns regarding the softening of the local property market, the effect of the region's financial difficulties on local banks, and the impact of economic slowdown and bad debts on corporate profits.

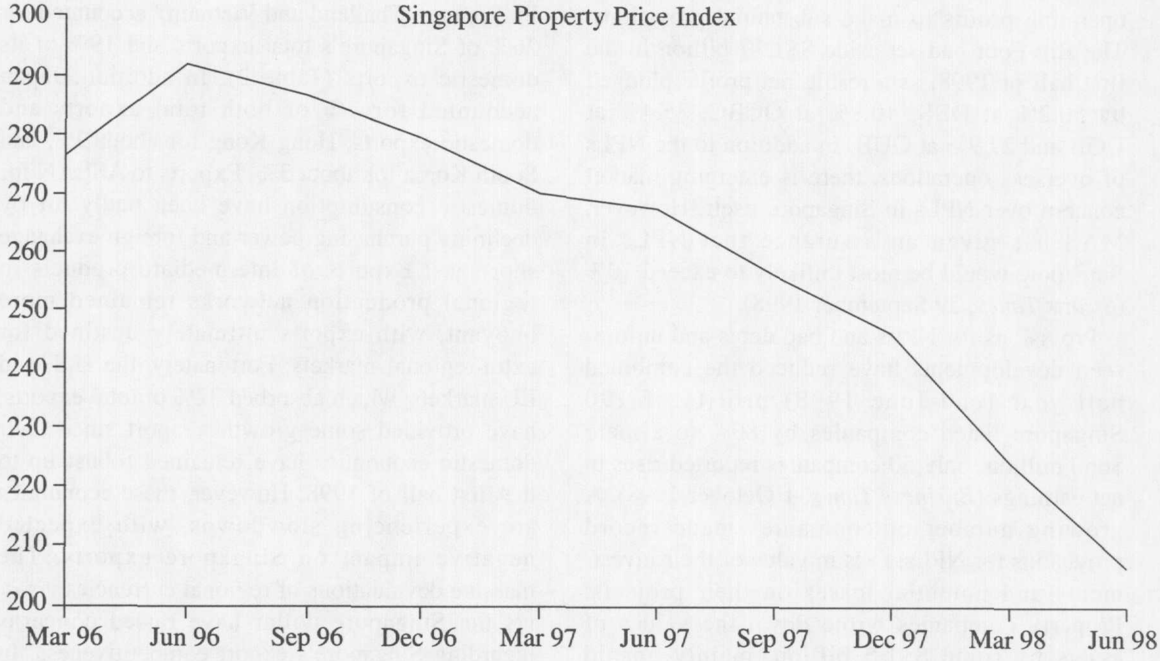
During the property boom from second quarter 1990 to second quarter 1996, property prices nearly tripled. With the May 1996 government measures to cool the private residential property market and the regional crisis, prices dropped by over 30% up to mid-1998. Falling asset values have seriously affected the balance sheets and profitability of property developers, while the CPF, Housing and Development Board, and financial institutions have large exposures to property loans. There is concern that lower property values and rising job retrenchments could result in more mortgage defaults and adverse effects on the banking system.

Financial System and Corporate Sector

The regional crisis and falling domestic asset prices have weakened domestic financial institutions, as they are confronted with rising non-performing loans (NPLs). Initially, the concern was more with the regional exposure of domestic banks as the Singapore economy was still healthy. In February 1998, the Deputy Prime Minister disclosed to Parliament that the regional exposure of domestic banks "was not alarmingly high", and local banks had made provision for their regional loans (*Business Times*, 20 February 1998). As at end-December 1997, domestic banking groups had loans and investments amounting to S$37.2 billion, or 16% of their total assets, in Malaysia, Indonesia, Thailand, Korea, and Philippines, with two-thirds in Malaysia and S$5.4 billion in Indonesia. Classified loans (that is, graded as substandard, doubtful or bad) amounted to S$2 billion or 5.7% of these loans as of mid-January 1998. The domestic banking groups have set aside S$1.6 billion in specific and general provisions for these regional loans from their 1997 earnings. More recently, the Big Four local banks (DBS, OCBC, UOB and OUB) reported NPLs ranging from 3.5% to 6.2% as at 30 June 1998 (*Business Times*, 24 September 1998). Market analysts estimate that these figures could double in the coming months. However, insolvency appears unlikely, as these banks have

FIGURE 2

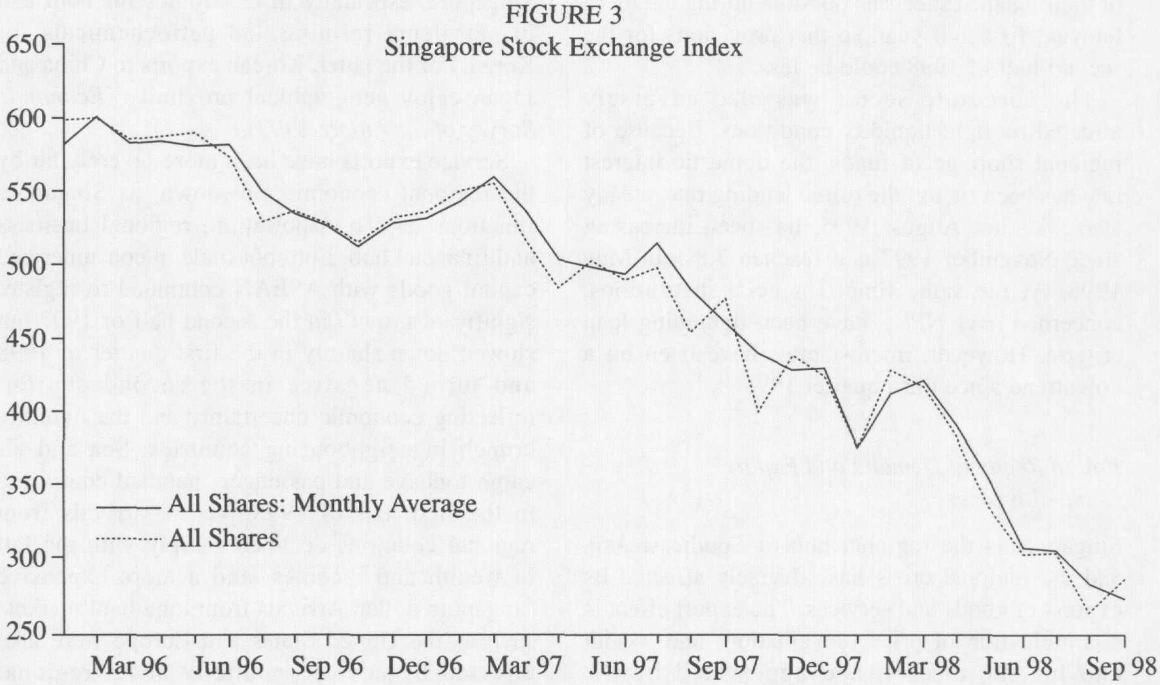
Singapore Property Price Index



SOURCE: CEIC.

FIGURE 3

Singapore Stock Exchange Index



SOURCE: CEIC.

strong capital positions and could count on operating profits to make substantial provisions. The Big Four had set aside S$1.17 billion in the first half of 1998; as a result, net profits plunged by 50.2% at DBS, 40.8% at OCBC, 35.4% at UOB and 27.9% at OUB. In addition to the NPLs of overseas operations, there is emerging market concern over NPLs in Singapore itself. However, MAS has given an assurance that NPLs in Singapore would be most unlikely to exceed 10% (*Straits Times*, 29 September 1998).

Provisions for NPLs and bad debts and unforeseen developments have reduced the combined half-year (end-June 1998) profits of 190 Singapore listed companies by 80% to a mere $660 million; only 50 companies reported rises in net earnings (*Business Times*, 1 October 1998). A growing number of companies made record provisions for NPLs, falls in value of their investments and potential losses on their projects. Property companies wrote down the values of assets by some S$1.5 billion, mainly unsold development properties. Most companies appear to have taken the opportunity to clean up as much of their balance sheets as possible during the more buoyant first half-year, so that provisions for the second-half of 1998 could be less.

The corporate sector was also adversely affected by tight liquidity conditions. Because of regional shortage of funds, the domestic interest rate has been rising; the prime lending rate, steady at 6.3% since August 1995, has been increasing since November 1997 and reached 7.8% in May 1998. At the same time, financial institutions, concerned over NPLs, have been tightening loan criteria. However, interest rates have been on a downtrend since third quarter 1998.

Fall in Regional Demand and Export Competitiveness

Singapore is the regional hub of Southeast Asia and the regional crisis has adversely affected its exports of goods and services. The export effect is a combination of price (devaluation) and wealth and income effects, and aggravated by the slowdown in the global electronics industry.

In 1997 ASEAN (Brunei, Malaysia, Philippines, Thailand and Vietnam)[6] accounted for 26% of Singapore's total exports and 19% of its domestic exports (Table 2). In addition, Japan accounted for 7% of both total exports and domestic exports, Hong Kong for about 9%, and South Korea for about 3%. Exports to ASEAN for domestic consumption have been badly hit by declining purchasing power and foreign exchange shortages. Exports of intermediate products in regional production networks remained more buoyant, with exports ultimately destined for extra-regional markets. Fortunately, the U.S. and EU markets, which absorbed 32% of total exports, have provided some growth support since their domestic economies have remained robust up to the first half of 1998. However, these economies are experiencing slowdowns, with expected negative impact on Singapore exports. The massive devaluations of regional currencies *vis-à-vis* the Singapore dollar have raised concerns regarding Singapore's export competitiveness. In particular, the export structures of Malaysia and South Korea are broadly similar to that of Singapore, especially in electronics for both and in petroleum refining and petrochemicals for Korea. For the latter, Korean exports to China and Japan enjoy geographical proximity (*Economic Survey of Singapore* 1997).

Service exports have been more severely hit by the regional economic slowdown, as Singapore functions as a transportation, regional business and financial hub. Entrepôt trade in consumer and capital goods with ASEAN continued to register significant growth in the second half of 1997 but slowed down sharply in the first quarter of 1998 and turned negative in the second quarter, reflecting economic uncertainty and the liquidity crunch in neighbouring countries. Sea and air cargo tonnage and passengers handled contracted in the first half of 1998. Visitor arrivals from regional countries declined sharply with the fall in wealth and incomes, and a more expensive Singapore dollar. Arrivals from long haul markets such as the United States and Europe were also affected by adverse publicity about regional instability and haze. Total assets (and liabilities)

TABLE 2
Singapore: Imports and Exports by Destination, 1997
(Percentage Distribution)

	Total Trade	*Imports*	*Exports*	*Domestic Exports*
Total	100.0	100.0	100.0	100.0
United States	17.6	16.8	18.4	25.0
EU	14.0	14.0	14.0	n.a.
Japan	12.5	17.6	7.1	7.4
China	3.8	4.3	3.3	3.3
Hong Kong	6.2	2.9	9.6	9.8
South Korea	3.0	3.1	3.0	2.6
ASEAN	24.5	22.2	26.2	19.2
Brunei	0.6	0.1	0.4	0.4
Indonesia				
Malaysia	16.2	15.0	17.5	13.0
Philippines	1.9	1.5	2.4	2.1
Thailand	4.9	5.1	4.6	3.8
Vietnam	0.9	0.4	1.3	0.0

SOURCE: Department of Statistics, *Yearbook of Statistics* (1997); Ministry of Trade and Industry, *Economic Survey of Singapore 1997*.

of the Asian Dollar Market contracted by 3.4% in first quarter 1998, accelerating to 14% in the second quarter. This reflected contractions in loans to regional countries as projects were delayed to reduce current account deficits, and the unwillingness of banks to commit in a climate of economic uncertainty. It also reflects the consolidation of Japanese banks' international banking activity arising from their bad debt problems and the need to meet capital requirements back home.

Economic Slowdown and Job Losses

Singapore achieved a creditable GDP growth rate of 7.8% in 1997 and 5.6% in first quarter 1998. An early official growth forecast of 2.5%–4.5% for 1998, already factoring in the regional crisis, had to be progressively revised downward to 0.5%–1.5%, as the deteriorating financial and economic conditions in the region took their toll. Exports grew by only 1.6% in the second quarter, with expected negative growth in the second half year. Both domestic investment and consumption demands have been dampened by a series of factors — negative wealth effects, weak incomes, tight bank liquidity, weak market sentiments, wage restraints and job retrenchments, and a strong Singapore dollar diverting demand to neighbouring countries.[7]

Total employment grew by a robust 6.2% in 1997, higher than the 5.5% average for 1994–96. By 1998, however, the economic slowdown had begun to impact on the job market. Retrenchments have been on the rise and are expected to accelerate in the second half-year. Trade union leaders are expecting the unemployment rate to rise to 7%, a rate which Singapore has not experienced since the late 1960s.

Riding out the Regional Crisis

In spite of pressures on the currency, and stock and property markets, the government has so far refrained from direct intervention. To maintain investor confidence and strong country credit ratings, it has reiterated that Singapore's fundamental approach towards economic development remains unchanged, with continuing reliance on market forces, allowing free capital flows and foreign investments, and remaining plugged into the global economy.[8] To help stimulate domestic demand, there will be increased public investment expenditures on infrastructure and tax rebates. While the government can do little to restore regional demand, it seeks to ensure international competitiveness by drastic cost cutting in the short term and by promoting education and training, encouraging new investments and liberalizing the financial sector in the longer term.

The government budget presented in February 1998 was still providing for a budget surplus, albeit smaller than previous years. However, as the economic downturn worsened, a S$2 billion off-budget package of cost cutting and stimulus measures was announced in June (*Business Times*, 30 June 1998). These include several measures targeted at the sagging property market — an additional 40% property tax rebate on commercial and industrial properties; cutting of posted rents and rental rebates by government agencies; suspension of government land sales for the rest of 1998 and 1999; deferment of stamp duty payment on properties purchased; suspension of the premium levied on developers of private residential properties for extension of completion date, and raising the financing scheme for local enterprises from S$1.1 billion announced in the February budget to S$2 billion. The measures have been unable to stop the slide in the property market, which suffers from a supply overhang. A second round of cost-cutting measures, targeted at job maintenance, is expected towards the end of 1998, including substantial wage cuts, CPF cuts, cuts in land and rental costs and in government user charges.[9] For the longer term, the government is also carrying out economic restructuring and strategic planning to enhance Singapore's international and regional competitiveness through investment in education and training and infrastructure development.

As part of the strategy to ensure competitiveness as a financial centre, MAS embarked on a fundamental review of its policies and established the Financial Sector Review Group (FSRG) in August 1997 (*MAS Annual Report* 1997/98). It is noteworthy that Singapore, with its long established reputation of being a tightly controlled financial sector, is liberalizing at a time when other countries are seeking more controls. MAS is shifting emphasis from regulation to supervision (*MAS Annual Report 1997/98*). Instead of imposing onerous regulations and restrictions on all institutions, MAS will give better-managed institutions more leeway to assume risk profiles, while maintaining stricter controls on weaker ones. This new approach is expected to minimize systemic risk as it will enable MAS to conduct frequent bank examinations that focus on evaluating risk management processes and internal control systems. To help investors assume investment risks themselves, MAS will improve banking disclosure standards and foster market discipline. Under the newly-formed Financial Supervision Group (FSG), the Banking Department now conducts off-site supervision and on-site examination of all commercial banks, merchant banks and finance companies.

In February 1998, the government accepted nearly all the proposals made by the Finance and Banking Subcommittee looking into the competitiveness of Singapore's financial sector. MAS is given the task of promoting Singapore as a world class financial centre providing a broad range of services and products, and a new Financial Sector Promotion Department was set up for that purpose. For banks, the minimum cash balance requirement has been halved from 6% to 3% to allow them greater flexibility in managing their liquidity, reduce the banks' cost of funds and improve their competitiveness. Some measures have also been implemented to further develop the debt capital market and the fund management, insurance and securities industries.

Conclusion

Singapore has not been as seriously affected by the regional currency and financial crisis as several countries in the region. For the latter, the crisis has necessitated not only stabilization measures and structural reforms to restore investor confidence and financial health, but has been complicated by or contributed to political and social turmoil. There are growing demands for greater government transparency, accountability and responsibility and for social safety nets for the poor and unemployed.

The regional currency and financial crisis has impaired Singapore's growth performance, but has not led to a collapse of the Singapore dollar nor jeopardized the health of the financial sector, nor given rise to political and social unrest. These fortunate outcomes reflect Singapore's strong economic and financial fundamentals; sound macroeconomic and financial policies; dependence on foreign direct investment rather than foreign loans; strict prudential regulation and supervision of the financial sector; and good governance, with accountability and responsibility giving credibility to government policies and actions. However, if the regional crisis is prolonged and systemic risk increases, then the impact on Singapore would be much more serious and domestic action alone would not be adequate.

The Singapore Government has not remained complacent. It has instituted measures to ensure short-term stability in currency and financial markets. Measures to stimulate domestic demand include tax cuts and pump priming through increased expenditure on infrastructure. Measures to help business enterprises remain competitive and stay afloat include cost cutting, aimed at reducing rentals, wage costs and other business costs. An economic downturn becomes an opportunity for reform and restructuring, and investments in education, training and infrastructure to improve competitiveness in the longer term. Reform and restructuring of the financial sector is already under way. The Committee on Singapore's Competitiveness is expected to complete its report and deliver its recommendations towards the end of 1998.[10]

Singapore's regionalization drive was launched in the early 1990s to enable Singapore companies to overcome the growing domestic constraints of land and labour shortage and domestic demand saturation by investing in the East Asian region. Many of these overseas investments have been seriously hurt by falling asset values, bad debts, shrinking demand and cash flow problems. However, the countries in crisis need tremendous amounts of foreign investment to help recapitalize their financial institutions and restructure corporate debts, and they have liberalized their foreign ownership restrictions. This presents a tremendous opportunity for cash-rich Singapore companies, including government-linked companies (GLCs), to embark on regional acquisitions and strategic alliances.

As a less affected country, Singapore is also trying to provide assistance to the crisis countries, through bilateral loans and trade financing schemes and through humanitarian food aid. But Singapore is a small country, and the assistance it can give is bound to be limited, both in amount and impact.

NOTES

1. There are no officially released statistics on the number of foreign workers in Singapore. The proportion is an educated estimate.
2. There is no official poverty line. However, a public housing programme introduced in 1960 has resulted in 86% of the population being provided with public flats, with an ownership rate of 81%. There are no urban slums and ghettos and no street vagrants. The GINI coefficient has remained relatively stable.
3. The last external loan, in 1994, amounted to only S$4.7 million. Private sector external borrowings have been moderated by the abundance of domestic savings and the low differential between international and domestic interest rates.
4. The equity ratio measures the financial corporate sectors' dependence on external financing while the current ratios measure their liquidity. Data are from the *Yearbook of Statistics*.

5. Singapore has often been criticized by the United States for maintaining protective financial regulations, even though these were largely imposed for prudential reasons.
6. Singapore trade statistics do not include trade with Indonesia, which is widely acknowledged as a major trading partner. This exclusion results in a serious downward bias of the importance of the ASEAN market.
7. The sharp differences in retail prices of consumer goods in Singapore and in Johor have induced large numbers of Singaporeans to do their weekend shopping in Johor. In an effort to contain the cost of living, the Malaysian Government imposed price controls on essential food items. Cross-border shoppers are now not allowed to buy cooking oil and Johor customs officers have introduced searches and confiscations.
8. See for example, the speech by the Prime Minister in the United States, as reported in *Business Times* on 24 September 1998, and the speech by the Deputy Prime Minister and Chairman of MAS in Tokyo, as reported in *Business Times*, on 1 October 1998.
9. Wage cuts were considered to have been an important factor in the recovery from the 1985–86 recession. Through a series of speeches in recent months, government ministers and trade union leaders have been preparing workers for wage cuts.
10. The Committee on Singapore's Competitiveness was constituted before the outbreak of the regional crisis and tasked with recommending measures to enable Singapore to remain internationally competitive in the years to come. The report has been delayed owing to the regional crisis.

REFERENCES

Business Times (*Business Times*). various issues.

Monetary Authority of Singapore (MAS). *Annual Report 1997/98.*

Singapore, Department of Statistics. *Yearbook of Statistics*, various years.

Singapore, Ministry of Trade and Industry. *Economic Survey of Singapore*, various annual and quarterly issues.

Straits Times (*Straits Times*), various issues.

Tyabji, Amina. "Capital Flows and Macroeconomic Stabilisation in Singapore". *Coping with Capital Flows in East Asia*, edited by In C.H. Kwan, Donna Vandenbrink and Chia Siow Yue. Singapore: Institute of Southeast Asian Studies, and Japan: Nomura Research Institute, 1998.

Chia Siow Yue is Director, Institute of Southeast Asian Studies, Singapore.