MONETARY AUTHORITY OF SINGAPORE
Annual Report 1998/99

Charting our course...

MONETARY AUTHORITY OF SINGAPORE Annual Report 1998/99

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Design and Production by Su Yeang Design

... a central bank of excellence.


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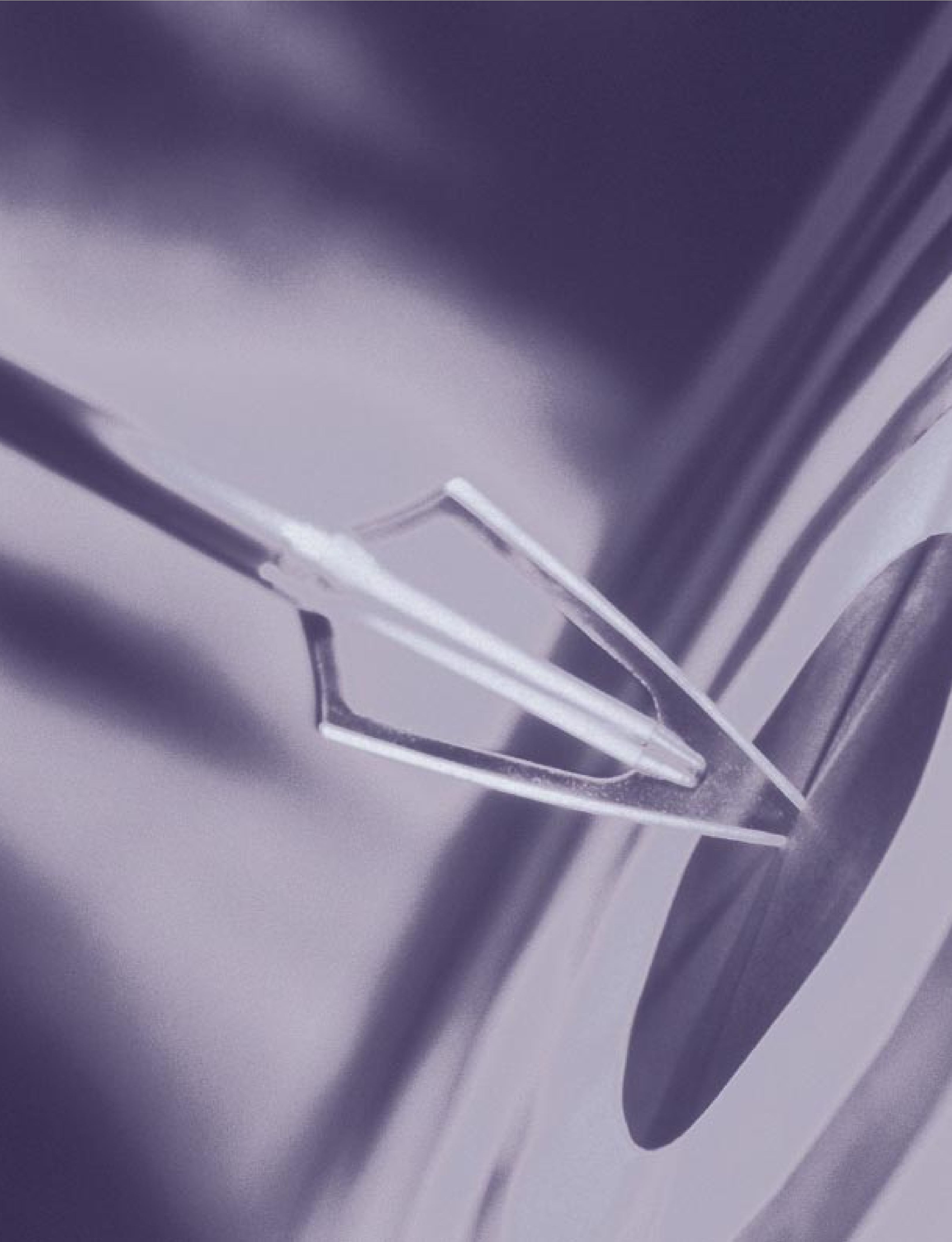
To promote sustained non-inflationary economic growth, and a sound and progressive financial centre.



To conduct monetary and exchange rate policies, and to manage the official foreign reserves and the issuance of government securities.

To supervise the banking, insurance, securities and futures industries, and develop strategies in partnership with the private sector to promote Singapore as an international financial centre.

To build a cohesive and integrated organisation of excellence.







Members of the Board

Top to bottom, left to right:

MR LEE HSIEN LOONG
Chairman

MR LEE EK TIENG
Deputy Chairman

MR KOH YONG GUAN
Managing Director

MR CHAN SEK KEONG
Member

MR LIM HNG KIANG
Member

MR KHAW BOON WAN
Member

MR J Y PILLAY
Member

MR LIM CHEE ONN
Member

MR LIM SIONG GUAN
Member

Chairman's Statement

It has been a challenging year for MAS.

The Singapore economy experienced the full brunt of the regional economic crisis in 1998. Real GDP grew by just 1.5%, compared with 8.0% in 1997. The slowdown was across the board. Although the worst of the crisis seems to have passed, and the region is beginning to stabilise, major uncertainties remain. These include the sustainability of the strong US economy, Japan's economic prospects, the situation in Indonesia, and progress in implementing structural reforms in the crisis economies.

To counter the economic slowdown, MAS has eased its monetary policy stance. It has kept the Singapore Dollar's value, in trade-weighted terms, broadly stable since July 1997, while managing the exchange rate more flexibly within a wider policy band. It sought to buffer the volatility and uncertainty in the financial markets and maintain domestic price stability. Besides contributing to macroeconomic stability, MAS has continued to ensure the soundness of the banking system, by maintaining high standards of prudential supervision.

To strengthen cost competitiveness and foster economic recovery, the Government implemented a $10.5 billion cost-cutting package last November. The Government is also building up key capabilities to support long-term economic growth. One of these is to develop Singapore into a world-class financial centre. Our strategy is three-pronged: (a) to promote a vibrant asset management industry; (b) to develop deep and broad capital markets in debt, equity, and derivatives; and (c) to build a strong and competitive banking industry.

We have given asset management companies greater access to domestic funds, adjusted our policy of non-internationalisation of the Singapore Dollar to allow supranationals and corporates of good standing to issue Singapore Dollar bonds, and begun to demutualise and merge SES and SIMEX. We have also launched a five-year liberalisation programme for the domestic banking sector. We are creating an open and competitive environment to spur the development and upgrading of local banks. The liberalisation will strengthen our banking system, provide Singaporeans with quality banking services, and enhance Singapore's position as an international financial centre. To support our strategy, we also need to upgrade the talent and skills in the financial industry, because ultimately it is people who make a vibrant financial centre.

MAS cannot build a world-class financial centre by itself. The private sector must play an active part. We therefore set up the Financial Centre Advisory Group (FCAG), to institutionalise the dialogue with leading members of the financial community in Singapore. We also formed an International Advisory Panel (IAP) of distinguished bankers and financiers, to tap on international expertise and keep abreast of best practices elsewhere. At its inaugural meeting in January this year, the IAP endorsed the broad thrust of our financial sector strategy.

MAS has spent the past year reviewing and putting in place the main prongs of our strategy for developing a thriving financial sector. All the major initiatives are now in place. Our next task is to follow these through, and bring the plans to fruition. In partnership with the financial community, and supported by dedicated and professional MAS staff, I am confident that we will realise our vision of making Singapore a world-class financial centre.

LEE HSIEN LOONG
Chairman
Monetary Authority of Singapore

The Management Team

Top to bottom, left to right:

HUAY KHEE CHUANG (MRS)
Executive Director
Information Technology

KOH CHING ANG
Executive Director
Finance

KOH YONG GUAN
Managing Director

VERONICA QUEK (MRS)
Senior Director
Human Resource

IRENE KHONG (MRS)
Executive Director
Internal Audit

DR KHOR HOE EE
Senior Executive Director
Economics

YEO LIAN SIM (MS)
Assistant Managing Director
Capital Markets

ONG CHONG TEE
Senior Director
Reserve Management

SHIH-TEO SIEW POH (MRS)
Executive Director
International Relations

TEO SWEE LIAN (MS)
Executive Director
Financial Sector Promotion

LIM SHU CHIAU (MRS)
Executive Director
Insurance

THARMAN SHANMUGARATNAM
Deputy Managing Director
Financial Supervision Group

FOO-YAP SIEW HONG (MRS)
Senior Executive Director
Banking

The region appears to be stabilising in recent months. Is the worst over for Singapore?

The outlook for the Singapore economy hinges on continued strength in the industrial economies and a gradual recovery in the regional economies. The US economy has been very robust and expectations are that it will have a soft landing. In the region, exchange rates have stabilised and interest rates fallen to pre-crisis levels. More importantly, exports have begun to rise in many of the crisis-affected countries.

While these signs are encouraging, it is premature to conclude that we are totally out of the woods. Major uncertainties lie ahead. There are risk factors to watch out for, particularly a sharp correction in the US stock market, a weakening of the Japanese Yen, and rising protectionist pressures. In the region, political and social instability and difficulties with banking reforms and corporate restructuring remain serious downside risks.

Has Singapore's monetary policy been appropriate given the current slack in the economy?

Our monetary policy is centred on managing the exchange rate rather than interest rates. In a small open economy like Singapore, this is a more effective way of influencing inflation and aggregate demand.

We manage the exchange rate against a trade-weighted basket of currencies of Singapore's main trading partners, within a target policy band. Since the onset of the regional financial crisis, MAS has widened the target band and managed the Singapore Dollar with greater flexibility. As the economy weakened, we adopted an easier exchange rate policy. In terms of the nominal trade-weighted basket, the Singapore Dollar has remained broadly stable since July 1997.

Domestic monetary conditions have also been generally consistent with the state of the economy. Confidence in the Singapore Dollar has allowed domestic interest rates to decline. Indeed, our interest rates have eased substantially over the course of 1998 and are considerably lower than offshore rates. There has been no shortage of funds in the banking system to support economic activity.

MAS launched a fundamental review of its approach to regulating and developing the financial sector in August 1997. What were some of the key reforms implemented to-date?

Over the past 18 months, we have put in place a broad range of financial reforms and strategies.

First came measures to spearhead the growth of Singapore's asset management industry, chief of which was the out-placement of GIC and MAS funds to fund management companies. We also eased the financial requirements for fund management companies, and streamlined regulations and procedures governing the setting up of unit trusts. The CPF Investment Scheme was revamped and guidelines for non-CPF unit trusts were liberalised.

To develop the debt capital market, MAS issued 10-year government securities for the first time, thus extending the benchmark yield curve against which private issues are priced. We also liberalised guidelines on the internationalisation of the Singapore Dollar so as to allow foreign entities to issue Singapore Dollar bonds.

To build an integrated world-class exchange, we are working closely with the industry to demutualise and merge the Stock Exchange of Singapore (SES) and the Singapore International Monetary Exchange (SIMEX). We are also progressively liberalising brokerage commissions and raising the foreign ownership limit in full member companies of the SES to 70%. We are also moving towards a disclosure-based regulatory framework for the securities industry.

In May this year, we announced a five-year liberalisation programme to strengthen our banking industry while maintaining confidence and stability in the financial system. To increase access to the domestic market, MAS will issue a new category of full banking licence known as Qualifying Full Banks (QFBs) to foreign banks. To strengthen corporate governance, all local banks will be required to appoint a five-member Nominating Committee within their boards. We have also lifted the 40% limit on foreign investors' total shareholding in local banks. These changes come on top of measures we took last year, such as raising disclosure standards among banks in Singapore, and halving the banks' minimum cash balance requirements to 3%.

What steps has MAS taken to promote Singapore as a leading financial centre to foreign investors?

Our policy reforms have helped to create a more conducive operating environment for market participants. This has generated much interest among foreign investors. Financial institutions also pay attention to the tax environment of different financial centres when making decisions on where to locate their operations. For instance, Ireland has successfully used its low tax rates to attract financial institutions to Dublin. In Singapore, we have introduced various tax incentive schemes, and refined existing ones. Our tax incentives focus on the bond market, loan syndication activities, operational headquarters, asset management, insurance and financial treasury centres.

Another critical success factor is the availability of a rich talent pool. MAS is studying the manpower needs of the financial centre to identify skills gaps and to devise means to fill these shortfalls. This will involve upgrading local talent as well as attracting skilled foreign professionals to Singapore. We will also be setting up a Financial Sector Development Fund for manpower training.

Besides implementing reforms and strategies, we are also proactively marketing Singapore as a financial centre to international investors. We recently opened a representative office in London and expanded the role of our existing office in New York. These overseas offices will help MAS to communicate more effectively with the international financial community.

To-date, we have made 12 promotional trips to the US, Europe and Asia. We have identified some 130 new investment commitments in the financial industry. Several asset management companies and insurance companies have committed to setting up operational headquarters in Singapore, and another 10 MNCs intend to base their regional treasury centres here.

The past year has been a busy one. What are MAS' priorities in the year ahead?

First, we must continue to ensure effective and credible monetary and exchange rate policies. This calls for judicious judgement and keen understanding of both macroeconomic factors and market forces. We are also revamping our investment framework and risk management systems in order to support and manage a wider and more diversified portfolio of foreign reserves.

On the financial sector front, we have put in place over the last year all the major reforms and initiatives. This year, the focus will be on working the reforms through. For instance, we have already begun a broad shift to the new risk-based supervisory approach; the challenge now is effective and skilful execution on the ground.

We need to enhance the depth and competitiveness of our banking and insurance industries. The domestic banking liberalisation package is a major step in this direction. We are currently doing a similar review of the insurance industry. We also need to broaden and deepen the capital market in debt, equities and derivatives, and grow asset management activity. We will continue to push the development of the Singapore Government Securities and Singapore Dollar bond markets, and attract debt origination and trading teams to base their operations in Singapore. With the merger of the SES and SIMEX, we will also explore strategic international linkages for the new Singapore exchange so that we can continue to grow as an equities and risk management centre.

What are the challenges that MAS faces as an organisation?

One key challenge is people development. MAS already has a pool of highly skilled and talented professionals. Whatever we have achieved this past year has only been possible because of their unstinting dedication and professional competence. But we need more expertise in each area of our work. In 1998, we stepped up recruitment sharply. A total of 93 staff were recruited, including 30 mid-career officers from the private sector. We also need to build up a core of officers who can combine breadth with depth, and span the multiple dimensions of central banking. We will give increased emphasis to career development and training this year.

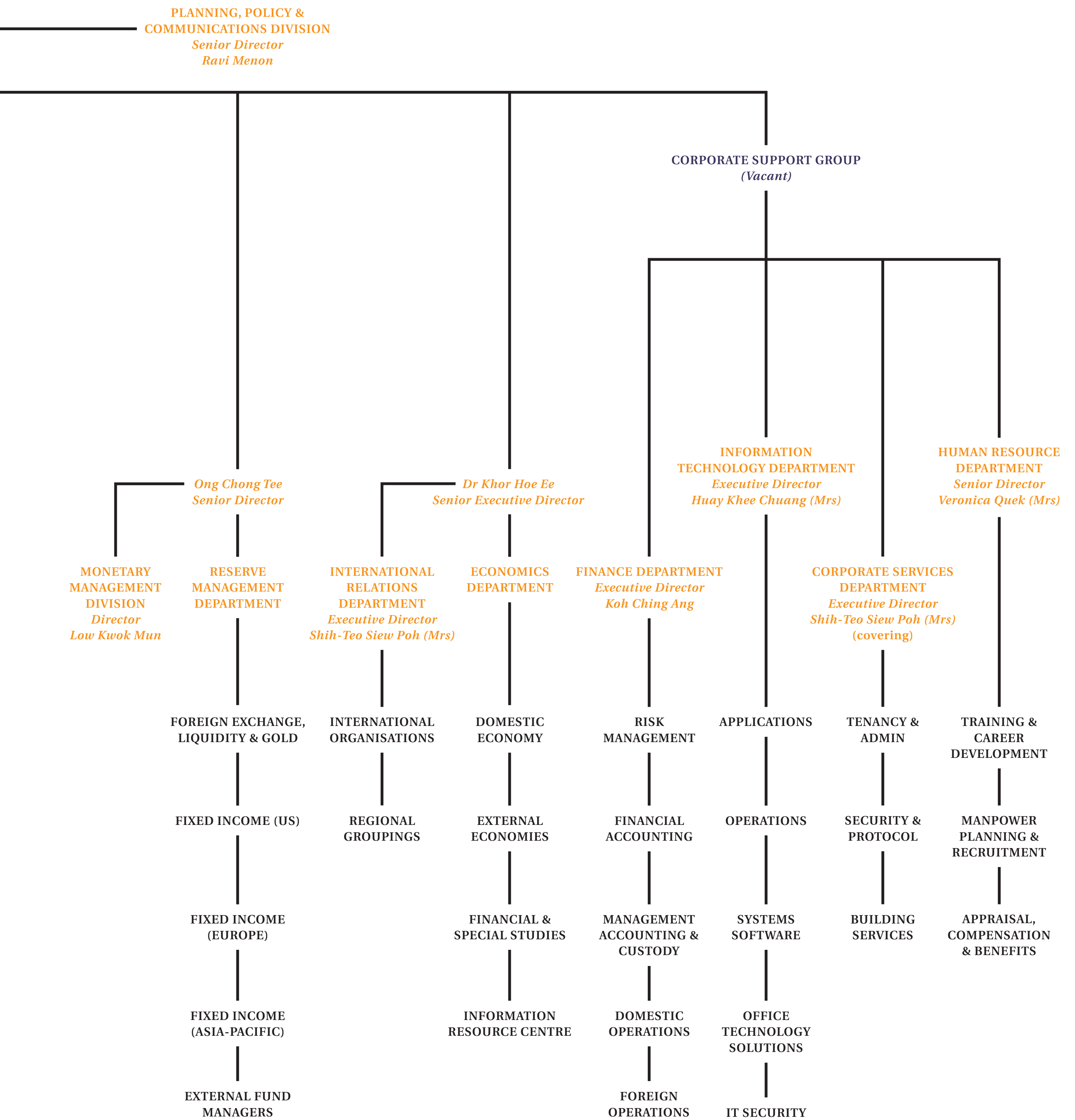
A second challenge is to improve internal efficiency and productivity. Internal procedures will be automated or simplified where possible. IT infrastructure will be upgraded to support our operations, which have grown much more complex. We will strengthen internal financial discipline by implementing an activity-based cost accounting system.

Finally, we aim to build a more integrated and cohesive organisation. The challenging external environment demands that we pull together as one, drawing on our varied expertise and competencies. The collective corporate visioning exercise was a good start. We engaged as many staff as possible in the process, and together came up with a set of core values that defined who we are, and a shared vision of where we want to go. This sense of common purpose and identity will help MAS to navigate through the many changes and challenges that lie ahead, and become a central bank of excellence.

Organisation Chart

MANAGING DIRECTOR
Koh Yong Guan

- **FINANCIAL SUPERVISION GROUP**
  Deputy Managing Director
  Tharman Shanmugaratnam
  - **SUPERVISORY POLICY DIVISION**
    Director
    Dr Andrew Khoo
  - **RISK & TECHNOLOGY DEPARTMENT**
    Senior Director
    Enoch Ch'ng
    - FINANCIAL RISK
    - TECHNOLOGY RISK
    - PAYMENT, CLEARING & SETTLEMENTS
    - TECHNOLOGY & SYSTEMS STRATEGY
  - **SUPERVISORY LEGAL SERVICES DIVISION**
    Senior Director
    Ng Heng Fatt
  - **BANKING DEPARTMENT**
    Senior Executive Director
    Foo-Yap Siew Hong (Mrs)
    - BANKING CLUSTER 1
    - BANKING CLUSTER 2
    - BANKING CLUSTER 3
    - BANKING CLUSTER 4
    - BANKING CLUSTER 5
  - **INSURANCE DEPARTMENT**
    Executive Director
    Lim Shu Chiau (Mrs)
    - LIFE & ACTUARIAL
    - GENERAL DIRECT
    - REINSURERS & CAPTIVES
    - EXAMINATION
  - *Yeo Lian Sim (Ms)*
    Assistant Managing Director
    (Capital Markets)
    - **SECURITIES & FUTURES DEPARTMENT**
      - INTERMEDIARIES SUPERVISION
      - CORPORATE FINANCE
      - SECURITIES REGULATION DEVELOPMENT
- **FINANCIAL SECTOR PROMOTION DEPARTMENT**
  Executive Director
  Teo Swee Lian (Ms)
  - MARKETING
  - SYSTEMS & STRATEGIES
  - MANPOWER DEVELOPMENT
- **INTERNAL AUDIT DEPARTMENT**
  Executive Director
  Irene Khong (Mrs)
  - FINANCIAL & OPERATIONAL AUDIT
  - INFORMATION TECHNOLOGY AUDIT


PLANNING, POLICY &
COMMUNICATIONS DIVISION
Senior Director
Ravi Menon
CORPORATE SUPPORT GROUP
(Vacant)
Ong Chong Tee
Senior Director
Dr Khor Hoe Ee
Senior Executive Director
INFORMATION TECHNOLOGY DEPARTMENT
Executive Director
Huay Khee Chuang (Mrs)
HUMAN RESOURCE DEPARTMENT
Senior Director
Veronica Quek (Mrs)
MONETARY MANAGEMENT DIVISION
Director
Low Kwok Mun
RESERVE MANAGEMENT DEPARTMENT
INTERNATIONAL RELATIONS DEPARTMENT
Executive Director
Shih-Teo Siew Poh (Mrs)
ECONOMICS DEPARTMENT
FINANCE DEPARTMENT
Executive Director
Koh Ching Ang
CORPORATE SERVICES DEPARTMENT
Executive Director
Shih-Teo Siew Poh (Mrs)
(covering)
FOREIGN EXCHANGE, LIQUIDITY & GOLD
FIXED INCOME (US)
FIXED INCOME (EUROPE)
FIXED INCOME (ASIA-PACIFIC)
EXTERNAL FUND MANAGERS
INTERNATIONAL ORGANISATIONS
REGIONAL GROUPINGS
DOMESTIC ECONOMY
EXTERNAL ECONOMIES
FINANCIAL & SPECIAL STUDIES
INFORMATION RESOURCE CENTRE
RISK MANAGEMENT
FINANCIAL ACCOUNTING
MANAGEMENT ACCOUNTING & CUSTODY
DOMESTIC OPERATIONS
FOREIGN OPERATIONS
APPLICATIONS
OPERATIONS
SYSTEMS SOFTWARE
OFFICE TECHNOLOGY SOLUTIONS
IT SECURITY
TENANCY & ADMIN
SECURITY & PROTOCOL
BUILDING SERVICES
TRAINING & CAREER DEVELOPMENT
MANPOWER PLANNING & RECRUITMENT
APPRAISAL, COMPENSATION & BENEFITS

MONETARY POLICY, RESERVE MANAGEMENT AND INTERNATIONAL RELATIONS

Economics Department

The Economics Department (ED) formulates monetary and exchange rate policies appropriate for sustained and non-inflationary economic growth in Singapore. It provides analyses and forecasts on the Singapore economy, and advises on policies relating to macroeconomic issues. ED also conducts regular assessment of economic and monetary developments in the regional economies.

Monetary Management Division

The Monetary Management Division (MMD) conducts Singapore's exchange rate and monetary policies. It also manages the issue of Singapore Government Securities (SGS), oversees developments in the SGS market as well as provides financial services and advice to government agencies.

Reserve Management Department

The Reserve Management Department (RMD) manages MAS' foreign assets, currencies and gold. It also performs cash management functions.

International Relations Department

The International Relations Department (IRD) is responsible for relations with major international organisations and foreign central banks. It reviews and recommends MAS' and Singapore's positions on key international financial and economic issues.

FINANCIAL SUPERVISION AND PROMOTION

Banking Department

The Banking Department (BD) has prudential oversight of all commercial banks, merchant banks, and finance companies, 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. SFD oversees the Stock Exchange of Singapore (SES) and the Singapore International Monetary Exchange (SIMEX). It is also responsible for regulating take-overs and mergers, unit trusts and other investment products.

Risk and Technology Department

The Risk and Technology Department (RTD) is responsible for risk management in the financial sector from the financial, technological, and IT infrastructure perspectives. It facilitates the strategic use of technologies to support Singapore's evolution into a world-class financial centre.

Supervisory Policy Division

The Supervisory Policy Division (SPD) formulates policies in the areas of financial sector regulation and supervision. SPD's functions include bank and market analysis and development of risk-based supervisory procedures.

Supervisory Legal Services Division

Supervisory Legal Services Division (SLS) provides legal advice on supervisory matters to the rest of the Financial Supervision Group.

Financial Sector Promotion Department

The Financial Sector Promotion Department (FPD) is responsible for developing and promoting Singapore as a financial centre. It identifies new financial activities and products, and markets Singapore's financial centre to existing and new players. FPD also helps to ensure an adequate supply of skilled workers in the financial sector.

CORPORATE SUPPORT

Corporate Services Department

The Corporate Services Department (CSD) provides general office, building and hospitality services to all departments in MAS. The department also manages the marketing and lease administration of office space, and security of the MAS building.

Finance Department

The Finance Department (FD) provides budgeting and accounting services to MAS. It 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.

Human Resource Department

The Human Resource Department (HRD) formulates and implements MAS' human resource management policies. This includes recruiting for the organisation, managing an objective appraisal system, ensuring a competitive remuneration package, as well as organising and co-ordinating training programmes.

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 MAS Electronic Payment System (MEPS). The networks provide the infrastructure and standard for efficient electronic communications and collaborations in the financial sector, and minimise payment risks for Singapore's banking system respectively.

Internal Audit Department

The Internal Audit Department (IAD) conducts financial, operational and information systems audits of MAS' operations. IAD ensures compliance with policies, guidelines, laws and regulations, and evaluates the reliability of financial records, and the security and integrity of information systems in the Authority. IAD also works with departments to review control in new systems and business processes.

MANAGING DIRECTOR'S OFFICE

Planning, Policy and Communications Division

The Planning, Policy and Communications Division (PPC) is responsible for cross-department policy integration and strategic planning, organisational development, and corporate communications. PPC collates, analyses, and integrates inputs on issues that cut across MAS departments. It formulates and implements the corporate planning process, and co-ordinates external communications, including media relations.

Managing the exchange rate flexibly to promote a sound macroeconomy

THE EXTERNAL ENVIRONMENT

Following a turbulent year in the global economic and financial environment in 1998, many of the Asian economies appear to have bottomed out. A sustained recovery for this region will depend on the existence of a benign external environment coupled with continued progress in domestic structural reform.

Threat of Global Financial Crisis

Global financial markets remained turbulent in 1998. The Asian financial crisis continued to spread across regional boundaries, affecting other emerging markets. Japan went deeper into recession, which intensified fears about the severity of problems in its banking system. As a result, the Yen came under depreciating pressure in May-June, which in turn affected the regional currencies, especially the Renminbi and the Hong Kong Dollar. In August 1998, Russia floated the Rouble and defaulted on its domestic debt, sending shock waves across global financial markets. As nervous investors panicked and shifted their funds into US treasury bonds, Brazil came under severe financial pressure, and yield spreads rose sharply for all emerging markets. Even the US economy did not appear to be immune. Its stock market fell while yield spreads on corporate bonds widened substantially. Long-Term Capital Management (LTCM), a highly leveraged US hedge fund, was brought to the brink of bankruptcy, threatening global financial stability.

At the same time, Asian countries at the heart of the crisis experienced worse-than-expected contractions in demand and output. In 1998, Indonesia, Malaysia, Thailand and South Korea, the four main crisis economies, experienced negative GDP growth, ranging from -5.5% in Korea to -13.7% in Indonesia.

Favourable Policy Initiatives Stabilise Financial Markets

The prospect of a global recession prompted the US and other major industrial countries to take concerted measures to ease monetary policy in order to sustain global demand and stabilise financial markets. Since then, interest rate cuts in the US and Europe and the adoption of significant fiscal stimulus and financial restructuring plans by Japan have helped to stabilise the global financial situation. In particular, lower global interest rates have eased pressures on emerging market currencies and interest rates. In Japan, resolute banking reform initiatives eliminated the Japan premium in March 1999 for the first time since October 1997. Major Japanese corporations also embarked on restructuring and streamlining operations to improve efficiency and boost profitability. Japan's Miyazawa Initiative, which provides financial aid for crisis-Asia, also helped to instil confidence in the region. In sum, these measures were expected to support global demand and prevent the global financial crisis from spreading further.

Risks to Recovery

While financial conditions both in the world and in the region have stabilised, substantial risks to the region's recovery remain.

Recovery is predicated on favourable external conditions, in particular a low external interest rate environment, continued strength of the US economy, moderate growth in Europe, and the relative stability of the Yen and the Renminbi. On current indications, a hike in US interest rates looks probable, in view of emerging signs of inflation. Slower growth in the EU in 1999, signs of which have also emerged, combined with a protracted Japanese recession could delay the region's recovery.

Domestic risks also abound. The Asian crisis had led to increased layoffs, high unemployment, decreasing real wages, and increasing dissatisfaction with governments across the region. In Indonesia, social and political unrests have hampered the government's effort to deal with the massive economic problems faced by the archipelago. Economic restructuring in the other countries have stretched the social fabric in the region.

Another risk factor emanates from the difficulties with banking reform and corporate restructuring in the crisis-affected Asian economies. The high level of non-performing loans would adversely affect the recovery process because domestic banks are unwilling or unable to extend credit even to viable firms. Deleveraging of external and domestic debt has proceeded at different paces for various countries, depending on political will and the degree of liberalisation and restructuring allowed in these countries. A resumption of financial intermediation is critical to sustaining recovery.

Developments in 1999

Such risks notwithstanding, economic prospects for the region in 1999 have brightened considerably.

The US economy has continued to show surprising strength. Across the region, currencies have stabilised and interest rates have declined, to pre-crisis levels for some countries. Stock markets also staged strong rallies in 1999, in line with declining interest rates and the rallies in the US market. One of the crisis-hit Asian countries, South Korea, has become the first to emerge from the regional economic slump, posting a strong year-on-year GDP growth of 4.6% in Q1 1999. South Korea, together with Thailand have both made significant progress in implementing financial and economic reforms. Major credit ratings agencies have upgraded sovereign debt ratings for several Asian countries in early-1999 to reflect the increased resilience of these economies. Except for Indonesia, which is expected to register flat or negative GDP growth, regional economies will most likely return to positive GDP growth in 1999.

ECONOMIC ACTIVITY

Recent Developments

In 1998, the Singapore economy experienced the full brunt of the adverse spillover effects of the Asian financial crisis. GDP growth slowed sharply from a positive 6.2% in Q1 to a negative 0.8% in Q4, and averaged 1.5% for 1998 as a whole compared with growth of 8.0% in 1997. The slowdown, which cut across all sectors of the economy, was worsened by the downturn in the global electronics industry. Indeed, on a seasonally adjusted quarter-on-quarter annualized basis, overall economic activity contracted during the first three quarters of 1998, thus putting the economy technically in a recession.[1]

Given Singapore's role as a provider of hub services, and hence its greater exposure to the regional economies, the commerce and financial services sectors experienced the sharpest deceleration in growth, with both sectors registering

CHART 1A: OVERALL GDP GROWTH

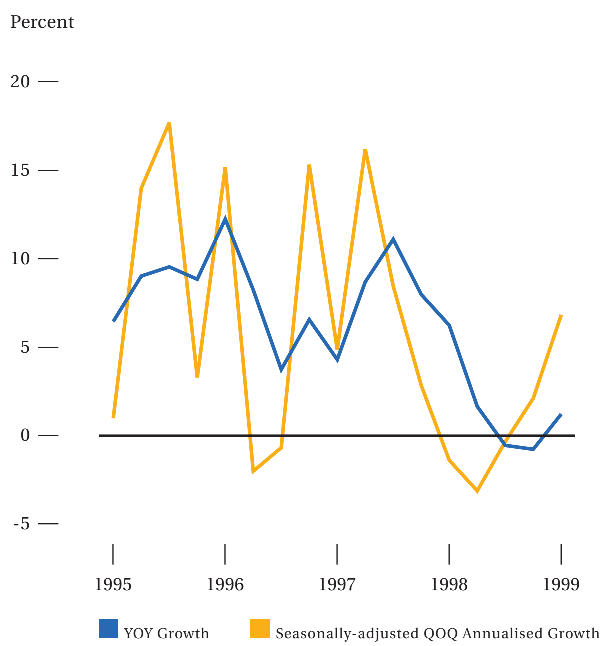
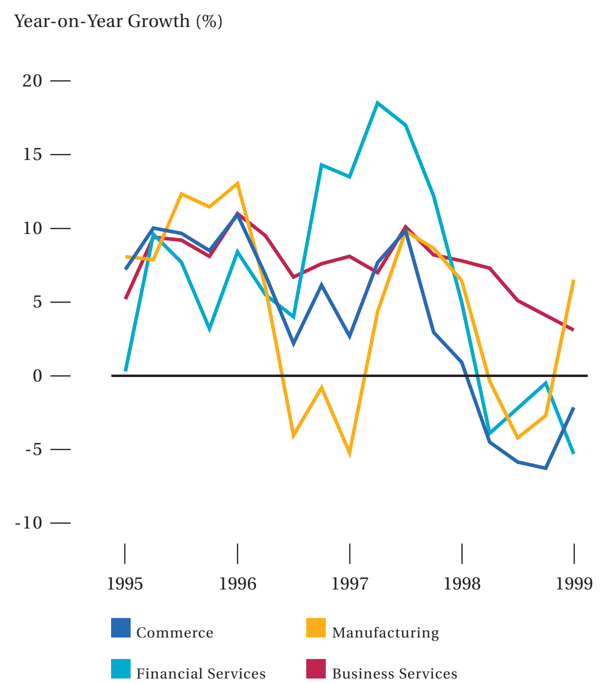
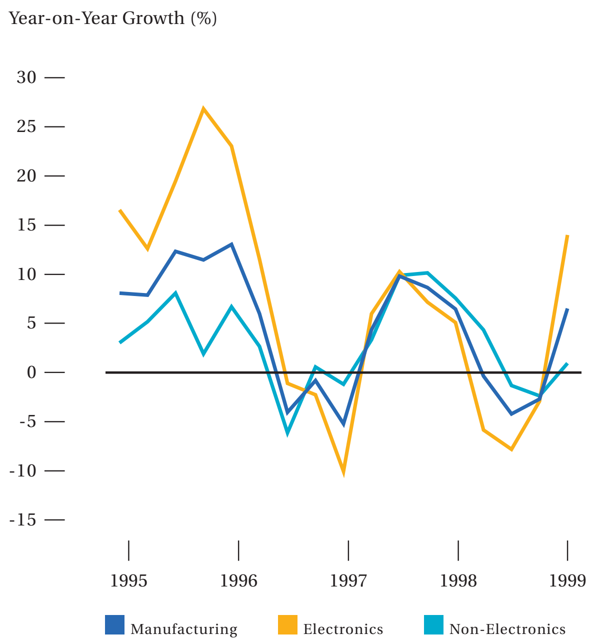


CHART 1B: GDP GROWTH IN SELECTED SECTORS



1 In the US, a recession is technically defined as two consecutive quarters of negative seasonally adjusted quarter-on-quarter GDP growth.

CHART 2: MANUFACTURING SECTOR GROWTH



negative growth for three consecutive quarters in Q2-Q4 1998. The commerce sector fell by 4% in 1998 as entrepot activity and visitor arrivals recorded double-digit declines with the sharp fall off in regional demand. The financial services sector, which contracted by 0.5%, saw a sharp pull-back in activity in the foreign exchange market and the Asian Dollar Market (ADM).

Although the manufacturing sector was less directly affected by the regional economic downturn, it too experienced a sharp slowdown and contracted for three consecutive quarters in Q2-Q4 1998. For 1998 as a whole, manufacturing output declined by 0.5% as the adverse impact of excess capacity and falling prices of electronic products was exacerbated by weak regional demand. There were, however, some pockets of strength in non-electronics manufacturing, such as the chemicals and transport equipment industries. In the construction sector, growth slowed down dramatically in the second half of the year, as the pipeline of projects was squeezed amidst oversupply and weak sentiments in the private property market. The business services sector, on the other hand, recorded relatively healthy growth of 6%, boosted by IT-related activity as firms rushed to resolve Y2000 problems.

From an aggregate demand perspective, the sharp decline in economic growth in 1998 reflected a contraction in both domestic and external demand. Domestic demand contracted by 4.2% in 1998, led by a substantial reduction in inventories in tandem with the downswing in the business cycle. Private investments in machinery and equipment, and transport equipment also contracted sharply as companies cut back on investment spending and scaled back business plans. Growth in private consumption expenditure was dampened considerably by the negative wealth effect of sharp falls in property and share prices over the year, and a decline in private disposable income. At the same time, external demand for Singapore's goods and services shrank by 4.9%, compared with growth of 7.0% recorded the year before.

While GDP rose by 1.2% year-on-year in Q1 1999, on a seasonally adjusted quarter-on-quarter annualized basis, growth had turned positive in Q4 1998 and the momentum picked up further in Q1 1999. This reflected a recovery in the manufacturing sector, which grew by 6.5% in Q1 1999, after three quarters of contractions. Output of the electronics industry rose by 14%, underpinned by strong growth across most electronic industries including semiconductors, computers and telecommunications equipment. This reflected the whittling down of inventories in distribution channels and ramping up of production of new and existing products. Non-electronics output remained constrained by weak demand from the Asian economies, although the chemicals sector still saw growth of almost 20% due the ramping up of capacity, and the opening of new plants.

Outlook for 1999

The outlook for the Singapore economy hinges on a recovery in the global electronics industry, continued strength in the industrial economies and some recovery in the regional economies. There have been signs of a bottoming-out in the electronics industry. Inventory levels have declined steadily since August 1998, while new orders and shipments of US electronic components continue to grow (See Chart 3). New orders for electronic components is a leading indicator of Singapore's electronics production. The expected recovery in the global semi-conductor industry in the second half of 1999 and capacity expansions at new and existing plants in Singapore should also support output growth in the local semiconductor industry.

In non-electronics manufacturing, the growth of the chemicals cluster will be supported by new petrochemical plants that will come on stream, and continued strength in pharmaceuticals. However, the transport equipment industry will be weighed down by softening demand for aircraft and ship-repair.

The services sectors are not expected to recover significantly this year, given continued weak demand in the Asian economies. Nevertheless, the recovery in visitor arrivals is expected to be sustained and this should provide a boost to the commerce sector. With the gradual return of confidence

CHART 3A: US PC-RELATED ELECTRONICS INVENTORY CYCLE

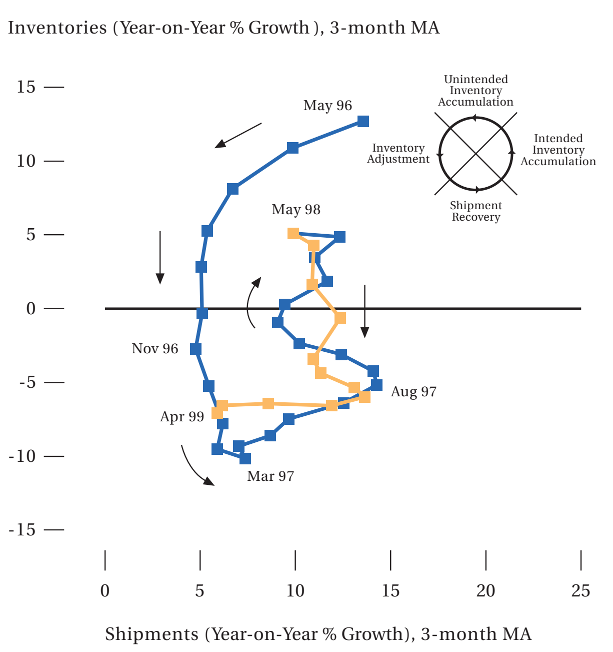


CHART 3B: US NEW ORDERS FOR ELECTRONICS COMPONENTS

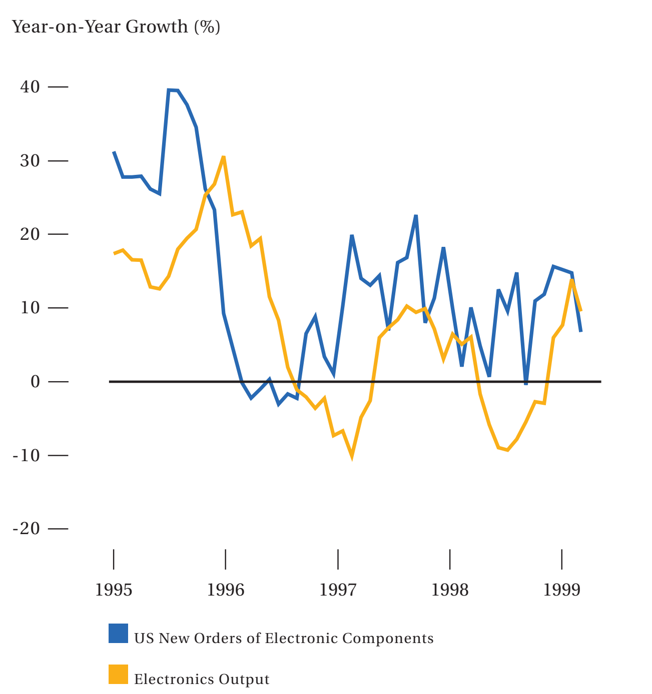


CHART 4: RETRENCHMENTS AND CHANGE IN EMPLOYMENT

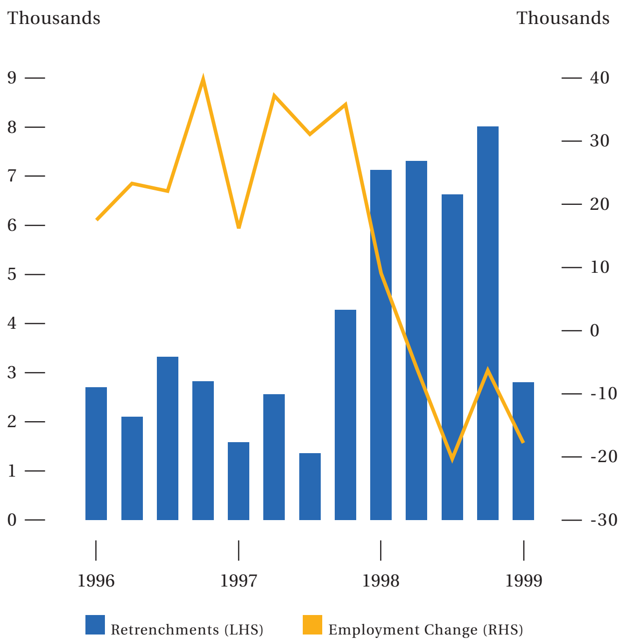
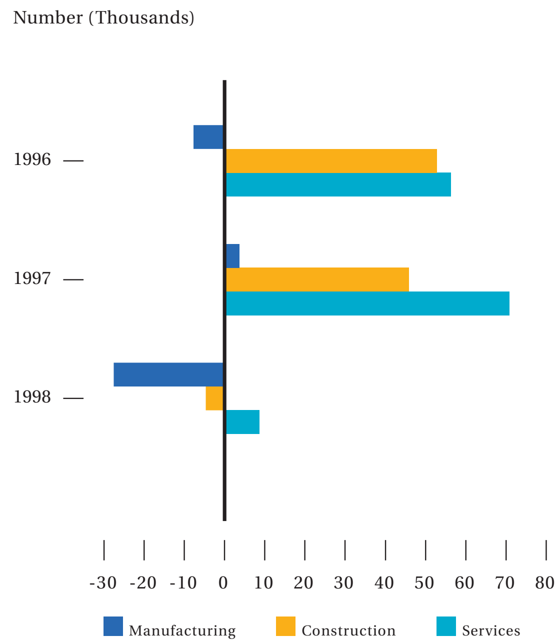


CHART 5: EMPLOYMENT CHANGES BY SECTOR



in the region, activity in the ADM should also recover, although growth in the overall financial services sector is expected to be modest. Weaker growth is forecast for the transport and communications sector as certain segments of the mobile communications market mature.

Further support to growth will come from public construction activity. Such investments include the final and largest phase of the Jurong Island reclamation project, the Northeast MRT line, the underground sewerage system, and building of schools. However, overall contracts awarded shrank by 35% in 1998, pointing to continued weakness in the private construction sector for at least the early part of 1999.

In view of the relatively favourable external environment and the marked improvement in market sentiments, the official forecast for GDP growth in 1999 was revised upwards to 0% to 2% in May 1999, from -1% to 1% previously. More recent indicators however, suggest that 1999 economic growth could turn out to be stronger.

THE LABOUR MARKET

Contraction in Employment

Total employment in Singapore contracted by 1.1% in 1998, compared with average growth of 5.9% in 1996-97. With overall retrenchments hitting a high of 29,086 in 1998, the total number of employed persons recorded a decline of 23,384, compared with robust growth of more than 100,000 in the previous two years. This marked the first decline in the number of employed since 1985, and it reflected a higher rate of job destruction, coupled with a much slower rate of job creation, as the labour market adjusted to slower output growth amidst an uncertain and difficult economic environment.

In particular, the manufacturing sector shed more than 27,600 jobs on a net basis. The electronics industry alone accounted for 18,400 of these net job losses, given its weak performance as a result of the global electronics downturn. The construction sector saw a 4,700 decline in employment in 1998, reversing the trend of strong employment growth in the previous few years.

In the commerce sector, which has been badly hit by the regional economic slowdown, employment declined by 13,500. In particular, employment in wholesale and retail trade fell by 12,000, while hotels and restaurants shed another 1,600 jobs. However, overall services employment was supported by an increase of 6,500 in financial & business services employment, as demand for certain business services, particularly IT services, remained strong. Community, social and personal services employment also grew by 16,100, contributing to an overall net gain of 8,600 services jobs.

A Comparison with 1985

A comparison of retrenchments in 1998 with the 1985 experience highlights the structural change that has taken place in the economy.[2] In 1998, layoffs in the manufacturing sector represented a smaller proportion of total retrenchments, while the share of the commerce sector rose significantly. Moreover, professional employees accounted for a larger proportion of retrenched workers last year compared to 1985, while the share of production employees contracted.

CHART 6A: RETRENCHMENTS BY INDUSTRY

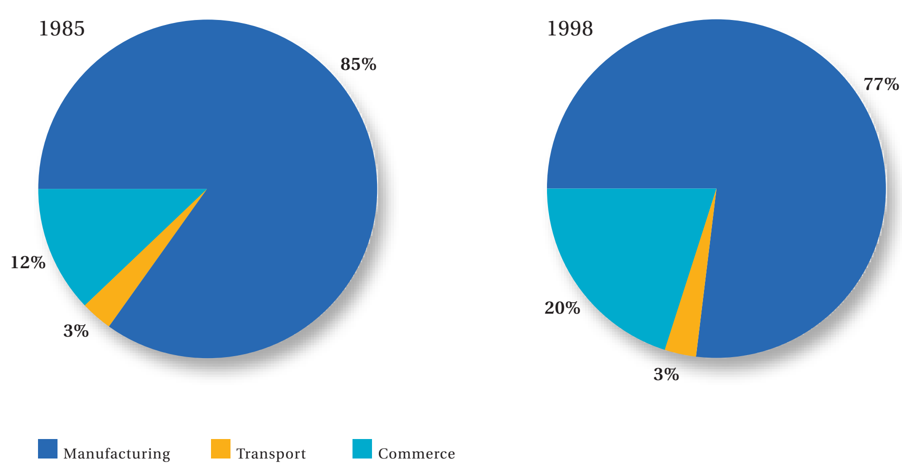
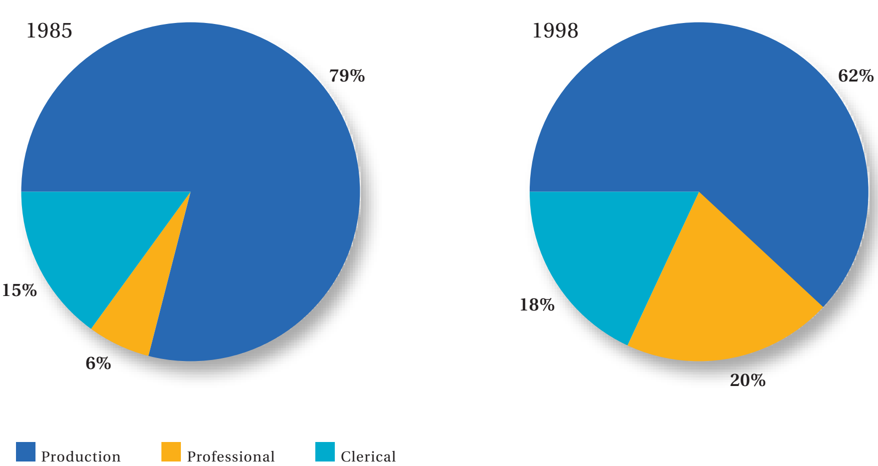


CHART 6B: RETRENCHMENTS BY OCCUPATION



2 For consistent comparison across both time periods, retrenchment data analysed here cover only the manufacturing, transport, storage & communications, and commerce sectors.

Although the unemployment rate doubled to 4.6% at end-1998, from 2.1% the previous year, it did not reach the peak of 6.5% experienced during the previous recession. A comparison of net job destruction[3] in the two years shows that total employment contracted by about 8% in 1985, as 101,700 jobs were lost on a net basis, four times that of 1998.

The slower rate of net job destruction in 1998 explains why the unemployment rate did not reach the peak of 6.5% recorded in Q2 1986. There could be several reasons for the moderate pace of net job destruction in 1998. First, the construction sector accounted for a large proportion of net job losses in 1985 when the sector contracted by 15%. In comparison, the slowdown in construction activity in 1998 was significantly more moderate.

Second, wages are more flexible now than in 1985. Following the Economic Committee's proposal in September 1985 for a more flexible wage system, the National Wages Council Sub-Committee on Wage Reform drew up a new pay structure, comprising a basic wage, an annual supplement and a variable bonus. The variable bonus would depend on the company's profitability and/or productivity. The objective of the flexible wage system was to enhance businesses' responsiveness, and hence competitiveness, while at the same time reinforcing workers' job security. By 1997, the average variable component comprised 16% of total wages, a five percentage point increase from 1987 when the flexible wage system was first introduced.

Finally, the Ministry of Manpower (MOM) has over the past year put in place several schemes to minimise retrenchments. Companies were advised to find alternatives to laying off staff, such as shorter workweeks, temporary layoffs and cost reductions through the flexible wage system. A new Employment Facilitation Team was established to counsel job seekers and conduct job fairs. The MOM has also expanded the Skills Redevelopment Programme to include retraining workers for new and high growth areas such as wafer fabrication.

Nominal Earnings, Productivity and Unit Labour Costs
Average growth of monthly nominal earnings halved to 2.8% in 1998, down from 5.7% the year before, in line with labour market weakness. This was the first time since 1987 that nominal earnings growth came in lower than 5%.

CHART 7: CUMULATIVE NET JOB DESTRUCTION

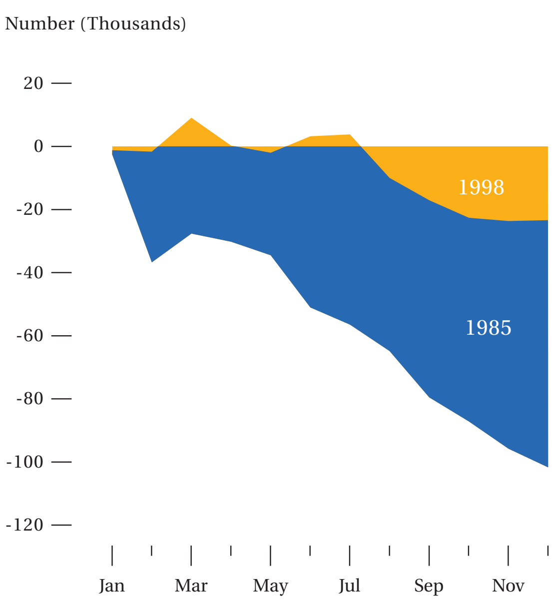
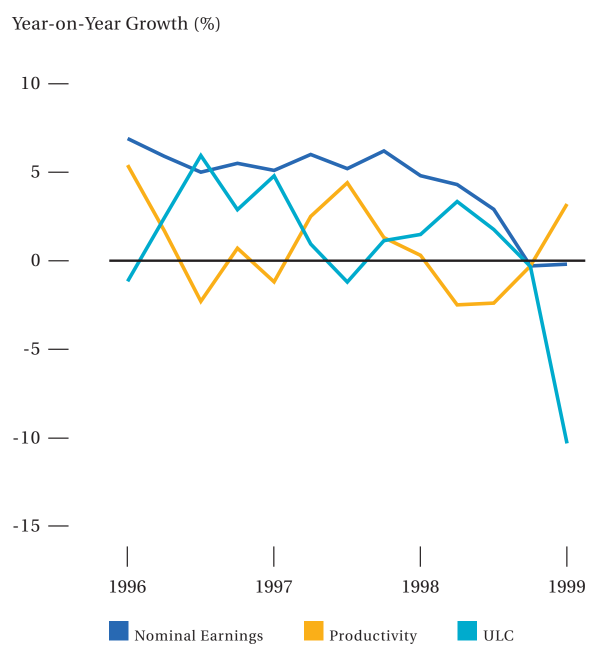


CHART 8: NOMINAL EARNINGS, PRODUCTIVITY AND ULC



[3] Net job destruction is defined as job losses net of new jobs created.

Productivity weakened in tandem with slower economic activity, although the contraction moderated from more than 2% in Q2 and Q3 1998, to 0.3% in Q4, leading to a whole-year productivity decline of 1.3%. Excluding the construction sector, the fall was a more moderate 0.6%. Productivity fell by at least 3% in the construction, commerce, and financial and business services sectors, but held up well in the manufacturing, and the transport and communications sectors.

Despite the fall in productivity, growth in unit labour costs (ULC) was capped at a relatively low 1.4% in 1998 due to the fairly rapid downward adjustment in nominal earnings growth.

In Q1 1999, productivity growth rebounded to 3.2%, from -0.3% in the previous quarter. Productivity in the manufacturing sector, in particular, rose by 14.3%. Higher productivity, the CPF rate cut and other cost-cutting measures announced by the Government in November 1998, contributed to a 10.3% decline in ULC in Q1 1999.

Labour Market Outlook

The seasonally adjusted job vacancy to unemployed person ratio averaged 0.7 in 1998, sharply down from the average of 2.5 in the earlier part of the 1990s, before the Asian financial crisis set in. This implied that last year, there was fewer than one job vacancy for every unemployed person.

Furthermore, the overall employment rate among new NUS and NTU graduates, about 6 months after graduating in 1998, declined to 83%, from 95% in the previous year.[4]

However, the improvement in Singapore's economic outlook, as reflected in the upward revision in the official 1999 GDP growth forecast, has also lifted labour market prospects somewhat. The number of workers who were retrenched in Q1 1999 declined to about 3,402, from an average of more than 7,000 each quarter in 1998. Robust growth of 6.5% in the manufacturing sector in Q1 1999 was accompanied by a sharp moderation in the number of retrenchments among manufacturing workers, to around 1,156, compared to 1998, when 4,700 manufacturing workers on average were retrenched every quarter. Concomitantly, the seasonally-adjusted unemployment rate, which had risen from 2.3% in mid-1998 to 4.4% by end-1998, declined to 3.9% in March 1999, while the unadjusted unemployment rate fell from 4.6% in December 1998 to 3.3% in March 1999.

Nevertheless, until a broad-based recovery materialises, particularly in the services sector, overall labour demand is likely to remain tentative.

Nominal earnings growth is expected to be subdued this year, given the National Wages Council's (NWC) latest guidelines for 1999, which called for continued wage restraint.[5] This, together with the improvement in productivity growth and the impact of the November 1998 cost-cutting package, will keep ULC down as the anticipated recovery gets underway.

INFLATION

The consumer price index (CPI) fell by 0.3% in 1998, compared with inflation of 2% in 1997, thus making it the first annual decline since 1986. One underlying measure of inflation, which excludes private road transport and accommodation from overall CPI (henceforth referred to as the MAS underlying inflation), also eased to 0.5% from 1.5% in the previous year.

The decline in CPI inflation throughout the year mirrored the sharp decline in prices of durable goods. Given the economic uncertainty with the looming spectre of wage cuts and even job losses, consumers had held back their purchases of durable or big-ticket items. In particular, prices of cars fell sharply, which together with the downward revisions in transport-related taxes and charges, led to a 10% contraction in the cost of private road transport in the consumer basket. Non-durable goods price inflation moderated with the decline in food prices due to the stiff price competition among supermarkets and retailers, as well as the appreciation of the Singapore Dollar against the currencies of the regional countries from which much of Singapore's food is imported. Services price inflation also trended down, although it remained positive at about 1% partly reflecting its price-inelastic nature and lower exposure

[4] Preliminary findings of 1998 NUS and NTU Graduate Employment Survey.

[5] The NWC guidelines also took into consideration individual company performance, and recommended that companies which had performed well be given greater flexibility to reward their workers through a bonus or a wage increase. To further enhance wage flexibility, the NWC recommended that this wage increase be in the form of a monthly variable component.

CHART 9A: OVERALL AND UNDERLYING CPI INFLATION

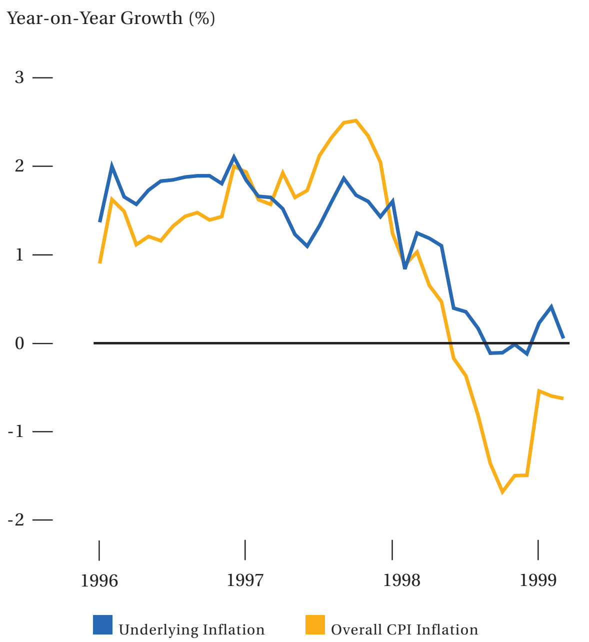


CHART 9B: CPI INFLATION OF SERVICES, DURABLE AND NON-DURABLE GOODS

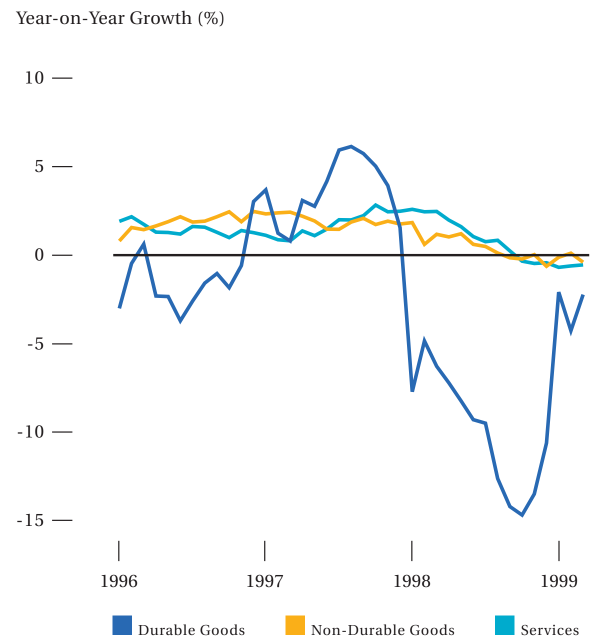


CHART 10: IMPORTED AND COMMODITY PRICE INFLATION, AND TREND ULC GROWTH

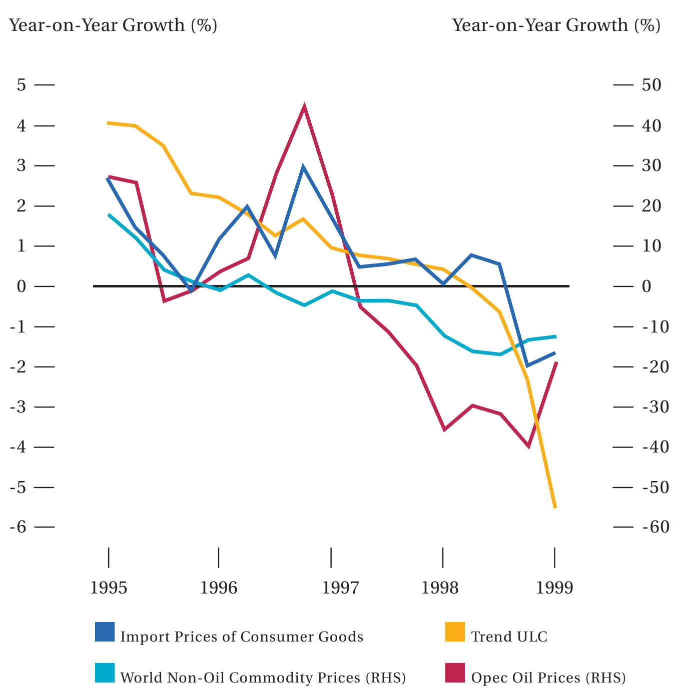


CHART 11: MEASURES OF CORE INFLATION

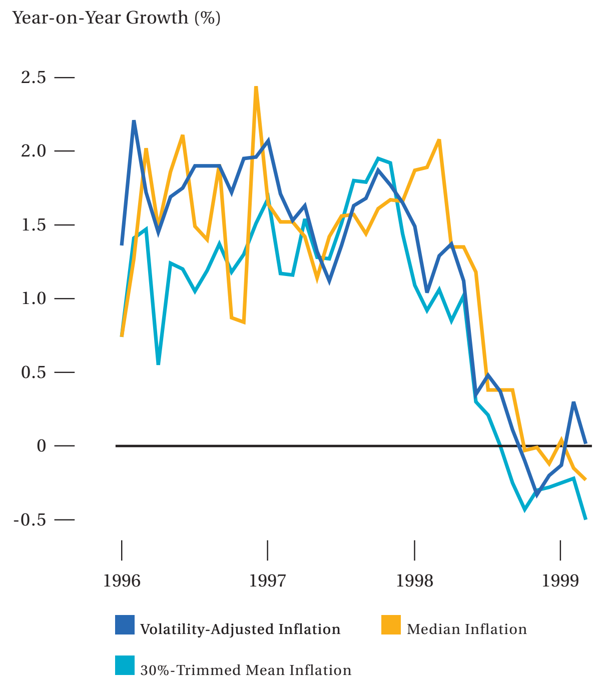
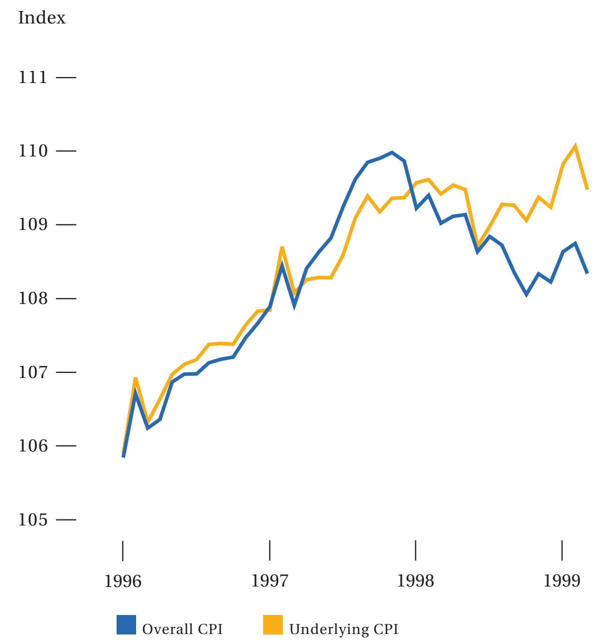


CHART 12: OVERALL AND UNDERLYING CPI



to international competition. Price inflation reflected the pass-through of price increases in several regulated items in 1997, such as public transport fares, utility charges and university fees, as well as further increases in the latter two items in 1998.

At a more macro level, the decline in consumer prices reflected the abatement of domestic and foreign price pressures. The trend decline in world prices of non-fuel commodities, combined with the relative strength of the Singapore Dollar vis-à-vis the regional currencies has kept imported inflation at bay. Domestically, the easing in labour market conditions has also led to a moderation in growth of unit labour costs.

The disinflationary trend in overall CPI in 1998 was also reflected in several other measures of underlying or core inflation, such as the volatility-adjusted, median and trimmed-mean inflation.[6] These measures, which were constructed to better capture the underlying price process of the economy, all turned negative towards the end of the year, although they remained marginally positive for the year as a whole.

In the first three months of 1999, most of the core inflation measures have indicated a levelling off in prices. This was in contrast to the overall or "headline" CPI inflation rate which has remained negative. Indeed, the recent phenomenon of a decline in overall CPI was more a reflection of an adjustment in relative prices arising from a correction in asset prices, rather than a general price deflation. As Chart 12 shows, underlying consumer prices have remained relatively stable over 1998 even though overall consumer prices have declined. The negative CPI inflation recorded since June 1998 has been very mild and within the realm of price stability.

Thus, the concerns that were raised about the economy going into a deflationary spiral, in which expectations of a decline in prices cause both businesses and households to hold back investment and consumption expenditure, leading to further declines in prices, are unfounded. The cyclical decline in the CPI has not persisted, but has reversed since end-1998. Moreover, as in the case of an inflationary spiral, a "deflationary" spiral can only be sustained if it is continuously validated by monetary policy, which must be contractionary in this case. However, there has been a marked easing of monetary conditions since the height of the Asian currency crisis in January 1998.

6 For more details, please refer to MAS Occasional Paper Number 10, 'Measures of Core Inflation for Singapore'.

The subdued inflationary environment is expected to continue in 1999, as both imported and domestic price pressures remain benign. Average inflation across the Asian economies is expected to moderate, as a return to relative financial stability in the region and an appreciation in the Yen are expected to underpin the regional currencies, thereby curbing some of the sharp rises in inflation seen in 1998. Prices of major commodities in world markets are also forecast to continue their downward trend in view of the oversupply and weak demand conditions. At the same time, the slack in the labour market and weak domestic consumption will help to check domestic price pressures. For 1999, overall CPI inflation is expected to be around 0%.

EXCHANGE RATE POLICY

In the absence of inflationary pressures, exchange rate policy in 1998 sought to cushion the rapidly decelerating Singapore economy from the adverse impact of the regional currency crisis without undermining confidence in the Singapore Dollar. Before the crisis, MAS allowed a trend appreciation of the Singapore Dollar, in line with the rapid growth of economic activity and an economy that was operating at full capacity. This contained inflationary pressures and prevented the economy from overheating. However, since the crisis began, aggregate demand has weakened, and imported inflation has not been a threat. MAS has therefore adopted an easier policy stance. In addition, the policy band, which was widened towards the end of 1997 in response to heightened foreign exchange volatility, remained in place as financial markets continued to be extremely volatile through 1998. This was particularly so during the early part of the year as a result of the economic and political turmoil in Indonesia, the weakness of the Yen due to concerns over the Japanese economy and financial system, and fears of a Renminbi devaluation. The exchange rate was also managed more flexibly to take into account market conditions, although MAS remained ready to intervene to repel speculation which pushed the exchange rate excessively in directions that were not justified by fundamentals. The policy objective continues to be one of maintaining price stability for sustained economic growth.

Concomitantly, overall monetary conditions have eased considerably since early 1998. The nominal effective exchange rate (NEER) of the Singapore Dollar is now close to its pre-crisis level. Given that the exchange rate is the principal monetary policy tool in Singapore, interest rate movements are largely a function of external interest rates and market expectations of the movement of the Singapore Dollar exchange rate. In this regard, the substantial abatement of domestic interest rates over 1998 up to the present reflects the market's confidence in the Singapore Dollar, as well as an improvement in the external economic environment. Current monetary conditions, as reflected in the levels of both interest and exchange rates, are broadly consistent with present economic conditions and prospects.

EXCHANGE RATE DEVELOPMENTS

In 1998, the Singapore Dollar strengthened marginally against the US Dollar and against the Euro, but fell against the other major currencies. It also weakened against regional and NIE currencies, strengthening only against the Indonesian Rupiah.

Movements Against Major Currencies

The Singapore Dollar weakened to a low of 1.8080 against the US Dollar at the height of the regional crisis in January 1998. Concerns over the regional economies led to capital flight. The announcement of a contraction in non-oil domestic exports in the second quarter of 1998 by 0.2% contributed to further weakness. The trend reversed in the fourth quarter of 1998 after the LTCM debacle sparked off a rush of Yen short-covering. This upward trend was further supported by the series of Fed Funds rate cut from 5.25% to 4.75%. However, the Singapore Dollar's strength was moderated by concerns over a possible Renminbi devaluation and fears of contagion. The Singapore Dollar ended 1998 1% stronger against the US Dollar.

The Singapore Dollar depreciated against the Japanese Yen at the start of 1998, as a 16 trillion Yen fiscal stimulus package brought hope of economic recovery in Japan. The trend reversed as the reality of recession sank in amidst poor consumer sentiment and rising unemployment. Even joint-intervention by the Fed and Bank of Japan in June proved inconsequential. By June, the Singapore Dollar had risen 7.8% against the Yen from the start of the year. The Yen strengthened from September onwards, from a tidal wave of Yen short-covering arising from the LTCM crisis, and was further supported by a 24 trillion Yen supplementary fiscal stimulus package and news that the Trust Fund Bureau would cease purchases of Japanese Government Bonds. For the year, the Singapore Dollar weakened 10.9% against the Yen.

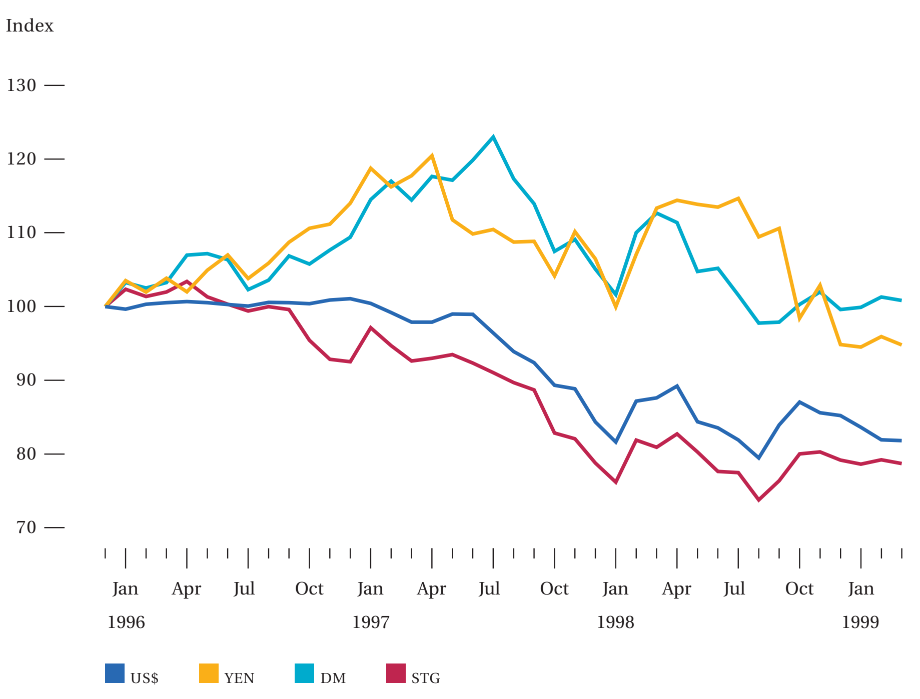
During the year, the Singapore Dollar depreciated 5.2% against the Deutsche Mark, which was underpinned by benign inflation and modest economic growth in Germany. The Deutsche Mark and other major European currencies were also boosted by capital flight-to-quality as the LTCM debacle and the financial crisis in Latin America dulled the US Dollar's safe-haven lustre. However, uncertainty over the Euro's launch capped the Deutsche Mark's strength. The Singapore Dollar recovered from its weakness against the Sterling Pound to close 0.5% higher in 1998. The high-yielding Sterling had benefited from safe-haven flows and relatively stronger economic performance for the first three quarters of 1998. The strength was shortlived, as interest rate cuts by the Fed and three rounds of base rate cuts by Bank of England prompted by a slowdown in the economy, weighed down on the Sterling Pound.

Funds flowed back into Asia in the first quarter of 1999, on expectations that the worst of the crisis was over. Investors were attracted by the strength in the region's stock markets, which were also boosted by rallies on the Dow. The Singapore Dollar appreciated against the Yen initially as the Japanese Government embarked on an aggressive policy of monetary easing. The low interest levels triggered a rally in Japanese stocks, which moderated the Yen's fall. Thereafter, the Singapore Dollar tracked the Yen, falling 3.1% against the US Dollar in the first quarter of 1999. The latter was supported by continued strong US economic growth amidst benign inflation. The Euro, following its successful launch and talk of its ascendancy to reserve currency status, strengthened initially against currencies across the board, but declined after a downward revision to the economic outlook for the Euro zone raised expectations of interest rate cuts by the European Central Bank. In the three months since its birth, the Euro fell 3.2% against the Singapore Dollar.

Movements Against Regional and NIE Currencies

The Singapore Dollar depreciated against most NIE and regional currencies in 1998, appreciating only against the Indonesian Rupiah. The market, recognising Singapore's strong long-term economic fundamentals bought the local currency initially. As the Asian crisis intensified, Singapore became caught in the deflationary spiral and market participants sold the Singapore Dollar on perceptions that a weaker currency was needed for Singapore's exports to remain competitive.

CHART 13: SINGAPORE DOLLAR EXCHANGE RATE AGAINST MAJOR CURRENCIES



The Thai Baht continued to rise steadily from its large fall in 1997, strengthening 21.5% against the Singapore Dollar in 1998. The Baht's recovery continued into 1998 as Thailand implemented the structural reforms prescribed by the International Monetary Fund (IMF). This soothed market fears of further foreign exchange volatility. The steady improvement in the Thai current account and foreign exchange reserve balances over the year, along with the inflow of foreign funds into Thai asset markets also supported the Baht.

The Indonesian Rupiah recovered sharply from its weakest point in the middle of 1998, but ended the year 57.7% weaker against the Singapore Dollar. Announcement of what market analysts perceived to be an unrealistic budget and uncertainties over Indonesia's commitment to IMF reforms, led to the depreciation of the Rupiah early in the year. The Rupiah recovered from the second quarter of 1998, after successful debt-rollover negotiations with major creditors and the enactment of a new bankruptcy law, which expedited the resolution of insolvent companies. The Rupiah's recovery was further supported by conversion of IMF aid money and progress made in banks and corporate sector restructuring.

Over 1998, the Singapore Dollar weakened 1.2% against the Malaysian Ringgit. The Ringgit weakened initially from contagion effects, slower GDP growth and the downgrade of Malaysia's sovereign rating. Thereafter, the imposition of capital controls pegged the Ringgit at 3.80 to the US Dollar and confined the Ringgit's fluctuations against the Singapore Dollar to a tighter range.

In the first quarter of 1999, the Thai Baht continued to strengthen against the Singapore Dollar, rising a further 1.4% as endorsement of its reform efforts by the IMF led to improved investor confidence. Conversely, the Rupiah weakened a further 8.8% against the Singapore Dollar, undermined by social unrest in Ambon and uncertainty over the Indonesian elections ahead.

Similar to the Thai Baht, the Korean Won recovered from its weakness in 1997 following the institution of IMF reforms. Foreign funds flowed back into Korean asset markets, particularly stocks, after the liberalisation of foreign ownership limits and upgrades by credit rating agencies. The Won benefited from the Yen's strength in the fourth quarter of 1998, and ended the year 28.7% stronger against the Singapore

CHART 14: SINGAPORE DOLLAR EXCHANGE RATE AGAINST REGIONAL CURRENCIES

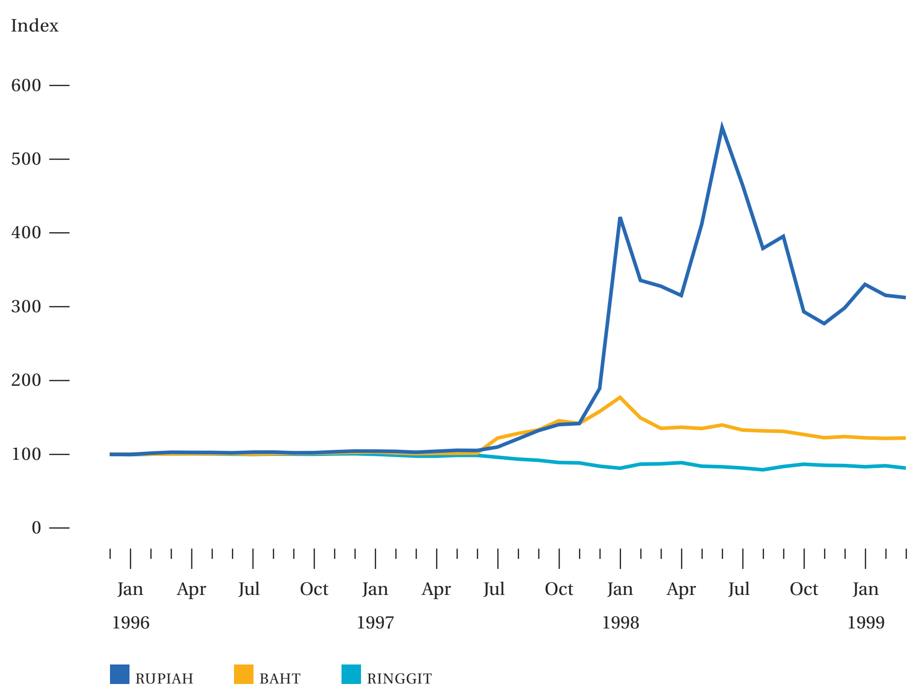
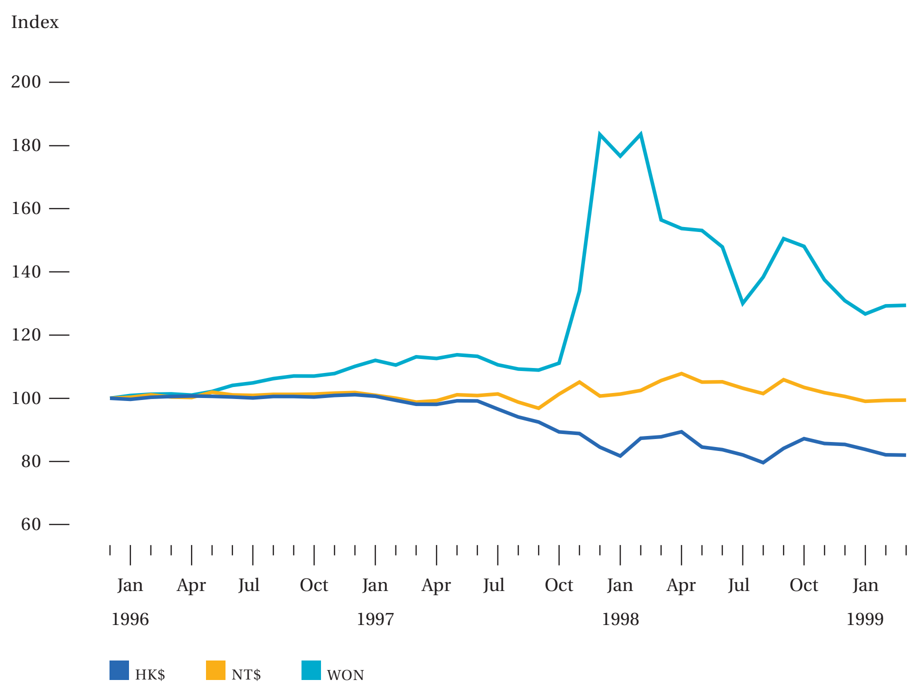


CHART 15: SINGAPORE DOLLAR EXCHANGE RATE AGAINST NIE CURRENCIES



Dollar. The New Taiwan Dollar ended 1998 relatively unchanged against the Singapore Dollar. As contagion spread to Taiwan in 1998, slower export growth and a softer economic outlook led to the Government's implementation of fiscal stimulatory measures. Excessive fluctuations in the New Taiwan Dollar was curbed however by the government's tightening of controls over foreign exchange trading.

MONETARY SECTOR

Domestic Interbank Rates

Interest rates in Singapore, which rose sharply in reaction to the contagion effect of the regional currency crisis, hit a peak in the earlier part of 1998, before gradually trending down. The 3-month interbank rate reached 9.00% at end-January but moderated to 5.00% by March. However, the outbreak of rioting in Indonesia sent the rate climbing back up again, to more than 6.00% in May 1998.

The latter half of the year saw the 3-month interbank rate on a downtrend as international financial markets stabilised and some confidence returned. Monetary easing was given a boost in the last quarter of 1998 when the US Federal Reserve, in three rounds of interest rates cuts between September and November, brought its official interest rate down by 75 basis points. By the end of 1998, the 3-month interbank rate in Singapore had fallen to 1.72%, more than seven percentage points lower than at the beginning of the year. In the first quarter of 1999, there was a slight pick-up of the interbank rate to 2.06%.

The high domestic interest rates early in 1998 saw the Singapore 3-month interbank rate at a premium of more than 300 basis points over the corresponding US-Dollar SIBOR. The premium turned negative briefly but became positive again when the local benchmark rate rose in May. Due to the sustained trend decline of local interest rates in the second half of the year, the 3-month interbank rate fell below its SIBOR counterpart in July. This differential widened to 341 basis points by the close of 1998, before narrowing to 294 points at end-March 1999.

Lending and Deposit Rates

In the face of higher borrowing costs in the interbank market, banks started to raise their retail lending and deposit rates late in 1997. The average prime lending rate rose to 7.79% in January 1998, a level where it remained almost unchanged until September. The sustained decline in interbank rates allowed local banks to reduce the average prime lending rate in a series of rate cuts to 5.80% by the end of the first quarter of 1999.

Deposit rates followed the same trends. At the beginning of 1998, the average interest rate on a 12-month fixed deposit rose above 5% for the first time since 1991. For much of the rest of the year, it remained at about 5.38% until September, when it was gradually brought down. At the end of March 1999, it stood at 2.46%. Banks' savings deposit rate also fell over the period, to 1.36% at end-March 1999.

Money Supply

Narrow money, M1, contracted by 1% in 1998. Demand deposits and currency in active circulation declined markedly in the first half of the year, as funds were attracted to the higher interest rates offered by fixed deposits. Transaction demand for money also weakened in line with the slowing economy. Broad money M2 and M3, on the other hand, saw growth of 30.2% and 8% respectively, boosted by the strong growth of fixed deposits. However, these changes reflected the full incorporation of POSBank's data in the domestic banking system following its acquisition by the Development Bank of Singapore (DBS) in November 1998.[7] Adjusted for the effects of the acquisition[8], M1 would have contracted by 0.9% in 1998, while M2 and M3 would have expanded by 9.7% and 8.1% respectively.

CHART 16A: INTERBANK INTEREST RATES

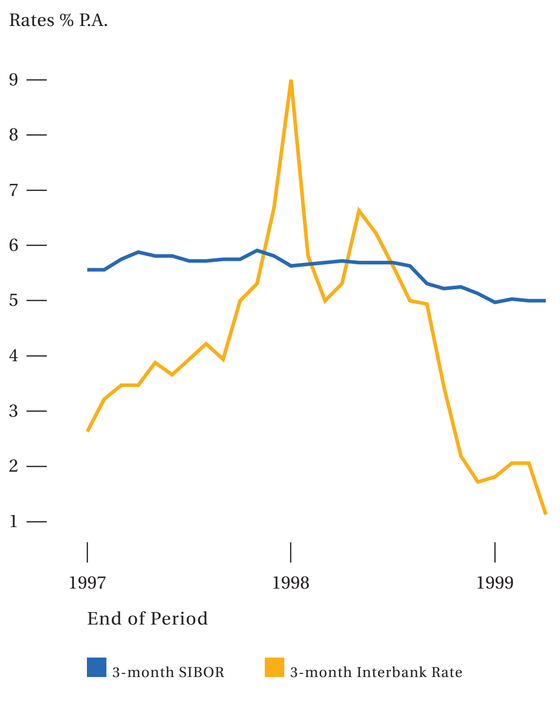
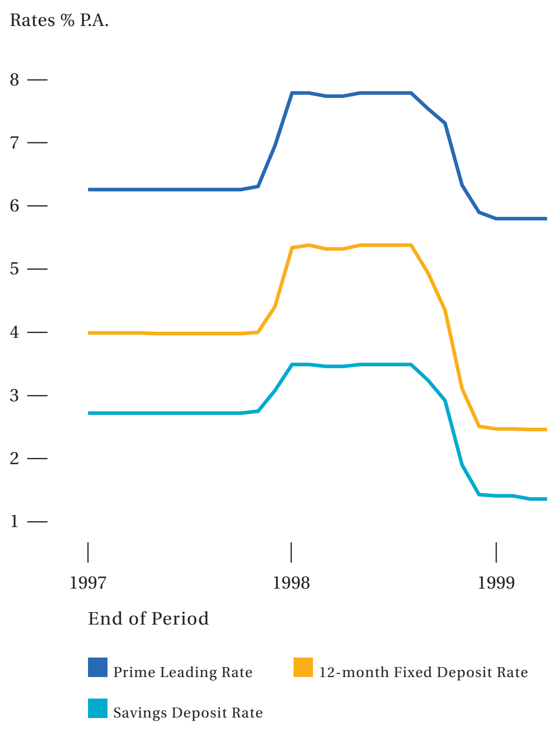


CHART 16B: RETAIL INTEREST RATES



7 The compilation of the monetary aggregates in Singapore is based on the institution-based approach, in which cash and deposits of banks are treated separately from those of non-bank financial institutions such as finance companies and the former POSBank, which also accept deposits. After the acquisition by DBS, POSBank's cash holdings and deposits are now classified like those of banks. This re-classification affects all three measures of money.

8 The effect of DBS' acquisition of POSBank was adjusted by also incorporating the full POSBank data in the year-ago base period.

CHART 17: TRENDS IN MONEY SUPPLY

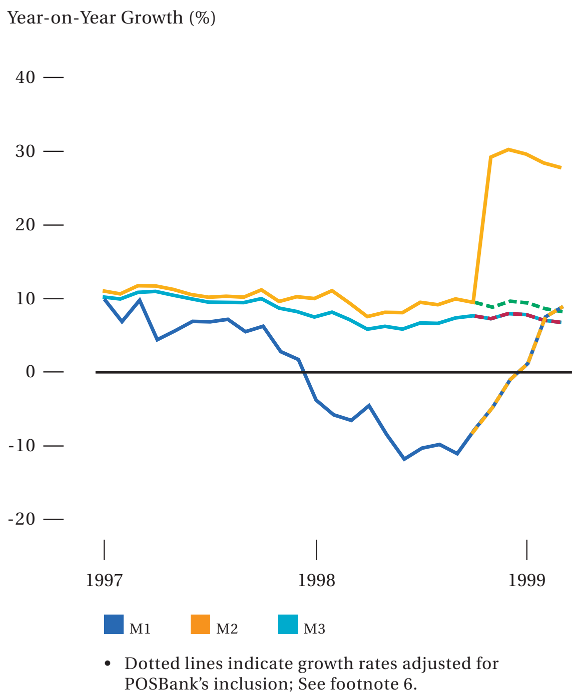
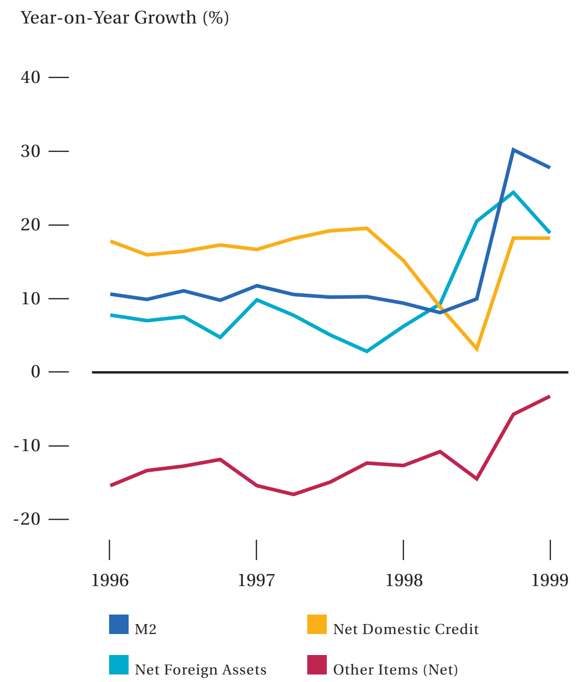


CHART 18: COMPONENTS OF M2



The increase in broad money, M2, together with the decline in net domestic credit, was mirrored in the strong growth in net foreign assets. The perceived increase of credit risks in the region, coupled with the downturn in demand for loans had caused banks' head-office funds to be pulled back. These head-office funds make up a significant proportion of banks' foreign liabilities, and were previously used to supplement locally-sourced funds for credit activities. Hence, there was a more rapid fall in banks' foreign liabilities compared with the fall in their foreign assets. Despite a decline in bank loans, growth of net domestic credit was supported by the trend increase in growth of lending to the government over the whole year, reflecting the acceleration in issuance of government securities to further develop the Singapore Government Securities market. In addition, the inclusion of POSBank's loans into the banking system after its acquisition by DBS also boosted growth of domestic credit in the last two months of 1998.

Domestic Credit

The size of the domestic banking sector was enlarged by DBS' acquisition of POSBank in November 1998. The impact was offset to some extent by the merger of Keppel Bank and Tat Lee Bank in December, which resulted in the removal of interbank loans between them. Nonetheless, total assets of domestic banking units surged to $310 billion at the end of the year.

DBS' acquisition of POSBank boosted the banking sector's loans and advances to non-bank customers, as well as domestic interbank loans. Most of POSBank's loans to non-bank customers were extended to the housing sector, statutory boards, non-bank financial institutions, and the building & construction sector. POSBank's loans boosted growth of total loans to non-bank customers to 5.9% at end-1998, compared with a contraction of 1.3% in the third quarter. Adjusted for the effect of the acquisition[9], total non-

[9] See footnote 8.

bank loans recorded a decline of 1.6%. Credit extended to the commerce sector saw the largest rate of decline, falling by 18%. Moreover, in terms of the types of loans, trade-related credit like bills and trust receipts contracted sharply, reflecting the overall slowing of business activity.

Loans and advances extended by finance companies continued to shrink, and by end-1998 had declined by 6.3% from the previous year. The largest decline was seen in hire-purchase financing, which fell by 12.6%, largely because of a significant contraction in motor-vehicle loans. Finance companies' credit extended for housing still registered growth of 2.7%, albeit much lower than the double-digit increases in previous years.

Liquidity or Credit Crunch?

The adverse impact of the regional currency crisis on the Singapore economy was manifested in a weaker Singapore Dollar exchange rate and higher domestic interest rates, particularly during the height of the crisis in early 1998. As a result, monetary conditions in Singapore tightened significantly in early 1998. Reflecting the slowing economy, growth in money supply and bank credit also slackened.

These developments are not unrelated and reflect exogenous developments associated with contagion from the regional currency crisis. In the context of an open capital account, the monetary authority can either manage the exchange rate or set the interest rate, but not both at the same time. In Singapore, domestic interest rates are largely a function of external interest rates and market expectations of the movement of the Singapore Dollar exchange rate. Both of these are exogenous variables, which cannot be controlled by the MAS, although the MAS may be able to influence exchange rate expectations to a certain extent by its policy actions and announcements.

Nonetheless, monetary developments in early 1998 raised some concern over whether there was a liquidity crunch or credit crunch or both during that period. A liquidity crunch

CHART 19: INTEREST RATE, MONEY SUPPLY AND BANK CREDIT

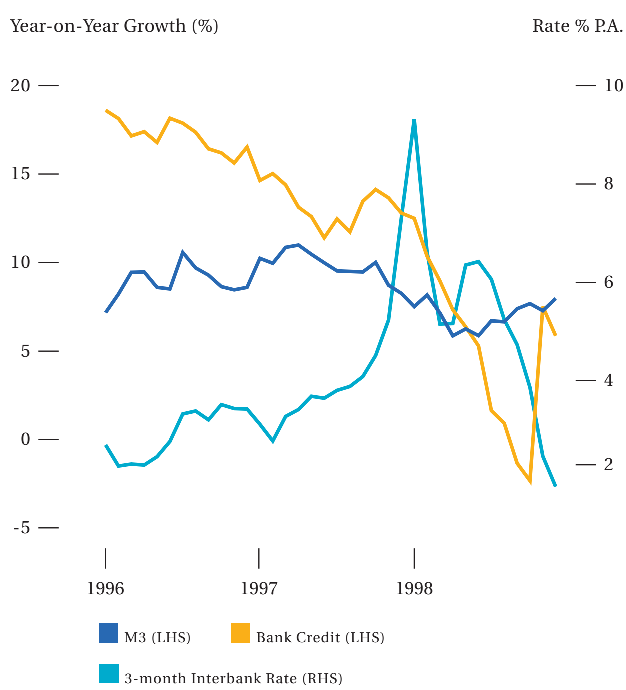


CHART 20A: MONETARY BASE

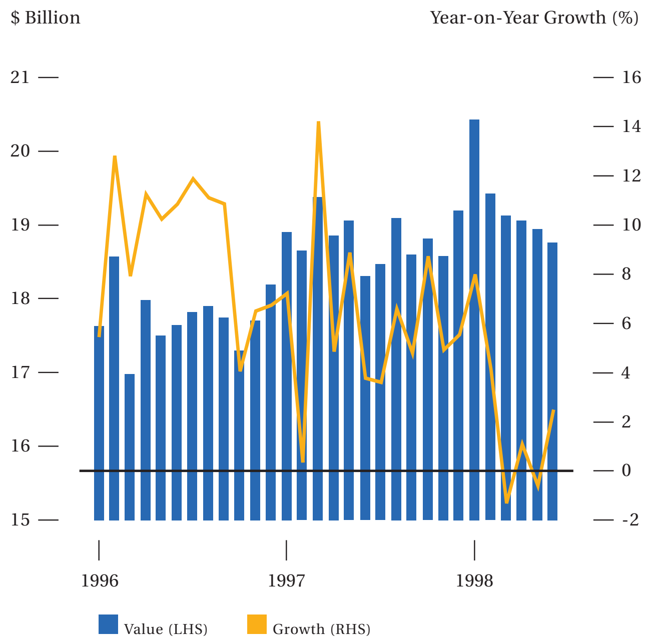
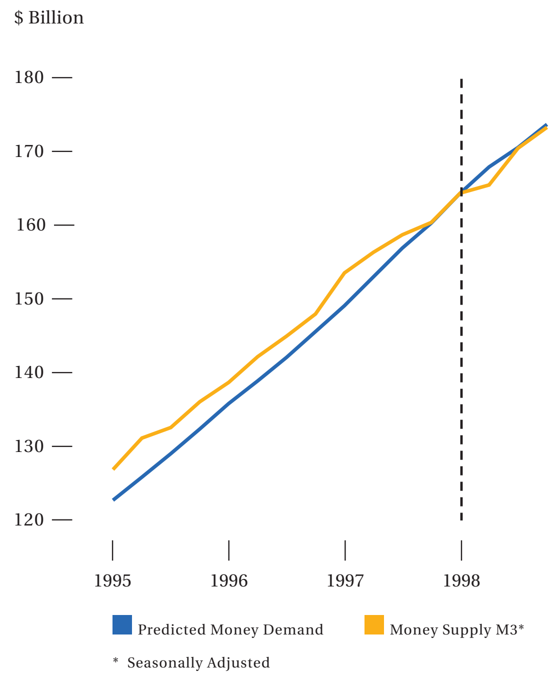


CHART 20B: ACTUAL MONEY SUPPLY AND PREDICTED MONEY DEMAND



arises when monetary policy is too tight, leading to insufficient loanable funds in the banking system to support economic activities. A credit crunch, on the other hand, reflects either banks' inability or unwillingness to extend credit to customers. Banks' inability to lend usually stems from a liquidity crunch, but an increased cautious attitude towards lending even in the face of adequate liquidity would indicate a perception of higher risks during the current difficult economic environment.

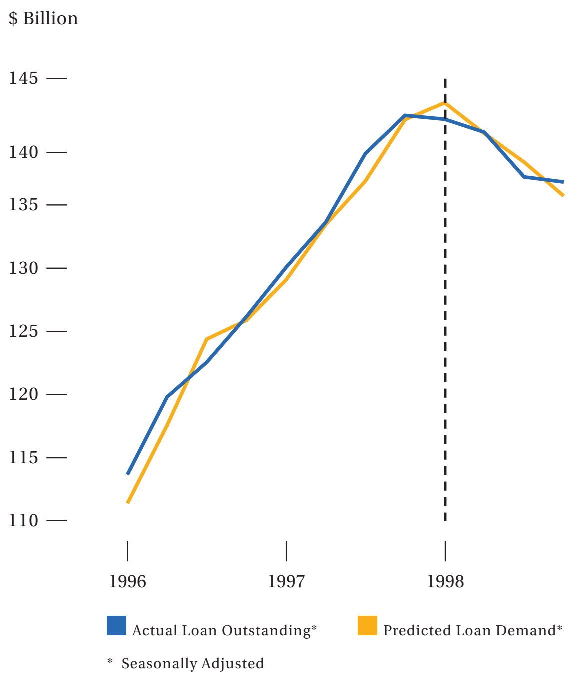
In the first half of 1998, there was marked slowdown in growth of the monetary base (Chart 20a). As the monetary base is a liability of the monetary authority which is affected by its monetary policy operations, the question arises as to whether the slower growth in M3 was induced by tighter monetary policy or the effect of a slowdown in economic activity. To address this issue, actual money supply is compared with money demand estimated as a function of income (nominal GDP) and interest rate. Chart 20b shows that, during the first half of 1998, actual money supply was in line with predicted money demand[10], implying that there had not been any liquidity crunch.[11]

In the absence of a liquidity crunch, the decline in bank credit could have reflected a fall in either the demand for or supply of bank credit, or both. To distinguish between the two, a loan demand schedule is estimated as a function of nominal GDP and interest rate. Chart 21 shows that while estimated loan demand had moderated in line with slowing economic growth, the actual loan supplied had also fallen, although the difference is not statistically significant.

10 Any difference observed between the two is not statistically significant.

11 The analyses in this section largely focus on the first half of 1998 as the statistics are distorted by the reduction of banks' Minimum Cash Balance (MCB) with MAS in Jul 98 and DBS' acquisition of POSBank in November 98.

CHART 21: PREDICTED LOAN DEMAND AND ACTUAL LOAN SUPPLY



The decline in supply of credit reflected banks' heightened cautiousness in light of the higher credit risks of borrowers amidst the difficult economic environment. Chart 22a shows that, during the first three quarters of 1998, banks' outstanding loans had declined even though their lending capacity[12] had picked up somewhat. This is also reflected in the declining loan/deposit ratio. In addition, banks' credit limits granted to borrowers had also fallen. The decline was most significant for those sectors of the economy which were perceived to be more vulnerable, such as the commerce sector, non-bank financial institutions, and professional and private individuals (Chart 22b). Banks' heightened cautiousness could also be seen in the rising proportion of their assets held in cash, reserves, securities and other assets, rather than extended as loans, particularly during the height of the crisis in late 1997 and early 1998.

The foregoing analysis suggests that there was some credit rationing by banks, reflecting their rational reaction in the midst of the adverse economic environment. The issue of credit crunch is not unique to Singapore, and has been even more severe in the crisis-hit regional economies. Nonetheless, it is imperative that credit remains readily available for firms with viable business even in the present difficult economic conditions. To help small local companies facing this problem, the government has enhanced the Local Enterprise Financing Scheme to provide working capital to credit-worthy local companies. Under this scheme, banks undertake the credit analysis with the government co-sharing the risks with them. Aside from buying new equipment, these small companies could also use the money for trading, as well as for working capital. The government recently increased its credit line for this scheme from $1.1 billion to $2 billion in June 1998, and relaxed the eligibility criteria in August 1998 to benefit more companies.

[12] Banks' lending capacity is defined as the sum of total deposits and banks' capital and reserves, net of their required and excess reserves.

CHART 22A: BANKS' LENDING CAPACITY, OUTSTANDING LOANS, AND LOANS/DEPOSIT RATIO

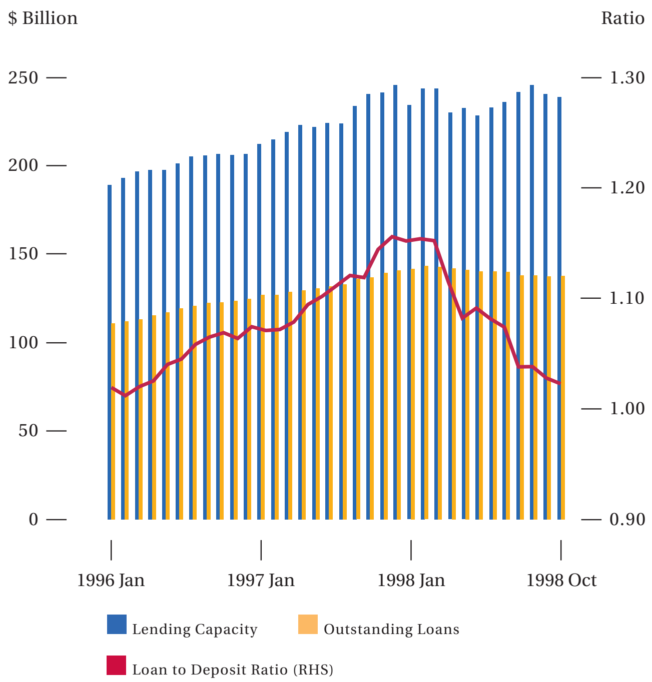
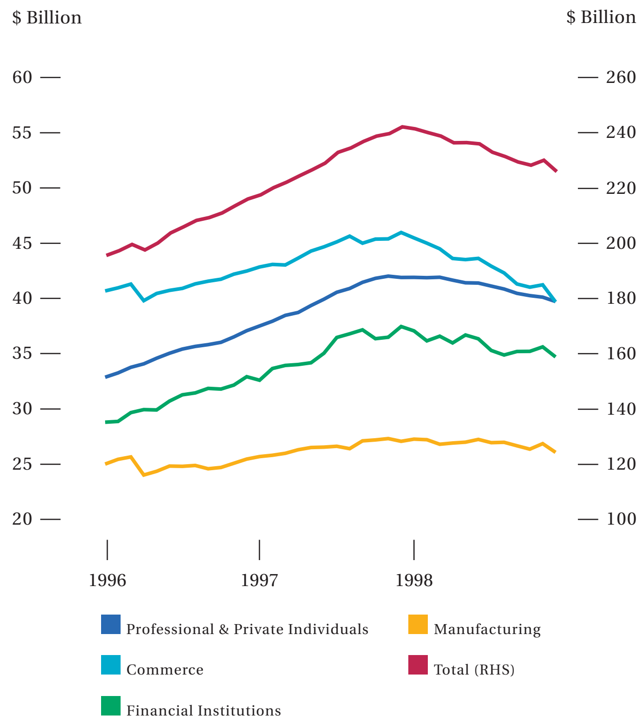


CHART 22B: BANKS' CREDIT LIMITS



FISCAL DEVELOPMENTS

Reflecting rapidly decelerating economic activity over the last few quarters of 1998, the intake of government revenue slowed. In 1998, government operating revenue was $28.2 billion, about 8% lower than in 1997.[13] This was partly due to the high base in Q1 1997 caused by a one-off contribution of $1.2 billion to direct taxes by statutory boards. Controlling for this, total operating revenue declined by a smaller 4%, due largely to a sharp contraction in indirect tax revenue.

Indirect tax revenue contracted by 12%. In particular, the collection of stamp duties fell by a steep 36% as weak sentiments and expectations of further price fall led to sharply lower transactions in the property and stock markets. Collections of motor-vehicle taxes also shrank by 12% following a contraction of 28% in 1997, as demand for cars slumped amidst the current difficult economic environment. In line with the slowdown in private consumption growth, revenue from Goods and Services Taxes (GST) declined by 15% in 1998 compared with growth of 11% the previous year.

At the same time, direct tax revenue fell by 7.6% (or 1.2% growth after adjusting for the one-off contribution from statutory boards in Q1 1997), due largely to a 23% decline in property tax collection. Collections from personal income tax, on the other hand, grew by 29%, reflecting the buoyancy of personal income in 1997 and the lag between assessment and collection of about 1 year. In contrast, declining profits or rising losses accruing to companies in a slowing economy, combined with the shorter lag between assessment and collection, led to a 7% fall in corporate tax revenue.

[13] These figures and the following analysis are based on calendar year data, unless otherwise stated. The fiscal year of the government runs from 1 April to 31 March.

Total government expenditure in 1998 also declined, by 4% from that in 1997. However, adjusting for the government's compensation to SingTel and for the acquisition and return of land in 1997[14], which together amounted to more than $3.0 billion, total government expenditure is estimated to have increased by about 11%. In the third and fourth quarters of 1998, total development expenditure for economic and infrastructure projects picked up significantly, reflecting the kick-in of some of the off-budget measures[15]. Thus, the government's net fiscal position, i.e. after deducting total expenditure from operating revenue, was a surplus of $3.4 billion, compared with $4.7 billion in 1997. On a fiscal year basis, however, the surplus deteriorated by more, from $6.1 billion in Fiscal Year 1997 to $1.1 billion in Fiscal Year 1998.[16] The deterioration reflected the effects of the automatic fiscal stabilizer on revenue collections and higher fiscal expenditures, particularly in January – March of 1999. In comparison, the surpluses between Fiscal Year 1993-97 averaged $7.4 billion.

In 1999, the government's fiscal position is projected to worsen, given the slowdown in economic growth and the implementation of a more expansionary fiscal policy to soften its impact on businesses. For Fiscal Year 1999, the deficit is estimated to be about 3.5% of GDP. In the Box Item, the expected boost to the economy from the government's measures is assessed, while in the following section, the sensitivity of government finances to the decline in economic activity is analysed in greater detail.

CHART 23A: DIRECT TAX REVENUE

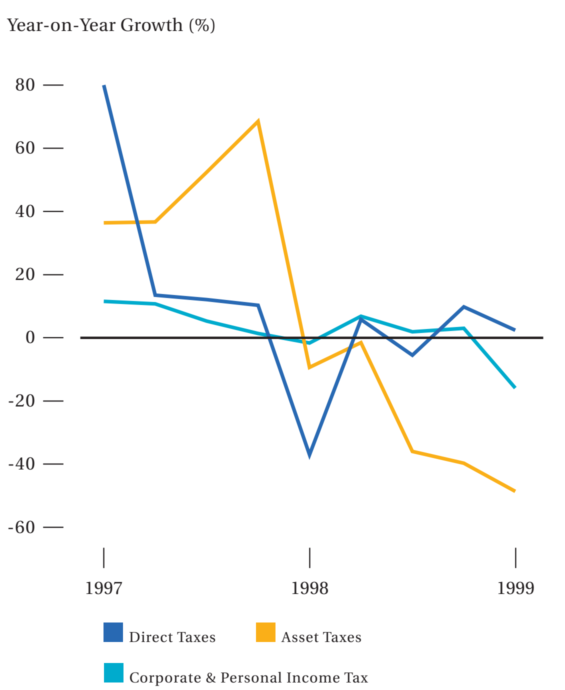
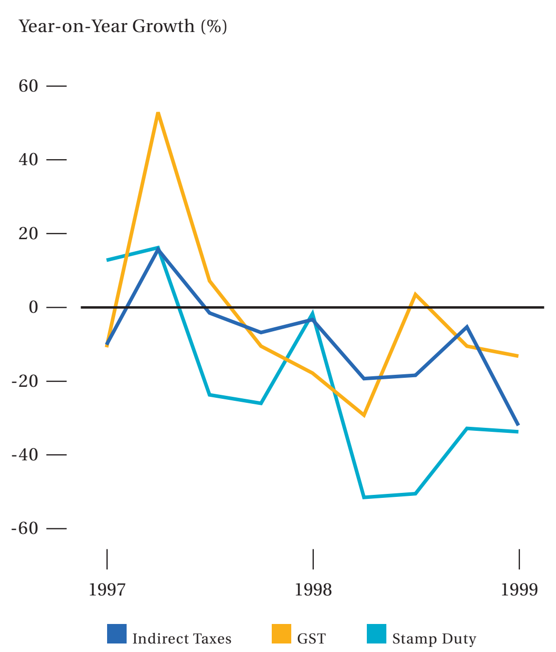


CHART 23B: INDIRECT TAX REVENUE



14 SingTel was compensated for the early termination of its exclusive telecommunications privileges. Compensation was given to statutory boards for land returned to the government during a land rationalisation exercise, while the government also acquired land for the construction of the Northeast MRT line.

15 For example, spending for communications rose to more than $660 million on average in the second half of the year, from an average of $210 million in Q1-Q2 with the extension of the MRT network, and the building of the LRT.

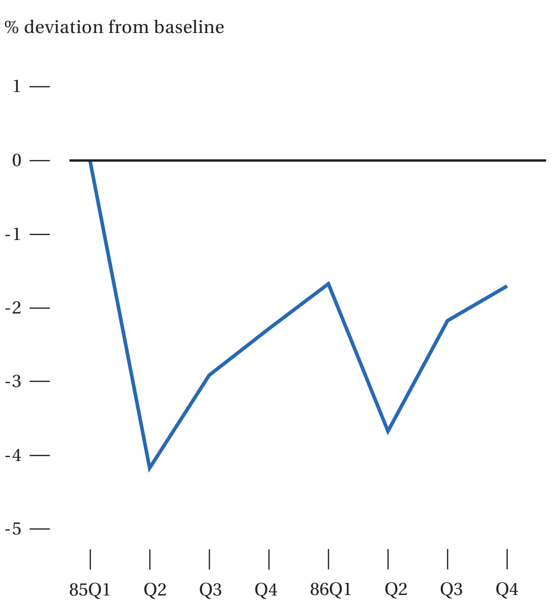
16 Fiscal Year 1998 (FY98) runs from April 1998 to March 1999. The preliminary outturn for FY98 was higher than the deficit of $0.4 billion estimated for the Budget in February 1999.

Box Item: Assessment of the Effectiveness of Fiscal Policy

To assess the impact of expansionary fiscal policy on GDP in 1999, the effectiveness of government policy in 1985 was first estimated. In 1985, when it became clear that the economy was slowing sharply towards the middle of the year, the government implemented a number of fiscal measures to cushion the impact of the slowdown and to help in its recovery. The measures included increasing development expenditures and reducing the corporate tax rate. Based on actual budget outturn in 1985[1], government expenditure increased by $1.3 billion (or 4% of GDP) while government revenue declined by $882 million (or 1.5% of GDP) relative to their levels in 1984.

A counterfactual simulation was performed using the MAS Econometric Model assuming the absence of such a fiscal boost. In other words, government revenue and expenditure for 1985[2] were held at their 1984 levels. The results (see chart below) show that real GDP would have been about 2.3% lower, on average per quarter, than its actual levels in 1985 and 1986. In addition, the unemployment rate would have been 0.3-0.4 percentage points higher on average between Q2 1985 and Q1 1986. The government's fiscal policy had the desired effect of increasing real disposable income in the private sector by 9.3% in 1985. This in turn stimulated real private consumption and investment expenditures, which increased by about 1.5% and 5.4% respectively.

COUNTERFACTUAL SIMULATION OF FISCAL POLICY IMPACT ON REAL GDP (LEVELS)



The government responded to the Committee on Singapore's Competitiveness (CSC) recommendations on 23 November 1998 with a $10.5 billion package of cost-cutting measures on top of the $2 billion off-budget package in June. It is estimated that the fiscal boost in 1999 will be similar to that in the mid-80s, of about 3-3.5% of GDP. The impact on real GDP levels would be to increase it by about 1.3-1.5%, compared to the baseline path[3]. However, the impetus provided by the expansionary fiscal policy would need to be followed by a recovery in private sector spending, which in turn would depend on the external economic outlook. The state of the external economic environment is considerably weaker now than during the mid-1980s. GDP growth of Singapore's major trading partners in the region had remained largely positive in 1985/86 compared with negative growth in almost all the ASEAN-3 and NIE economies in 1998. Moreover, average growth in the industrial countries was lower than in the earlier period, due largely to the weak Japanese economy. Overall growth in Singapore's external markets is not expected to pick-up significantly in 1999.

Simulations indicate that the special budget measures would have a stronger impact on GDP growth in the year 2000 than in 1999. This would occur as the private sector reacts favourably to the pick-up in foreign demand, for example by investing in new productive capacity. In addition, the positive impact on cost competitiveness in the economy following the implementation of the CSC measures in 1999 should also provide a boost to the economy, bringing real GDP 3% higher compared with baseline forecasts.

1 Government finance data from 1980-88 have been adjusted to maintain consistency with current definitions of operating revenue and total expenditure.
2 Fiscal year data was used in the simulation as the contraction in real GDP occurred between the second quarter of 1985 and the first quarter of 1986.
3 The baseline path is simulated without the CSC measures.

Cyclical Response of Tax Revenue and Expenditure To The Business Cycle

Tax Revenue

The impact of the economic downturn on tax revenue thus far is reflective of the cyclical responsiveness or sensitivity of the various tax categories to fluctuations in GDP. Table 1 summarises the estimates obtained via econometric means. It is estimated that a 1 percentage point decline in the growth rate of nominal GDP would lead to a 0.28 percentage point decline in total tax revenue as a proportion of GDP. The estimated sensitivity parameter of direct tax revenue to the business cycle was higher than that for indirect tax revenue. This is not unexpected given the strong cyclical behaviour of the tax base for personal and corporate taxes in relation to wage income and corporate profits respectively. However, there are also some highly cyclical revenue items among the various indirect taxes, such as motor-vehicle related and property taxes.

TABLE 1: CYCLICAL RESPONSIVENESS OF TAX REVENUE

Tax Category	Estimated Cyclical Response Parameter
Total Tax	**0.28**
Direct Taxes	**0.30**
Indirect	**0.17**
GST	0.18
Property	0.35
Motor-vehicle	0.26
Non-tax	
COE	0.31

Note:
1 The estimation equation is based on the following model:
$\triangle(Rev/GDP) = \alpha + \beta \triangle \log(GDP) + \varepsilon$
This specification allows β to be directly interpreted as the percentage point increase in the ratio of revenue to GDP, for a 1 percentage point increase in the growth rate of nominal GDP.
2 Not all categories within indirect taxes were estimated.

The analysis also showed that the estimated cyclical response or sensitivity of tax revenue to changes in GDP was slightly higher in the mid-1990s than a decade ago. This could be due to the increasing importance of several indirect tax categories with relatively strong cyclical response, including motor-vehicle related and property taxes.

Indeed, Chart 24 shows that the share of indirect taxes increased to 45% of total tax revenue, up from 34% in 1983-84. This was due largely to the introduction of the Goods and Services Tax (GST) in 1994. GST collections now account for about 8% of total tax revenue. It has been the experience of a number of OECD countries that GST normally displays lower cyclical variability than, say, direct taxes. This is because spending on consumption is less affected by the business cycle compared to spending on investment goods. However, the cyclical response of GST to the current downturn has been relatively strong as seen in the double-digit fall in its collection in 1998. This is despite the relatively low sensitivity estimate for GST shown in Table 1, which, however, might have been affected by the small sample size because of the relatively short history of GST collections. The sharp falls in GST collections this year reflected a weakening in a broad range of expenditure items, especially retail goods and some categories of investment goods.[17]

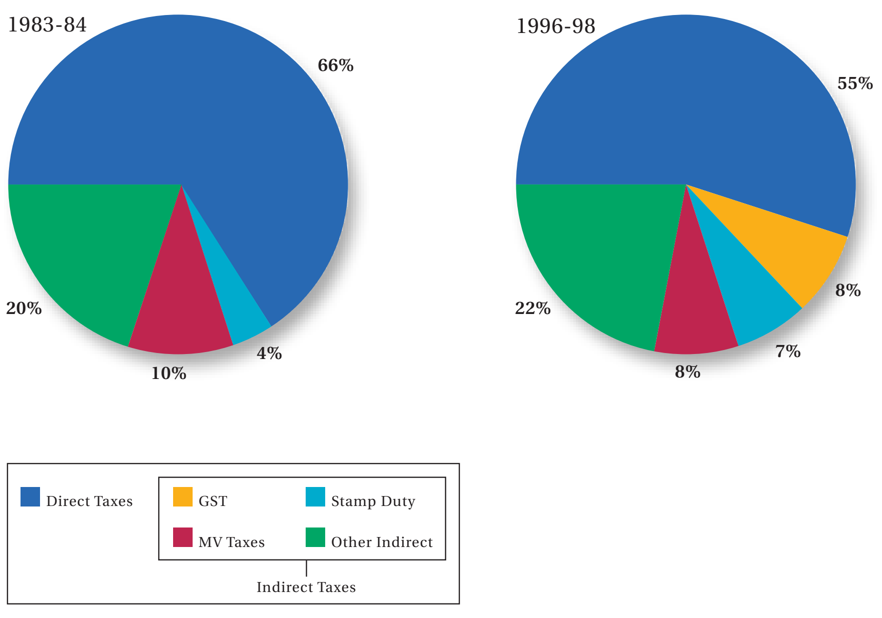
The other categories of indirect taxes exhibiting strong cyclical response are stamp duty and motor-vehicle tax collections, which have increased and maintained their shares of total tax revenue respectively over the past decade or so.

[17] Some domestic services like those rendered by property agents and stockbrokers are subject to GST, and these would have also fallen.

Government Expenditure and Overall Budget Position

In contrast, government expenditures in Singapore display limited cyclical behaviour. This reflects the relative absence of counter-cyclical welfare and unemployment-related payments in government outlays. Instead, the government adopts a longer-term strategy towards its expenditure. For example, it was announced in the 1993 Budget Statement that the government would target expenditures at around 20% of GDP over the medium-term.[18] In the Budget Statement of 1998, the government aimed at making funds available "to maintain and even increase, where necessary, expenditure needed to support long term growth and future competitiveness". This basic tenet of expenditure policy was reaffirmed in the Budget of 1999, where the government's spending plans focused on areas, such as education and economic infrastructure, which would yield lasting returns.

CHART 24: CHANGES IN STRUCTURE OF TAX REVENUE



18 In effect this target assumes a unitary cyclical response of expenditure to nominal GDP.

CHART 25A: GOVERNMENT FINANCE (CALENDAR YEAR)

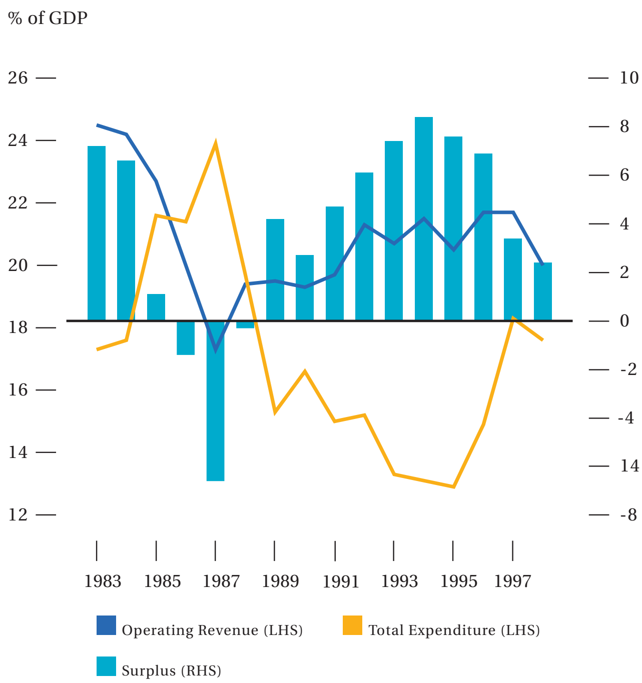
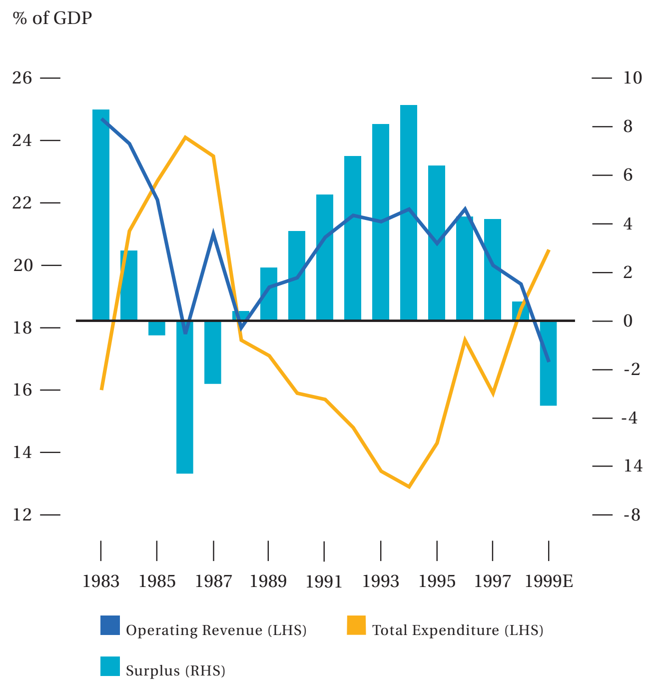


CHART 25B: GOVERNMENT FINANCE (FISCAL YEAR)



The decline in the ratio of total expenditure to GDP between 1988 and 1995 reflected the government's emphasis on keeping a tight rein over the share of resources consumed by the public sector, particularly by restraining operating expenditure (See Chart 25). Coupled with sustained growth in operating revenues, the government budget surplus grew strongly during that period, reaching a peak of 8.5% of GDP in 1994. However, total expenditure has since risen significantly in the last two years, due to expenditure on several large economic and infrastructure projects.

BALANCE OF PAYMENTS

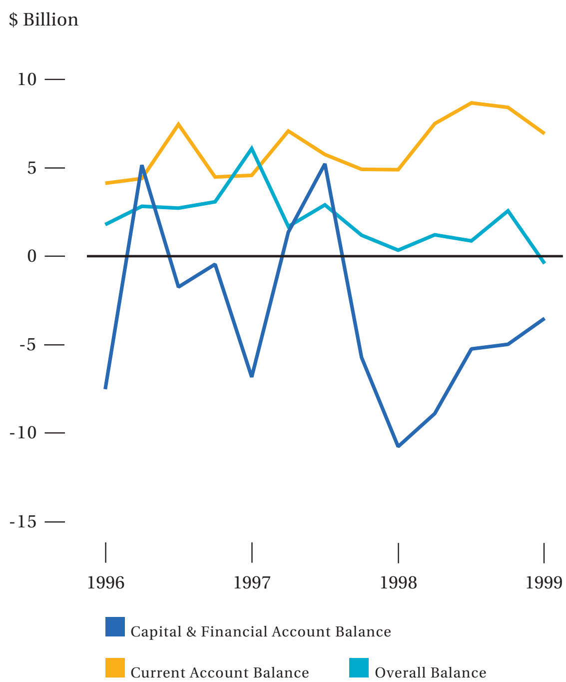
Singapore's overall balance of payments amounted to a surplus of $5 billion or 3.4% of GNP in 1998. As a result, official foreign reserves rose to $125 billion, equivalent to 8.8 months of total imports.

The current account surplus registered a substantial rise to $29.5 billion, equivalent to about 20% of GDP. This increase of $7.2 billion from the previous year was largely due to the surge in the goods account surplus by $22.9 billion. While there was a slight slowdown in exports, imports fell more sharply, reflecting weak domestic demand and a decline in industrial output in the aftermath of the Asian crisis as manufacturers cut back on imported inputs to run down inventories instead.

However, the expanding goods surplus was partly offset by a fall in the services account surplus of $15.9 billion. The decline in the services account balance reflected the high exposure of Singapore's services exports to the regional economies, and hence its vulnerability to the sharp fall in demand from the region amidst the crisis. Travel services were particularly badly hit, with net travel receipts recording a $744 million deficit as tourist arrivals from the region fell, in contrast to the surpluses in previous years. The surplus arising from other miscellaneous services, at $4.4 billion, was also much lower than the previous year's level of $18 billion.

The rise in the overall current account surplus was also mirrored in the widening of the savings-investment gap, particularly of the private sector. While gross national savings remained at about 52% of GNP, gross investments fell from 37% of GNP in 1997 to 32% of GNP in 1998. Private savings rose because of a weakness in private consumption in view of job uncertainties and expectations of wage reductions. On the other hand, reflecting the poor economic outlook and significant weakness in the property market, gross investments contracted by 13%. Coupled with the fall in inventory, this led to a widening of the private savings-investment gap. With the acceleration of several government construction projects, public investments[19] grew by 4.2%. This, together with a decline in government revenue, led to a smaller public savings-investment gap in 1998.

CHART 26: SINGAPORE'S BALANCE OF PAYMENTS



19 Excluding inventory.

CHART 27A: CURRENT ACCOUNT

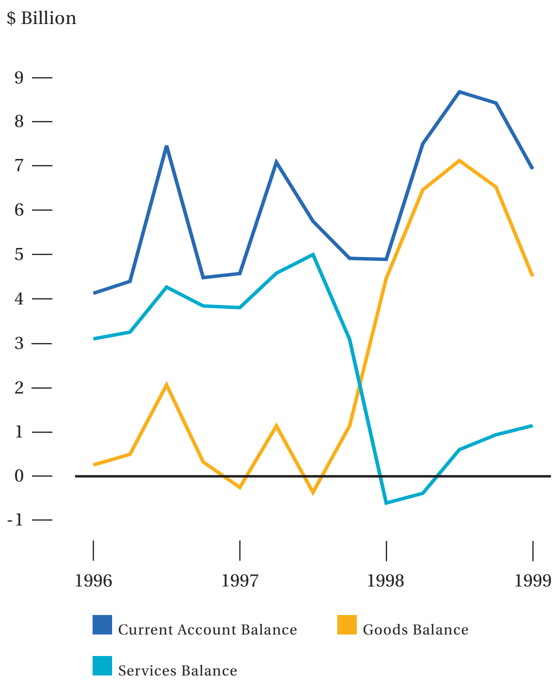
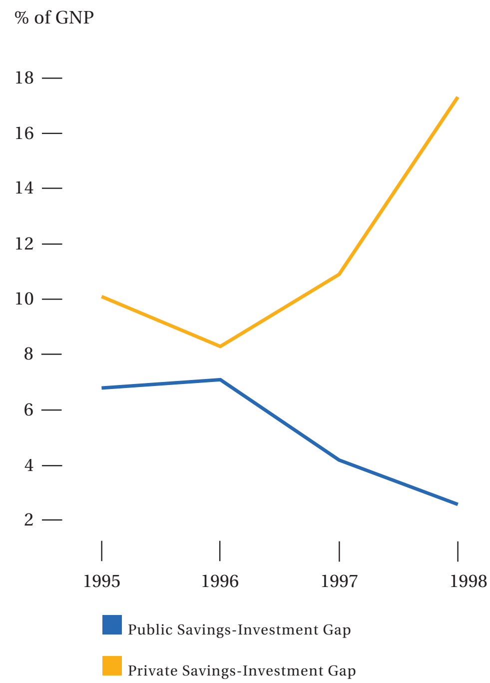


CHART 27B: SAVINGS-INVESTMENT GAP



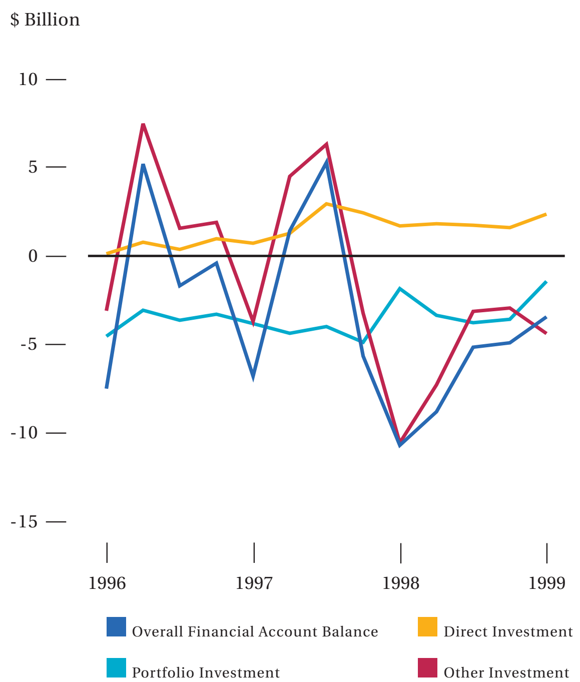
The financial and capital account of the balance of payments recorded outflows in 1998 that were five times higher than that in 1997, as a result of the spillover effects from the Asian crisis. Most of the outflow of $30 billion was from the financial account, and was largely due to the repatriation of funds from the banking sector, particularly in the first half of 1998. As discussed in the 'Money Supply' section, foreign banks in Singapore, faced with heightened uncertainties, had seen a repatriation of their head-office funds. There was also a net repayment of loans to the Asian Dollar Market by residents, given increased uncertainty in exchange rate movements.

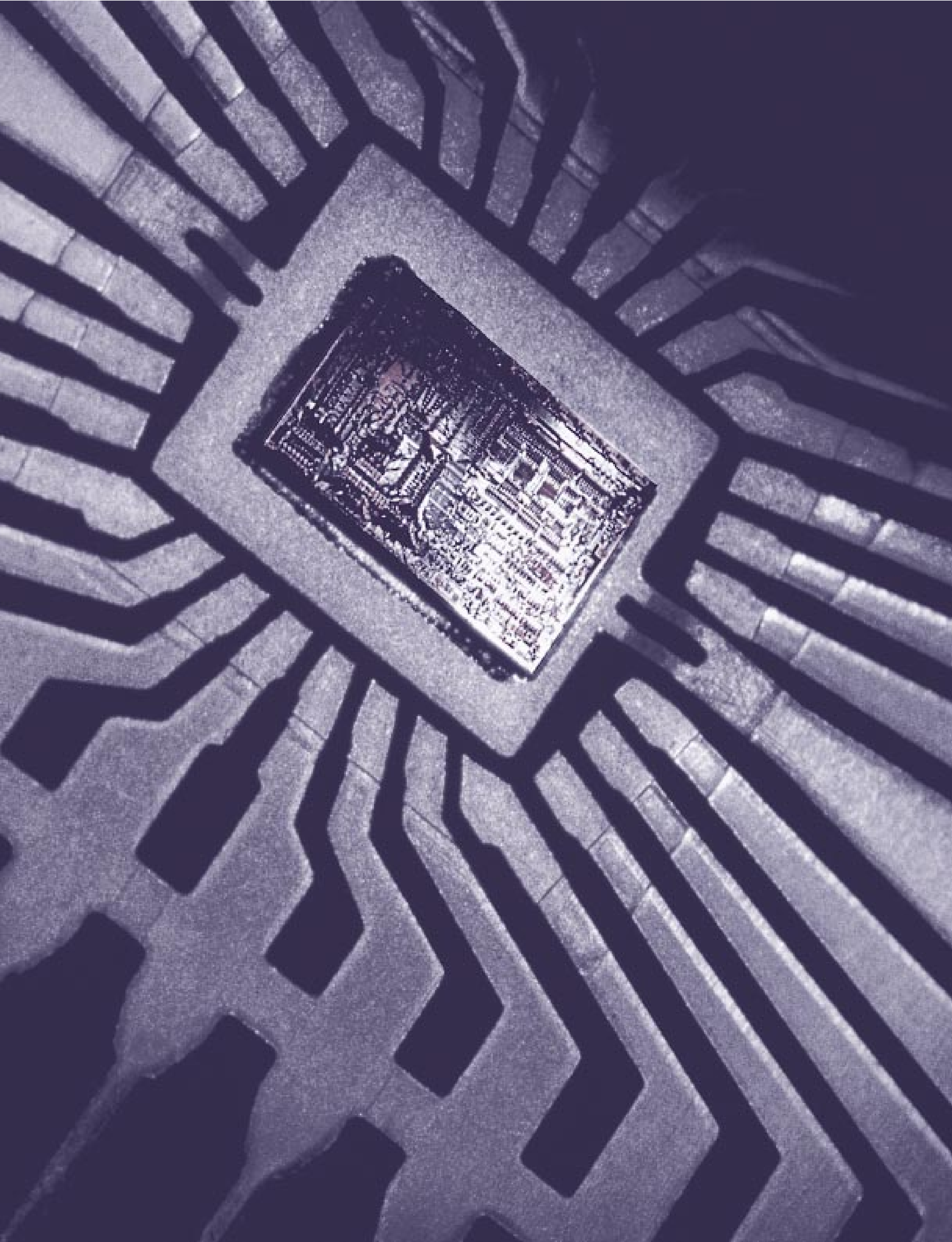
Net portfolio investment outflow slowed to $12.5 billion in 1998 from a high of $17.0 billion in 1997. In addition to a decline in residents' purchase of foreign equity securities, a rise in foreign investment in local stocks also contributed to the overall smaller outflow. However, the net inflow of direct investments moderated to $6.9 billion from $7.4 billion in 1997. The net balancing item for 1998 was positive, at $5.4 billion.

In the first quarter of 1999, Singapore's external balances slipped into a deficit of $414.6 million. The current account surplus shrank as external demand remained weak and exports continued to fall. However, the contraction in imports moderated significantly, indicating that the cutback on imported inputs has bottomed-out, supporting the improved outlook in industrial output and hence exports. The services balance also picked-up, boosted by a turnaround in the travel account which recorded its first surplus since the third quarter of 1997. Tourist receipts were sustained by the return of visitors from the region, particularly from Korea, Thailand and Indonesia.

In the capital and financial accounts, smaller deficits were recorded in the first quarter of this year, reflecting a large increase in net direct investments, as well as a smaller net outflow in portfolio investments. These more than offset the larger net outflow recorded by bank funds, which were mostly due to an increase in interbank lending to ACUs. The net balancing item was also negative, contributing to the decline in the official foreign reserves to $124.3 billion, compared with $125 billion in Q4 1998.

CHART 28: FINANCIAL ACCOUNT BALANCE





Partnering the industry to develop a world class financial centre

FINANCIAL SECTOR REFORMS

Financial Sector Review

Despite the economic crisis, MAS kept up a steady pace of financial sector reforms in 1998. The financial sector review, which began in August 1997, arose from the recognition that the dramatic pace at which Singapore's financial sector had been growing over the last 30 years could not be taken for granted. This was particularly so given the rapid changes which the financial industry was undergoing. Falling regulatory barriers, advances in information technology (IT) and a wave of mergers among financial institutions have integrated financial markets. To thrive as a financial hub in this bracing environment, Singapore needed a radical change in approach, to quicken the pace of market development and innovation.

The main thrusts of the reforms were to create a more conducive regulatory environment, and to play a more proactive role in promoting the financial sector.

To this end, MAS has shifted progressively from "one-size-fits-all" regulation to a risk-focused supervisory approach. The focus of supervision is on systemic risk rather than the risks of individual institutions or transactions. The new approach will entail monitoring and examining institutions for compliance with guidelines, and assessing the adequacy of internal controls and risk management systems. MAS is also developing internal rating systems for financial institutions. This will allow us to move towards performance-based regulation, where greater leeway is given to stronger and better managed players. MAS is also shifting away from relying on extensive regulation to protect investors and customers. Our role is to enable investors to make informed decisions, by promoting adequate disclosure and greater transparency in the market. Better disclosure and market scrutiny will sharpen our financial institutions' competitive edge by putting pressure on them to operate efficiently.

As we liberalise our financial sector, we will maintain our reputation for high supervisory standards. We will also require improvements in the standards of corporate governance of financial institutions. The regional financial crisis has highlighted the dangers of liberalising financial markets without strengthening supervisory systems – financial institutions took on too much risks and regulators did not have adequate resources to monitor and control such risks. By progressing incrementally, we give market participants more time to adjust to the new environment.

MAS will continue to consult the industry actively so as to keep abreast of new developments and fine-tune its policies. A strategic approach has been adopted to develop the various financial industries and markets. At the same time, MAS will continue to market to existing and new players, to encourage them to set up or expand their operations here, help develop IT infrastructure and manpower resources, and design appropriate incentives to promote the sector.

Liberalising Commercial Banking and Upgrading Local Banks

On 17 May 1999, MAS introduced a five-year programme to liberalise the commercial banking sector and upgrade local banks. The aim is to move towards a more open and competitive environment so as to spur the development of local banks. This will strengthen our banking system, provide Singaporeans with quality banking services, and enhance our position as an international financial centre.

The programme has three key elements:

- *Implementing A Five-Year Liberalisation Package*

MAS will implement a five-year programme to liberalise access by foreign banks to Singapore's domestic market. It will grant increased access only to foreign banks that are strong, well-managed and committed to growing in Singapore. MAS will issue a new category of full banking licence known as Qualifying Full Banks (QFBs) to distinguish them from the existing class of foreign full banks. Incumbent foreign full banks that are not awarded QFB status will retain their existing privileges. All future admissions or upgrading to full bank status will be to the new QFB category. MAS will issue up to 6 QFB licences to foreign banks over 1999 – 2001. Each QFB will be allowed additional branches, off-premise ATMs and ATM sharing. In addition, MAS will also increase the number of restricted banks, and give offshore banks greater flexibility in Singapore Dollar wholesale business.

Given that the change is major, and there is no certainty as to how the industry will develop in Singapore and abroad over the next few years, MAS will commit to a definite package only for the first three years (1999 – 2001). It will review the progress made after the third year of liberalisation before deciding on further measures.

- *Improving Corporate Governance*

The Government has protected and nurtured the local banks, and enabled them to grow to their present size and strength, for a national purpose: to enhance the resilience and stability of our banking system. If the liberalisation weakens local banks and displaces them from their pivotal role in the domestic banking system, it will have failed. Local banks are expected to strengthen themselves and grow as a result of the liberalisation measures. In this way they can continue to underpin the financial sector. To survive in the new environment, local banks must put increased emphasis on efficiency, quality of service and shareholder returns. Most importantly, they must strengthen corporate governance, attract leadership talent and give them the necessary autonomy to make professional management decisions.

The local banks need to institute systems for ensuring the appointment of capable individuals to their boards and key posts. To strengthen corporate governance, MAS will require all local banks to appoint Nominating Committees within their boards, and to provide for this in their Articles of Association. The purpose of the five-member Nominating Committee is to ensure that the most competent individuals, who can contribute to the bank and discharge their responsibilities in the interests of all shareholders, are appointed to the board and key management positions. The Nominating Committee must also ensure that a majority of the board of local banks are Singapore citizens or permanent residents and the board comprises mainly of independent directors. MAS will retain its existing powers under the Banking Act to approve appointments to the board and key appointments, and extend the vetting process to re-appointments in order to ensure that candidates who have been appointed some time ago continue to meet the criteria for re-appointment.

- *Lifting the 40% Foreign Shareholding Limit*

The Government will lift the 40 per cent limit on foreign investors' total shareholding in local banks. The requirement to create Nominating Committees, and for the boards of banks to comprise a majority of Singapore citizens and permanent residents, would effectively ensure that control of the banks rested with individuals or groups who would act in a manner consistent with national interest. In addition, MAS will tighten existing safeguards on the accumulation of significant ownership in a local bank.

The lifting of the foreign shareholder limit would facilitate the merger of the local and foreign share tranches of banks. This would in turn increase the liquidity in local banks' shares. In addition, it would make it easier for local banks to forge strategic partnerships with foreign banks, and to pay for overseas acquisitions with shares.

MAS will review all regulations concerning local banks so as to give them greater flexibility in their operations without compromising prudential objectives. For example, MAS will issue guidelines to allow local banks to set up a financial holding company structure. This structure will provide local banks with greater autonomy in organising their operations, especially as they venture abroad, and in forming strategic alliances with foreign banks while allowing both banks to maintain separate legal identities and franchises. These measures to provide local banks regulatory flexibility will enable them to compete more effectively as the Government liberalise and increase the level of competition.

The Government has calibrated the pace and extent of liberalisation to inject competition and a sense of urgency, yet allow local banks time to strengthen and re-position themselves. The objective is a more competitive industry with stronger local banks maintaining more than half the market. While there is no assurance that liberalisation will succeed, the risk of not proceeding is greater. It is clear that local banks will be progressively marginalised if no affirmative change is undertaken now. Through extensive discussions between the local banks and the Government, the banks understand the objective of the exercise and the challenges they face. The Government is confident that they will strive to transform themselves in order to meet the challenges of a new banking environment.

Enhancing Bank Supervision

- *Refining the Capital Adequacy Ratio Requirement of Singapore Incorporated Banks*

MAS has refined the capital adequacy ratio (CAR) requirement of Singapore-incorporated banks or local banks. Previously, local banks had to maintain a CAR of 12%, comprising entirely Tier 1 or equity capital. This is higher than the international standard of 8%, which consists of 4% Tier 1 capital and 4% Tier 2 capital, contained in the Basle Capital Accord.

Singapore banks are therefore well capitalised, exceeding the BIS standard. However, this raises the cost of funds to the banks and lowers their return on equity. The requirement that the entire 12% of CAR consist of Tier 1 capital will constrain the flexibility of the banks in raising capital. Following a review, MAS has decided to maintain the requirement of 12% CAR for the local banks. However, with effect from December 1998, local banks are required to have at least 10% Tier 1 capital, while the remaining 2% may consist of Upper Tier 2 capital. Upper Tier 2 instruments comprise of perpetual cumulative preference shares and subordinated debt which satisfy strict qualifying conditions. The definition of Tier 1 capital is also widened to include equity-like capital instruments, in line with Basle Committee's recommendations.

These adjustments are in line with international norms as contained in the Basle Capital Accord, and do not represent any lowering of prudential standards. Our capital adequacy requirements still exceed those of other international financial centres, and remain the highest in Asia.

- *Using Internal Models for Computation of Market Risk Capital*

As of 1 December 1998, MAS allowed banks to use internal models for calculating market risk capital. Guidelines on the use of internal models and back-testing were sent to the five local banks on 5 March 1999. The use of internal models is a dynamic statistical approach (namely the Value-at-Risk methodology) that incorporates correlation and volatility in the calculation of risk exposure of a bank's trading position. The approach is flexible, and it permits regulatory capital requirements that commensurate with the bank's trading strategies and its risk management capability. The internal model approach is an improvement from the static standardised method, which does not reward banks with good risk management practice. Therefore, encouraging the use of internal models provides an incentive for banks to improve their risk management systems. The qualitative and quantitative standards on the integrity of internal models were documented in the guidelines.

- *Raising Disclosure Standards*

MAS has prescribed the minimum standard of disclosure that banks and merchant banks should comply with, taking into account the recommendations made by the private sector-led Committee on Banking Disclosure.

Accordingly, banks and merchant banks are required to disclose, among other things, details relating to principal sources of income, loan loss provisions and off-balance sheet items. They will also disclose the aggregate amount of their non-performing loans as well as the market value of their investments and properties. Local banks are required to provide additional information such as significant concentration of exposure by geographical areas, industry groups and maturity bands. The revised disclosure standards take effect for financial year ending on or after 31 December 1998. In addition, local banks will equity account for their investments in associated companies with effect from financial year 1999. They will also provide in their annual report, a financial review section covering subjects such as business description, analyses of results, risk management systems, and any other pertinent information.

- *Setting Prudential Guidelines for Asset Securitisation Activities*

In line with its plan to develop the securitisation market, MAS has prepared a set of prudential guidelines for asset securitisation activities performed by financial institutions. The guidelines cover regulatory issues such as the capital adequacy treatment of assets for which there has been a clean sale, credit enhancement and liquidity facilities, as well as disclosure requirements of various entities involved in a securitisation deal. MAS is currently gathering inputs from market players and other professionals with an interest in securitisation, and the guidelines are expected to be finalised by the third quarter of 1999.

- *Reducing Minimum Cash Balances of Finance Companies*

To align with the changes in the minimum cash balance (MCB) of banks in July 1998, the MCB requirement of finance companies was reduced from 6% to 3% in December 1998. To ensure that they continue to maintain adequate liquidity, the minimum liquid assets (MLA) requirement of finance companies was raised from 10% to 13% of their liabilities base. The cap for finance companies' trade bills and overnight repurchase agreements in Singapore Government Securities (SGS) was also adjusted to align with those for banks.

f) Developing a Common Risk Framework

The innovations in technology and business products, as well as the growing volume and speed of financial transactions have precipitated a paradigm shift in the financial sector. The forces of international competition have increasingly globalised financial activities and obscured the distinctions between banking, securities and insurance activities. Consequently, the international practices in regulation and supervision are converging towards a consistent risk-focused approach at a consolidated enterprise-wide level. Currently, a common risk framework is being developed as a consistent platform to establish a general set of principles that will enhance the effectiveness of financial regulation and supervision practised by MAS in a dynamic and global environment.

Developing the Securities Industry

- *Enhancing the Competitiveness of the Stock Exchange of Singapore*

The Stock Exchange of Singapore Review Committee (SESRC) was commissioned to review the competitiveness of the Stock Exchange of Singapore (SES). In July 1998, the SESRC made 46 recommendations, covering a wide range of areas such as membership, brokerage commissions, regulations, new products and services. Key recommendations include progressive liberalisation of brokerage commissions with complete freeing-up of brokerage charges by 1 January 2003; lifting of local ownership restriction of SES members; raising of foreign ownership limit in full member companies to 70%; reduction of settlement period for share transactions; and allowing local stockbrokers to expand into other securities-related areas such as fund management.

MAS has accepted most of the SESRC recommendations. Some recommendations involve tax issues and need to be explored with the Inland Revenue Authority of Singapore.

- *Demutualising and Merging the Stock Exchange of Singapore and the Singapore International Monetary Exchange (SIMEX)*

Following from the work of the SESRC, a Committee on Governance of the Exchanges (CGE) was established, consisting of representatives from the financial services industry, SES, SIMEX and MAS. CGE recommended that SES and SIMEX be demutualised and merged into a single integrated and privately-held stock company. Demutualisation would reduce the potential conflict of interests between members, who are owners, and other users of the exchanges. Other advantages include greater transparency, in that the share value and dividends will reflect earnings and prospects; and more efficient and flexible funding from the capital markets. A merger would benefit the exchanges by, among others, aligning cash and derivatives business strategies, and increasing the financial capability to make heavy capital investments.

MAS has agreed with the Committee's recommendation. A Pro-Tem Committee, chaired by a member of the MAS Board, Mr J Y Pillay, was appointed to oversee the transition process. The merger is expected to complete by end-1999.

- *Developing a Corporate Fund-Raising Centre*

The Corporate Finance Committee, comprising private sector representatives with MAS' participation, submitted its final report in October 1998. It made 38 recommendations on the philosophy and framework of regulation, standards of disclosure, and measures to liberalise and develop Singapore into an international corporate fund-raising centre. The government has accepted all of the Committee's 38 recommendations, and relevant agencies have been tasked to study and implement them.

- *Establishing a New Inspection Unit*

In May 1998, MAS set up a new inspection unit within the Securities and Futures Department to conduct on-site inspection of securities market intermediaries. This is in line with the shift in emphasis from regulation to risk-based supervision, with more regular on-site inspection of financial institutions. The unit commenced inspection in August 1998.

Developing the Fund Management Industry

- *Outplacing Government Funds for Private Management*

In February 1998, the Government of Singapore Investment Corporation (GIC) announced that it would place out an additional $25 billion over the following three years to external fund managers who have offices in Singapore. Of this amount, $6.8 billion was placed out in 1998.

In November 1998, MAS announced that it would place out $10 billion over the following three years to external fund managers with offices in Singapore. Of the $10 billion, MAS expects to place out $2.5 billion in 1999.

The Government has also encouraged statutory boards and government-linked companies to place out their excess funds to external fund managers. According to a MAS survey, these statutory boards and government-linked companies (excluding MAS and GIC) had placed out a total of $4.8 billion as at 31 December 1998 to external fund managers with offices in Singapore.

- *Revamping the CPF Investment Scheme for Unit Trusts*

The CPF Investment Scheme for unit trusts was modified and liberalised in the second half of 1998. The investment guidelines for the CPF-approved unit trusts were also revised to allow fund managers to diversify investment portfolios across markets to reduce investment risk.

Unit trusts to be offered by approved fund managers were assessed, and classified into appropriate risk categories. An independent investment consultant was engaged to assist in evaluating the suitability of fund managers for admission to the scheme, and in the on-going evaluation of the performance of CPF-approved unit trusts.

The revision provides CPF members a wider choice of quality fund managers and unit trusts, as well as better information on investment risk and fund performance. The revised scheme also enlarges the pool of domestic funds available for professional fund management. As at end-March 1999, 25 fund managers and 54 unit trusts have been approved under the revised scheme.

- *Streamlining the Regulation of Unit Trusts*

On 1 January 1999, MAS assumed the functions of the Registrar of Companies for the regulation of unit trusts under the Companies Act. The functions include approval of trust deeds, processing applications for the appointment of trustees for unit trusts and exemptions from certain requirements of the Companies Act. These statutory functions are in addition to MAS' review of unit trust documents for compliance with its administrative guidelines. With the new functions, fund managers and their solicitors need only deal with MAS on all matters concerning unit trusts.

- *Promoting Boutique Fund Managers*

In March 1999, MAS introduced a streamlined licensing scheme aimed at developing more boutique fund management firms (BFMs). These smaller firms owned and operated by experienced fund management professionals, provide specialised investment advisory services to selected institutional and high net-worth individual clients. Licensing BFMs as investment advisers (IAs) will enable them to reach out to a wider client base and give them a means to grow their businesses. The licensing scheme for BFMs will apply primarily to local firms. MAS will consider licensing foreign-owned BFMs on a case-by-case basis. Licensed BFMs may only manage funds for sophisticated investors (as defined in the Companies Act) without any limit on the number of such investors.

Developing the Futures Industry

- *Revising the Financial Requirements for Futures Brokers*

The Futures Trading Regulations (FTR) were amended on 10 July 1998 to prescribe revised financial requirements for futures brokers whose activities were restricted to soliciting or accepting orders in futures contracts traded on SIMEX. These futures brokers, who essentially performed the functions of an introducing broker, were not permitted to maintain trading accounts for their customers or accept customers' funds. After the amendment, such futures brokers are required to maintain a minimum paid-up capital and shareholders' funds of $1 million each, as compared to $5 million for a typical futures broker that is permitted to perform the full range of functions. They are also subject to an adjusted net capital requirement of $300,000.

- *Abolishing the Minimum Commission Structure*

With effect from 5 February 1998, SIMEX abolished the minimum commission rate structure which was applied to the Nikkei-225, Nikkei-300, JGB and Fuel Oil futures contracts. Futures brokers were thereby allowed to set the commission rates for these contracts freely, as was the case for all other SIMEX contracts.

Developing the Insurance Industry

- *Reducing Capital Requirements for Captive Insurers*

On the recommendation of the Finance & Banking Sub-Committee (FBSC) to review the capitalisation requirements for captive insurers and adopt a more flexible approach such as a sliding scale, MAS agreed to lower the capital requirements of captives from $1 million to $400,000. The regulation on the reduction in paid-up capital requirements for captive insurers was gazetted on 14 April 1998.

- *Granting Blanket Approval for Captives To Write Certain Non In-House Risks*

Another recommendation by the FBSC was to allow captive insurers to write second-party businesses, so as to be competitive with other successful domiciles and to increase the number of captive insurers. MAS already allowed this on a case-by-case basis. A circular giving captive insurers blanket approval, with conditions, to write certain non in-house risks was issued on 5 May 1998.

- *Enhancing the Regulatory Framework for Investment-Linked Policies (ILPs) under CPF Investment Scheme (CPFIS)*

In line with the revisions for unit trusts under CPFIS announced in May 1998, an enhanced regulatory framework for CPFIS ILPs was introduced. The framework covers the following areas:

- minimum admission criteria for insurers who want to offer ILPs under CPFIS;
- quality screening test for insurers or fund management companies who want to manage CPFIS ILP sub-funds;
- approval process for CPFIS ILPs;
- investment guidelines for CPFIS ILP sub-funds; and
- sanctions to be imposed on insurers for failing to meet the minimum admission criteria, and for fraud and other serious breaches of law.

- *Reviewing Amendments to the Insurance (Financial Guarantee Insurance) Regulations 1997*

The main amendment to the Financial Guarantee Regulations will provide for licensing of foreign financial guarantee insurers to establish branch operations in Singapore. Another proposed change will require Financial Guarantee insurers to systematically build up contingency reserves to meet catastrophic losses.

MAS is working towards finalising the amendments to the Financial Guarantee Regulations by the second quarter of 1999.

- *Clarifying Regulations on Derivatives Transactions*

Insurers had previously consulted MAS, on a case-by-case basis, on their proposed derivative transactions. In line with its aim of making the regulations better understood by the industry, MAS issued a notice on derivatives to all insurers. The notice spells out the internal control systems that insurers must set up, defines the scope of derivatives activities, and sets out the reporting requirements for such activities. It also incorporates the principles and guidelines adopted by the International Association of Insurance Supervisors.

- *Reviewing Regulations on Financial Reinsurance*

A working committee comprising representatives from the insurance associations, Institute of Certified Public Accountants of Singapore (ICPAS) and MAS deliberated on issues concerning the writing of and accounting for financial reinsurance, including disclosure requirements. MAS will be issuing separate notices to general insurers and life insurers on the various requirements.

- *Reviewing the Distribution of Personal Financial Services*

The Personal Financial Services Working Group (PFSWG) was formed to conduct a comprehensive review of the existing regulatory framework for Personal Financial Services (PFS) distribution in Singapore. The key areas include licensing and regulation of intermediaries, and regulation of point of sale activity of the intermediaries.

PREPARATION FOR YEAR 2000

Financial Sector Y2000 Awareness

MAS launched numerous initiatives to create public awareness on the Y2000 issue. The MAS Y2000 website was set up to inform the general public, local/overseas organisations and authorities of MAS' approach in tackling the Y2000 problem and the readiness of the financial sector in Singapore. In addition, MAS published brochures and newsletters to financial institutions to help them keep abreast of the latest Y2000 events in Singapore's financial arena.

MAS actively encouraged industry initiatives to host Y2000 events, e.g. Global 2000 Seminar and ABS Workshop were organised by the Association of Banks of Singapore (ABS). MAS also facilitated a number of Y2000 discussions and talks involving essential service providers and other government agencies such as National Computer Board, Singapore Telecom, Singapore Power, and Public Utilities Board.

In March 1999, MAS hosted the Executive Meeting of East Asia & Pacific Central Banks (EMEAP) Seminar on the Y2000 Issue. This received the full support of the other member countries, namely Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, and Thailand. Officials from Bank of International Settlements (BIS) and the US Office of the Comptroller of the Currency (OCC) were also present.

The conference allowed the participating central banks to share and exchange their know-how and experience in handling the Y2000 problems. In addition, the central banks reported on their countries' financial sector Y2000 readiness. The EMEAP provided a forum for the discussion between central banks and the financial institutions, as it was held in conjunction with the Global 2000 seminar, organised by ABS.

Y2000 Supervision and Compliance Monitoring

MAS stepped up its effort in its supervision and compliance monitoring of the financial institutions under its purview in the past 12 months. Off-site surveillance and on-site Y2000 assessment were intensified and a number of circulars/guidelines issued to the financial institutions:-

- **October 1998** – Guidelines published by the Joint Y2000 Council, which identified the basic elements necessary in a successful testing programme were circulated to all financial institutions.
- **December 1998** – MAS reiterated that banks and financial institutions which were unable to demonstrate their Y2000 readiness on schedule, would be subject to varying degrees of operational restrictions. Milestones for completion of external testing and contingency planning were also defined.
- **January 1999** – Banks and financial institutions were advised to formulate comprehensive contingency plans to minimise business disruptions and other problems due to Y2000. The deadlines for completion and validation of plans were conveyed.
- **February 1999** – A general framework for managing business risks associated with the Y2000 was presented. It served as a preamble to the financial institutions on the impending independent assessment required by MAS.
- **March 1999** – All banks, merchant banks and finance companies were required to conduct an independent assessment of the institution's Y2000 preparation. The assessment is scheduled for period between June 1999 and August 1999.

To achieve effective off-site surveillance of financial institutions' Y2000 preparation, MAS requested financial institutions to submit quarterly Y2000 progress reports for review. Compliance status of critical Y2000 milestones, such as testing, contingency planning and risk management issues were monitored. Financial institutions that were lagging in their progress would be subjected to closer supervision.
A consolidated chart on financial sector Y2000 compliance status as of March 1999 is shown in Table 1.

TABLE 1: Y2000 SURVEY RESULTS

Y2000 Survey Results for Singapore Financial Sector as at 31 Mar 1999					
Activity	Current Status	Forecast @ 31 Dec 98	Forecast as at 31 Mar 1999		
	Mar-99	Mar-99	Jun-99	Sep-99	Dec-99
Internal Testing of Mission Critical Systems(1)	5% 95%	3% 97%	1% 99%	100%	100%
Internal Testing of Non-Mission Critical Systems(2)	4% 96%	4% 96%	100%	100%	100%
External Testing	12% 88%	14% 86%	1% 99%	100%	100%
Formulate Contingency Plans	19% 81%	16% 84%	2% 98%	100%	100%
Test Contingency Plans	51% 49%	48% 52%	8% 92%	100%	100%
Assess Counterparties/ Customers	22% 78%	16% 84%	4% 96%	1% 99%	100%
Address Legal Issues	28% 72%	23% 77%	7% 93%	1% 99%	100%

(1) Mission Critical Systems consist of business applications, infrastructure, Local Area Networks, and building facilities.
(2) Non-mission Critical Systems consist of desktops, and date-sensitive equipment.
(3) The classification of work areas into mission and non-mission critical systems may differ from company to company. The grouping used here is for statistical purpose only.
Total population of 526 financial institutions supervised by MAS

Yes No

To complement the off-site review, on-site assessments of financial institutions' Y2000 readiness were also carried out. Selection criteria were based on each institution's Y2000 progress, impact on the financial sector and size and complexity of operations. In conducting the on-site review, a Y2000 checklist was used to test and verify the institution's management of the Y2000 issue.

As at 31 March 1999, MAS assessed 357 financial institutions, covering banks, finance companies, insurance companies, securities companies, futures companies and investment advisers. Financial institutions were rated Satisfactory, Marginally Satisfactory, Needs Improvement and Unsatisfactory, based on the resources committed and risk management processes put in place to address the Y2000 issue. The breakdown on the ratings is shown below, in Table 2.

TABLE 2: Y2000 PREPAREDNESS RATING OF FINANCIAL INSTITUTIONS

Rating	No.
Satisfactory	260
Marginally Satisfactory	57
Needs Improvement	38
Unsatisfactory	2

Y2000 assessment letters, which highlighted areas of weaknesses regarding the handling of the Y2000 were sent to these institutions. For institutions that were not adequately prepared, warning letters citing supervisory actions were issued to ensure immediate actions were taken by the institutions to address the concerns.

While the majority of the financial institutions have completed their internal testing and to a large extent, external testing, business contingency planning (BCP) is increasingly becoming an important consideration for institutions to maintain continuity of critical business processes in the event of Y2000 problems. In this light, all financial institutions were advised to complete their BCPs by 31 March 1999 and validate the plan by 30 June 1999. MAS has since commenced reviewing the BCPs submitted by the institutions for their adequacy and completeness.

Having a sound BCP is an indispensable part of the Y2000 project. Thus MAS has embarked on establishing and testing the BCP to prepare for any disruptions that may affect its ability to provide services to the financial sector.

To encourage mediation as opposed to mitigation that may arise from Y2000 problems among financial institutions, MAS has taken a leading step to become a signatory of the Millennium Accord, which essentially seeks to:

- reduce the potential for confrontation and dispute between business and/or public sector organisations arising from the millennium;
- encourage and facilitate the exchange of information on any millennium problem on a without prejudice basis; and
- promote a cost-effective approach to resolving millennium problem differences and disputes, whether domestic or international.

Industry-Wide Y2000 Test for MEPS and MASNET

While MAS expects the financial institutions to be well prepared for Y2000, it also proactively strives to be Y2000 ready as an external service provider for the financial sector and within MAS itself. Both MAS Electronic Payment System (MEPS) and MAS Network (MASNET) are Y2000 compliant. Industry-wide testing for MEPS was concluded on 22 November 1998. MASNET was successfully tested on 17 January 1999 and 7 February 1999.

A total of 97 banks participated in the Y2000 test for MEPS. All aspects of MEPS operations were tested, including interbank funds transfers, government securities transactions and settlement of cheque and interbank GIRO clearing figures transmitted from the Automated Clearing House. The MASNET test covered linkages with the Stock Exchange of Singapore, Central Provident Fund Board, Board of Commissioners of Currency Singapore, Land Transport Authority, Ministry of Manpower and Institute of Banking and Finance. About 200 financial institutions took part in the test.

Conclusion

The result of the work and effort put in by MAS and the industry participants has brought Singapore's financial sector as a whole into the forefront of Y2000 preparedness, having received the Green rating – the highest granted by the Global 2000 co-ordinating group.

Internally, MAS also went through the process of identifying, converting and testing its systems and equipment. Y2000 co-ordinators were appointed in all departments to ensure that the project received maximum coverage and awareness.

For 1999, MAS will continue to monitor the Y2000 progress of the financial sector. With most financial institutions completing their internal and external testing, the next area of focus will be assessing financial institutions' thoroughness in establishing and validating contingency plans as well as their ability to address the wide spectrum of business risks such as liquidity, market, legal and credit risks.

FINANCIAL SECTOR PROMOTION

The Financial Sector Promotion Department (FPD) was set up in April 1998, to focus MAS' efforts in promoting the financial industry and Singapore's role as a financial centre. Over the last year, MAS has been actively engaging local and overseas financial institutions, to attract reputable financial market participants to Singapore, and to encourage existing players to expand the range of financial services conducted here.

MAS has identified various growth areas and products. Areas of focus include asset management, debt and equity markets, specialised insurance, treasury, fee-based financial advisory services, and financial operational headquarters services.

During the period April 1998 to March 1999, more than 130 new projects had been identified. These projects would result in enhanced skills sets, and an increase in job opportunities as well as total business spending over the next few years.

A number of asset management companies have consolidated the management of Asian funds in Singapore. Increasingly, more are managing their global mandates out of Singapore. The enhancements to the Tax Exemption Scheme for Fund Management attracted much interest, and three fund managers were awarded the status of Enhanced Fund Manager last year.

Efforts to develop the debt market have reaped results, with an increase in the number of Singapore Dollar as well as non-Singapore Dollar bond issues in Singapore. As at 31 March 1999, a total of $1.3 billion worth of bonds were issued by foreign entities. Various landmark Singapore Dollar bonds were also raised. Following the $300 million International Finance Corporation (IFC) issue, the Singapore bond market has remained active with issuance from statutory boards such as JTC, as well as from other MNCs.

Over the last 12 months, 10 MNCs have committed to setting up their regional treasury centres in Singapore, affirming Singapore's position as a preferred location for regional treasury centres. As at March 1999, a total of 36 MNCs were registered as approved Financial Treasury Centres (FTC) under the MAS' FTC Incentive Scheme.

As for the insurance industry, Singapore remains the leading domicile for Asian captive insurers. MAS will continue to attract more insurance companies to base their operational headquarters here. One key promotional focus is in attracting specialised insurance companies, such as marine hull insurers and financial guarantee insurers, to expand the scope of insurance and risk management activities in Singapore.

In 1998, MAS embarked on 12 promotional visits to various leading financial centres in the United States, Europe and Asia. To extend our overseas coverage, MAS set up a representative office in London and a promotional office in New York in April 1999. The establishment of these offices was part of the effort to foster greater rapport with the international financial community, and to attract more financial activities to Singapore.

To facilitate our communications with the industry, MAS launched its inaugural industry newsletter "Financial Hub Singapore" in October 1998. The newsletter provides industry players with regular updates on key developments in the Singapore financial sector.

As part of its effort to create a more conducive operating environment for market participants, MAS streamlined various tax incentive schemes, including those for the bond market, loan syndication activities, operational headquarters as well as financial treasury centres. New incentive schemes for the fund management industry and the marine hull and liability insurance, as well as an Approved Bond Intermediary (ABI) tax incentive scheme were introduced.

In building up the necessary skills and expertise, MAS conducted comprehensive industry reviews to identify and anticipate skill gaps within the Singapore financial sector. MAS will work with various local and overseas universities and training institutes to help align courses to suit industry needs. A Financial Sector Development Fund is being set up to provide for manpower training.

GROWTH OF THE FINANCIAL SECTOR

Financial Services Sector Performance

Our economy and financial sector slowed down considerably in 1998. The sector contracted by 0.5% in 1998, compared with 15.3% growth in 1997. Consolidation was seen in major market segments as a number of institutions ceased operations due to mergers and corporate restructuring.

Total assets in the Asian Dollar Market decreased by 9.6% in 1998 to US$503.6 billion, while total assets in the Domestic Banking Units of banks rose by 7.0% to reach $310.0 billion over the same period. Average daily foreign exchange trading volume fell by 14.9% to US$142.0 billion. Daily trading activity on the Singapore International Monetary Exchange (SIMEX) rose by 15.9% to 108,961 lots, while daily average turnover on the Stock Exchange of Singapore (SES) decreased by 13.4% to $394.4 million.

In the first quarter of 1999, the financial services sector contracted by 5.3% due to weak lending sentiment to non-bank customers in the domestic and offshore markets. Total assets in the Asian Dollar Market declined by 5.4% year-on-year to US$$485.6 billion. Total assets in the Domestic Banking Units of banks rose 16.6% year-on-year to $326.0 billion. In the first 3 months of 1999, foreign exchange trading activity averaged US$131.9 billion per day, a 2.0% decrease over the same period last year. Turnover on SIMEX increased to 106,328 lots per day, compared with 103,878 lots in the corresponding period in 1998. Daily average turnover on SES however, decreased to $441.7 million, compared with $552.2 million for the same period last year.

TABLE 3: NUMBER OF FINANCIAL INSTITUTIONS IN SINGAPORE

INSTITUTIONS	END OF PERIOD MAR 98	END OF PERIOD MAR 99
Commercial Banks	**154**	**142**
Local	12	9
Foreign		
Full Banks	22	22
Restricted Banks	13	13
Offshore Banks	107	98
Merchant Banks	**80**	**70**
Asian Currency Units	**226**	**205**
Banks	146	135
Merchant Banks	80	70
Representative Office	**69**	**68**
Banks	67	68
Merchant Banks	2	–
Finance Companies	**19**	**15**
Insurance Companies	**164**	**159**
Direct Insurers	61	59
Reinsurers	51	49
Captive Insurers	52	51
Stockbroking Companies	**89**	**78**
SES Member Companies	32	30
Non-SES Member Companies	57	48
Investment Advisers	**156**	**148**
International Money Brokers	**9**	**9**
SIMEX Members		
Corporate Clearing Members	36	33
Corporate Non-clearing Members	26	22
Individual Members	473	520
Commercial Associate Members	11	16

CHART 1: COMMERCIAL BANKS – TOTAL ASSETS AND LIABILITIES

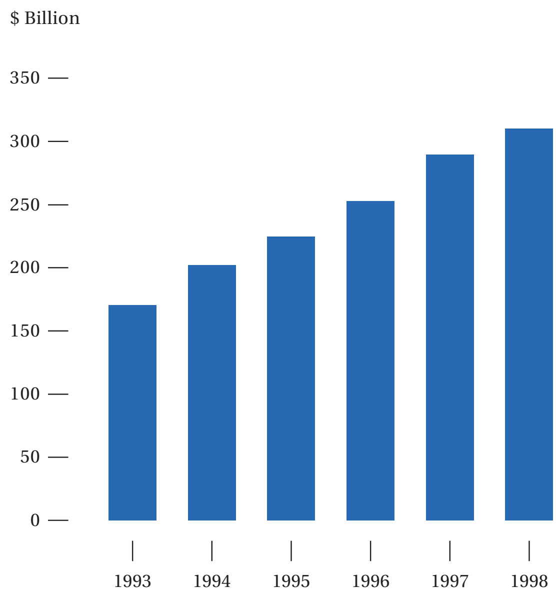
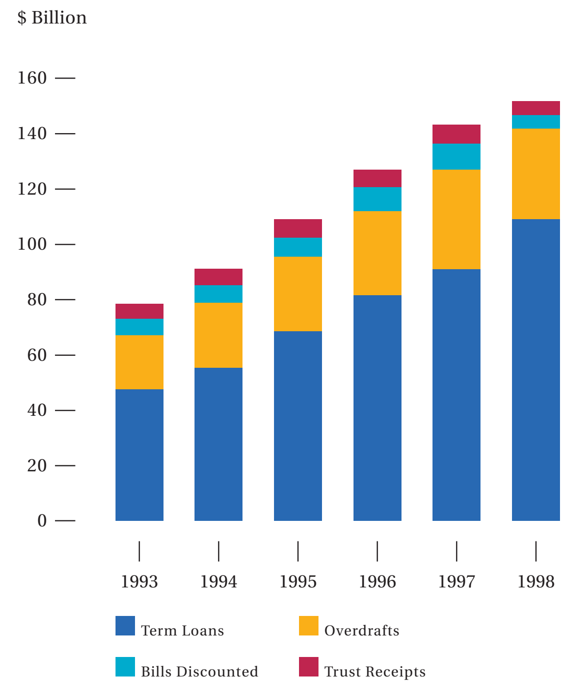


CHART 2: COMMERCIAL BANKS – TYPES OF LOANS & ADVANCES



Financial Institutions Operating in Singapore

As at end-March 1999, there were 142 commercial banks in Singapore, compared with 154 a year ago. Two new banks were admitted, while 10 ceased operations and four converted to representative offices. Over the same period, the number of merchant banks and finance companies also decreased to 70 and 15, from 80 and 19 respectively.

As at end-March 1999, there were 30 SES member companies and 48 non-SES member companies. The number of investment advisers decreased to 148 from 156 a year ago.

There were 71 SIMEX corporate members, comprising 33 corporate clearing members, 22 corporate non-clearing members and 16 commercial associate members. The number of individual non-clearing members increased to 520 as at end-March 1999.

MAS registered four reinsurers and three direct general insurers. On the other hand, six reinsurers, five direct general insurers and one captive insurer were de-registered. This brings the total number of insurance companies to 159 as at 31 March 1999.

COMMERCIAL BANKS (DOMESTIC BANKING UNITS)

Locally incorporated banks reported substantially lower earnings for 1998 because of the increase in specific provisions for their loans and additional general provisions made for their exposure to the regional countries. However, all of them remained financially sound. Paid-up capital and reserves of the Singapore incorporated banks increased by 6% in 1998, compared with 13% in 1997. They are well capitalised with capital adequacy ratios of more than the 12% required under the Banking Act. The total Net Head Office Funds of branches of foreign incorporated banks declined by 6% from a year ago, to $42.5 billion as at 31 December 1998.

Overall Operations

Commercial banks' assets and liabilities expanded at a slower rate of 7% in 1998 to $310.0 billion, compared with 15% in 1997. Interbank loans increased by 6% to $106.3 billion compared with 16% in the previous year, while interbank deposits decreased by 16% to $105.3 billion compared with an increase of 24% in 1997.

The rate of growth in loans to non-bank customers slowed from 13% in 1997 to 6% in 1998 in line with the slower growth of the economy. As at end-1998, loans to non-bank customers amounted to $151.6 billion. Excluding POSBank's loans, credit extended to industrial sectors experienced a slowdown. Non-bank deposits expanded at a significantly higher rate of 31% in 1998 to $162.3 billion due mainly to the inclusion of POSBank's deposits, compared with 5% the year before.

Banks' holdings of Singapore Government Securities and Treasury bills increased by 40% in 1998 to $26.5 billion, as compared to an 8% growth recorded in 1997, with the inclusion of securities held by POSBank. Banks' investments abroad increased marginally by 2% to $1.4 billion in 1998.

Assets

Aggregate credit granted to non-bank customers contracted by 0.4% to $241.2 billion as at end-1998. The loan utilisation rate rose from 55% to 61%.

Loans to the general commerce sector, accounting for $21.5 billion or 14% of outstanding loans to non-bank customers, decreased by 18% in 1998 compared to a growth rate of 10% in 1997. Loans to the manufacturing sector decreased by 2% in 1998 to $12.2 billion, compared with growth of 2% the previous year.

Housing loans expanded by 39% to $31.8 billion, significantly higher than the 12% increase in 1997. The increase was due mainly to the inclusion of POSBank's housing loans. Loans to the building and construction industry declined by 3% to $25.6 billion, compared with an increase of 23% in 1997.

Loans to professional and private individuals decreased by 4% to $21.8 billion as at end-1998 after expanding by 12% in 1997.

Loans to non-bank financial institutions maintained its growth rate of 8% to reach $22.7 billion as at end-1998. Loans to the transport and communications sector grew by 25% to $4.5 billion, after rising by 37% in 1997.

Liabilities

Commercial banks' deposits expanded by 31% to $162.3 billion as at end-1998, significantly higher than the 5% growth recorded in 1997. Their overall reserve and liquidity ratio was 23%, marginally above the statutory requirement of 21%. Banks' aggregate holding of Singapore Government Securities was 17% of their total liabilities base, significantly higher than the statutory requirement of 10%, with the inclusion of securities held by POSBank.

CHART 3: COMPOSITION OF COMMERCIAL BANKS' LOANS AND ADVANCES, 1998

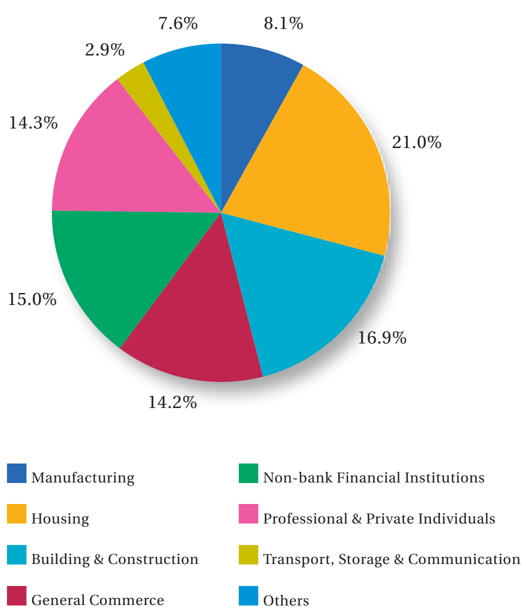


CHART 4: COMMERCIAL BANKS – TYPES OF DEPOSITS

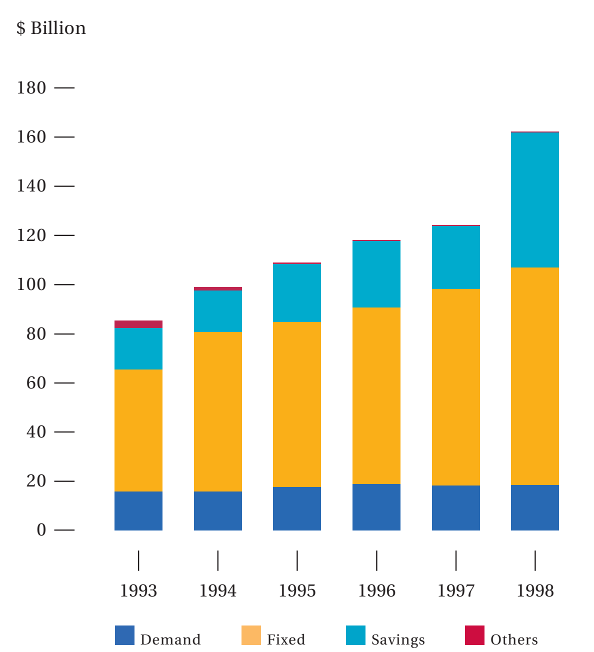
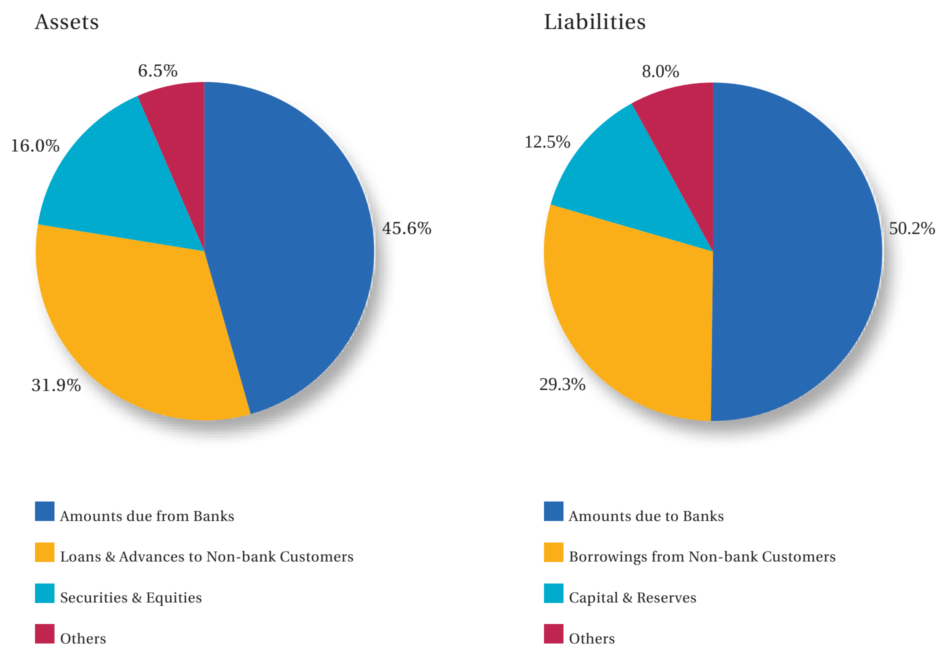


CHART 5: MERCHANT BANKS – COMPOSITION OF ASSETS AND LIABILITIES (ACU+DBU), 1998



Non-bank fixed deposits grew by 11% to $88.7 billion as at end-1998, compared with an increase of 12% the year before. Its share of total deposits dropped from 64% to 55%. On the other hand, total savings deposits (including those of POS-Bank transferred to DBS) increased by 116% to $54.9 billion in 1998, after registering a fall of 6% in 1997. Its share of total deposits increased from 20% to 34%. Demand deposits increased by 1% to $18.4 billion, compared with the 3% decrease in 1997. Its share of total deposits dropped from 15% in 1997 to 11% in 1998.

CREDIT AND CHARGE CARDS

The number of credit and charge cards grew by 10% to 2,050,597 in 1998.

The value of card transactions of resident cardholders declined by 3% to $7.7 billion in 1998 compared with a growth of 13% in 1997. This was due to the drop in card transactions in the last three quarters of 1998.

Card issuers wrote off bad debts totalling $53.7 million in 1998 compared with $31.6 million in 1997. The amount of bad debts written-off increased to 0.7% of card transactions against 0.4% in 1997.

Foreign card issuers increased their share in terms of the number of cards issued from 44% to 47% but local card issuers continued to lead despite a drop in their share from 56% to 53%. The local card issuers' market share of total card transactions declined from 44% to 43% while foreign card issuers increased their share further from 56% to 57%.

MERCHANT BANKS

Overall Operations

Merchant banks' commercial lending activities contracted in 1998. Overall income from fee-based activities also decreased.

Total assets/liabilities of merchant banks shrank by 9% to $60.5 billion in 1998, compared to the 24% growth registered in 1997. Inter-bank loans, non-bank loans and securities holdings contracted by 2%, 11% and 33% respectively, to $27.6 billion, $19.3 billion and $9.7 billion. Borrowings from banks also decreased from $41.1 billion in 1997 to $30.4 billion in 1998.

Offshore Operations

Total assets of the Asian Currency Units (ACUs) of merchant banks contracted by 10% to $57.6 billion as at end-1998, due mainly to a 35% drop in securities holdings as merchant banks decreased holdings of regional debt papers as well as other public securities. The ACU assets of merchant banks comprised mainly interbank loans (42%), loans and advances to non-bank customers (34%) and investments in securities (18%).

The merchant banks' ACU liabilities comprised borrowings from banks (including ACUs) in Singapore (32%), borrowings from banks outside Singapore (19%) and non-bank deposits (29%). Borrowings from banks decreased by 27%.

Domestic Operations

Merchant banks' Domestic Banking Unit (DBU) assets decreased slightly by 1% to $8.6 billion as at end-1998, following a growth of 16% in 1997. The decrease was due to a 23% and 16% decrease in loans and advances to non-bank customers and securities holdings, respectively. Interbank placements, however, increased by 3%. The merchant banks' DBU assets comprised mainly interbank placements (79%), loans and advances to non-bank customers (10%), and investments in securities (5%). Their capital and reserves grew by 7% in 1998. However, borrowings from banks and non-bank customers fell by 9% and 27%, respectively.

Off-Balance Sheet Activities

The volume of merchant banks' underwriting activities dropped from $2.0 billion in 1997 to $548 million in 1998. Fee income of merchant banks also decreased by 4% to $21.2 million, due to the reduction in fees received for underwriting activities from $12.4 million to $3.2 million. However, fees earned from mergers, acquisitions & other financial advisory services rose from $9.7 million to $18.0 million.

FINANCE COMPANIES

Overall Operations

Finance companies' assets/liabilities contracted by 1% to $21.9 billion in 1998 compared with an increase of 5% in 1997. Loans dropped by 6% to $16.8 billion, from the 7% growth in the previous year. Deposits declined by 2% to $15.3 billion after growing by 4% in 1997.

CHART 6: FINANCE COMPANIES – TYPES OF LOANS AND ADVANCES

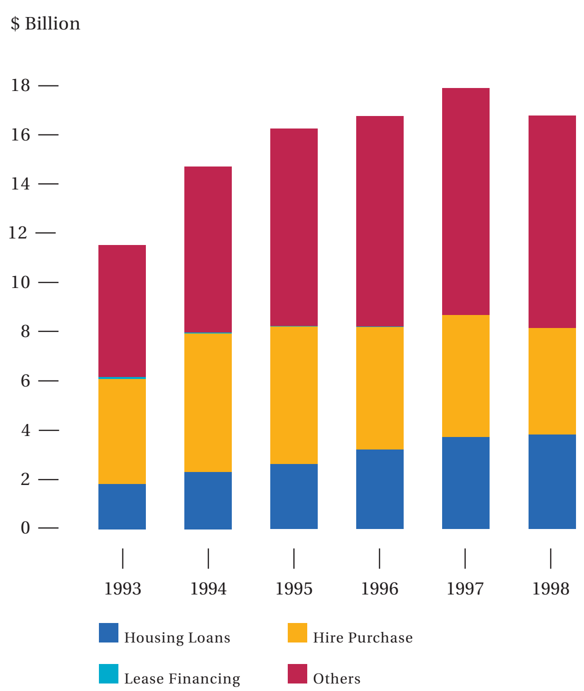
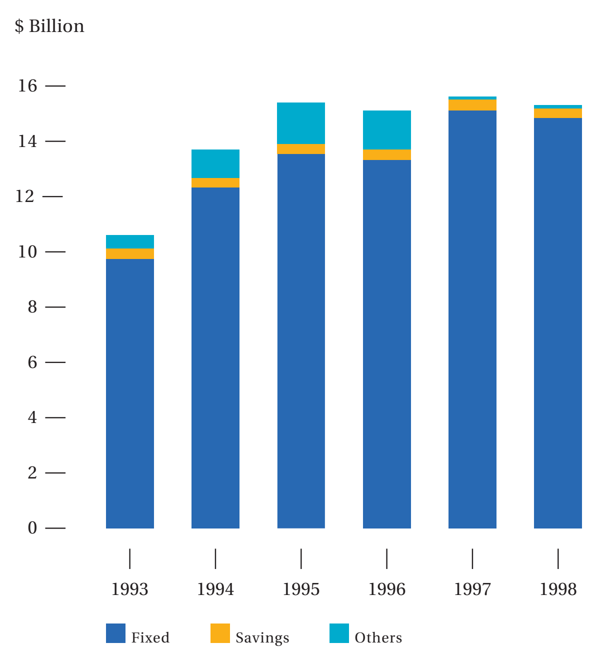


CHART 7: FINANCE COMPANIES – TYPES OF DEPOSITS



Assets

Loans dropped by 6% in 1998 compared with a growth of 7% in the previous year. The decline in hire-purchase financing, loans for general commerce and manufacturing and to professionals and private individuals accounted mainly for the drop in loans.

Housing loans grew at a slower rate of 3% to $3.8 billion compared with a growth of 16% in 1997. Loans to the building and construction sector increased marginally by 0.2% to $1.9 billion after rising by 5% in the previous year. Lending to the manufacturing sector declined by 18% to $0.5 billion in 1998 against a growth of 24% a year ago. Loans to professionals and private individuals dropped by 5% to $2.6 billion after growing by 7% in 1997. Loans to financial institutions also declined by 3% to $1.3 billion compared with a growth of 14% in the previous year.

Hire purchase financing registered a further drop of 13% to $4.3 billion, after declining by 1% in 1997.

Finance companies' investments in securities and equities surged by 42% to $1.7 billion in 1998, compared with a growth of 6% in 1997. This was due mainly to a 51% rise in investments in government securities and treasury bills to $1.5 billion as a result of the revision in the minimum cash balance (MCB) and the minimum liquid assets (MLA) requirements for finance companies from 6% and 10%, respectively, to 3% and 13%. Funds released from the reduction in MCB were invested in government securities to comply with the higher MLA requirement. Investment in equities fell by a further 5% to $192 million in 1998 after declining by 11% in 1997. Placements with banks and other financial institutions rose by 43% to $2.7 billion in 1998, after dropping by 12% in 1997, as lending activity slowed.

Liabilities

Total deposits with finance companies dropped by 2% to $15.3 billion in 1998 compared with a growth of 4% in 1997. The decline was due mainly to fixed deposits which dropped by 2% to $14.9 billion compared with an increase of 14% in 1997. Borrowings from banks and other creditors reduced by 16% to $1.2 billion after a small growth of 1% in the previous year.

ASIAN DOLLAR MARKET (ASIAN CURRENCY UNITS)

Assets and Liabilities

Total assets in the Asian Dollar Market, operated through ACUs of financial institutions, contracted by 10% to US$503.6 billion as at end-1998, compared to the 10% growth recorded in 1997. This was primarily due to a decrease in loans to non-bank customers. The share of interbank loans in total ACU assets increased from 59% to 66% while the share of non-bank loans decreased from 31% to 26%. The share of interbank deposits in total ACU liabilities declined marginally to 73% from 74% in 1997, while the share of non-bank deposits rose slightly to 22% from 20%.

Loans to non-bank customers continued to decrease by 24% to US$131.8 billion in 1998, after contracting 4% in 1997. Non-bank deposits totalled US$113.1 billion, a slight decrease of 1% compared with a 19% increase in the previous year.

Interbank activities of ACUs decreased slightly in 1998. The volume of interbank loans contracted slightly by 0.2% to US$330.2 billion, compared with a 19% growth in 1997. Interbank liabilities also decreased by 12% to US$365.4 billion, compared with an increase of 6% in 1997. Inter-ACU tran-sactions and net borrowings from banks abroad declined to US$40.7 billion and US$40.4 billion, respectively, in 1998 from US$48.9 billion and US$81.4 billion in 1997.

The composition of ACU assets and liabilities by maturity was 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% of assets and 4% of liabilities had maturities exceeding one year.

CHART 8: ASIAN CURRENCY UNITS – COMPOSITION OF ASSETS AND LIABILITIES, 1998

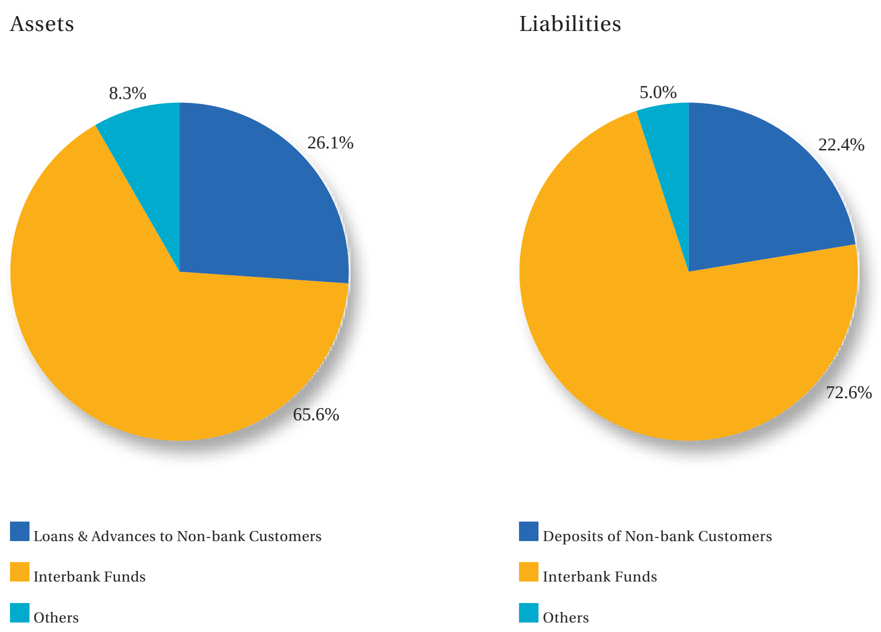
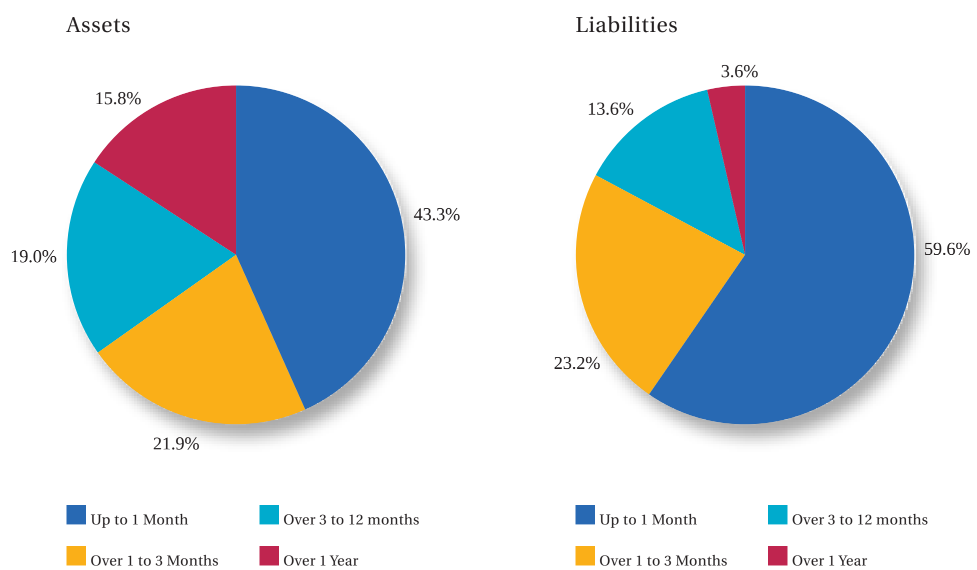


CHART 9: ASIAN CURRENCY UNITS – MATURITIES OF ASSETS & LIABILITIES, 1998



EQUITY MARKET

Stock Market Commentary

The market opened 1998 with the Straits Times Industrial Index (STII) at 1,529.84. Within 10 days, the STII plunged 456 points (or 29%) to 1,073.47 as regional currencies came under renewed attack. Market sentiment improved in February and March following attempts by some countries in the region to address their financial problems and rebuild confidence in their economies. Share prices climbed, bringing the STII to a high of 1,679.11 on 20 March 1998.

However, the rally was short-lived. The market moved downwards in the following 6 months to September 1998 against a backdrop of doubts about Japan's economic and financial-sector reforms, sharply lower earnings of Singapore companies, fears of a protracted recession in Asia, political instability in Indonesia after President Suharto's resignation in May 1998, and the imposition of capital controls by Malaysia. The new Straits Times Index (STI) replaced the STII on 31 August 1998 and debuted at 885.26. The STI promptly dived to a 10-year low of 805.04 on 4 September 1998 as confusion and uncertainty reigned over the fate of Malaysian shares traded on Clob International.

The market staged a sharp recovery in the last quarter of 1998. An unexpected cut in US interest rates, followed by a similar move in Germany, spurred sharp rallies in Asian equity markets. Further good news came with several rounds of prime lending rate cuts by Singapore banks. Using the proforma opening level of 1,496.29 for the new STI, the market ended the year 6.9% lower at 1,392.73.

At the commencement of the new year, stocks extended their rally to take the Index to a high of 1,548.27 on 20 January 1999. Sentiment subsequently turned negative over weakness on regional markets, fears of a devaluation of the Chinese renminbi and a hike in US interest rates, and concerns over worse-than-expected results of listed companies. The market closed the quarter with the Index at 1,518.31 to register an increase of 9.0% over its opening level.

CHART 10A: STRAITS TIMES INDEX AND STRAITS TIMES INDUSTRIAL INDEX

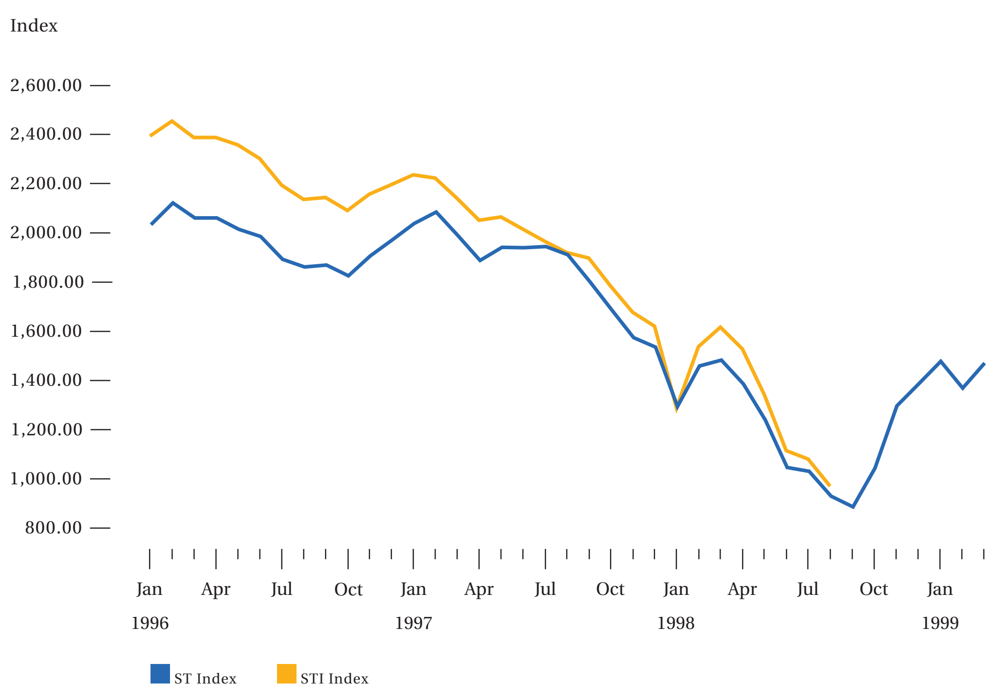
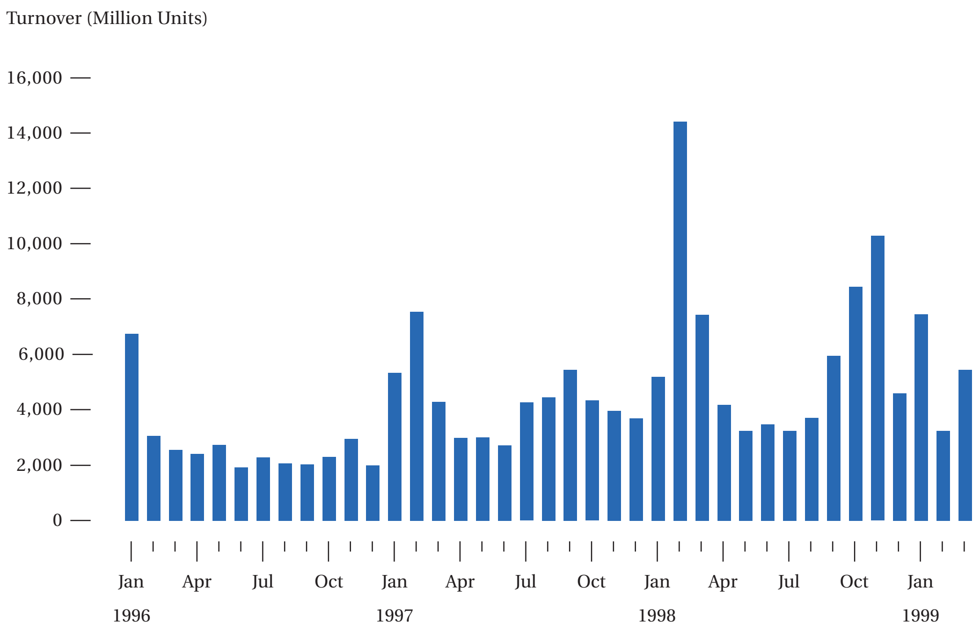


CHART 10B: STOCK MARKET TURNOVER



Market Capitalisation and Turnover

As at end-1998, market capitalisation stood at $270.5 billion, a decline of 20% from a year ago. As at end-March1999, market capitalisation recovered to $293.9 billion, 8.7% above the end-1998 level.

Turnover on the SES declined by 14% from $114.3 billion to $98.6 billion in 1998. Lower share prices meant that, in volume terms, turnover increased by 43% from 52.0 billion units to 74.1 billion units. In the first quarter of 1999, turnover in units fell 40% to 16.1 billion units compared with the first quarter of 1998. Turnover in value terms decreased over the same period from $33.1 billion to $26.1 billion.

Funds Raised

In 1998, funds raised through the SES fell more than half from $5.1 billion to $2.33 billion. The flotation of 21 companies raised $411 million. Rights issues garnered $822 million while bonds and private placements raised $721 million and $373 million, respectively.

In the first quarter of 1999, the amount of funds raised jumped by 368% to $1,411 million compared with $301.5 million raised in the first quarter of 1998. Funds raised through initial public offerings amounted to $66.0 million while bond issues accounted for $1,285 million. Rights issues and private placements raised $24.4 million and $35.1 million, respectively.

New Listings

During the year, 12 companies were admitted to the SES Main Board while four were delisted. Seven companies were transferred from SESDAQ to the Main Board while SESDAQ saw 10 new listings. These changes brought the number of companies listed on the Main Board and SESDAQ as at end-1998 to 314 and 64, respectively.

The first quarter of 1999 saw the admission of three companies to the Mainboard and two to SESDAQ. These admissions, coupled with the delisting of three companies from the Mainboard, brought the number of companies on the Mainboard and SESDAQ to 314 and 66, respectively.

Financial Position of Stockbroking Companies

The financial position of SES-member companies weakened in 1998 with shareholders' funds and adjusted net capital shrinking by 1.9% and 4.4% respectively to $2,991 million and $2,708 million. Increases of 75.1% and 100% respectively were seen in the shareholders' funds and adjusted net capital of non-SES members. Shareholders' funds reached $905.3 million while adjusted net capital was $811.9 million. In contrast, total assets of non-SES members fell by 12.1% to $16,198.9 million as at end-1998.

TABLE 4: FINANCIAL POSITION OF STOCKBROKING COMPANIES

			($ Million)
SES Member Stockbroking Companies	**Dec 1996**	**Dec 1997**	**Dec 1998**
Adjusted Net Capital	2,624.7	2,833.0	2,708.4
Shareholder's Funds	2,894.8	3,049.2	2,991.0
Total Assets	5,312.1	5,048.6	4,835.0
Non-SES Member Stockbroking Companies (excluding merchant banks)			
Adjusted Net Capital	235.0	405.0	811.9
Shareholders' Funds	316.1	517.0	905.3
Total Assets	7,809.4	18,434.3	16,198.9

Number of Stockbroking Companies

As at March 1999, the number of SES member companies decreased to 30. There was also a fall in the number of non-SES member companies from 57 at end-March 1998 to 48 at end-March 1999. The number of investment advisers dropped to 148 at end-March 1999.

FUTURES MARKET

In 1998, total trading volume on the Singapore International Monetary Exchange (SIMEX) increased by 15.7% from the previous year's volume to 27.86 million lots. Average daily turnover in 1998 was 108,961 lots, an increase from 94,036 lots in 1997. 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 1999, the average daily volume was 106,328 lots, compared with 103,878 lots in the corresponding period in 1998.

1998 was a successful year for SIMEX with its total annual trading volume reaching a record high, surpassing the previous record of 24.25 million lots set in 1995. In 1998, SIMEX achieved a record annual volume of 9.84 million lots for trading in the 3-month Eurodollar interest rate futures contract, the Exchange's most actively traded contract. The contract also registered a record average daily trading volume of 38,128 lots per day in 1998. On the other hand, the 3-month Euroyen interest rate futures contract experienced a considerable decline of 9% in annual volume. This was due to the worsening hedging effectiveness of the contract because of the deterioration in credit-worthiness of Japanese banks. As a result, the Euroyen contract was overtaken by the Eurodollar contract, becoming the second most actively traded contract on SIMEX, attracting an average daily trading volume of 33,683 lots. Notwithstanding this, the contract attained record open interest of 614,980 on 10 September 1998. Its options contract also set a new high in annual volume of 661,008 lots, an increase of 37.4% over the previous year.

The Nikkei-225 futures contract, the third most actively traded contract on SIMEX, enjoyed a growth of 14.3% in annual volume with 5.54 million contracts changing hands in 1998. Trading in the MSCI Taiwan stock index futures contract was also active. The average daily volume of the contract increased markedly from 2,402 lots in 1997 to 6,776 lots in 1998.

SIMEX launched the MSCI Singapore stock index futures contract, the first ever Singapore related futures product, on 7 September 1998. Together with the listing of the Dow Jones Thailand stock index futures contract listed on 2 November 1998, the MSCI Hong Kong+ stock index futures contract on 23 November 1998, and the Euroyen LIBOR futures and option contracts listed on 22 February 1999 and 8 March 1999 respectively, SIMEX now offers a comprehensive range of hedging and trading instruments on Asia's major economies including Japan, Taiwan, Hong Kong, Thailand and Singapore.

Among the new contracts listed, the Euroyen LIBOR futures contract has been the most successful, with an average daily turnover of 3,950 lots in its first month of trading. The MSCI Singapore stock index futures contract has also been moderately successful, with an average of 728 contracts traded daily in the first quarter of 1999. The Exchange currently lists 11 futures and seven options contracts.

On 18 March 1999, SIMEX signed a tripartite agreement with the Chicago Mercantile Exchange (CME) and the Socièté des Bourses Françaises (SBF Paris Bourse) to form the world's first major electronic trading alliance, known as Globex, to offer trading of futures and options spanning the world's three major time zones. Under this agreement, SIMEX will adopt the electronic platform developed by the SBF as its new electronic trading system and members of the three exchanges will enjoy cross-exchange trading privileges with respect to the others' electronically traded products, as well as opportunity for cost savings with cross-margining between products. SIMEX also reached an agreement with NYMEX in January 1999 to operate NYMEX's ACCESS electronic trading system in Singapore, allowing SIMEX corporate members to trade NYMEX's contracts when the system is open during the Asia-Pacific trading hours. In addition, SIMEX broadened its already successful mutual offset system (MOS) in the trading of Eurodollar and Euroyen futures contracts with CME to include the Japanese Government Bond and Euroyen LIBOR futures contract on 21 January 1999 and 1 April 1999, respectively.

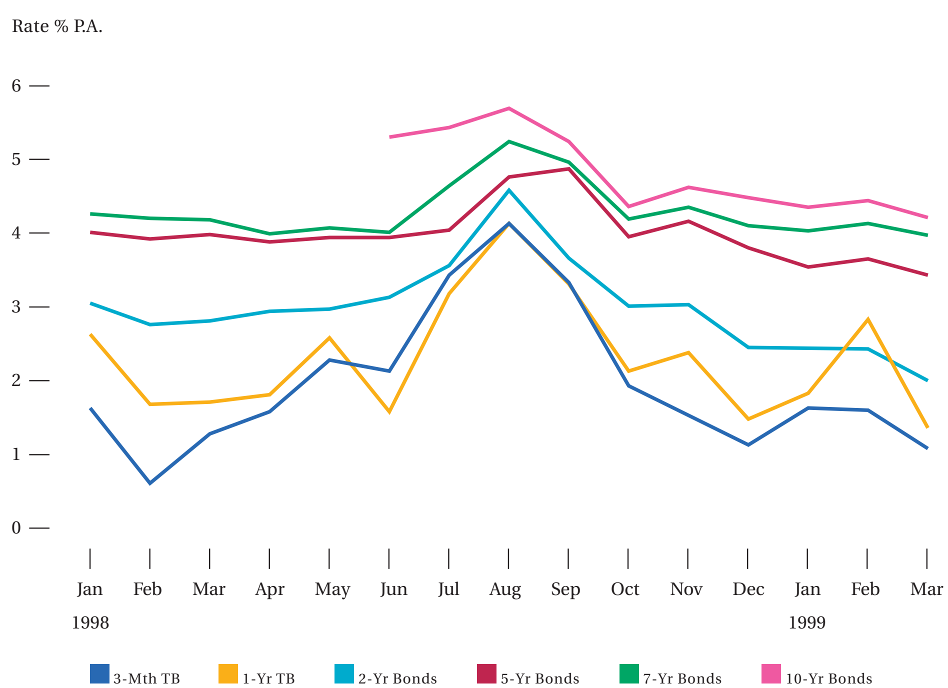
For its commendable performance in 1998, SIMEX was awarded the Derivatives Exchange of The Year by the International Financing Review, a renowned financial weekly based in the UK. SIMEX is the only Exchange to have won this award four times, the first three being in 1989, 1992 and 1993. SIMEX is also the only Asian Exchange to have won since the award was introduced.

BOND MARKET

Singapore Government Securities Market

The Singapore Government Securities (SGS) market rallied at the start of 1998 on the back of lower inter-bank rates and strong demand for liquid assets. The 3-month and 1-year Treasury bills, which made the most significant gains, fluctuated from a high of 3.38% and 3.23% in January, to a low of 0.48% and 1.48%, respectively. The longer-dated issues also gained, albeit to a smaller extent. In April, yields of SGS started to rise across the maturity spectrum in tandem with

CHART 11: YIELDS OF SINGAPORE GOVERNMENT SECURITIES

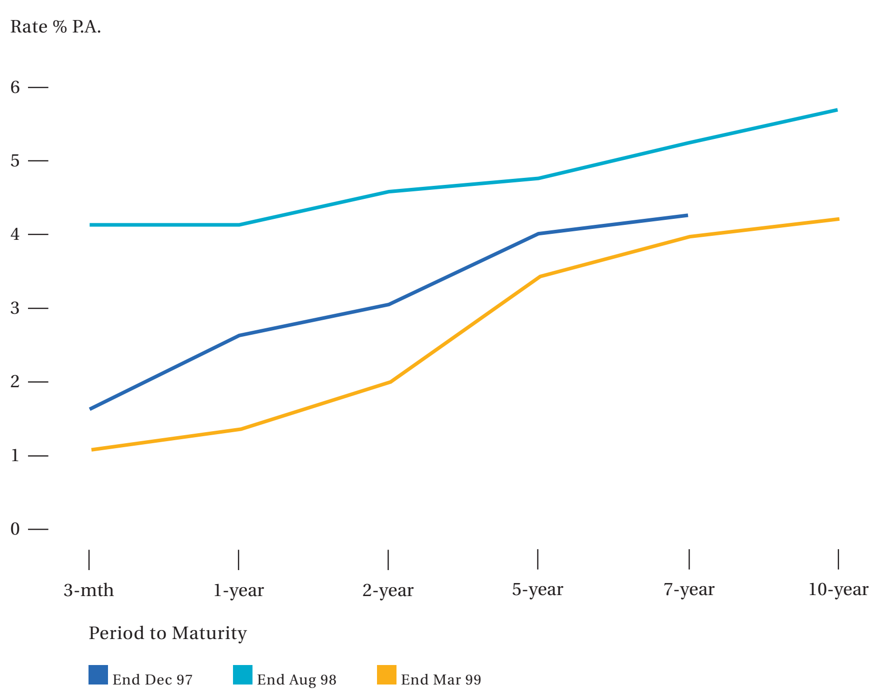


higher interbank rates. The announcement of the SGS issuance calendar and an increase in the net supply of SGS sent the yields to new highs in August. The excess liquidity released by the reduction in Minimum Cash Balance requirement in July was readily absorbed by the ample supply of securities in the market. At the peak, the 3-month and 1-year Treasury bills were trading at 4.13%, and the benchmark 5-year, 7-year and 10-year bonds were trading at 4.76%, 5.24% and 5.69%, respectively.

When interest rates fell in September, strong buying interest emerged from various quarters of the investor base, including asset managers, insurance companies, corporates and individuals, in both the primary and secondary markets. Demand for high yielding, long-term papers was underpinned by expectations of continued softening of interest rates. New bond issues were all well absorbed by the market. Demand for short-dated papers was also strong following the 3% increase in the liquid asset requirement of finance companies. Over 1998, the benchmark 5-year and 7-year bond yields declined by 8 and 45 basis points to 3.88% and 4.55%, respectively. The 10-year bond yields fell more significantly by 119 basis points from its average yield of allotment of 5.67% to 4.48%. The 3-month Treasury bill rate was marginally lower at 1.13% at end-December.

In line with the Government's goal to establish Singapore as the regional hub for arranging and trading debt securities, steps were taken in 1998 to improve liquidity and deepen the SGS market. More SGS were issued in 1998 than any other year. Apart from the normal SGS issues, the first 10-year Government bond issue was successfully auctioned in July 1998 to extend the SGS yield curve. A SGS issuance calendar, which shows the type of bond issue that would be auctioned each month, was announced in September to assist market participants in their investment planning. The net increase in the issue of Treasury bills and Government bonds is $1.62 billion and $4.86 billion respectively, significantly higher than the net increase of $930 million in Treasury bills and $460 million in Government bonds in 1997. There were seven new bond issues (two issues each of 2-year, 5-year and 7-year bonds and one issue of 10-year bonds), one 1-year Treasury bill issue and two reopened issues, amounting to $7.8 billion. As at end-1998, the total SGS outstanding,

CHART 12: SINGAPORE GOVERNMENT SECURITIES YIELD CURVES



excluding scrip-based bonds, amounted to $28.6 billion, an increase of almost 31% from 1997. Sizes of new bond issues varied from $700 million to $1,500 million; the average size of the weekly 91-day Treasury bill auctions was $530 million. The bulk of the SGS issued were held by banks, with the remaining held by finance companies, insurance companies, asset managers, corporations and individuals.

The increase in supply of SGS not only induced greater investor demand for SGS when yields moved to more attractive levels, but also bolstered trading activities in the secondary market. Coupled with the higher volatility in domestic interbank rates, there were more trading opportunities in the SGS market. Liquidity in the interbank market improved when two broking houses commenced operations as SGS brokers. In 1998, outright transactions rose by almost 64% to a daily average of $874 million, from a daily average of $534 million in 1997. For four months during the year, average daily turnover exceeded $1 billion. As a percentage of outstanding SGS, turnover improved to 3.1%, from 2.4% in 1997. Trading interest was equally focussed on Treasury bills and bonds. Transactions in repurchase agreements were less active, with the average daily volume increasing marginally to $277 million in 1998 from $267 million in 1997.

In the first quarter of 1999, SGS trading moderated to a daily average of $594 million, as market players stayed on the sidelines, awaiting clearer indications on the outlook of domestic interest rates.

Singapore Dollar Bond Market

The Singapore Dollar bond market was adversely affected by the regional crisis as volatile market conditions caused domestic borrowers to refrain from large scale fund raising activities. This was reflected by the decrease in the total value of Singapore Dollar corporate bond issues which amounted to $4.2 billion in 1998, compared with $6.7 billion in 1997. The decrease came from a fall in the average amount raised per bond issue though the total number of issues actually increased from 48 in 1997 to 52 in 1998. Despite the hostile market conditions, MAS pressed ahead to develop the bond market. The policy of non-internationalisation of Singapore Dollar was relaxed to allow foreign issuers of good standing to issue bonds in Singapore Dollar. Tax exemption on interest from qualifying debt securities paid to non-residents was extended to include non-residents who have permanent establishment in Singapore. In addition, an Approved Bond Intermediary (ABI) scheme was created. All debt securities lead managed by a financial institution with ABI status would automatically qualify for tax incentives.

Asian Dollar Bond Market

The Asian Dollar Bond Market was active in 1998, with the total number of issues reaching 83 from 49 in 1997. The total value of issues increased to US$2.7 billion in 1998 from US$1.2 billion in 1997. While all of the issues floated in 1997 were in US Dollar and Yen, there was a significant number of issues floated in Indonesian Rupiah and Hong Kong Dollar in 1998. Of the 83 issues in 1998, 45 were issued in Indonesian Rupiah.

Syndication Activities

The syndication market in Singapore slowed down in 1998. The number of applications approved under the tax exemption scheme for syndicated offshore credit and underwriting facilities contracted to 72 from 155 in 1997. The total loan value amounted to $11.9 billion from $13.8 billion in 1997. In creating a more conducive environment for syndication activities, a simplified procedure was introduced to grant tax exemption automatically to facilities which meet the defined criteria.

FOREIGN EXCHANGE MARKET

Foreign Exchange Transactions

Trading activity in the foreign exchange market slowed down in 1998. Average daily trading volume was US$142.0 billion, compared with US$166.9 billion in 1997. As in 1997, the Yen and DM were the most actively traded currencies. They accounted for 27.0% and 19.9%, respectively of the total turnover.

Currency Options

Transactions in currency options increased in 1998, averaging US$61.2 billion per month, 0.9% higher than in 1997. The bulk of the trading volume (76.0%) was accounted for by transactions involving Yen, DM and Australian Dollar. The majority (85.6%) of the currency options transactions were transacted with counterparties outside Singapore.

Interest Rate Swaps

The principal value of interest rate swap (IRS) transactions in 1998 averaged US$166.1 billion monthly, a significant 135.8% higher than in 1997. This growth was due to the increased interest rate volatility caused by the regional economic crisis. US Dollar-denominated IRS remained the most widely transacted instrument. Its share of total IRS transacted rose from 59.1% in 1997 to 76.4% in 1998. Yen-denominated IRS accounted for 19.1% of total IRS transacted, as compared to 29.7% for 1997. IRS transactions in other currencies decreased by 4.0% to account for one-twentieth of total volume.

Forward Rate Agreements

In 1998, the principal value of transactions in Forward Rate Agreements (FRAs) averaged US$34.6 billion monthly, a 5.1% increase from 1997. The volume of Yen-denominated FRAs grew by 32.7% and constituted 63.6% of total volume for 1998. The volume of US Dollar-denominated FRAs declined by 21.2% and accounted for 25.3% of total volume. FRAs denominated in other currencies decreased by 26.6% to account for 11.1% of total volume.

FUND MANAGEMENT INDUSTRY

Prior to December 1998, MAS conducted half-yearly surveys of the unit trust industry and annual surveys of financial institutions conducting fund management activities in Singapore. In December 1998, the two surveys were consolidated into one and the scope of the survey was expanded to cover both discretionary and non-discretionary fund management, unlike past surveys, which were confined to discretionary fund management.

Total funds under management in Singapore at end-1998 amounted to $150.6 billion, comprising $111.9 billion of discretionary funds and $38.7 billion of non-discretionary funds. In order to draw comparisons with data for 1997, the rest of this section on the fund management industry will focus on discretionary funds under management.

Due to the sharp fall in asset values during the year and increased withdrawals of Asian mandates stemming from the regional financial crisis, discretionary funds under management at end-1998 decreased by about 10% to $111.9 billion from $124.1 billion a year ago. Despite the fall in assets under management, the fund management industry continued to show healthy employment growth. The industry employed a total of 822 professionals, comprising 577 fund managers and 245 investment analysts at end-1998, compared with 814 in 1997. Four in 10 fund managers in the industry have more than 10 years of experience in managing funds. One-quarter of fund managers held the Chartered Financial Analyst qualification.

The number of financial institutions managing discretionary funds declined from 160 at end-1997 to 141 at end-1998. Most of the attrition in the industry was concentrated in fund managers with portfolios less than $100 million.
A number of international financial institutions are now managing their global mandates from Singapore. Based on the survey results, about 70% of mandates managed by financial institutions in Singapore were global ones.

Funds sourced from Europe and the US declined by about 26% – from $60 billion in 1997 to $44 billion in 1998 – reflecting in part rising redemptions of Asian mandates by European and American investors in the year due to the regional financial turmoil. This fall in funds from Europe and the US was offset by increased funds from Asia, particularly Singapore.

The bulk of funds managed were invested in equities. As at end-1998, investments in equities accounted for $71.2 billion or 64% of total funds, representing an increase of 4% over a year ago. The proportion of funds invested in bonds also increased, from 12% in 1997 to 16% in 1998. Following a trend that began in 1997, investments in the stock markets of Singapore and other ASEAN countries continued to decline in 1998. While investment in Asian equities fell in 1998, the sustained bull-run on Wall Street drew a sharp increase in investment funds into American equities.

As at end-1998, there were 23 unit trust managers managing a total of 127 unit trusts, compared to 22 managers managing 101 unit trusts at end-1997. Despite the increase in number of unit trusts, total assets under management declined marginally to $3.2 billion at end-1998 from $3.3 billion a year ago. This was because the bulk of unit trusts were invested in regional markets which had suffered severe price falls in 1998.

INSURANCE INDUSTRY

Overall Operations

The insurance industry's total premiums declined by 8.8% to $7.8 billion in 1998. These comprised annual premiums in force and new single premiums of life and annuity business as well as gross premiums of domestic and offshore general insurance business. Total assets of the industry expanded by 11.2% to $31.3 billion.

Life Insurance Business

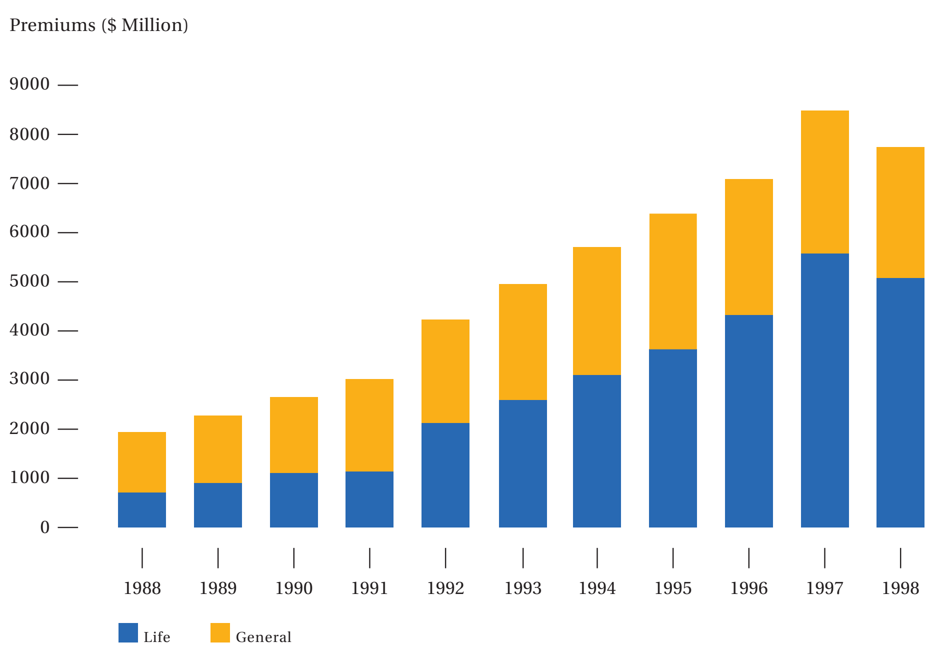
The life insurance industry experienced a considerable slowdown in new business sales in 1998. New annual premiums and single premiums for life insurance business declined by 35.4% and 58.9% to $540.5 million and $529.3 million, respectively. New single premiums for annuity business also contracted by 14.2% to $103.7 million. With the contraction in new business and increase in volun-tary terminations of policies, annual premiums in force increased marginally by 6.3% to $4.5 billion.

The implementation of the CPF Investment Scheme in 1997 boosted sales initially, but it was not sustained. Consumers were reluctant to make long-term financial commitments due to the economic slowdown, cut in the CPF contribution rate and job uncertainties. The volatile stock markets in Singapore and the region had adversely affected insurance sales, particularly investment-linked policies.

General Insurance Business

Total gross premiums for the general insurance industry declined by 8.4% to $2.7 billion in 1998. Domestic business and offshore business declined by 7.1% and 10% to $1.5 billion and $1.1 billion, respectively.

CHART 13: TOTAL INSURANCE BUSINESS



The decline in domestic business was attributable to the prevailing difficult economic conditions and intense competition resulting in severe rate erosion particularly for motor and workmen's compensation business. All classes of business recorded negative growth. Miscellaneous accident remained the largest class of domestic business.

The decline in offshore business in 1998 was due to the weakness of regional currencies, continued softening of premium rates, higher retention by ceding companies and a number of captives which had ceased writing business.

The life insurance industry grew substantially in the first quarter of 1999 mainly from the sale of new single premiums, which increased by a hefty 161% to $252 million, reminiscent of the levels before the financial crisis. New single premiums for annuity business also increased by 15% to $29 million. However, new annual premiums declined by 27% to $98 miillion. As for general insurance business, domestic gross premiums decreased by 10.2% to $396 million while offshore premiums declined by 8.8% to $230 million.

CHART 14: GROWTH OF DOMESTIC GENERAL BUSINESS BY CLASS

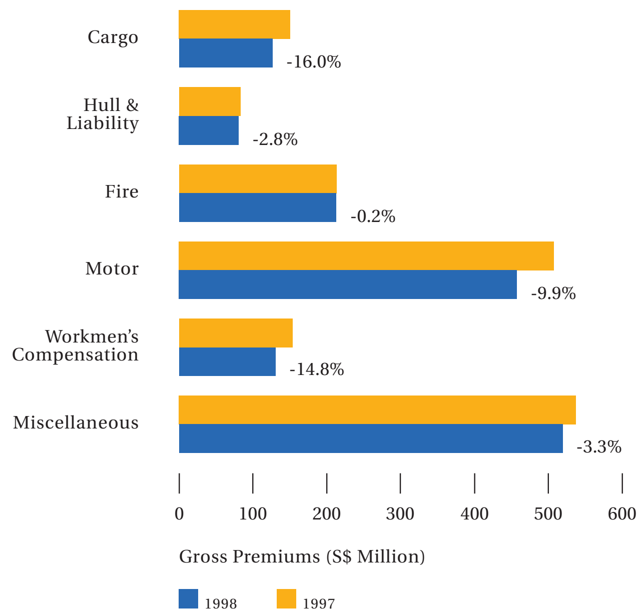
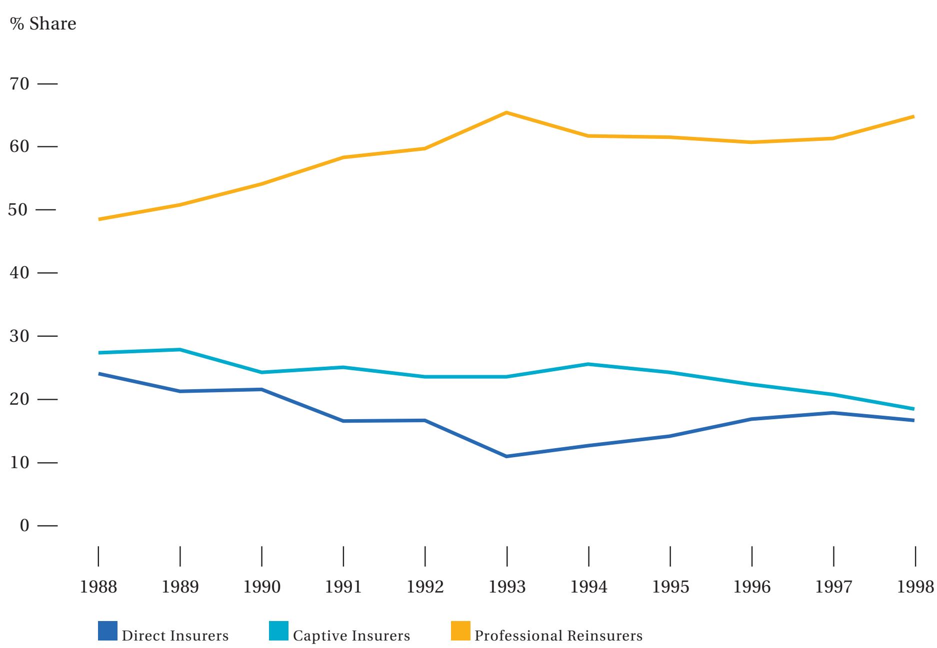


CHART 15: COMPOSITION OF OFFSHORE GENERAL BUSINESS BY TYPE OF INSURER



PAYMENT SYSTEMS AND IT DEVELOPMENTS

MAS Electronic Payment System (MEPS)

The MAS Electronic Payment System (MEPS) went 'live' on 13 July last year, after the completion of an extensive industry-wide system integration test. MEPS is a real-time gross settlement system for Singapore dollar high value interbank funds transfers and the delivery-versus-payment (DVP) settlement of scripless Singapore Government Securities. The settlement of interbank funds transfers and Singapore Government Securities transactions is effected through the banks' accounts with MAS.

In December last year, SES linked the Central Depository (CDP) System to MEPS to provide DVP settlement of S$ debt securities transactions. The linkage between MEPS and CDP has put in place a settlement system infrastructure to support the development of the S$ debt securities market in Singapore.

MAS Network (MASNET)

In line with MAS' effort to strengthen the existing MAS Network (MASNET) infrastructure, a new Internet web-site was launched in July 1998 to facilitate access to MASNET services via the web. BIZNET, a companies/businesses information retrieval service, was introduced on the MASNET web-site through collaborative efforts with Singapore Network Services. A new facility for the submission of returns to MAS was developed using Internet technologies to allow financial institutions to enter information on-line via the Internet. This facility was made available for the submission of the new insurance return on Claims Payments and Loss Reserves.

Cheque Clearing

The volume and value of cheques cleared by the Automated Clearing House (ACH) decreased slightly in 1998. A daily average of 290,177 cheques, with a value of $1.5 billion, were cleared through the ACH in 1998 compared with a daily average of 290,778 cheques, with a value of $2.0 billion, in 1997.

GIRO

Daily Interbank GIRO (IBG) transactions averaged 114,407 in 1998, compared with 121,198 in 1997. In value terms, this represents a 5% decline from $245 million in 1997 to $231 million in 1998, reflecting the depressed economic climate. With greater promotion of cashless payments, IBG has seen wider acceptance among consumers and service providers as transactions have grown steadily at an average annual growth rate of 25.3% since its introduction in 1989.

CashCard, HomeNETS and Mobile Phone CashCard Top-Up

Another mode of cashless payment is NETS CashCard. Based on smartcard technology, the NETS CashCard is essentially a stored value card which facilitates payment for goods and services at department stores, Electronic Road Pricing (ERP), retail outlets, and on the Internet without the physical delivery of cash. As at December 1998, a total of 10,594 CashCard terminals were installed over 7,076 outlets, compared with 6,491 terminals over 4,616 outlets in December 1997.

NETS has introduced the HomeNETS service that facilitates easy top-up of CashCards. The HomeNETS Terminal, which is only slightly larger than a hand-held calculator, can be plugged into any telephone jack and used for bank transactions and other NETS services.

One significant development in the coming months is the introduction of a CashCard top-up service using mobile phones. Expected to be launched in mid-1999, the mobile phone top-up service operates on dual-slot GSM mobile phones and requires a Personal Identification Number and a Smart ATM Card.

Automated Teller Machines

Since their introduction, Automated Teller Machines (ATMs) have played a major role in promoting a cashless society and in bringing greater convenience to customers. Besides allowing consumers to enjoy longer banking hours to make deposits to, and withdrawals from, their bank accounts, other services such as shares applications, funds transfers, bills payment, and Certificate of Entitlements (COE) bidding are also available at ATMs.

Following the merger of POSBank and the Development Bank of Singapore Ltd (DBS), there are now two major ATM networks in Singapore – the current shared network among the other four local banks (United Overseas Bank, Oversea-Chinese Banking Corporation, Overseas Union Bank, Keppel-Tat Lee Bank), and the POSB-DBS ATM network. As at 31 December 98, there is a network of 1,893 ATMs, giving Singapore an ATM penetration rate of about 512 ATMs per million population, one of the highest in the region.

Phone Banking and Internet Banking in Singapore

Since the introduction of phone banking in 1982, the range of phone banking services offered has increased. Besides funds transfer and account balance enquiries, bank customers can also settle utility bills, trade in stocks and shares, and bid for COEs over the telephone. More significantly, bank customers are now able to effect banking transactions through mobile phones, whose mobility and display screen features allow customers to enjoy off-premise ATM services wherever they are.

Internet banking is one of the latest service innovations offered by banks. Some of the online banking services available almost instantly via the Internet include account balance enquiries, funds transfer, fixed deposit placements, bill and shares payment, demand draft application and loan application.

To facilitate and promote internet banking, banks have introduced internet kiosks at convenient locations. At these internet kiosks, customers can enjoy services not normally provided by ATMs, such as terminating bill payments, enquiring IPO results, obtaining updates on banking services and utilising interactive calculators to simulate loan quantum and the accompanying interest payment schedule.

IT Strategy Study

MAS commissioned consultant Arthur D Little (ADL) in 1998 to develop an IT Strategy targeted at the capital markets, banking, insurance and payment systems. The IT strategies were positioned to support the visions developed by McKinsey, in a parallel study at the strategic level.

Both studies, completed in December 1998, led to subsequent follow-up actions within the MAS. The capital market's IT strategy is being implemented with the announcement of the demutualisation and merger of SES and SIMEX. An IT Working Group (ITWG), facilitated by MAS with the participation of both exchanges, has been set-up to identify and implement IT changes in the run-up to the merger.

Integrating our strengths to build a cohesive and dynamic organisation

ORGANISATIONAL REVIEW

Following the restructuring of MAS last year, further refinements were made this year. This year's changes were aimed at streamlining certain functions and strengthening core capabilities, so as to align the organisation with its vision to promote a sound macroeconomy, a world-class financial centre, and a cohesive and dynamic organisation.

Monetary Policy, Reserve Management and International Relations

The changes in this area were introduced to achieve greater focus within the individual functions while fostering closer interaction among the departments performing these functions.

The former Markets and Investments Department (MID) was reconfigured into a Monetary Management Division (MMD) and a Reserve Management Department (RMD). MMD will work closely with the Economics Department for more seamless monetary policy formulation and implementation.

A new International Relations Department (IRD) was set up to take on and expand the role of the former External Relations Division in the Economics Department. MAS' participation in international fora has been increasing and has extended beyond the economic and monetary policy dimensions to include issues related to financial regulation and supervision, market development, and skills training. IRD will cultivate an organisation-wide perspective in shaping external policy positions and managing international relations. IRD will also oversee MAS' position on official requests for attachments, training, and technical assistance.

Financial Supervision

The new structure explicitly recognises the three functional areas within the Financial Supervision Group (FSG), namely Banking and Insurance, Capital Markets and Support Functions like policy formulation, risk management and legal services.

The Securities and Futures Department (SFD) was reconfigured into three divisions: Intermediaries Supervision Division, Corporate Finance Division, and Securities Regulation Development Division. This change puts in place a seamless regulatory regime across capital market intermediaries and enables specialised regulatory development work to be undertaken.

A new Risk and Technology Department (RTD) was formed to oversee risk management in the financial sector in an integrated fashion from the financial, technological, and IT infrastructure perspectives.

The former Supervisory Policy Department was re-organised into a Supervisory Policy Division and a Supervisory Legal Services Division (SLS).

Corporate Support

A new Risk Management Division was set up under the Finance Department, given the increasing complexity of instruments in which MAS invests and the growing specialisation of risk measurement, controls and technologies.

The former Human Resource and Corporate Services Department was reconfigured into a new Human Resource Department (HRD) and a Corporate Services Department (CSD), to give greater focus to people development as a critical function and area of priority within MAS. The new HRD is organised into three divisions: Training and Career Development; Manpower Planning and Recruitment; Appraisal, Compensation, and Benefits.

Managing Director's Office

The Planning and Policy Co-ordination Division was renamed the Planning, Policy and Communications Division (PPC) in view of its responsibility for corporate communications. PPC will continue to be responsible for cross-department policy integration and organisational development/ corporate planning.

INTERNATIONAL RELATIONS

International meetings and efforts focused on the financial crisis in Asia during the year under review. With the crisis deepening, international efforts to address the urgent needs of containing contagion and implementing mutual surveillance intensified. Key issues include banking and corporate restructuring, reform of the international financial architecture, and strengthening of financial supervisory systems.

MAS participated in 146 international meetings from April 1998 to March 1999, up from 109 the year before. More than 100 MAS staff attended these meetings. MAS received 697 visitors during the period, compared with 400 a year ago. MAS hosted 12 events, including the EDI Seminar on Lessons in Banking Crisis Resolution for East Asia, OECD Conference on Insurance Regulation and Supervision in Asia, IAIS Seminar on Insurance Supervision, and EMEAP Seminar on Y2000 Issue. The EMEAP Seminar was held in conjunction with a Global 2000 meeting to allow for public-private sector dialogues. In early April 1999, MAS also hosted the first meeting on the Asian Growth and Recovery Initiative, co-chaired by the US and Japan.

To better monitor and contribute to the discussions in various fora on global monetary and financial issues, MAS set up an International Relations Department (IRD). International relations functions were previously carried out separately by a few departments. While these MAS departments continue to participate in specialised financial sector-specific fora, the new IRD provides a cohesive and integrated view on all international relations issues to enable MAS to play a more active and constructive role in the international community.

At the global level, MAS participated in various efforts to address the needs highlighted by the financial crisis centred on strengthening the financial resources of International Financial Institutions (IFIs), reforming the international financial architecture, and strengthening the domestic financial supervisory systems.

Financing Arrangements

With the International Monetary Fund's (IMF) resources stretched by the financial assistance packages to the various crisis-affected countries, there was an urgent need to implement the 11th increase in IMF quotas agreed upon in September 1997. This 45% increase in total IMF quotas to SDR 212 billion (equivalent to about US$297 billion) finally came into force in January 1999, when members holding 85% majority of the total IMF votes, formally consented to it. Singapore consented to the increase in its quota to SDR 862.5 million (US$1.2 billion).

The IMF's financial armoury was further enhanced with the implementation of two new financing facilities. The New Arrangements to Borrow (NAB) between the IMF and 25 members came into force in November 1998, providing the IMF with supplementary resources to forestall any financial crisis that could pose a risk to the international monetary system. The NAB was activated for the first time in December 1998, to provide the IMF with SDR 9.1 billion (about US$12.7 billion) in resources for Brazil's drawdown from the Fund's new Supplemental Reserve Facility (SRF). Singapore was one of the 21 NAB participants that could contribute to this first activation. We contributed a maximum of SDR 99.4 million (about US$140 million) to the IMF credit line to Brazil. The IMF has since repaid the amounts provided. In April 1999, the IMF Interim Committee also endorsed the establishment of a precautionary line of defence to members to guard against possible contagion from an international financial crisis.

Reform of International Financial Architecture

The longer-term issue of reform of the international financial architecture was a major preoccupation of the international community during the year. At the suggestion of Prime Minister Goh Chok Tong, the US convened a special meeting of Finance Ministers and Central Bank Governors from 22 industrial and emerging economies in April 1998. This Group of 22 formed three working groups to study options for increasing transparency and accountability, strengthening financial systems and sharing the burden of preventing and resolving financial crisis with the private sector. MAS participated in the deliberations of the last two working groups. The recommendations of the three groups were presented at a meeting of G22 Finance Ministers and Central Bank Governors in October 1998, and subsequently endorsed by the G7. The G22's work provided the foundation for further work on reform being carried forward by the G7 and the IMF.

At its February 1999 meeting, the G7 Finance Ministers and Central Bank Governors endorsed Bundesbank President Tietmeyer's proposal to establish a Financial Stability Forum. The Forum will pool the resources of national and international regulatory bodies to assess and reduce the vulnerabilities affecting the global financial system. The Forum has established three working groups on highly-leveraged institutions, offshore financial centres and short-term capital flows respectively. Singapore is a member of the working group on offshore financial centres.

While the Financial Stability Forum is focusing on regulatory and supervisory issues, further work on macroeconomic issues, such as appropriate exchange rate regimes and bailing in the private sector, would also need to be expedited. With the discontinuation of the G22 process, the task of advancing this work, including implementing the G22 recommendations, is now focused on the IMF.

Strengthening Financial Systems

International efforts to strengthen financial supervisory systems intensified, in the light of lessons from the financial crisis. The role of hedge funds and other highly leveraged institutions, especially in the aftermath of the LTCM debacle, came under scrutiny. The Basle Committee on Banking Supervision, as well as the US Federal Reserve, proposed promoting sound risk management processes at banks and securities firms with respect to their interactions with hedge funds. Two working groups established under the BIS' Committee on the Global Financial System (formerly known as the Euro-currency Standing Committee) have been working to identify the additional information required from private market participants, including highly leveraged institutions, at both the aggregated and individual institutional levels. MAS has been involved in their work. In addition, the Basle Committee is considering requiring higher capital charges for bank exposures to highly leveraged institutions. Its Core Principles Liaison Group of which MAS is also a member, is working on the Core Principles Methodology paper, which sets out harmonised standards for assessing compliance with each of the 25 Core Principles for Effective Banking Supervision.

During the year, MAS continued to contribute to the work of the BIS Committee on Payment and Settlement Systems, aimed at establishing a common regulatory policy framework on payment systems. The Y2000 problem was another major preoccupation in the financial supervisors' fora. MAS is a member of the Joint Y2000 Council, the primary international regulatory agency which co-ordinates and recommends Y2000 initiatives. In a recent survey by the Global 2000 Co-ordinating Group, Singapore has been assigned an all green rating, reflective of the high comfort level of the international financial community with the Y2000 readiness of Singapore's financial sector and the country's infrastructure as a whole.[1]

In the area of securities regulation, IOSCO issued a consultative paper on the objectives and principles of securities regulation, which was subsequently adopted in September 1998. MAS, a member of IOSCO's Asia Pacific Regional Committee and Emerging Markets Committee, fully supports these principles and will co-operate with IOSCO in studying implementation issues. On regulation of futures trading, MAS attended the Futures and Options Market Regulators Meeting at Bürgenstock in September 1998 and the International Regulators Meeting held at Boca Raton in March 1999.

In insurance, the 5th IAIS Annual Conference in September-October 1998, adopted three sets of standards on Licensing, On-Site Inspection and Derivatives. The MAS has been re-elected to represent the Asia region on the IAIS Executive Committee for another two-year term.

[1] It is one of two economies in the world to have received this top rating, the other one being Hong Kong.

Regional Fora and Responses to the Crisis

At the regional level, mutual surveillance was implemented during the year in both the ASEAN Finance Ministers' process and the Manila Framework Meetings. An ASEAN Central Bank Forum introduced in late 1997 was followed by the establishment of a framework for a broader ASEAN Surveillance Process (ASP), incorporating the ASEAN finance ministries, and with technical assistance from the Asian Development Bank. At their meeting in Hanoi during March 1999, ASEAN Finance Ministers adopted common positions on reform issues. The ASEAN Leaders' meeting in December 1998 also endorsed a medium term plan of action – the Hanoi Plan of Action – to strengthen economic and financial co-operation for restoring sustainable growth to the region. This plan includes the development of capital markets in the region, especially the bond markets, to reduce members' dependence on short-term bank lending.

In the ASEM grouping, two major initiatives were announced and developed over the last year, in response to the Asian financial crisis. An ASEM Trust Fund was created at the World Bank to help finance technical assistance and advice in the areas of financial restructuring and alleviation of poverty and the social impact of the financial crisis. A European Financial Expertise Network was also launched and will associate Asian expertise to increase the quantity and quality of technical advice for financial sector reforms in the crisis-affected Asian ASEM members.

At the APEC forum, there were wide-ranging discussions on outstanding work required under both short-term and long-term responses to the crisis. At the Leaders' Summit in November 1998 in Kuala Lumpur, the US and Japan announced a joint multilateral initiative, Asian Growth and Recovery Initiative (AGRI). Four components were incorporated, including bank and corporate restructuring, trade and working capital financing, provision of technical assistance and mobilisation of new private sector capital. This initiative complemented Japan's US$30 billion bilateral financial aid package to the crisis-affected countries in Asia under the New Miyazawa Initiative.

Similarly, exchange of views on the regional situation and response to the crisis, as well as joint initiatives, continued in the regional central banking groups like SEACEN, EMEAP and the ASEAN Central Bank Forum. During the year, the three EMEAP working groups were reorganised to allow a first group to concentrate on Payments and Settlements systems, and to transfer its work on financial market development to a Working Group on Financial Markets. The Study Group on Banking Supervision was formalised into a Working Group.

In early 1999, the focus of dialogue among regional central banks shifted to issues on the reform of the international financial architecture, with efforts made to derive common views and positions on the various issues. A consensus was reached at the 4th ASEAN Central Bank Forum hosted by MAS in Singapore.

Technical Assistance

At the APEC Leaders' Summit in November 1998, Singapore's Prime Minister announced an enhanced technical assistance initiative, aimed at helping capacity building in finance and healthcare within the region. MAS played a leading role in developing this initiative, which included ramping up the training programme of the IMF-Singapore Regional Training Institute (STI) to maximum capacity, and collaborating with other IFIs and countries. At the ASEAN Summit in Hanoi in December 1998, Singapore also offered a new ASEAN training programme worth $12 million to provide about 30 undergraduate scholarships a year for higher education in Singapore. This will help mitigate the social and long-term economic effects of the crisis on these countries. In its first year of operation, the STI trained 405 government officials from 35 foreign countries through 15 courses, covering topics such as financial programming, fiscal policy, banking supervision and statistics.

Last year, MAS hosted training attachments and study visits by officials from several foreign countries, including Thailand, Vietnam, China, Nepal and Eritrea. We also provided training for supervisors from Thailand and Brunei on the Y2000 issue.

HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

During the year, human resource management and development was geared towards strengthening organisational capabilities. Human resource policies remained focused on attracting, developing, motivating and retaining quality staff.

Recruitment

As at 31 March 1999, MAS' staff strength numbered 701, comprising 310 senior officers, 129 officers and 262 support officers. Of the 129 officers, 70 were trainee officers. A total of 93 officers were recruited, including 30 mid-career officers from the financial industry as well as the universities.

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 our supervisory approach from regulation to risk-based supervision, and the increased focus on promoting Singapore as a world-class financial centre necessitated a considerable increase in staff strength.

As part of pre-service recruitment, a total of five local and 11 overseas undergraduate scholarships were awarded during the year to outstanding GCE 'A' level students, to read Accountancy, Economics, Computational Finance, and Chemistry. MAS introduced a mentor scheme for scholars, under which mentors were assigned to scholars to help them keep in touch with MAS and Singapore during the period of their undergraduate studies.

Career Development and Training

MAS' strength lies in its people. Hence, career development planning and staff training were given priority in the management of human resources. This year, greater staff mobility was facilitated across departments, to give our officers a broader exposure to different aspects of central banking. Steps were also taken to expose our staff to the industry, through external attachments to other organisations, both locally and overseas. Job rotations and external attachments will enhance individual growth as well as lay the foundation for organisational strength and continuity.

During the year, 59 officers were rotated to new areas of work within MAS, while two officers were attached to external organisations – the Economic Development Board, and the Federal Reserve Bank of New York. This year, more of these external attachments will be planned, to give our officers some exposure to the environment and practices in the private sector and other public and regulatory institutions. This exposure will provide our officers with a broader perspective that has become increasingly important in our policy formulation and implementation.

Training was stepped up to equip our staff with the requisite skills to cope with more challenges last year. MAS staff spent an average of nine days or 66 hours on structured training during the year; total training costs amounted to 3.8% of total payroll, or an average of $2,800 per employee.

A total of 100 senior officers attended training abroad, mainly in central banking and related areas. In addition, MAS sent four study teams to reputable financial institutions, to learn about the best practices in other countries. Such training and study trips provided staff with good exposure to country-specific and international financial regulatory issues, as well as the operational aspects of banking in different countries. During the year, 507 staff members attended local training courses, both in-house and external. The courses included programmes on finance, econometrics, information technology, emotional intelligence, and leadership.

Officers on the Trainee Officer Scheme attended a central banking induction course, which introduced them to MAS' role and its various departments. They also attended other core courses on economics, accounting, written communication and team-building, and specialised functional courses relevant to their areas of work. Mentors were assigned to trainee officers to help them settle down in MAS, as well as to provide advice and counsel where needed.

At the same time, MAS continued to sponsor promising staff for postgraduate studies at local and foreign universities.

Staff Remuneration

In order to attract and retain the best talents, the MAS' policy is to pay remuneration packages that are competitive with the financial sector for jobs of comparable sizes and responsibilities.

Following a review of salary scales for support staff, adjustments were made to their salaries.

A total of 74 professional staff and 33 support staff were promoted in April 1999 following the annual appraisal exercise, which was conducted to assess the performance and potential of each officer.

Long Service Awards

In recognition of their dedication and loyalty, 52 employees were presented with long service awards. Of these, 3 had served the MAS for 30 years, 21 for 25 years, 8 for 20 years, 11 for 15 years, and 9 for 10 years.

Recreation and Welfare

As in previous 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. After work, and even during the lunch hour, many MAS staff could be seen working out in the well-equipped gymnasium, or playing squash, table soccer, table tennis, and billiards. Activities organised by the Recreation Club included lunch-time talks and inter-departmental friendly matches in games such as street soccer, badminton, bowling, and international chess.

The MAS Child Development Centre continued to provide quality early childhood care and education to pre-school children. The Centre caters mainly to children of staff members. As at 31 March 1999, a total of 82 children were cared for by 10 teachers.

INFORMATION RESOURCES

The MAS Information Resource Centre continued to expand its resources in the areas of economics, banking and finance. The Collection size at end-March stood at 27,000 book titles and 1,090 serial titles. The Centre also subscribed to on-line databases and CD-ROM titles. In addition to these in-house resources, publications from other libraries in Singapore were also made available to staff through inter-library loan arrangements and SILAS.

The Centre has benefited from advances in information technology. With the Internet, it is able to source for publications quickly. Internal dissemination has also improved as staff members are now able to receive timely and accurate information.

INTERNAL AUDIT

The MAS Internal Audit Department (IAD) conducts independent appraisals of MAS' operations to provide management with the assurance that controls implemented are sound and effective. For new systems and business processes, IAD works with departments concerned to identify the inherent risks, and ensures that key controls are instituted at the outset to mitigate these risks.

Over the past year, IAD reviewed key developments and systems such as the MAS Electronic Payment System (MEPS), Euro conversion of the MAS' investment holdings, Y2000 conversion of the MAS' in-house systems and facilities, and upgrading of the settlement system for overseas investments. Operational and compliance audits were also carried out on the reserve management activities, domestic market operations, as well as the corporate service functions.

Annual Accounts

HIGHLIGHTS OF THE ACCOUNTS

ASSETS
Total assets of the Authority as at 31 March 1999 were S$108,164 million.

Holdings of gold and foreign assets, which accounted for 98.4 per cent of the Authority's total assets, grew by S$12,071 million during the year to S$106,412 million.

The Authority's reserve position in the International Monetary Fund (IMF) and Special Drawing Rights (SDR) increased by S$449 million to S$1,314 million due mainly to the payment of Singapore's quota increase on 5 February 1999. A quarter of the quota increase of SDR504.9 million was paid in Swiss Francs and the rest through the issue of Singapore dollar denominated promissory notes to the IMF. As at 31 March 1999, Singapore's quota was SDR862.5 million.

Other assets decreased by S$192 million to S$334 million due mainly to the fall in holdings of Singapore Government securities, commercial bills and cash balances.

LIABILITIES
Deposits placed by the Singapore Government and statutory boards with the Authority fell by S$5,773 million to S$54,164 million.

The deposits and balances of banks and other financial institutions decreased by S$39 million to S$9,921 million. The reduction resulting from the revision of the statutory reserves ratios for banks and finance companies from 6% to 3% in 1998/99 was offset by the increase arising from the reclassification of deposits placed by Post Office Savings Bank of Singapore with the Authority before its merger with The Development Bank of Singapore Limited.

The allocation of Special Drawing Rights to Singapore remained unchanged at SDR16.5 million or S$39 million.

Provisions and other liabilities increased by S$14,198 million to S$29,477 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 due to the weakening of the local currency 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 year was S$5,794 million. In accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act (Chapter 319A), $1,159 million will be paid to the Government. As approved by the Board, S$3,494 million has been transferred to the General Reserve Fund and the remaining profit of S$1,141 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 1999

The accounts of the Monetary Authority of Singapore set out on pages 92 to 97 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 1999, and the results and cash flows of the Authority for the year ended on that date.

CHUANG KWONG YONG
AUDITOR-GENERAL
SINGAPORE
22 JUNE 1999

BALANCE SHEET

AS AT 31 MARCH 1999

	Note	1998/99 S$	1997/98 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		**11,992,227,936**	8,498,188,947
		12,092,227,936	8,598,188,947
Represented by:			
Assets			
Fixed Assets	4	**103,813,053**	102,614,349
Gold		**79,783,038**	74,491,583
Foreign Assets	5	**106,332,214,478**	94,266,738,723
Reserve Position in the International Monetary Fund and Special Drawing Rights	6	**1,313,561,080**	864,172,605
Other Assets	7	**334,182,068**	526,146,552
		108,163,553,717	95,834,163,812
Less:			
Liabilities			
Deposits of Singapore Government and Statutory Boards		**54,163,606,751**	59,936,424,680
Deposits of Banks and Other Financial Institutions	8	**9,921,334,385**	9,959,871,287
Deposits of International Financial Institutions	9	**170,297,419**	24,832,481
Provision for Contribution to Consolidated Fund	10	**1,158,807,798**	–
Return of Profit to Government		**1,141,192,202**	2,000,000,000
Allocation of Special Drawing Rights	11	**38,717,258**	35,860,165
Provisions and Other Liabilities		**29,477,369,968**	15,278,986,252
		96,071,325,781	87,235,974,865
		12,092,227,936	8,598,188,947

The accompanying notes form part of the accounts.

LEE HSIEN LOONG
CHAIRMAN
MONETARY AUTHORITY OF SINGAPORE
SINGAPORE
18 JUNE 1999

KOH YONG GUAN
MANAGING DIRECTOR
MONETARY AUTHORITY OF SINGAPORE
SINGAPORE
18 JUNE 1999

INCOME AND EXPENDITURE STATEMENT

FOR THE YEAR ENDED 31 MARCH 1999

	Note	1998/99 S$	1997/98 S$
Net Income from Foreign Operations (after transfers to/from provisions)		**5,835,940,865**	5,083,463,711
Net Income from Domestic Operations		**31,731,649**	43,054,919
Non-operating Income		**12,012,421**	11,924,080
		5,879,684,935	5,138,442,710
Less:			
Personnel Expenditure	12	**57,825,122**	50,494,350
General & Administrative Expenditure	13	**17,180,703**	14,648,142
Non-recurrent Expenditure		**5,904,766**	1,172,169
Depreciation/Amortisation		**4,735,355**	3,400,718
		85,645,946	69,715,379
Profit for the Year (after transfers to/from provisions)		**5,794,038,989**	5,068,727,331
Less:			
Contribution to Consolidated Fund	10	**1,158,807,798**	–
Return of Profit to Government		**1,141,192,202**	2,000,000,000
		2,300,000,000	2,000,000,000
Transfer to General Reserve Fund		**3,494,038,989**	3,068,727,331
General Reserve Fund brought forward		**8,498,188,947**	5,429,461,616
General Reserve Fund carried forward		**11,992,227,936**	8,498,188,947

The accompanying notes form part of the accounts.

CASH FLOW STATEMENT

FOR THE YEAR ENDED 31 MARCH 1999

	Note	1998/99 S$	1997/98 S$
Cash Flows from Operating Activities			
Profit (after transfers to/from provisions)		**5,794,038,989**	5,068,727,331
Add: Non-Cash Items (Depreciation/Amortisation)			
Fixed Assets	4	**4,718,688**	3,384,051
Others		**16,667**	16,667
Add/(Less) Changes in Working Capital			
Gold		**(5,291,455)**	(7,818,186)
Foreign Assets		**(12,065,475,755)**	(8,991,919,790)
Reserve Position in the International Monetary Fund and Special Drawing Rights		**(446,531,382)**	(197,513,565)
Other Assets		**135,914,889**	(182,298,184)
Deposits of Singapore Government and Statutory Boards		**(5,772,817,929)**	(3,277,365,676)
Deposits of Banks and Other Financial Institutions		**(38,536,902)**	443,479,937
Deposits of International Financial Institutions		**145,464,938**	(1,163,854)
Provisions and Other Liabilities		**14,197,456,418**	7,929,880,473
Net Cash from Operating Activities		**1,948,957,166**	787,409,204
Cash used in Investing Activities			
Purchase of Fixed Assets		**(4,990,094)**	(2,038,642)
Cash used in Financing Activities			
Profit returned to Government/Dividend Paid		**(2,000,000,000)**	(700,000,000)
Net (Decrease)/Increase in Cash and Cash Equivalents		**(56,032,928)**	85,370,562
Cash and Cash Equivalents at beginning of year		**127,644,950**	42,274,388
Cash and Cash Equivalents at end of year	14	**71,612,022**	127,644,950

The accompanying notes form part of the accounts.

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 income and expenditure 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
Building Improvements & Renovation	10 years
Mechanical and Electrical Installations	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 income and expenditure 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**

	Leasehold Land S$	Buildings S$	Building Improvements and Renovation S$	Mechanical and Electrical Installations S$	Computer Equipment and Software S$	Furniture, Fixtures and Other Equipment S$	Total S$
COST							
At 1.4.98	25,448,472	105,121,814	–	35,113,058	2,622,705	1,008,612	169,314,661
Additions	–	–	1,063,416	–	3,730,365	1,123,611	5,917,392
Reclassification	–	–	248,703	(7,500)	–	(241,203)	–
At 31.3.99	**25,448,472**	**105,121,814**	**1,312,119**	**35,105,558**	**6,353,070**	**1,891,020**	**175,232,053**
ACCUMULATED DEPRECIATION							
At 1.4.98	3,441,764	27,227,009	–	35,036,056	756,803	238,680	66,700,312
Additions	265,141	2,103,731	107,006	9,495	1,782,114	451,201	4,718,688
Reclassification	–	–	48,991	(750)	–	(48,241)	–
At 31.3.99	**3,706,905**	**29,330,740**	**155,997**	**35,044,801**	**2,538,917**	**641,640**	**71,419,000**
Depreciation for FY1997/98	265,141	2,103,731	8,344	11,352	756,803	238,680	3,384,051
NET BOOK VALUE							
At 31.3.99	**21,741,567**	**75,791,074**	**1,156,122**	**60,757**	**3,814,153**	**1,249,380**	**103,813,053**
At 31.3.98	22,006,708	77,894,805	–	77,002	1,865,902	769,932	102,614,349

5 **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 based on the lower of cost and market value.

6 RESERVE POSITION IN THE INTERNATIONAL MONETARY FUND (IMF) AND SPECIAL DRAWING RIGHTS (SDR)

These comprise the following:-

	1998/99 S$	1997/98 S$
Reserve Tranche	**954,395,361**	598,357,483
SDR Holdings	**183,633,033**	119,375,673
Enhanced Structural Adjustment Facility	**188,002,613**	174,129,191
Accrued Income	**7,574,468**	6,400,266
Currency Adjustment	**(20,044,395)**	(34,090,008)
	1,313,561,080	864,172,605

The Reserve Tranche represents the amount of the paid-up portion of the Singapore quota. Changes in SDR Holdings are due to, among other things, interest receipts and payments of charges as well as transactions with other member countries. Singapore participated in the IMF's Enhanced Structural Adjustment Facility with an initial loan of SDR40 million disbursed over four years from 1988 and another SDR40 million in 1994. The period of the loan is ten years from the date of disbursement.

7 OTHER ASSETS

These comprise the following:-

	1998/99 S$	1997/98 S$
Cash and Cash Equivalents	**71,612,022**	127,644,950
Singapore Government Securities	**64,840,537**	127,038,906
Investment in Bank for International Settlements	**54,670,260**	54,670,260
Staff Loans		
– Amount repayable within 12 months	**938,881**	1,020,796
– Amount repayable after 12 months	**9,202,219**	7,567,834
Others	**132,918,149**	208,203,806
	334,182,068	526,146,552

The Authority's investment in the Bank for International Settlements comprises 3,000 shares at 2,500 gold francs per share (25% paid).

8 DEPOSITS OF BANKS AND OTHER FINANCIAL INSTITUTIONS

These represent mainly 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).

9 DEPOSITS OF INTERNATIONAL FINANCIAL INSTITUTIONS

These represent current account balances of the International Monetary Fund and central banks.

10 CONTRIBUTION TO CONSOLIDATED FUND

This represents the contribution to be made to the Consolidated Fund in accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act (Chapter 319A). The contribution is based on 20% of the profit for the year (after transfers to/from provisions).

11 ALLOCATION OF SPECIAL DRAWING RIGHTS

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

12 PERSONNEL EXPENDITURE

This includes the following:-

	1998/99 S$	1997/98 S$
Salaries and Superannuation	**52,247,877**	46,301,833
Training and Personnel Development	**3,345,839**	1,999,450
Staff Benefits	**1,669,445**	1,506,720
Directors' Fees	**14,636**	5,550

13 GENERAL AND ADMINISTRATIVE EXPENDITURE

This includes the following:-

	1998/99 S$	1997/98 S$
Property Tax	**2,034,583**	2,921,177
Information Technology Expenses	**5,893,033**	4,160,271
Building and M&E Maintenance	**1,744,470**	1,572,603
Audit Fees		
– Statutory Accounts	**250,000**	225,000
– Service Charge Account	**10,000**	8,000
Entertainment	**123,334**	97,185

14 CASH AND CASH EQUIVALENTS

These comprise the following:-

	1998/99 S$	1997/98 S$
Cash and Bank Balances	**63,685,346**	80,611,103
Export and Pre-Export Bills	**7,926,676**	47,033,847
	71,612,022	127,644,950

15 COMMITMENTS

International Monetary Fund

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$1,073 million (FY1997/98: S$180 million) which represents the unpaid quota due to 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$799 million] (FY1997/98: S$740 million) in the event of a financial emergency as specified by the NAB. During the year, the Authority granted a loan of SDR31 million under the NAB. The loan was fully repaid by 31 March 1999.

Bank for International Settlements

The Authority has a commitment, amounting to S$25.3 million as at 31 March 1999 (FY1997/98: S$25.6 million), in respect of the uncalled portion of its investment in the Bank for International Settlements. The amount is based on the nominal value (in gold francs) of the uncalled portion and gold price as at the balance sheet date.

Financing Package

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 1999, the outstanding principal due from BOT under the Agreement amounted to US$793 million (FY1997/98: US$680 million).

The Singapore Government committed US$5 billion as second line financing to the IMF stand-by facility for Indonesia. The amount has since been earmarked for the bilateral trade finance guarantee scheme requested by the Indonesian Government. As at 31 March 1999, the Authority has not issued any guarantee under this facility.

16 COMPARATIVE FIGURES

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

Calendar of Monetary and Financial Events

April 1998 – March 1999

5 May 1998

The Singapore International Monetary Exchange (SIMEX) allows stockbrokers to sell stock index-linked futures contracts.

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 and Registry of Companies and Businesses jointly issue a Handbook on Unit Trust.

29 June 1998

Parliament passes the MAS (Amendment) Bill 1998 to include financial sector promotion as one of the MAS' main objectives.

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

1 July 1998

MAS lowers the minimum cash balance requirement for banks to 3% from 6%.

12 August 1998

MAS accepts nearly all the recommendations made by the SES Review Committee, including progressively liberalising brokerage commissions and opening up trading access to the exchange.

13 August 1998

MAS launches the MAS Electronic Payment System, a real-time gross settlement system for high-value S$ interbank fund transfers and scripless settlement of Singapore Government Securities.

MAS introduces MAS Notice 757 to allow a wider use of the Singapore Dollar by non-residents for business transactions.

15 August 1998

Tat Lee Bank merges with Keppel Bank.

31 August 1998

The SES introduces a revised classification for listed companies aimed at better representing the businesses they operate, and new sectoral stock indices in place of the five SES indices currently in use.

7 September 1998

SIMEX launches the Morgan Stanley Capital International Singapore Stock Index futures contract.

12 October 1998

Parliament passes the Companies Act (Amendment) Bill to allow Singapore companies to buy back their own shares.

2 November 1998

SIMEX launches the Dow Jones Thailand Stock Index futures contract.

Domestic

3 November 1998
The CPF Board announces that under the CPF Investment Scheme, CPF savings can be used to buy bonds issued by statutory boards.

4 November 1998
The government announces that the SES and SIMEX will be merged.

9 November 1998
MAS accepts all recommendations of the Corporate Finance Committee to promote Singapore as an international corporate fund-raising centre.

16 November 1998
POSBank merges with the Development Bank of Singapore.

23 November 1998
SIMEX relaunches the MSCI Hongkong Stock Index futures contract.

1 December 1998
MAS changes the composition of the capital adequacy requirement for local banks from 12% comprising Tier One capital to at least 10% in Tier One capital and the remaining 2% in Upper Tier Two capital.

17 December 1998
MAS lowers the minimum cash balances for finance companies from 6% to 3%.

8 January 1999
SES cuts brokerage commissions on all share transactions by 5%.

8 February 1999
SIMEX enters into the Globex Alliance with the Chicago Mercantile Exchange and the Societe des Bourses Francaises in an unprecedented alliance spanning the world's three major time zones.

22 February 1999
SIMEX launches a new three-month Euroyen futures contract based on the London interbank offered rate or LIBOR.

26 February 1999
Finance Minister Richard Hu announces the 1999 Budget which includes tax incentives for the financial sector.

8 March 1999
SIMEX launches the Euroyen LIBOR options.

Calendar of Monetary and Financial Events
April 1998 – March 1999

1 April 1998
Japan launches its 'Big Bang' financial system deregulation.

17 April 1998
Trading commences on Taiwan's first futures market.

12 May 1998
The London International Financial Futures and Options Exchange (LIFFE) lists a futures contract on the FTSE Eurotop Index.

20 May 1998
The Malaysian government exempts from tax those who repatriate foreign income to Malaysia.

26 May 1998
The Hong Kong Futures Exchange launches the Taiwan stock index futures.

30 June 1998
The European Central Bank is inaugurated.

The London Stock Exchange and Germany's Deutsche Borse forge an alliance to form the foundation for a single European stock market.

1 July 1998
South Korea removes all regulations on foreign exchange transactions and foreign investments in the country.

Bank Negara Malaysia lowers the statutory reserve requirements of financial institutions from 10% to 8%.

14 July 1998
Vietnam allows foreign joint-venture securities companies to participate in its new stock exchange.

21 July 1998
The Taiwan International Mercantile Exchange launches its stock index futures.

31 August 1998
The Kuala Lumpur Stock Exchange (KLSE) introduces measures which affect over-the-counter trading of Malaysian shares on Singapore's Clob International.

1 September 1998
Malaysia imposes capital controls on offshore trading of the Malaysian ringgit in a bid to curb speculation of the Malaysian currency.

18 September 1998
The Hong Kong Futures Exchange launches the futures and options contracts based on the Hang Seng 100 Index of leading stocks.

External

1 November 1998

Amendments to four pieces of Malaysia's securities and futures laws take effect. The changes formalise the government's decision not to recognise trading in futures of Malaysian-based cash instruments on bourses not recognised by the country.

2 November 1998

NASDAQ merges with the American Stock Exchange.

13 November 1998

The Hong Kong Stock and Futures Exchanges implement a new rule which makes it nearly impossible for investors to do business legally with banks in countries with banking secrecy law.

30 November 1998

The London International Financial Futures and Options Exchange launches its electronic trading system in a move that heralds the end of floor trading in London.

1 December 1998

The Japanese government allows Japan's banks and insurers to sell mutual funds.

1 January 1999

The Hong Kong Futures Exchange reduces by one-third the interest charge on margin funds for all futures contracts.

The Euro is launched.

4 January 1999

The pan-European equity market alliance between the Frankfurt and London stock exchanges is launched.

15 January 1999

Brazil floats its currency.

4 February 1999

Malaysia relaxes some of the capital controls imposed on 1 September 1998. The new policy, centering on an exit tax, allows portfolio investors to repatriate their capital (which would otherwise have to remain in Malaysia for at least 12 months when capital controls were imposed) and profits, as well as encourages new capital inflows into the country.

1 March 1999

The World Trade Organization's agreement on the liberalisation of financial services takes effect.

KEY ECONOMIC AND FINANCIAL STATISTICS

	1994	1995	1996	1997	1998
NATIONAL INCOME AGGREGATES					
Gross Domestic Product					
At Current Market Prices ($m)	106489.7	118490.5	128973.5	141261.9	141216.2
Growth Rate (% change)	14.6	11.3	8.8	9.5	0.0
At 1990 Market Prices ($m)	94777.8	102782.4	110510.2	119337.7	121111.5
Growth Rate (% change)	11.2	8.4	7.5	8.0	1.5
Gross National Product					
At Current Market Prices ($m)	108873.5	121734.1	133348.3	147210.4	147548.0
Growth Rate (% change)	16.8	11.8	9.5	10.4	0.2
LABOUR FORCE					
Unemployment Rate (%)	2.0	2.0	2.0	1.8	3.2
Productivity Growth (% change)	6.4	3.3	1.2	1.8	-1.3
Employment Growth (% change)	4.4	6.4	5.6	6.2	-1.1
Average Monthly Earnings (% change)	8.8	6.4	5.8	5.7	2.8
Unit Labour Cost (% change)	2.6	2.4	2.4	1.5	1.4
SAVINGS AND INVESTMENT					
Gross National Savings ($m)	53114.3	61328.7	68235.4	76944.2	76834.4
As % of GNP	48.8	50.4	51.2	52.3	52.1
Gross Domestic Capital Formation ($m)	35701.8	40867.2	47777.3	54624.2	47355.7
As % of GNP	32.8	33.6	35.8	37.1	32.1
BALANCE OF PAYMENTS ($m)					
Goods Balance	2068.7	1384.2	3136.4	1660.1	24564.6
Exports of Goods	149565.8	167896.5	177679.6	186708.1	184731.1
Growth Rate (% change)	18.9	12.3	5.8	5.1	-1.1
Imports of Goods	147497.1	166512.3	174543.2	185048.0	160166.5
Growth Rate (% change)	13.3	12.9	4.8	6.0	-13.4
Services and Other Balances	15343.8	19077.3	17321.7	20659.9	4914.1
Current Account Balance	17412.5	20461.5	20458.1	22320.0	29478.7
As % of GNP	16.0	16.8	15.3	15.2	20.0
Capital and Financial Account Balance	-13632.6	-6810.7	-4560.0	-5975.7	-29902.3
Balancing Item	3521.8	-1476.9	-5491.5	-4488.6	5404.2
Overall Balance	7301.7	12173.9	10406.6	11855.7	4980.6
Official Foreign Reserves	85165.5	97336.6	107750.8	119616.8	124584.4
INFLATION (% CHANGE)					
Consumer Price Index	3.1	1.7	1.4	2.0	-0.3
GDP Deflator	3.1	2.6	1.2	1.5	-1.5

	1994	1995	1996	1997	1998
MONETARY AGGREGATES (% CHANGE)					
M1	2.3	8.3	6.7	1.7	-1.0
M2	14.4	8.5	9.8	10.3	30.2
M3	13.0	8.7	8.6	8.3	8.0
INTEREST RATES (PERIOD AVERAGE) (% PER ANNUM)					
Prime Lending Rate	5.82	6.37	6.26	6.30	7.49
Banks' 3-month Fixed Deposit Rate	3.00	3.50	3.41	3.47	4.60
Banks' Domestic 3-month Interbank Rate	3.62	2.60	2.92	4.06	5.27
3-month SIBOR – US$	4.76	6.01	5.52	5.74	5.56
EXCHANGE RATES (PERIOD AVERAGE) (S$ PER)					
US Dollar	1.5274	1.4174	1.4101	1.4848	1.6736
Pound Sterling	2.3377	2.2369	2.2017	2.4334	2.7722
Deutsche Mark	0.9423	0.9900	0.9377	0.8569	0.9522
100 Japanese Yen	1.4951	1.5154	1.2971	1.2277	1.2823
Malaysian Ringgit	0.5823	0.5651	0.5605	0.5353	0.4271
BANKING AND FINANCE					
Commercial Banks' Assets/Liabilities ($m)	201952.5	224578.7	252723.4	289572.3	309975.4
Growth Rate (% change)	18.6	11.2	12.5	14.6	7.0
Finance Companies' Assets/Liabilities ($m)	18997.7	21135.5	21189.4	22210.6	21941.9
Growth Rate (% change)	26.7	11.3	0.3	4.8	-1.2
Merchant Banks' Assets/Liabilities ($m)	45049.4	50253.1	53580.6	66661.2	60545.4
Growth Rate (% change)	6.7	11.6	6.6	24.4	-9.2
Asian Currency Units' Assets/Liabilities (US$m)	416345.4	478232.9	506870.2	557193.5	503609.9
Growth Rate (% change)	7.8	14.9	6.0	9.9	-9.6
INSURANCE					
Life Insurers' Assets/Liabilities ($m)	10542.2	13230.2	16626.5	19350.9	22265.4
Growth Rate (% change)	25.1	25.5	25.7	16.4	15.1
General Insurers' Assets/Liabilities ($m)	6483.9	7221.1	7996.1	8815.0	9066.1
Growth Rate (% change)	12.4	11.4	10.8	10.3	2.9
CPF					
Excess of Contributions Over Withdrawals ($m)	3977.6	6270.0	4078.3	4398.3	2370.5
DOMESTIC CAPITAL MARKET					
Net Funds Raised in Domestic Capital Market ($m)	13178.7	15864.5	15556.7	16536.4	17306.1

Statistical Annex

A.1 MONETARY STATISTICS: MONEY SUPPLY

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
MONEY SUPPLY (M1)	15,260.9	16,430.0	18,515.6	22,882.2	23,411.5	25,349.2	27,040.0	27,510.9	27,239.1	28,988.5
Currency in circulation	7,108.5	7,497.1	8,279.2	8,942.1	9,420.3	9,906.5	10,293.1	10,703.8	10,146.2	10,490.1
Demand deposits	8,152.4	8,932.9	10,236.4	13,940.1	13,991.2	15,442.7	16,746.9	16,807.1	17,092.9	18,498.4
Quasi-money	46,584.2	53,112.3	57,212.9	59,248.1	70,569.1	76,618.1	84,910.8	95,932.5	133,544.8	134,594.8
Fixed deposits	35,965.9	40,852.0	43,176.4	40,321.0	53,622.8	54,908.2	59,987.0	72,704.6	81,294.6	79,318.9
Savings and other deposits	9,458.0	11,338.5	13,295.4	18,091.7	16,350.1	20,894.8	24,079.3	22,594.4	51,673.7	54,704.4
S$NCDs	1,160.3	921.8	741.1	835.4	596.2	815.1	844.5	633.5	576.5	571.5
MONEY SUPPLY (M2)	61,845.1	69,542.3	75,728.5	82,130.3	93,980.6	101,967.3	111,950.8	123,443.4	160,783.9	163,583.3
Net deposits with non-bank financial institutions	20,647.3	23,107.4	25,753.6	29,239.1	31,854.5	34,769.3	36,543.9	37,322.6	12,797.1 2/	12,371.8
Finance companies	7,419.4	7,557.3	8,060.9	9,301.3	11,863.8	13,273.7	13,192.0	13,969.3	12,797.1	12,371.8
POSBank	13,227.9	15,550.1	17,692.7	19,937.8	19,990.7	21,495.6	23,351.9	23,353.3	–	–
MONEY SUPPLY (M3) 1/	82,492.4	92,649.7	101,482.1	111,369.4	125,835.1	136,736.6	148,494.7	160,766.0	173,581.0	175,955.1

1/ The M3 series has been revised to include Post Office Savings Bank's (POSBank) fixed deposits with MAS. For a more detailed explanation of this change, please refer to the January 1999 issue of the MAS Monthly Statistical Bulletin.

2/ From November 1998, with the acquisition of POSBank by The Development Bank of Singapore, POSBank's data has been incorporated as part of the banking system in M1 and M2, and not as a non-bank financial institution in M3.

A.2 MONETARY STATISTICS: OFFICIAL FOREIGN RESERVES[1/]

S$ million

End of Period	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**March 1999**
Total Foreign Reserves	48,521.3	55,802.8	65,788.4	77,866.8	85,165.5	97,336.6	107,750.8	119,616.8	124,584.4	124,327.4
Gold & Foreign Exchange	48,033.9	55,324.0	65,239.0	77,290.7	84,559.4	96,666.2	107,072.5	118,764.7	123,570.3	123,023.1
Reserve Position in the IMF	212.5	199.7	346.4	361.2	381.5	430.3	428.8	564.3	614.5	932.7
Special Drawing Rights (SDRs)	274.9	279.1	203.0	214.9	224.6	240.1	249.5	287.8	399.6	371.6

1/ Valued at book cost.

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

Period Average	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1st Qtr 1999**
US Dollar	1.8125	1.7276	1.6290	1.6158	1.5274	1.4174	1.4101	1.4848	1.6736	1.7026
100 Japanese Yen	1.2548	1.2843	1.2869	1.4568	1.4951	1.5154	1.2971	1.2277	1.2823	1.4631
Euro	–	–	–	–	–	–	–	–	–	1.9132
Pound Sterling	3.2262	3.0559	2.8762	2.4271	2.3377	2.2369	2.2017	2.4334	2.7722	2.7810
Swiss Franc	1.3075	1.2101	1.1621	1.0940	1.1184	1.2009	1.1425	1.0245	1.1563	1.1956
Australian Dollar	1.4157	1.3454	1.1978	1.0983	1.1166	1.0510	1.1040	1.1024	1.0518	1.0789
100 Korean Won	0.2563	0.2357	0.2087	0.2014	0.1900	0.1838	0.1754	0.1587	0.1204	0.1422
100 New Taiwan Dollar	6.7432	6.4415	6.4724	6.1279	5.7724	5.3382	5.1354	5.1752	5.0004	5.2198
Hong Kong Dollar	0.2327	0.2223	0.2104	0.2089	0.1976	0.1832	0.1823	0.1918	0.2160	0.2197
Malaysian Ringgit	0.6702	0.6283	0.6398	0.6277	0.5823	0.5651	0.5605	0.5353	0.4271	0.4479
Thai Baht	0.0708	0.0677	0.0641	0.0638	0.0607	0.0569	0.0556	0.0488	0.0409	0.0460
100 Indonesian Rupiah	0.0984	0.0886	0.0802	0.0775	0.0707	0.0632	0.0606	0.0536	0.0173	0.0195

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

A.4 MONETARY STATISTICS: DOMESTIC INTEREST RATES

Per Cent Per Annum

Period Average	1990	1991	1992	1993	1994	1995	1996	1997	1998	1st Qtr 1999
BANKS[1]										
Prime Lending Rate	7.32	7.61	6.01	5.39	5.82	6.37	6.26	6.30	7.49	5.81
Fixed Deposit Rate										
3-month	4.67	4.63	2.86	2.30	3.00	3.50	3.41	3.47	4.60	1.69
6-month	5.11	4.97	3.09	2.54	3.26	3.77	3.67	3.72	4.66	2.05
12-month	5.51	5.06	3.34	2.84	3.54	4.11	4.01	4.02	4.82	2.47
Savings Deposit Rate	3.50	3.69	2.14	1.62	2.31	2.81	2.72	2.75	3.11	1.39
FINANCE COMPANIES[2]										
Fixed Deposit Rate										
3-month	5.11	4.73	2.90	2.44	3.28	3.28	3.14	3.32	4.61	1.77
6-month	5.45	4.99	3.16	2.68	3.52	3.68	3.48	3.62	4.73	2.18
12-month	5.81	5.17	3.54	3.16	3.99	4.20	3.93	4.03	4.93	2.60
Savings Deposit Rate	4.11	4.12	2.48	1.95	2.33	2.56	2.50	2.55	3.04	1.41
POSBANK										
Savings Deposit Rate for amounts										
Up to $50,000[3]	3.90	4.42	2.88	2.31	2.50	2.88	2.56	2.56	3.33	1.13
Exceeding $50,000[3]	2.90	3.42	2.10	1.56	1.75	2.25	2.25	2.31	3.55	1.38
INTERBANK RATE										
1-month	6.58	4.60	2.51	2.19	3.36	2.33	2.82	4.12	5.09	1.56
3-month	6.63	4.76	2.66	2.40	3.62	2.60	2.92	4.06	5.27	1.85
SIBOR-US$										
1-month	8.31	5.99	3.82	3.23	4.50	5.96	5.45	5.64	5.57	4.96
3-month	8.30	6.01	3.87	3.32	4.76	6.01	5.52	5.74	5.56	5.00
6-month	8.33	6.09	3.96	3.43	5.09	6.12	5.58	5.83	5.54	5.04

1 Average of 10 leading banks.

2 Average of 10 leading finance companies.

3 Prior to April 1998, the limit was set at $100,000.

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

B.1 FINANCIAL STRUCTURE: NUMBER OF FINANCIAL INSTITUTIONS IN SINGAPORE

End-March	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
BANKS	141	137	131	128	132	140	143	152	154	142
Local[1]	13	13	13	13	13	12	12	12	12	9
Foreign	128	124	118	115	119	128	131	140	142	133
Full banks	22	22	22	22	22	22	22	22	22	22
Restricted banks	14	14	14	14	14	14	14	13	13	13
Offshore banks	92	88	82	79	83	92	95	105	107	98
(Banking offices including head offices and main offices)	(422)	(431)	(439)	(435)	(446)	(463)	(473)	(482)	(474)	(561)
ASIAN CURRENCY UNITS	199	198	196	195	198	209	214	224	226	205
Banks	131	127	121	118	123	132	135	144	146	135
Merchant banks	67	70	75	77	75	77	79	80	80	70
Others	1	1	0	0	0	0	0	0	0	–
FINANCE COMPANIES	28	27	27	27	27	23	22	19	19	15
(Finance companies' offices including head offices)	(137)	(135)	(129)	(130)	(131)	(128)	(128)	(125)	(119)	(109)
MERCHANT BANKS	68	71	76	78	76	77	79	80	80	70
INSURANCE COMPANIES	124	135	136	140	142	141	146	154	164	159
Direct insurers	57	60	60	58	58	58	59	59	61	59
Professional reinsurers	25	29	32	36	36	35	38	45	51	49
Captive insurers	42	46	44	46	48	48	49	50	52	51
REPRESENTATIVE OFFICES	45	49	52	52	50	56	57	64	69	68
Banks	42	46	50	50	47	53	54	61	67	68
Merchant banks	3	3	2	2	3	3	3	3	2	–
STOCKBROKING COMPANIES	57	63	71	72	78	81	82	95	89	78
SES member companies	26	26	26	33	33	33	33	33	32	30
SES non-member companies	31	37	45	39	45	48	49	62	57	48
INVESTMENT ADVISERS	60	81	93	108	125	136	151	162	156	148
INTERNATIONAL MONEY BROKERS	8	7	7	8	10	11	10	8	9	9
SIMEX MEMBERS										
Corporate clearing members	37	39	37	39	38	39	38	36	36	33
Corporate non-clearing members	43	39	36	30	31	30	27	29	26	22
Individual members	279	277	264	371	387	411	443	470	473	520
Commercial associate members	11	12	12	12	12	12	12	11	11	16

[1] All local banks are full banks.

C.1 COMMERCIAL BANKS: ASSETS & LIABILITIES

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Cash in hand	471.2	532.9	543.1	578.3	593.5	688.8	811.2	802.2	998.2	1,034.1
Balances with MAS	3,486.3	4,227.4	4,764.5	5,198.9	5,564.3	6,471.8	7,095.4	7,702.2	5,430.8	5,733.6
S$NCDs held	296.6	271.7	198.6	180.3	71.0	104.9	198.5	212.5	175.0	175.0
Amounts due from banks	55,205.7	47,683.7	57,724.2	62,516.6	79,152.9	79,837.0	86,112.6	99,935.3	106345.0	122,731.5
In Singapore	18,438.4	12,058.4	11,936.4	17,401.5	28,411.2	30,926.6	33,555.1	30,220.6	38,215.6	42,740.3
ACUs	16,922.7	17,900.2	22,703.6	21,328.8	26,373.8	25,398.6	24,851.9	34,517.1	29,216.6	36,624.5
Outside Singapore	19,844.6	17,725.0	23,084.2	23,786.3	24,367.9	23,511.8	27,705.6	35,197.5	38,912.8	43,366.7
Money market investments	1,988.9	3,362.0	4,660.0	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	8,103.7	8,739.8
Treasury bills	1,988.9	3,362.0	4,660.0	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	8,103.7	8,739.8
Other investments	10,376.8	10,862.9	11,717.1	13,177.5	14,608.2	16,637.6	18,694.3	19,667.5	27,128.1	27,602.6
In Singapore	10,035.2	10,532.3	11,448.0	12,777.3	13,439.6	15,508.4	17,400.4	18,340.0	25,772.4	26,149.6
Government securities	5,934.0	6,403.1	6,945.8	7,975.1	8,681.3	10,092.5	11,599.0	12,145.1	18,392.1	19,621.9
Other securities	4,101.1	4,129.1	4,502.2	4,802.2	4,758.3	5,415.9	5,801.4	6,194.9	7,380.3	6,527.7
Outside Singapore	341.6	330.7	269.2	400.3	1,168.7	1,129.2	1,293.9	1,327.5	1,355.8	1,453.0
Loans and advances to non-bank customers	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	148,360.3
of which bills financing	4,952.0	5,466.0	5,710.3	5,835.9	6,247.8	6,879.2	8,693.4	9,363.5	4,924.5	4,503.9
Fixed and other assets	4,480.0	5,143.8	4,556.0	5,346.0	6,100.3	6,203.2	6,884.7	11,270.6	10,152.8	11,661.7
LIABILITIES										
Paid-up capital and reserves	8,623.1	9,748.0	11,379.3	13,296.3	15,685.3	18,904.1	20,977.3	23,709.6	23,323.8	23,308.5
Deposits of non-bank customers	63,979.7	72,241.1	78,483.2	85,400.8	99,032.2	108,885.5	118,201.5	124,143.0	162,310.3	165,236.7
S$NCDs issued	1,457.0	1,193.4	939.7	1,015.7	667.2	920.0	1,043.0	846.0	751.5	746.5
Amounts due to banks	52,697.1	45,002.1	54,397.4	62,264.7	77,295.1	86,063.1	101,576.8	125,856.1	105,301.7	116,295.1
In Singapore	14,512.3	10,419.7	11,862.8	16,626.7	25,125.5	29,881.0	34,328.6	31,134.2	29,769.5	34,988.5
ACUs	15,309.9	13,307.0	15,994.9	20,450.0	24,993.0	26,293.3	31,293.4	50,049.6	43,034.2	47,170.9
Outside Singapore	22,874.9	21,275.4	26,539.8	25,188.0	27,176.6	29,888.8	35,954.8	44,672.3	32,497.9	34,135.7
Amounts borrowed from other creditors	683.0	877.9	1,096.3	1,101.6	1,337.6	1,369.8	1,423.9	1,316.0	519.3	530.7
Bills payable	726.1	633.8	566.7	752.2	511.6	503.4	589.2	552.5	478.8	588.6
Other liabilities	5,836.1	6,397.2	6,439.8	6,419.0	7,423.6	7,932.8	8,911.7	13,149.2	17,289.2	19,332.4
Total Assets/Liabilities	134,002.0	136,093.4	153,302.4	170,250.4	201,952.5	224,578.7	252,723.4	289,572.3	309,974.5	326,038.5

C.2 COMMERCIAL BANKS: LOANS AND ADVANCES BY INDUSTRIAL CLASSIFICATION

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
Agriculture, mining and quarrying	85.6	96.9	86.5	105.5	119.8	159.3	132.8	187.6	223.6	196.1
Manufacturing	7,488.9	8,122.6	8,380.4	8,353.4	8,856.2	11,003.1	12,248.2	12,472.0	12,249.2	12,169.6
Building and construction	7,116.2	8,602.1	9,285.0	11,394.1	13,509.9	16,712.9	21,401.2	26,234.7	25,580.0	25,087.4
Housing loans	5,748.1	6,976.3	8,626.3	11,718.5	14,702.8	17,482.8	20,402.3	22,934.8	31,788.5	32,414.7
General commerce	13,686.1	15,694.7	17,188.8	17,732.6	19,442.6	21,643.9	23,931.8	26,349.5	21,549.1	20,843.9
Transport, storage and communication	1,736.7	1,816.9	1,939.8	1,837.8	1,902.2	2,178.1	2,618.7	3,575.7	4,459.7	4,460.9
Non-bank financial institutions	9,923.0	10,317.9	11,250.2	13,132.5	13,644.4	16,888.6	19,448.3	20,997.4	22,724.1	21,413.4
Professional and private individuals	7,752.3	8,290.2	8,135.5	9,352.8	13,786.0	16,889.5	20,256.1	22,775.4	21,766.1	21,333.7
Others	4,159.4	4,091.5	4,246.5	4,826.9	5,010.2	6,015.8	6,548.3	7,716.5	11,300.6	10,440.5
Total	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	148,360.3

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

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
Overdrafts	17,004.6	16,682.3	16,237.6	19,585.6	23,620.2	26,965.7	30,306.9	36,063.2	32,680.6	30,774.6
Term loans	31,554.3	37,012.4	41,531.1	47,456.1	55,238.2	68,394.5	81,518.5	90,805.3	109,009.0	108,144.1
Bills discounting	4,952.0	5,466.0	5,710.3	5,835.8	6,247.8	6,879.2	8,693.4	9,363.5	4,924.5	4,503.9
Trust receipts	4,185.5	4,848.3	5,659.9	5,576.7	5,867.9	6,734.6	6,468.9	7,011.8	5,026.7	4,937.7
Total	57,696.4	64,009.1	69,138.9	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	148,360.3

C.4 COMMERCIAL BANKS: TYPE OF DEPOSITS INCLUDING S$NCDs

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
Demand	9,169.9	10,290.8	11,635.0	15,765.4	15,787.6	17,537.8	18,862.7	18,297.4	18,427.1	20,778.9
Fixed	44,407.3	49,528.9	52,136.9	49,877.9	65,083.2	67,389.6	71,802.7	80,089.1	88,658.1	85,868.5
Savings	10,009.8	11,981.1	14,208.8	16,895.3	16,900.2	23,501.3	27,168.2	25,439.4	54,862.4	58,226.3
S$NCDs (net)	1,160.4	921.7	741.1	835.4	596.2	815.1	844.5	633.5	576.5	571.5
Others	392.6	440.3	502.5	2,862.1	1,261.1	456.8	368.0	317.2	362.7	362.9
Total	65,140.1	73,162.7	79,224.3	86,236.2	99,628.3	109,700.6	119,046.0	124,776.5	162,886.8	165,808.2

C.5 COMMERCIAL BANKS: LIQUIDITY POSITION

S$ million

Period Average	1990	1991	1992	1993	1994	1995	1996	1997	1998	1st Qtr 1999
1) Liabilities Base	55,170.1	64,846.8	73,389.7	80,743.0	87,580.0	100,138.0	114,828.5	122,777.4	134,282.3	158,277.6
2) Liquid Assets										
(a) Minimum Requirement	13,240.8	15,563.2	17,613.5	19,378.3	21,019.2	24,033.1	27,558.9	29,466.6	30,125.4	33,238.3
(b) Total Actual Liquid Assets	13,596.4	16,099.9	18,394.9	20,232.9	21,932.2	25,039.1	28,632.1	30,556.7	31,968.1	36,559.2
(c) Free Liquid Assets (b) – (a)	355.6	536.7	781.3	854.6	913.0	1,006.0	1,073.3	1,090.2	1,842.7	3,320.9
3) Liquidity Ratios	24.6	24.8	25.1	25.1	25.0	25.0	24.9	24.9	23.8	23.1

D.1 FINANCE COMPANIES: ASSETS & LIABILITIES

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Reserves with MAS	456.5	464.6	493.6	578.7	728.2	836.1	812.7	871.8	401.7	387.1
Deposits with banks and other financial institutions	2,389.3	2,478.7	2,207.2	1,802.2	2,333.6	2,666.1	2,165.9	1,904.2	2,721.8	2,589.6
Banks	1,087.6	1,511.2	1,448.0	1,197.0	1,830.9	1,998.3	1,734.1	1,628.1	2,408.1	2,370.9
Other institutions	1,301.6	967.5	759.2	605.2	502.7	667.8	431.8	276.1	313.7	218.7
Loans and advances	7,765.7	8,666.3	9,563.7	11,516.8	14,708.6	16,251.9	16,762.7	17,900.2	16,779.4	16,199.7
Housing loans	1,606.2	1,523.9	1,473.6	1,826.9	2,314.2	2,637.3	3,221.1	3,721.7	3,821.2	3,816.1
Hire purchase	2,076.8	2,384.1	3,045.9	4,245.7	5,616.1	5,580.2	4,982.4	4,958.8	4,331.6	4,111.6
Lease finance	180.9	156.0	114.9	84.0	46.2	20.2	8.7	6.1	2.4	2.5
Others	3,901.8	4,602.3	4,929.3	5,360.2	6,732.0	8,014.2	8,550.5	9,213.7	8,624.2	8,269.6
Securities	579.0	614.5	702.3	845.5	942.9	1,089.8	1,139.4	1,201.6	1,705.2	1,703.2
Other assets	233.1	235.7	240.9	251.2	284.5	291.6	308.8	332.8	333.8	336.0
LIABILITIES										
Capital and reserves	1,415.8	1,510.3	1,678.9	1,850.2	2,202.9	2,621.0	3,014.7	3,268.5	3,371.2	3,325.0
Deposits	8,397.2	8,972.1	9,550.9	10,567.7	13,790.3	15,417.8	15,071.6	15,611.8	15,344.6	14,794.9
Fixed	7,719.2	8,323.8	8,685.1	9,729.2	12,345.5	13,584.6	13,311.8	15,124.9	14,882.9	14,299.0
Savings	273.2	296.2	342.4	350.5	320.5	348.8	371.6	392.7	341.7	364.9
Others	404.9	352.1	523.4	488.0	1,124.4	1,484.4	1,388.2	94.2	120.0	130.9
Borrowings	263.1	528.2	744.8	1,113.2	1,248.1	1,215.0	1,381.9	1,398.0	1,180.4	1,058.7
Other liabilities	1,347.5	1,449.2	1,232.9	1,463.3	1,756.4	1,881.7	1,721.2	1,932.2	2,045.6	2,036.9
Total Assets/Liabilities	11,423.6	12,459.8	13,207.6	14,994.4	18,997.7	21,135.5	21,189.4	22,210.6	21,941.9	21,215.5

E.1 MERCHANT BANKS: CONSOLIDATED ASSETS AND LIABILITIES[1]

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Amounts due from banks	12,920.6	11,573.2	11,343.3	15,828.2	18,590.9	21,678.6	21,796.7	28,222.0	27,632.0	27,398.9
In Singapore	664.0	682.2	616.8	609.0	997.6	715.2	771.9	1,221.3	1,771.2	1,078.7
Outside Singapore[2]	12,256.6	10,891.0	10,726.5	15,219.2	17,593.3	20,963.4	21,024.8	27,000.7	25,860.8	26,320.2
Loans and advances to non-bank customers	11,271.9	10,590.8	15,691.2	11,545.8	13,138.8	15,258.2	17,348.9	21,777.5	19,321.2	19,357.0
Securities and equities	7,173.1	7,029.4	9,045.7	13,547.4	10,880.2	10,550.1	11,678.3	14,339.0	9,662.9	8,816.3
Other assets	970.4	829.1	706.4	1,283.9	2,439.4	2,766.3	2,756.7	2,322.8	3,929.2	2,499.3
LIABILITIES										
Capital and reserves	4,662.6	4,781.9	4,777.7	5,777.4	5,704.7	6,089.9	6,646.0	8,193.7	7,597.8	7,731.5
Amounts due to banks	19,229.5	18,039.7	19,286.3	27,473.3	28,668.5	30,543.6	34,571.8	41,111.3	30,363.7	28,348.8
In Singapore	543.7	565.6	499.7	471.2	399.0	657.5	481.5	974.2	1,083.2	422.6
Outside Singapore[2]	18,685.8	17,474.1	18,786.6	27,002.1	28,269.5	29,886.1	34,090.3	40,137.1	29,280.5	27,926.2
Borrowings from non-bank customers	6,845.9	5,956.4	11,099.4	6,711.3	7,453.2	8,779.6	9,030.0	13,814.9	17,751.6	17,219.6
Other liabilities	1,598.1	1,244.5	1,623.3	2,243.4	3,223.0	4,840.0	3,332.9	3,541.2	4,832.3	4,771.5
Total Assets/Liabilities	32,336.0	30,022.5	36,786.7	42,205.3	45,049.4	50,253.1	53,580.6	66,661.2	60,545.4	58,071.5

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

[2] Including Asian Currency Units.

E.2 MERCHANT BANKS: ASSETS AND LIABILITIES OF DOMESTIC OPERATIONS[1]

S$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Amounts due from banks	4,878.6	4,170.2	3,893.0	4,558.8	4,787.9	5,191.9	5,339.3	6,553.5	6,753.9	5,998.8
In Singapore	659.5	679.4	613.5	599.8	994.0	712.3	761.7	1,215.8	1,769.2	1,076.1
Outside Singapore[2]	4,219.1	3,490.8	3,279.5	3,959.0	3,793.9	4,479.6	4,577.6	5,337.7	4,984.7	4,922.7
Loans and advances to non-bank customers	1,637.0	1,747.6	1,334.5	1,398.0	1,131.0	1,295.1	1,246.6	1,089.8	834.2	793.1
Securities and equities	392.7	369.0	471.0	479.7	393.1	406.1	494.2	513.2	430.0	445.6
Other assets	419.7	401.8	285.9	422.5	387.6	351.7	416.4	555.8	574.5	492.5
LIABILITIES										
Capital and reserves	3,122.2	3,122.8	3,111.6	3,902.0	3,739.9	4,036.7	4,104.7	4,889.6	5,254.6	4,914.3
Amounts due to banks	1,424.6	1,400.4	1,318.2	1,304.9	1,376.3	1,509.7	1,720.2	2,046.5	1,855.6	1,433.6
In Singapore	502.6	520.3	442.6	381.9	299.2	412.0	297.7	284.6	183.3	181.3
Outside Singapore[2]	922.0	880.1	875.6	923.0	1,077.1	1,097.7	1,422.5	1,761.9	1,672.3	1,252.3
Borrowings from non-bank customers	2,233.8	1,759.0	1,209.1	1,185.2	1,229.4	1,324.9	1,194.3	1,082.0	786.0	815.5
Other liabilities	547.4	406.3	345.5	466.9	353.9	373.5	477.3	694.2	696.5	566.6
Total Assets/Liabilities	7,328.0	6,688.5	5,984.4	6,859.0	6,699.6	7,244.8	7,496.5	8,712.3	8,592.6	7,730.0

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

2 Including Asian Currency Units.

F.1 INSURANCE INDUSTRY: ASSETS AND PREMIUMS

S$ million

	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
TOTAL ASSETS OF INSURANCE INDUSTRY	8,360.7	9,793.9	11,899.9	14,199.2	17,026.1	20,451.3	24,622.6	28,165.9	31,331.5	
Direct Insurers	6,817.0	7,958.3	9,824.2	12,049.3	14,537.4	17,599.3	21,516.2	24,628.1	27,819.3	NA
Professional Reinsurers	1,055.7	1,253.1	1,421.0	1,455.5	1,649.8	1,969.3	2,222.0	2,581.0	2,689.5	NA
Captive Insurers	488.0	582.5	654.7	694.4	838.9	882.7	884.4	956.8	822.7	NA
GENERAL BUSINESS: GROSS PREMIUMS										
Total General Business	1,556.7	1,873.4	2,125.5	2,369.3	2,609.5	2,716.1	2,793.8	2,914.9	2,670.9	624.2
Domestic Business	875.6	953.1	1,059.1	1,230.0	1,397.2	1,544.7	1,616.4	1,645.4	1,527.9	396.0
Offshore Business	681.1	920.3	1,066.4	1,139.3	1,212.3	1,171.4	1,177.4	1,269.5	1,143.0	228.2
LIFE BUSINESS: PREMIUMS										
Premiums in Force (End Period)	1,122.8	1,392.9	1,711.7	2,070.4	2,547.8	3,016.0	3,538.0	4,202.5	4,468.6	4,474.0
New Business Premiums										
Annual Premium Policies	285.5	333.8	397.2	485.0	578.3	584.5	656.7	837.1	540.5	97.8
Single Premium Policies										
Life Insurance	9.3	9.1	393.4	480.1	509.9	551.5	699.5	1,288.1	529.3	251.7
Annuity	12.6	24.1	43.2	54.9	60.5	74.5	104.2	120.8	103.7	28.7

G.1 NON-BANK FINANCIAL INSTITUTIONS: CENTRAL PROVIDENT FUND BOARD

S$ million

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1st Qtr 1999P
EXCESS OF CONTRIBUTIONS OVER WITHDRAWALS (DURING PERIOD)	3,170.7	3,436.5	3,609.9	-522.2	3,977.6	6,270.0	4,078.3	4,398.3	2,370.5	1,141.4
Members' Contributions	7,174.2	8,101.4	9,028.2	10,427.0	11,278.5	13,536.1	14,623.0	15,873.8	15,999.8	4,065.5
Withdrawals*	4,003.5	4,664.9	5,418.3	10,949.2	7,300.9	7,266.1	10,544.7	11,475.5	13,629.3	2,924.1
Approved Housing Schemes[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	7,834.7	2,554.6
Under Section 15[2]	1,021.0	958.1	1,015.0	1,187.0	1,372.9	1,450.0	1,633.0	1,548.2	1,847.0	403.8
Medical Schemes[3]	240.1	265.4	275.7	292.1	335.2	360.0	389.5	420.8	441.0	94.1
Others	483.4	440.8	513.5	5,960.7	2,092.4	865.4	3,463.8	3,719.8	3,506.6	-128.4
INTEREST CREDITED TO MEMBERS' BALANCES (DURING PERIOD)	1,424.1	1,966.1	1,868.0	1,329.6	1,337.3	2,116.2	2,452.8	2,692.6	3,248.9	978.9
ADVANCED DEPOSITS WITH MAS (DURING PERIOD)[4]	4,211.0	5,478.3	6,058.0	1,782.8	4,617.3	8,184.6	8,075.9	6,337.8	5,967.5	2,286.7
INTEREST EARNINGS FROM INVESTMENTS (DURING PERIOD)	1,505.0	2,053.3	1,943.3	1,387.8	1,397.4	2,198.7	2,596.6	2,868.4	3,479.6	1,033.0
HOLDINGS OF GOVERNMENT SECURITIES (END PERIOD)[5]	32,120.0	32,120.0	45,620.0	44,620.0	43,620.0	45,120.0	51,620.0	57,120.0	59,620.0	59,620.0
MEMBERS' BALANCE (END PERIOD)	40,646.4	46,049.0	51,526.9	52,334.3	57,649.2	66,035.4	72,566.6	79,657.4	85,276.8	87,397.1

Source: Central Provident Fund Board

* Includes refunds and transfers to Reserve Account.
P Provisional.

1 Housing schemes include Public Housing and Residential Properties Schemes.
2 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).
3 Medical Schemes include Medisave & MediShield Schemes.
4 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

S$ million

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1st Qtr 1999
A NET FUNDS RAISED BY GOVERNMENT	5,117.9	6,243.9	6,757.9	2,538.0	5,519.1	10,417.9	10,096.6	6,626.4	11,491.5	4,776.0
1) Gross issue of Government securities[1]	1,850.0	2,300.0	17,700.0	3,260.0	3,750.0	7,200.0	12,150.0	10,460.0	12,800.0	2,300.0
Less:										
Redemption of Government securities	1,199.0	1,639.3	3,150.0	2,768.4	4,100.0	4,000.0	3,998.0	5,008.2	5,438.4	909.7
Government holdings of Government securities	-0.9	-1.0	–	-5.7	–	–	-2.8	-15.2	-0.1	–
Conversion from accumulated advance deposits	–	–	14,000.0	–	–	3,000.0	8,000.0	7,000.0	5,000.0	–
2) New advance deposits	4,466.0	5,582.2	6,207.9	2,040.7	5,869.1	10,217.9	9,941.8	8,159.4	8,829.8	2,785.7
3) Net issues of statutory boards' securities	–	–	–	–	–	–	–	–	300.0	600.0
B NEW CAPITAL RAISED BY THE PRIVATE SECTOR	3,036.6	1,057.7	2,434.2	8,168.8	4,732.7	1,680.0	3,150.6	3,928.0	1,606.0	125.5
1) Public issues of shares	898.5	278.6	515.0	5,832.2	1,399.5	644.6	906.2	1,379.3	411.2	66.0
2) Rights issues	1,486.5	686.2	1,150.6	1,352.3	2,050.0	571.5	1,154.8	1,769.6	822.2	24.4
3) Private placements of listed shares	651.6	92.9	768.6	984.3	1,283.2	463.9	1,089.6	779.1	372.6	35.1
C ISSUES OF DEBT SECURITIES	1,632.3	1,940.9	2,380.5	3,659.3	2,926.9	3,766.6	2,309.5	5,982.0	4,208.6	1,744.0
1) Listed bonds, debentures and loan stocks[2]	499.3	671.9	1,258.5	1,518.3	643.9	1,695.0	589.5	1,168.1	721.4	1,285.1
2) Unlisted bonds	395.0	719.0	812.0	1,325.0	1,808.0	1,784.6	1,620.0	4,813.9	3,425.2	458.9
3) Revolving underwriting facilities/ Note issuance facilities	728.0	450.0	130.0	615.0	445.0	280.0	–	–	–	–
4) Negotiable certificates of deposits[3]	10.0	100.0	180.0	201.0	30.0	7.0	100.0	–	62.0	–
Total net funds raised (A+B+C)	9,786.8	9,242.5	11,572.6	14,366.1	13,178.7	15,864.5	15,556.7	16,536.4	17,306.1	6,645.5

[1] Government registered stocks and securities, excluding Treasury bills.

[2] Singapore dollar-denominated bonds listed on the Stock Exchange of Singapore.

[3] Refers only to S$ reserve-free NCDs issued during the year.

I.1 ASIAN DOLLAR MARKET: ASSETS AND LIABILITIES

US$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Loans to non-bank customers	125,516.0	134,078.2	134,184.1	136,857.4	145,822.5	173,264.7	180,505.5	173,286.3	131,749.9	118,899.7
Interbank funds	239,119.8	197,028.2	194,757.8	214,276.8	234,338.5	258,769.8	278,743.1	330,685.5	330,193.3	321,580.9
In Singapore	8,744.6	8,221.1	9,726.4	12,716.9	17,106.7	18,591.6	22,357.2	29,846.3	25,930.5	27,205.6
Inter-ACU	34,440.2	26,626.4	26,740.3	31,713.5	36,356.6	39,669.5	40,236.8	48,882.9	40,696.6	40,174.1
Outside Singapore	195,935.0	162,180.7	158,291.1	169,846.4	180,875.2	200,508.7	216,149.1	251,956.3	263,566.2	254,201.2
NCDs held	1,740.4	1,781.1	1,884.5	2,899.5	3,917.7	6,450.4	7,952.7	5,837.0	3,378.7	3,164.0
Other Assets	24,019.2	24,837.5	24,552.2	32,069.4	32,266.7	39,747.8	39,668.8	47,384.7	38,288.0	42,000.5
LIABILITIES										
Deposits of non-bank customers	66,885.5	63,499.4	63,612.2	62,669.0	65,787.8	80,603.6	95,373.8	113,683.4	113,077.0	118,539.8
Interbank funds	309,427.1	281,813.4	279,821.3	308,940.1	333,537.8	376,106.5	389,469.6	414,526.2	365,433.9	333,701.9
In Singapore	11,955.8	14,258.8	18,194.7	18,502.4	22,676.3	25,133.5	25,257.4	32,271.9	20,742.4	25,327.0
Inter-ACU	34,438.1	26,624.1	26,741.6	31,716.6	36,354.3	39,670.2	40,243.3	48,905.3	40,694.4	40,178.5
Outside Singapore	263,033.2	240,930.5	234,885.0	258,721.1	274,507.2	311,302.8	323,968.9	333,349.0	303,997.1	268,196.4
NCDs issued	2,014.0	1,334.1	925.0	760.2	797.2	1,737.5	2,229.5	2,198.1	1,571.6	1,591.1
Other Liabilities	12,068.8	11,078.0	11,020.1	13,733.6	16,222.6	19,785.2	19,797.3	26,785.9	23,527.3	31,812.4
Total Assets/Liabilities	390,395.5	357,725.0	355,378.6	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9	485,645.1

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

US$ million

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
ASSETS										
Up to 7 days	71,920.0	57,253.1	66,710.8	78,267.1	75,774.0	89,709.1	102,544.6	131,356.6	117,190.0	120,705.0
Over 7 days to 1 month	82,234.9	71,974.0	68,542.8	77,557.8	76,180.8	84,731.7	88,029.3	106,318.6	100,885.7	101,382.2
Over 1 to 3 months	102,193.3	87,569.0	80,492.5	86,333.6	105,446.9	116,031.0	116,119.3	115,402.8	110,067.7	104,882.8
Over 3 to 12 months	67,399.9	66,520.6	69,957.1	69,544.2	81,102.7	102,093.3	112,104.8	112,918.7	95,641.1	82,759.9
More than 1 year	66,647.4	74,408.3	69,675.4	74,400.2	77,841.1	85,667.7	88,072.1	91,196.8	79,825.4	75,915.3
LIABILITIES										
Up to 7 days	99,804.7	87,149.5	87,561.6	108,432.5	110,093.2	123,729.0	147,901.2	165,240.8	159,157.6	172,794.9
Over 7 days to 1 month	104,839.1	98,496.2	101,664.4	109,383.7	104,555.7	129,946.3	136,728.0	150,252.5	141,014.5	137,465.5
Over 1 to 3 months	104,664.5	97,193.5	97,551.2	101,099.5	118,392.3	129,254.7	138,149.5	136,103.3	116,857.3	103,937.0
Over 3 to 12 months	61,433.3	57,516.3	53,313.0	55,177.2	71,221.4	81,408.7	65,738.6	87,882.6	68,616.1	52,259.5
More than 1 year	19,653.8	17,369.5	15,288.4	12,010.2	12,082.8	13,894.2	18,352.9	17,714.3	17,964.4	19,188.2
Total Assets/Liabilities	390,395.5	357,725.0	355,378.6	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9	485,645.1

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

US$ billion

End of Period	1990	1991	1992	1993	1994	1995	1996	1997	1998	March 1999
NET POSITION										
Up to 3 months	-53.0	-66.0	-71.1	-76.7	-75.6	-92.4	-116.1	-98.5	-88.8	-87.2
3 months to 1 year	6.0	9.0	16.7	14.3	9.9	20.7	46.4	25.0	27.0	30.5
More than 1 year	46.9	57.0	54.4	62.4	65.7	71.8	69.7	73.5	61.8	56.7
CLAIMS										
Up to 3 months	256.3	216.8	215.7	242.2	257.4	290.5	306.7	353.1	328.1	327.0
3 months to 1 year	67.4	66.5	70.0	69.5	81.1	102.1	112.1	112.9	95.6	82.8
More than 1 year	66.6	74.4	69.7	74.4	77.8	85.7	88.1	91.2	79.8	75.9
LIABILITIES										
Up to 3 months	309.3	282.8	286.8	318.9	333.0	382.9	422.8	451.6	417.0	414.2
3 months to 1 year	61.4	57.5	53.3	55.2	71.2	81.4	65.7	87.9	68.6	52.3
More than 1 year	19.7	17.4	15.3	12.0	12.1	13.9	18.4	17.7	18.0	19.2