

he Monetary Authority of Singapore (MAS) is the central bank of Singapore. It formulates and executes Singapore's monetary and exchange rate

policies. As banker and financial agent to the Government, it manages the country's official foreign reserves and facilitates the

issuance of government securities.

As supervisor and regulator of



Singapore's financial services sector, MAS has prudential oversight over the banking, securities, futures and insurance industries. It is also responsible for the development and promotion of Singapore as an international financial centre.

MAS is governed by a Board of Directors, comprising the Chairman, Deputy Chairman, Managing Director, and three other members. The Chief Executive of MAS is the Managing Director, who is entrusted with the Authority's day-to-day operations and administration. He is assisted by a Management Team comprising two Deputy Managing Directors and nine heads of departments.

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Non-Bank Financial Institutions

DOMESTIC CAPITAL MARKET

Asian Dollar Market

# OUR MISSION

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The MAS seeks to promote sustained and non-inflationary growth of the economy as well as foster a sound and progressive financial services sector.

# OUR OBJECTIVES

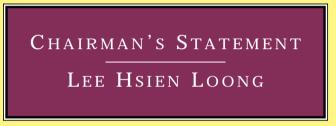
- To conduct monetary and exchange rate policies appropriate for steady and non-inflationary economy growth.
- To maintain conditions conducive to a sound financial services sector.
- To act as banker to, and financial agent of, the government.
- To develop a competitive and progressive financial services sector.
- To build a cohesive organisation of excellence that will attract, motivate and retain employees of quality.
- To foster sound working relationships with other central banks, international financial organisations, and public and private institutions in Singapore.



MAS has had an eventful year.

The Asian financial crisis has totally changed the regional landscape, and seriously affected the Singapore economy. In response to the increased volatility and uncertainty of financial markets, MAS has managed

the exchange rate of the Singapore Dollar with greater flexibility, in order to maintain price stability and confidence in the Singapore Dollar and financial system, without losing export competitiveness. On a trade-



weighted basis, the exchange rate has appreciated slightly since mid-1997, when the regional crisis began, reflecting Singapore's relatively strong economic and financial fundamentals.

The regional turmoil notwithstanding, we have embarked on a fundamental review of our approach to regulating and developing the financial sector. We set up the Financial Sector Review Group, and commissioned private sector committees to study specific aspects of financial sector liberalisation. We also engaged McKinsey & Co to do a strategic review of the sector and identify major opportunities for developing the industry further.

Falling regulatory barriers, advances in information technology and a tidal wave of mergers are transforming global financial markets. Financial activities are consolidating in fewer centres, and competition is becoming intense. To secure Singapore's position as a major financial centre in this bracing environment, a fresh approach is needed.

First, MAS is shifting its emphasis from regulation to supervision. Instead of imposing onerous regulations and restrictions on all institutions, MAS will give better-managed institutions more leeway to assume risk profiles they are comfortable with. This risk-focused supervisory philosophy will place greater attention on minimising systemic risk than on preventing bad business decisions or safeguarding each and every financial institution.

Second, MAS will leave it to investors to judge business risks. We cannot assess the merits of individual products or services offered by financial institutions on their behalf. But we will raise information disclosure standards, to enable investors to make informed decisions.

Third, MAS is promoting the financial sector more actively. Our vision is to develop Singapore as a world-class financial centre offering a broad range of services and products.

These changes do not signal any slackening of supervisory vigilance. The regional crisis underlines the critical importance of maintaining high standards of integrity and sound financial management. Restrictions will be placed on weak or poorly managed institutions to prevent their problems from disrupting the stability of the financial system as a whole.

To carry out this new approach, MAS has restructured itself and recruited more talent to reinforce its departments. We have re-configured the Financial Supervision Group to align with the trend towards the integration of financial industries and to support our new risk-focused approach. We have set up a dedicated Financial Sector Promotion Department.

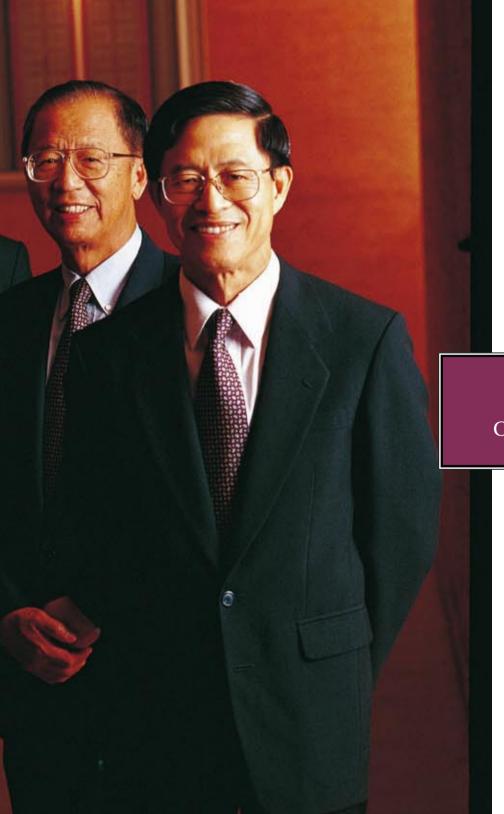
The MAS Act has been amended to increase the maximum number of Directors from 7 to 10, to bring a broader spectrum of experience to the Board. I welcome to the Board Mr Lim Hng Kiang, Mr J Y Pillay, and Mr Khaw Boon Wan. On behalf of the new Board, I thank my predecessor, Dr Richard Hu, and the former Deputy Managing Director, Banking and Financial Institutions Group, Mr Koh Beng Seng, for their invaluable contributions to MAS. Under Dr Hu's stewardship, MAS pursued policies that ensured consistent macroeconomic stability and a sound financial sector. Mr Koh Beng Seng played a pivotal role in building up the financial sector, and establishing the high standards of financial regulation for which Singapore has become known. I would also like to thank Mr Moses Lee, Chairman POSBank, who has served on the Board of Directors since 1994. Mr Lee resigned from the Board following the merger between DBS Bank and POSBank.

My colleagues on the Board of Directors join me in thanking all MAS staff for their professional excellence and untiring dedication during this challenging year.

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Lee Hsien Loong Chairman Monetary Authority of Singapore





Mr J Y Pillay and Mr Khaw Boon Wan joined the Board of Directors on 1 July 1998 and 1 August 1998 respectively. Mr Moses Lee resigned from the Board of Directors on 24 July 1998.

## $\begin{array}{c} \text{Members} \\ \text{of the Board} \end{array}$

Mr Lee Hsien Loong *Chairman* 

MR MOSES LEE KIM POO *Member* 

Mr Lim Hng Kiang *Member* 

Mr Chan Sek Keong *Member* 

MR LEE EK TIENG Deputy Chairman

MR KOH YONG GUAN Managing Director

From left: Sitting: Koh Yong Guan *Managing Director* 

Ms Yeo Lian Sim Assistant Managing Director Markets & Investments

Mrs Shih Siew Poh Executive Director Human Resource & Corporate Services Tan Chek Ming Executive Director Financial Sector Promotion

Mrs Irene Khong Executive Director Internal Audit

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Standing: Tharman Shanmugaratnam Deputy Managing Director Financial Supervision Group

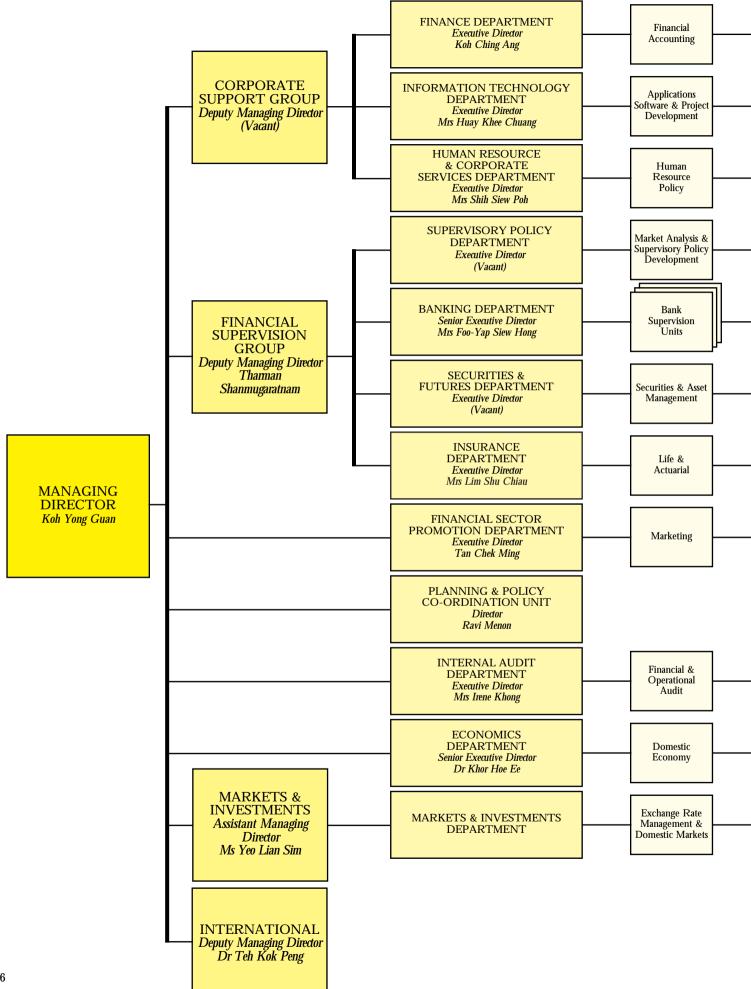
Dr Teh Kok Peng Deputy Managing Director International

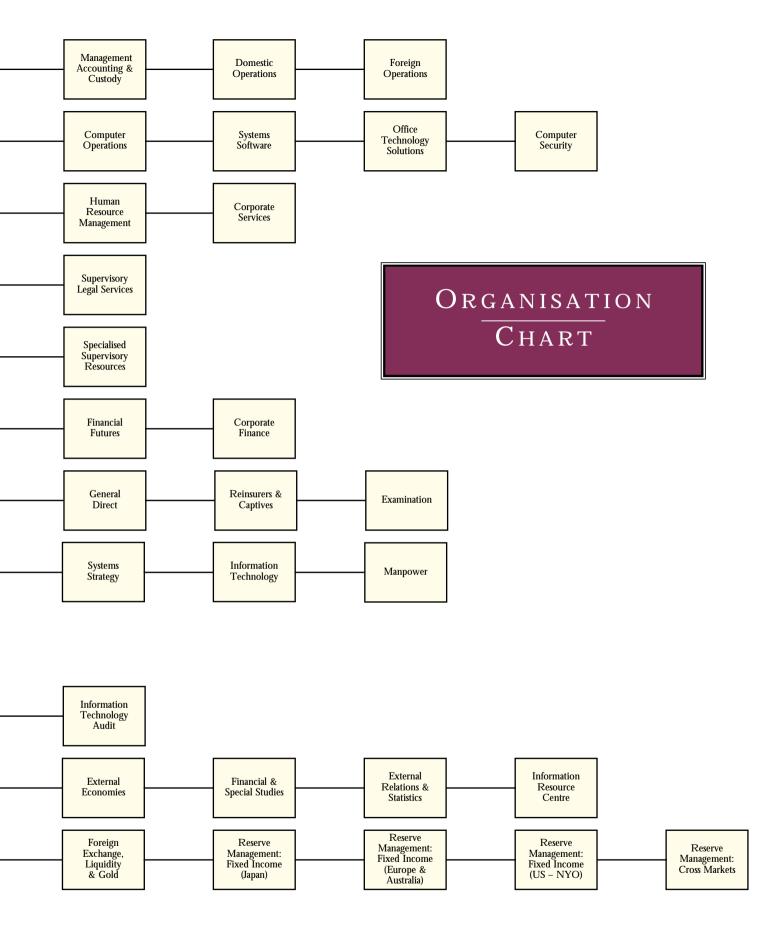
Koh Ching Ang Executive Director Finance Mrs Huay Khee Chuang Executive Director Information Technology

Mrs Lim Shu Chiau Executive Director Insurance Dr Khor Hoe Ee Senior Executive Director Economics

Mrs Foo-Yap Siew Hong Senior Executive Director Banking

## The $\frac{Management}{Team}$





## ORGANISATIONAL STRUCTURE

MAS is organised into a Corporate Support Group, a Financial Supervision Group, and four departments reporting to the Managing Director.

#### CORPORATE SUPPORT GROUP

The Corporate Support Group (CSG) comprises three departments: the Finance Department, the Human Resource and Corporate Services Department, and the Information Technology Department.

#### **Finance Department**

The Finance Department (FD) maintains the official accounting records of MAS' assets and is responsible for the settlement, custody monitoring and performance evaluation of MAS' international investments. FD also administers the issue of government securities, and maintains the government securities systems as well as the current accounts of banks and international monetary organisations. It also provides budgeting services to MAS.

#### Human Resource and

#### **Corporate Services Department**

The Human Resource and Corporate Services Department (HRD) formulates and implements MAS' human resource policies. This includes recruiting for the organisation, managing an objective appraisal system, ensuring a competitive remuneration package, and organising and co-ordinating training programmes. HRD also provides general office and building services to all departments in MAS, and manages public relations (excluding media), the marketing and lease administration of office space, and security of the MAS building. Information Technology Department The Information Technology Department (ITD) promotes and provides IT services to the other departments of MAS. ITD also manages two nation-wide financial networks, namely the MASNET and the Real Time Gross Settlement (RTGS) System. MASNET provides the infrastructure and standard for efficient electronic communications in the financial sector. RTGS minimises payment risks for Singapore's banking system.

## FINANCIAL SUPERVISION GROUP

The Financial Supervision Group (FSG) is responsible for the regulation, supervision and licensing of all banks and financial institutions in Singapore. The Group is organised into four departments, namely the Banking Department, the Insurance Department, the Securities and Futures Department, and the Supervisory Policy Department.

#### **Banking Department**

The Banking Department (BD) has prudential oversight of all commercial banks, merchant banks, and finance companies in Singapore, both local and foreign. It conducts both off-site supervision and on-site examination. BD is also responsible for the licensing of these institutions.

#### **Insurance Department**

The Insurance Department (ID) is responsible for the supervision of the insurance industry. ID administers the Insurance Act, which governs the licensing of insurance companies, and monitors insurers' financial soundness and their compliance with minimum prudential standards as stipulated in the Act.

#### Securities and Futures Department

The Securities and Futures Department (SFD) is responsible for the regulation of securities, asset management and financial futures companies, and capital markets. It oversees the Stock Exchange of Singapore (SES) and the Singapore International Monetary Exchange (SIMEX). SFD is responsible for the development of supervisory practices for the fund management industry, and the regulation of take-overs and mergers as well as unit trusts and other investment products.

#### Supervisory Policy Department

The Supervisory Policy Department (SPD) is responsible for policy formulation in the areas of financial sector regulation and supervision. SPD's functions include bank and market analysis, risk assessment, development of risk-based supervisory procedures, and the provision of supervisory legal services.

#### **Financial Sector Promotion Department**

The Financial Sector Promotion Department (FPD) is responsible for developing and promoting Singapore as a financial centre. Its functions include marketing to existing and new players, and identifying and promoting new financial activities and products. FPD is also responsible for developing a leading edge information technology infrastructure and manpower resources and capabilities for the financial sector. It also develops appropriate fiscal incentives for promoting the sector.

#### Markets and Investments Department

The Markets and Investments Department (MID) conducts Singapore's exchange rate and monetary policies and invests the country's

financial reserves abroad. MID also acts as the banker and financial agent of the Government. It manages the issue of Government securities and develops the Government securities and other interest rate markets. MID has a representative office in New York.

#### **Economics Department**

The Economics Department (ED) formulates monetary and exchange rate policies for the Singapore economy. It also contributes to sound economic policies through the provision of relevant information, analysis and recommendations. ED conducts regular assessments of economic and monetary developments in Singapore and the regional economies, and is responsible for relations with major international organisations.

#### Internal Audit Department

The Internal Audit Department (IAD) conducts financial, operational and information systems audits of MAS' operations. It ensures compliance with policies, guidelines, laws and regulations with respect to the operations reviewed. IAD is also responsible for ensuring the reliability of financial records, and the security and integrity of information systems in the Authority.

#### Planning and Policy Co-ordination Unit

The Planning and Policy Co-ordination Unit (PPC), under the Managing Director's Office, is responsible for cross-department co-ordination, strategic and scenario planning, organisational development, and corporate communications. PPC collates, analyses, and integrates inputs on policy issues that cut across MAS departments. It formulates and implements the corporate planning process and co-ordinates internal and external communications, including media relations.

## CALENDAR OF MONETARY

#### AND FINANCIAL EVENTS

April 1997 – June 1998

#### DOMESTIC

#### 5 June 1997

The Stock Exchange of Singapore (SES) relaxes the fees and listing requirements for foreign currency debt securities in a move to promote the listing of such instruments in Singapore.

#### 24 June 1997

SIMEX signs a linkage agreement with Deutsche Terminborse to allow German futures contracts to be traded on SIMEX.

#### 25 June 1997

MAS raises the Singapore Dollar loan limit for offshore banks by \$50 million to \$200 million.

#### 11 July 1997

The Finance Minister, in his 1997/98 Budget, announces the following tax incentives for the financial sector:

- More incentives for large ACUs and fund managers;
- Tax exemption for managing foreign currency IPOs and for trading foreign currency shares;
- Easier tax exemption for fees from underwriting syndicated offshore debt;
- Concessionary 10% tax for credit rating firms; and
- Limit on tax deduction for banks' general provision raised to 3%.

#### 1 August 1997

SES launches the new delivery versus payment system which enables shares to be delivered immediately upon payment so that cash and shares are exchanged simultaneously in the Central Depository accounts.

#### 2 December 1997

SES announces that it has agreed with the Taiwan Stock Exchange to promote dual listing of shares on each other's bourses, study cross-trading of securities and cooperate closely in enforcing and exchanging surveillance information.

#### 21 January 1998

SIMEX members can now trade on the Singapore Commodity Exchange, in line with other major global financial centres.

#### 9 February 1998

SIMEX frees its minimum commission rates on all its remaining futures contracts, namely, the Nikkei 225, the Nikkei 300, Japanese Government Bond and fuel oil contracts.

#### 18 February 1998

The government accepts most of the recommendations of the Finance & Banking Sub-Committee of the Competitiveness Study Committee to liberalise the financial sector.

#### 26 February 1998

MAS unveils measures that will further liberalise the Central Provident Fund unit trust scheme, rewrite the investment guidelines to give fund managers greater flexibility, and raise disclosure standards so that CPF investors can make informed decisions.

#### 27 February 1998

The Insurance (Amendment) Regulations 1998 takes effect. The regulations prescribe revisions to investment limits, introduce new permitted counterparty exposure limits, and provide clarification on the valuation of unit trusts.

The Finance Minister, in his 1998/99 Budget, announces the following tax incentives for the financial sector:

- Tax exemptions and concessions to promote fund management, bond market, unit trusts, and syndicated offshore credit and underwriting facilities;
- Tax incentives liberalised to encourage banks and merchant banks to build up their general reserves for possible bad loans; and
- Tax holiday for SIMEX extended again, to year 2003, while tax incentives for venture capital funds to be extended on a case-by-case basis by up to a further 5 years beyond the current maximum of 10 years.

#### 1 May 1998

The Central Provident Fund (CPF) Board, under the CPF Investment Scheme, allows members to sell their shares as soon as a day after their purchase, if they have enough funds to settle the buy trade in their CPF accounts.

#### 4 May 1998

The Stock Exchange of Singapore (SES) replaces the mandatory rules on audit committees with a voluntary guide.

#### 5 May 1998

The Singapore International Monetary Exchange (SIMEX) allows stockbrokers to sell stock indexlinked futures contracts traded on SIMEX.

#### 20 May 1998

The Government lifts virtually all the investment restrictions on CPF-approved unit trusts with the objective of boosting Singapore's fund management industry.

#### 8 June 1998

The Monetary Authority of Singapore (MAS) raises the Singapore Dollar resident limit on offshore banks from S\$200 million to S\$300 million.

#### 12 June 1998

MAS announces new guidelines for unit trusts not covered by the CPF Investment Scheme. The guidelines are:

- minimum initial investment for unit trusts scrapped;
- no minimum investment amount in unit trust required before regular savings plans can be offered;
- investment guidelines to apply for all non-CPF unit trust, irrespective of their minimum initial subscription; and
- investment in derivatives relaxed;

In addition, a unit trust managers' handbook of guidelines is compiled for easy implementation and greater transparency.

#### 29 June 1998

Parliament passes the MAS (Amendment) Bill 1998 which includes:

- increasing the maximum size of the MAS Board from 7 to 10; and
- financial sector promotion as one of MAS's main objectives.

Parliament passes the Banking (Amendment) Bill 1998 which covers a Real-Time Gross Settlement (RTGS) system to be effective on July 13.

The Finance Minister announces a S\$2 billion off-budget package to cut business costs and boost the Singapore economy. Among the measures are:

- lifting the current 3% limit on tax deduction for general provisions by banks and merchant banks for Year of Assessment 1999; and
- suspension of stamp duty on contract notes for share transactions for 1 year with immediate effect, to lower stockbrokers' cost.

#### EXTERNAL

#### 8 April 1997

The world's central banks and regulators agree on a comprehensive set of rules to supervise banking operations worldwide. The rules concern:

- minimum capital requirements;
- the need for adequate internal controls;
- the evaluation of country risk in international lending; and
- the need for external auditors and full disclosure practices.

#### 9 April 1997

Australia announces plans in its Wallis Inquiry Report, to reform its financial services industry. Among the proposals are:

- loosening restrictions on mergers between banks, and life insurance companies;
- lifting barriers to foreign takeovers of local banks; and
- reforming financial system regulation.

#### 16 May 1997

The Japanese Diet enacts a law that ends the monopoly of banks in the foreign exchange business, allowing other companies and individuals to freely sell and buy foreign currencies.

#### 22 June 1997

South Korea announces a detailed plan for the first phase of financial reforms. Among the measures are:

- brokerage houses would be allowed to issue corporate bonds and underwrite trade and broker commercial paper beginning July;
- banks would be permitted to raise funds through financial bonds; and
- Insurers would be allowed to engage in foreign exchange operations.

#### 2 July 1997

Taiwan's Securities and Futures Commission allows Taiwan firms with local listings to list shares in overseas exchanges, and likewise, foreign companies to list and trade their shares on the Taiwan stock exchange.

The Thai government floats the Thai Baht.

11 July 1997 The Central Bank of the Philippines floats the Philippine Peso.

Bank Indonesia widens the Indonesian Rupiah-US dollar intervention band from 8% to 12%.

#### 14 July 1997

The International Monetary Fund (IMF) offers the Philippines almost \$1.1 billion in financial support under fast-track regulations drawn up after the 1995 Mexican crisis.

#### 11 August 1997

IMF unveils a rescue package for Thailand, including loans totalling \$17.2 billion from the Fund and Asian nations.

14 August 1997 Bank Indonesia floats the Indonesian Rupiah.

#### 21 September 1997

The Interim Committee of the IMF approves a move aimed at giving the Fund mandate over capital market liberalisation.

#### 31 October 1997

IMF offers Indonesia a financial stabilization package worth US\$23 billion which will require the Indonesian government to dismantle the import monopoly of Bulog, the state logistics agency, and restructure the banking sector.

#### 10 November 1997

Trading on MSCI Taiwan index futures on SIMEX is extended from the floor pits to the computer screen, in which the Taiwan index futures contracts are listed for after-hours trading on the Automated Trading System.

#### 1 December 1997

The Hong Kong Monetary Authority forms a pan-Asian bond trading and settlement facility by linking Hong Kong's trading system with Australia's Central Moneymarket Unit.

Asean finance ministers endorse the so-called Manila Framework, which gives the IMF the lead role in managing financial rescues in the region.

#### 3 December 1997

South Korea seals the biggest ever IMF bail-out package of US\$57 billion.

8 December 1997

The Chicago Board Options Exchange launches options on two mutual fund indexes, namely, the Lipper/Salomon index options.

13 December 1997 The World Trade Organization reaches a landmark pact to liberalise the financial services industry.

15 December 1997 South Korea floats the Korean Won.

16 February 1998

South Korea liberalises its capital market further by allowing foreigners to buy corporate bonds, commercial papers and trade bills.

17 April 1998 Taiwan launches its first futures markets.

#### 1 April 1998

Japan launches its 'Big Bang' financial system deregulation. Some key measures that form the backbone of the financial reform are as follows:

- easing of restrictions on foreign exchange transactions
- liberalising brokerage commissions on securities transactions exceeding 50 million Yen;
- introducing corrective action for banks with low capital adequacy; and
- giving some autonomy to the Bank of Japan

30 June 1998

The European Central Bank is inaugurated.

### Key Economic and

#### FINANCIAL STATISTICS

	1993	1994	1995	1996	1997]
National Income Aggregates					
Gross Domestic Product					
At Current Market Prices (\$m)	94317.5	108216.9	120704.1	130775.3	143014.
Growth Rate (% change)	16.5	14.7	11.5	8.3	9.
At 1990 Market Prices (\$m)	85387.3	94367.9	102531.2	109572.8	118077.
Growth Rate (% change)	10.4	10.5	8.7	6.9	7.
Gross National Product					
At Current Market Prices (\$m)	93497.8	109160.5	121887.4	133108.0	146890.
Growth Rate (% change)	13.5	16.8	11.7	9.2	10.
Labour Force					
Unemployment Rate (%)	1.9	2.0	2.0	2.0	1.
Productivity Growth (% change)	7.0	5.7	3.5	0.6	1.
Employment Growth (% change)	4.5	4.4	6.4	5.6	6.
Average Monthly Earnings (% change)	6.3	8.8	6.4	5.8	5.
Unit Labour Cost (% change)	1.2	3.2	2.2	4.0	1.
Savings and Investment					
Gross National Savings (\$m)	42536.7	52904.6	60957.0	66734.6	75144
As % of GNP	45.5	48.5	50.0	50.1	51
Gross Domestic Capital Formation (\$m)	35749.2	35539.9	40702.8	46170.0	53422.
As % of GNP	38.2	32.6	33.4	34.7	36
Balance of Payments (\$m)					
Goods Balance	-4401.4	2068.7	1384.2	3136.4	1700.
Exports of Goods	125802.2	149565.8	167896.5	177679.6	186758.
Growth Rate (% change)	16.0	18.9	12.3	5.8	5.
Imports of Goods	130203.6	147497.1	166512.3	174543.2	185057.
Growth Rate (% change)	16.9	13.3	12.9	4.8	6.
Services and Other Balances	11304.2	15424.5	18971.0	17623.8	20278.
Current Account Balance	6902.8	17493.2	20355.2	20760.2	21979.
As % of GNP	7.4	16.0	16.7	15.6	15.
Capital and Financial Account Balance	-2073.6	-17984.1	-1027.3	-3633.2	-6991.
Balancing Item	7324.5	7792.6	-7154.0	-6720.4	-3131.
Overall Balance	12153.7	7301.7	12173.9	10406.6	11855.
Official Foreign Reserves	77866.8	85165.5	97336.6	107750.8	119616.
Inflation (% change)					
Consumer Price Index	2.3	3.1	1.7	1.4	2.
GDP Deflator	5.5	3.8	2.6	1.4	1.
Monetary Aggregates (% change)					
M1	23.6	2.3	8.3	6.7	1.
M2	8.5	14.4	8.5	9.8	10.
M3	10.9	15.9	10.1	8.5	10.

	1993	1994	1995	1996	1997P
Interest Rates (period average)(% per annum)					
Prime Lending Rate	5.39	5.82	6.37	6.26	6.30
Banks' 3-month Fixed Deposit Rate	2.30	3.00	3.50	3.41	3.47
Banks' Domestic 3-month Interbank Rate	2.40	3.62	2.60	2.92	4.06
3-month SIBOR – US\$	3.32	4.76	6.01	5.52	5.73
Exchange Rates (period average)(S\$ per)					
US Dollar	1.6158	1.5274	1.4174	1.4101	1.4848
Pound Sterling	2.4271	2.3377	2.2369	2.2017	2.4334
Deutsche Mark	0.9781	0.9423	0.9900	0.9377	0.8569
100 Japanese Yen	1.4568	1.4951	1.5154	1.2971	1.2277
Malaysian Ringgit	0.6277	0.5823	0.5651	0.5605	0.5353
Banking and Finance					
Commercial Banks' Assets/Liabilities (\$m)	170250.4	201952.5	224578.7	252723.4	289572.3
Growth Rate (% change)	11.1	18.6	11.2	12.5	14.6
Finance Companies' Assets/Liabilities (Sm)	14994.4	18997.7	21135.5	21189.4	22210.6
Growth Rate (% change)	13.5	26.7	11.3	0.3	4.8
Merchant Banks' Assets/Liabilities (\$m)	42205.3	45049.4	50253.1	53580.6	66661.2
Growth Rate (% change)	14.7	6.7	11.5	6.6	24.4
Asian Currency Units' Assets/Liabilities (US\$m)	386103.0	416345.4	478232.9	506870.2	557193.5
Growth Rate (% change)	8.6	7.8	14.9	6.0	9.9
Insurance					
Life Insurers' Assets/Liabilities (\$m)	8429.1	10542.2	13230.2	16626.5	19350.9
Growth Rate (% change)	31.0	25.1	25.5	25.7	16.4
General Insurers' Assets/Liabilities (Sm)	5770.1	6483.9	7221.1	7996.1	8815.0
Growth Rate (% change)	5.7	12.4	11.4	10.8	10.3
POSBank					
Total Net Deposits Inflow (during period) (\$m)	1823.9	-449.9	1564.6	2058.9	386.1
CPF					
Excess of Contributions Over Withdrawals (\$m)	-522.2	3977.6	6270.0	4078.3	4398.3
Domestic Capital Market					
Net Funds Raised in Domestic Capital Market (\$m)	14366.1	13178.7	15864.5	15556.7	16536.4

OVERVIEW

#### The Economy

The external economic environment deteriorated sharply with the outbreak of the regional currency crisis in July 1997. What began as a financial crisis soon developed into wider economic and social crises. Compared with 1996, GDP growth in the region was significantly lower last year. This year, many regional economies are heading into recession.

Reflecting its good economic and financial fundamentals, Singapore has weathered the regional crisis relatively well and its financial system has remained sound. Nevertheless, the economy has been seriously affected by the sudden deterioration in the external environment. The high GDP growth of 7.8% in 1997 masked the adverse effects of the regional crisis, which began spilling over into Singapore only towards the end of last year. GDP growth has fallen sharply from 10.7% in Q3 97 to an estimated 1.6% in Q2 98. For 1998 as a whole, the economy is expected to register growth averaging 0.5-1.5%.

The economic slowdown reflects largely external factors. Singapore's exports are expected to weaken as the regional economies rein in their spending on consumer and capital goods. In particular, the electronics industry has been badly affected by excess capacity and drastic cuts in IT spending in the region. Activity in the Asian dollar market and foreign exchange market has contracted and is expected to remain weak. The regional crisis has also dampened domestic consumer sentiment, weighing down the retail and property sectors. To cushion the effects of the economic slowdown, the government has announced a package of off-budget measures. The package, amounting to \$2 billion, aims to cut business costs, enhance economic infrastructure, and help stabilise the property and financial sectors.

Given the volatility and uncertainty stemming from the regional crisis, MAS has managed the exchange rate of the Singapore Dollar with greater flexibility. The chief consideration has been to maintain price stability and confidence in the Singapore Dollar while safeguarding export competitiveness. Notwithstanding the significant depreciation against the US Dollar, the exchange rate has appreciated slightly on a trade-weighted basis since mid-1997, and inflation has remained subdued. The economy's overall competitiveness, as measured by the real effective exchange rate, was relatively stable in 1997, thanks to higher manufacturing productivity growth which has kept Singapore's unit labour cost increases lower than in our major trading partners.

#### The Financial Sector

MAS has embarked on a fundamental review of its policies towards regulating and developing the financial sector. A Financial Sector Review Group (FSRG) was formed in August 1997 to oversee this effort. Several major initiatives have since been introduced.

In its supervisory role, MAS is shifting its emphasis from regulation to supervision. Rather than a "one-size-fits-all" approach, MAS will monitor and differentiate among institutions by giving the stronger and well-managed ones more operational flexibility while maintaining stricter controls on the weaker ones.

MAS' new risk-focused supervisory approach will seek to minimise systemic risk rather than safeguard each and every individual institution. Bank examinations will focus on evaluating risk management processes and internal control systems, instead of detailed transaction testing. This new approach will enable MAS to conduct more focused and frequent examinations. MAS will continue to maintain high supervisory standards, which is the cornerstone of a sound banking system.

Investors will be left to judge and assume business risks for themselves. To help them make informed decisions, MAS will raise information disclosure standards and foster market discipline. In this regard, MAS has accepted the recommendations made by a committee of private sector bankers and public accountants to improve banking disclosure standards in Singapore.

In its developmental role, MAS is taking a strategic approach to make Singapore a worldclass financial centre. It has engaged McKinsey & Co to identify key growth opportunities and formulate strategies to develop the sector further. MAS has also engaged Arthur D Little to develop an IT infrastructure plan for the financial sector.

MAS is also playing a more proactive role in promoting the financial sector, and forging a closer partnership with the industry through a more open and friendly operating environment. In February this year, the government accepted nearly all the proposals made by the Finance and Banking Sub-committee of the Ministry of Trade and Industry's Committee on Singapore's Competitiveness. Some of these proposals have since been implemented.

To boost the fund management industry, MAS has revised the investment guidelines for CPF-approved unit trusts so as to give fund managers more flexibility to diversify their portfolios. To help grow the industry, another \$25 billion of public funds will be placed out to fund managers for management over the next 3 years. The minimum shareholders' funds required of foreign companies wishing to set up as investment advisers in Singapore has been cut from \$500 million to \$100 million.

To help develop the debt capital market, MAS issued for the first time 10-year government securities in July 1998. This \$1.5 billion issue will extend the benchmark yield curve on which other bond issues can be priced. MAS and other statutory boards also plan to issue more bonds in the coming years to enlarge the tradable pool of Singapore dollar debt.

For the insurance industry, MAS has relaxed the investment restrictions on insurers' Singapore general insurance and non-investment-linked life insurance funds. The minimum paid-up capital requirement for captive insurers has been lowered from \$1 million to \$400,000.

For banks, MAS has halved the minimum cash

balance (MCB) requirement from 6% to 3%, to allow them greater flexibility in managing their liquidity and improve their competitiveness. The measure will reduce banks' cost of funds as they will be able to invest the excess balance to earn more interest income. Some of this cost saving will ultimately be passed on to consumers. The reduction in MCB does not compromise MAS' prudential standards nor does it signal an easing of monetary policy.

Efforts are also underway to make Singapore's securities industry more competitive. A private sector committee is studying ways to open up the industry to greater international competition and liberalise brokerage commission. Another private sector team – on corporate fundraising – has issued a consultation paper recommending a predominantly disclosure-based regulatory system, increased participation by institutional investors, and the consolidation of securities regulation in MAS.

In terms of infrastructure, Singapore has kept apace with developments in global payment systems. To reduce settlement risks, MAS launched the MAS Electronic Payment System in July 1998. This new real-time gross settlement system, which also incorporates the settlement of Singapore Government Securities on a Delivery vs Payment (DvP) basis, replaces the previous end-of-day net settlement system for inter-bank funds transfers in Singapore.

#### The Organisation

MAS underwent a restructuring to align itself with industry trends, support its expanded functions,

and enhance organisational effectiveness.

Within the newly-constituted 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, both local and foreign. The Insurance Department has been brought under FSG, in recognition of the need to align the regulatory approach across financial industries. The Securities and Futures Department integrates the regulation of the securities industry, asset management and financial futures companies, and the capital markets. The new Supervisory Policy Department seeks to strengthen policy formulation in financial sector regulation and supervision.

To focus MAS' efforts in promoting the financial industry and developing Singapore as a world-class financial centre, a dedicated *Financial Sector Promotion Department* has been set up. Besides attracting new activities and players, this new department will carry out manpower and IT planning for the financial sector as well as design and implement incentive schemes.

Other changes include the setting up of a *Planning* and *Policy Co-Ordination Unit* under the Managing Director's Office to strengthen policy integration, strategic planning, and corporate communications; the renaming of the International Department as the *Markets and Investments Department* to better reflect its functions; and the setting up of a *Corporate Support Group* comprising the *Human Resource and Corporate Services Department*, the *Information Technology Department*, and the *Finance Department*.



The Singapore economy grew by a strong 7.8% in 1997. The outlook for 1998 is for much slower growth, with the effects of the regional economic crisis passing through more fully. GDP is expected to grow by 0.5% to 1.5%.

#### THE EXTERNAL ENVIRONMENT

#### Global Economic Backdrop

In the first half of 1997, the global economic outlook was relatively favourable. In particular, economic growth for the industrial economies was expected to be slightly stronger<sup>1</sup>. The US was into its sixth consecutive year of economic expansion as consumer spending and investment growth were spurred by low interest rates. In Europe, growth was supported by the exportled recovery in Germany and buoyant domestic demand conditions in the UK. The main uncertainty was the strength of the recovery of the Japanese economy, given the weakness of the financial system and the fiscal consolidation programme.

In Asia, while weak exports and tighter demand policies in some countries suggested slower economic growth, an expected upturn in the global electronics market, a main determinant of regional export performance, brightened the region's prospects for 1997 somewhat.

However, such prospects were soon dissipated with the outbreak of the regional currency crisis in July 1997. Growth for the ASEAN-4 countries suffered the largest decline to 4.3% for 1997 from 7.0% in 1996. In the NIEs (Korea, Taiwan and Hong Kong), GDP growth declined to 6.1% in 1997 from 6.4% in the previous year.

The industrial economies, on the other hand, were less affected by the Asian crisis, with 1997 GDP growth increasing to 2.9% from 2.5% in 1996. This reflected above-potential growth in the US and the UK, where domestic demand conditions remained robust. Other EU countries

saw economic recovery gather strength throughout 1997 as consumer confidence remained strong and exports buoyant.

#### THE ASIAN CURRENCY CRISIS

#### Early Warning Signals

In retrospect, the fairly sanguine external outlook in early-1997 had somewhat masked the impending Asian financial crisis, signs of which had in fact emerged as early as the second half of 1996. Speculative attacks on the Baht arose from concerns over Thailand's widening current account deficit, the rise in external debt and over-exposure of the financial sector to a flagging property market. In Korea, indications of trouble also surfaced in the first half of 1997 when a number of chaebols defaulted on their debts.

The Currency Crisis in Southeast Asia For more than a year, the Bank of Thailand put up a strong defence of the Baht. Capital controls were adopted in May 1997 but to no avail and the Baht was eventually floated on 2 July 1997, when it depreciated immediately by 15%. Contagion effects spread rapidly to the other ASEAN currency markets.

On 11 July, the Peso depreciated by 12%, following the widening of the trading range for peso-dollar rates. Bank Indonesia floated the Rupiah on 14 August. The Malaysian Ringgit and Singapore dollar also weakened against the US Dollar.

Central banks in the region raised interest rates and imposed capital controls, but failed to restore stability to the currency markets. Acknowledging the fundamental collapse of confidence, various

<sup>1</sup> Source: World Economic Outlook Oct 96 : 2.5% in 1997 compared with 2.3% in 1996.

ASEAN countries entered into IMF programmes to help their economies tide through the crisis.

#### Spillover to Northeast Asia

In October 1997, the contagion spread to Northeast Asia. The Hong Kong Dollar peg remained intact, reflecting the firm response of the Hong Kong Monetary Authority, particularly its willingness to allow domestic interest rates to rise. However, both the New Taiwan Dollar and the Korean Won succumbed to selling pressures. The New Taiwan Dollar was allowed to depreciate against the US Dollar while the fluctuation band for the Won was widened. Korea sought IMF recourse on 21 November but could not erase concerns over a possible debt moratorium which led the Won and Korean stock market into a freefall. The financial markets only stabilised following concerted efforts by the IMF and the major industrial countries to encourage banks to rollover and restructure their short-term debt to Korea.

#### Deterioration in the ASEAN region

Even as the Won regained strength in January 1998, the situation in the ASEAN region worsened. Capital flight from the region reflected worries over rating agencies' downgrade of Thailand and Indonesia, corporate and financial failures and political uncertainties. In mid-January 1998, the Ringgit, Baht and Peso fell to their historical lows against the US Dollar.

Investor confidence was also shaken by rising apprehensions about Indonesia: the extent of its external debt problem, its compliance with IMF reforms and a controversial proposal for a currency board system in February 1998. This was, however, shelved indefinitely in March 1998 and Indonesia has since embarked on a new IMF programme.

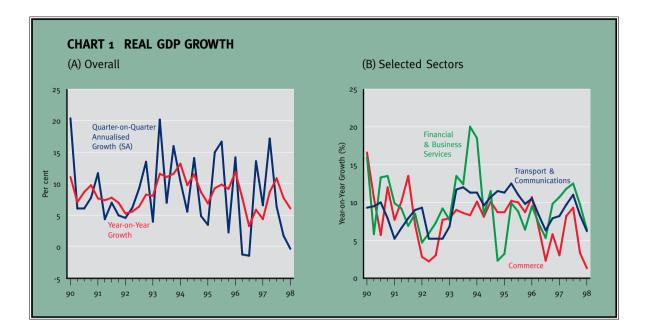
#### Developments in 1998

The regional financial markets saw some respite over February-April 1998 as countries embarked on economic and financial restructuring programmes. Exchange rates appreciated by some 20% to 80% from their historic lows in mid-January 98 while stock markets stabilised somewhat. However, during May-June 1998, political developments in Indonesia and a weakness of the Japanese Yen renewed pressures on the regional financial markets. Stock markets in the region hit new historic lows while the exchange rates depreciated. The current prognosis is for either negative or low GDP growth in 1998 for most of the countries in the region while inflation will be significantly higher.

#### ECONOMIC ACTIVITY

#### **Recent Developments**

The Singapore economy expanded by a strong 7.8% in 1997, compared with 6.9% in 1996. Growth had recovered after hitting a low in the third quarter of 1996 due to the cyclical global electronics downturn. The manufacturing sector was beginning to pick up in 1997, in tandem with the global electronics cycle, even as the regional currency crisis broke out in the middle of the year. The resulting surge in activity in the equities and foreign exchange markets, both before and in the immediate aftermath of the crisis, spurred growth in the financial services sector to 15% for the year as a whole. The transport and communications sector, which benefited from liberalisation in the mobile communications industry, also registered strong growth. Another major source of strength in the economy came from the construction sector, which, underpinned by public construction activity, expanded by 13%.

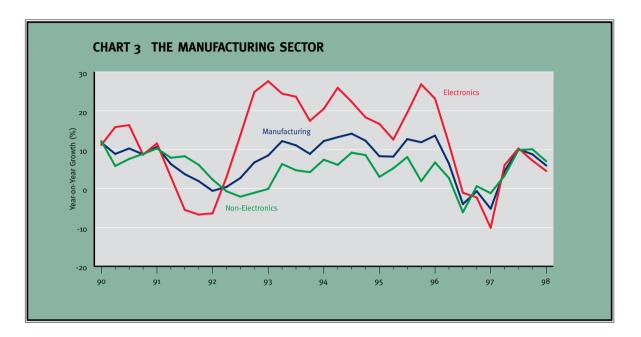




Nonetheless, the adverse effects of the regional currency turmoil began to spill over to the Singapore economy from the latter part of 1997. Growth moderated from 10.7% in Q3 97, to 7.6% in Q4 97 and 6.1% in Q1 98. On a seasonally-adjusted quarter-on-quarter annualised basis, growth fell from 6.2%, to 1.6% and 0.3% respectively. The commerce sector was particularly hard hit, as it is more susceptible to a regional slowdown. Following a 14% decline in

Q4 97, tourist arrivals fell sharply again in Q1 98, by 20%, as a result of a plunge in the number of visitors from the region. Visitors from other parts of the world also stayed away because of the haze from forest fires that enveloped the region during the second half of 1997. Both entrepot and domestic trade continued to record lower growth in Q1 98.

In the manufacturing sector, growth of 6.1 %



in Q1 98 was largely supported by the non-electronics industry, particularly in petrochemicals and aviation transport equipment. Growth of electronics manufacturing, on the other hand, trended down from 10% in Q3 97, to 7.2% in Q4 97 and 4.5% in Q1 98. The moderation in growth of electronics production reflected weak demand coupled with excess capacity and falling prices in the semiconductor and disk drive industries.

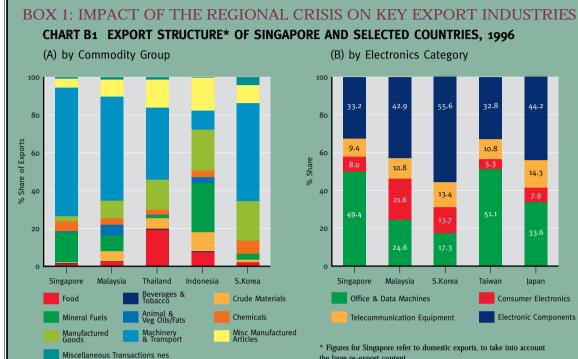
Activity in the foreign exchange and stock markets fell sharply towards the end of last year, as trading in regional currencies and equities evaporated in the wake of the crisis. In the first quarter of 1998, trading activity picked up somewhat, reflecting a brief improvement in sentiment after Chinese New Year.

#### Economic Impact of Regional Turmoil in 1998

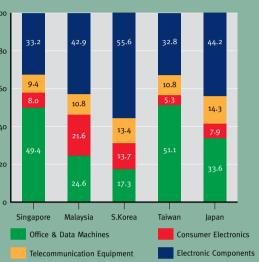
The adverse impact from the regional economic turmoil is expected to be felt more fully in 1998, with GDP growth forecast to weaken significantly to 0.5% - 1.5%. The financial services sector, which expanded by 15% in 1997,

is likely to experience a contraction. Financing activity in the Asian Dollar Market is expected to decline, as the regional economies curtail their investment and infrastructural projects in an environment of uncertainty and austerity. This will be exacerbated by a consolidation of Japan's international banking activity, as its domestic banking problems continue to unfold. The commerce and transport sectors are also expected to be weighed down by a further slowdown in re-exports, particularly of consumer and capital goods, to ASEAN. Retail trade would be hit both from the decline in tourists and weak consumer sentiments. The reduction in regional air traffic will dampen the air transport industry.

While manufacturing output growth will find some support from capacity expansion, particularly in the semiconductor and chemical industries, prospects for a sustained momentum in growth have diminished, in light of developments in the region and in the global electronics market. The spread of the currency crisis to South Korea has caused the Korean Won to depreciate sharply, thereby increasing the competitive pressure on



(B) by Electronics Category



The advent of the regional currency crisis, and its subsequent spread to Northeast Asia, has given rise to concerns about its adverse impact on Singapore's exports. In particular, exports of the regional countries would have become relatively more competitive as their currencies have weakened against the Singapore Dollar.

Chart B1(a) shows that among the countries most affected by the currency crisis, the export structures of Malaysia and South Korea are broadly similar to that of Singapore, particularly in the machinery & transport category. This category comprises mainly electronics.

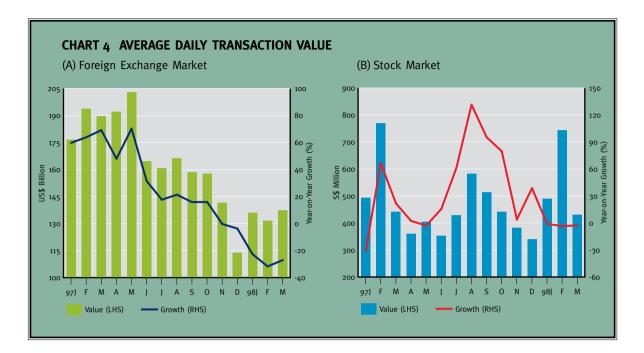
Among the major electronics exporters, however, Singapore's exports are comparatively more skewed towards office and data machines (of which over 40% are disk drives), while Malaysia's and South Korea's are mainly in electronic components or semiconductors. (See Chart B1b). Nonetheless, electronic components form a substantial proportion of Singapore's exports. The considerable depreciation of the Won has increased the competitiveness of South Korea vis-à-vis Singapore, especially since South Korea is a major world manufacturer of electronics components, churning out one-third of the world's supply of Dynamic Random Access Memory (DRAM) chips.

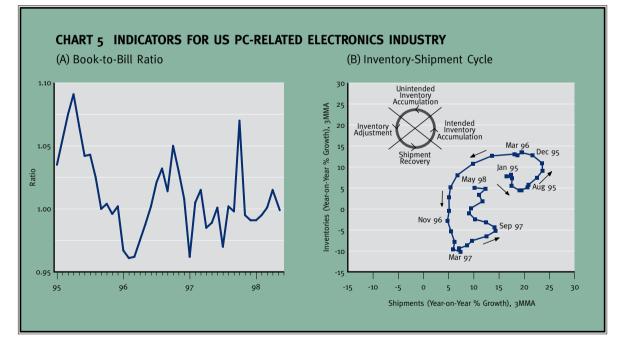
\* Figures for Singapore refer to domestic exports, to take into account the large re-export content.

Singapore also faces considerable competition from South Korean petroleum refining and petrochemicals industries, whose capacities have expanded in the past two years. South Korea has the advantage of being nearer to the region's largest importers of refined petroleum and petrochemicals - Japan and China. However, further major investment in capacity could be limited by the chaebols' current financial difficulties.

As Chart B1(b) shows, Japan is also a key exporter of semiconductors, while Taiwan's electronics exports are most similar to Singapore's.

With the spread of the currency turmoil to Northeast Asia, overall demand for Singapore's exports would be dampened this year. Based on 1997 shares, Northeast Asia accounted for a significant 27% of Singapore's domestic exports, while ASEAN, the US and the EU accounted for 21%, 25% and 17% respectively. However, the adverse impact from the regional slowdown could be cushioned to some extent by the fact that a significant share of Singapore's exports is intermediate goods, such as electronic components. These are used for final production to be exported largely to the Western industrial countries, such as the US and the EU, which are still the largest markets for electronics products.





some of Singapore's key exports. Singapore's exports could also face additional pressure from further weakening of the Yen and New Taiwan Dollar against the Singapore Dollar. Overall regional demand for our exports will also continue to soften. Box Item 1 provides a more detailed discussion of these factors. More Muted Global Electronics Recovery? Recent indicators suggest that the recovery in the global electronics industry will be muted. In the semiconductor industry, prices of Dynamic Random Access Memory (DRAM) chips continued to decline following a brief respite early this year. Furthermore, the disk drive industry is still working through its inventory overhang problem, which was precipitated by aggressive expansion of smaller players, a lack of product differentiation, and a move by PC makers towards a build-toorder production system. However, the forward indicators remain indecisive as the US PCrelated book-to-bill ratio has hovered around the critical unity level, while the inventory-shipment cycle is showing some signs of weakness. (See Chart 5 on previous page.)

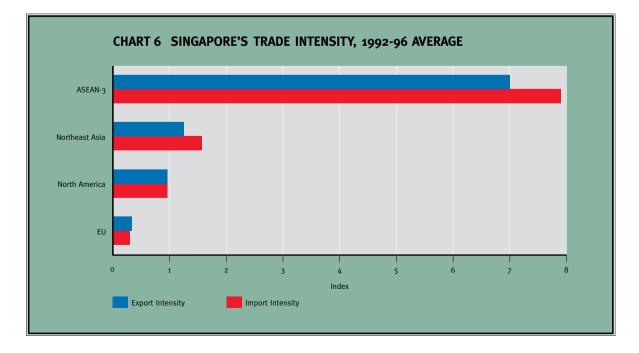
#### Domestic and External Demand

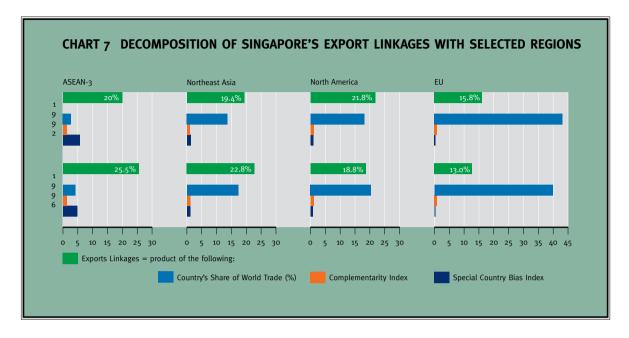
In 1998, GDP growth will be dampened by major weakening in both domestic and external demand. Domestic demand would be supported to some extent by the strong expansion in public investments, particularly in on-going infrastructural projects like the Northeast MRT line and the land reclamation project for the petrochemical complex on Jurong Island. However, private investment would be adversely affected by the on-going consolidation in the private residential property market and the general slowdown in economic activity. Consumption expenditure will be affected by weak consumer sentiments, as the economy slows down and labour retrenchment increases.

The spillover effects from the regional downturn will also be manifested in weak external demand, as the regional economies rein in their spending on consumer and capital goods. This is already evident in the sharp decline in export growth of goods and services in the first quarter of the year.

#### SINGAPORE'S TRADE LINKAGES

The impact of the regional downturn on Singapore's exports will not be insignificant. Singapore's trade linkages with the ASEAN economies have strengthened in recent years. Between 1992 and 1996, the ASEAN-3<sup>2</sup> share of Singapore's total exports expanded from 20% to 26%, while its share of Singapore's total imports grew from 19% to 22%. In contrast, Singapore's trade linkages with the European Union (EU)<sup>3</sup>





and North America have, on the whole, weakened in recent years. The pattern of Singapore's trade linkages with Northeast Asia<sup>4</sup> was mixed.

#### Factors Driving Trade Linkages

Changes in Singapore's trade linkages with another country can be attributed to changes in the importance of that country in world trade, and its intensity of trade with Singapore. Trade intensity measures the importance of that country in Singapore's trade vis-à-vis its importance in trade with the rest of the world. As shown in Chart 6, Singapore's export intensity index with ASEAN-3 averaged 7.0 for 1992-96, implying that the share of Singapore's exports going to ASEAN-3 was 7 times the region's share of world imports. Similarly, Singapore's import trade intensity with the region was also very high, at 7.9.

Singapore's trade intensity with a particular country can in turn be disaggregated into

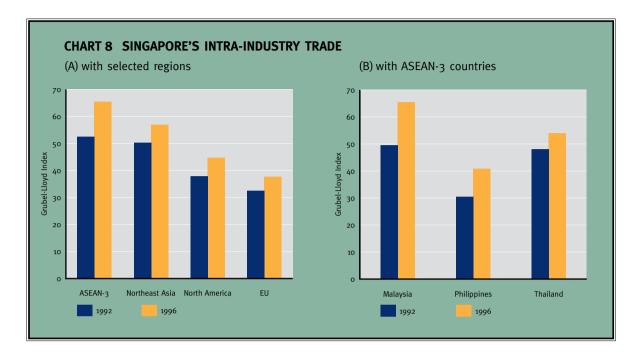
two components. The first component is the complementarity index, which measures the extent of the match between Singapore's exports (imports) and the other country's imports (exports), compared to its match with world trade. The second component, special country bias, measures the degree of impediment faced by Singapore in its trade with that country, compared with Singapore's other bilateral trading relations. Special country bias is determined largely by factors such as investment flows, geographical proximity, historical associations, common ideology, and trade agreements.

Chart 7 shows that special country bias was the most important factor in the Singapore's export linkages with ASEAN-3, reflecting geographic proximity, and the strong ties under the ASEAN framework in facilitating Singapore's trade with the region. In contrast, Singapore's export linkages with other regions are more

<sup>2</sup> ASEAN-3 refers to Malaysia, Thailand and the Philippines.

<sup>3</sup> EU includes the UK, Germany, Austria, Denmark, France, Italy, Finland, Switzerland, Sweden, Spain, Ireland, Belgium and Luxembourg.

<sup>4</sup> Northeast Asia here refers to Japan, China, South Korea, and Hong Kong.



closely related to their share of world trade. Nonetheless, the importance of special country bias in Singapore's export linkages with ASEAN-3 has declined over time. In fact, much of the increase in the share of ASEAN-3 in Singapore's exports between 1992 and 1996 was due to the region's growing importance in world trade. The degree of complementarity between Singapore's exports and the region's imports has also increased during the period.

#### Intra-industry Trade

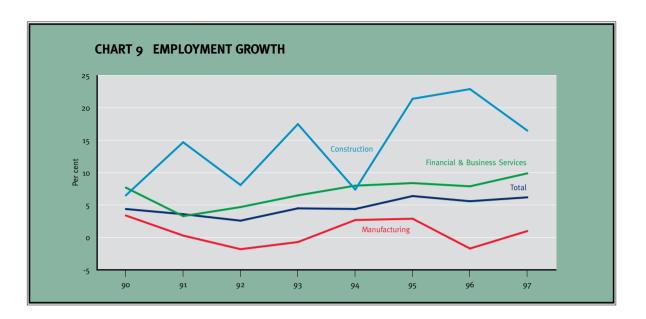
Singapore's strong trade linkage with ASEAN-3 was also characterised by extensive intraindustry trade. As can be seen in Chart 8A, intra-industry trade as measured by the Grubel-Lloyd index<sup>5</sup>, was more significant in Singapore's trade with ASEAN-3, than with the other regions. Electronic products accounted for the largest share of Singapore's intra-industry trade with ASEAN-3, with a share of 57% in 1996. This reflects the broader trends of convergence in economic development, and the establishment by multinational corporations of a transnational network of production facilities in the region.

Among the ASEAN-3, the degree of Singapore's intra-industry trade linkage with Malaysia was the strongest, followed by Thailand and the Philippines. (See Chart 8B.)

#### Implications for Singapore's Exports

In view of Singapore's dependence on ASEAN-3 as an export market, the expected regional slowdown would have the effect of dampening Singapore's external demand. The fairly high special country bias suggests that Singapore's trade with ASEAN-3 could be more affected by the regional downturn, as it is driven more by factors like geographical proximity and historical ties, than by a close match between the traded commodities. However, the significant share of intra-industry

<sup>5</sup> The Grubel-Lloyd index is a commonly used measure for the size of intra-industry trade within total trade.



trade is expected to mitigate some of this adverse impact, especially if the demand for intermediate products used in the final production of goods bound for the US and Europe remains healthy. Nonetheless, these production linkages could be adversely affected by the severe credit crunch facing regional manufacturers, as recent data on regional exports seem to suggest.

#### THE LABOUR MARKET

#### Employment

Reflecting the pick-up in economic activity, total employment expanded by a robust 6.2% in 1997, compared with the 1994-96 average of 5.5%. The strong overall employment growth, however, masked significant differences in sectoral employment growth rates.

Employment in the manufacturing sector turned around from a contraction in 1996 to register modest growth in 1997, reflecting a rebound in the electronics industry in the second and third quarters of the year. The financial and business services workforce grew by about 10%, boosted by the sector's buoyant doubledigit growth during the year. In contrast, the consolidation in the property sector resulted in a moderation in construction employment growth. (See Chart 9.)

Other indicators point to an overall easing of the labour market. The job vacancy rate<sup>6</sup> fell to a low of 4.4% in 1997, from 4.8% in 1996. The average monthly resignation rate also declined, reflecting greater uncertainty in job prospects.

### Productivity, Wages

and Unit Labour Costs

Productivity growth in the economy improved to 1.6% in 1997, from 0.6% the year before. This was due to productivity gains of 3.3% in the non-construction sector. In particular, the manufacturing sector recorded the strongest productivity growth of 5.3%. However,

<sup>6</sup> This refers to the total number of job vacancies as a percentage of the sum of employment and total vacancies, as defined by the Ministry of Manpower.



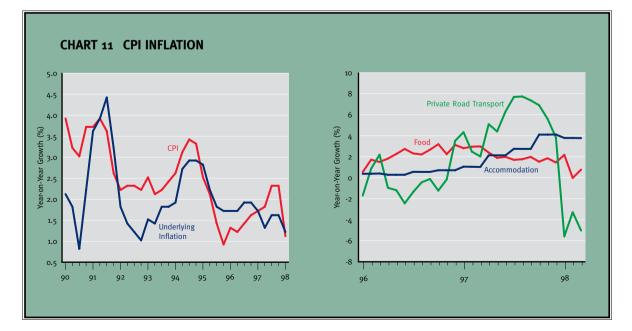
construction productivity declined by 5.7%, compared with a contraction of 4.8% in 1996, thereby dampening overall productivity growth. Wage growth moderated marginally to 5.7% in 1997, from 5.8% in 1996. Unit labour costs were dampened by higher productivity growth, rising by 1.1%, compared with 4.0% in 1996.

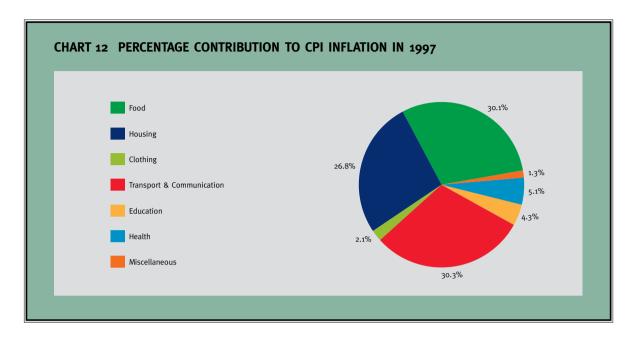
in GDP growth to 5.9%. All the major sectors, except manufacturing and transport and communications, registered negative productivity growth in Q1 98. Hence, despite a further moderation in nominal wage growth to 4.8%, unit labour costs rose slightly faster, by 1.8%. (See Chart 10.)

In the first quarter of 1998, overall productivity contracted slightly, following the moderation

Labour Market Outlook

The impact of the regional currency crisis on





labour market conditions is expected to be felt more acutely in 1998. Retrenchments, which started to rise in the last quarter of 1997, reached 7,131 in Q1 98, compared with 9,784 for the whole of 1997. Both the average monthly recruitment and resignation rates were lower in Q1 98, compared with a year ago, reflecting weaker labour demand amidst the difficult business climate and heightened job insecurity among workers.

Given the slack in the labour market, wage growth is expected to be subdued, as workers lower their wage expectations. The National Wages Council's recommendations for 1998, which called for wage restraint, will also help to keep wage growth down and moderate unit labour cost increases.

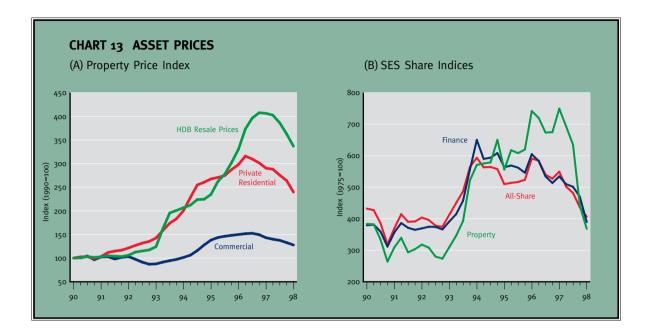
#### INFLATION

The decline in unit labour costs in 1997 was accompanied by a generally subdued inflationary environment. Consumer prices rose faster but by a still-moderate 2%, compared

with 1.4% the year before, reflecting mostly domestic sources of inflation. Price increases in the transport and communications, food, and housing categories accounted for 87% of total CPI inflation in 1997.

Both public and private road transport costs increased at a faster rate. Public road transport inflation escalated due to an upward revision in fares in June 1997, while higher private road transport inflation was attributable to stronger demand for cars, spurred by a spate of innovative car financing schemes. The faster increase in private road transport costs was also affected by hikes in petrol prices, as a result of higher operating costs and crude oil prices. Excluding private road transport costs, CPI inflation was 1.7% in 1997, compared with 1.6% in 1996. Reflecting the volatility of the premium for Certificates of Entitlement (COE), this measure of underlying inflation is more stable than overall CPI inflation.

Additional domestic price pressures arose from a spate of increases in administrative prices, including hikes in utility charges, which raised



housing inflation to 2.3% in 1997, from a mere 0.5% in 1996. Food price inflation, on the other hand, moderated marginally, although it still contributed the most to overall CPI inflation, reflecting its weight in the CPI basket.

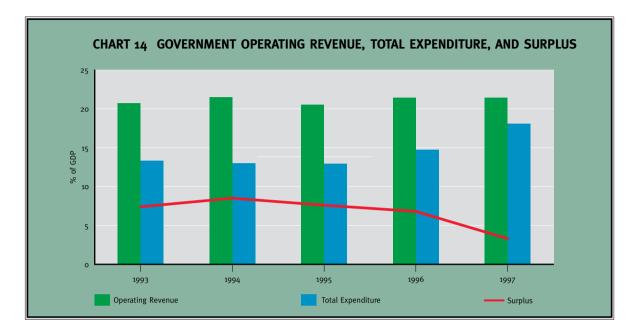
CPI inflation in 1998 is forecast at less than 1%. In the first five months of 1998, inflation reached only 0.9%. The easing in overall price pressures for the year is expected to come mostly from slower increases or declines in the cost of food and transport items. While some upward pressure on the cost of food would come from the poor agricultural harvest resulting from the El Nino effect, the impact would be largely offset by the relatively stronger Singapore Dollar vis-à-vis the regional countries. In addition, retail prices of food will continue to be dampened by the on-going stiff competition among wholesalers and retailers.

Private road transport costs are expected to fall, as premiums of COEs are projected to ease with the release of more COEs. This, together with savings from the new fees for vehicle registration and road taxes, is in line with the government's aim to reduce the cost of car ownership, while raising the cost of usage through the Electronic Road Pricing system. Petrol prices are also expected to remain low, given the current glut in the world market.

The favorable fuel price situation will feed through to the housing sector too, via cheaper electricity tariffs. The increase in the private rentals component of the housing category has also started to moderate, reflecting the oversupply in the property market. Lower price pressures from these quarters would partially offset the pass-through from last year's increases in administrative charges, and a further increase in water charges this year.

#### **Asset Prices**

Prices in the property and stock markets contracted in 1997. The first half of 1997



saw property prices adjusting to the dampening effects of the May 1996 curbs on private residential property. Weak sentiments were exacerbated by the onset of the regional financial crisis in the second half of 1997, and the uncertainty of its impact on the Singapore economy. All sectors of the property market were affected, with private residential and commercial property prices declining at doubledigit rates towards the end of the year, as an oversupply situation began to build up. The contraction continued into the first quarter of 1998, with the private residential property price index declining by 24% from its peak in the second quarter of 1996.

In the equities market, prices also fell, with the SES All-Share Index declining by 21% in 1997. Reflecting an erosion in general investor confidence, funds were withdrawn from the region as a whole, as the regional financial crisis spread across Southeast and Northeast Asia. In Singapore, the soft property market and the expected impact of the region's financial difficulties on local banks, contributed to declines in the share prices of these major sectors of the stockmarket. Sentiments generally remained weak in the first quarter of 1998.

#### FISCAL DEVELOPMENTS

Fiscal policy was relatively more expansionary in 1997, compared with the previous year. The surplus<sup>7</sup> shrank to 3.3% of GDP, from 6.8% of GDP. While operating revenue remained unchanged at 21.4% of GDP, total expenditure rose to 18.1% of GDP, from 14.7% the year before.

Government operating revenues rose by 9.2% in 1997, down from 13% the year before. Faster increase in income tax revenues, due to a one-off collection from a land rationalisation exercise, was more than offset by lower collections

7 This is before deductions for contributions to the various Endowment Funds and Top-up Schemes.

em	Estimated Impact (\$million)		
usiness Costs	978		
conomic Infrastructure/Capabilities Building	668		
conomic Infrastructure/Capabilities Building	395		

from motor-vehicle taxes, stamp duty and fees and charges.

Government expenditure on education, health and various economic services rose at a more rapid pace in 1997. In particular, development expenditure increased to 7.5% of GDP, from 5.3% of GDP, reflecting the progress of large construction projects such as Jurong Island land reclamation and the Northeast MRT Line, as well as a rise in spending on research and development, and investments in information technology in schools.

In the first quarter of 1998, the government budget recorded a deficit of \$0.8 billion. This was largely a result of a decline in operating revenue, from \$8.4 billion in the last quarter of 1997, to \$6.1 billion. Receipts from income taxes fell by \$1.1 billion. Total expenditure also rose, from \$6.1 billion to \$6.9 billion. Notwithstanding this deficit, for FY97 as a whole (ending March 1998), the government accumulated a surplus of \$6.4 billion.

Following the downward revision of the official GDP growth forecast to 0.5% - 1.5% for 1998, the government announced a package of off-budget measures on 29 June 1998. (See Table 1.) The package of measures totalling \$2 billion is aimed at reducing business costs,

building economic infrastructure and capabilities, and helping to stabilise specific sectors of the Singapore economy.

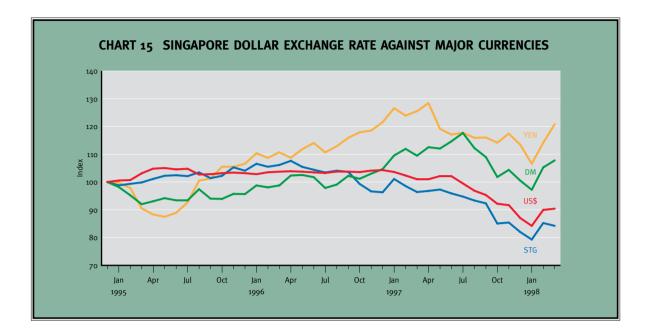
The major business cost containment measures included additional property tax rebates on commercial and industrial properties, suspension of the parking surcharge scheme in the central business district, and a rebate on electricity tariffs.

The government will also speed-up or bring forward public infrastructure projects, such as the building of schools, and the development of Jurong Island and other industrial land. Other specific areas which were to receive support from the measures included the property and financial sectors.

With the inclusion of these off-budget measures, a total of \$1.6 billion is expected to affect the budget balance directly, resulting in a projected budget deficit of about \$800 million for FY98.

#### EXCHANGE RATE POLICY

The steady Singapore Dollar exchange rate policy stance that was adopted in late 1996, continued in 1997. This was consistent with a benign inflation outlook and uncertainty over



the strength of recovery in the manufacturing sector, especially the electronics industry, during the first half of the year. The onset of the regional currency crisis in the second half of 1997 also heightened uncertainty over the extent and duration of the economic slowdown in the region and its adverse impact on the Singapore economy. The accompanying increase in foreign exchange market volatility complicated the management of exchange rate policy to some extent and, concomitantly, the trade-weighted Singapore Dollar was allowed to fluctuate within a wider range. While the Singapore Dollar depreciated against the US Dollar, the tradeweighted, nominal effective exchange rate (NEER) of the Singapore Dollar appreciated slightly, especially after July 1997. Singapore's strong economic fundamentals protected the Singapore Dollar from depreciating to the same extent as the other regional currencies. However, Singapore's export competitiveness as measured by the real effective exchange rate (REER) was relatively stable. Singapore's unit labour costs increased by less than those of its competitors, with the cyclical recovery in manufacturing productivity.

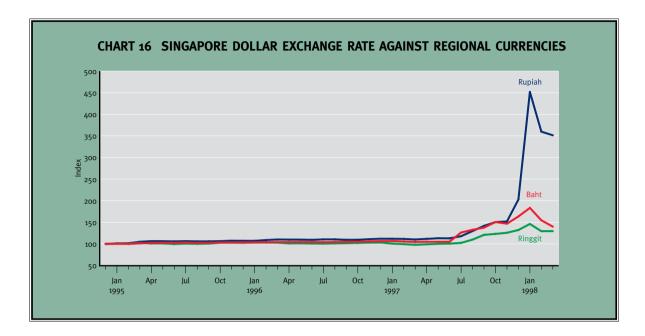
Given lingering uncertainty from the regional currency crisis, MAS will continue to manage the Singapore Dollar flexibly against a tradeweighted basket of currencies. The primary objective of exchange rate policy remains unchanged, namely to maintain price stability in the context of sustaining medium-term economic growth.

#### EXCHANGE RATE DEVELOPMENTS

During the South-East Asian currency turmoil in 1997, the Singapore Dollar depreciated significantly against the major currencies of the US, Japan and Europe but rose sharply against the currencies in Asia, particularly the Indonesia Rupiah, Thai Baht, Malaysian Ringgit and Korean Won.

#### Movements against Major Currencies

The Singapore Dollar, which started the year on a strong note at S\$1.4000 against the US Dollar, traded gradually lower to S\$1.4300 at end June, as the latter rose against the other major currencies. The US currency benefitted from a

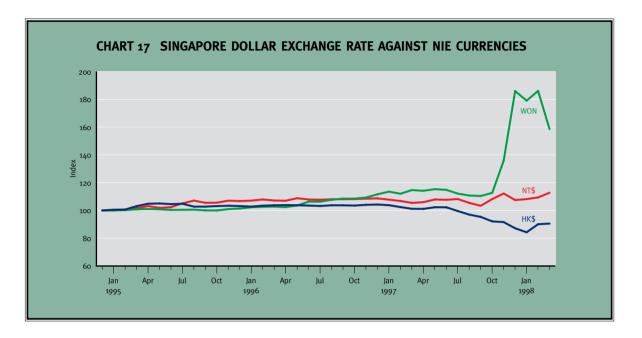


stronger economy, compared to the economies of Europe and Japan. Its buoyant stock and bond markets, despite higher interest rates, also supported its upward momentum. The US Dollar's appreciation against the Singapore Dollar accelerated after June 1997 as the contagion effects of the Thai Baht devaluation spread to the rest of the currencies in the region. Market participants perceiving that the Singapore Dollar should be weaker for Singapore's exports to remain competitive, sold the Singapore Dollar lower. However, traders remained cautious in their sales of the Singapore Dollar as they recognised Singapore's strong long-term economic fundamentals; namely, budget and current account surpluses, high savings, low inflation, large foreign reserves without foreign public debt and a sound financial system. Over the year, the Singapore Dollar weakened by 16.5% to S\$1.6775 against the US Dollar and to a lesser extent, by 6.7% and 4.0% against the Yen and Deutsche Mark respectively.

In the first quarter of 1997, the Singapore Dollar appreciated against the Japanese Yen

on the back of better economic performance, falling Japanese share prices and problems in the Japanese banking system. However, calls by Japanese officials in May for lower US Dollar-Yen levels amidst reports of large Japanese trade surpluses and speculation of possible Bank of Japan monetary tightening, managed to turn the Yen around on to an upward path against the Singapore Dollar. Nevertheless, disappointment that Japanese interest rates would not be raised in a weak economic recovery and continuing concern over the health of Japanese financial institutions capped the Yen's rise.

As with the Yen, the Singapore Dollar rose steadily against the Deutsche Mark in the first half of the year due to jitters over possible delays of a broader European Monetary Union (EMU), rising German unemployment and low interest rates. However, the Deutsche Mark reversed its depreciation against the Singapore Dollar when the latter was affected by the Asian currency turmoil. A 0.3% repo rate hike by the Bundesbank in October 1997, to stem inflationary pressures from an improving



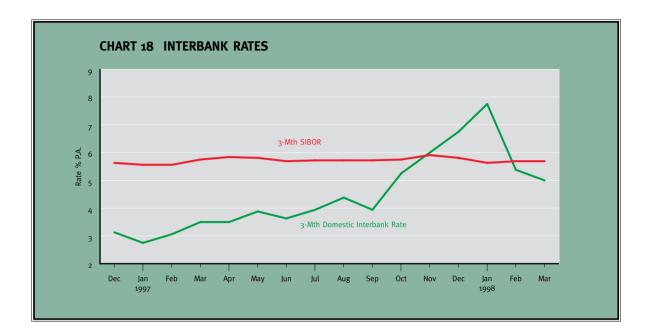
economy, provided additional support to the German currency.

The Sterling Pound, a currency not joining the EMU, strengthened by 14.9% against the Singapore Dollar in 1997, benefitting from strong economic growth and flows out of European currencies. As with the US Dollar, expectation of higher interest rates to curb inflation underpinned the currency's appreciation.

Funds began returning to some parts of Asia in the first quarter of 1998, as the Asian countries embarked on the structural reforms of their economies and political systems. The downward overshooting of some of the Asian currencies towards the end of 1997, corrected partially in the new year. In this retracement, the Singapore Dollar recovered by 3.9% against the US Dollar, 6.5% against the Yen, 7.2% against the Deutsche Mark and 2.7% against the Pound. The US Dollar remained buoyant, sustained by good economic growth, rallying financial markets and tensions in the Middle East. Poor consumer and corporate sentiments in Japan and disappointing fiscal stimulus packages, dampened Japanese economic prospects and kept the Yen weak.

Movements against the Regional and NIE Currencies

The Singapore Dollar was relatively steady against the other currencies in the region but began appreciating sharply in the latter half of 1997. Following the floating of the Thai Baht on 2 July 1997, massive selling of the other South East Asian currencies led eventually to their free-float and steep decline. The Thai Baht came under heavy selling pressure at the start of the year as the Baht's close link to the US Dollar, which had appreciated significantly against most currencies, resulted in an overvaluation of the currency, causing a slump in Thai exports and a widening current account deficit. Insolvent finance companies and growing worries over the ailing stock and property markets, together with a budget deficit and political uncertainty, aggravated the flows out of the Baht. Central bank intervention and interest rates as high as 1,000% pa overnight, to penalise speculators and defend the currency, exacted a heavy cost on the Thai economy.

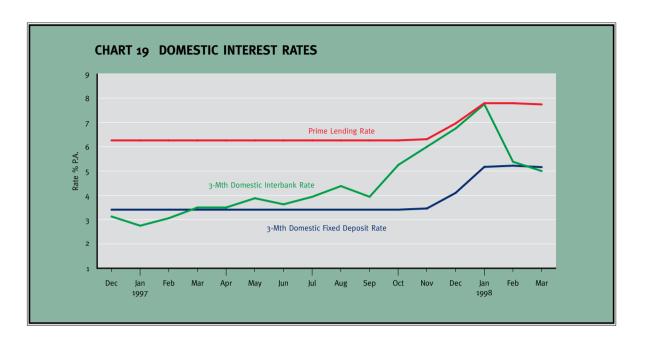


After it was allowed to float freely in the market without intervention, the Thai currency, which started 1997 at Baht 25.6 against the US Dollar and weakened by 1.1% to Baht 25.9 at the end of June, plunged to a depth of Baht 47.2 by the year-end. Over the year, the Singapore Dollar appreciated by 53.8% against the Baht. The IMF's US\$17.2 billion bailout programme and Thailand's implementation of political and economic reforms took effect and helped the currency to recover in the first quarter of 1998.

Among the Asian currencies, the Singapore Dollar strengthened the most, by 81.0%, against the Indonesian Rupiah, after Bank Indonesia abandoned the Rupiah trading band in August 1997. The Rupiah was badly hit again in December 1997 when concerns over President Suharto's health, deteriorating foreign debt, intense corporate hedging and capital flight took its toll on the currency.

In contrast to the other regional currencies, the Singapore Dollar depreciated slightly against the Malaysian Ringgit before the currency crisis broke out in Asia. The Ringgit, which was underpinned by strong economic growth and higher interest rates, was affected by the capital exodus from Asia, but to a lesser extent than the other regional currencies. Over the year, the Singapore Dollar appreciated by 28.3%, from S\$0.55 to S\$0.43, against the Ringgit. The Malaysian currency also suffered from the steep fall in Malaysian share prices.

In the first quarter of 1998, the Singapore Dollar and other Asian currencies recovered partially from the massive selling in 1997 and in January 1998. However, the Indonesian Rupiah continued to weaken after the announcement of what market analysts perceived to be an unrealistic budget, uncertainties over Indonesia's commitment to the International Monetary Fund (IMF) reforms and plans to introduce a currency board system. The Singapore Dollar strengthened by a further 73.3% against the Rupiah, but fell by 14.4% against the Baht and 2.0% against the Ringgit. The Thai Baht recouped some of its losses, on the back of improving current account balance and rising stock prices. Revised IMF targets and progress



in its financial sector reforms also gave some support to the Baht.

The Korean Won was not spared when funds fled Asia. Against the Singapore Dollar, it lost 66.6% of its value, in selling brought on by concerns over cash-strapped *chaebols* and Korea's worsening debt problems. It regained 14.7% of its losses in the first quarter of 1998 after international creditors agreed to reschedule Korea short-term foreign debt and unions, corporates and government representatives, were able to reach an agreement on labour reform. Although the New Taiwan Dollar was also affected by the Asian currency sell-off, its large foreign reserves and resilient stock market cushioned its fall. It managed to appreciate by 1.1% against the Singapore Dollar.

#### INTEREST RATES

#### **Domestic Interbank Rates**

In the first quarter of 1997, interbank rates in Singapore remained low, with capital inflows continuing to supply liquidity to the banking system. The overnight and 3-month interbank rates fell from 3.00% and 3.13% at the start of the year to their lows of 0.50% and 2.25% respectively in February. However, interbank rates rebounded when funds exited the region, in the aftermath of the Thai Baht crisis and caused the Singapore Dollar to weaken against the major currencies. Interest rates in the region rose in the defense of their falling currencies. Notwithstanding, Singapore's interbank rates did not climb sharply until October when the currency turbulence in the South-East Asian region spread to North Asia. The upward pressure on interbank rates in the fourth quarter of 1997, increased as Asian currencies and their stock markets tumbled. In volatile trading, the 3-month interbank rate reached a high of 10.25% on 19 December 1997 before easing to 6.75% at the year-end.

Interbank rates continued to fluctuate over a wide range in the new year due to the continued uncertain outlook for the regional economies. Peaking at 20.00% and 14.00% on 8 January 1998 respectively, the overnight and 3-month interbank rates, together with the Singapore



Dollar recovered subsequently and declined to 3.00% and 5.00% at end-March 1998.

#### Foreign-Domestic

#### Interest Rate Differential

In contrast to the uptrend in Singapore interbank rates, short term US interest rates, were relatively stable in 1997, after a 0.25% hike in Federal Funds rate by the US Federal Reserve in March 1997. The US Dollar 3-month SIBOR fluctuated around 5.75% in 1997. The Singapore 3-month interbank rates, from a level 2.50% below the US Dollar 3-month SIBOR at the start of the year, rose above the latter in October 1997. This sharp climb of the domestic 3-month interbank rate was unsustainable and as money market conditions stabilised, it returned to a differential of 0.69% below its US counterpart by end March 1998.

#### Lending And Deposit Rates

The retail deposit and prime lending rates of leading banks in Singapore were initially unaffected by the movements in interbank rates. In the fourth quarter of 1997, banks raised their retail interest rates due to persistently high interbank rates and the intense competition for funds. Towards end November 1997, when short term interbank rates surpassed 6%, the level of the prime lending rate, banks raised their deposit and lending rates by about 0.5%, for the first time since their last change in June 1995. The upward pressure on interbank rates carried over into 1998, prompting another two rounds of interest rate increases. In January 1998, banks raised their deposit and lending rates twice, by about 0.5% on each occasion. As at end March 1998, the 3-month fixed deposit rate of the leading banks in Singapore ranged between  $4^{5}/8\%$  to  $5^{1}/2\%$  and their prime lending rates between 71/2% to 81/4%. After the three upward revisions to interest rates, the spreads of the prime lending rate of the leading banks in Singapore over their 3 month deposit rates had narrowed from an average of 2.85% to 2.58% and over the 12 month rate, widened slightly from an average of 2.28% to 2.42%.

Following the higher interest rates in the banking system, MAS raised its rediscount rate for pre-export and export bills by 0.5% to 4.00% on 5 February 1998.

#### TRENDS IN MONEY SUPPLY AND CREDIT

#### Money Supply

Overall money supply, as defined by its broadest measure M3, grew by 10.3% in 1997, higher than the 8.5% recorded in 1996. Attracted by higher interest rates, funds moved out of demand deposits into fixed deposits, which grew considerably faster, by 21%, compared with 0.4% growth for demand deposits. Hence, narrow money, M1, grew by a slower 1.7%, from 6.7% the year before. These trends in money supply continued in Q1 98, with M1 contracting by 6.5%, and broad money, M3, expanding by about 10%.

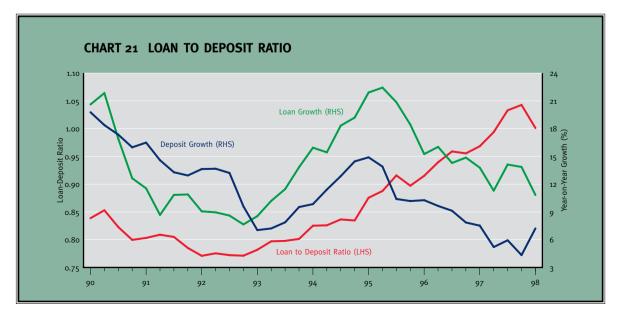
#### Credit

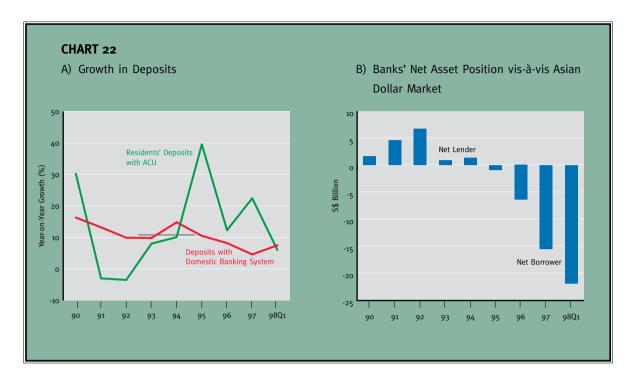
Loans and advances of banks to non-bank customers grew by 13% in 1997, compared with 17% in 1996. Credit growth eased across most major sectors of the economy. Lending to the manufacturing sector, non-bank financial institutions, the commerce sector, professional and private individuals, and the building and construction sector expanded at a slower pace. This slowdown more than offset the faster growth in credit extended to the transport and other miscellaneous sectors.

Finance companies' loans and advances grew faster at 6.8% in 1997, compared with 3.1% the year before. Growth was supported by housing loans, while hire-purchase financing registered a smaller contraction of 0.5%. Credit extended by POSB remained strong.

In Q1 98, growth of lending by both banks and finance companies continued to moderate. Bank lending to the commerce sector, in particular, saw only marginal growth, as overall activity in the sector slowed.

The broader trends in the overall supply and demand for funds indicate that loan growth in the economy was stronger than the growth of deposits. Chart 21 shows that there was a rising trend in the loan-to-deposit ratio from 1992 to 1997. This implies that the banking system was increasingly funding its credit expansion by borrowing from the ACU market or abroad. Indeed residents' deposits with ACU grew strongly by 18% p.a. during 1993-97, higher than the 9% p.a. growth of deposits with the domestic banking system. (See Chart 22a.)





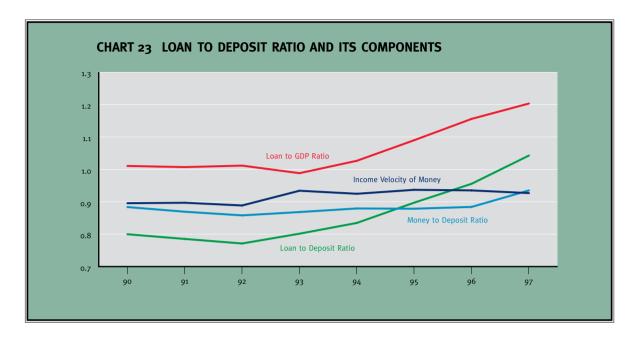
At the same time, the net asset position of banks in Singapore vis-à-vis the Asian Dollar Market turned from positive to negative, implying net borrowing from the ACU. (See Chart 22b.)

From an analytical standpoint, the loanto-deposit ratio can be disaggregated into several components (see Chart 23).<sup>8</sup> The first component is the income velocity of money, which is the ratio of nominal GDP to money supply (M3). The income velocity of money tends to increase over time with technological changes in financial transactions, such as increased use of automated teller machines and credit cards. However, over the period of analysis, 1990-97, this ratio has remained fairly stable. The second component is the ratio of M3 to deposits, which represents, inter alia, economic agents' preference for cash over deposits, or the currency-to-deposit ratio. This ratio has also remained fairly stable, up until 1997, when there was a slight pick-up.

The last component is the loan-to-GDP ratio, which indicates the amount of loans supporting nominal economic activity. This component has been the main impetus for the upward trend in the loan-to-deposit ratio over 1990-97. Indeed, the pick-up in the loan-to-deposit ratio from 1992 onwards coincided with the rise in the loan-to-GDP ratio. For the period 1992-97, the rise in the loan-to-GDP ratio contributed to 58% of the rise in the loan-to-deposit ratio.

A rising loan-to-GDP ratio implies loan growth in excess of nominal GDP growth which, if sustained, could have inflationary implications for the economy, particularly in the asset

<sup>8</sup> Algebraically, the loan-to-deposit ratio can be expressed as:  $\frac{\text{Loans}}{\text{Deposits}} = \frac{\text{Nominal GDP}}{\text{Money Supply}} \times \frac{\text{Money Supply}}{\text{Deposits}} \times \frac{\text{Loans}}{\text{Nominal GDP}}$ 



markets. Indeed, a large proportion of the expansion in credit in recent years mirrored developments in the asset markets. The period 1992-97 was characterised by a rapid expansion in lending for asset-related purposes. Loans for housing, non-bank financial institutions, and private individuals & professionals grew by 18% p.a. during this period, compared to 12% p.a. for other loans, and accounted for 45% of total loans. This might have contributed to an escalation in property and stock prices during this time.

Consequently, the government's introduction of pre-emptive measures against speculative activity in the property market in May 1996, which included prudential limits on housing loans, was timely and had the intended effect. Property prices have eased by more than 24% since, while growth of housing loans has also moderated significantly, from 20% p.a. before the curbs, to 14% in 1997 and Q1 98. In 1998, overall loan growth is expected to be dampened further as economic activity expands at a slower rate, and consumer sentiments remain weak amidst the regional currency crisis. The expected slowdown in loan demand should hold down the trend increase in the loan-to-deposit ratio of the last few years. Indeed, the loan-to-deposit ratio declined to 1.00 at end-May, from 1.04 at end-97.

#### BALANCE OF PAYMENTS

#### **Developments in 1997**

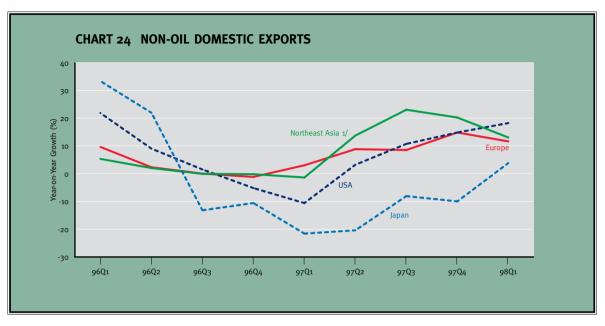
Singapore's external balance of payments remained strong in 1997, despite the outbreak of the regional financial crisis. A slightly higher overall balance of payments surplus of S\$11.9 billion was registered, bringing total official foreign reserves to an outstanding amount of S\$119.6 billion, able to cover 7.3 months of imports at current levels.

Item	1993	1994	1995	1996	1997
A Goods Balance	-4,401	2,069	1,384	3,136	1,701
Exports of Goods	125,802	149,566	167,897	177,680	186,758
(% Growth Rate)	16.0	18.9	12.3	5.8	5.1
Imports of Goods	130,203	147,497	166,513	174,544	185,057
(% Growth Rate)	16.9	13.3	12.9	4.8	6.0
B Balance of Services	11,855	14,068	17,239	14,929	16,242
As % of GNP	12.7	12.9	14.1	11.2	11.1
Transportation	-1,359	-1,154	-1,136	-1,538	-1,721
Travel	5,246	4,404	3,800	2,374	330
Insurance	-599	-674	-878	-856	-823
Government Services	-8	10	-36	1	-28
Other Services	8,575	11,482	15,489	14,948	18,484
C Income Balance	315	2,366	2,988	4,207	5,799
D Current Transfer (Net)	-866	-1,010	-1,256	-1,512	-1,762
E Current Account Balance (A+B+C+D)	6,903	17,493	20,355	20,760	21,980
As % of GNP	7.4	16.0	16.7	15.6	15.0
F Capital and Financial Account Balance	-2,073	-17,984	-1,027	-3,633	-6,992
of which Financial Account (Net)	-1,958	-17,855	-926	-3,438	-6,735
G Balancing Item [H-(E+F)]	7,324	7,793	-7,154	-6,720	-3,132
H OVERALL BALANCE	12,154	7,302	12,174	10,407	11,856
As % of GNP	13.0	6.7	10.0	7.8	8.1

The current account surplus firmed to S\$22 billion and remained at around 15% of GNP. (See Table 2.) The surplus was bolstered by the strong underlying growth in net investment income receipts to S\$5.8 billion, reflecting higher

growth in public investment income. By 1997, the income balance was contributing 26% to the current account surplus, or 4% of GNP.

The current account was also supported by the



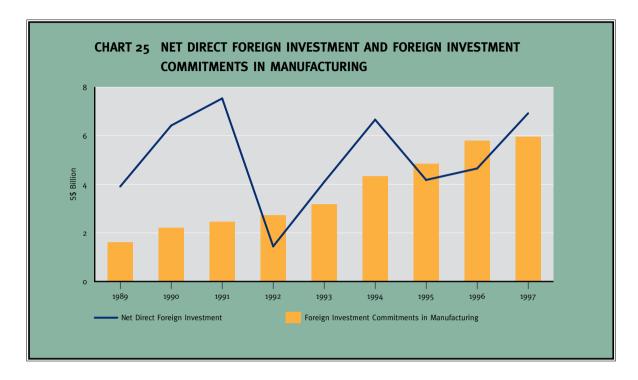
1/ Refers to China, Hong Kong, North and South Korea, Macau and Taiwan.

recovery in non-oil merchandise exports from the second quarter of the year. In particular, non-oil domestic exports rebounded at an annual rate of 10% in the second half of the year, with the recovery in global electronics demand and the coming on-stream of investments in the chemical industry. This recovery was led by the US, European, and Northeast Asian markets other than Japan.<sup>9</sup> (See Chart 24.) The outbreak of the regional financial crisis also had a minimal impact on non-oil domestic exports to neighbouring Southeast Asian countries in 1997, partly as these exports are mainly intermediate goods for production of final exports to markets outside the region.

The higher net income and non-oil merchandise export receipts cushioned the adverse effects on the current account of a significant widening in the oil trade deficit and decline in net travel receipts. The oil trade deficit widened for a third consecutive year, by a substantial S\$2.1 billion to S\$5.1 billion in 1997 as the 1996 recovery in petroleum exports faltered. Coupled with the fall-off in demand, refining margins have fallen since mid-96 and came under increasing pressures as South Korean and Thai refineries ramp up production to earn needed foreign exchange.

Net travel receipts continued on a downtrend, falling sharply to S\$330 million, from \$2.4 billion in 1996 and an annual average of S\$4.7 billion in the first half of the 1990s. Gross travel receipts declined by 10%, reflecting the effects of a 1.3% broad-based decline in visitor arrivals as well as a drop in their average per capita expenditure. Apart from cost competitive pressures, the economic uncertainty created by the regional financial turmoil has reduced travel receipts because the bulk of these receipts are from Asian markets. At the same time, outward travel payments continued to rise, albeit at a slightly moderated rate of 11%.

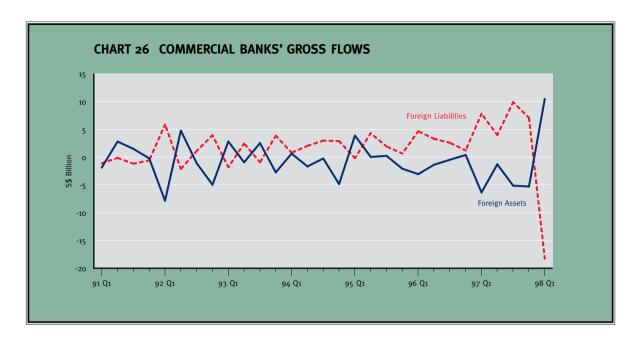
9 Non-oil domestic exports to Japan declined through the four quarters of the year, averaging a -15% growth for 1997.



In the capital account, direct foreign investment (DFI) inflows were unaffected by the regional financial crisis, rising at an accelerated rate of 22% during the year. While these inflows were the outcome of investment decisions made before the outbreak of the crisis, the pipeline of manufacturing investment commitments made in 1997 and through early 1998, has also remained healthy.<sup>10</sup> (See Chart 25.) On the other hand, the outflow of Singapore direct foreign investments abroad stabilised in 1997 at around the 1996 level. On a net basis, a direct investment inflow of S\$6.9 billion was achieved in 1997, the highest level reached since 1991 when S\$7.5 billion of net inflow was recorded.

The regional crisis resulted in a sharp increase in banks' gross monetary capital flows, reflecting the volatility in financial markets. Banks' foreign assets increased by S\$18.5 billion in 1997, nearly four times the increase in 1996. Their foreign liabilities expanded by nearly three-fold to S\$28.3 billion. On net basis, banks continued to channel in funds from abroad, of S\$9.8 billion in 1997. As in the preceding years, the net inflow was from their head offices and branches abroad and from the Asian Currency Units (ACUS), partly to build up their capital funds. The net inflow from the Asian Currency Units to the Domestic Banking Units continued as the Asian financial crisis accelerated the on-going consolidation in their offshore lending.

<sup>10</sup> Net foreign investment commitments in manufacturing totalled SS6.0 billion in 1997, slightly higher than the 1996 figure of S\$5.8 billion. In the first quarter, a net S\$1.6 billion was committed in manufacturing investments.



#### Outlook

The balance of payments outlook for 1998 is less sanguine as the full effects of the regional crisis on the Singapore economy are expected to be felt this year. While the current account maintained a healthy surplus of S\$4.7 billion in the first quarter of 1998, there are signs of a slowdown in non-oil domestic exports, due not only to a decline in final demand from the region but also to a weakening in the recovery in electronics demand, especially from the US. Services exports which have a higher exposure to regional markets will also be more adversely affected in 1998. The effects of the export slowdown on the current account surplus would however be ameliorated by an expected slowdown in imports as domestic construction activity moderates and inventories adjust.



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MAS launched a fundamental review of its policies towards regulating and developing the financial services sector. It instituted a new supervisory framework and adopted a more pro-active and strategic approach towards developing Singapore as an international financial centre.

#### GROWTH OF THE FINANCIAL SECTOR

**Financial Services Sector Performance** 

The financial services sector grew by 15.0% in 1997, compared with 5.4% in 1996. The continual expansion of inter-bank activities within the Domestic Banking Units and Asian Currency Units, as well as the robust growth in trading activities in both the foreign exchange and stock markets contributed to this improved performance.

Total assets in the Asian Dollar Market grew by 9.9% in 1997 to US\$557.2 billion, while total assets in the Domestic Banking Units of banks rose by 14.6% to \$289.7 billion over the same period. The average daily trading volume of foreign exchange increased by 31.4% to reach US\$167.1 billion. Daily trading activity on the Singapore International Monetary Exchange (SIMEX) rose by 7.1% to 94,063 lots. Daily average turnover on the Stock Exchange of Singapore (SES) also increased by 28.6% to \$455.4 million.

In the first quarter of 1998, the financial services sector grew by 5.5%. Total assets in the Asian Dollar Market declined by 3.4% year-on-year to US\$513.3 billion as at end-March 1998, due to a decrease in loans to non-bank customers. On the other hand, total assets in the Domestic Banking Units of banks rose 5.2% year-on-year to \$279.7 billion. In the first 3 months of 1998, foreign exchange trading volume averaged US\$134.7 billion per day, a drop of 27.6% compared with the same period last year. Turnover on SIMEX surged by 21.6% year-on-year to 103,878 lots per day in the first quarter of the year. Daily average turnover on SES however, fell marginally by 1.4% to \$552.2 million, compared with \$560.0 million for the corresponding quarter of 1997.

Financial Institutions Operating in Singapore As at end-March 1998, there were 154 commercial

banks in Singapore, compared with 152 a year ago. This represented the admission of 6 banks, while 2 ceased operations and 2 converted to representative office status. The number of merchant banks and finance companies remained unchanged at 80 and 19 respectively.

The number of SES member companies decreased to 32 with the closure of an international member while the number of non-member companies increased to 57. The number of investment advisers remained at 156 as at end-March 1998.

The number of SIMEX corporate members decreased to 72. This comprised 36 corporate clearing members, 25 corporate non-clearing members and 11 commercial associate members. On the other hand, the number of individual non-clearing members increased to 638 as at end-March 1998.

MAS registered 8 reinsurers, 2 captive insurers and 4 direct general insurers including two marine insurance mutuals and a specialist marine hull and liability insurer. An existing reinsurer was also granted a general licence in addition to its life licence. On the other hand, 3 reinsurers and 2 direct general insurers were de-registered, while an existing composite reinsurer cancelled its general licence. This brings the total number of insurance companies to 163 as at 31 Mar 1998.

#### STRATEGIC REVIEW OF THE FINANCIAL SECTOR

The Government set up a Financial Sector Review Group (FSRG) in the middle of 1997 to review its policies towards regulating and developing the financial sector. The aim was to position Singapore as a premier financial centre in Asia, and globally.

nstitutions	End of Period Mar 97	End of Period Mar 98
Commercial Banks	152	154
_ocal	12	12
Foreign		
Full Banks	22	22
Restricted Banks	13	13
Offshore Banks	105	107
Merchant Banks	80	80
Asian Currency Units	224	226
Banks	144	146
Merchant Banks	80	80
Representative Office	65	70
Banks	62	68
Merchant Banks	3	2
Finance Companies	19	19
nsurance Companies	154	163
Direct Insurers	59	61
Reinsurers	45	50
Captive insurers	50	52
Stockbroking Companies	89	90
SES Member Companies	33	32
Non-SES Members Companies	56	57
nvestment Advisers	156	156
nternational Money Brokers	9	9
SIMEX Members		
Corporate Clearing Members	36	36
Corporate Non-clearing Members	29	25
Individual Non-clearing Members	470	638
Commercial Associate Members	11	11

The review is on-going, and major initiatives have been introduced.

First, MAS will focus on systemic risk rather than safeguarding individual institutions, foster greater transparency and market discipline to enable investors to assess business risks for themselves, and forge a closer partnership with the industry. (See Supervisory Developments and Issues on opposite page for further details.)

Second, MAS will play a more proactive role in promoting the financial sector. To this end, MAS formed a separate Financial Sector Promotion Department (FPD) in April 1998 to focus its efforts in developing the financial industry. (See Financial Sector Promotion Department on page 97) Instituting the promotional role within MAS enables the Authority to exploit synergies between developing new activities and evolving the appropriate supervisory policies.

In addition, MAS has engaged consultants McKinsey & Co and Arthur D Little to craft strategies to promote the financial sector and develop an IT infrastructure plan for the industry respectively. The consultants will complete their studies by the end of this year.

Even before the consultants make their final recommendations, MAS has taken some early steps to give a fillip to the industry. In February 1998, the Government accepted nearly all the proposals made by the Finance and Banking Subcommittee of the Ministry of Trade and Industry's Committee on Singapore's Competitiveness. Some of these recommendations have already been implemented.

The CPF Investment Scheme has been liberalised to help stimulate the growth of the asset management industry. In May 1998, MAS and RCB jointly issued a Handbook on Unit Trusts containing simplified rules for setting up and managing unit trusts. The government will place out another US\$15 billion of public funds to private fund managers for management over the next 3 years. Further, MAS has reduced the minimum shareholders' funds required of investment advisers from \$500 million to \$100 million.

To boost the debt capital market, MAS issued new 10-year government bonds in July 1998 to extend the benchmark yield curve. The Authority and other statutory boards also plan to issue more debt securities to enlarge the tradable pool of Singapore Dollar bonds.

The Corporate Finance Committee, comprising private sector representatives with MAS participation, issued a consultation paper on the securities market in May 1998. Among other things, the report recommended a predominantly disclosure-based regulatory system, increased participation by institutional investors to enhance disclosure, corporate governance and market discipline, and the consolidation of securities law into a unified legislation to be administered by a single securities residing in MAS. The SES Review Committee and Corporate Finance Committee are currently reviewing the structure and listing requirements of the Stock Exchange of Singapore to make the exchange more accessible and to give the equities market greater depth.

To develop the insurance industry, MAS relaxed the investment restrictions on insurers' Singapore general insurance and non-investment linked life insurance funds in February 1998. The minimum paid-up capital requirement for captive insurers has been lowered from \$1 million to \$400,000.

Through the various initiatives which have been taken and those currently underway, MAS aims to encourage a transparent and conducive business environment in which innovation can thrive while high standards of financial management are maintained.

## SUPERVISORY DEVELOPMENTS AND ISSUES

## New Approach to Supervision and Regulation of Financial Activities

In line with Singapore's goal to become a premier global financial centre, MAS has undertaken a fundamental review of its policies towards regulating and developing the financial services sector. To this end, MAS has instituted a new supervisory framework based on the key tenets of:

*i)* Maintaining High Prudential and Supervisory Standards

> MAS will continue to oversee the financial sector professionally, vigilantly and proactively. The maintenance of high standards of integrity and sound financial management does not contradict the aim to create a more dynamic, innovative and vibrant financial sector. A sound financial system serves as the foundation on which the liberalisation of the financial sector can take place.

### *ii)* Shifting the Emphasis from Regulation to Supervision

MAS will be shifting its emphasis in overseeing the financial sector from regulation to supervision. The supervisor's primary responsibility is to protect the stability of, and maintain confidence in the financial system. We will shift from 'one-size-fits-all' regulation toward a greater emphasis on supervision, which entails monitoring and examining institutions for compliance with laws and guidelines, and assessing asset quality and the adequacy of risk management systems. MAS can then deal with stronger and better-managed institutions differently from the weaker ones. MAS can give flexibility to the strong institutions to develop and innovate, while maintaining stricter controls on the weaker ones to minimize the disruptions that weak banks can cause to the rest of the system.

#### (iii) Implementing a Risk-Focused Approach to Bank Supervision

MAS will also shift the emphasis of bank supervision toward a risk-focused, top-down approach, moving away from the traditional, bottom-up method. Rapid technological advancements, increased linkages between institutions and financial markets, and the consequent growth in complexity of banks' activities, have necessitated a more holistic and risk-focused supervisory approach. The approach will enable the allocation of limited supervisory resources to major risk areas, hence improving the effectiveness and efficiency of the examination process.

Examinations will emphasize the review of banks' risk management processes and control systems. They will be tailored to the bank's size, activities and risk profile. The framework for conducting risk-focused examinations will comprise the following key stages:

a) Pre-Planning and Determination of

#### Examination Scope

MAS will generally inform banks of upcoming examinations, unlike the current system of purely surprise examinations. Planning will be performed prior to the examination to evaluate the bank's activities and risk profiles, both current and prospective. MAS will hold pre-examination meetings with bank management and internal and external auditors and review reports and data on the bank. MAS will assess the risks inherent in the bank's activities and how well the bank's existing control infrastructure manages its risks. We will leverage on the work of internal and external auditors, where appropriate. MAS will then shape the scope of the examination to focus on those operations which represent higher risk to the bank's ongoing financial soundness. Although planning and pre-consultation with bank management will be the norm, surprise examinations on institutions for certain specific purposes will still be conducted when necessary.

b) Examination Procedures

Examinations will focus on management and asset quality and processes by which the bank identifies, measures, monitors and controls its risks, rather than testing transactional and numerical data extensively and tooth-combing the books for control deficiencies, large and small. Selective transaction testing will remain necessary, however, to enable examiners to arrive at a judgement on the adequacy of the bank's risk control procedures.

c) Examination Report

The examination report will seek not only to inform bank management of areas to be improved, but also provide value-added to bank management by providing insights based on knowledge MAS has gained through supervising a large number and variety of institutions.

The shift to risk-focused examinations, with greater pre-planning, will enable MAS to shorten the duration of inspections. MAS will be able to inspect more banks and financial institutions more frequently than has been possible in the past. This will add up to a strengthening of MAS' supervisory effectiveness. MAS will start to implement the new approach in 1998. Full implementation will be phased in over the next few years, as MAS trains and builds up its supervisory staff.

MAS would promote sound risk management practices among institutions, especially those whose activities have the most impact on systemic stability and investor and depositor confidence, and seek to minimise disruptions to the financial system. Institutions with inadequate management control systems will be required to take corrective actions.

While MAS will continue to set high standards of financial management and integrity, no amount of MAS bank examination can totally prevent irregularities and malpractice. The primary responsibility must rest with bank management for exercising adequate management supervision and instituting proper policies and procedures to prevent and detect irregularities and malpractice.

Foreign supervisors around the world, including the US Federal Reserve Board and the UK Financial Services Authority, are also shifting towards a risk-based supervisory approach. MAS will continue to exchange experiences with foreign supervisors and adopt international best practices in supervision, to maintain our high supervisory standards.

*iv)* Vesting the Public with the Responsibility to Make Their Own Informed Investment Decisions There is a need to differentiate between considered business risks and fraudulent practices by financial institutions. Investors should be protected from the latter but left to judge and assume business risks for themselves. To assist investors in making informed decisions, MAS will provide greater transparency in its regulations, raise disclosure standards and foster market discipline in the financial industry. We will also encourage industry groups to develop and enforce standards of good practice.

v) Forging a Closer Partnership Between the

Government and the Financial Services Industry MAS will build a closer partnership with the industry and promote a more open operating environment. MAS actively seeks industry inputs to adjust its policies to rapidly changing market realities. It will also set up private sector committees to examine issues pertaining to the financial sector. In February 1998, MAS accepted nearly all of the 55 proposals put forward by the Finance & Banking Sub-Committee. Other private sector groups were set up to study issues on banking disclosure standards, public listings and corporate fund raising rules and deregulation of the stockbroking industry. Furthermore, MAS will disseminate policy thinking through associations of the finance industry e.g. ABS, SMBA, and IMAS.

## Financial Institutions' Compliance with Year 2000 Issue

"The Year 2000 Problem" refers to the potential inability of information systems to function and process data in the next millennium. The most commonly quoted example is that storage of dates where the year is represented as two digits. The year 2001, for instance, will be stored as '01' and may therefore be interpreted by the system as 1901, leading to calculation errors and/or system failure.

There are numerous risks for financial institutions arising from the Year 2000 problem. They are:

- Machine and system breakdowns that could lead to day-to-day banking service disruptions, mismanagement of funds, and compromises in safety and security (operational risk).<sup>1</sup> Severe service disruption or degradation can lead to franchise erosion in the longer term (business risk).
- Possible litigation costs in fighting lawsuits (legal risk).
- Year 2000 non-compliance could also turn low-risk credits into high-risk credits i.e. a large credit exposure might arise if a large number of banks' counterparties/customers are not Year 2000 compliant, which could lead to non-provisioned asset quality problems generated by sudden loan defaults (credit risk).
- Insurance companies may also face huge insurance claims and incur litigation costs to fight claims. These unknown potential liabilities could cause insurance failures (solvency risk).

A pull-back of interbank lines could result in a liquidity crunch (liquidity risk), and inevitably tarnish the reputation of the banks in particular, and the reputation of Singapore as a financial center in general (reputation risk). If these risks are not contained adequately or quickly, the risk of systemic failure could spread across national boundaries through the intricate network of

<sup>1</sup> Examples in this category include ATM, vaults, lock-box services, building control and security systems.

	Bank & Merchant Bank	Money Broker	Finance	Futures	Dealer	Insurers
Issues fully resolved	0%	25%	<b>o%</b>	4%	4%	17%
In the process of rectifying the problem	59%	50%	<b>59%</b>	71%	72%	73%
In the process of identifying the problem	41%	25%	41%	25%	24%	<b>9</b> %
Issue had not been addressed	0%	<b>o</b> %	<b>o%</b>	0%	<b>o</b> %	1%
Already Completed	<b>o%</b>	25%	<b>o%</b>	4%	4%	17%
By end 1998	96%	50%	94%	<b>90</b> %	91%	52%
Before Year 2000	4%	25%	6%	6%	5%	31%
Cannot complete by Year 2000	0%	0%	<b>o%</b>	<b>o%</b>	<b>o%</b>	0%

systems linkage characteristic of the financial industry (systemic risk).

The Basle Committee for Banking Supervision has recommended the completion of system renovation by 31 December 1998. This is to provide sufficient time for validation and implementation by 31 December 1999. Financial institutions that are late in their Year 2000 effort may have to incur substantially higher compliance expenses in terms of shortage of experienced computer programmers and escalating product or service costs.

Responsibility for identifying, assessing, and minimizing endogenous risks faced by financial institutions resides primarily with their Boards or senior management. Senior management must ensure the timely implementation of comprehensive remedial programs and test schedules to cater to Year 2000. This must be monitored at the Board level. For FY97, MAS' focus was to alert the industry to the criticality of the issue and to monitor Year 2000 preparations of the institutions in Singapore. Between May 1997 and March 1998, MAS issued a total of four circulars to all banks and financial institutions in Singapore. These circulars highlighted, among other things, the following:

- The potential impact and risks associated with the Year 2000.
- Guidelines the institutions could follow in addressing the Year 2000 issue. In particular, institutions are advised to complete their Year 2000 remedial programs by 31 December 1998, as recommended by the Basle Committee on Banking Supervision.

- The need for senior management to be proactive and supportive in committing resources to address the Year 2000 problem, and to review their preparedness for the Year 2000 project.
- Warning that appropriate supervisory action will be taken against those institutions should they fail to devote adequate attention and resources to achieve Year 2000 compliance.
- The various insurance risks associated with non-compliance with Year 2000 standards.

Besides promoting Year 2000 awareness, MAS carried out various surveys to assess the state of the industry's preparedness in addressing the Year 2000 computer problems. See Table 2 for the key findings of the surveys<sup>2</sup>.

MAS will carry out further periodic surveys and on-site reviews to verify the survey results in the information reported. On-site assessment of all banks, financial institutions and insurance companies' Year 2000 remedial efforts will be conducted on an ongoing basis. MAS will seek to obtain assurance that institutions that are on track in meeting the Year 2000 challenge do not fall behind. MAS will also identify institutions that are deficient in their Year 2000 preparation and impose varying degrees of supervisory actions on them so as to encourage them to catch up in their efforts. Over the next 12 months, MAS will intensify its supervisory efforts to make certain that the financial fraternity is prepared in addressing the Year 2000 issue. Institutions that are eventually unable to prove their Year 2000 readiness in time will have restrictions placed on them so as to

insulate the rest of the system. MAS will also liaise with the home supervisory authorities of foreign institutions to ensure a co-ordinated approach in addressing the Year 2000 issue.

MAS' effort in ensuring its internal systems are Year 2000 – compliant is further discussed in the section "Payment Systems and IT Developments".

Amendment to the

**Futures Trading Regulations** 

An amendment to the Futures Trading Regulations was promulgated on 2 October 1997 to introduce a single-tier risk-based capital requirement for futures brokers and to permit futures brokers to utilise Letters of Credit (LCs) to meet this requirement.

With effect from 2 January 1998, the new singletier regulatory capital requirement for all futures brokers is computed as a fixed percentage of maintenance margin requirements in respect of both proprietary and customer positions carried by the broker, as well as to the amount of excess customer funds held. Previously, the capital requirement was based on the magnitude of the futures broker's risk-based capital, which was divided into three tiers. With effect from the same date, futures brokers are permitted to utilise LCs to meet up to 50% of their risk-based capital requirement.

#### Reduction of Minimum Cash Balance (MCB)

All domestic banking units in Singapore are required to maintain MCB with MAS of 6% of their liabilities base, and Minimum Liquid Assets

<sup>2</sup> The survey findings are as at March 1998 except for insurers, which are as at October 1997.

The survey results of credit card issuers and asset managers have been omitted because of the small number of credit card issuers and the level of technology dependency among asset managers.

(MLA) of 18% of their liabilities base. These prudential requirements are aimed at ensuring that banks maintain adequate liquid assets to meet unanticipated liquidity needs, such as when there are sudden large withdrawals by depositors. MAS does not use the MCB as a tool for monetary policy.

The 6% MCB was last changed in 1975 and since then, most banks have improved on their liquidity management systems. Furthermore, capital markets have developed significantly in breadth and depth such that today, banks hold many more types of liquid instruments. There is therefore less need for banks to maintain a large cash buffer. Several countries do not require banks to hold cash balances with the central bank, while others are moving towards reducing such requirements or removing them altogether. In view of such developments, MAS decided to reduce the 6% MCB requirement to 3% in July 1998.

MAS will study further the broader issue of liquidity management by banks. Our aim is to move towards a new liquidity standard that is flexible, and that distinguishes stronger and better-managed institutions from weaker ones. This would be in line with the best practices of other supervisory authorities.

## Raising Bank Disclosure Standards

In June 1998, MAS accepted the recommendations of the private sector-led Committee on Banking Disclosure. Accordingly, with effect from financial year 1998, local banks will stop the current practice of maintaining hidden reserves and will disclose the market value of their investments, which have largely been valued at book cost and hence contributed to hidden reserves. They will also disclose the level of their non-performing loans, and past and future provisions. Local banks have agreed to equity account for their investments in associated companies with effect from financial year 1999.

These new accounting practices are consistent with international standards, and the global trends towards greater transparency in both the banking and corporate sectors.

Raising disclosure standards will benefit the banking industry. In the absence of information, in times of uncertainty investors fear the worst and tend to over-react. This penalises wellmanaged institutions together with weaker institutions facing real problems, and can undermine the financial system. As the local banks are well-capitalised and financially strong, better disclosure should strengthen market confidence in them. Better disclosure and market scrutiny will also put banks under pressure to operate efficiently, and deploy resources to uses which yield the highest risk-adjusted returns. This discipline will sharpen their competitive edge.

# PAYMENT SYSTEMS AND IT DEVELOPMENTS

## MAS Electronic Payment System (MEPS)

In line with the global trend in interbank payments and the growing awareness of the need to manage settlement risks, the Authority has developed the MAS Electronic Payment System (MEPS) to replace the existing end-ofday net settlement system for large-value interbank funds transfers in Singapore. MEPS, which is a real-time gross settlement (RTGS) system, effects final settlement of interbank funds transfers on a continuous, transactionby-transaction basis throughout the processing day. This will limit settlement risks which are inherent in the end-of-day net settlement system. Besides interbank funds transfers, MEPS is also the platform for the delivery-versus-payment (DVP) settlement mechanism for Singapore Government Securities (SGS) transactions. The system will effect the transfer of securities and funds for each SGS transaction at the same time. This will contribute to the reduction of settlement risk in SGS transactions. In addition, the Automated Clearing House will transmit banks' net clearing figures for cheques and IBG transactions to MEPS for settlement during the day.

MEPS comprises 2 main components: namely the front-end system at the banks; and the host settlement system, which is the heart of the RTGS system, in MAS. Besides the necessary message processing functions, the front-end system provides banks with the facility to implement "straight-through processing" between their domestic and international payments.

MEPS employs state-of-the-art cryptography and smartcard technology to protect the transactions; and achieve end-to-end security between the front-end system at the banks and the host settlement system in MAS. To support this security infrastructure, the Authority also takes on the role of the Certification Authority (CA) for the banks.

As the continued operation of MEPS is critical for the smooth functioning of the financial system, MAS has implemented a real-time mirror backup for MEPS transactions and databases. In the event of a disaster causing the computer facilities in MAS to become inaccessible, MEPS operation could be switched to the "hot" backup site with minimum disruption to the banks. In May 1998, MAS carried out a system disaster recovery test involving all MEPS participating banks. The system recovery test confirmed that MAS could recover the MEPS operation within half an hour without any loss of data.

In November 1997, the MEPS front-end system was delivered and installed for the banks' testing. At the final phase of the industry test in April 1998, the banks carried out a full-volume industry-wide integrated system test. The main objective of this phase of the industry test was to provide banks with the opportunity to simulate the actual operating environment and test-manage their liquidity positions on a real-time basis.

To ensure that banks are familiar and ready for MEPS operations, MAS conducted several briefing and technical training sessions on MEPS for all participating banks. The banks were also provided with comprehensive MEPS front-end system user guides as well as the MEPS security procedures and guidelines. In addition, MAS has set up a helpdesk to provide banks with hotline support for MEPS. The system is targeted to go "live" in July 1998.

## MASNET

In our continuous efforts to upgrade MASNET to support the needs of financial institutions, MAS has enhanced the MASNET to enable users to access MASNET services using web browsers. MASNET also continues to promote inter-sectoral collaboration through links with other government agencies. For example, we have facilitated the collation of guarantee details from banks and insurance companies by the Ministry of Manpower. The Land Transport Authority also uses MASNET to retrieve vehicle insurance information from insurance companies to facilitate the implementation of interbank GIRO deduction for the renewal of vehicle road tax.

The banks have also taken advantage of their links to MASNET to provide account holders

with the facility to apply for rights issue through their ATMs. Through MASNET, the applicant's eligibility for the rights is verified by the Central Depository computer system at SES.

#### Getting Ready for the Year 2000

The two nation-wide networks for the financial industry operated by MAS, i.e. MASNET and the RTGS system (or MEPS), are ready for Year 2000. Banks and other MASNET users have been informed about the readiness of the two networks, and more information on Y2K is available on the MASNET web site.

Internally, MAS' IT department (ITD) has started making strategic plans to prepare MAS' own IT and non-IT systems for the millennium date change. A comprehensive inventory of all assets and external interfaces that are likely be affected by the millennium bug were identified and conversion strategies for the various IT applications and automated systems were mapped out.

To date, the Authority has completed the installation of its mainframe operating software, database management software and other system software utilities to support Year 2000. All PC applications, software & hardware, and networks have also been converted or verified with software providers to be Year 2000 compliant.

Currently, the Authority is well into the renovation phase to enhance its mainframe application systems. The main bulk of the Year 2000 conversion was out-sourced and targeted for completion and testing by end-December of 1998.

## **Cheque Clearing**

The volume and value of cheques cleared have been increasing steadily throughout the years since the establishment of the Electronic Clearing System by the Automated Clearing House (ACH). A daily average of 290,778 cheques, with a value of S\$2 billion, were cleared through the ACH in 1997 compared with a daily average of 272,290 cheques, with a value of S\$1.9 billion, in 1996. This represents an average increase of 9.1% per annum in the value of cheques cleared from 1989 to 1997.

#### GIRO

As part of the Government's efforts to develop Singapore into a cashless society, the Interbank Giro (IBG) system was introduced in 1984. Since then, IBG has received widespread popularity in terms of effecting bill payments, donations, etc. An average of 121,198 IBG transactions, with a value of S\$245 million, were effected daily in 1997 compared to an average of 105,968 IBG transactions, with a value of S\$198 million, in 1996. In value terms, this represents an average annual growth rate of 29% from 1989 to 1997.

## CashCard and HomeNETS

The CashCard is a stored value card which can be used to pay for goods and services at departmental stores, Electronic Road Pricing (ERP), and the Internet. It is based on smartcard technology which will offer cardholders another cashless payment option. CashCards are now available at petrol stations to provide added convenience to motorists, with the recent implementation of the ERP system. As at March 1998, a total of 7480 CashCard terminals were installed over 5321 outlets as compared to 647 terminals over 355 outlets, in December 1996.

To make it more convenient for all CashCard owners, NETS will be introducing the Home-NETS service that facilitates easy top-up of CashCards. The HomeNETS Terminal, being only slightly larger than a hand-held calculator, can be plugged at the consumer's own convenience into any telephone jack and used for bank transactions. This service will greatly enhance the usefulness of the CashCard and facilitate motorists in loading value for use in the Electronic Road Pricing system.

With the HomeNETS terminal, consumers can top up their cards by transferring funds from their savings/current accounts into their CashCards. Presently, NETS is working on increasing the number of applications available on HomeNETS. Besides topping up of CashCards, it is envisioned that consumers will be able to carry out other NETS services and banking operations from home through HomeNETS.

#### Automated Teller Machines

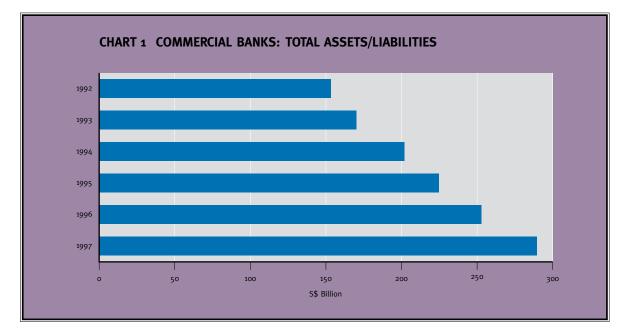
Automated Teller Machines (ATMs) are now part and parcel of our lives. ATMs have brought greater convenience to the customers by allowing them to enjoy longer banking hours as they could make deposits to and withdrawals from their bank accounts even after banking hours. Many other services are also being added to the ATMs. As at 31 December 1997, banks and POSBank had a network of 1,894, giving Singapore an ATM penetration rate of about 631 ATMs per million population, one of the highest in the region.

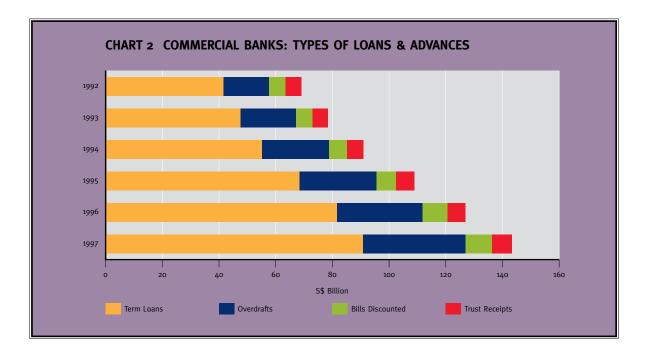
#### Internet Banking in Singapore

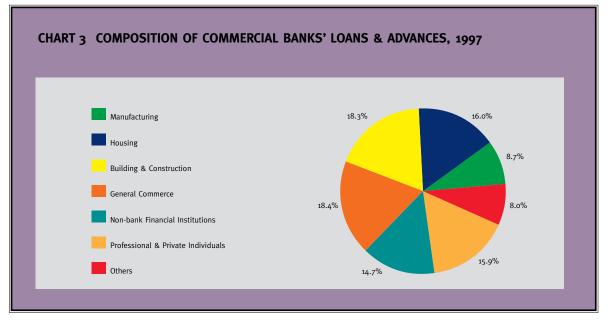
Internet banking is one of the latest service provided by banks. With internet banking, a customer can have instant access to his account information with his bank and perform banking transactions online. Some of the online services provided include account balance enquiries, funds transfer, bill payment, demand draft application, housing loan application and car loan application. More services will be introduced progressively.

## COMMERCIAL BANKS (DOMESTIC BANKING UNITS)

Banks incorporated in Singapore reported significantly lower earnings for 1997 because of the exceptional general provisions made for their exposure to the regional countries. However, all of them remained financially sound. Paid-up capital and reserves of the locally-incorporated



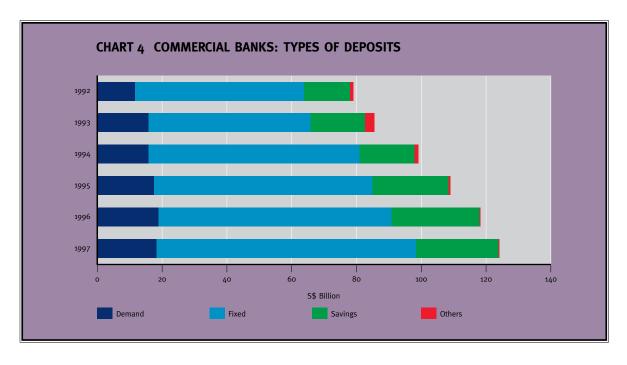




banks increased by 13% in 1997, compared with 11% in 1996. They are well capitalised with capital adequacy ratios of more than 12% based solely on core capital as required under the Banking Act. The total Net Head Office Funds (NHOF) of branches of foreign incorporated banks rose by 22% from a year ago to \$45.3 billion as at end-1997.

## **Overall Operations**

Commercial banks' assets and liabilities expanded at a faster rate of 15% in 1997 to \$289.7 billion, compared with 13% in 1996. Interbank loans and interbank deposits increased by 16% and 24% respectively, to \$100.1 billion and \$125.9 billion, compared with 8% and 18% respectively, in the previous year.



The rate of growth in loans to non-bank customers slowed from 17% in 1996 to 13% in 1997 in line with the slower growth of the economy. The slow-down was broad-based across almost all industrial sectors. As at end-1997, loans to non-bank customers amounted to \$143 billion. The slower growth in loans to non-bank customers was largely due to the lower increase in loans to the manufacturing sector and to non-bank financial institutions. Growth in loans to professional and private individuals and housing loans also moderated in 1997. Non-bank deposits expanded at a lower rate of 5% in 1997 to \$124 billion, compared with 9% the year before.

Banks' holdings of Singapore Government Securities and Treasury bills increased by 8% in 1997 to \$18.9 billion, as compared to an 11% growth recorded in 1996. Banks' investments abroad increased by 3% to \$1.3 billion at end-1997, after increasing by 15% a year ago.

#### Assets

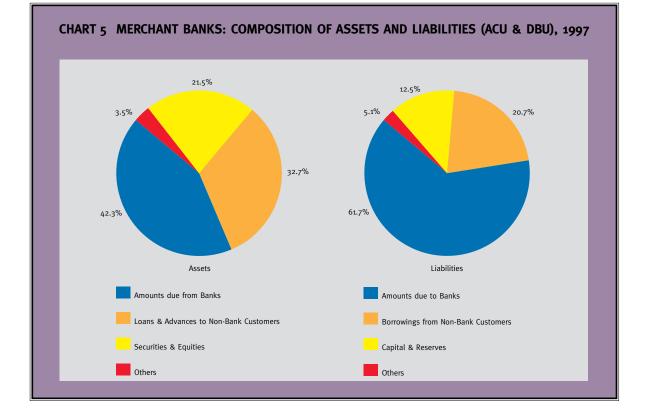
Aggregate credit granted to non-bank customers

expanded by 12% to \$242 billion at end-1997, similar to the growth recorded in 1996. The loan utilisation rate rose from 55% to 59%.

Loans to the general commerce sector, accounting for \$23.6 billion or 18% of outstanding loans to non-bank customers, maintained a growth rate of 10% in 1997. Loans to the manufacturing sector increased by only 2% in 1997 to \$12.5 billion, compared with growth of 11% the previous year.

Housing loans expanded by 12% to \$22.9 billion, lower than the 17% increase in 1996. This reflected the slow-down in the property market following the implementation of measures by the Government in May 1996 to dampen speculation in the private residential property market. Similarly, loans to the building and construction industry expanded by 23% to \$26.2 billion, compared with 28% in 1996.

Loans to professional and private individuals expanded by 12% to \$22.8 billion at end-1997. The growth rate continued to decline from the 20% increase recorded in 1996, reflecting the



effect of MAS' guidelines on unsecured loans to individuals and on car loans introduced in February 1995.

Loans to non-bank financial institutions increased by a slower 8% to \$21 billion at end-1997, after rising 15% in the previous year. Loans to the transport and communications sector grew by 37% to \$3.6 billion, higher than the 20% growth recorded in 1996.

## Liabilities

Commercial banks' deposits expanded by 5% to \$124.1 billion at end-1997, lower than the 9% growth recorded at end-1996. Their overall reserve and liquidity ratio was 25%, marginally above the statutory requirement of 24%. Banks' aggregate holding of Singapore Government Securities was 14.7% of their total liabilities base, significantly higher than the statutory requirement of 10%.

Non-bank fixed deposits grew by 12% to \$80.1 billion at end-1997, compared with an increase of 7% the year before. Its share of total deposits increased to 64%. On the other hand, total savings deposits decreased by 6% to \$25.4 billion in 1997, after registering strong growth of 16% in 1996. Its share of total deposits decreased from 23% to 20%. Demand deposits decreased by 3% to \$18.3 billion, compared with the 8% growth in 1996. Its share of total deposits dropped from 16% in 1996 to 15% in 1997.

## MERCHANT BANKS

## **Overall Operations**

Merchant banks' commercial lending activities continued to grow in 1997. Volume of feebased activities, in particular underwriting, also increased. Total assets/liabilities of merchant banks grew by 24% to \$66.7 billion as at end-1997, higher than the 6% growth registered in 1996. Growth was fuelled by a 29% expansion in inter-bank loans to \$28.2 billion and a 26% increase in non-bank loans to \$21.8 billion. Securities holdings of merchant banks rose from \$11.7 billion in 1996 to \$14.3 billion in 1997.

## **Offshore Operations**

Total assets of the Asian Currency Units (ACUs) of merchant banks expanded by 24% to \$64.1 billion as at end-1997, due mainly to a 28% increase in commercial lending activities. The ACU assets of merchant banks comprised mainly interbank loans (41%), loans and advances to non-bank customers (34%) and investments in securities (22%).

The merchant banks' ACU liabilities comprised borrowings from banks (including ACUs) in Singapore (37%), borrowings from banks outside Singapore (26%), and non-bank deposits (27%). Borrowings from banks increased by 19% and remained the merchant banks' main source of funding.

## **Domestic Operations**

Merchant banks' Domestic Banking Unit (DBU) assets increased by 16% to \$8.7 billion as at end-1997, following a growth of 4% in 1996. Growth was largely due to a 23% and 4% increase in interbank placements and securities holdings, respectively. Loans and advances to non-bank customers, however, dipped by 13%. The merchant banks' DBU assets comprised mainly interbank placements (75%), loans and advances to non-bank customers (13%), and investments in securities (6%). Their capital and reserves grew by 19% in 1997. Borrowings from banks rose by 19% while borrowings from non-bank financial institutions fell by 9%.

## **Off-balance Sheet Activities**

The volume of merchant banks' underwriting activities jumped from \$1.1 billion in 1996 to \$2 billion in 1997. Fee income of merchant banks correspondingly rose by 29% to \$22.1 million.

## FINANCE COMPANIES

## **Overall Operations**

Finance companies' assets/liabilities rose by 5% to \$22.2 billion in 1997 compared with 0.3% in 1996. Loans increased by 7% to \$17.9 billion, higher than the 3% growth in the previous year. Deposits grew by 4% to \$15.6 billion after declining by 2% in 1996.

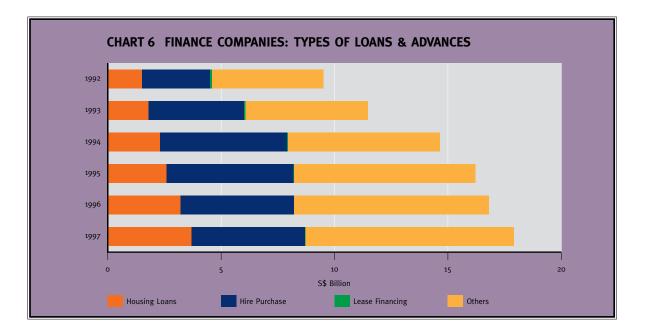
## Assets

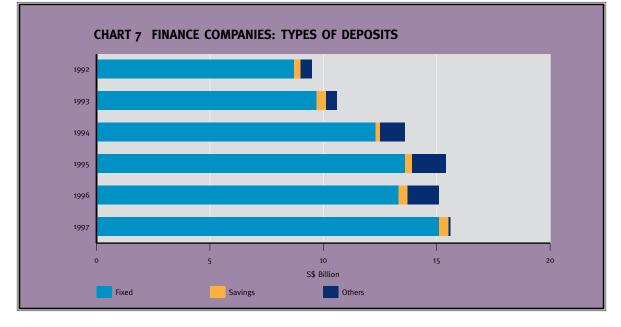
In 1997, loans extended by finance companies grew by 7% compared with 3% the previous year. The higher growth was due to an increase in housing loans as well as loans to professionals and private individuals and the manufacturing sector.

Housing loans increased by 16% to \$3.7 billion as at end-1997. Loans to the building & construction sector, however, increased at a slower rate of 5% to \$1.9 billion after rising by 19% in the previous year. Loans extended to the manufacturing sector increased by 24% in 1997 compared with 15% in 1996. Lending to professionals and private individuals rose by 7% to \$2.8 billion after a small increase of 1% in 1996. However, loans to financial institutions moderated, growing by 14% to \$1.3 billion compared with 21% the year before.

Hire purchase financing registered a smaller drop of 1% after declining by 11% in 1996. Lease financing, which declined by 57% in 1996, contracted further by 30% in 1997 to \$6.1 million.

Finance companies' investments in securities and

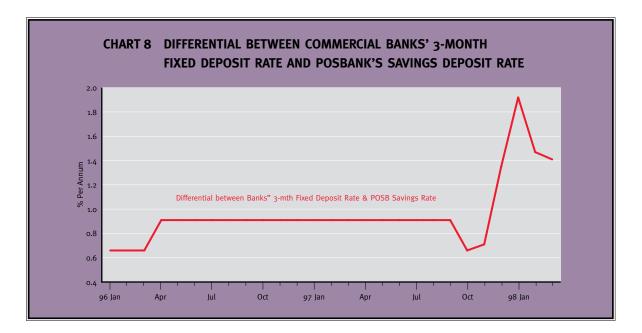




equities increased by 6% in 1997 to \$1.2 billion, slightly higher than the growth of 5% a year ago. Investments in government securities and treasury bills rose by 9% to \$1 billion compared with an increase of 2% in 1996. However, investment in equities dropped by 11% to \$202 million in 1997 after a sharp rise of 14% in 1996. Placements with banks and other financial institutions contracted further by 12% to \$1.9 billion in 1997, after declining by 19% in 1996.

## Liabilities

Total deposits with finance companies grew by 4% to \$15.6 billion in 1997 after a 2% drop in 1996. The growth was due mainly to the increase in fixed deposits. Finance companies' borrowings from banks and other creditors increased slightly



by 1% to \$1.4 billion compared with a much higher growth of 14% in the previous year.

## POSBank

Savings deposits with the POSBank exceeded withdrawals by \$0.4 billion in 1997, significantly lower than the net deposit of \$2 billion in 1996. Although deposits increased by 18%, withdrawals rose by a larger magnitude of 22%. Notwithstanding its tax-exempt status, the increase in withdrawals partly reflected a widening of the differential between POSBank's savings deposit rate and the banks' fixed deposit rates towards the end of the year. The differential between POSBank's savings deposit rate and the banks' three-month fixed deposit rate, for instance, increased by 44 basis points. In an effort to boost deposits, POSBank increased its interest rate on deposits exceeding \$100,000 to 4.125% from 3.5% in March this year, and lowered the minimum sum qualifying for these rates to \$50,000 in the following month.

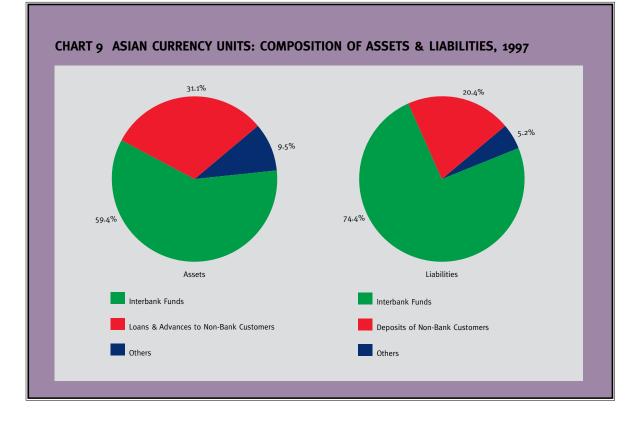
POSBank's loan portfolio grew strongly, by 48% in 1997. This largely reflected a surge in other term loans (mostly to statutory boards and government-linked companies), which more than doubled. Growth of housing loans also remained strong at 22%. POSBank's holdings of government securities and fixed deposits with banks (including S\$NCDs), on the other hand, declined by 17% and 18% respectively.

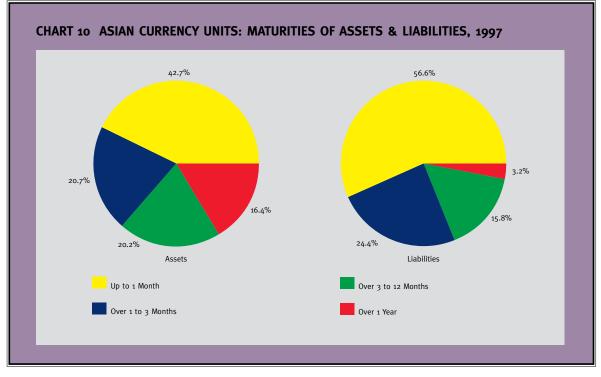
The number of savings accounts maintained with POSBank increased by a net 220,366 in 1997, bringing the total to 5.1 million. Another 127,910 new accounts were opened in Q1 98. As at 31 March 1997, POSBank's deposit base stood at \$25 billion.

# ASIAN DOLLAR MARKET (ASIAN CURRENCY UNITS)

## Assets and Liabilities

Total assets in the Asian Dollar Market, operated through ACUs of financial institutions, grew by 9.9% to reach US\$557.2 billion as at end-1997. This was higher than the 6.0% growth recorded in 1996, primarily due to continued strong growth in interbank lending activity. The





share of interbank loans in total ACU assets increased from 55.0% to 59.4% while the share of non-bank loans decreased from 35.6% to 31.1%. On the other hand, the share of interbank deposits in total ACU liabilities continued to decline to 74.4% from 76.8% in 1996, while the share of non-bank deposits rose to 20.4% from 18.8%.

After 5 years of consecutive growth, loans to non-bank customers contracted by 4.0% to US\$173.3 billion in 1997. Non-bank deposits totalled US\$113.7 billion, an increase of 19.2% compared with 18.3% in the previous year.

Interbank activities of ACUs expanded at a faster rate than in 1996. The volume of interbank loans grew by 18.6% to US\$330.7 billion, as compared to a 7.7% growth in 1996. Interbank liabilities increased by 6.4% to US\$414.6 billion, higher than the 3.6% growth last year. Net borrowings from banks abroad declined to US\$81.4 billion from US\$107.8 billion in 1996, while inter-ACU transactions rose to US\$48.9 billion from US\$40.2 billion.

The composition of ACU assets and liabilities by maturity was generally unchanged compared with previous years. Interbank transactions continued to dominate the Asian Dollar Market. ACU assets and liabilities were therefore concentrated in the shorter end of the maturity spectrum. Only 16.4% of assets and 3.2% of liabilities had maturities exceeding one year.

## Syndication Activities

The syndication market in Singapore contracted in 1997, reflecting the regional economic downturn. The number of applications approved under the tax exemption scheme for syndicated offshore credit and underwriting facilities declined to 150 applications with total loan value of S\$13.2 billion, compared with 219 applications (S\$16.4 billion) in 1996. As in previous years, almost all the syndicated funds raised were denominated in US dollars.

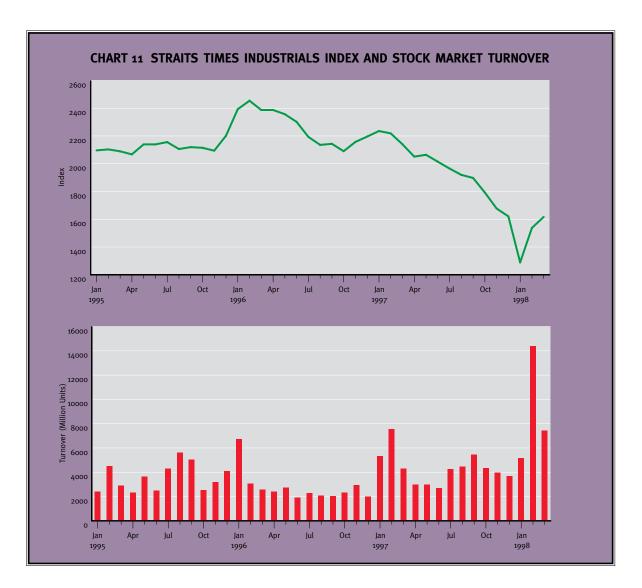
#### EQUITY MARKET

#### Stock Market Commentary

The market opened 1997 with the Straits Times Industrials Index (the Index) at 2,216.79. It trended downwards amid fears of possible interest rate hikes in the US, the release of poor trade figures for the domestic economy and for corporate earnings of Singapore companies. Except for a slight gain in the Index in May, share prices continued their decline in the second quarter. The bearish factor was again poor trade figures which was compounded by some diversion of funds to a rising Hong Kong market.

Share prices were badly affected by the devaluation of the Thai Baht in July. Market sentiment was also affected by the possibility that the foreign tranche of shares of blue-chip Singapore companies would be merged with the local tranche. The last quarter of the year saw even more marked declines in share prices as the regional financial situation worsened. The market ended the year with the Index at 1,529.84 to register a decline of 31% over its opening level.

At the commencement of the new year, the stock market fell sharply as the regional financial crisis deepened. The Index dropped drastically to a low of 1,073.47 on 12 Jan 1998. Market sentiment improved in February following attempts by countries in the region to address their financial problems and rebuild confidence in their economies. Consequently, share prices trended upwards. The market consolidated in March as concerns over the regional crisis eased. Moreover, positive developments in the



domestic property market gave a mild boost to share prices. The market closed the quarter with the Index at 1,629.18 to register an increase of 6.5% over its opening level.

#### Market Capitalisation and Turnover

As at end 1997, market capitalisation stood at \$338.7 billion, an increase of 12.3% from that a year ago. As at end Mar 98, market capitalisation fell to \$331.1 billion, 2.2% lower than the end-1997 level.

Turnover on the SES rose sharply by 28.6% to \$114.3 billion in 1997. In terms of units

transacted, turnover rose 57.3% to 52.0 billion units. In the first quarter of 1998, turnover in units rose 57.2% to 27.0 billion units compared with the first quarter of 1997. Reflecting lower prices, turnover in value terms rose only marginally over the same period from \$33.0 billion to \$33.1 billion.

## **Funds Raised**

1997 was an active year for fund raising. Total funds raised through SES amounted to \$5.1 billion, a strong 37.8% increase over that raised in 1996. The flotation of 37 companies raised \$1.4 billion, while rights issues raised \$1.8 billion. Bond issues accounted for \$1.1

	Dec 95	Dec 96	(S\$ Million) Dec 97
ES Member Stockbroking Companies			
djusted Net Capital	2,518.2	2,624.7	2,833.0
hareholders' Funds	2,725.9	2,894.8	3,049.2
otal Assets	6,153.3	5,312.1	5,048.6
lon-SES Member Stockbroking Compa	nies (excluding merchant banks)		
djusted Net Capital	256.4	235.0	405.0
hareholders' Funds	328.1	316.1	517.0
Total Assets	4,835.2	7,809.4	18,434.3

billion of funds raised and private placement of shares, \$0.8 billion.

In the first quarter of 1998, the amount of funds raised declined by 55.2% to \$301 million compared with \$673 million raised in the first quarter of 1997. Funds raised through initial public offerings amounted to \$242 million. Rights issues and private placement of shares raised \$16 million and \$42 million respectively. No new bonds were issued during the quarter.

#### New Listings

During 1997, 28 companies were admitted to the Mainboard while 7 were delisted. One company was upgraded to the Mainboard from the Foreign Board and 4 from SESDAQ. These changes brought the number of companies listed on the Mainboard as at end-1997 to 297. The admission of 15 companies to SESDAQ during the year saw the number of SESDAQ companies increasing to 62 as at end-1997.

The first quarter of 1998 saw the admission of 4 companies to the Mainboard and 2 to SESDAQ.

These admissions coupled with the upgrading of 3 SESDAQ companies brought the number of companies on the Mainboard and SESDAQ to 304 and 61 respectively.

## Financial Position of

#### **Stockbroking Companies**

The financial position of SES-member companies continued to strengthen in 1997 with shareholder's funds and adjusted net capital growing by 5.3% and 7.9% respectively to \$3,049 million and \$2,833 million. Increases of 63.6% and 72.3% respectively were also seen in the shareholders funds and adjusted net capital of non-SES members. Shareholders funds reached \$517 million while adjusted net capital was \$405 million. Increased activity of a number of non-SES members boosted their total assets by 136% to \$18,434 million as at end-1997.

## Number of Stockbroking Companies

As at end-March 1998, the number of SES member companies decreased to 32 with the closure of one international member, Yamaichi Securities (Singapore) Pte Ltd. There was an

increase in the number of non-SES member companies from 56 at end-March 1997 to 57 at end-March 1998. The number of investment advisers remained at 156 at end March 1998.

Trading in Non-Singapore Dollar Securities Singapore continues to grow in importance as a centre for international investors to trade foreign securities. In 1997, the volume of non-Singapore dollar denominated shares traded by ACUs and securities houses in Singapore increased by 8.1% to S\$94.4 billion from S\$87.3 billion the previous year. Of the S\$94.4 billion, 69.7% were transacted by non-residents.

As in the previous year, the most actively traded shares were Thai, US, Hong Kong and Japanese shares. These shares accounted for 74.0% of total amount of non-Singapore dollar denominated shares traded in 1997.

## BOND MARKET

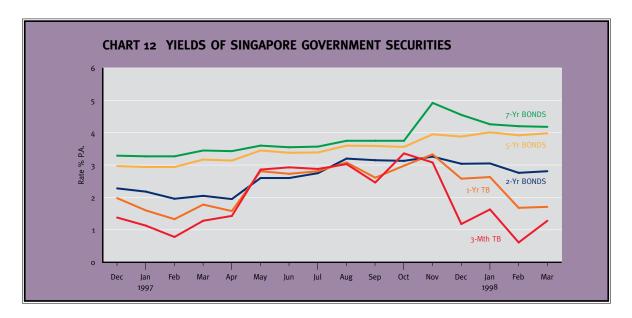
Singapore Government Securities Market Prices of Singapore Government Securities (SGS) traded slightly higher, during the first quarter of 1997, responding to fluctuations in the interbank rates and changes in the demand and supply of liquid assets.

However, when interbank rates rose sharply and a large supply of commercial bills dampened demand for Treasury bills in May, the 3-month Treasury bill rate climbed from a low of 0.50% in March 1997 to 2.90% at end May, before trading around the 3% level in the subsequent months. Despite the spike-up in interbank rates towards the close of the year, the 3 month Treasury bill rate fell from a high of 4.05% in October to 1.20% by end-December. A flight-to-quality in the midst of the regional currency crisis, increased demand for SGS, particularly the shorter papers. Even the 2-year bond yield which rose from 2.31% at end 1996 to a high of 3.28% at end-November declined to 3.06% by end-1997.

The yield curve which had flattened in the middle of the year, steepened significantly in the fourth quarter of 1997 and into the first quarter of 1998. The benchmark 5-year bond yield which increased by 91 basis points over the year to 3.89%, stabilised to around the 4.00% level in the first quarter of 1998. The 7-year bond which was sold down heavily in the bearish market, saw its yield rise from 3.31% at end-96 to a high of 4.93% at end-November, before easing to 4.55% at the year end. Subsequently, when interbank rates settled down in a calmer market, the 7-year bond also recovered more, to 4.17% by end-March 98.

There were five issues of 2, 5 and 7-year Singapore Government bonds totalling S\$3.5 billion in 1997, a net increase of S\$460 million bonds issued during the year but smaller than the S\$1.7 billion net issuance in 1996. As demand for SGS slackened and shifted to Treasury bills in a cautious market, an additional S\$930 million Treasury bills, were issued in 1997. Overall, the supply of SGS increased by 4% in 1997, compared to an increase of 9% in 1996. The total outstanding SGS issued, amounting to S\$23.1 billion at end-1997, were held mostly by banks and the eight primary dealers, with the remainder, held by finance companies, insurance companies, and to a lesser extent by corporations and individuals.

Activity in the SGS market escalated in 1997, with the higher volatility in domestic interbank rates creating more hedging needs and trading opportunities in SGS. Outright transactions shot up to a peak of S\$703 million daily in December, boosting the 1997 average turnover to S\$534 million daily, a significant increase of 21% from the level of activity in 1996. Trading interest was equally focussed on Treasury bills and bonds.



With traders paring down their inventory of SGS, there was less need to finance their SGS holding through repurchase agreements (repos). The daily average volume of repos during the year stabilised at 1996's average of S\$270 million. In the first quarter of 1998, SGS trading stepped up, increasing to an average turnover of S\$757 million daily, on higher issuance and continuing interest rate volatility.

#### **Domestic Corporate Bond Market**

Borrowing in the domestic corporate bond market grew substantially in 1997. During the year, a total of 48 issues worth S\$5,916.5 million were floated, compared with S\$2,996.1 million (31 issues) raised a year ago. To promote the development of an active bond market in Singapore, fee income earned by financial institutions in Singapore from arranging debt securities issued after 28 February 1998 will be exempted from tax. In addition, interest income earned by financial institutions and corporations from holding such debt securities will enjoy a concessionary tax rate of 10%. Furthermore, interest income earned by non-residents which do not have permanent establishments in Singapore will be exempted from withholding tax, while income earned by financial institutions in Singapore from trading in debt securities will be taxed at 10%.

#### Asian Dollar Bond Market

Borrowing in the Asian Dollar Bond market slowed down substantially in 1997 after experiencing strong growth in the previous year. During the year, a total of 49 issues worth US\$1,176.5 million were floated, compared with US\$2,212.5 million (27 issues) raised a year ago. Of the 49 issues, 48 were raised by nonresident borrowers and the Singapore branches/ subsidiaries of foreign corporations.

#### FOREIGN EXCHANGE MARKET

#### Foreign Exchange Transactions

Trading activity in the foreign exchange market remained strong as a result of increased volatility of the Asian currencies. Average daily trading volume rose by 31.2% to US\$166.9 billion, from US\$127.2 billion in 1996. As in 1996, the Japanese Yen and Deutschemark were the most actively traded currencies against the US Dollar. They accounted for 23.4% and 16.9%, respectively, of total turnover.

## **Currency Options**

Transactions in currency options increased significantly in 1997, averaging US\$60.6 billion per month, 78.9% higher than in 1996. The bulk of the trading volume (67.5%) was accounted for by transactions involving US Dollar/Japanese Yen, US Dollar/Deutsche Mark and Deutsche Mark/Japanese Yen. 79.8% of transactions in currency options were done with counterparties outside Singapore.

## **Interest Rate Swaps**

The principal value of interest rate swap (IRS) transactions in 1997 averaged US\$70.5 billion monthly, 35.3% higher than in 1996. US Dollar-denominated IRS remained the most widely transacted instrument. Its share of total IRS transacted rose from 48.3% in 1996 to 59.1% in 1997. Japanese Yen-denominated IRS accounted for 29.7% of total IRS transacted, as compared to 41.9% for 1996. IRS transactions in other currencies rose by 54.9% to account for approximately one-tenth of total volume.

## Forward Rate Agreements

In 1997, the principal value of transactions in Forward Rate Agreements (FRAs) averaged US\$33.0 billion monthly, a 10.1% increase from 1996. The volume of Japanese Yen-denominated FRAs grew by 11.5% and constituted 50.3% of total volume for 1997. The volume of US Dollar-denominated FRAs declined by 10.2% and accounted for 33.8% of total volume. FRAs denominated in other currencies rose by 97.3% to account for 15.9% of total volume.

## FINANCIAL FUTURES MARKET

In 1997, total trading volume on the Singapore International Monetary Exchange (SIMEX) increased by 6.7% from the previous year's volume to 24.09 million lots. Average daily turnover in 1997 was 94,063 lots, an increase from the 87,859 lots in 1996. Trading interest continued to be dominated by the 3-month Eurodollar interest rate futures, 3-month Euroyen interest rate futures, and the Nikkei-225 stock index futures and options contracts. During the first quarter of 1998, the average daily volume expanded to 103,878 lots, compared with 85,400 lots in the corresponding period in 1997.

SIMEX currently lists 12 futures and 6 options contracts. The Exchange delisted the MSCI Hong Kong stock index futures contract on 28 August 1997. The MSCI Taiwan stock index futures contract, which was launched on 9 January 1997, was very successful. It enjoyed an average daily volume of 2,402 lots in 1997. For the first quarter of 1998, average daily volume increased to 4,650 lots. In addition, SIMEX has announced plans to link up with the Deutsche Terminbörse of Germany, in 1998, to trade the 10-year German Government Bond (Bund), the 5-year German Government Bond (Bobl) and the 2-year German Government Bond (Schatz) contracts.

SIMEX recorded a strong trading volume in 1997, just marginally below the all-time record of 24.25 million lots set in 1995. In 1997, SIMEX achieved a record annual volume of 9.62 million lots for trading in the 3-month Euroyen interest rate futures contract, the Exchange's most actively traded contract. On 11 June 1997, the contract achieved a record single-day volume of 122,470 lots while a record monthly volume of 1.22 million lots was attained in May 1997. The Eurodollar interest rate futures contract experienced a decline of 9.6% in volume due to low interest rate volatility in the US during 1997. As a result, it became the second most actively traded contract on SIMEX, with an average daily trading volume of 28,682 lots. The Nikkei-225 futures contract, the third most actively traded contract on SIMEX, experienced a marginal decline of 0.9% in volume with an average daily volume of 19,773 lots.

## FUND MANAGEMENT INDUSTRY

As at end-1997, the total amount of funds managed by financial institutions in Singapore decreased marginally by 0.72% to S\$124.1 billion from S\$125.0 billion a year ago. The number of institutions conducting fund management activities in Singapore decreased by one to 160 in 1997. While a number of new fund management companies established operations in Singapore, several banks and merchant banks consolidated their fund management activities within their existing fund management subsidiaries. The industry employed a total of 814 fund management professionals, comprising fund managers and investment analysts, compared with 712 in 1996. 32% of the fund management professionals have more than 10 years of working experience in fund management, while 17% held the Certified Financial Analyst qualification. Total staff employed by the fund management industry, including marketing staff and clerical and other support staff, grew by 10% from 1,725 in 1996 to 1.899 in 1997.

In 1997, the total amount of funds managed in Singapore remained relatively unchanged. Additional funds brought in were offset by redemption of funds invested in Asia as fund management companies reduced their weighting in Asian investments. Declining values of Asian equities also eroded the size of funds managed by fund managers in Singapore. Despite the regional economic crisis, a number of fund management companies without a presence here are exploring the possibility of using Singapore as a base to manage their Asian portfolio. Funds sourced from Europe continued to account for the largest proportion of total funds managed here in 1997. Funds from Europe amounted to S\$34.4 billion and another S\$25.3 billion were sourced from US, US\$21.1 billion from Singapore, S\$8.3 billion from other Asian countries and S\$35.0 billion from other countries.

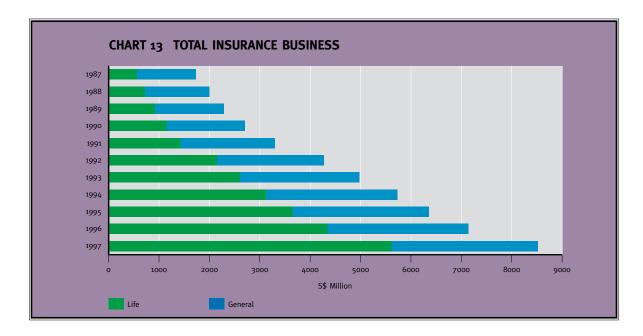
The majority of funds managed continued to be invested in equities. However, the S\$68.6 billion invested in equities as at end-1997 represented a decline of 21.0% from the previous year's total. Poorly performing equities markets across the region contributed to the decline. On the other hand, investments in bonds, deposits and other investments rose by 45.3% to reach S\$55.5 billion. Investments in bonds totalled S\$14.9 billion while deposits and other investments totalled S\$40.6 billion. This trend reflected fund managers' preference to invest their clients' funds in less volatile fixed income instruments and fixed deposits to safeguard against declining equities values of the region.

Investments in the Singapore stock market amounted to S\$10.7 billion. Investments in the other ASEAN stock markets and in the Hong Kong stock market totalled S\$10.0 billion and S\$15.4 billion, respectively.

## INSURANCE INDUSTRY

#### **Overall Operations**

The insurance industry recorded a good growth of 20% in 1997, with total insurance premiums amounting to \$8.5 billion. (See Chart 13 on following page.) These comprised annual premiums in force and new single premiums of life business as well as gross premiums of domestic and offshore general business. Total assets of the industry expanded by 14% to \$28.2 billion.



## Life Insurance Business

The life insurance industry grew at a robust pace; total new annual premiums increased by 27% to \$837.1 million, while new single premiums surged by 84% to \$1.3 billion. The implementation of the CPF Investment Scheme (CPF-IS) in January 1997 has bolstered the sales of traditional policies as well as investment-linked policies. Coupled with good persistency of business, total annual premiums in force rose by 19% to \$4.2 billion as at the end of 1997.

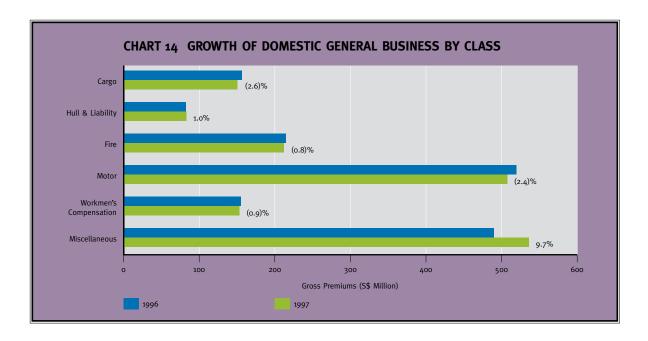
After two years of strong growth, new single premiums for life annuity business increased at a moderate pace of 16% to \$120.8 million. The slowdown was attributable to three insurers withdrawing some annuity products previously launched, and increasing the premium rates of existing products. Nearly 73% of new annuity contracts were sold under the CPF Minimum Sum Scheme.

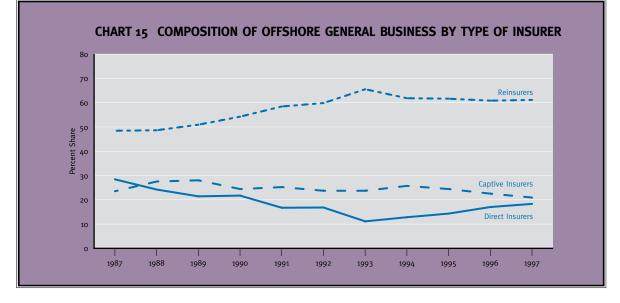
## General Insurance Business

In 1997, total general insurance business (domestic and offshore) grew by 4.3% to \$2.9 billion. Domestic business expanded by only 1.8%, while offshore business reported a creditable growth of 7.8%.

Domestic business was adversely affected by the slowdown in economic activities as well as intense rate competition. Most classes of business recorded flat or negative growth. Miscellaneous accident business was the main contributor to growth, which has now become the largest class of domestic business. Growth was mainly sustained by general insurers' increased writings of accident, travel and healthcare insurances. In contrast, Motor business has contracted in view of the sluggish car market and rate reduction.

In spite of the prevailing soft market and the depreciation of the regional currencies, offshore business regained its growth momentum following two years of flat growth. Reinsurers, the major writers of offshore business, turned around to register a good growth of 8.8%. The substantial writings from the large number of new reinsurers admitted during the past three years, helped to prop up offshore business growth. In addition, a few reinsurers reported large increases in business volume arising from an expansion in their





territorial scope. Direct insurers also contributed significantly to the growth of offshore business. On the other hand, the restructuring of insurance programmes by a few captive insurers and rate reduction have dampened the growth of captive insurers' offshore writings.

In the first quarter of 1998, the life insurance industry experienced a considerable slowdown in new business sales. New annual premiums and single premiums for life insurance business declined by 35% and 69% over corresponding period to \$134 million and \$96 million, respectively. New single premiums for annuity business also contracted by 8.5% to \$25 million. This could be attributed to the economic slowdown, the high interest rate environment, and the life insurers' use of a lower investment return assumption to illustrate policy benefits. As for general insurance business, domestic gross premiums dipped by 2.1%, while offshore gross premiums expanded by 11%.

Developments in the Insurance Industry

i)

Development of Marine Hull Market During the year, the Authority licensed the first P&I Club in Singapore to write protection and indemnity risks of shipowners, a marine mutual to write risks of the transport industry, and a specialist marine hull insurer. This is in line with MAS' aspiration to develop a viable marine hull market in Singapore, and Singapore's vision to become a one-stop maritime centre.

In the 1998 Budget, the Minister for Finance has announced that with effect from Year of Assessment 1999, income derived from writing offshore marine hull & liability insurance business of approved insurers will be exempted from tax for 10 years. This is to encourage serious and committed players to invest further in developing their regional marine hull & liability portfolio from Singapore. The Tax Regulations for the tax exemption are presently being drafted.

ii) Control of Investments of Singapore Insurance Fund The Authority sets control, in the form of investment limits, for all assets of Singapore general insurance and non-linked life insurance funds of registered insurers and reinsurers to ensure a certain degree of diversification by type of assets and by exposure to any single party. Any amount in excess of the prescribed investment limits would not be admissible for the purpose of meeting the solvency margin of the Singapore general and life insurance funds. Effective 27 Feb 1998, the Authority liberalised the investment limits to accord insurers greater flexibility to invest in equities and foreign assets. In addition, the revised regulations introduced new permitted

counterparty exposure limits and provided clarifications on the valuation of unit trusts.

## CREDIT AND CHARGE CARD INDUSTRY

The number of cards grew by 10.2% to 1,867,458 cards in 1997 compared with 6.2% in 1996. In August 1997, the guidelines on the issue of supplementary cards were revised to allow card issuers to issue supplementary cards to any person below 21 years old under extenuating circumstances for bona fide transactional needs, e.g. students pursuing studies overseas. Before the revision of the guidelines, supplementary cards were allowed to be issued to persons who were under 21 but above 18 years of age under extenuating circumstances.

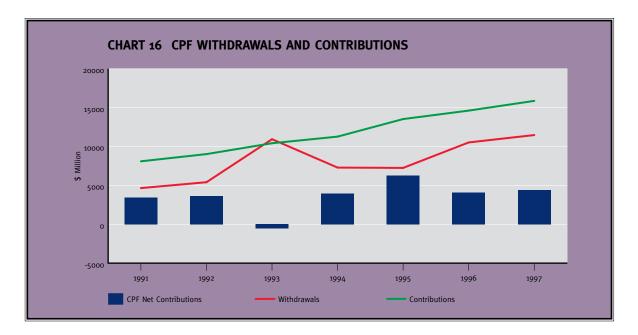
The value of card transactions of resident cardholders increased by 13.3% to \$7.9 billion, about the same as the 13.5% growth in 1996.

Card issuers wrote off bad debts totalling \$31.6 million in 1997 compared with \$23.9 million in 1996. The amount of bad debts written off constituted 0.4% of card billings compared with 0.3% in 1996.

Local card issuers' and foreign card issuers' share of the number of cards issued remained unchanged at 56% and 44% respectively. Foreign card issuers increased their market share of total card transactions further from 55% to 56%.

## CENTRAL PROVIDENT FUND

In 1997, net contributions to the CPF rose by 7.9% to \$4.4 billion. This moderate increase compared with last year's steep decline of 35%, reflected a more moderate growth in withdrawals.



Total outstanding balances due to members increased by 9.8% to \$79.7 billion. The interest rate on CPF balances in the Ordinary and Medisave Accounts, which was based on the 12-month deposit and savings rate of the four major local banks, was constant at 3.48% through 1997. The interest rate on balances in Special Accounts was 1.25 percentage points higher although, as announced in the 1998 Budget, it will be raised to 1.5 percentage points higher from July 1998.

## Contributions and Withdrawals

Gross contributions to the CPF in 1997 totalled \$15.9 billion, an increase of 8.6%, which was close to 1996's growth of 8.0%, but much lower than the 20% growth recorded in 1995. This was partly due to a slower increase in the number of active CPF members in the last two years.

Total withdrawals increased by only 8.8% last year to \$11.5 billion, compared with an increase

of 45% in 1996. The smaller increase was due to an inflow of \$111 million under the Special Discounted Shares Scheme<sup>3</sup>, as proceeds from members' sales of Singapore Telecom shares were returned to their CPF accounts. This compares with an outflow of \$1.8 billion the year before, for the purchase of the second tranche of Special Discounted Singapore Telecom shares, or ST2.

Withdrawals under the Approved Investment Scheme, on the other hand, tripled to \$3.1 billion, reflecting the continued liberalisation of the investment scheme<sup>4</sup> for CPF funds. Growth of withdrawals for the Approved Housing Scheme almost doubled, as more public housing units were completed to meet demand. This more than offset the slight decline in growth of withdrawals for private housing under the Approved Residential Properties Scheme. Hence, overall withdrawals for home ownership schemes grew faster, by 14% to \$5.8 billion.

<sup>3</sup> Under this scheme, Singaporeans who are CPF members are entitled to use CPF funds to buy special discounted shares of Singapore Telecom.

<sup>4</sup> In January 1997, the Basic Investment Scheme and the Enhanced Investment Scheme were merged to form the CPF Investment Scheme, and this enabled more CPF members to invest in greater number of financial instruments.

# ORGANISATION Тне

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MAS put in place a new organisational structure in 1998, aimed at reflecting its expanded roles and functions, supporting its new supervisory approach, and aligning itself with changes in the external environment.

#### ORGANISATIONAL REVIEW

#### New Organisation Structure

MAS put in place a new organisational structure on 1 April 1998. The new structure was designed to meet three objectives: (a) to reflect MAS' expanded roles and functions; (b) to support its new supervisory approach; and (c) to align MAS' organisational capabilities with changes in the external environment.

First, while MAS' principal functions remain unchanged, namely to promote macroeconomic stability, foster a sound financial system, develop Singapore as an international financial centre, and manage MAS' foreign reserves, it would need to build up key capabilities in strategic and corporate planning, financial sector promotion, and supervisory policy development. The new organisational structure would support this.

Second, in line with the shift in MAS' emphasis from regulation to supervision, it would need to enhance and integrate its supervisory functions. MAS' new supervisory approach would focus on minimising systemic risk, while allowing institutions greater leeway to take business risks for themselves. This means MAS will focus on assessing financial institutions' risk control and management systems, rather than trying to detect fraud. The new approach would require MAS to develop risk-based supervisory procedures that distinguish strong players from weaker ones.

Third, the structure of the financial services sector is changing dynamically. Traditional boundaries between products are becoming less defined, and activities are becoming more integrated. MAS' new structure seeks to streamline and integrate its approach to supervising and regulating financial institutions, so as to align itself with these industry trends.

#### The Financial Supervision Group

The Banking and Financial Institutions Group (BFIG) was reconstituted as the Financial Supervision Group (FSG), comprising four departments: Banking Department (BD), Securities and Futures Department (SFD), Insurance Department (ID), and Supervisory Policy Department (SPD).

The new Banking Department (BD) would oversee all commercial banks, merchant banks and finance companies, both local and foreign. The reconstituted BD also strengthens coordination between off-site supervision and on-site examination, which would aid in the implementation of a risk-based supervisory approach. It would also provide greater scope for developing staff capabilities in broader supervisory skills.

The new Securities and Futures Department (SFD) is organised into three divisions: Securities and Asset Management, Financial Futures, and Corporate Finance. The Securities and Asset Management Division would develop supervisory practices for the fund management industry, following best international practices. The Corporate Finance Division would regulate take-overs and mergers, recommend policy on corporate fund-raising, and regulate unit trusts and other investment products. It would also eventually take over the functions currently performed by the Registrar of Companies with regard to the registration of unit trusts, so as to allow for seamless regulation of such products within one Government authority.

The Insurance Department (ID) was brought together with the other supervisory departments under FSG, since product distinctions between banking and insurance are no longer so clearly defined. It also aimed at aligning the regulatory and supervisory approach in these two industries. The new Supervisory Policy Department (SPD) would strengthen policy thinking and formulation in financial sector regulation and supervision. It would co-ordinate a major review of regulatory and supervisory policies concerning banks and other financial institutions. It would also, on an ongoing basis, undertake market analyses and risk assessment within its Market Analysis and Supervisory Policy Development Division, and provide legal services on regulatory and supervisory matters within its Supervisory Legal Services Division.

## The Financial Sector

#### **Promotion Department**

A Financial Sector Promotion Department (FPD) was set up, separate from the FSG, to focus MAS' efforts in promoting the financial industry and Singapore's role as a financial centre. Besides attracting new activities, players, and products, FPD would carry out manpower and information technology planning for the financial sector, and design and implement incentive schemes. It would also provide assistance to financial institutions that need help when dealing with government agencies and departments. FPD would work closely with private sector industry bodies and help gather industry feedback. It would also work with other MAS departments and government agencies to promote Singapore as a financial centre.

FPD comprises five divisions. The Marketing division will proactively seek new investments in Singapore's financial sector, promoting activities in the areas of fund management and private banking, foreign exchange and risk management, capital markets, and insurance. The Systems Strategy Division will help identify new growth areas and products and help formulate developmental policies and strategies. The Information Technology Division will facilitate the development of cutting edge IT infrastructure and systems for the financial sector. The Manpower Division will assess the manpower needs of the financial sector and help develop and attract the necessary skills and expertise. There is also a pro-tem Special Projects Division in FPD which is overseeing the integration of the different financial sector studies being carried out by the consultants.

FPD will be working closely with both the Economic Development (EDB) and the National Computer Board (NCB) in its promotional efforts, particularly in its first year of operation. Staff from EDB have been seconded to FPD to work jointly on marketing activities and systems strategy plans. There will also be a rotation of FPD officers to EDB for a six to twelve-month period, to gain first-hand experience in EDB's investment promotion approach. These cross-training activities will enable FPD to take advantage of EDB's extensive network and promotional experience.

In addition, staff from NCB have been seconded to FPD to work jointly with FPD officers and external IT consultants on formulating an IT strategy for the financial sector. The co-operation of the Ministry of Manpower will be sought in the development of financial sector manpower resources.

FPD will also work closely with private sector industry bodies in developing Singapore as a premier financial centre. Regular dialogue and contact with the private sector will be maintained to gather feedback on industry development.

The Planning & Policy Co-ordination Unit The Planning and Policy Co-Ordination Unit (PPC) was set up in February 1998 under the Managing Director's Office to strengthen policy integration and strategic planning within MAS. Its principal functions include cross-department policy co-ordination and integration, strategic and scenario planning, organisational development, and corporate communications.

In addition to providing staff support to senior management on policy and organisational issues, PPC is co-ordinating MAS' study with McKinsey & Co, who had been commissioned to identify potential growth areas for Singapore's financial sector and formulate appropriate long-term policies and strategies to make Singapore a premier financial centre in Asia, and globally. As part of its corporate communications function, PPC is involved in developing appropriate strategies and structures for internal communications as well as external promotion, media relations, and publications.

## Other Changes

A Corporate Support Group (CSG) was formed, comprising the Human Resource and Corporate Services Department (HRD) [formerly called Personnel and Administration Department], the Information Technology Department (ITD) [formerly called Information Services Department], and the Finance Department (FD).

The International Department was renamed Markets and Investments Department (MID) to better reflect the range of the department's functions.

## EXTERNAL RELATIONS

The last financial year was a very active one for MAS in the area of external relations. The number of international meetings involving MAS rose from 63 in 1996/1997 to 104 in 1997/98. About 60 officials were involved in attending these meetings. With Singapore serving as a key stop-over point for high-level visits to address the regional financial crisis, MAS received 400 foreign visitors during the year. MAS also hosted an IMF presentation on the Spring 1997 World Economic Outlook, a SEACEN seminar on the Special Data Dissemination Standard and the General Data Dissemination Systems, the 15th EMEAP Deputies' Meeting, and a BIS Working Party Meeting on Monetary Policy in Asia during the year.

# Regional Fora and Responses to Regional Crisis

As efforts to resolve the regional financial crisis became the focus of intensified international and regional co-operation, MAS was involved in an increased number of meetings of central banks and finance ministries as well as in other fora like the ASEAN and APEC Leaders' Summits.

Following the outbreak of the Thai baht crisis in mid-1997, EMEAP Governors exchanged views on it during their meeting in Shanghai during July. This meeting, and the EMEAP network, facilitated the assembling of a US\$17.1 billion loan package for Thailand. Singapore extended a US\$1billion bilateral swap line to Thailand as part of this IMF-led package.

As the contagion effects of the Thai Baht crisis on regional financial markets spread, the First Asia-Europe (ASEM) Finance Ministers' Meeting was held in Bangkok in September 1997. At a meeting on the fringe of the ASEM Meeting, ASEAN countries discussed with Japan possible responses to the crisis. A follow-up meeting of Finance and Central Bank Deputies in Manila which MAS helped to convene in November, produced a New Framework for Enhanced Asian Regional Co-operation to Promote Financial Stability. This "Manila Framework" proposed a regional surveillance mechanism, measures to strengthen the IMF's capacity to respond to financial crises; enhanced economic and technical co-operation, particularly in strengthening financial systems and regulatory capacities; and a co-operative financing arrangement to supplement IMF financing on a case-by-case basis. It was endorsed by APEC Economic Leaders meeting in Vancouver that same month and by ASEAN Finance Ministers at their Special Meeting in Kuala Lumpur in December. The first surveillance meeting of the group was held in Tokyo in March 1998.

ASEAN also established its own mutual surveillance process during the year. The ASEAN Central Bank Forum was inaugurated in early-November, with the IMF providing technical support to its meetings.<sup>1</sup> In other responses to the regional crisis, ASEAN Central Banks signed a Sixth Supplementary Agreement to renew the ASEAN Swap Arrangement in July and considered the question of using ASEAN currencies for settling intra-ASEAN trade during the 33rd SEACEN Governors' Conference in February this year. The Second ASEAN Finance Ministers' Meeting in Jakarta subsequently endorsed the use of bilateral payments arrangements on a voluntary basis.

With the crisis spreading to Indonesia in the second half of 1997, Singapore pledged US\$5 billion to a US\$36.6 billion financial package in support of an IMF program for Indonesia. As it became clear that inadequate trade financing was hampering Indonesia's ability to export, Singapore proposed the establishment of a multilateral trade finance guarantee facility for Indonesia. But, due to a lack of support, Singapore decided to proceed with a bilateral facility instead, using the funds which it had pledged under the second-line financial package to Indonesia.

In response to a proposal by Singapore at the APEC Leaders' Summit, the US convened a meeting of Finance Ministers from twenty-two countries, to study ways to improve the functioning of the international financial system. After a preparatory meeting of Finance and Central Bank Deputies in February, Finance Ministers met in Washington in mid-April. Three working parties have been set up to address the issues of transparency and disclosure in financial markets, ways to strengthen national financial systems, and appropriate burden sharing in resolving international financial crises. MAS is participating in the latter two working parties and providing inputs to the first group.

## Relationship with International Organisations IMF

Singapore played an enhanced role in the IMF during the year. It accepted in full the proposed increase of SDR 504.9 million in its quota subscription to the IMF under the Eleventh General Review of Quotas, concluded and approved by the IMF's Interim Committee in September.

During the year, the MAS also followed up on a proposal raised during the IMF Managing Director's visit to Singapore in December 1996, for Singapore to host an IMF regional training institute. A Memorandum of Understanding on the establishment of the IMF-Singapore Regional Training Institute, or STI, was signed on the occasion of the IMF/World Bank Annual



Mr Michel Camdessus and Dr Richard Hu (right) officially opening STI.

Meeting in September. The STI was launched on 4th May 1998 from temporary premises in the MAS Building<sup>2</sup>. The establishment of the STI is timely as it will help meet the needs for training and institutional-building in the region, especially in the light of developments since mid-1997.

## BIS and Financial Sector Fora

During the year, MAS played an active role in continuing international efforts to strengthen mechanisms for surveillance and supervision of the world's financial markets.

With Singapore becoming a member of the BIS in December 1996, MAS has increased its participation in BIS activities. Besides attending some of the regular meetings of the BIS Eurocurrency Standing Committee and the Committee on Payments and Settlement Systems (CPSS), MAS made a presentation at the Conference on Managing Change in Payment Systems organised by the CPSS in December 1997. MAS was also closely involved in the BIS Basle Committee's work on the Core Principles for Effective Banking Supervision. Following the issue of the Core Principles in September 1997, a Core Principles Liaison Group is formulating the appropriate modalities for dissemination and adoption of the Principles by bank regulators worldwide. MAS is a member of this Group.

MAS also continued to be active as a member of the Asia Pacific Regional Committee (APRC) and the Emerging Markets Committee (EMC) of the International Organisation of Securities Commission (IOSCO). In April 1997, the APRC

<sup>2</sup> There are plans for the STI to move to a permanent building with residential facilities, near the National University of Singapore.

passed a resolution for the prompt exchange of enforcement information on securities law violations. The EMC endeavours to promote the development and efficiency of emerging securities markets.

## WTO

MAS represented Singapore in the WTO negotiations on financial services during the year. Singapore tabled a significant offer during the negotiations, underlining its commitment to an open trading system. The WTO negotiations were successfully concluded in December 1997 and the agreement on financial services is scheduled to come into force by 1 March 1999.

## HUMAN RESOURCE MANAGEMENT

During the financial year under review, human resource management and development was geared towards building up the organisation and strengthening organisational capabilities. While human resource policies remained focused on attracting, developing, motivating and retaining quality staff, there was a comprehensive review of specific policies.

#### Recruitment

As at 31 March 1998, MAS had a staff strength of 596, comprising 292 senior officers, 52 officers and 252 support staff.

The Authority recruited a total of 59 new officers during the year, comprising 14 midcareer and 45 trainee officers, who were mostly fresh graduates. Another 5 mid-career recruits joined in the beginning of the new financial year 1998/1999. The stepped-up recruitment, which is still in progress, was aimed at building up MAS' human resources to support its expanded roles and functions. The shift in regulatory approach to give greater emphasis to supervision, especially on-site examination, called for a substantial increase in staff strength. To build up MAS' capabilities and bring in new talent, more seasoned mid-career officers with industry knowledge were recruited, compared with previous years. The mid-career recruits were mainly for the new Financial Sector Promotion Department, Banking Department, Securities and Futures Department, Economics Department, and the Information Technology Department.

Fresh graduates were recruited as trainee officers. They will be groomed to take on senior officer responsibilities. During their traineeship, they will attend a central banking induction course to orientate them to the operations of MAS and its departments. Trainees will also undergo comprehensive on-the-job training, as well as attend several in-house (e.g. report writing and team-building) and specialised functional courses.

#### Career Development and Training

At MAS, career development planning and staff training are a continuing process. To provide well-rounded careers, increased emphasis was given to career development planning. The focus was on putting into place a more structured job rotation scheme to enable officers to move into different job functions for broader exposure. The scheme included external attachments to industry and to other organisations, both locally and overseas. To enable the organisation to meet changes and challenges in the external environment, staff training continued to aim at ensuring that MAS officers are equipped with the requisite functional skills, at each stage of their career. Staff were sent for both overseas and local training courses. Those with demonstrated potential also attended general management and personal development courses.

A total of 67 senior officers were sent for overseas training, and 13 were attached to central banks and financial institutions abroad. The overseas courses and seminars were mainly in central banking and related areas. They provided staff with a good exposure to international financial regulatory issues, as well as operational aspects of banking in the countries where these courses were held.

During the year, 495 staff members attended local training courses, both in-house and external. The courses included programmes on central banking, accounting, economics, information technology, stress management, effective writing and emotional intelligence.

MAS continued to sponsor promising staff for graduate studies at local and foreign universities. One senior officer completed a Master's degree programme under MAS' sponsorship while another senior officer is still pursuing his degree. During the year, the Authority also extended its postgraduate scholarship scheme to undergraduate scholars pursuing their Bachelor's degrees, and who have excelled academically. These scholars will be sponsored, without an increase in their bond period, if they complete their undergraduate and graduate studies within 4 years. However, the cost of sponsorship for their graduate studies will be imputed in their bond amount. A total of 16 local and 4 overseas undergraduate scholarships were awarded during the year to outstanding GCE 'A' level students, to read Accountancy, Economics, Computer Engineering, Computer Science, Actuarial Science, and Mathematics.

During the year, MAS staff spent an average of 12 days on training; total training costs amounted to 2.05% of total payroll, or an average of \$1,600 per employee.

## Remuneration

MAS completed a comprehensive review of its salary policy for professional staff, aimed at ensuring that MAS, as the central bank, is able to attract and retain a higher proportion of the best people than the industry we are overseeing. Our policy is to pay remuneration packages that are competitive with the financial market for jobs of comparable sizes and responsibilities. As a result, adjustments were made to the remuneration packages of most of the existing professional staff, where appropriate. This move also enabled MAS to recruit mid-career professional staff from the market to boost its manpower needs.

MAS continued to participate in surveys of remuneration practices in the financial and public sectors to enable it to monitor and move in line with general trends and practices.

## Staff Appraisal

The annual staff appraisal exercise was conducted to assess the performance and potential of each officer. Performance-based rewards, in terms of performance bonuses and salary increases, continued to be emphasised. Staff with demonstrated potential, and who performed well, were promoted to assume higher levels of responsibilities. Altogether, 75 professional staff were promoted.

## Long Service Awards

In recognition of their dedication and loyalty, 61 employees were presented with long service awards during the year. Of these, 2 had served for 30 years, 11 for 25 years, 9 for 20 years, 15 for 15 years, and 24 for 10 years.

## **Recreation and Welfare**

As in past years, the MAS Recreation Club (MASRC) organised a wide range of social, sports and recreational activities for staff. Among the social events organised were the annual Dinner and Dance, National Day celebrations and MAS family day.

MAS staff continued to enjoy sports and recreation facilities available at the MAS Building. These include squash courts, billiard room, table tennis room, and a well-equipped gymnasium. Activities included lunch-time talks and movies, and inter-departmental friendly matches in games such as street soccer, international chess, darts, netball, table soccer, and bowling.

## INFORMATION RESOURCES

MAS Information Resource Centre's collection size at end-March stood at 25,724 book titles and 1,016 serial titles. To ensure the quality, relevance and timeliness of information provided, staff of the Centre, thoroughly reviewed the material in the areas of economics, finance, banking and investment during the year. Action was taken to supplement and update the collection where necessary.

The Centre's staff and users continued to use SILAS and various commercial databases to supplement the information available in-house. Usage of the online databases maintained its upward trend. CD-ROMs online were introduced during the year. Although titles currently made available are only for rating services, more broad ranging titles will be introduced in the near future.

The Information Resource Centre's management software was changed and a new system is now in operation. Among the new functions are online access to the Centre's catalogues together with the contents page of some titles. The Centre's users may also make loan reservations and check their own loan records from their desktop computer.

## INTERNAL AUDIT

The role of Internal Audit is to regularly review the operations of the Authority. These include the Authority's reserves management activities, domestic money market operations, its administrative functions, and the information systems and networks that support these operations.

When conducting its audits, a risk-based approach is adopted. Emphasis is also placed on identifying new areas in which computerassisted audit techniques could enhance efficiency and effectiveness.

To be proactive, the department evaluates new computer systems and areas of operation with user departments. This ensures that key internal controls are instituted from the beginning.

Current areas being reviewed by the department include the new real time gross settlement system (MEPS), the upgrade of the electronic funds transfer system, and the Year 2000 conversion project.

## A N N U A L

ACCOUNTS

#### Assets

Total assets of the Authority as at 31 March 1998 were S\$95,834 million.

Holdings of gold and foreign assets which accounted for 98.4 per cent of the Authority's total assets, grew by \$\$9,000 million during the year to \$\$94,341 million.

The Authority's Reserve Position and Holdings of Special Drawing Rights (SDRs) with the International Monetary Fund (IMF) increased by S\$201 million to S\$864 million. As at 31 March 1998, the Singapore's quota in the IMF was SDR 357.6 million, the same as at 31 March 1997.

Other assets rose by S\$268 million to S\$526 million due mainly to increase in loans to banks and cash holding.

#### Liabilities

Deposits and balances of banks and other financial institutions increased by S\$444 million to S\$9,960 million. As the statutory reserves ratios for banks and finance companies remained unchanged in 1997/98, the higher balances reflected a growth in deposits of the financial sector.

Deposits placed with the Authority by Government, statutory boards and international financial institutions fell by S\$3,279 million to S\$59,961 million, due mainly to the decrease in deposits by statutory boards.

The allocation of Special Drawing Rights to Singapore remained unchanged at SDR16.5 million or S\$36 million.

Provisions and other liabilities increased by S\$9,232 million to S\$17,279 million over the year, as higher provisions were set aside for currency fluctuation and other contingencies.

#### **Operating Results and Profit Appropriation**

The Authority recorded a large translation gain for the year from the conversion of its foreign investments into the Singapore dollar as the local currency weakened against major foreign currencies during the period. The translation gain has been set aside as a provision for currency fluctuation.

After meeting all expenditure and transferring to/from provisions, the net profit for the financial year was S\$5,069 million. As approved by the Board, S\$3,069 million has been transferred to the General Reserve Fund and the remaining profit of S\$2,000 million will be returned to the Government.

## REPORT ON THE AUDIT OF THE ACCOUNTS OF THE MONETARY AUTHORITY OF SINGAPORE FOR THE YEAR ENDED 31 MARCH 1998

The accounts of the Monetary Authority of Singapore set out on pages 108 to 113 have been examined under my direction and in accordance with the provisions of the Monetary Authority of Singapore Act (Chapter 186). I have obtained all the information and explanations I have required.

In my opinion, the accompanying accounts show fairly the state of affairs of the Authority as at 31 March 1998, and the results and cash flows of the Authority for the year ended on that date.

Chuang Kwong Yong Auditor-general Singapore 29 June 1998

## MONETARY AUTHORITY OF SINGAPORE BALANCE SHEET AS AT 31 MARCH 1998

	Note	1997/98	1996/97
		S\$	S\$
Capital and General Reserve			
Authorised Capital		100,000,000	100,000,000
Issued and Paid-up Capital	3	100,000,000	100,000,000
General Reserve Fund	U	8,498,188,947	5,429,461,616
		8,598,188,947	5,529,461,616
Represented by: Assets			
Fixed Assets	4	102,614,349	102,283,636
Gold and Foreign Assets	5	94,341,230,306	85,341,492,330
Reserve Position and Holdings of Special Drawing Rights in International Monetary Fund		864,172,605	663,162,395
Other Assets	6	526,146,552	258,494,474
		95,834,163,812	86,365,432,835
Less: Liabilities			
Deposits of Banks and Other Financial Institutions	7	9,959,871,287	9,516,391,350
Deposits of Singapore Government, Statutory Boards and International Financial Institutions	8	59,961,257,161	63,239,786,691
Allocation of Special Drawing Rights in International Monetary Fund	9	35,860,165	32,363,520
Provisions and Other Liabilities		17,278,986,252	8,047,429,658
		87,235,974,865	80,835,971,219
		8,598,188,947	5,529,461,616

The accompanying notes form part of the accounts.

LEE HSIEN LOONG CHAIRMAN MONETARY AUTHORITY OF SINGAPORE SINGAPORE 29 JUNE 1998 KOH YONG GUAN MANAGING DIRECTOR MONETARY AUTHORITY OF SINGAPORE SINGAPORE 29 JUNE 1998

# MONETARY AUTHORITY OF SINGAPORE PROFIT AND LOSS APPROPRIATION ACCOUNT FOR THE YEAR ENDED 31 MARCH 1998

	1997/98	1996/97
	S\$	S\$
Profit (after transfers to/from provisions)	5,068,727,331	1,542,435,700
General Reserve Fund brought forward	$\frac{5,429,461,616}{10,498,188,947}$	4,587,025,916 6,129,461,616
Less: Return of Profit to Government	2,000,000,000	700,000,000
General Reserve Fund carried forward	8,498,188,947	5,429,461,616

The accompanying notes form part of the accounts.

# MONETARY AUTHORITY OF SINGAPORE CASH FLOW STATEMENT FOR THE YEAR ENDED 31 MARCH 1998

	Note	1997/98	1996/97
		S\$	S\$
Cash Flows from Operating Activities			
Profit (after transfers to/from provisions)		5,068,727,331	1,542,435,700
Add: Non-Cash Item (Depreciation/Amor	tisation)		
Fixed Assets Others	4	3,384,051 16,667	2,382,576 67,500
Add/(Less) Changes in Working Capital			
Gold and Foreign Assets		(8,999,737,976)	(13,310,587,567)
Reserve Position and Holdings of Special Drawing Rights in International Monetary Fund		(197,513,565)	17,787,744
Other Assets		(182,298,184)	(49,339,160)
Deposits of Banks and Other Financial Institutions		443,479,937	476,955,675
Deposits of Singapore Government, Statutory Boards and International Financial Institutions		(3,278,529,530)	8,934,965,850
Provisions and Other Liabilities		7,929,880,473	2,850,315,356
Net Cash from Operating Activities		787,409,204	464,983,674
Cash used in Investing Activities			
Purchase of Fixed Assets		(2,038,642)	-
Cash used in Financing Activities			
Dividend Paid		(700,000,000)	(500,000,000)
Net Increase/(Decrease) in Cash and Cash Equivalents		85,370,562	(35,016,326)
Cash and Cash Equivalents at beginning of year		42,274,388	77,290,714
Cash and Cash Equivalents at end of year	10	127,644,950	42,274,388

The accompanying notes form part of the accounts.

# MONETARY AUTHORITY OF SINGAPORE NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 MARCH 1998

## **1 PRINCIPAL ACTIVITIES**

The Authority performs all the functions of a central bank except for the issue of currency. It also oversees the securities and insurance industries.

## 2 SIGNIFICANT ACCOUNTING POLICIES

#### **Basis of Accounting**

The accounts are prepared in accordance with the historical cost convention.

## Foreign Currency Transactions

Assets and liabilities in foreign currencies have been translated into Singapore dollars at the rates of exchange ruling on the balance sheet date. Transactions in foreign currencies during the year have been translated into Singapore dollars at the rates of exchange prevailing on transaction dates. Exchange differences are taken to the profit and loss account.

## Fixed Assets and Depreciation

Fixed assets are stated at cost less accumulated depreciation. Depreciation is calculated on the straight line basis to write off the cost of the fixed assets over their estimated useful lives as follows:

Leasehold Land	Period of lease
Buildings	50 years
Mechanical and Electrical Installation	10 years
Computer Equipment and Software	3 to 5 years
Furniture, Fixtures and Other Equipment	3 to 5 years

Assets costing not more than S\$1,000 are charged to the profit and loss account in the year of purchase.

## 3 ISSUED AND PAID-UP CAPITAL

The issued and paid-up capital of S\$100 million is owned solely by the Government of the Republic of Singapore.

#### 4 FIXED ASSETS

			Mechanical and	Computer	Furniture,	
	Leasehold		Electrical	Equipment	Fixtures and	
	Land	Buildings	Installation	and Software	Other Equipment	Total
	S\$	S\$	S\$	S\$	S\$	S\$
COST						
At 1.4.1997	25,448,472	105,121,814	35,029,611	-	-	165,599,897
Additions	-	-	83,447	2,622,705	1,008,612	3,714,764
At 31.3.1998	25,448,472	105,121,814	35,113,058	2,622,705	1,008,612	169,314,661
ACCUMULATE	ED DEPRECIA	TION				
At 1.4.1997	3,176,623	25,123,278	35,016,360	-	-	63,316,261
Additions	265,141	2,103,731	19,696	756,803	238,680	3,384,051
At 31.3.1998	3,441,764	27,227,009	35,036,056	756,803	238,680	66,700,312
Depreciation						
for FY 1996/97	265,141	2,103,731	13,704	-		2,382,576
NET BOOK VA	LUE					
At 31.3.1998	22,006,708	77,894,805	77,002	1,865,902	769,932	102,614,349
At 31.3.1997	22,271,849	79,998,536	13,251	_	-	102,283,636

The Authority capitalises the cost of computer equipment and software, furniture, fixtures and other equipment from this financial year onwards. In prior years, the costs of these fixed assets were charged to the profit and loss account in the year of purchase. The net profit has increased by SS2,635,834 as a result of the change in accounting policy.

#### 5 GOLD AND FOREIGN ASSETS

Foreign assets consist of government securities, Treasury bills, deposits with banks and other approved investments. Provision has been made for diminution in value of assets.

#### 6 OTHER ASSETS

This includes the Authority's shareholding in the Bank for International Settlements of 3,000 shares at 2,500 gold francs per share (25% paid).

#### 7 DEPOSITS OF BANKS AND OTHER FINANCIAL INSTITUTIONS

These represent the minimum cash balances maintained by banks and finance companies with the Authority as required under the Banking Act (Chapter 19) and the Finance Companies Act (Chapter 108) respectively and statutory deposits of securities companies under the Securities Industry Act (Chapter 289).

8 DEPOSITS OF SINGAPORE GOVERNMENT, STATUTORY BOARDS AND INTERNATIONAL FINANCIAL INSTITUTIONS

These represent mainly deposits of the Singapore Government, statutory boards and current account balances of the International Monetary Fund and central banks.

## 9 ALLOCATION OF SPECIAL DRAWING RIGHTS IN INTERNATIONAL MONETARY FUND

This represents special drawing rights allocated to the Authority in proportion to its subscription to the International Monetary Fund.

## 10 CASH AND CASH EQUIVALENTS

These comprise the following:

	1997/98	1996/97
	S\$	S\$
Cash and Balances with Banks	80,611,103	25,656,659
Export and Pre-Export Bills	47,033,847	16,617,729
	127,644,950	42,274,388

## 11 COMMITMENTS

In addition to the Reserve Position and Holdings of Special Drawing Rights disclosed in the accounts, the Authority has an obligation to pay an amount of S\$180 million (FY1996/97: S\$300 million) which represents the unpaid quota due to the International Monetary Fund (IMF) under Section 4 of Article III of the Articles of Agreement.

As a participant in the IMF's 'New Arrangements to Borrow' (NAB), the Authority undertakes to provide a credit line up to SDR340 million (S\$740 million) in the event of a financial emergency as specified by the NAB. As at 31 March 1998, the Authority has not granted the IMF any loan under this special borrowing arrangement.

The Authority has a commitment, amounting to S\$25.6 million as at 31 March 1998 (FY1996/97: S\$26.4 million), in respect of the uncalled portion of its shares held in the Bank for International Settlements. The amount is based on the nominal value of the uncalled portion and gold price as at the balance sheet date.

The Authority participated in a financing package organised for Thailand by the IMF. The financing package is in the form of a Currency Swap Agreement between the Bank of Thailand (BOT) and a number of Asian central banks and multinational institutions, including the Authority and the IMF. Under the Agreement, the Authority entered into swap transactions to exchange US dollars for Thai Baht up to a maximum of US\$1 billion for a maximum period of 5 years. As at 31 March 1998, the outstanding principal due from BOT under the Agreement amounted to US\$680 million.

The Singapore Government has committed US\$5 billion to the IMF stand-by facility for Indonesia. This amount has been earmarked for the bilateral trade finance guarantee scheme requested by the Indonesian Government. The scheme is to be funded by MAS and will start off with US\$3 billion.

## **12 COMPARATIVE FIGURES**

Certain comparative figures have been reclassified to conform to the current year's presentation.

 $\frac{STATISTICAL}{\overline{ANNEX}}$ 

#### A MONETARY STATISTICS

- A.1 Money Supply
- A.2 Official Foreign Reserves
- A.3 Exchange Rates (S\$ Per Foreign Currency)
- A.4 Domestic Interest Rates

#### B FINANCIAL STRUCTURE

B.1 Number of Financial Institutions in Singapore

## C COMMERCIAL BANKS

- C.1 Assets and Liabilities
- C.2 Loans and Advances by Industrial Classification
- C.3 Types of Loans and Advances to Non-Bank Customers
- C.4 Types of Deposits including S\$NCDs
- C.5 Liquidity Position

#### D FINANCE COMPANIES

D.1 Assets and Liabilities

#### E MERCHANT BANKS

- E.1 Consolidated Assets and Liabilities
- E.2 Assets and Liabilities of Domestic Operations

## F INSURANCE INDUSTRY

F.1 Assets and Premiums

#### G NON-BANK FINANCIAL INSTITUTIONS

- G.1 Post Office Savings Bank
- G.2 Central Provident Fund Board

## H DOMESTIC CAPITAL MARKET

H.1 Net Funds Raised in the Domestic Capital Market

## I ASIAN DOLLAR MARKET

- I.1 Assets and Liabilities
- I.2 Maturity Classification of Assets and Liabilities
- I.3 Maturity Transformation by Asian Currency Units

## A.1 MONETARY STATISTICS: MONEY SUPPLY

										S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Money Supply (M1)	13,744.6	15,260.9	16,430.0	18,515.6	22,882.2	23,411.5	25,349.2	27,040.0	27,510.9	26,609.9
Currency in circulation	6,609.9	7,108.5	7,497.1	8,279.2	8,942.1	9,420.3	9,906.5	10,293.1	10,703.8	10,467.2
Demand deposits	7,134.7	8,152.4	8,932.9	10,236.4	13,940.1	13,991.2	15,442.7	16,746.9	16,807.1	16,142.7
Quasi-money	37,800.9	46,584.2	53,112.3	57,212.9	59,248.1	70,569.1	76,618.1	84,910.8	95,932.5	101,417.0
Fixed deposits	27,207.8	35,965.9	40,852.0	43,176.4	40,321.0	53,622.8	54,908.2	59,987.0	72,704.6	79,555.2
Savings and other deposits	9,454.4	9,458.0	11,338.5	13,295.4	18,091.7	16,350.1	20,894.8	24,079.3	22,594.4	21,269.3
S\$NCDs	1,138.7	1,160.3	921.8	741.1	835.4	596.2	815.1	844.5	633.5	592.5
Money Supply (M2)	51,545.5	61,845.1	69,542.3	75,728.5	82,130.3	93,980.6	101,967.3	111,950.8	123,443.4	128,026.9
Net deposits with non-bank										
financial institutions	12,462.3	13,947.3	14,657.4	15,353.6	18,839.1	23,054.5	26,869.3	27,893.9	30,862.6	32,171.0
Finance companies	6,709.2	7,419.4	7,557.3	8,060.9	9,301.3	11,863.8	13,273.7	13,192.0	13,969.3	13,522.0
POSBank	5,753.1	6,527.9	7,100.1	7,292.7	9,537.8	11,190.7	13,595.6	14,701.9	16,893.3	18,649.0
Money Supply (M3)	64,007.8	75,792.4	84,199.7	91,082.1	100,969.4	117,035.1	128,836.6	139,844.7	154,306.0	160,197.9

### A.2 MONETARY STATISTICS: OFFICIAL FOREIGN RESERVES

										S\$ million
										March
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Foreign Reserves	38,607.2	48,521.3	55,802.8	65,788.4	77,866.8	85,165.5	97,336.6	107,750.8	119,616.8	119,956.2
Gold & Foreign Exchange	38,144.6	48,033.9	55,324.0	65,239.0	77,290.7	84,559.4	96,666.2	107,072.5	118,764.7	119,098.4
Reserve Position in the IMF	215.5	212.5	199.7	346.4	361.2	381.5	430.3	428.8	564.3	564.3
Special Drawing Rights (SDRs)	247.1	274.9	279.1	203.0	214.9	224.6	240.1	249.5	287.8	293.5

## A.3 MONETARY STATISTICS: EXCHANGE RATES (S\$ PER FOREIGN CURRENCY)

Period Average	1989	1990	1991	1992	1993	1994	1995	1996	1997	1st Qtr 1998
US Dollar	1.9503	1.8125	1.7276	1.6290	1.6158	1.5274	1.4174	1.4101	1.4848	1.6761
100 Japanese Yen	1.4173	1.2548	1.2843	1.2869	1.4568	1.4951	1.5154	1.2971	1.2277	1.3070
Deutsche Mark	1.0391	1.1223	1.0449	1.0451	0.9781	0.9423	0.9900	0.9377	0.8569	0.9217
Pound Sterling	3.1983	3.2262	3.0559	2.8762	2.4271	2.3377	2.2369	2.2017	2.4334	2.7567
Swiss Franc	1.1945	1.3075	1.2101	1.1621	1.0940	1.1184	1.2009	1.1425	1.0245	1.1362
French Franc	0.3062	0.3331	0.3073	0.3083	0.2858	0.2754	0.2843	0.2758	0.2546	0.2751
Australian Dollar	1.5445	1.4157	1.3454	1.1978	1.0983	1.1166	1.0510	1.1040	1.1024	1.1143
100 Korean Won	0.2905	0.2563	0.2357	0.2087	0.2014	0.1900	0.1838	0.1754	0.1587	0.1045
100 New Taiwan Dollar	7.3890	6.7432	6.4415	6.4724	6.1279	5.7724	5.3382	5.1354	5.1752	5.0721
Hong Kong Dollar	0.2500	0.2327	0.2223	0.2104	0.2089	0.1976	0.1832	0.1823	0.1918	0.2164
Malaysian Ringgit	0.7203	0.6702	0.6283	0.6398	0.6277	0.5823	0.5651	0.5605	0.5353	0.4213
Thai Baht	0.0759	0.0708	0.0677	0.0641	0.0638	0.0607	0.0569	0.0556	0.0488	0.0360
100 Indonesian Rupiah	0.1102	0.0984	0.0886	0.0803	0.0775	0.0707	0.0632	0.0606	0.0536	0.0183

Note: Currencies quoted are those frequently requested from the Authority.

## A.4 MONETARY STATISTICS: DOMESTIC INTEREST RATES

								P	er Cent Pe	er Annum
										1st Qtr
Period Average	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Banks <sup>1</sup>										
Prime Lending Rate	6.21	7.32	7.61	6.01	5.39	5.82	6.37	6.26	6.30	7.66
Fixed Deposit Rate										
3-month	3.21	4.67	4.63	2.86	2.30	3.00	3.50	3.41	3.47	5.18
6-month	3.68	5.11	4.97	3.09	2.54	3.26	3.77	3.67	3.72	5.20
12-month	4.42	5.51	5.06	3.34	2.84	3.54	4.11	4.01	4.02	5.35
Savings Deposit Rate	2.93	3.50	3.69	2.14	1.62	2.31	2.81	2.72	2.75	3.48
Finance Companies <sup>2</sup>										
Fixed Deposit Rate										
3-month	3.93	5.11	4.73	2.90	2.44	3.28	3.28	3.14	3.32	5.24
6-month	4.20	5.45	4.99	3.16	2.68	3.52	3.68	3.48	3.62	5.26
12-month	4.88	5.81	5.17	3.54	3.16	3.99	4.20	3.93	4.03	5.44
Savings Deposit Rate	3.57	4.11	4.12	2.48	1.95	2.33	2.56	2.50	2.55	3.32
POSBank										
Savings Deposit Rate for amounts										
Up to \$100,000	3.02	3.90	4.42	2.88	2.31	2.50	2.88	2.56	2.56	3.58
Exceeding \$100,000	2.02	2.90	3.42	2.10	1.56	1.75	2.25	2.25	2.31	3.54
Interbank Rate										
1-month	5.26	6.58	4.60	2.51	2.19	3.36	2.33	2.82	4.12	7.02
3-month	5.32	6.63	4.76	2.66	2.40	3.62	2.60	2.92	4.06	7.03
SIBOR-US\$										
1-month	9.32	8.31	5.99	3.82	3.23	4.50	5.96	5.45	5.64	5.64
3-month	9.31	8.30	6.01	3.87	3.32	4.76	6.01	5.52	5.73	5.66
6-month	9.32	8.33	6.09	3.96	3.43	5.09	6.12	5.58	5.83	5.68

Average of 10 leading banks.
Average of 10 leading finance companies.
Note: Interest rates for banks (except for Prime Lending Rate), finance companies and POSB refer to average of end of month rates.

End-March	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Banks	136	141	137	131	128	132	140	143	152	154
Local <sup>1</sup>	13	13	13	13	13	13	12	12	12	12
Foreign	123	128	124	118	115	119	128	131	140	142
Full banks	22	22	22	22	22	22	22	22	22	22
Restricted banks	14	14	14	14	14	14	14	14	13	13
Offshore banks	87	92	88	82	79	83	92	95	105	107
(Banking offices including head offices and main offices)	(411)	(422)	(431)	(439)	(435)	(446)	(463)	(473)	(482)	(474)
Asian Currency Units	191	199	198	196	195	198	209	214	224	227
Banks	126	131	127	121	118	123	132	135	144	146
Merchant banks	64	67	70	75	77	75	77	79	80	81
Others	1	1	1	0	0	0	0	0	0	0
Finance Companies	30	28	27	27	27	27	23	22	19	19
(Finance companies' offices including head offices)	(135)	(137)	(135)	(129)	(130)	(131)	(128)	(128)	(125)	(119)
POSBank	138	142	147	150	149	146	145	135	133	130
Merchant Banks	65	68	71	76	78	76	77	79	80	80
Insurance Companies	110	124	135	136	140	142	141	146	154	163
Direct insurers	57	57	60	60	58	58	58	59	59	61
Professional reinsurers	19	25	29	32	36	36	35	38	45	50
Captive insurers	34	42	46	44	46	48	48	49	50	52
Representative Offices	47	45	49	52	52	50	57	58	65	70
Banks	43	42	46	50	50	47	54	55	62	68
Merchant banks	4	3	3	2	2	3	3	3	3	2
Stockbroking Companies	48	57	63	71	72	78	81	82	95	90
SES member companies	25	26	26	26	33	33	33	33	33	33
SES non-member companies	23	31	37	45	39	45	48	49	62	57
Investment Advisers	43	60	81	93	108	125	136	151	162	156
International Money Brokers	8	8	7	7	8	10	11	10	8	9
SIMEX Members										
Corporate clearing members	36	37	39	37	39	38	39	38	36	36
Corporate non-clearing members	42	43	39	36	30	31	30	27	29	26
Individual members	240	279	277	264	371	387	411	443	470	460
Commercial associate members	9	11	12	12	12	12	12	12	11	11

1 All local banks are full banks.

										S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Cash in hand	401.3	471.2	532.9	543.1	578.3	593.5	688.8	811.2	802.2	790.2
Balances with MAS	3,314.1	3,486.3	4,227.4	4,764.5	5,198.9	5,564.3	6,471.8	7,095.4	7,702.2	7,843.3
S\$NCDs held	283.0	296.6	271.7	198.6	180.3	71.0	104.9	198.5	212.5	212.5
Amounts due from banks	57,238.3	55,205.7	47,683.7	57,724.2	62,516.6	79,152.9	79,837.0	86,112.6	99,951.7	91,784.0
In Singapore	15,165.8	18,438.4	12,058.4	11,936.4	17,401.5	28,411.2	30,926.6	33,555.1	30,220.6	31,594.9
ACUs	21,427.9	16,922.7	17,900.2	22,703.6	21,328.8	26,373.8	25,398.6	24,851.9	34,517.1	22,563.8
Outside Singapore	20,644.5	19,844.6	17,725.0	23,084.2	23,786.3	24,367.9	23,511.8	27,705.6	35,214.0	37,625.3
Money market investments	1,773.3	1,988.9	3,362.0	4,660.0	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	7,557.1
Treasury bills	1,773.3	1,988.9	3,362.0	4,660.0	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	7,557.1
Other investments	9,045.0	10,376.8	10,862.9	11,717.1	13,177.5	14,608.2	16,637.6	18,694.3	19,667.5	20,299.5
In Singapore	8,764.3	10,035.2	10,532.3	11,448.0	12,777.3	13,439.6	15,508.4	17,400.4	18,340.0	18,945.3
Government securities	5,053.1	5,934.0	6,403.1	6,945.8	7,975.1	8,681.3	10,092.5	11,599.0	12,145.1	12,533.9
Other securities	3,711.3	4,101.1	4,129.1	4,502.2	4,802.2	4,758.3	5,415.9	5,801.4	6,194.9	6,411.4
Outside Singapore	280.7	341.6	330.7	269.2	400.3	1,168.7	1,129.2	1,293.9	1,327.5	1,354.2
Loans and advances to non-bank customers	50,785.9	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	141,046.6
of which bills financing	4,533.3	4,952.0	5,466.0	5,710.3	5,835.9	6,247.8	6,879.2	8,693.4	9,363.5	7,905.5
Fixed and other assets	4,360.7	4,480.0	5,143.8	4,556.0	5,346.0	6,100.3	6,203.2	6,884.7	11,270.6	10,102.7
Liabilities										
Paid-up capital and reserves	7,972.2	8,623.1	9,748.0	11,379.3	13,296.3	15,685.3	18,904.1	20,977.3	23,709.6	23,724.1
Deposits of non-bank customers	53,351.1	63,979.7	72,241.1	78,483.2	85,400.8	99,032.2	108,885.5	118,201.5	124,134.8	130,349.8
S\$NCDs issued	1,421.7	1,457.0	1,193.4	939.7	1,015.7	667.2	920.0	1,043.0	846.0	805.0
Amounts due to banks	57,475.1	52,697.1	45,002.1	54,397.4	62,264.7	77,295.1	86,063.1	101,576.8	125,856.1	109,379.9
In Singapore	16,391.9	14,512.3	10,419.7	11,862.8	16,626.7	25,125.5	29,881.0	34,328.6	31,134.2	32,596.1
ACUs	13,970.3	15,309.9	13,307.0	15,994.9	20,450.0	24,993.0	26,293.3	31,293.4	50,049.6	44,483.5
Outside Singapore	27,112.9	22,874.9	21,275.4	26,539.8	25,188.0	27,176.6	29,888.8	35,954.8	44,672.3	32,300.3
Amounts borrowed from other creditors	769.1	683.0	877.9	1,096.3	1,101.6	1,337.6	1,369.8	1,423.9	1,316.0	1,322.2
Bills payable	607.6	726.1	633.8	566.7	752.2	511.6	503.4	589.2	552.5	584.7
Other liabilities	5,604.8	5,836.1	6,397.2	6,439.8	6,419.0	7,423.6	7,932.8	8,911.7	13,173.9	13,470.1
Total Assets/Liabilities	127,201.7	134,002.0	136,093.4	153,302.4	170,250.4	201,952.5	224,578.7	252,723.4	289,588.8	279,635.8
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#### C.2 COMMERCIAL BANKS: LOANS AND ADVANCES BY INDUSTRIAL CLASSIFICATION

										S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Agriculture, mining										
and quarrying	78.8	85.6	96.9	86.5	105.5	119.8	159.3	132.8	187.6	167.0
Manufacturing	7,432.6	7,488.9	8,122.6	8,380.4	8,353.4	8,856.2	11,003.1	12,248.2	12,472.0	12,906.8
Building and construction	6,435.7	7,116.2	8,602.1	9,285.0	11,394.1	13,509.9	16,712.9	21,401.2	26,234.8	25,740.8
Housing loans	4,467.6	5,748.1	6,976.3	8,626.3	11,718.5	14,702.8	17,482.8	20,402.3	22,934.8	23,230.9
General commerce	12,385.7	13,686.1	15,694.7	17,188.8	17,732.6	19,442.6	21,643.9	23,931.8	26,349.5	24,444.2
Transport, storage										
and communication	1,080.7	1,736.7	1,816.9	1,939.8	1,837.8	1,902.2	2,178.1	2,618.7	3,575.7	3,824.4
Non-bank financial institutions	8,431.9	9,923.0	10,317.9	11,250.2	13,132.5	13,644.4	16,888.6	19,448.3	20,997.4	20,972.9
Professional and										
private individuals	6,981.4	7,752.3	8,290.2	8,135.5	9,352.8	13,786.0	16,889.5	20,256.1	22,775.4	22,196.5
Others	3,491.4	4,159.4	4,091.5	4,246.5	4,826.9	5,010.2	6,015.8	6,548.3	7,716.5	7,563.1
Total	50,785.9	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	141,046.6

# C.3 COMMERCIAL BANKS: TYPES OF LOANS AND ADVANCES TO NON-BANK CUSTOMERS

										S\$ million
										March
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Overdrafts	15,761.9	17,004.6	16,682.3	16,237.6	19,585.6	23,620.2	26,965.7	30,306.9	36,063.2	34,176.6
Term loans	26,806.9	31,554.3	37,012.4	41,531.1	47,456.1	55,238.2	68,394.5	81,518.5	90,805.3	92,765.4
Bills discounting	4,533.4	4,952.0	5,466.0	5,710.3	5,835.8	6,247.8	6,879.2	8,693.4	9,363.5	7,905.5
Trust receipts	3,683.8	4,185.5	4,848.3	5,659.9	5,576.7	5,867.9	6,734.6	6,468.9	7,011.8	6,199.1
Total	50,785.9	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	141,046.6

### C.4 COMMERCIAL BANKS: TYPES OF DEPOSITS INCLUDING S\$NCDS

										S\$ million
										March
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Demand	8,019.2	9,169.9	10,290.8	11,635.0	15,765.4	15,787.6	17,537.8	18,862.7	18,289.1	19,181.9
Fixed	34,972.0	44,407.3	49,528.9	52,136.9	49,877.9	65,083.2	67,389.6	71,802.7	80,089.1	87,010.0
Savings	9,952.2	10,009.8	11,981.1	14,208.8	16,895.3	16,900.2	23,501.3	27,168.2	25,439.4	23,763.3
S\$NCDs (net)	1,138.7	1,160.4	921.7	741.1	835.4	596.2	815.1	844.5	633.5	592.5
Others	407.7	392.6	440.3	502.5	2,862.1	1,261.1	456.8	368.0	317.2	394.6
Total	54,489.8	65,140.1	73,162.7	79,224.3	86,236.2	99,628.3	109,700.6	119,046.0	124,768.3	130,942.3

#### C.5 COMMERCIAL BANKS: LIQUIDITY POSITION

										S\$ million
										1st Qtr
Period Average	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
I Liabilities Base	46,583.4	55,170.1	64,846.8	73,389.7	80,743.0	87,580.0	10,0138.0	114,828.5	122,777.4	126,550.4
II Liquid Assets										
(a) Minimum Requirement	11,180.0	13,240.8	15,563.2	17,613.5	19,378.3	21,019.2	24,033.1	27,558.9	29,466.6	30,372.1
(b) Total Actual Liquid Assets	11,552.8	13,596.4	16,099.9	18,394.9	20,232.9	21,932.2	25,039.1	28,632.1	30,556.7	31,670.5
(c) Free Liquid Assets (b) - (a)	372.8	355.6	536.7	781.3	854.6	913.0	1,006.0	1,073.3	1,090.2	1,298.4
III Liquidity Ratios	24.8	24.6	24.8	25.1	25.1	25.0	25.0	24.9	24.9	25.0

# D.1 FINANCE COMPANIES: ASSETS AND LIABILITIES

									S	S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Reserves with MAS	407.5	456.5	464.6	493.6	578.7	728.2	836.1	812.7	871.8	857.9
Deposits with banks and other financial institutions	1,767.0	2,389.3	2,478.7	2,207.2	1,802.2	2,333.6	2,666.1	2,165.9	1,904.2	2,286.2
Banks	695.3	1,087.6	1,511.2	1,448.0	1,197.0	1,830.9	1,998.3	1,734.1	1,628.1	2,054.6
Other institutions	1,071.6	1,301.6	967.5	759.2	605.2	502.7	667.8	431.8	276.1	231.7
Loans and advances	7,180.5	7,765.7	8,666.3	9,563.7	11,516.8	14,708.6	16,251.9	16,762.7	17,900.2	17,786.6
Housing loans	1,683.4	1,606.2	1,523.9	1,473.6	1,826.9	2,314.2	2,637.3	3,221.1	3,721.7	3,788.4
Hire purchase	1,732.0	2,076.8	2,384.1	3,045.9	4,245.7	5,616.1	5,580.2	4,982.4	4,958.8	4,801.6
Lease finance	175.6	180.9	156.0	114.9	84.0	46.2	20.2	8.7	6.1	5.7
Others	3,589.5	3,901.8	4,602.3	4,929.3	5,360.2	6,732.0	8,014.2	8,550.5	9,213.7	9,190.8
Securities	562.0	579.0	614.5	702.3	845.5	942.9	1,089.8	1,139.4	1,201.6	1,246.0
Other assets	220.2	233.1	235.7	240.9	251.2	284.5	291.6	308.8	332.8	339.5
Liabilities Capital and reserves	1,332.8	1,415.8	1,510.3	1,678.9	1,850.2	2,202.9	2,621.0	3,014.7	3,268.5	3,390.4
Deposits	7,384.3	8,397.2	8,972.1	9,550.9	10,567.7	13,790.3	15,417.8	15,071.6	15,611.8	15,671.4
Fixed	6,507.2	7,719.2	8,323.8	8,685.1	9,729.2	12,345.5	13,584.6	13,311.8	15,124.9	15,185.3
Savings	308.1	273.2	296.2	342.4	350.5	320.5	348.8	371.6	392.7	344.2
Others	569.0	404.9	352.1	523.4	488.0	1,124.4	1,484.4	1,388.2	94.2	141.9
Borrowings	226.5	263.1	528.2	744.8	1,113.2	1,248.1	1,215.0	1,381.9	1,398.0	1,574.0
Other liabilities	1,193.6	1,347.5	1,449.2	1,232.9	1,463.3	1,756.4	1,881.7	1,721.2	1,932.2	1,880.5
Total Assets/Liabilities	10,137.2	11,423.6	12,459.8	13,207.6	14,994.4	18,997.7	21,135.5	21,189.4	22,210.6	22,516.3

#### E.1 MERCHANT BANKS: CONSOLIDATED ASSETS AND LIABILITIES<sup>1</sup>

									5	S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Amounts due from banks	13,057.6	12,920.6	11,573.2	11,343.3	15,828.2	18,590.9	21,678.6	21,796.7	28,222.0	27,609.5
In Singapore	523.6	664.0	682.2	616.8	609.0	997.6	715.2	771.9	1,221.3	1,115.9
Outside Singapore <sup>2</sup>	12,534.0	12,256.6	10,891.0	10,726.5	15,219.2	17,593.3	20,963.4	21,024.8	27,000.7	26,493.6
Loans and advances to non-bank customers	11,340.4	11,271.9	10,590.8	15,691.2	11,545.8	13,138.8	15,258.2	17,348.9	21,777.5	20,256.8
Securities and Equities	8,368.2	7,173.1	7,029.4	9,045.7	13,547.4	10,880.2	10,550.1	11,678.3	14,339.0	12,567.2
Other assets	1,281.8	970.4	829.1	706.4	1,283.9	2,439.4	2,766.3	2,756.7	2,322.8	2,142.9
Liabilities										
Capital and reserves	4,459.6	4,662.6	4,781.9	4,777.7	5,777.4	5,704.7	6,089.9	6,646.0	8,193.7	7,400.6
Amounts due to banks	20,841.6	19,229.5	18,039.7	19,286.3	27,473.3	28,668.5	30,543.6	34,571.8	41,111.3	37,562.6
In Singapore	895.7	543.7	565.6	499.7	471.2	399.0	657.5	481.5	974.2	836.9
Outside Singapore <sup>2</sup>	19,945.9	18,685.8	17,474.1	18,786.6	27,002.1	28,269.5	29,886.1	34,090.3	40,137.1	36,725.7
Borrowings from non-bank customers	6,567.8	6,845.9	5,956.4	11,099.4	6,711.3	7,453.2	8,779.6	9,030.0	13,814.9	13,680.4
Other liabilities	2,179.0	1,598.1	1,244.5	1,623.3	2,243.4	3,223.0	4,840.0	3,332.9	3,541.2	3,932.7
Total Assets/Liabilities	34,048.0	32,336.0	30,022.5	36,786.7	42,205.3	45,049.4	50,253.1	53,580.6	66,661.2	62,576.3

1 Data are derived from the consolidation of merchant banks' domestic and Asian dollar operations.

2 Including Asian Currency Units.

									S	\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Amounts due from banks	4,875.4	4,878.6	4,170.2	3,893.0	4,558.8	4,787.9	5,191.9	5,339.3	6,553.5	6,111.6
In Singapore	514.3	659.5	679.4	613.5	599.8	994.0	712.3	761.7	1,215.8	1,108.2
Outside Singapore <sup>2</sup>	4,361.1	4,219.1	3,490.8	3,279.5	3,959.0	3,793.9	4,479.6	4,577.6	5,337.7	5,003.4
Loans and advances to non-bank customers	1,923.6	1,637.0	1,747.6	1,334.5	1,398.0	1,131.0	1,295.1	1,246.6	1,089.8	881.9
Securities and Equities	466.3	392.7	369.0	471.0	479.7	393.1	406.1	494.2	513.2	465.9
Other assets	367.8	419.7	401.8	285.9	422.5	387.6	351.7	416.4	555.8	587.1
Liabilities										
Capital and reserves	2,980.9	3,122.2	3,122.8	3,111.6	3,902.0	3,739.9	4,036.7	4,104.7	4,889.6	4,616.0
Amounts due to banks	1,829.8	1,424.6	1,400.4	1,318.2	1,304.9	1,376.3	1,509.7	1,720.2	2,046.5	1,725.2
In Singapore	871.9	502.6	520.3	442.6	381.9	299.2	412.0	297.7	284.6	235.0
Outside Singapore <sup>2</sup>	957.9	922.0	880.1	875.6	923.0	1,077.1	1,097.7	1,422.5	1,761.9	1,490.2
Borrowings from non-bank customers	2,145.4	2,233.8	1,759.0	1,209.1	1,185.2	1,229.4	1,324.9	1,194.3	1,082.0	991.8
Other liabilities	677.1	547.4	406.3	345.5	466.9	353.9	373.5	477.3	694.2	713.4
Total Assets/Liabilities	7,633.2	7,328.0	6,688.5	5,984.4	6,859.0	6,699.6	7,244.8	7,496.5	8,712.3	8,046.4

Corporate financial advisory services, underwriting activities and operations in the gold market are not reflected in the data. Including Asian Currency Units. 1

2

#### F.1 INSURANCE INDUSTRY: ASSETS AND PREMIUMS

									S	\$\$ million
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1st Qtr 1998p
Total Assets of Insurance										
Industry (End Period)	7,026.1	8,360.7	9,793.9	11,899.9	14,199.2	17,026.1	20,451.3	24,622.6	28,165.9	n.a
Direct Insurers	5,685.3	6,817.0	7,958.3	9,824.2	12,049.3	14,537.4	17,599.3	21,516.2	24,628.1	n.a
Professional Reinsurers	892.8	1,055.7	1,253.1	1,421.0	1,455.5	1,649.8	1,969.3	2,222.0	2,581.0	n.a
Captive Insurers	448.0	488.0	582.5	654.7	694.4	838.9	882.7	884.4	956.8	n.a
General Business: Gross Premiu	ıms									
Total General Business	1,371.1	1,556.7	1,873.4	2,125.5	2,369.3	2,609.5	2,716.1	2,793.8	2,914.9	691.0
Domestic Business	761.3	875.6	953.1	1,059.1	1,230.0	1,397.2	1,544.7	1,616.4	1,645.4	440.8
Offshore Business	609.8	681.1	920.3	1,066.4	1,139.3	1,212.3	1,171.4	1,177.4	1,269.5	250.2
Life Business: Premiums										
Premiums in Force (End Period)	896.1	1,122.8	1,392.9	1,711.7	2,070.4	2,547.8	3,016.0	3,538.0	4,202.5	4,271.9
New Business Premiums										
Annual Premium Policies	250.3	285.5	333.8	397.2	485.0	578.3	584.5	656.7	837.1	134.5
Single Premium Policies										
Life Insurance	4.0	9.3	9.1	393.4	480.1	509.9	551.5	699.5	1,288.1	96.2
Annuity	13.3	12.6	24.1	43.2	54.9	60.5	74.5	104.2	120.8	24.9

p: preliminary

#### G.1 NON-BANK FINANCIAL INSTITUTIONS: POST OFFICE SAVINGS BANK

									S	S\$ million
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998* March
Total Net Deposits Inflow										
(During Period)	624.7	-246.9	1,720.1	2,073.1	1,823.9	-449.9	1,564.6	2,058.9	386.1	-879.7
Net Deposits in Savings Account	586.3	-234.5	1,753.5	2,067.9	1,719.2	-367.1	1,559.7	2,041.6	396.6	-872.4
Deposits	16,969.7	20,001.6	22,950.2	27,846.3	44,117.6	47,713.4	46,825.2	54,176.5	63,806.1	16,489.7
Withdrawals	16,383.4	20,236.1	21,196.7	25,778.4	42,398.4	48,080.5	45,265.5	52,134.9	63,409.5	17,362.1
Net deposits in Current Account	38.4	-12.4	-33.4	5.2	104.7	-82.8	4.9	17.3	-10.5	-7.3
Interest Credited and Accrued										
(During Period)	349.0	463.8	598.4	463.7	412.8	469.7	577.2	580.8	634.4	220.7
Total Depositors' Balances										
(End Period)	13,210.1	13,387.6	15,645.5	18,126.8	20,310.0	20,269.3	22,335.7	24,898.3	25,814.8	24,958.6
of which main applications are:										
Term loans	2,926.5	3,130.0	3,383.0	3,175.4	3,232.0	5,405.9	6,347.1	7,381.6	10,933.2	12,313.5
Fixed deposits including S\$NCDs <sup>1</sup>	7,416.0	7,041.3	8,647.0	10,832.3	10,822.4	9,130.6	8,820.7	10,307.7	8,471.1	6,392.1
Government securities	1,134.8	1,214.7	1,429.4	1,852.9	2,302.9	2,379.1	2,722.2	2,939.0	2,443.1	2,649.4

Source: Post Office Savings Bank

S\$NCDs are net of provisions. Figures are unaudited. 1

\*

									5	S\$ million
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998p 1st Qtr
Excess Of Contributions Over										
Withdrawals (During Period)	2,444.0	3,170.7	3,436.5	3,609.9	-522.2	3,977.6	6,270.0	4,078.3	4,398.3	1,397.9
Members' Contributions	6,107.5	7,174.2	8,101.4	9,028.2	10,427.0	11,278.5	13,536.1	14,623.0	15,873.8	4,652.0
Withdrawals *	3,663.5	4,003.5	4,664.9	5,418.3	10,949.2	7,300.9	7,266.1	10,544.7	11,475.5	3,254.1
Approved Housing Schemes <sup>1</sup>	2,415.1	2,259.0	3,000.6	3,614.1	3,509.4	3,500.4	4,590.7	5,058.4	5,786.7	1,642.6
Under Section 15 <sup>2</sup>	841.0	1021.0	958.1	1,015.0	1,187.0	1,372.9	1,450.0	1,633.0	1,548.2	474.1
Medical Schemes <sup>3</sup>	178.2	240.1	265.4	275.7	292.1	335.2	360.0	389.5	420.8	92.5
Others	229.2	483.4	440.8	513.5	5,960.7	2,092.4	865.4	3,463.8	3,719.8	1,044.9
Interest Credited to Members'										
Balances (During Period)	1,078.3	1,424.1	1,966.1	1,868.0	1,329.6	1,337.3	2,116.2	2,452.8	2,692.6	722.7
Advanced Deposits with										
MAS (During Period) <sup>4</sup>	3,307.3	4,211.0	5,478.3	6,058.0	1,782.8	4,617.3	8,184.6	8,075.9	6,337.8	2,035.1
Interest Earnings from										
Investments (During Period)	1,135.3	1,505.0	2,053.3	1,943.3	1,387.8	1,397.4	2,198.7	2,596.6	2,853.0	763.0
Holdings of Government										
Securities (End Period) <sup>5</sup>	32,120.0	32,120.0	32,120.0	45,620.0	4,4620.0	43,620.0	45,120.0	51,620.0	57,120.0	62,120.0
Members' Balances										
(End Period)	36,051.6	40,646.4	46,049.0	51,526.9	52,334.3	57,649.2	66,035.4	72,566.6	79,657.4	81,778.1
								Source: Cent	ral Provident	Fund Board

Includes refunds and transfers to Reserve Account.

Р Provisional.

Housing schemes include Public Housing and Residential Properties Schemes.

Section 15 of the CPF Act allows withdrawals to be made on any of the following grounds:

a) member having reached the age of 55 years;

b) leaving Singapore and West Malaysia;c) physical incapacity;

d) unsound mind;

e) death; and

f) Malaysian citizen (leaving Singapore). Medical Schemes include Medisave & MediShield Schemes.

Deposits placed with MAS during the year excluding: a) interest on bonds & interest on Advance Deposits retained as deposits by MAS; and

b) conversion and redemption of Government Bonds.

5 Excludes advance deposits with MAS.

#### H.1 DOMESTIC CAPITAL MARKET: NET FUNDS RAISED IN THE DOMESTIC CAPITAL MARKET

										5	\$ million
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1st Qtr 1998
A	Net funds raised by Government	4,944.0	5,117.9	6,243.9	6,757.9	2,538.0	5,519.1	10,417.9	10,096.6	6,626.4	4,946.4
1)	Gross issue of Government securities <sup>1</sup>	4,350.0	1,850.0	2,300.0	17,700.0	3,260.0	3,750.0	7,200.0	12,150.0	10,460.0	8,100.0
	Less										
	Redemption of Government securities	820.5	1,199.0	1,639.3	3,150.0	2,768.4	4,100.0	4,000.0	3,998.0	5,008.2	550.0
	Government holdings of Government securities	_	-0.9	-1.0	_	-5.7	_	_	-2.8	-15.2	
	Conversion from accumulated advance deposits	d 2,000.0	_	_	14,000.0	_	_	3,000.0	8,000.0	7,000.0	5,000.0
2)	New advance deposits	3,414.5	4,466.0	5,582.2	6,207.9	2,040.7	5,869.1	10,217.9	9,941.8	8,159.4	2,396.4
3)	Net issues of statutory boards securities	,	_	_	_	_				_	
В	New capital raised by the private sector	1,077.8	3,036.6	1,057.7	2,434.2	8,168.8	4,732.7	1,680.0	3,150.6	3,928.0	301.5
1)	Public issues of shares	198.4	898.5	278.6	515.0	5,832.2	1,399.5	644.6	906.2	1,379.3	242.5
2)	Rights issues	693.4	1,486.5	686.2	1,150.6	1,352.3	2,050.0	571.5	1,154.8	1,769.6	16.5
3)	Private placements of listed shares	186.0	651.6	92.9	768.6	984.3	1,283.2	463.9	1,089.6	779.1	42.5
С	Issues of debt securities	2,257.2	1,632.3	1,940.9	2,380.5	3,659.3	2,926.9	3,766.6	2,309.5	5,982.0	306.5
1)	Listed bonds, debentures and loan stocks <sup>2</sup>	1,458.2	499.3	671.9	1,258.5	1,518.3	643.9	1,695.0	589.5	1,168.1	0.0
2)	Unlisted bonds	90.0	395.0	719.0	812.0	1,325.0	1,808.0	1,784.6	1,620.0	4,813.9	306.5
3)	Revolving underwriting facili Note issuance facilities	ties/ 612.0	728.0	450.0	130.0	615.0	445.0	280.0	_	_	_
4)	Negotiable certificates of depo	osits <sup>3</sup> 97.0	10.0	100.0	180.0	201.0	30.0	7.0	100.0	-	_
То	tal net funds raised (A+B+C	2) 8,279.0	9,786.8	9,242.5	11,572.6	14,366.1	13,178.7	15,864.5	15,556.7	16,536.4	5,554.4

1

Government registered stocks and securities, excluding Treasury bills. Singapore dollar-denominated bonds listed on the Stock Exchange of Singapore.

2 3 Refers only to S\$ reserve-free NCDs issued during the year.

# I.1 ASIAN DOLLAR MARKET: ASSETS AND LIABILITIES

									U	S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Loans to non-bank customers	86,393.5	125,516.0	134,078.2	134,184.1	136,857.4	145,822.5	173,264.7	180,505.5	173,286.3	152,276.0
Interbank funds	228,725.2	239,119.8	197,028.2	194,757.8	214,276.8	234,338.5	258,769.8	278,743.1	330,685.5	309,950.7
In Singapore	7,329.6	8,744.6	8,221.1	9,726.4	12,716.9	17,106.7	18,591.6	22,357.2	29,846.3	27,667.2
Inter-ACU	27,565.9	34,440.2	26,626.4	26,740.3	31,713.5	36,356.6	39,669.5	40,236.8	48,882.9	45,771.5
Outside Singapore	193,829.7	195,935.0	162,180.7	158,291.1	169,846.4	180,875.2	200,508.7	216,149.1	251,956.3	236,512.0
NCDs held	1,496.4	1,740.4	1,781.1	1,884.5	2,899.5	3,917.7	6,450.4	7,952.7	5,837.0	4,979.1
Other Assets	19,966.7	24,019.2	24,837.5	24,552.2	32,069.4	32,266.7	39,747.8	39,668.8	47,384.7	46,136.7
Liabilities										
Deposits of non-bank customers	55,019.4	66,885.5	63,499.4	63,612.2	62,669.0	65,787.8	80,603.6	95,373.8	113,683.4	114,056.9
Interbank funds	269,582.1	309,427.1	281,813.4	279,821.3	308,940.1	333,537.8	376,106.5	389,469.6	414,526.2	369,435.0
In Singapore	12,620.3	11,955.8	14,258.8	18,194.7	18,502.4	22,676.3	25,133.5	25,257.4	32,271.9	21,829.6
Inter-ACU	27,566.5	34,438.1	26,624.1	26,741.6	31,716.6	36,354.3	39,670.2	40,243.3	48,905.3	45,796.0
Outside Singapore	229,395.3	263,033.2	240,930.5	234,885.0	258,721.1	274,507.2	311,302.8	323,968.9	333,349.0	301,829.4
NCDs issued	2,355.3	2,014.0	1,334.1	925.0	760.2	797.2	1,737.5	2,229.5	2,198.1	1,989.3
Other Liabilities	9,625.1	12,068.8	11,078.0	11,020.1	13,733.6	16,222.6	19,785.2	19,797.3	26,785.9	27,861.4
Total Assets/Liabilities	336,581.8	390,395.5	357,725.0	355,378.6	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	513,342.6

# I.2 ASIAN DOLLAR MARKET: MATURITY CLASSIFICATION OF ASSETS AND LIABILITIES

									U	S\$ million
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998
Assets										
Up to 7 days	65,321.6	71,920.0	57,253.1	66,710.8	78,267.1	75,774.0	89,709.1	102,544.6	131,356.6	133,192.0
Over 7 days to 1 month	86,399.0	82,234.9	71,974.0	68,542.8	77,557.8	76,180.8	84,731.7	88,029.3	106,318.6	98,689.0
Over 1 to 3 months	81,123.7	102,193.3	87,569.0	80,492.5	86,333.6	105,446.9	116,031.0	116,119.3	115,402.8	106,464.2
Over 3 to 12 months	53,511.4	67,399.9	66,520.6	69,957.1	69,544.2	81,102.7	102,093.3	112,104.8	112,918.7	92,481.3
More than 1 year	50,226.1	66,647.4	74,408.3	69,675.4	74,400.2	77,841.1	85,667.7	88,072.1	91,196.8	82,516.0
Liabilities										
Up to 7 days	84,482.0	99,804.7	87,149.5	87,561.6	108,432.5	110,093.2	123,729.0	147,901.2	165,240.8	161,077.0
Over 7 days to 1 month	98,606.8	104,839.1	98,496.2	101,664.4	109,383.7	104,555.7	129,946.3	136,728.0	150,252.5	137,051.9
Over 1 to 3 months	82,122.8	104,664.5	97,193.5	97,551.2	101,099.5	118,392.3	129,254.7	138,149.5	136,103.3	125,653.3
Over 3 to 12 months	53,178.0	61,433.3	57,516.3	53,313.0	55,177.2	71,221.4	81,408.7	65,738.6	87,882.6	72,009.1
More than 1 year	18,192.2	19,653.8	17,369.5	15,288.4	12,010.2	12,082.8	13,894.2	18,352.9	17,714.3	17,551.3
Total Assets/Liabilities	336,581.8	390,395.5	357,725.0	355,378.6	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	513,314.8

# I.3 ASIAN DOLLAR MARKET: MATURITY TRANSFORMATION BY ASIAN CURRENCY UNITS

	UNLIVET U								US\$ billion		
End of Period	1989	1990	1991	1992	1993	1994	1995	1996	1997	March 1998	
Net Position											
Up to 3 months	-32.4	-53.0	-66.0	-71.1	-76.7	-75.6	-92.4	-116.1	-98.5	-85.5	
3 months to 1 year	0.3	6.0	9.0	16.7	14.3	9.9	20.7	46.4	25.0	20.5	
More than 1 year	32.0	46.9	57.0	54.4	62.4	65.7	71.8	69.7	73.5	64.9	
Claims											
Up to 3 months	232.8	256.3	216.8	215.7	242.2	257.4	290.5	306.7	353.1	338.3	
3 months to 1 year	53.5	67.4	66.5	70.0	69.5	81.1	102.1	112.1	112.9	92.5	
More than 1 year	50.2	66.6	74.4	69.7	74.4	77.8	85.7	88.1	91.2	82.5	
Liabilities											
Up to 3 months	265.2	309.3	282.8	286.8	318.9	333.0	382.9	422.8	451.6	423.8	
3 months to 1 year	53.2	61.4	57.5	53.3	55.2	71.2	81.4	65.7	87.9	72.0	
More than 1 year	18.2	19.7	17.4	15.3	12.0	12.1	13.9	18.4	17.7	17.6	

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