

Our Mission: To promote sustained and non-inflationary economic growth and a sound and progressive financial services sector.  To promote sustained and non-inflationary economic growth and a sound and progressive financial services sector. 



Monetary Authority
of Singapore

Our Objectives: To conduct monetary policy, 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. 

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GLOSSARY

Members of the Board

MR LEE HSIEN LOONG

Chairman
Deputy Prime Minister
Finance Minister



MR LIM HNG KIANG

Deputy Chairman
Minister for Health
Second Minister for Finance



MR KHAW BOON WAN

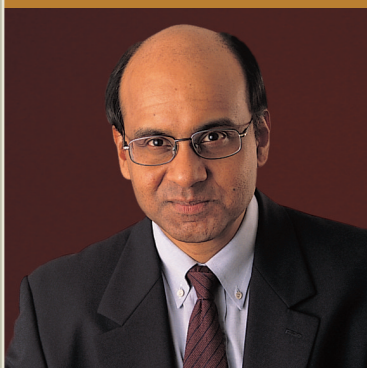
Member
Senior Minister of State
Ministry of Transport
Ministry of Information,
Communications & The Arts



**MR THARMAN
SHANMUGARATNAM**

Member

Senior Minister of State
Ministry of Trade and Industry,
Ministry of Education



MR CHAN SENG ONN

Member

Solicitor-General
Attorney General's Chambers



MR LIM SIONG GUAN

Member

Head
Civil Service
Permanent Secretary
Ministry of Finance



MR KOH YONG GUAN

Member

Managing Director



DR PHILIP N PILLAI

Member

Senior Partner
Shook Lin & Bok



MR LAM CHUAN LEONG

Member

Permanent Secretary
Ministry of the Environment
Chairman
Infocomm Development Authority
of Singapore



Chairman's Statement



LEE HSIEN LOONG | Chairman

2001 WAS A DIFFICULT YEAR FOR

Singapore. Hit by the sharp global IT downturn and the slowdown in the global economy, Singapore slipped into its worst recession since the mid-1980s. September 11 further dampened the already bleak outlook. As a result, the economy contracted by 2% in 2001.

Faced with a rapidly weakening economy, in July 2001 MAS shifted its monetary policy stance from a gradual and modest appreciation of the Singapore dollar to a neutral exchange rate policy. In October, as prospects worsened, MAS widened the policy band to allow for greater flexibility in managing the exchange rate.

After the initial shock, financial markets stabilised. At the beginning of the year, MAS narrowed the policy band while maintaining a neutral policy stance. The global economy, led by the US, is now showing clear signs of recovery. Reflecting the improved external environment, the Singapore economy has rebounded in the last two quarters. We now expect GDP growth of 2% to 4% in 2002.

Despite the economic uncertainties, MAS pressed on to further liberalise the financial sector. One significant development is the consolidation among the local banks. Well-executed integrations will produce a core of larger and stronger local banks, enjoying greater scale. Strong local banks, competing with quality international banks in a liberalised environment, will foster a more dynamic market and offer better services to consumers.

In June 2001, MAS announced a major package to further liberalise the domestic banking sector. MAS freed up the wholesale banking market and committed to upgrade progressively all Offshore Banks to Wholesale Bank status.

MAS continued to strengthen its regulatory and supervisory framework in step with consolidation and liberalisation of the financial industry.

Fifteen banks were awarded wholesale banking privileges in December 2001. Another five Wholesale Bank licences will be made available in 2002. We also enhanced the Qualifying Full Bank (QFB) privileges, and awarded QFB status to two more foreign banks, in addition to the four that received QFB status in 1999.

MAS further liberalised the Singapore dollar non-internationalisation policy to ease access to Singapore dollar credit by non-residents wishing to invest in or tap our capital markets.

MAS has now exempted all individuals and non-financial entities from our borrowing restrictions. Non-resident financial entities are still governed by the non-internationalisation policy, but we have lifted restrictions on foreign exchange options, asset swaps, cross-currency swaps and cross-currency repos. Financial institutions may lend any amount of Singapore dollar-denominated securities in exchange for Singapore dollar- or foreign currency-denominated collateral.

The calibrated pace and cumulative effect of the liberalisation measures over the last three years underscore our intention to broaden and deepen our foreign exchange, equity and debt capital markets, without compromising our ability to manage the Singapore dollar within its trade-weighted policy band. Hence, we have maintained the core stance of our Singapore dollar non-internationalisation policy, and still disallow non-resident borrowing of the Singapore dollar purely for currency speculation.

The changes to the Singapore dollar rules have increased participation by international investors and financial institutions in our capital markets. The debt market continues to grow strongly, with a record \$72 billion worth of corporate debt issued in 2001. More foreign companies have been listed on the Singapore Exchange (SGX).

MAS continued to strengthen its regulatory and supervisory framework in step with consolidation and liberalisation of the financial industry. The Securities and Futures Act and the Financial Advisers Act came into force in stages over the first nine months of 2002. The new legislation is structured flexibly to encourage innovation and consistency in regulation, and foster higher professional standards.

MAS also introduced a new risk-based capital framework for SGX member-brokers, tailored more directly to the business risks of individual firms.

Corporate governance and financial disclosure standards were further enhanced. MAS now requires banks to change auditing firms every five years, in order to enhance audit effectiveness. We announced a new liquidity supervision framework, tailoring requirements to the liquidity profile and risk management capabilities of banks, as part of the broader move towards risk-based supervision. We are now developing guidelines to encourage banks and insurance companies to better manage firm-wide risks, in particular internal controls, credit, market and liquidity risks.

Against the backdrop of September 11, MAS remains fully committed to the national and global effort against money laundering and terrorist financing.

In terms of organisation, the Board of Commissioners of Currency, Singapore, will merge with MAS by 31 March 2003. We expect to formalise the merger by October 2002. This will give MAS the full range of central banking functions.

The financial landscape is continuing to change. MAS will continue to monitor developments in the global economy and participate in international financial initiatives. We will adopt flexible and adaptable supervisory regimes and actively consult with industry so as to enhance the dynamism and competitiveness of our financial centre.

I wish to express my sincere thanks to Mr Chan Sek Keong and Mr Tharman Shanmugaratnam, for their many significant contributions to MAS and the financial sector. Mr Chan stepped down from the MAS Board in January 2002, having served as a member since 1992. Mr Shanmugaratnam relinquished the post of Managing Director in October 2001, and remains a board member. I would also like to welcome Mr Chan Seng Onn to the Board.


LEE HSIEN LOONG
 Chairman
 MONETARY AUTHORITY OF SINGAPORE

Organisation Structure

Managing Director

Mr Koh Yong Guan

Deputy Managing Director

Mr John Palmer

Deputy Managing Director

Ms Yeo Lian Sim

Assistant Managing Director (Banking)

Mrs Foo-Yap Siew Hong

Assistant Managing Director (Economics)

Dr Khor Hoe Ee

Assistant Managing Director (Financial Centre Development/ Planning, Policy and Communications)

Ms Teo Swee Lian

Assistant Managing Director (Securities and Futures)

Mr Shane Francis Tregillis

BANKING DEPARTMENT

Mrs Foo-Yap Siew Hong

Assistant Managing Director
(Banking)

Mrs Lim Shu Chiau

Executive Director

Mr Ravi Menon

Executive Director

INSURANCE DEPARTMENT

Mrs Hauw Soo Hoon

Executive Director

SECURITIES AND FUTURES DEPARTMENT

Ms Yeo Lian Sim

Deputy Managing Director

Mr Shane Francis Tregillis

Assistant Managing Director
(Securities and Futures)

Mr Tan Kim Kway

Executive Director
(Corporate Finance)

MARKET INFRASTRUCTURE AND RISK ADVISORY DEPARTMENT

Mr Enoch Ch'ng

Executive Director

SUPERVISORY POLICY DEPARTMENT

Mr Ravi Menon

Executive Director

SUPERVISORY LEGAL SERVICES DIVISION

Mr Ravi Menon

Executive Director

FINANCIAL CENTRE DEVELOPMENT DEPARTMENT

Ms Teo Swee Lian

Assistant Managing Director
(Financial Centre Development/
Planning, Policy and Communications)

ECONOMICS DEPARTMENT

Dr Khor Hoe Ee

Assistant Managing Director
(Economics)

INTERNATIONAL DEPARTMENT

Dr Khor Hoe Ee

Assistant Managing Director
(Economics)

Dr Lam San Ling

Director

**RESERVE MANAGEMENT
DEPARTMENT**

Mr Ong Chong Tee
Executive Director

INTERNAL AUDIT DEPARTMENT

Mr Tai Boon Leong
Director

**MONETARY MANAGEMENT
DIVISION**

Mr Ong Chong Tee
Executive Director

**PLANNING, POLICY AND
COMMUNICATIONS DEPARTMENT**

Ms Teo Swee Lian
Assistant Managing Director
(Financial Centre Development/
Planning, Policy and Communications)

**CORPORATE SERVICES
DEPARTMENT**

Mrs Shih-Teo Siew Poh
Executive Director

FINANCE DEPARTMENT

Mr Koh Ching Ang
Executive Director

HUMAN RESOURCE DEPARTMENT

Mr Ong Chong Tee
Executive Director

Ms Mimi Ho
Executive Director

**INFORMATION TECHNOLOGY
DEPARTMENT**

Mrs Huay Khee Chuang
Executive Director

FINANCIAL SECTOR SUPERVISION

BANKING DEPARTMENT

The Banking Department (BD) is responsible for prudential oversight of all commercial banks, merchant banks, and finance companies. BD licenses these institutions and continuously monitors their soundness through off-site surveillance and on-site examination. The Department also actively promotes the adoption of international best practice in risk management and corporate governance in the banking industry.

INSURANCE DEPARTMENT

The Insurance Department (ID) is responsible for the regulation and supervision of the insurance industry. ID has prudential oversight over insurance companies and insurance brokers.

SECURITIES AND FUTURES DEPARTMENT

The Securities and Futures Department (SFD) has supervisory responsibility for capital markets. It regulates the origination and trading of securities and their derivatives products, supervises investment advisory and fund management activities, and oversees take-over and corporate governance issues.

MARKET INFRASTRUCTURE AND RISK ADVISORY DEPARTMENT

The Market Infrastructure and Risk Advisory Department (MIR) provides specialist supervisory resources in technology and risk management. MIR oversees payment and settlement systems, and other financial market

infrastructure, to foster their safety, efficiency and progressiveness. MIR also facilitates the strategic use of technologies to support Singapore's development as a world-class financial centre.

SUPERVISORY POLICY DEPARTMENT

The Supervisory Policy Department (SPD) formulates capital and prudential policies for a sound and dynamic financial sector, and policies to promote competition and efficiency. It is also responsible for providing a framework for the integrated supervision of the financial sector.

SUPERVISORY LEGAL SERVICES DIVISION

The Supervisory Legal Services Division (SLS) provides legal services to MAS and assists in developing a best practice regulatory framework for a sound and progressive financial centre.

FINANCIAL CENTRE DEVELOPMENT

FINANCIAL CENTRE DEVELOPMENT DEPARTMENT

The Financial Centre Development Department (FDD) is responsible for developing and promoting Singapore as an international financial centre. It identifies new financial activities that grow the breadth and depth of the financial centre, and proactively markets Singapore's financial centre to existing and new players. FDD also facilitates the development of a world-class financial sector workforce in Singapore. FDD has offices in Singapore, New York and London.

MONETARY POLICY, RESERVE MANAGEMENT AND INTERNATIONAL RELATIONS

ECONOMICS DEPARTMENT

The Economics Department (ED) formulates monetary policy appropriate for sustained and non-inflationary economic growth in Singapore, monitors and assesses systemic financial stability, and closely follows and evaluates developments in the G-3 and regional economies. It also provides analyses and forecasts to support policy decisions, advises on international economic and financial issues, undertakes in-depth studies on issues faced by the Singapore economy, and engages in public economics education.

MONETARY MANAGEMENT DIVISION

The Monetary Management Division (MMD) implements Singapore's monetary policy by managing the trade-weighted Singapore-dollar exchange rate within its targeted policy band. It also conducts money market operations to manage liquidity in the banking system. MMD is also responsible for the issuance of Singapore Government Securities (SGS), as well as overseeing the growth and development of the SGS market.

RESERVE MANAGEMENT DEPARTMENT

The Reserve Management Department (RMD) is responsible for investing MAS' foreign reserves in major bond and currency markets globally, including managing the tranche of reserves outsourced to external fund managers. RMD's portfolio managers are based in Singapore, New York and London.

INTERNATIONAL DEPARTMENT

The International Department (INT) develops and shapes an MAS-wide perspective on international monetary and financial issues, enabling MAS and Singapore to play an active and constructive role in international and regional financial fora. Working closely with its counterparts at other Singapore ministries and agencies, INT promotes the development of strong relations with foreign central banks and finance ministries, and international financial institutions.

CORPORATE RESOURCE MANAGEMENT**CORPORATE SERVICES DEPARTMENT**

The Corporate Services Department (CSD) oversees logistics and administration. It manages and provides administrative support for events hosted or organised by MAS. It is also responsible for tenancy, property, security and building related matters.

FINANCE DEPARTMENT

The Finance Department (FD) is responsible for managing the financial resources of the Authority. Its functions include the control and budgeting of MAS' assets and liabilities, and accounting, settlement, safe-custody, counterparty risk management, performance evaluation and taxation issues relating to MAS' Global Investments. FD also administers the MAS Electronic Payment System and the issue of SGS, as well as maintains the current accounts of banks and interna-

tional monetary organisations and financial institutions. The department also oversees the Net Economic Value function in MAS.

HUMAN RESOURCE DEPARTMENT

The Human Resource Department (HRD) formulates and implements MAS' human resource management policies. These include attracting talent for the organisation, managing and retaining talent through a fair performance appraisal system and a competitive remuneration package, as well as developing talent through needs-based training and development programmes.

INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology Department (ITD) promotes the strategic use of technology and provides IT services to the departments of MAS. ITD also manages two nation-wide financial networks, namely MASNET and the MAS Electronic Payment System (MEPS). The networks provide the infrastructure for efficient electronic communication and collaboration in the financial sector; and, minimise payment risks for Singapore's banking system, respectively.

INTERNAL AUDIT**INTERNAL AUDIT DEPARTMENT**

The Internal Audit Department (IAD) conducts financial, operational and information systems audits of MAS' operations. IAD checks for compliance

with policies, guidelines, laws and regulations, and evaluates the reliability of financial records, and the security and integrity of information systems. In addition to seeking improvement in internal efficiencies, IAD also works with other departments to review controls in new systems and business processes.

MANAGING DIRECTOR'S OFFICE**PLANNING, POLICY AND COMMUNICATIONS DEPARTMENT**

The Planning, Policy and Communications Department (PPC) is responsible for strategic and corporate planning, organisational development, and corporate communications. PPC facilitates the formulation of organisational policies and strategies and drives the strategic and corporate planning processes. It facilitates the building of a more cohesive and integrated organisation by fostering an open and innovative culture within MAS. PPC is responsible for external communications, including media relations.

Regulation and Development of the Financial Sector:

▣ The reforms and initiatives implemented by MAS in recent years have been in tune with the needs of the financial sector, ensuring dynamism and innovation.

Prudential regulation and policies will help further develop a financial system that is sound, resilient and well prepared for external shocks.

Regulation and Development of the Financial Sector

REGULATORY INITIATIVES

Financial sector reforms continued to be a focus in 2001. A series of regulatory and developmental initiatives were introduced to encourage greater dynamism and innovation. The objective is to create an environment for greater development of the financial sector without compromising the prudential soundness of financial institutions or undermining systemic stability.

Legislative Changes

BANKING ACT AMENDMENTS

On 18 July 2001, the Banking (Amendment) Act brought into force several new policy measures. These measures included the separation of financial and non-financial businesses of local banking groups, the revision of the rules on property-related loans to more effectively monitor banks' exposure to the property sector, and the revision of ownership rules to ensure that the control of Singapore-incorporated banks continues to rest with individuals or groups that will act in a manner consistent with national interest and the interest of the bank.

SECURITIES & FUTURES ACT AND FINANCIAL ADVISERS ACT

The Securities and Futures Act (SFA) and the Financial Advisers Act (FAA) (See Box 1.) were passed by Parliament in October 2001 after having gone through a public consultation process.

The SFA consolidates legislation relating to capital markets activities in Singapore. It puts into place major policy reforms and updates the legislative framework to keep abreast of new developments in Singapore's capital markets. The SFA also provides the legislative framework for a disclosure-based regime and enhances the present enforcement framework for market misconduct. (See Box 2.)

The FAA consolidates and streamlines the different regulatory regimes governing the provision of financial advisory services, including the sale of collective investment schemes and life insurance, into a single piece of legislation. The FAA will provide a more flexible and integrated regulatory framework for entities engaging in financial advisory activities. It will also promote consistent professional standards across the industry.

The SFA is being implemented in phases, and the final phase will be introduced by the third quarter of 2002. The FAA will also come into force at the same time.

Box 1

THE INTRODUCTION OF THE FINANCIAL ADVISERS ACT (FAA)

THE FAA AIMS TO IMPROVE THE LEVEL OF service and the quality of advice delivered by financial advisers, thereby enhancing consumer and investor confidence in the professionalism and competency of financial advisers in Singapore. Consumers and investors will have a wider choice of investment products to choose from as distributors and product manufacturers would be able to cross-sell each other's products.

The range of policy initiatives introduced under the FAA includes:

BUSINESS CONDUCT REQUIREMENTS

All financial advisers are required to comply with business conduct requirements stipulated under the FAA. Having a common set of business conduct requirements applicable to all market intermediaries engaging in financial advisory activities ensures a level-playing field and consistent, professional standards across the industry.

REPRESENTATIVE TO ACT FOR ONLY ONE FINANCIAL ADVISER

Under the FAA, a representative can only act for one financial adviser. The objectives of this provision are two-fold. Firstly, to provide clarity on the status of the representatives, the financial advisers they represent, and more importantly, where responsibility rests for complaints and redress. Secondly, to ensure that financial advisers monitor and supervise their representatives closely at all times.

USE OF THE TERM "INDEPENDENT"

As the investing public may have certain expectations of financial advisers who call themselves "independent", it is important to ensure that the term "independent" is used in a proper manner. The Financial Advisers Regulations stipulate three requirements that a financial adviser has to meet to call itself "independent". First, it does not receive any commission or other benefit from one or more product providers that may create a product bias. Second, it operates free from any direct or indirect

restriction relating to the product recommended. Third, it operates without any conflict of interest created by a connection to or association with any product provider.

STANDARDS OF CONDUCT FOR FINANCIAL ADVISERS

MAS will introduce a set of guidelines on Standards of Conduct for Financial Advisers (the Guidelines), which set out the general standards expected of financial advisers and their representatives in conducting financial advisory activities. The aim of the Guidelines is to help foster higher standards of professionalism and enhance confidence in the financial services industry. ■

Risk-based Regulation

CAPITAL REQUIREMENTS For Banks

MAS is developing a framework that sets capital adequacy requirements according to the riskiness of the banks' activities, as part of its ongoing efforts to move towards a more risk-sensitive supervisory framework. MAS will also refine its policies on credit risk transfer instruments and mechanisms, taking into account changes in the industry that have occurred since the release of MAS' guidelines on asset securitisation and credit derivatives in 2000. MAS will work closely with the industry in preparation for the implementation of the New Basel Accord. MAS will also focus on developing a framework for validation of internal ratings systems of banks that desire to adopt the internal risk-based approaches under the New Accord.

For Insurance Companies

In developing the risk-based capital (RBC) framework for insurance companies, members of industry bodies, the actuarial profession, and the accounting profession were invited to join several work groups, to examine specific issues.

- (a) The Risk-based Capital Work Group for Life Insurance Business, formed in November 2000, reviewed the valuation and solvency framework for life insurance in Singapore.

Following the issue of its Exposure Draft in February 2001, the Work

Group issued a discussion paper on the Valuation of Assets and Liabilities for Traditional Life Policies in August 2001.

Another paper on capital adequacy requirements for life insurers in Singapore was circulated for industry feedback in February 2002. To facilitate discussions within the industry, the Work Group also held industry-wide briefings on its recommendations. The Work Group is embarking on an industry-wide testing of the proposed framework to investigate its potential impact on the market.

- (b) Another work group comprising actuaries and MAS representatives was formed in April 2001 to work out the details for the implementation of the certification of policy liabilities for general insurance.
- (c) A new work group involving actuarial and accounting professionals was formed in April 2002 to develop the RBC framework for the general insurance business.

For Member Companies of SGX

MAS completed its study of a RBC adequacy framework for licensed securities dealers and futures brokers that are member companies of Singapore Exchange (SGX). The new RBC framework will enhance the capital efficiency of SGX member companies and lower the entry hurdle for legitimate and

qualified players to be admitted into Singapore's capital markets. This enhanced efficiency is achieved without compromising regulatory effectiveness, as the RBC framework is more risk-sensitive and results in more appropriate capital charges for business risks undertaken by SGX members. The new framework will form part of the Securities and Futures Regulations.

The RBC framework is benchmarked to international best practices, and has been tested with actual data from SGX member companies. MAS will continually assess the framework and make refinements, where necessary, to ensure that it is up-to-date and relevant. To facilitate a smooth migration to the RBC framework, existing member companies of SGX will be given a 12-month grace period, beginning from the date of implementation, to transit to the new capital regime.

MINIMUM LIQUID ASSETS REQUIREMENTS FOR BANKS

During the year, MAS announced a new risk-based Liquidity Supervision Framework for banks in Singapore. The new Framework is a move away from the existing "one-size-fits-all" 18% statutory minimum liquid assets (MLA) requirement to one that is based on a bank's own liquidity risk profile and risk management capabilities. The new liquidity requirements will lower banks' prudential costs without compromising their finan-

cial soundness or the stability of the financial system.

Under the new Framework, a bank can choose to remain on the existing statutory MLA requirement or move to a risk-determined MLA requirement specific to the bank. The approach consists of MAS' periodic assessment of a bank's liquidity risk management systems and processes, as well as the daily determination of a bank's short-term liquidity risk exposure as estimated by the volatility of its projected Singapore dollar cashflows.

In the second phase of the new Framework, a bank may be allowed to adapt its own liquidity risk model to determine its liquid asset requirement. A bank will be allowed to do so once it has developed and tested its internal model against industry data.

Supervisory Initiatives SUPERVISING THE SINGAPORE EXCHANGE

Following SGX's demutualisation and conversion to a commercial entity, the operating and risk profile of SGX has changed. In response to this, MAS as the regulator of SGX, has enhanced its supervisory regime for SGX.

The groundwork has been laid to build a more pro-active, systematic and integrated supervisory approach. Going forward, a co-ordinated SGX supervisory

programme will seek to ensure that there are no gaps or duplication of efforts in the oversight of SGX, regulation of market activities and supervision of licensees. MAS will continue to work closely with SGX on the supervision of its members, with SGX remaining a frontline regulator. A detailed supervisory plan for SGX, which includes the inspection of SGX's key operating departments on a regular cycle, was completed in early 2002.

IT Supervision Framework for SGX

Due to the extensive use of IT in SGX, MAS is also formalising an IT supervision framework to address the technology risks specific to the securities industry.

Furthermore, MAS will provide technical assistance to SGX in enhancing its IT inspection capabilities for the purpose of monitoring the IT operations of its members.

SUPERVISORY EFFORTS TO COMBAT MONEY LAUNDERING AND COUNTER TERRORIST FINANCING

As part of its ongoing anti-money laundering efforts, MAS continues to rigorously supervise financial institutions for compliance with MAS' Guidelines on Prevention of Money Laundering. In response to September 11, additional inspections targeting terrorism financing were conducted. MAS has also issued directives to financial institutions to detect and freeze any assets they may have in their custody of terrorist en-

titles sanctioned by the United Nations Security Council.

MAS will continue to work with security agencies and international organisations to strengthen its regulatory framework for combating money laundering and terrorism financing in the financial sector.

Depositor Protection

DEPOSIT INSURANCE

MAS' study of deposit insurance will continue in 2002/3. Public and industry consultation will be held later in the year to gather views and inputs for the study.

Corporate Governance and Disclosure

REVIEW OF CORPORATE REGULATION AND GOVERNANCE

The work of the Corporate Regulation and Governance Policy Committee continued apace during the year. One of the three review committees under its wing, the Disclosure and Accounting Standards Committee (DASC), had conducted two public consultations and issued its Final Report in September 2001.

The Government has accepted all of DASC's recommendations, including: (i) making compliance with prescribed accounting standards by Singapore companies a legal requirement; (ii) adopting the accounting standards issued by the International Accounting Standards Board as Singapore's prescribed accounting standard; (iii) esta-

blishing an independent panel comprising representatives from business and relevant organisations to prescribe accounting standards as well as review corporate governance and disclosure practices in Singapore; (iv) requiring all listed companies to announce interim results on a quarterly basis instead of the present half-yearly basis and to present annual reports to their shareholders within 120 days instead of the present five months of the financial year-end for financial periods commencing on or after 1 January 2003; and (v) tightening rules on auditor independence. The third review committee, on Company Legislation and Regulatory Framework, has reviewed how Singapore's corporate legislation and regulatory regime can be improved to benefit the business community. It will consider feedback received from its second public consultation, which was launched on 9 May 2002, before finalising its proposals.

RAISING CORPORATE GOVERNANCE AND DISCLOSURE STANDARDS FOR LOCAL BANKS

The local banks have decided to implement more stringent corporate governance requirements with effect from their Annual General Meetings held from 1 January 2003. These measures include strengthening the independence of bank boards, as well as nominating, audit and compensation committees. In

particular, the independence of directors will be assessed not just in terms of the business relationship element stated in the Code of Corporate Governance; but also by their independence of both executive functions and substantial shareholders.

Significant improvements have also been made in the disclosure of key information relating to corporate governance practices, financial performance review and risk exposure and management practices in the last financial year. Pertinent information such as the audit committees' assessment of the independence of their external auditors, aggregate credit facilities to directors and director-related entities and information on the risk-taking philosophy, activities and various risks arising from these activities, have been disclosed in local banks' 2001 annual reports.

In March 2002, as part of the ongoing effort to enhance the independence and effectiveness of external auditors, MAS introduced a requirement for Singapore incorporated banks to change their audit firm every five years. While they are required to comply no later than the end of their financial year in 2006, they have been urged to change their auditors as soon as is practicable.

REGULATION OF TAKE-OVERS AND MERGERS

On 6 December 2001, MAS, on the advice of the Securities Industry Council, issued a revised Singapore Code on Take-overs

and Mergers (Take-over Code). The key changes include: (i) applying the Take-over Code only to listed companies and unlisted companies with 50 or more shareholders and net tangible assets of \$5 million or more (instead of all public companies previously); (ii) changing the voting control levels at which a take-over offer is required to be made so that a person who acquires 30% (25% previously) or more of a company or, if he already holds between 30% and 50% of the company, increases his stake by more than 1% in any six-month period (3% in 12 months previously) will be required to make a general offer for the company; (iii) requiring an offeror to keep an offer open for a longer period (28 instead of 21 days previously), to give more time for the offeree company and its shareholders to consider the offer; and (iv) clarifying that a shareholder in an upstream company who acquires or consolidates effective control in a downstream company as a result of a distribution of the upstream company's shareholdings in the downstream company will not be required to make a general offer for the downstream company if he owns more than 50% of the upstream company or is not acting in concert with any upstream company director, and allowing other upstream shareholders to retain the higher of their minimum effective interests in the downstream company in the last three years or the mandatory offer thresholds stated in (ii).

Box 2

DEVELOPING THE DISCLOSURE-BASED REGIME FOR SINGAPORE'S CAPITAL MARKETS

OVER THE LAST FEW YEARS, MAS HAS shifted from a merit-based approach in regulating the capital markets, where the regulator judged the suitability of securities being made available to the public, to a market-driven, disclosure-based regime of supervision. The objective is to allow market participants greater choice and freedom to take calculated risks so as to promote a more vibrant market.

To improve the standard of disclosure, the Companies (Amendment) Act 2000 introduced a "reasonable investor" test, which requires any issuer making a public offer to include in the prospectus all material information that an investor would reasonably require in order to make an informed decision on the securities being offered. Further, to enhance accountability for prospectus disclosure, the new law holds an underwriter (in addition to the issuer and its directors) liable for misleading or inadequate prospectus information and provides for an issuer to publish a supplementary or replacement prospectus if a registered prospectus was found to contain false or misleading information or to have omitted material details.

Efforts to develop a disclosure-based regulatory regime continued apace in 2002. Under the SFA, all prospectuses lodged with MAS, which takes over from the Registry of Companies and Businesses as the prospectus registration authority in July 2002, are subject to a two-week exposure period. Besides conducting a regulatory review of the lodged prospectuses, MAS will publish them on its website for public comment. To supplement the general disclosure tests, new prospectus disclosure checklists, based on standards adopted by the International Organisation of Securities Commissions, were introduced. The SFA also empowers MAS to issue a stop order to prevent further issuance or sale of shares on the basis of a prospectus that is found to be defective after it has been registered.

Besides raising the standard of disclosure in the primary market, the SFA has introduced provisions to enhance disclosure in the secondary market. Continuous disclosure of material information by listed companies, hitherto an SGX listing rule, will be given statutory backing under the SFA. Previously, substantial shareholders in a listed company were required under the Companies Act to notify the company of their shareholdings and changes thereto within two days of

their trades. In turn, SGX requires the company to disclose such notifications to SGX. The SFA shortens this two-stage reporting process and makes disclosure to SGX a legal obligation by requiring substantial shareholders of listed companies to notify SGX of their trades directly.

A disclosure-based regime demands an effective market enforcement regime. The SFA has introduced provisions to enhance market enforcement. Laws on insider trading have been redefined to capture a wider pool of persons who seek to take advantage of inside information. The civil penalty regime, which allows MAS to bring an action in Court against a defendant, now covers all forms of abusive market behaviour. Civil penalty action will be facilitated by enhanced investigative powers for MAS' enforcement officers.

MAS will work closely with the Attorney-General's Chambers and the Commercial Affairs Department to seek effective enforcement of the laws. On its part, MAS continues to build up its enforcement capabilities to undertake investigation and civil penalty action. To support its enforcement activities, MAS has acquired a market surveillance system to enhance its capability in detecting irregular trading activities. ■

Prudential Guidelines for Financial Institutions

GUIDELINES ON PRIVATE EQUITY AND VENTURE CAPITAL INVESTMENTS

After industry consultation, MAS issued guidelines on banks' private equity and venture capital investments in July 2001 to ensure banks' prudent management of these investments.

ISSUANCE OF RISK MANAGEMENT GUIDELINES

During the year, one major focus of MAS' work was the compilation and issuance of risk management guidelines. Guidelines for internal controls, market, credit and liquidity risks are being formalised for issue to banks and insurance companies in the second half of 2002. These guidelines will include the key principles for sound risk management which financial institutions are encouraged to follow, and will help them develop prudent policies and improve their methods for measuring and managing firm-wide risks. Feedback and comments from the industry will be sought and incorporated into the final guidelines.

CREDIT STRESS TESTING

The last decade saw an increase in the number of shocks that financial markets were subjected to. These shocks have also shown a greater tendency to spread to other financial markets, aided by improved financial infrastructure and

lower barriers to international capital flows. The anticipation and management of these financial crises are among the most pressing challenges faced by financial institutions.

Stress testing offers financial institutions a systematic methodology to prepare for financial crises. In this regard, MAS released a consultative paper on 31 January 2002 on credit stress testing for industry feedback. This paper aims to provide risk managers with some guidance in constructing and conducting credit stress tests.

SECURITY GUIDELINES FOR MOBILE BANKING AND PAYMENTS

Recent advancement and rapid extension of wireless technologies such as SMS, WAP, GPRS and SIM Toolkit have spurred new opportunities and more innovative ways of providing wireless financial and commercial services to customers. As with all new technologies, the need to establish and maintain rigorous standards of security in the operation, delivery and usability of mobile services and applications are key factors in generating consumer confidence and mass-market acceptance. In February 2002, MAS released a consultative paper on security guidelines for mobile banking and payments. This was a result of its collaboration with the financial sector, mobile equipment manufacturers, telcos and service providers in the wireless communications industry. Feedback

was sought from financial institutions, network carriers and payment organisations from all over the world. Taking into consideration the comments received, a final paper will be issued later in the year.

Improved Conduct Practices for Financial Institutions

COMMITTEE ON EFFICIENT DISTRIBUTION OF LIFE INSURANCE

The Committee on Efficient Distribution of Life Insurance (CEDLI) was a private sector-led committee appointed by MAS in March 2000 to propose changes to raise standards, transparency and efficiency in the distribution of life insurance products. The CEDLI recommendations were jointly implemented by the Life Insurance Association of Singapore and MAS' Insurance Department. Following the implementation of CEDLI's recommendations on the needs-based sales process and training and competency requirements in January 2001 and April 2001, CEDLI's recommendations on disclosure of distribution costs, charges and expenses were implemented in July 2001. In light of the enhanced disclosure requirements, MAS responded with the lifting of agency costs and commission limits with effect from January 2002.

COMMITTEE ON ENHANCEMENT OF STANDARDS IN GENERAL INSURANCE

The Committee on Enhancement of Standards in General Insurance was

formed in August 2001. Private sector players from the general insurance industry embarked on a major review of industry practices. Comprising representatives from General Insurance Association of Singapore (GIAS), Singapore Insurance Brokers' Association, and MAS, the Committee aims to better serve consumers in terms of service and protection by raising business practice standards in the general insurance industry through greater transparency and disclosure, higher standards of professionalism, and better efficiency and business processes. Two work groups were recently formed to operationalise the recommendations resulting from the first phase of the Committee's work. The first work group will develop a Code of Practice that represents the minimum sales and customer service standards that general insurance players must adhere to. The second work group will formulate a set of training and competency standards for insurance companies' staff and intermediaries who have contact with the customers.

MOTOR INSURANCE INITIATIVES

The GIAS formed the Motor Insurance Task Force (MITF) to review the practices and conduct of the motor insurance industry in Singapore. The objective of MITF was to recommend a set of international best practice on sales and service standards for motor insurers in Singapore with the purpose of providing

an enhanced level of service and disclosure to the consumers. The MITF issued its final report in July 2001 with recommendations with respect to pricing methodology, claims cost management, disclosure, distribution, professional standards, consumer education and service standards. The GIAS has formed two committees to attend to the implementation of these recommendations. The recommendations are expected to be in place by the end of 2002.

COLLECTIVE INVESTMENT SCHEME

In June 2001, MAS issued guidelines for the offer of hedge funds to the general public. To offer hedge funds to the public, managers must have the requisite expertise and the minimum subscription of \$100,000 per investor. MAS will be reviewing the minimum subscription requirement for fund-of-funds as opposed to single hedge funds.

MAS specified a maximum period within which managers must pay out redemption proceeds to investors. In line with the practice in some established markets, MAS disallowed the charging of marketing and promotion expenses to unit trust funds. Advertising of funds can continue provided the costs are defrayed from the management fees of managers.

Regulations for the offer of collective investment schemes to sophisticated investors were also released. To offer such schemes, offerors must apply to

MAS. Offerors must satisfy MAS that the manager of the scheme is licensed in its home jurisdiction and is fit and proper.

DEVELOPMENTAL INITIATIVES Liberalisation

SECOND PHASE OF BANKING LIBERALISATION

On 29 June 2001, MAS announced the second phase of a five-year (1999-2003) programme to liberalise foreign banks' access to the domestic market. Details of the second-phase liberalisation include:

(a) Broadening of access to the domestic wholesale banking market:

Restricted Banks were renamed Wholesale Banks, to better reflect the wide range of activities that they currently engage in. Fifteen banks were awarded wholesale banking privileges in December 2001. Another five Wholesale Bank licences will be made available in 2002. MAS will progressively upgrade all Offshore Banks and Qualifying Offshore Banks to Wholesale Banks over time.

(b) Enhancement of competition in the domestic retail banking market:

MAS awarded two new Qualifying Full Bank (QFB) licences in December 2001 to The Hongkong and Shanghai Banking Corporation Limited and Malayan Banking Berhad, bringing the total number of QFBs to six. All six QFBs were granted enhanced privileges in branching and esta-

blishing off-site Automated Teller Machines (ATMs), and new privileges in offering the Central Provident Fund Investment Scheme products, operating Supplementary Retirement Scheme accounts, and providing Electronic Funds Transfer at Point of Sale services.

NON-INTERNATIONALISATION OF THE SINGAPORE DOLLAR

MAS completed another review of its policy on the non-internationalisation of the Singapore dollar in March 2002. Areas were identified for further liberalisation in order to facilitate continued growth of Singapore's capital markets. These included exempting all individuals and non-financial entities not substantially engaged in financial trading and investment activities from the restrictions of the policy.

For non-resident financial entities, the following financial activities have been liberalised:

- (a) Assets swaps, cross-currency swaps and cross-currency repos can be transacted freely;
- (b) Banks may lend any amount of Singapore dollar-denominated securities to non-resident financial entities, in exchange for both Singapore dollar- or foreign currency-denominated collateral;
- (c) Singapore dollar foreign exchange options can be transacted freely;

(d) Banks may lend Singapore dollar to non-resident financial entities for investment in financial assets and real estate without having to ensure that the Singapore dollar credit facilities are withdrawn when the investments, or part thereof, are liquidated.

These measures would facilitate greater participation by non-residents in the Singapore dollar capital markets.

SINGAPORE DOLLAR LENDING TO FOREIGNERS AND SINGAPORE PERMANENT RESIDENTS FOR THE PURCHASE OF RESIDENTIAL PROPERTY

Over the last few years, MAS has progressively lifted restrictions on Singapore dollar lending to foreigners which are not critical for stability reasons. As part of a comprehensive review of land and property related measures, the above restrictions on non-citizens borrowing in Singapore dollar to purchase property¹ were lifted in October 2001.

¹ The restrictions limited each Permanent Resident (PR) to one Singapore dollar loan for the purchase of residential property in Singapore for owner-occupation, and disallowed foreigners who were not PRs and non-Singapore companies to obtain loans in Singapore dollars.

Box 3

LIBERALISATION OF THE STOCKBROKING INDUSTRY

LIBERALISATION OF THE STOCKBROKING industry is now complete, coming a little over three years after the Stock Exchange of Singapore Review Committee report. The final restriction, in the form of minimum trading limits on new SGX-Securities Trading (SGX-ST) members, was removed in January 2002. Singapore's securities market is now totally open to local and international participation.

The greatest impact since the start of liberalisation in 1998 has been a tremendous gearing up and consolidation in the broking industry. The loss of entrenched franchises has not been without pain. In the longer term, the rationalisation will bring benefits to the market, investors and also brokerages that have re-organised themselves.

Meanwhile, services have improved with more intense competition; new and multiple products are now available on brokers' internet platforms, even as balance sheets strengthen considerably with industry mergers and acquisitions.

Following the liberalisation, new participants in the form of large sophisticated brokerages have entered the market and become SGX-ST members. This

has avoided a situation where trading in Singapore equities becomes overly concentrated with fewer intermediaries as a result of consolidation. The new entrants into the market will ensure a minimum level of choice for investors. While the merger of existing members has resulted in greater depth and enhanced ability to invest in technology, the new participants bring with them international experience and gives the market additional span in reaching out to foreign investors.

Moving forward, MAS will continue to benchmark Singapore's securities market to global standards. It will look to the market to innovate and leverage on technology developments to enhance its offerings. One key area will be the implementation of a straight-through-processing environment with an infrastructure based on open architecture.

Meanwhile, when the SFA comes into effect in the third quarter of 2002, a single licensing and a risk-based capital framework will be implemented, which will better reflect the potential of dual membership in Singapore's equity and derivatives markets. This process of regulatory renewal and fine-tuning will continue. ■

Equity and Derivatives Markets

CO-OPERATION WITH OTHER MARKETS

SGX has been engaged in various forms of market co-operation. In December 2001, SGX and the Australian Stock Exchange (ASX) launched the world's first co-trading linkage for securities, which allowed for 50 SGX stocks and 51 ASX stocks to be quoted and traded across the linkage. SGX and the Tokyo Stock Exchange have also entered into a Heads of Agreement in October 2001 to explore co-operation in both the cash and derivatives markets.

During the year, SGX introduced several innovative products that are new to Singapore's capital markets.

In a joint venture with the American Stock Exchange (AMEX), SGX launched five AMEX-listed Exchange Traded Funds (ETFs) on SGX-ST on 4 May 2001. The AMEX ETFs were listed on a new SGX-Securities Trading (SGX-ST) trading board for structured products named "SGX-Xtranet". Building on the launch of the AMEX ETFs, SGX-ST listed the first local ETF based on the Straits Times Index on 17 April 2002.

In the derivatives market, domestic futures contracts launched by SGX-Derivatives Trading (SGX-DT) included a 5-year Singapore Government Bond futures contract on 29 June 2001 and single stock futures contracts listed on 15 SGX-ST stocks on 26 October 2001. SGX-DT also listed a ¥100 million

Japanese Government Bond futures contract on 18 April 2002, that trades alongside its existing ¥10 million JGB futures contract, and SGX's third Japan stock index futures contract, based on the MSCI Japan stock index, on 15 May 2002.

Debt Market

Over the past year, MAS implemented a series of initiatives to further enhance the depth and breadth of the Singapore Government Securities (SGS) market. These measures included:

- (a) Launch of the SGS website in May 2001, which provides a one-stop location of comprehensive information and data on the SGS market.
- (b) Facilitating the launch of 5-year SGS bond futures by SGX in June 2001 to enable SGS players to hedge their investments in SGS.
- (c) Issuance of the inaugural 15-year SGS bond in September 2001 to extend the SGS yield curve.
- (d) Launch of the SGS Electronic Application facility which enables primary dealers to submit SGS auction bids electronically.

E-Financial Services and E-Commerce

MAS is proactive in engaging the industry and other governmental agencies in facilitating the development of e-financial

services and e-commerce via various fora such as the E-Commerce Action Committee, National Trust Council and the Public Key Infrastructure Forum.

MAS plays a key role in developing a safe, progressive and efficient financial infrastructure and environment for the promotion of these activities in these fora.

Recent Developments in Electronic Payments

INTERNET PAYMENTS

In June 2001, Network for Electronic Transfers (S) Pte Ltd (NETS) and The Payment Solutions Company launched janusX, Singapore's first Internet payment service. janusX enables consumers to initiate online payments by directly debiting their bank accounts. In March 2002, Green Dot Payment Services and BCS Information Systems also announced their joint venture to provide an electronic payment service targeted to be launched by June 2002. As a further step to enrich the electronic payment landscape in Singapore, the two consortia announced their strategic intent to interconnect their networks for the benefit of consumers and merchants. The inter-connection is expected to be effected by end-2002.

Box 4

■ **FINANCIAL SERVICES
DEVELOPMENT FUND (FSDF)
- BUILDING TALENT &
INFRASTRUCTURE FOR
SINGAPORE'S FINANCIAL
CENTRE**

TECHNOLOGY, INNOVATION AND COMPETITION have led to dynamic changes to financial centres worldwide. Talents and capabilities are becoming increasingly critical in this environment. In order to maintain its competitive advantage, Singapore needs to develop a pool of highly-skilled professionals who are at the forefront of their respective specialist areas.

The FSDF was set up to facilitate the manpower and capability development for Singapore's financial sector. The following are two manpower development schemes supported under this Fund:

(a) The Financial Training Scheme

Under this scheme, the FSDF helps defray the costs incurred by financial institutions, companies engaged in significant financial activities or in-

dustrial bodies/associations in providing relevant training to employees or member participants.

(b) The Training Infrastructure Enhancement Scheme (TIES)

The TIES aims to attract world-class financial training providers and corporate training centres to offer advanced or specialised financial training programmes in Singapore through the setting up or expansion of training facilities here.

PROMOTING ELECTRONIC FINANCIAL SERVICES

MAS launched a new Innovation in Financial Technology & Infrastructure Grant Scheme in late 2001, to encourage the development of electronic financial services and infrastructure in Singapore's financial centre. As one of the initiatives supported under the FSDF, the scheme offers grants for qualifying costs incurred in the development of advanced e-finance technology and infrastructure in Singapore. ■

MOBILE PAYMENTS

In October 2001, the Infocomm Development Authority of Singapore selected and awarded funding to four consortia to conduct trials for mobile payments. The trials, which are set to run from March till August 2002, will involve mobile phone users initiating payments via their mobile phones using various technologies such as SMS, WAP, InfraRed and RFID.

EGIRO SYSTEM

The Singapore Automated Clearing House (SACH) successfully launched a new online system for electronic payments called eGIRO in July. The eGIRO system replaces the magnetic tape-based Interbank GIRO system that has served Singapore well in the last 17 years.

eGIRO utilises browser-based technologies to allow banks to send and receive GIRO instructions electronically through a secured communication network to SACH. As the instructions will be transmitted electronically instead of being delivered physically via tapes and vouchers, shorter clearing cycles will be possible in the future, resulting in more efficient services for banks' customers.

Enhancement of Exchange Infrastructure

Significant enhancements to SGX's infrastructure have been made over the last year.

SGXACCESS

In March 2001, SGX launched SGX-Access that provides global access to the Singapore securities market. This is an open interface trading facility based on a universally adopted messaging standard that enables SGX's member firms to trade from anywhere in the world.

STRAIGHT-THROUGH-PROCESSING INITIATIVE

Last year, SGX also started an initiative to bring the Singapore securities market and its institutional participants to a Straight-Through-Processing (STP) environment, from trade execution to final settlement. An Industry Working Group (IWG), comprising members from various securities market sectors was set up to represent the market sector interests and to promote the implementation of STP within the securities industry. The IWG has completed the STP business case report and is proceeding with the implementation of the facility that will lower operating costs, reduce settlement risks and provide more timely risk management information.

SECURITIES LENDING FACILITY

In January 2002, SGX introduced its Securities Lending Facility. This facility gives market participants access to a ready source of lendable securities, and also provides investors with an avenue to earn additional fee income from their securities holdings. The establishment of the Securities Lending Facility will provide greater flexibility for investors

who may wish to engage in a range of trading strategies. This will expand the breadth of trading activities and enhance the vibrancy of the capital markets in Singapore.

SGX is in the process of enhancing the facility to better meet market demand, and building up a wider and deeper pool of securities for lending.

ENHANCED MARKET DATA FEED SERVICE

On 1 July 2002, SGX has also announced plans to introduce an enhanced market data feed service for the securities market. This service will enable data vendors and other market participants to receive market data feed at higher speeds, as well as increase the depth of order book dissemination to third parties. The availability of more comprehensive price information will enable investors to get a better picture of market depth, and of market reaction to their transactions. This improves market transparency and efficiency.

Dialogue Sessions with Industry

MAS RISK CONFERENCE 2002

MAS organised the first risk management conference from 31 January to 1 February 2002. The theme of the conference was *"Towards Active Credit Portfolio Risk Management"*, which focused on the challenges and practical implementation issues faced by banks during their transition from passive buy-and-hold to active management of credit portfolio risk.

The conference aimed to promote sound financial risk management practices in Singapore and provide a forum for risk practitioners and academics to share their views on the latest developments in this area.

Technology in Finance (TiF) Dialogue Sessions

The TiF session is an MAS initiative to establish a regular forum for MAS, financial institutions, consultants and IT solution providers to exchange views on new technology developments to promote growth and greater efficiency in the financial industry.

(a) Continuing with the success of the previous sessions, MAS organised the fourth TiF session on *"The New Liquidity Supervision Framework Workshop"* on 20 September 2001 to explain the new framework for banks which was announced in July 2001. The session provided an invaluable opportunity for participating banks to clarify the operation of the new framework and was very well received by the participants.

(b) The fifth TiF session on *"Internet and Mobile Security"* was held on 12 October 2001 to facilitate an exchange of views and formulate fresh perspectives on the adoption of new security technologies for the financial industry.

The high level of participation, with over 225 business heads and security professionals from banks, law firms,

insurance companies, technology vendors and government agencies, underscored the importance of constantly reviewing technology risk and security issues.

- (c) To further enhance MAS objective in promoting world-class standards in technology risk management and security practices, two dialogue sessions were held with major banks in Singapore on 19 October 2001 and 8 February 2002 respectively. Issues discussed were regulatory guidance relating to MAS directives and advisories on security requirements, as well as emerging security issues affecting the industry.

■ MARKET INFRASTRUCTURE

Consumer Credit Bureau (CCB)

A significant addition to Singapore's risk management infrastructure is the industry-led CCB initiative. The CCB, launching in September 2002, will help financial institutions mitigate consumer credit risk through information pooling. MAS is providing the regulatory guidance and support for this important development.

The availability of timely and reliable customer credit information is vital for financial institutions in making the decision to grant or sustain credit facilities. The CCB will enhance the reliability of financial institutions' internal

credit rating systems and help them meet the challenge of improving the quality of their consumer credit portfolios.

MAS expects the establishment of the CCB to lead to an increased amount of credit business, more competitive pricing of credit facilities and lower credit loan defaults and delinquency rates. The launch of the CCB will mark the beginning of a new risk management process and will further bolster the integrity and transparency of Singapore's financial sector.

Reducing Foreign Exchange Settlement Risks

In July 2001, MAS published a report, based on a survey of the Singapore banking industry that highlighted significant exposures in current foreign exchange settlement practices. This report also underscored the market participants' demand for foreign exchange settlement risk reduction measures, principally the new "Continuous Linked Settlement" (CLS), a global initiative that would enable two legs of a cross-currency transaction to be settled simultaneously.

CLS is targeted to go live in 2002 and will initially settle foreign exchange transactions in seven of the most actively traded currencies. On 18 October 2001, MAS received in-principle agreement from CLS Bank to include the Singapore dollar as a prospective CLS eligible currency in 2003.

The three major Singapore banks - Development Bank of Singapore (DBS), Oversea-Chinese Banking Corporation Limited (OCBC) and United Overseas Bank (UOB) - became shareholders of the CLS Group in October 2001. They have also jointly formed Clearing and Payment Services (CAPS), a common utility that will facilitate the connection of banks' systems to CLS. The successful co-operation in the area of payments processing will increase the efficiency and consolidation in banks' back office processing that is important to Singapore's competitiveness.

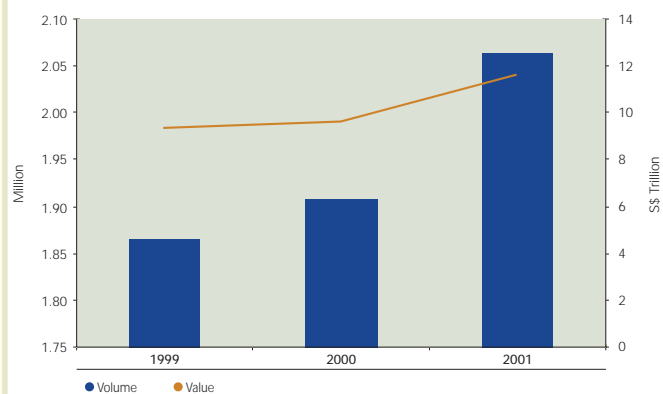
Automated Teller Machines

There are several shared ATM networks and a number of proprietary ATM networks operating in Singapore. The two major ATM networks are the DBS network and the shared ATM network between UOB and OCBC. With the issuance of QFB licences, some of the QFBs are sharing their ATM networks amongst themselves to provide better service to the consumers. In March 2002, The Hongkong and Shanghai Banking Corporation Limited, Maybank and Standard Chartered Bank launched their shared ATM network. In May 2002, Citibank and ABN Amro announced their intention to share their ATM networks. As at December 2001, the total number of ATMs increased slightly by 0.17% to 1,797 machines. ■

MAS Electronic Payment System

On 13 July 1998, MAS launched its Electronic Payment System (MEPS) - a real-time gross settlement system for Singapore dollar high value interbank fund transfer and the delivery-versus-payment settlement of scripless SGS. As at 31 December 2001, there were 129 banks participating in MEPS, of which 85 banks were direct participants. In 2001, the volume of MEPS transactions increased by 8.2% to 2.1 million. In the same year, the value of MEPS transactions cleared was \$11.6 trillion, 20.6% higher than 2000.

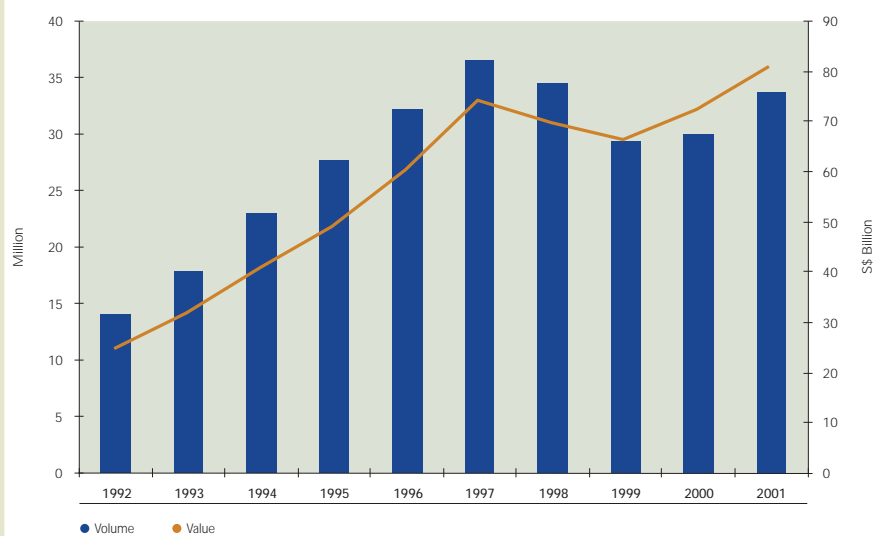
Chart 1 | MEPS VOLUME & VALUE



Interbank GIRO (IBG)

SACH enhanced the IBG system to a browser-based eGIRO system in July 2001. The new system eliminates manual delivery of magnetic tapes between participating banks and SACH. Participating banks can now send and receive GIRO items, including returned and rejected items, electronically via a secured communication network. With eGIRO, clearing cycles for the direct credit and debit transactions could be shortened significantly. In 2001, there was an increased usage in the IBG system. The number of transactions processed in 2001 was 33.6 million, 12.2% higher than in 2000 and the value of IBG transactions processed in 2001 was \$80.7 billion, 11.9% higher than in 2000.

Chart 2 | INTERBANK GIRO VOLUME & VALUE



Cheques

SACH clears both Singapore dollar-denominated cheques and US dollar-denominated cheques that are issued by banks in Singapore. In 2001, the number of Singapore dollar-denominated cheques processed by the SACH increased slightly by 0.4% to 91.6 million compared to the previous year. The total value of Singapore dollar-denominated cheques cleared however fell 7.8% to S\$417.8 billion in the year. In the same year, the number of US dollar-denominated cheques cleared by SACH increased by 2.2% to 399,000. Total value of the US dollar-denominated cheques cleared decreased by 13.1% to US\$10.6 billion.

Chart 3 SINGAPORE DOLLAR CHEQUE VOLUME & VALUE

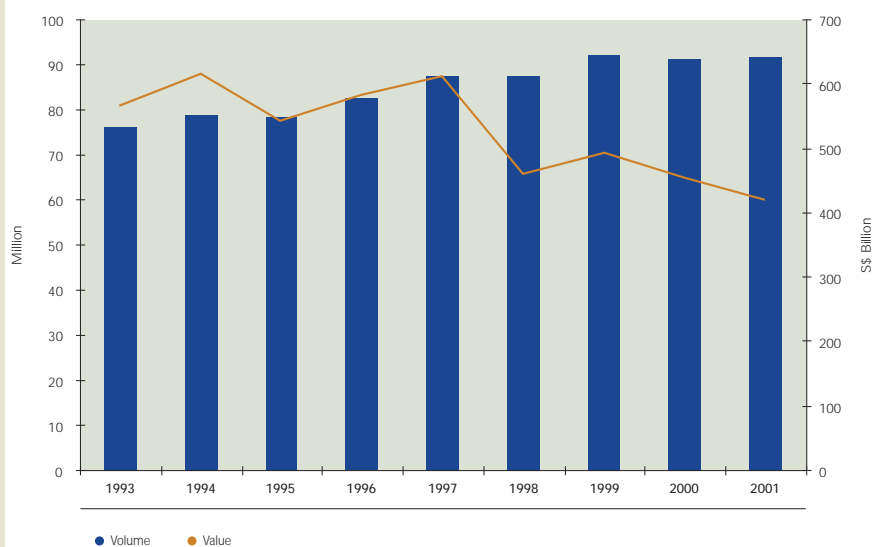
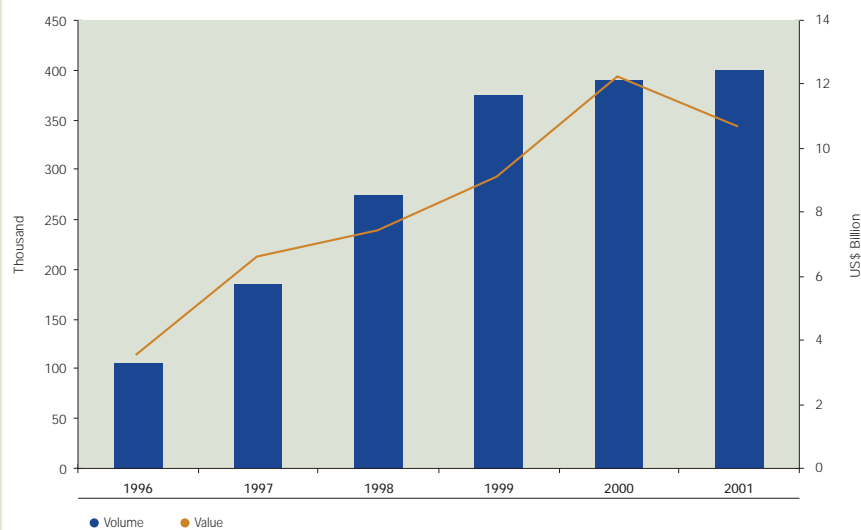


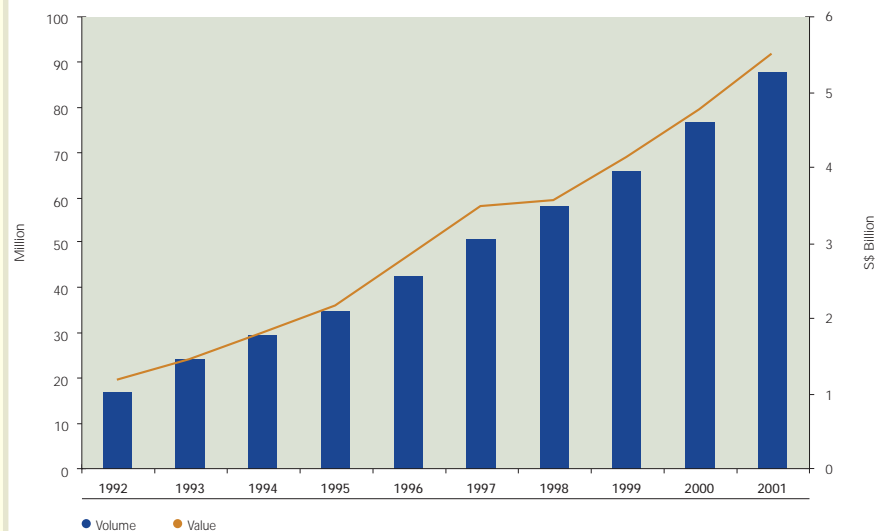
Chart 4 UNITED STATES DOLLAR CHEQUE VOLUME & VALUE



Electronic Funds Transfer at Point of Sale (EFTPOS)

NETS operates the main EFTPOS in Singapore. EFTPOS enables consumers to pay for purchases at the point-of-sale using their ATM cards. As at December 2001, there were over 11,000 retailers offering NETS as a payment method with over 20,000 EFTPOS terminals distributed across these retailers. Retailers using the system include supermarkets, department stores, petrol stations and government institutions. In 2001, the EFTPOS system processed 87.7 million transactions worth \$5.5 billion.

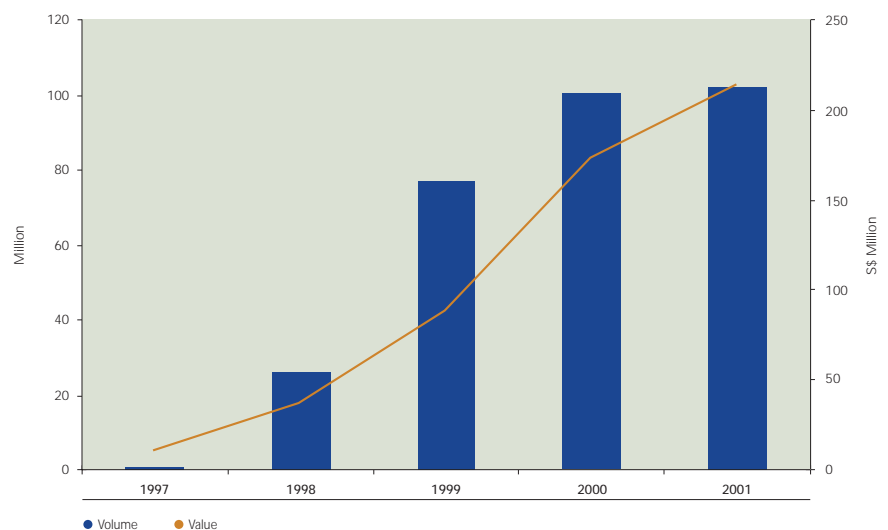
Chart 5 | EFTPOS VOLUME & VALUE



Multi-purpose Stored Value Card (MPSVC)

The CashCard, operated by NETS, is an MPSVC that offers consumers an alternative and convenient electronic payment mode for a variety of small-value transactions. Over the years, the CashCard has gained increasing acceptance among Singaporeans. The number of CashCard transactions rose from 100 million in 2000 to 102 million in 2001, while transaction value increased from \$173 million to \$212 million in the same period. In August 2001, NETS introduced the NETS Virtual Card, which is a payment service that allows users to make payment to businesses or individuals through online interfaces or mobile phones.

Chart 6 | CASHCARD VOLUME & VALUE



Growth and Performance of the Financial Sector:

■ With the global downturn and poor market conditions, the financial industry has had more than its fair share of knocks.

The economic slowdown placed new pressures on the financial industry and put it to the ultimate test. Appropriately, the financial sector has responded by realigning strategies and going through a process of consolidation. As the economy recovers, the sector will make a comeback.

Growth and Performance of the Financial Sector

In line with international trends, 2001 saw a continued consolidation in the number of financial institutions in Singapore. (See Table 1.) Besides the consolidation of foreign banks with operations in Singapore, the five local banking groups also merged into three groups in 2001. In addition, the number of insurance companies fell from 151 to 144. In the stockbroking sector, the number of Singapore Exchange Securities Trading Ltd (SGX-ST) member companies fell from 35 to 27 while the number of non-SGX-ST member companies increased by six.

With the global economic slowdown, financial sector performance was mixed in 2001. The insurance and asset management sectors experienced relatively robust growth while domestic and offshore lending activities remained weak. Economic uncertainty fueled strong trading in derivatives, whereas stockbroking, foreign exchange and investment advisory activity remained subdued. The corporate debt and Singapore Government Securities (SGS) markets continued to grow.

Financial sector value-added grew at a more moderate 2.2% in 2001 compared with 4.6% in 2000. (See Table 2.)

Total **domestic assets** of banks, merchant banks and finance companies rose 9.6% to reach \$407 billion as at end-2001. (See Chart 7.) Domestic loan

Table 1 NO. OF FINANCIAL INSTITUTIONS IN SINGAPORE

Institutions	End of Period Mar 2001	End of Period Mar 2002
Commercial Banks	133	120
Local	8	6
Foreign		
Full Banks	23	22
Wholesale Banks	20	33
Offshore Banks	82	59
Merchant Banks	58	55
Asian Currency Units	184	169
Banks	127	115
Merchant Banks	57	54
Representative Offices	62	55
Finance Companies	11	7
Insurance Companies	151	144
Direct Insurers	54	53
Reinsurers	46	42
Captive Insurers	51	49
Insurance Brokers	88	90
Stockbroking Companies	81	79
SGX-ST Member Companies	35	27
Non-SGX-ST Member Companies	46	52
Investment Advisers	167	167
International Money Brokers	8	8
SGX-Derivatives Trading		
Corporate Clearing Members	30	27
Corporate Non-Clearing Members	14	8
Individual Members	552	539
Commercial Associate Members	17	15

Table 2 FINANCIAL SERVICES VALUE-ADDED, REAL GROWTH (%), 2001

Banking	1.4
Insurance	14.2
Stock, Futures & Commodity Brokers	-8.3
Investment Advisory Activities	-21.9
FINANCIAL SERVICES	2.2

Source: Economic Survey of Singapore 2001

growth remained weak at 3.0%. With the poorer business environment, commercial banks increased their investments in securities including SGS, resulting in a sharp 59.0% increase in their total holdings of securities and equities².

On the liabilities side, total deposits of non-bank customers with banks and finance companies recovered, to register a modest growth of 4.4% in 2001, after a 2.0% drop in 2000.

Domestic interbank transactions contracted with the weaker economic environment, bank consolidation and easier liquidity. Domestic interbank assets of commercial banks fell 36.0% from \$42.5 billion as at end-2000 to \$27.1 billion at end-2001. Domestic banking units also reduced their net foreign liabilities by about half, from \$11.5

² Part of the increase in commercial banks' holdings of securities and equities was technical, reflecting acquisitions by two major local banks.

billion at end-2000 to \$5.7 billion at end-2001. This was mainly due to a reduction in their net foreign interbank liabilities.

The **Asian Dollar Market (ADM)** remained weak during 2001, dampened by the slowdown in global economic activity. (See Chart 8.) Total assets of the ADM³ fell 3.1% to US\$471 billion at end-2001 after recovering by 1.3% in 2000. Loans to non-bank customers fell by 11.3%, although the rate of decline continued to slow, as banks diversified their loan portfolios. Interbank assets and liabilities on the ADM contracted by 2.6% and 1.7% respectively in 2001.

³ Includes merchant bank Asian Currency Units.

Chart 7 TOTAL DOMESTIC ASSETS/LIABILITIES OF BANKS, MERCHANT BANKS AND FINANCE COMPANIES

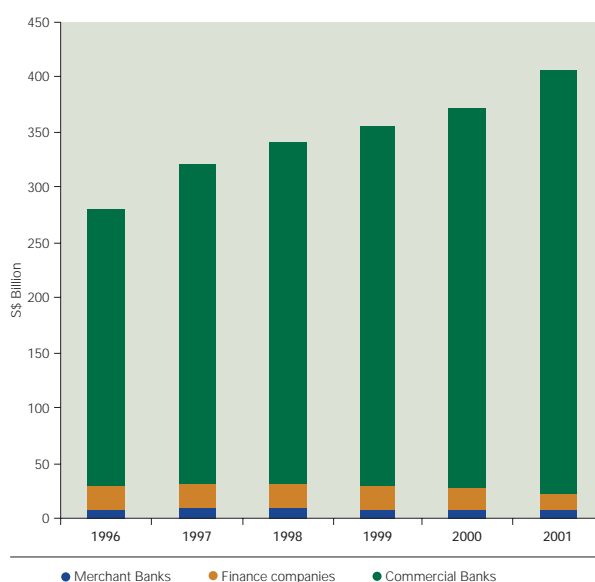
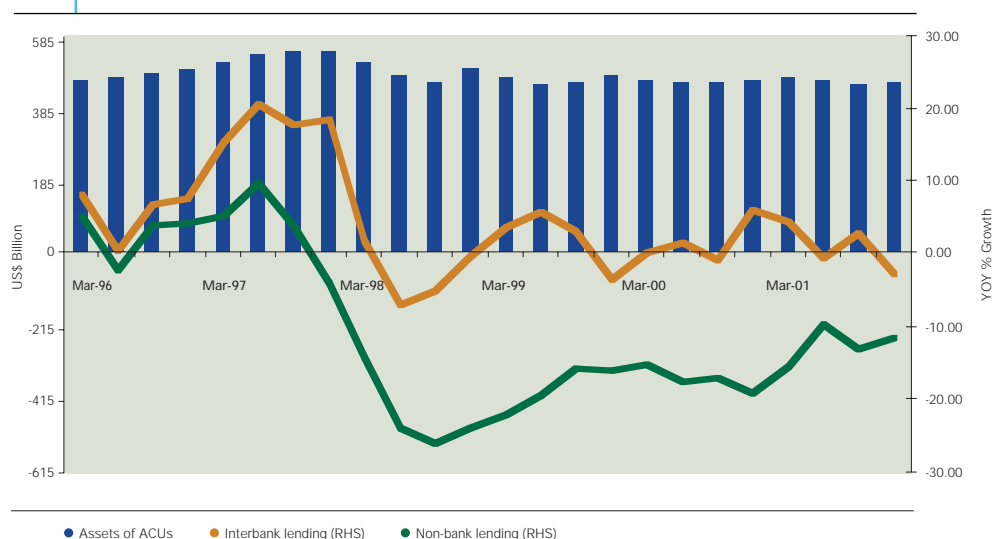


Chart 8 THE ASIAN DOLLAR MARKET



Commercial banks' operating profits during the year were based by gains from investment and trading of securities and derivatives. However, given the poorer economic conditions and outlook, both local and foreign banks substantially increased their provisions. This, together with other one-off extraordinary items, dampened their net profits before tax.

Local banks' non-performing loans (NPL) as a percentage of their total loans continued on a downtrend over 2001. Their NPL ratio fell to 8.0% at end 2001, compared with 9.1% in 2000. (See Chart 9.)

The **insurance sector** experienced relatively robust growth in 2001 due primarily to the life insurance segment. (See Chart 10.) Single premium life insurance saw significant growth, growing 170.0% to \$9 billion. This was boosted by further liberalisation of the Central Provident Fund Investment Scheme in January 2001, which released funds from the Ordinary Accounts and Special Accounts for investments.

The **general insurance sector** also performed well, underpinned by demand from both domestic and offshore business. In particular, there was an increase in aviation insurance premium rates following September 11, as well as an increase in health and personal accident insurance.

Chart 9 NON-PERFORMING LOANS AS A PERCENTAGE OF NON-BANK LOANS FOR LOCAL BANKS

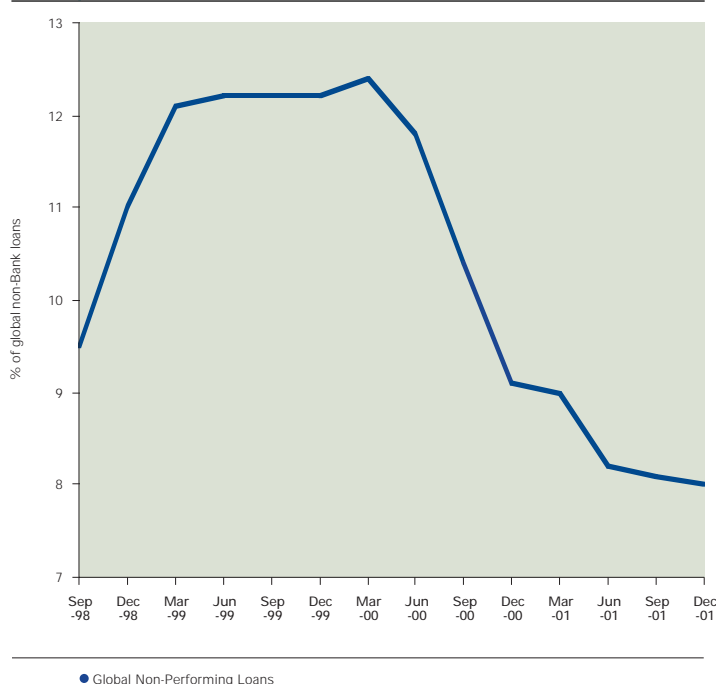
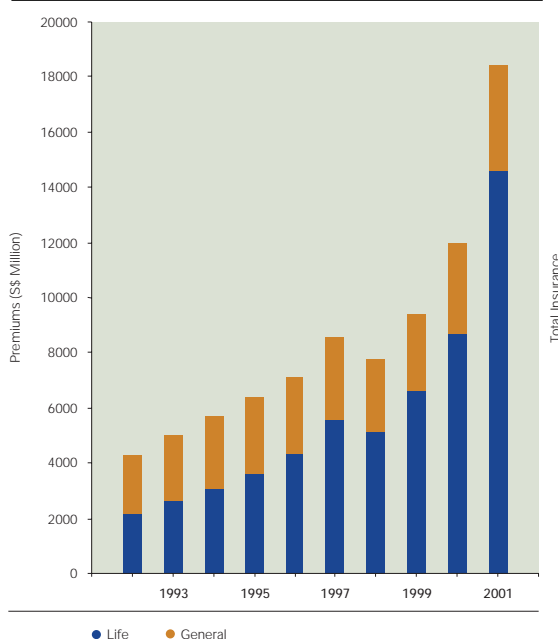


Chart 10 INSURANCE PREMIUMS (LIFE AND GENERAL)



Reflecting the downturn in global equity markets, 2001 was a lacklustre year for the **Singapore stock market**. The Straits Times Index ended 2001 at 1623.6, down 15.7% from the previous year, and turnover volume was down 5.9%. (See Chart 11.) During 2001, there were 36 new listings on SGX-ST, raising a total of \$485.7 million in funds. As at end-2001, the number of companies listed on the SGX-ST Main Board and SESDAQ were 396 and 107 respectively, with a total market capitalisation of \$449.2 billion, up 7.5% from the previous year.

In contrast, **derivatives trading** grew strongly in 2001, benefiting from the more uncertain economic environment. (See Chart 12.) Trading volume reached an all-time record of 31 million contracts, surpassing the previous high in 1998. Record high trading volume was seen in several contracts, in particular the Eurodollar futures, MSCI Taiwan Index options and futures and the Singapore dollar Interest Rate futures contract.

In contrast, **foreign exchange** activity was subdued, reflecting ongoing consolidation and weak activity in regional currency markets. (See Chart 13.) Nevertheless, Singapore maintained its position as the fourth largest foreign exchange centre in the world⁴. (See Table 3.)

Chart 11 SGX-ST DAILY AVERAGE TURNOVER AND ST INDEX (LEVELS)

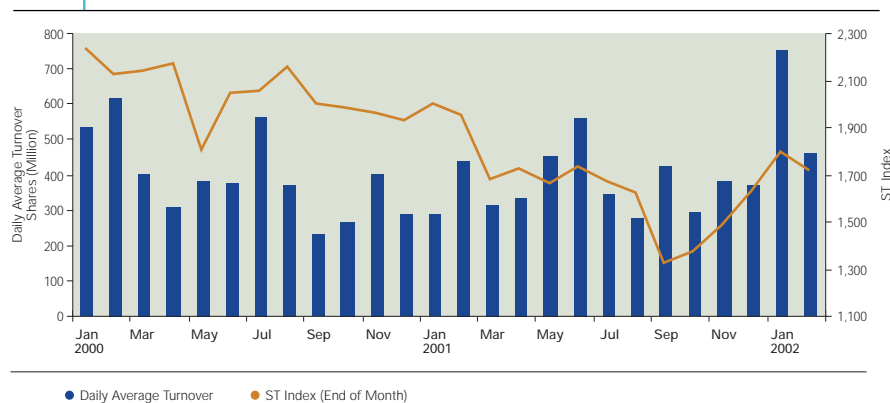


Chart 12 SGX-DT TURNOVER



The Singapore **asset management** industry has also been growing steadily, and despite weakened market conditions, total Assets Under Management (AUM) has seen good growth. As at end-2001, total assets managed by Singapore-based financial institutions was \$307.0 billion. This comprised \$180.7 billion of discretionary assets managed in Singapore, and \$126.3 billion of non-discretionary assets. This represents an increase of \$30.8 billion or 11.0% over end-2000. (See Chart 14.) The number of investment professionals in the asset management industry has also increased significantly by 10.0% to 1,114.

The Singapore **debt market** continued to grow strongly in 2001 with total corporate debt issuance witnessing a 43.0%

increase from \$50.0 billion in 2000 to a record \$72.0 billion in 2001. Total outstanding corporate debt volume also increased 63.0% to \$80.8 billion. Non-Singapore dollar-denominated bonds continued to dominate corporate debt issuance volumes in Singapore, with 649 non-Singapore dollar issues registering a total of \$50.0 billion, compared with 801 Singapore dollar-denominated issues registering a total of \$22.0 billion. (See Chart 15.)

The market continued to see a diverse range of issuers tapping the Singapore dollar-denominated debt market.

In the **SGS Market**, gross issuance of SGS treasury bills and bonds during the year increased to \$44.4 billion and \$14.2 billion respectively, compared

with \$41.9 billion and \$12.1 billion in the previous year. (See Chart 16.) SGS yields remained fairly stable during the first half of 2001 but fell across the curve during the third quarter on strong demand for SGS, over concerns of a worsening global economy. However, the prospects of an improving global economy at the end of last year exerted downward pressures on SGS prices. This steepened the SGS

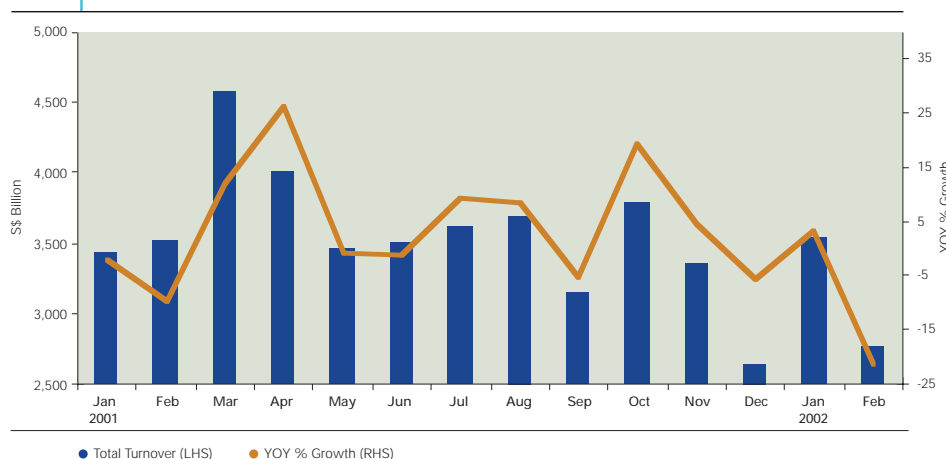
Table 3 GROSS FOREX TURNOVER

Rank	Country	Gross turnover, daily average* (US\$ million)
1	United Kingdom	591, 163
2	USA	287, 389
3	Japan	176, 655
4	Singapore	112, 820
5	Germany	97, 615
6	Hong Kong SAR	80, 008

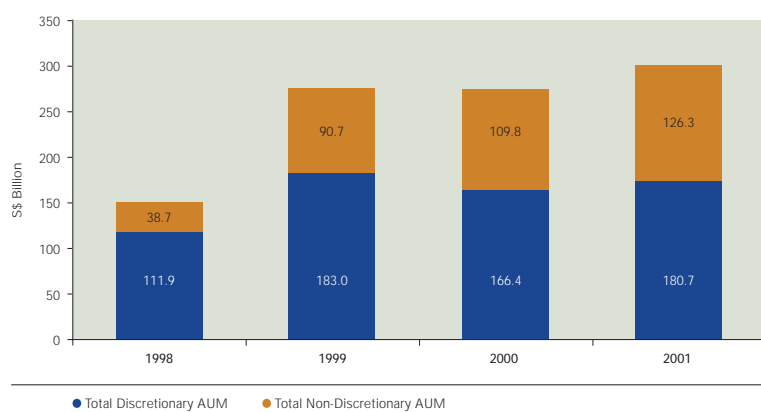
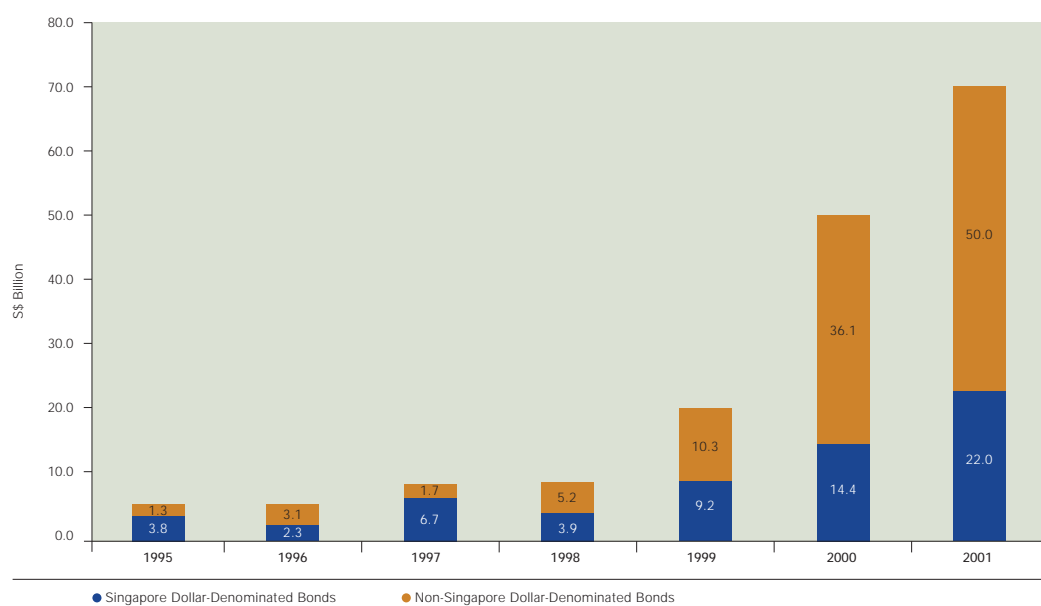
* in April 2001

Source: BIS Triennial Central Bank Survey 2001

Chart 13 TOTAL FOREX TURNOVER



⁴ Bank for International Settlements (BIS) Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity 2001.

Chart 14 ASSETS UNDER MANAGEMENT**Chart 15** TOTAL CORPORATE DEBT ISSUANCE

yield curve, bringing the 1-year yield down from 2.6% at end 2000 to 1.2% at end 2001 and softening the 10-year yield from 4.1% to 4.0% over the same period. (See Chart 17.)

Reflecting the rapid development of and increased activity in the SGS market, average daily turnover increased by 136.0% to \$1,923 million in 2001. (See Chart 18.) Similarly, the average daily SGS repo turnover for 2001 also more than

Chart 16 GROSS SGS ISSUANCE

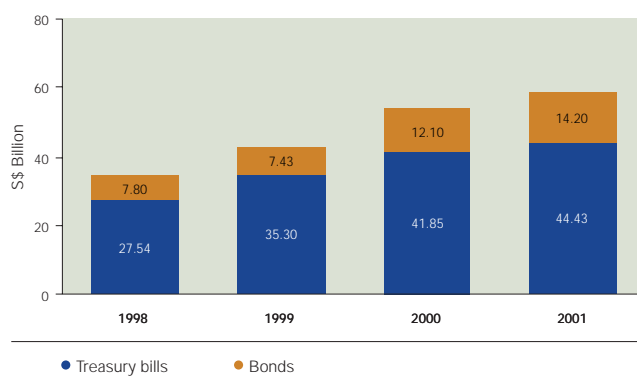
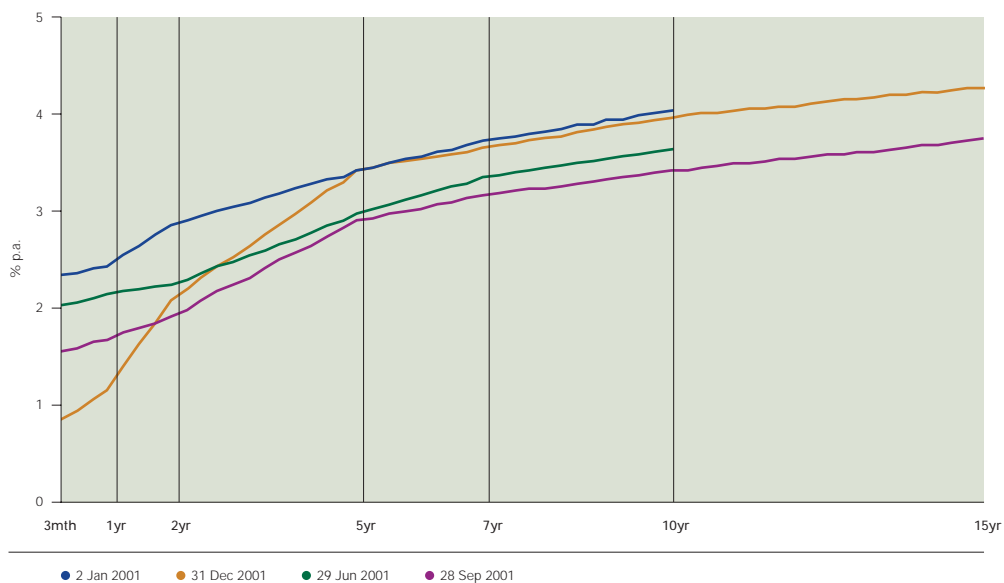


Chart 17 SGS YIELDS



trebled to \$1,799 million from \$543 million in 2000. (See Chart 19.)

The financial sector's performance is expected to improve as the economy recovers. ■

Chart 18 SGS DAILY AVERAGE TURNOVER

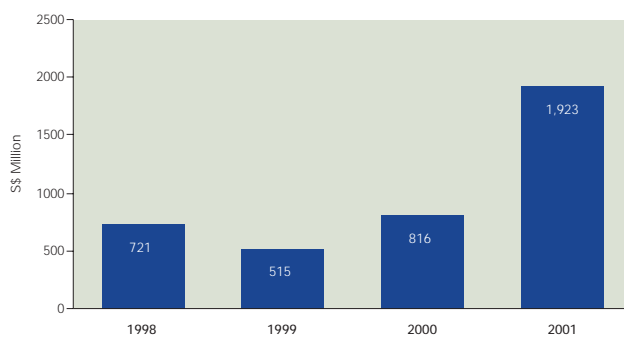
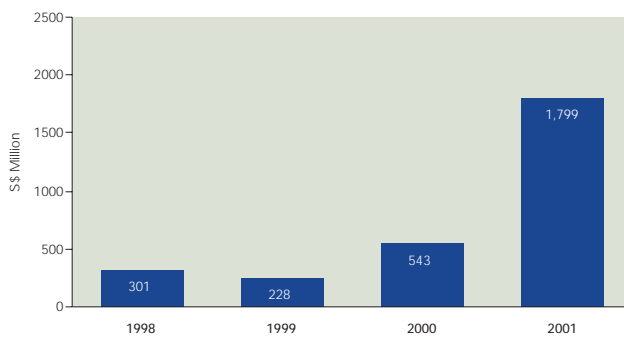


Chart 19 REPO DAILY AVERAGE TURNOVER



Economic Research and Policy Making:

■ While the US economic slowdown, the global electronics slump, and the September 11 terrorist attacks threw a wrench into the Singapore growth engine, they also triggered the necessity for a fundamental review of the economy.

This review of policies and strategies is now underway. It is aimed at positioning Singapore to better withstand increased regional competition and to provide new growth drivers for the economy.

Economic Research and Policy Making

■ BACKDROP: CHALLENGES TO THE SINGAPORE ECONOMY

2001 was characterised by challenges stemming from the uncertainty in and the rapid deterioration of the external economic landscape. The sharp slow-down in the US economy, coupled with the global electronics slump, precipitated a synchronised downturn across most countries last year. (See Chart 20a.) The fall in external demand hit Singapore's export-oriented manufacturing sector, which then filtered into the other services sectors in the domestic economy. The result was one of the worst economic downturns on record, with the Singapore economy contracting by 2.0% in 2001, following positive growth of 10.3% the year before. (See Chart 20b.) (Refer to Charts Annex for a series of charts on the Singapore economy.) The heightened uncertainty that followed the September 11 attacks also triggered bouts of volatility in international financial markets.

While the adverse shock experienced by the domestic economy was largely cyclical in nature, 2001 also presented an opportunity to re-examine Singapore's economic strategies, policies and constraints. Not only is Singapore facing a changing competitive landscape in Asia, rapid technological advances and fundamental shifts in the nature of competition among industries pose both opportunities and challenges for the economy. These changes have

highlighted the need for Singapore to fundamentally review its economic strategy to facilitate the restructuring of the economy and prepare itself for its next phase of development.

■ RESPONSE TO THE CHALLENGES

These external challenges necessitated the strengthening of MAS' surveillance and forecasting capabilities for the external and domestic economies as well as financial markets, and also emphasised the importance of deepening the analytical foundations of policy formulation and enhancing the transparency of the monetary policy process. In addition, such developments have highlighted the need for better understanding of the links between macroeconomic developments and the overall stability of the financial system.

Strengthening Surveillance and Forecasting Capabilities across Both External and Domestic Economies

The challenges presented by the rapidly deteriorating global environment last year led to the strengthening of MAS' surveillance and forecasting capabilities. Developments in the regional and G-3 economies, especially in the US and global IT markets, were monitored closely, to assess their impact on the domestic economy. For in-

stance, the Economics Department (ED) kept a close watch over a whole range of indicators in the key IT markets, such as global chip sales, semiconductor prices, and new orders of electronics in the US. A number of detailed studies were carried out to assess the information content of these indicators, and to compare their behaviour across cycles for signals of impending changes in trends and their impact on the domestic economy.

Regional export performances were examined closely to assess the commonality of underlying causes, and to determine whether divergences across countries reflected underlying shifts in industry trends or in the product-market mix. In particular, close attention was paid to developments in Korea and Taiwan, given the similarities in their economic structures to Singapore and their trade linkages with the US economy. Potential risks and opportunities in global financial markets were also identified and assessed against the context of unfolding cyclical developments as well as the underlying structural changes brought about by continuing liberalisation and consolidation in the financial services industry. Throughout the year, MAS continued to contribute actively to regional surveillance initiatives as well as in efforts to strengthen the architecture of the international

Chart 20a | G-3 GDP GROWTH

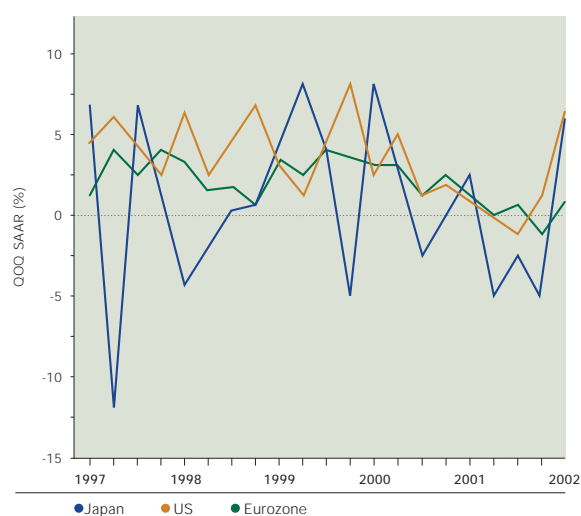
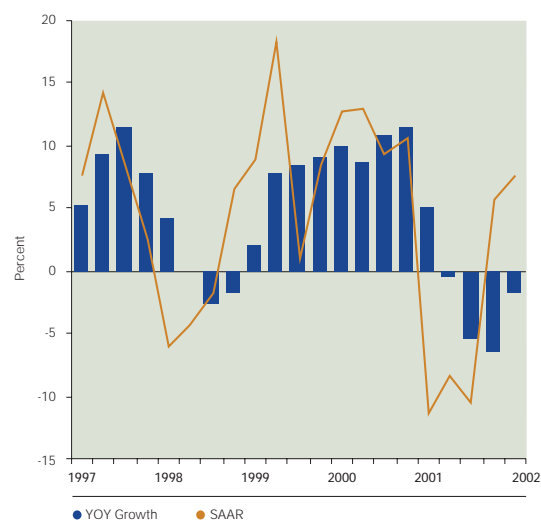


Chart 20b | SINGAPORE GDP GROWTH



financial system through participation in regional and international fora such as the Executives' Meeting of East Asia-Pacific Central Banks, the Manila Framework, the Asia-Pacific Economic Co-operation group, the Association of Southeast Asian Nations, the Bank for International Settlements, and the Financial Stability Forum (FSF).

Forecasting for the domestic economy also proved particularly challenging in the uncertain environment last year, as previously stable economic relationships broke down. For instance, there was a decoupling of the historical relationship between the rates of decline in global indicators like chip sales and domestic electronics Index of Industrial Production. In particular, the impact of the global electronics downturn on the domestic manufacturing industry turned out greater than expected compared with

previous downturns. As a result, MAS had to increase its reliance on short-term and direct cause-effect relationships, as well as gather feedback from industry participants and private sector analysts to better assess developments in the different industries. Another consequence of the heightened uncertainty in the environment was a greater dependence on scenario forecasting, with MAS' econometric model, the Monetary Model of Singapore (MMS), used to simulate alternative scenarios so as to anticipate appropriate policy responses. Nevertheless, MAS' sectoral and expenditure model frameworks continued to provide a useful macro perspective through which current events could be interpreted. Close study of previous downturns also allowed MAS to compare the differences in how each recession unfolded and provided additional indi-

cators to look out for. This will help pre-empt the knock-on effects following the externally induced shocks and anticipate the levelling off and the recovery of the Singapore economy. Finally, given that the structure of the economy is rapidly evolving, it is important that Singapore's statistical databases are constantly reviewed so that they remain relevant and adequate for surveillance and policy analysis. In this context, a working group has been formed under the Economic Monitoring Group - which comprises various government agencies and is co-chaired by MAS and the Ministry of Trade and Industry - to identify any gaps and weaknesses in the existing economic databases.

Deepening the Analytical Foundations of Policy Formulation and Enhancing Transparency to Strengthen Monetary Policy Effectiveness

Last year's developments highlighted the need to concurrently deepen the analytical foundations of policy formulation and enhance the transparency of the monetary policy process so as to improve on its effectiveness. Against a backdrop of collapsing external demand, MAS faced the challenge of ensuring that monetary policy remained supportive of growth, while continuing to emphasise the medium-term price stability objective. The frequency of the policy and forecasting review was increased last year in line with the rapidly evolving conditions in the economy. In addition, detailed studies were carried out on the exchange rate pass-through relationship, to examine the transmission mechanism by which changes in the nominal effective exchange rate (NEER) translated into inflationary pressures, as well as on wage-price dynamics to better understand the adjustment process in the labour markets, and their role in facilitating the economy's adjustment to external shocks. Econometric modeling was also carried out to determine the medium- to long-term influences on the real effective exchange rate (REER).

MAS also explicitly recognised the need to assess the overall macroeconomic stance in the economy and its implications for growth and inflation. This led to the development of the fiscal impulse measure that was used to summarise the fiscal policy stance, as well as the Domestic Liquidity Index, as a measure of overall liquidity conditions, to provide a better assessment of the state of monetary conditions in the economy. The MMS provided MAS with a quantitative assessment of the impact of the overall macroeconomic policy mix - involving both monetary and fiscal policy - on GDP growth. In addition, major developmental work was carried out on the MMS to enhance the fiscal block of equations and strengthen its linkages with the rest of the model. With these improvements, MAS is better able to assess the impact of fiscal measures on the economy, as well as to carry out medium-term simulations on the effects of tax changes on the government budget position.

The effectiveness of MAS' exchange rate policy has also been strengthened through its efforts to enhance the transparency of the monetary policy process. Towards this end, the Monetary Policy Statement (MPS) has been published on a semi-annual basis since February 2001, following the review of the exchange rate policy.

MAS also released the first issue of the Macroeconomic Review in January 2002 in conjunction with the MPS, to provide the public with the economic background and rationale behind its policy decisions. The first issue tracked the impact of the deteriorating external environment through the various sectors of the domestic economy, and included a special feature on forecasting in times of uncertainty. Going forward, the Macroeconomic Review will be the main vehicle to release MAS' analysis on current economic developments, but MAS also plans to release a number of more in-depth studies on various aspects of the economy in the Occasional Paper Series. In addition, the revamp of the Monthly Statistical Bulletin in 2001 led to the inclusion of more charts and data on the financial sector, which provided the public with a comprehensive overview of financial sector developments.

Another dimension of the shift towards increased transparency is MAS' efforts in economics education. Initiatives taken to improve the level of economic literacy amongst the public included the recent launch of the 2002 MAS-ESS Essay Competition, on *"The Role of the State in an Increasingly Borderless World"*, and various public lectures to private sector participants and students. MAS has engaged the private sector in dialogue, through fora such

as the semi-annual analysts meetings, and provided resource persons to training institutes like the Southeast Asian Central Banks Research and Training Centre and the IMF-Singapore Regional Training Institute. Also, in conjunction with MAS' 30th Anniversary Conference (See page 59.) which was held in 2001, MAS is putting together for publication the MAS 30th Anniversary commemorative volume, which will provide an analytical discussion of the evolution of monetary and financial sector policies in Singapore since the 1970s. A number of essays by prominent economists will also be featured in the book and will help to interpret Singapore's policy strategies and experiences within a formal conceptual framework as well as to relate them to the practices and experiences of central banks elsewhere. Other upcoming plans include the introduction of the Academic Visitors Programme. MAS has already secured commitments from at least two academics from the US to deliver public lectures to both MAS staff and the public, and to work on papers focusing on current policy issues. Going forward, MAS will also continue to reach out to students in junior colleges and universities, through lectures on Singapore's monetary policy framework and developments in the economy.

In-depth Studies on Structural Trends and Issues

Beneath the overlay of cyclical developments, new areas were also identified for special in-depth studies, particularly of longer-term structural factors and trends that would impact Singapore. For instance, the export slump raised concerns of Singapore's competitive position in Asia, especially with the emergence of China as a formidable competitor and important market. In this context, ED embarked on a joint project with International Enterprise Singapore and the National University of Singapore, using the shift share analysis to examine Singapore's competitiveness relative to the other Asian economies. In-depth studies were conducted on current issues such as deflation in Japan, and the rising challenges posed by China. In addition to these projects, MAS has been engaged in increased consultation and joint projects with other ministries and statutory boards on various longer-term structural issues, including a joint study with the Ministry of National Development and the Urban Redevelopment Authority on assessing policies in the property market, as well as medium-term simulations on the impact of tax policy changes on the government's budget position.

Exploring Linkages Between Macroeconomic Developments and the Overall Stability of the Financial System

Given the developments in the external environment last year, more resources were devoted to understanding the links between macroeconomic developments and overall financial system stability. This included, for instance, understanding the relationship between economic growth and the impact of financial market turbulence on the health of financial institutions. In the past, MAS' efforts in financial surveillance were divided across two departments - the Supervisory Policy Department (SPD) and ED. To minimise duplication and in order to pool resources and build up a critical mass of requisite skills and expertise in this area, the Financial Surveillance Division in SPD was merged with ED's Financial and Special Studies Division. ED was given responsibility for assessing and monitoring overall financial system stability, while working closely with and supporting the Financial Supervisory Group (FSG).

This was achieved via the development of a systematic framework to monitor and assess overall financial system stability, which includes regular reporting on developments in the financial system both in Singapore and internationally. Leveraging on expertise in FSG, work in international

groups such as the FSF, and informal discussions with the private sector, these reports highlight the linkages between the economy, financial institutions and financial markets, as well as those between individual financial institutions. For instance, in the aftermath of September 11, ED worked with FSG to conduct an internal assessment of the impact of such negative shocks on banks, insurance companies and securities firms.

Going forward, MAS' analyses of systemic stability and financial market surveillance will be consolidated in a semi-annual financial report. MAS will also work on regular reports to benchmark the performance of Singapore's financial system against similar global centres and to enable more systematic monitoring of trends. In this regard, a major effort is being made to improve the comprehensiveness of data that will help MAS to assess financial stability, as well as the efficiency by which this data is collected and managed.

On the external front, MAS has been preparing for its involvement in the joint International Monetary Fund–World Bank Financial Sector Assessment Program (FSAP), an external assessment of the systemic stability of Singapore's financial system that will take place in late-2002 to mid-2003. (See Box 5.) To this end, the necessary logistical framework has been

laid out, and preparations made to facilitate the upcoming stress tests and Reports on the Observance of Standards and Codes (ROSC) assessments that will be conducted around the FSAP missions. ■

Box 5

■ WHAT IS THE FINANCIAL SECTOR ASSESSMENT PROGRAM (FSAP)?

FSAP IS A JOINT INTERNATIONAL MONETARY fund (IMF)–World Bank initiative that was started in 1999 in response to the proliferation of financial crises in the 1990s. It is a comprehensive health check of a country's financial sector that seeks to reduce the likelihood of financial crises by identifying the strengths, vulnerabilities and risks to a national financial system. In particular, an FSAP focuses on the link between financial sector soundness and the macroeconomic environment in addition to the usual business risks that might impact on financial institutions.

So far, more than 40 countries have participated in the FSAP including Canada, Hong Kong, Japan, Korea, Switzerland, and the United Kingdom. Singapore agreed in 2001 to undergo an FSAP in 2002/2003. An FSAP team comprising 10–15 experts from the IMF, the World Bank and experts from other regulatory organisations are likely to make two visits to Singapore as part of this assessment.

The FSAP has two main components. First, an assessment of the health of the financial system, including macro-

economic factors that could affect its performance. This will include both industry and institutional-level stress and scenario testing. Second, the FSAP team will also assess Singapore's compliance with relevant best practices, codes and standards in their Reports on the Observance of Standards and Codes. These international standards include the Basel Core Principles of Effective Banking Supervision, International Organisation of Securities Commissions' Objectives and Principles on Securities Regulation, International Association of Insurance Supervisors' Insurance Supervisory Principles and IMF's Code of Good Practices on Transparency in Monetary and Financial Policies. ■

MAS in the International Arena:

▣ MAS has been an active member of the international financial community.

It has made useful contributions in areas such as financial regulation and anti-money laundering, through participation in fora and standard-setting bodies.

MAS also engages in regular dialogues to strengthen working relations with counterparts around the world.

MAS in the International Arena

INTERNATIONAL RELATIONS

The past year witnessed tremendous global uncertainty, with the challenges of a severe economic slowdown in key developed markets, and the shock to global financial markets from the September 11 terrorist attacks. MAS, together with the international financial community, has stepped up measures to combat the financing of terrorism, while continuing to be vigilant against money laundering.

In other areas of international co-operation, MAS continues to strengthen co-operation with its counterparts through regular dialogue, information exchange and technical co-operation. Singapore fully supports the work of the International Monetary Fund (IMF) in promoting international financial stability, and participates actively in the work of key standard-setting bodies in financial sector regulation.

MAS was also actively engaged in negotiations on financial services sector liberalisation, as part of Singapore's efforts in promoting global free trade and free trade agreements.

ANTI-MONEY LAUNDERING EFFORTS AND COMBATING TERRORIST FINANCING

MAS participates actively in global efforts to combat money laundering, aimed at preserving the integrity of the

global financial system. Singapore has been a member of the Financial Action Task Force since 1991, and is also one of the founding members of the Asia-Pacific Group on Money Laundering (APG), which encourages the adoption, implementation and enforcement within the Asia-Pacific region of internationally accepted anti-money laundering standards.

MAS, together with the Commercial Affairs Department of the Singapore Police Force, hosted the 4th APG Typologies Workshop on Money Laundering on 17-18 October 2001 which brought together more than 100 law enforcement and regulatory experts from 23 jurisdictions in the Asia-Pacific region. The Workshop focused on ways to combat money laundering of proceeds generated by drug trafficking and financial crime, and the use of underground banking and alternative remittance systems to launder money.

Singapore is fully committed to the global fight against terrorism, and has signed various anti-terrorism conventions, including the United Nations International Convention for the Suppression of the Financing of Terrorism. MAS participates in the Singapore Inter-Ministerial Task Force on Anti-Terrorism, set up shortly after September 11.

INFORMATION EXCHANGE, BILATERAL DIALOGUE AND TECHNICAL CO-OPERATION

In 2001, MAS strengthened co-operation with our fellow regulators in the supervision of securities markets. MAS signed Memoranda of Understanding (MoUs) with the Comissão de Valores Mobiliários of Brazil in February 2001, the Commission des valeurs mobilières du Québec, the Financial Services Board of the Republic of South Africa both in June 2001, and the Financial Services Agency of Japan in December 2001. MAS also signed an MoU in March 2002 with the Hong Kong Office of the Commissioner of Insurance to provide mutual assistance and exchange of information, to facilitate co-operation between the two supervisory authorities in the effective supervision of insurers who have presence in both jurisdictions.

Also, in March 2002, MAS and the People's Bank of China (PBC) signed an MoU to strengthen co-operation to promote the implementation of sound economic and prudential policies in the two countries, the effective supervision and development of the banking industry as well as staff training and development.

During the year, MAS held regular bilateral dialogues with regional central banks and financial regulators, including Bank of Thailand, Bank Negara Malaysia, Hong Kong Monetary Authority and Bank Indonesia (BI). MAS also

held bilateral meetings with the PBC, China Insurance Regulatory Commission (CIRC) and China Securities Regulatory Commission. These bilateral dialogue sessions serve as platforms to foster better understanding of developments in the respective economies and financial systems, and to discuss issues of mutual concerns.

MAS actively provides technical co-operation to other countries, either bilaterally or through various multi-lateral fora, to help in enhancing their financial infrastructure and supervisory regimes. In 2001, MAS held briefings for close to 300 foreign visitors and also tailored training seminars and attachment programmes for 540 participants, including more than 300 officials from the PBC and BI. Further training programmes for officials from the PBC and the CIRC are planned. MAS will also be providing training on on-site inspection techniques to the Central Bank of Iran in June 2002 under a World Bank technical assistance programme.

MAS will continue to host and organise annual training seminars for insurance supervisors from Asian jurisdictions in its capacity as the International Association of Insurance Supervisors (IAIS) Training Co-ordinator for Asia. The training seminars will focus on the discussion of IAIS Insurance Core Principles & Standards and will be

sponsored by the Singapore and Japanese Governments under the *"Japan-Singapore Partnership Programme for the 21st Century"*.

MAS organised a Capital Markets Seminar in May 2002 with the theme *"Evolving Regulatory Approaches"*. The Seminar provided a forum for securities regulators, mainly from the Asia-Pacific region, to discuss and share experiences on regulatory challenges in today's rapidly evolving financial landscape. Regulators from major global markets and prominent speakers from the private sector were invited to provide a global dimension and contribute market perspective to the issues raised.

INTERNATIONAL POLICY DIALOGUE AND ECONOMIC SURVEILLANCE

With the global slowdown and greater economic uncertainty, MAS continues to be in close consultation with other central banks and regulators. In the Financial Stability Forum, which brings together central bankers and regulators from the G-7 and selected financial centres, including Singapore, MAS participated in active discussions on vulnerabilities in the international financial system.

GLOBAL FREE TRADE AND FREE TRADE AGREEMENTS

MAS represents Singapore in financial services negotiations at the World Trade Organisation (WTO), and will participate in the new round of WTO trade talks which were launched in Doha in November 2001. MAS is also involved in negotiations on financial liberalisation under the Association of Southeast Asian Nations (ASEAN) Framework Agreement on Services, which aims to achieve full trade liberalisation of services by the year 2020. On 5 April 2002, the ASEAN Finance Ministers signed the Protocol in Yangon implementing the second

package of financial services commitments, and launched a third round of negotiations.

MAS has also been actively involved in discussions on financial services sector liberalisation and co-operation, as part of Singapore's efforts to forge Free Trade Agreements (FTA) with key trading partners. The Japan-Singapore Agreement for a New Age Economic Partnership (JSEPA) was signed in Singapore on 13 January 2002. Negotiations for the EFTA-Singapore FTA (ESFTA) were also completed in March 2002 and signed in June 2002.

MAS keeps its neighbours updated on the latest economic developments in Singapore, through economic surveillance discussions at regional fora such as the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), Manila Framework Group and ASEAN and ASEAN+3 Finance process.

MAS hosted the 36th Southeast Asia Central Banks (SEACEN) Governors Conference in June 2001 with the theme of *"Financial Sector Reforms in a Globalised Economy: Issues for Financial Stability in Asia"*. Mr Andrew Crockett, General Manager of the Bank for International Settlements (BIS), delivered the keynote address. With the hosting of the Governors' Conference, MAS also assumed chairmanship of the SEACEN Board of Governors for 2001-2002. MAS also hosted the International Monetary Conference back-to-back with the SEACEN Governors Conference.

MAS was also co-host to the first Joint EMEAP Forum-Gold and Foreign Exchange Committee Meeting with the BIS Representative Office for Asia and the Pacific in July 2001. The meeting discussed recent developments in foreign exchange markets, and structural changes re-shaping these markets.

Further to the above, MAS hosted and chaired the 4th ASEAN Insurance Regulators Meeting in August 2001. The meeting discussed various initiatives

such as human resource training and development for ASEAN insurance markets, enhancing the regulatory frameworks of member countries through greater adoption of the IAIS Insurance Core Principles and Standards. The issue

of the establishment of a Scheme of Compulsory Motor Vehicle Insurance to provide compensation to victims of road accidents caused by foreign transit vehicles passing between ASEAN countries was also discussed.

■ RELATIONS WITH THE IMF

Singapore fully supports the work of international financial institutions, such as the IMF, in promoting international financial stability. Singapore is currently represented at the Alternate Executive Director level at the IMF South East Asia Voting Group. Besides holding regular Article IV Consultations with the IMF, Singapore will also participate in the joint IMF-World Bank Financial Sector Assessment Programme (FSAP) in 2002 to 2003, and the associated Reports on the Observance of Standards and Codes. MAS also contributes resource persons and assessors at the request of the IMF and the World Bank, to participate in FSAP and other missions to other countries.

Singapore and the IMF jointly set up the IMF-Singapore Regional Training Institute (IMF-STI) in Singapore in May 1998. The IMF-STI trains officials from developing countries in the Asia Pacific in macroeconomic adjust-

ment and reform policies, financial programming, monetary and exchange operations, public finance, banking supervision, and statistics. The IMF-STI has seen overwhelming demand and runs at full capacity. As of end March 2002, it has conducted over 97 courses for 2,200 officials from 41 countries.

MAS also participates in the outreach efforts of the IMF. On 15 June 2001, MAS and the IMF co-hosted the IMF Outreach Seminar on Reserve Management Guidelines. Participants from the regional central banks exchanged views on the IMF's draft guidelines, and shared their experience on reserve management practices. Together with the Institute of Policy Studies, MAS co-organised a public lecture on *"Asia and the IMF"*, by Dr Stanley Fischer, then first Deputy Managing Director of the IMF, on 1 June 2001.

■ STANDARD-SETTING AND INNOVATION

During the year, MAS continued to be involved in standard-setting work of international bodies and committees to enhance global supervisory standards and practices. This included the Basel Committee on Banking Supervision's Core Principles Liaison Group and its Working Group on Capital, a Working Group on Cross-border Banking, and two Task Forces, one on Accounting Issues⁵ and the other on Dealing with Weak Banks. The efforts of these working groups produced important papers issued by the Basel Committee last year, like "Internal Audit in Banks and the Supervisor's Relationship with Auditors", "Supervisory Guidance on Dealing with Weak Banks" and "Customer Due Diligence for Banks". MAS is regularly invited to enlarged meetings of the G-10 Committee on Payment and Settlement Systems (CPSS), Committee on the Global Financial System, Gold and Foreign Exchange Committee⁶, and the Group of Computer Experts, and participates in working groups established by these committees.

As one of the three Asian representatives on the Executive Committee, MAS continues to participate actively in the supervisory standard-setting work of the IAIS. In 2001, MAS became a member of the Emerging Mar-

kets Committee and Work Group on the Future and Financing Structure of the IAIS, in addition to its membership on other key IAIS committees.⁷

On the securities front, MAS plays an increasingly active role in the International Organisation of Securities Commissions (IOSCO). In 2001, MAS became co-chair of the CPSS-IOSCO Joint Task Force on Securities Settlement Systems, and hosted the 12th meeting in April 2002. MAS also joined IOSCO's Standing Committee 2 on regulation of secondary markets. Other IOSCO committees that MAS participates in include Standing Committee 3 on regulation of market intermediaries and the Implementation Committee, which develops implementation and assessment methodologies for IOSCO's Objectives and Principles of Securities Regulation.

MAS continues to be at the forefront in examining regulatory issues arising from the use of information technology in international financial markets. As a member of the newly established IOSCO's Internet Project Team, MAS contributes to IOSCO's efforts in monitoring Internet-related market and regulatory developments and identify regulatory issues requiring further guidance. Under the initiative on Electronic Financial Transactions

Systems in the Asia-Pacific Economic Co-operation Finance process, Singapore presented a case study on its e-Government system where it shared its experience in developing the Public Services Infrastructure, with a specific emphasis on its e-payment capabilities. ■

⁵ Including its sub-group on Fair Value Accounting.

⁶ Renamed as Markets Committee in May 2002.

⁷ MAS is represented in the Executive Committee, Technical Committee, Solvency & Actuarial Issues Subcommittee, Investment Subcommittee and Reinsurance Subcommittee.

Meeting the Challenges Ahead as a Team:

▣ The many branches of MAS work together as a close-knit team -

each one with a different role to play, but working together toward a common goal. And as inevitable shifts occur in the local and international financial landscape, so too has MAS evolved to meet these changing needs.

Meeting the Challenges Ahead as a Team

■ TOWARD ORGANISATION EXCELLENCE AND EFFECTIVENESS

Organisation Review

The year has seen MAS making further refinements to its organisation structure to achieve greater effectiveness. As part of this exercise, the Financial Sector Promotion Department was renamed as Financial Centre Development Department, and the International Relations Department as International Department, to better reflect their roles and focus. The Banking Department streamlined and enhanced its internal structures as it shifted to a risk-focused supervisory approach in its work. Similarly, the Finance Department re-positioned itself to improve its risk management practices and financial resource utilisation. The Planning, Policy and Communications Division of the Managing Director's Office became a department, to undertake additional responsibilities in strategic planning and policy, and promoting organisational innovation.

Supporting Corporate Priorities

Cross-departmental teams were formed to identify frameworks and strategies to foster innovation, support knowledge management and organisational integration, and to enhance market infrastructure. Gaps were identified and initiatives developed to support these corporate priorities.

Greater Cohesion and Learning

To foster a shared vision and *esprit de corp*, and promote learning across all levels, workshops were conducted for MAS' staff on the Organisational Learning concepts, framework and tools. Internal facilitators were also trained to help their respective departments build organisational development capacities and to manage change efforts.

Merger with the Board of Commissioners of Currency, Singapore

The government announced in January 2002 that the Board of Commissioners of Currency, Singapore and MAS would be merged by 31 March 2003. MAS will become a full-fledged central bank with a range of functions, including currency issuance. The merger of the two institutions was undertaken with the objective of streamlining the institutional structure, rationalising common functions and realising efficiency gains.

Institutionalising Strategic Planning Capability

The rapid pace of change and the increasing complexity of the financial industry require an ongoing, systematic approach to seek out industry trends and driving forces, assess their implications to Singapore and formulate an effective response to the ensuing challenges and opportunities. MAS will strengthen

its longer-term planning capability by institutionalising a structured and disciplined approach to strategic planning. A dedicated division within the Planning, Policy and Communications Department will spearhead its implementation. For a start, the division is supporting the Financial Services Working Group as part of the government's Economic Review Committee tasked to review and recommend long-term policies to re-make Singapore's economy.

Alignment of Workplan, Appraisal and Budget Cycles

To better synchronise its corporate planning and resource allocation cycles, MAS has aligned its Corporate Planning, Appraisal and Budget exercises. With this change, the planning process begins with an assessment of the previous year's performance, and incorporates new corporate and organisational priorities from the Strategic Planning process. This is prior to the plans for resources and budget. The synchronised cycles will lead to a more efficient planning and allocation of organisational resources.

■ CORPORATE RESOURCE MANAGEMENT GROUP

The Corporate Resource Management Group provides essential services that support and sustain the operations of the organisation. It ensures the efficiency and effectiveness of internal systems

and operations, and comprises the Corporate Services Department, Finance Department, Human Resource Department and Information Technology Department.

During the year, the Group undertook several major projects and reviews. These included strengthening training and career development frameworks, fine-tuning the performance management system and improving on logistical and administrative work procedures and processes. On the IT front, more enhanced IT systems were put in place to better position MAS as a knowledge-based organisation.

The renovation of MAS' premises made good progress. The renovation was initiated to meet the needs of the growing staff strength, and to optimise space usage. More than half of the staff have moved to their renovated offices with 10 floors completed out of 14 being renovated. The whole project is expected to be completed by August 2002. The Corporate Services Department will continue to oversee the construction of the IMF-Singapore Regional Training Institute Building at Heng Mui Keng Terrace which is likely to be completed in the later part of 2003.

■ HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

MAS' strength lies in its people. Guided by its shared values of Integrity, Enterprise, Commitment and Teamwork, MAS staff are committed to the common vision of building MAS into a central bank of excellence.

MAS places great emphasis in developing a vibrant and conducive work environment that motivates each and every employee to make a meaningful contribution to the organisation.

Human Capital

MAS recruits high calibre staff to ensure that it has the necessary capabilities to achieve its mission and objectives. As at 31 March 2002, MAS staff strength totalled 870, of which 62.0% are professional staff and 38.0% support staff.

During the year, MAS recruited a total of 87 professional staff, comprising 55 mid-career officers and 32 fresh graduates. MAS selects officers with diverse experiences and background who can contribute to the quality and breadth of the organisation's work.

With increasing competition for talent, MAS adopts a proactive stance in augmenting its future talent pool through the MAS Undergraduate Scholarship programme. During the year, we awarded 12 MAS Undergraduate Scholarships.

These 12 undergraduate scholars will join the existing group of 33 scholars to study at top overseas and local universities.

Reward and Recognition

MAS believes that a performance-based compensation system challenges and motivates people to give their best. During the year, MAS fine-tuned its performance management system to arrive at a more holistic assessment of individual officers, in terms of their performance and demonstrated capability. The assessment criteria were broadened to encompass non-technical skills and attributes such as teamwork, leadership, innovation and integrity. Managers are also encouraged to give regular and constructive feedback to their staff and coach them to achieve better performance.

MAS' pegged-to-market pay structure came under test this year as the financial sector underwent a series of retrenchments and pay adjustments, resulting from mergers and acquisitions, and the global economic downturn. MAS responded accordingly while ensuring that its total compensation package remains competitive vis-à-vis the financial sector.

In a move to create a more open organisation, MAS introduced a flatter designation structure for senior officers during the year. The fewer designation levels de-emphasises hierarchy within

the organisation and fosters a more open and flexible working relationship.

Training And Development - A Continuous Process

MAS views training as a life-long and continuous process. MAS has designed core training programs for different levels of officers. The content of these programs is subject to regular review to ensure the courses remain relevant in a changing environment.

MAS' investment on training and personnel development for the financial year amounted to about \$5.1 million, more than half of which took the form of undergraduate and postgraduate scholarship awards. Staff training expenditure was about \$2 million, representing about 2.6% of payroll. On average, each staff received 11 days' training during the year.

During the year, MAS granted 5 Postgraduate Scholarships Awards and 1 Professional Development Award to senior officers to pursue postgraduate programmes at local and foreign universities. In addition, under the part-time Educational Sponsorship Scheme, MAS granted financial assistance and study leave to 104 staff who enrolled in part-time courses.

External attachment programs aim to provide external exposure and learning for MAS' officers. During the year, staff

were attached to the Financial Services Authority in the United Kingdom, the Bank of England, and local financial institutions.

Service Appreciation Awards

In recognition of their contributions and dedication to the organisation, 78 employees were presented with service appreciation awards. Of these, 1 had served MAS for 35 years, 10 for 30 years, 11 for 25 years, 7 for 20 years, 10 for 15 years, 12 for 10 years and 27 for 5 years.

Work-Life Balance

MAS recognises the significance of work-life balance. The MAS Recreation Club (MASRC) plays an important role in forging greater interaction and *esprit de corp* within the 'MAS Family'. Several social and sporting events were organised by MASRC during the year. To promote a healthy lifestyle among staff, the MASRC also organised activities such as lunchtime exercise classes on aerobics, pilates, yoga and boxercise. MAS' staff also demonstrated their social responsibility in lending strong support to a charity fund-raising campaign and blood donation drive organised by the MASRC.

The MAS Child Development Centre, catering mainly to children of MAS staff, was outsourced to Kinderland Educare Services from 1 March 2002 to ensure continued professional care and education of its staff's pre-school children.

INFORMATION RESOURCES

The Information Resource Centre (IRC) supports the information needs of the organisation by developing and maintaining a collection of up-to-date print and electronic resources. Information received by the Centre is disseminated through an alert service which keeps staff informed of developments and trends in their areas of interest. The collection itself provides materials for users with research needs and is used also to support MAS' organisational and life-long learning initiatives.

During the year, IRC initiated several projects to improve its services. These include the provision of more electronic journals and allowing for personalised information dissemination. These projects are near completion and the services will be launched in 2002. The Centre has also been working on a Corporate Memory Project where its photograph collection was digitised and resources in the Centre sifted through for earlier information on the organisation.

INFORMATION TECHNOLOGY SYSTEMS

E-services

MAS expanded the scope of e-Services for the financial sector by introducing the Singapore Government Securities Electronic Applications (SGS e-Apps) in January 2002. This is a secured electronic

platform for primary dealers to submit auction bids for Singapore Government Treasury Bills and Bonds online. In addition, a new SGS website, www.sgs.gov.sg, with comprehensive information on the SGS market, is now available.

A new improved online version of the MAS Monthly Statistical Bulletin was also launched to cater to different audiences in the public. Besides expanding the data content to include 10-year historical time-series, the online facility provides various data extraction and search features to make data more readily accessible and easily downloadable for analysis.

In the pipeline is a new e-Service called Offers and Prospectuses Electronic Repository and Access (OPERA) which serves to strengthen the disclosure-based regime. The service will host the prospectus and offers of investments lodged to MAS, and provide the public with a simple means to access and feedback on the published information via the Internet.

Enterprise Initiatives

On the corporate front, IT has been used as a means to bring the organisation towards greater integration and cohesion. Leveraging on technology in content management and portals, a knowledge portal is being developed to provide a unified interface to discover, share and reuse knowledge resources in the organisation. At the same time, the content

management process will be streamlined to ensure more timely updates, and horizontal portals introduced to provide the relevant context to content, such as the Resource Network portal.

Existing IT applications are being reviewed to make way for new business initiatives such as the integrated investment system to enhance MAS' role in monitoring and management of external reserves, and a new licensing system for the processing of Capital Market Services and Financial Adviser licences to support the introduction of the Securities and Futures Act and Financial Advisers Act.

■ MAS IT INFRASTRUCTURE

With the proliferation of bandwidth-intensive applications like multimedia streaming, the IT infrastructure was enhanced with a high-speed gigabit Storage Area Network. Data storage-related network traffic is now localised to a dedicated network providing better performance and higher throughput from the servers, storage and tape systems.

To enhance operational efficiency, the disaster recovery site for the MAS Electronic Payment System and in-house mainframe IT systems have been merged into a single location.

■ FINANCIAL RISK MANAGEMENT

Risk Committee

To foster a sound risk controlled environment in MAS, a Risk Committee was set up in 2000 to assist the Board of Directors in the management of financial risks inherent in MAS' investment portfolios. The Committee is chaired by an independent Board member, Mr Lam Chuan Leong, Permanent Secretary (Ministry of the Environment). The Risk Committee is responsible for strategic risk management issues as well as ensuring that appropriate risk methodologies and effective risk measurement systems are established. In addition, the Committee reviews and recommends portfolio benchmarks based on MAS' defined risk tolerance for approval by the MAS' Board.

The Risk Committee is supported by the Financial Risk Management Division (FRM) which provides regular reports of the risk profiles of MAS' investments. These reports cover risk measurement and analysis of the various MAS' portfolios. FRM also formulates risk policies and controls, and performs independent compliance monitoring of the portfolios in accordance with stipulated investment guidelines.

■ ENHANCING CORPORATE GOVERNANCE

Audit Committee

The Audit Committee was set up in 2001 to assist the Board of Directors in fulfilling its oversight responsibilities. It reviews the adequacy of MAS' internal controls, the scope and results of the internal and external auditors' work and the integrity of the financial reporting process. The Committee comprises three non-executive MAS Board members, namely, Mr Lim Siong Guan, Permanent Secretary (Finance) as Chairman, Mr Chan Seng Onn, Solicitor-General, and Dr Philip N Pillai, Senior Partner (Shook Lin & Bok). The Committee met twice during the financial year, with all members present at both meetings.

■ INTERNAL AUDIT

The Internal Audit Department (IAD) independently appraises the effectiveness of MAS' internal control systems and compliance with policies to provide assurance of a sound and effective control environment. The authority, responsibilities and professional independence of IAD are set out in the internal audit charter approved by the Audit Committee.

The major areas reviewed by IAD during the past year included MAS' reserves management operations, the issuance and management of SGS, the administration of the Financial Sector Develop-

ment Fund and the licensing of financial institutions. The technology and IT infrastructure supporting MAS' activities and securing MAS' network, such as data-centre operations, firewalls and intrusion detection systems, were also reviewed.

In addition, IAD worked with departments to ensure that key controls are incorporated at the outset of new operations and systems and through participation in work groups involved in the pre-implementation of financial systems.

■ PARTNERING THE INTERNATIONAL FINANCIAL COMMUNITY

International Advisory Panel

Formed in November 1998, the International Advisory Panel (IAP) comprises some of the world's leading experts in the financial sector. The panel advises the MAS on Singapore's financial sector reforms and strategies. Tapping the knowledge and expertise of a distinguished advisory panel gives MAS a global perspective on financial sector issues, and keeps MAS abreast of market developments and policy initiatives in major international financial centres. The 3rd MAS IAP meeting originally scheduled for October 2001 was postponed to 24 July 2002 due to the September 11 incident.

The IAP presently comprises 14 members:

- **Mr Lim Hng Kiang**
Chairman,
IAP
- **Mr Claude Bébéar**
Chairman of the Supervisory Board,
The AXA Group
- **Dr Rolf-E Breuer**
Chairman of the Supervisory Board,
Deutsche Bank AG
- **Mr Gerald Corrigan**
Managing Director,
Goldman Sachs & Co.
- **Mr Tom Glocer**
Chief Executive Officer,
Reuters Group PLC
- **Mr Rijkman Groenink**
Chairman,
ABN AMRO Bank NV
- **Mr John Mack**
Chief Executive Officer,
Credit Suisse First Boston, and
Vice-Chairman,
Credit Suisse Group Executive Board
- **Sir Peter Middleton**
Chairman,
Barclays Bank Plc
- **Mr Marcel Ospel**
President & Chief Executive Officer,
UBS AG
- **Mr Michel Pébureau**
Chairman,
BNP Paribas
- **Mr Robert Rubin**
Chairman of Executive Committee,
Citigroup Inc
- **Dr Werner G. Seifert**
Chief Executive Officer,
Deutsche Bourse AG
- **Mr Tasuku Takagaki**
Senior Advisor,
The Bank of Tokyo-Mitsubishi, Ltd
- **Dr Junichi Ujiié**
President & Chief Executive Officer,
Nomura Holdings, Inc

■ MAS LECTURE

To foster dialogue amongst key players in the financial sector, and to develop and sustain a vibrant financial community in the region, MAS launched an annual MAS Lecture series in 2000. The annual lecture series provides a platform for a distinguished and leading member of the international financial community to speak to a gathering of central bankers, regulators and industry players from Singapore and the region on issues of current interest and importance.

The 2001 MAS Lecture, scheduled for October 2001, was postponed to 25 July 2002 in the aftermath of September 11.

Goh Chok Tong was the Guest-of-Honour. A special commemorative book, *"MAS: 30 Years of Central Banking Excellence"* was also issued. It features interviews with MAS' past and present management and staff. ■

■ 30 YEARS OF CENTRAL BANKING EXCELLENCE

To mark its 30th Anniversary last year, MAS hosted a conference, *"Central Banking in the New Economic and Financial Landscape"* on 20 July 2001. A number of eminent international speakers, including central bankers and academics, participated in the Conference to share global perspectives as well as regional experiences. Senior central bankers from the region and more than 400 senior representatives from local and foreign financial institutions, economists, academia and the public sector attended the conference. MAS also hosted a dinner on the same evening to commemorate its 30th Anniversary. Prime Minister

Annual Accounts

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Highlights of the Accounts

ASSETS

Total assets of the Authority as at 31 March 2002 were S\$129,745 million, compared to S\$129,523 million a year ago.

Holdings of Singapore Government Securities (SGS) rose from S\$5,557 million to S\$6,393 million over the year. The increase was in line with the Authority's policy to build up its portfolio of SGS for more active use in repurchase transactions as part of money market operations.

Holdings of gold and foreign assets, which accounted for 95% of total assets, decreased by S\$778 million during the year to S\$122,956 million. Foreign assets included the Authority's reserve position in the International Monetary Fund (IMF) and Special Drawing Rights (SDRs) of S\$1,386 million. As at 31 March 2002, Singapore's quota in the IMF was SDR862.5 million, the same as at 31 March 2001.

LIABILITIES

Deposits of banks and financial institutions increased by S\$95 million to S\$7,310 million. With the statutory reserve ratios for banks and finance companies remaining unchanged in Year 2001/2002, the higher balances reflected a growth in deposits in the financial sector.

The allocation of Special Drawing Rights to Singapore remained unchanged at SDR16.5 million or S\$38 million.

Provisions and other liabilities decreased by S\$10,311 million over the year to S\$25,214 million, due largely to the reduction in the Authority's borrowings from banks as part of its money market operations.

Deposits placed by the Singapore Government with the Authority grew by S\$11,796 million to S\$82,585 million, reflecting mainly increased issuance of SGS through the Authority and larger placement of advance deposits by the Central Provident Fund Board with the Government for the purchase of future issues of Singapore Government Bonds.

PROFIT APPROPRIATION

After meeting all expenditure and transfers to/from provisions, the net profit for the year was S\$641 million. The decrease of S\$1,426 million compared to the previous year's profit was attributable mainly to lower interest income and general unfavourable performance of the financial markets.

In accordance with Section 3 of the Statutory Corporations (Contributions to Consolidated Fund) Act (Chapter 319A, 2000 Revised Edition), 24.5% of the net profit or S\$157 million will be paid into the Government's Consolidated Fund. The balance of S\$484 million shall be paid to the Government under Section 6(3) of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition). In addition, as approved by the Board, another S\$1,959 million will be drawn from the General Reserve Fund for payment to the Government in relation to its funds placed with the Authority.

FINANCIAL SECTOR DEVELOPMENT FUND (FSDF)

The Authority's Annual Accounts also include assets of S\$487 million under the FSDF which was established under Section 30A of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition).

With the release of sale proceeds of the Singapore Exchange Limited's shares previously held by SEL Holdings Pte Ltd to meet outstanding expenses allowed under Section 10(1) of the Exchanges (Demutualisation and Merger) Act (Chapter 99B), the Fund's capital account increased by S\$5 million to S\$472 million as at 31 March 2002.

Over the year, the Fund recorded a net surplus of S\$5 million after issuing grants of S\$10 million.

Report on the Audit of the Accounts of The Monetary Authority of Singapore

FOR THE YEAR ENDED 31 MARCH 2002

The accounts of the Monetary Authority of Singapore set out on pages 64 to 77 have been examined under my direction and in accordance with the provisions of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition). 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 2002 and the financial transactions of the Authority for the year ended on that date.

CHUANG KWONG YONG

AUDITOR-GENERAL

SINGAPORE

29 JUNE 2002

Income and Expenditure Statement FOR THE YEAR ENDED 31 MARCH 2002

	Note	2002 S\$'000	2001 S\$'000
Income from Foreign Operations (after transfers to/from provisions)	4	664,416	2,434,820
Income from Domestic Operations	5	271,201	178,727
Total Operating Income (after transfers to/from provisions)		935,617	2,613,547
LESS:			
Investment, Interest and Other Expenses	6	164,460	441,243
Net Operating Income (after transfers to/from provisions)		771,157	2,172,304
Non-operating Income	7	10,516	10,715
Total Income (after transfers to/from provisions)		781,673	2,183,019
LESS:			
Personnel Expenditure	8	105,057	88,153
General and Administrative Expenditure	9	23,204	19,990
Non-recurrent Expenditure		2,687	1,202
Depreciation/Amortisation		9,778	6,776
		140,726	116,121
Profit for the Year (after transfers to/from provisions)		640,947	2,066,898
LESS:			
Contribution to Consolidated Fund		157,032	413,379
Net Profit for the Year (after transfers to/from provisions)		483,915	1,653,519

The accompanying notes form part of the accounts.

Balance Sheet AS AT 31 MARCH 2002

	Note	2002	2001
		S\$'000	S\$'000
Capital and General Reserve			
Authorised Capital		100,000	100,000
Issued and Paid-up Capital	10	100,000	100,000
General Reserve Fund	11	11,897,723	13,856,776
		11,997,723	13,956,776
Financial Sector Development Fund	12	486,601	476,333
		12,484,324	14,433,109
REPRESENTED BY:			
Assets			
Cash and Bank Balances		120,574	4,334
Singapore Government Treasury Bills		507,036	1,697,980
Singapore Government Bonds		5,886,372	3,858,523
Foreign Assets	13	122,870,800	123,650,516
Gold		85,579	83,797
Other Assets	15	160,850	120,570
Fixed Assets	16	113,656	107,241
		129,744,867	129,522,961
LESS:			
Liabilities			
Deposits of Banks and Financial Institutions	17	7,310,119	7,215,000
Contribution to Consolidated Fund	18	157,032	413,379
Return of Profit to Singapore Government		2,442,968	1,586,621
Allocation of Special Drawing Rights in IMF		37,732	37,171
Provisions and Other Liabilities	19	25,213,823	35,524,776
Deposits of Singapore Government		82,585,470	70,789,238
		117,747,144	115,566,185
Net Assets of the Authority		11,997,723	13,956,776
Net Assets of Financial Sector Development Fund	12	486,601	476,333
		12,484,324	14,433,109

The accompanying notes form part of the accounts.

LEE HSIEN LOONG
CHAIRMAN
MONETARY AUTHORITY OF SINGAPORE
SINGAPORE
29 JUNE 2002

KOH YONG GUAN
MANAGING DIRECTOR
MONETARY AUTHORITY OF SINGAPORE
SINGAPORE
29 JUNE 2002

Statement of Changes in Equity FOR THE YEAR ENDED 31 MARCH 2002

	Issued and Paid-up Capital	General Reserve Fund	Total
	S\$'000	S\$'000	S\$'000
Balance as at 1 April 2000	100,000	13,789,878	13,889,878
Net Profit for the Year (after transfers to/from provisions)	-	1,653,519	1,653,519
Return of Profit to Singapore Government	-	(1,586,621)	(1,586,621)
Balance as at 31 March 2001	100,000	13,856,776	13,956,776
Net Profit for the Year (after transfers to/from provisions)	-	483,915	483,915
Return of Profit to Singapore Government	-	(2,442,968)	(2,442,968)
Balance as at 31 March 2002	100,000	11,897,723	11,997,723

Cash Flow Statement

FOR THE YEAR ENDED 31 MARCH 2002

	Note	2002	2001
		S\$'000	S\$'000
Cash Flows from Operating Activities			
Profit for the Year (after transfers to/from provisions)		640,947	2,066,898
ADJUSTMENTS FOR:			
Depreciation/Amortisation			
Fixed Assets	16	9,754	6,774
Others		17	17
(Gain)/Loss from Sale of Fixed Assets/Other Assets		(6)	1
Profit before Working Capital Changes		650,712	2,073,690
Decrease/(Increase) in Singapore Government Treasury Bills		1,190,944	(801,012)
Increase in Singapore Government Bonds		(2,027,849)	(2,511,922)
Decrease/(Increase) in Foreign Assets	13	779,716	(12,046,903)
Increase in Gold		(1,782)	(4,741)
Increase in Other Assets	15	(40,305)	(58,164)
Increase in Deposits of Banks and Financial Institutions	17	95,119	396,744
Increase/(Decrease) in Allocation of Special Drawing Rights in IMF		561	(555)
Decrease in Provisions and Other Liabilities	19	(10,311,758)	(153,287)
Increase in Deposits of Singapore Government		11,796,232	14,673,155
Net Cash from Operating Activities		2,131,590	1,567,005
Cash Flows from Investing Activities			
Purchase of Fixed Assets		(15,366)	(9,510)
Proceeds from Sale of Fixed Assets/Other Assets		16	1
Net Cash used in Investing Activities		(15,350)	(9,509)
Cash Flows from Financing Activities			
Contribution to Consolidated Fund	18	(413,379)	(719,530)
Return of Profit to Singapore Government		(1,586,621)	(1,080,470)
Net Cash used in Financing Activities		(2,000,000)	(1,800,000)
Net Increase/(Decrease) in Cash and Bank Balances		116,240	(242,504)
Cash and Bank Balances as at beginning of the year		4,334	246,838
Cash and Bank Balances as at end of the year		120,574	4,334

The accompanying notes form part of the accounts.

Notes to the Accounts FOR THE YEAR ENDED 31 MARCH 2002

These notes form an integral part of and should be read in conjunction with the accompanying accounts.

1 GENERAL

The Authority is established under the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition) and is located at 10 Shenton Way, MAS Building, Singapore 079117.

2 PRINCIPAL ACTIVITIES

The principal activities of the Authority are:

- a) to conduct monetary policy and to manage the official foreign reserves and the issuance of government securities; and
- b) 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.

3 SIGNIFICANT ACCOUNTING POLICIES

3.1 Compliance with Statements of Accounting Standard

The financial statements of the Authority are prepared in accordance with the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition) and comply with Singapore Statements of Accounting Standard to the extent that it is appropriate to do so having regard to the Authority's mission and principal activities, in particular, its responsibility to conduct monetary policy based on managing the Singapore dollar exchange rate within a trade-weighted policy band.

3.2 Basis of Accounting

The accounts are prepared in accordance with the historical cost convention and on an accrual basis. Purchases and sales of investments are recognised on a settlement date basis.

3.3 Foreign Currency Translation

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 statement.

3.4 Income Recognition

Interest income is recognised on an accrual basis.

Dividends from equities are recognised in the financial year in which they are declared payable.

Premiums and discounts are amortised on the straight-line basis over the remaining life of the securities and recognised as interest expense or interest income accordingly.

Profits and losses on disposal of investments are taken to the income and expenditure statement.

Licence fees and rental income are recognised on an accrual basis.

3.5 Singapore Government Bonds and Treasury Bills

Singapore Government bonds and Treasury bills are stated at cost. Provision has been made for diminution in value, if any, on an individual investment basis.

3.6 Gold and Foreign Assets

Gold and foreign assets are stated at cost. Provision has been made for diminution in value, if any, on an individual investment basis. Foreign assets represent the Authority's investments in a global diversified portfolio.

3.7 Repurchase and Reverse Repurchase Agreements (“Repos” and “Reverse Repos”)

Reverse Repos are treated as collateralised borrowing and the amounts borrowed are included in other liabilities. The securities sold under reverse repos are treated as pledged assets and remain on the balance sheet as assets. Repos are treated as collateralised lending and the amounts lent are included in other assets. The difference between the amount received and the amount paid under repos, and reverse repos is amortised as interest income and interest expense respectively on the straight-line basis.

3.8 Derivative Instruments

Off-balance sheet financial derivatives include forwards, swaps, futures and options. Provision is made for diminution in value, if any, using the lower of cost and market value.

3.9 Operating Lease

Leases where substantially all the rewards and risks of ownership remain with the leasing companies are accounted for as operating leases. Rental receipts/payments under operating leases are accounted for in the income and expenditure statement on the straight-line basis over the period of the relevant leases.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an income/expense in the period in which termination takes place.

3.10 Employees’ Benefits

Employees’ benefits including leave entitlement are recognised on an accrual basis.

3.11 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 and 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 statement in the year of purchase.

4 INCOME FROM FOREIGN OPERATIONS

Income from foreign operations includes interest, dividends, realised capital gains/losses and exchange gains/losses less provision for diminution in value of individual investment, based on the lower of cost and market value.

5 INCOME FROM DOMESTIC OPERATIONS

Income from domestic operations comprises licence fees, interest and capital gain from Singapore Government Bonds and Treasury bills, and revenue from services rendered to banks and financial institutions on MASNET and MAS Electronic Payment System which provides real time gross settlement of payments.

6 INVESTMENT, INTEREST AND OTHER EXPENSES

Foreign investment expenses include management fees and bank, custody and other charges. Interest and other expenses comprise mainly interest paid on borrowings and reverse repurchase agreements.

Notes to the Accounts FOR THE YEAR ENDED 31 MARCH 2002 (con't)

7 NON-OPERATING INCOME

Non-operating income includes rental and carpark income, interest on loans to staff and management services fee.

8 PERSONNEL EXPENDITURE

This includes the following:

	2001/02	2000/01
	S\$'000	S\$'000
Salaries	82,571	69,946
Employer's Contribution to the Central Provident Fund	10,730	7,193
Training and Personnel Development	5,150	4,904
Staff Benefits	2,543	2,296
Directors' Fees	36	45

As at 31 March 2002, MAS has 870 (FY2000/2001: 823) employees.

9 GENERAL AND ADMINISTRATIVE EXPENDITURE

This includes the following:

	2001/02	2000/01
	S\$'000	S\$'000
Information Technology Expenses	8,869	7,077
Official Trips and Conferences	1,921	2,285
Building and Mechanical and Electrical Maintenance	1,612	1,543
Property Tax	1,426	1,554
Rental Expense - Operating Leases	805	203
Audit Fee	350	310
Entertainment	115	119

10 ISSUED AND PAID-UP CAPITAL

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

11 GENERAL RESERVE FUND

The General Reserve Fund is established under Section 6(1) of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition). The movement in the General Reserve Fund relates to the amounts transferred to the Fund in accordance with Section 6(3) of the Act.

Material movements in the General Reserve Fund are set out in the statement of changes in equity.

12 FINANCIAL SECTOR DEVELOPMENT FUND

(a) The Financial Sector Development Fund (hereinafter called the Fund) is established under Section 30A of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition). It is controlled and administered by the Authority. The Fund shall be used for the objects and purposes set out in Section 30B of the Act.

(b) The assets and liabilities of the Fund as at 31 March 2002 are as follows:

	Note	2001/02	2000/01
		S\$'000	S\$'000
Accumulated Fund			
Capital Account	12(f)	471,635	466,102
Accumulated Surplus		14,966	10,231
		486,601	476,333

REPRESENTED BY:

Assets

Cash and Deposits		77,372	468,147
Accrued Interest and Dividend Receivable		11,975	9,033
Portfolio Investments	12(c)	404,968	-
		494,315	477,180

LESS:

Liabilities

Accounts Payable		7,714	847
Net Assets		486,601	476,333

(c) Details of portfolio investments are as follows:

	2001/02	2000/01
	S\$'000	S\$'000
Bank Balances and Deposits	72,993	-
Fixed Income Securities, at cost	255,279	-
Less: Provision for Diminution in Value	(2,893)	-
(Market Value - 2001/02: S\$253,212)	252,386	-
Equities, at cost	82,275	-
Less: Provision for Diminution in Value	(6,186)	-
(Market Value - 2001/02: S\$82,155)	76,089	-
Receivables and Other Investments, at cost	3,900	-
(Market Value - 2001/02: S\$4,430)		
Accrued Expenses and Other Payables	(400)	-
	404,968	-

Notes to the Accounts FOR THE YEAR ENDED 31 MARCH 2002 (con't)

12 FINANCIAL SECTOR DEVELOPMENT FUND (con't)

(d) The financial results of the Fund are as follows:

	2001/02	2000/01
	S\$'000	S\$'000
Portfolio Investments		
Interest Income	9,471	-
Dividend Income	729	-
Realised Exchange Loss	(1,096)	-
Realised Capital Loss	(4,297)	-
Investment Expenses	(1,628)	-
Net Realised Portfolio Investment Income	3,179	-
Translation Gain	1,844	-
Provision for Diminution in Value	(9,079)	-
Net Portfolio Investment Loss	(4,056)	-
Interest Income from Bank Deposits	662	3,675
Dividend on Warehoused SGX Shares	18,249	7,500
	14,855	11,175
LESS:		
Manpower Development Grants		
Global Enrichment Initiatives	158	-
Executive Development Scheme	988	-
Training Infrastructure Enhancement Scheme	22	-
	1,168	-
Non-manpower Development Grants		
Infrastructure	8,736	-
Studies for Development of Singapore Financial Market	-	847
Investor Education	204	-
Other Projects	12	97
	8,952	944
	10,120	944
Net Surplus for the year	4,735	10,231
Accumulated Surplus as at beginning of the year	10,231	-
Accumulated Surplus as at end of the year	14,966	10,231

(e) Significant Accounting Policies

The accounts are prepared in accordance with the historical cost convention. The Fund's investment assets are valued at the lower of cost and market value.

- (f) The Capital Account is funded from the net sale proceeds of the Singapore Exchange Limited's (SGX) shares. The increase in capital as at 31 March 2002 was due to the transfer of funds previously held by SEL Holdings Pte Ltd (SEL) to meet outstanding expenses and fees allowed under Section 10(1) of the Exchanges (Demutualisation and Merger) Act (Chapter 99B).

(g) As at 31 March 2002, SEL holds 249,991,184 SGX shares for the benefit of the Fund as stipulated under Section 11(2) of the Exchanges (Demutualisation and Merger) Act (Chapter 99B). These SGX shares held have a total market valuation of S\$325 million as at 31 March 2002 (FY2000/2001: S\$282 million). The net sale proceeds of these shares (after deducting expenses allowed under Section 10(1) and the par value of those shares) shall be paid by SEL into the Fund under Section 10(2) of the Act.

(h) The fund has outstanding commitments, amounting to S\$5.9 million in respect of grants approved but not paid out as at 31 March 2002.

13 FOREIGN ASSETS

13.1 These comprise the following:

	2001/02	2000/01
	S\$'000	S\$'000
Foreign Investments		
Securities (including Treasury bills, bonds and equities)	105,486,813	108,139,152
Bank Balances, Deposits and Negotiable Certificates of Deposit	15,265,643	14,343,640
Other Reserve Assets/Liabilities	677,794	(189,764)
	121,430,250	122,293,028
International Monetary Fund		
Reserve Tranche	902,822	873,456
Holdings of Special Drawing Rights (SDRs)	278,558	245,964
Poverty Reduction and Growth Facility (PRGF)	91,609	112,809
Poverty Reduction and Growth Facility - Heavily Indebted Poor Countries (PRGF-HIPC)	100,875	67,686
Accrued Income	5,737	7,535
Currency Adjustment	6,277	(4,634)
	1,385,878	1,302,816
Shareholding in Bank for International Settlements	54,670	54,670
Shareholding in SWIFT	2	2
	122,870,800	123,650,516

13.2 International Monetary Fund (IMF) Assets

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 PRGF (previously known as 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. The first SDR40 million has been rolled over for another ten years upon maturity under the PRGF-HIPC. The Authority's balance of SDR4,045,647 in the Post-Special Contingent Account-2 with IMF was transferred to the PRGF-HIPC on 24 April 2001 as an interest-free deposit maturing at the end of 2018.

13.3 Shareholding in Bank for International Settlements

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

Notes to the Accounts FOR THE YEAR ENDED 31 MARCH 2002 (con't)

14 FINANCIAL RISK MANAGEMENT

To foster a sound risk-controlled investment environment in MAS, a Risk Committee, chaired by an independent Board member, has been set up to assist the Board of Directors in the management of financial risks inherent in MAS' investment portfolios. This Committee is responsible for strategic risk management issues as well as ensuring that appropriate risk methodologies and effective risk measurement systems are established. In addition, the Committee reviews and recommends portfolio benchmarks, based on MAS' defined risk tolerance, for approval by the MAS Board.

An independent risk management unit provides senior management and the Risk Committee, with regular reports of the risk profiles of MAS' investments. These reports cover risk measurement and analysis of the various MAS' portfolios. It also formulates risk policies and controls, and performs independent compliance monitoring of the portfolios in accordance with the stipulated investment guidelines.

14.1 Interest Rate and Credit Risks

Interest rate risk is the risk of loss arising from changes in market interest rates.

Credit risk is the risk of loss arising from counterparty's failure to discharge its obligations under a financial contract. MAS' maximum credit exposures arise mainly from its business relationships with counterparties and custodians. These risks are managed by dealing only with highly-rated entities and assigning comprehensive credit limit to each of them. Credit risks are also mitigated by diversifying credit exposures across multiple entities.

As MAS invests mainly in high quality investment grade securities, issuer credit risk is minimal. MAS' credit exposure at the end of the financial year, in relation to each class of recognized financial assets, is the carrying amount of those assets as indicated in the balance sheet.

15 OTHER ASSETS

These comprise the following:

	2001/02	2000/01
	S\$'000	S\$'000
Loans, Deposits and Other Receivables	153,126	109,794
Corporate Club Membership		
Cost	500	508
Less: Amount amortised	(151)	(134)
	349	374
Staff Loans		
Amount repayable within 12 months	846	899
Amount repayable after 12 months	6,529	9,503
	7,375	10,402
	160,850	120,570

Staff loans include housing, conveyance, renovation and personal computer loans. The period ranges from 3 years for computer loans to 30 years for housing loans. The interest rates vary, ranging from 0% for personal computer loans to 1% below DBS Bank's housing loan rate (subject to a floor of 5% per annum) for the portion of housing loans exceeding S\$750,000.

16 FIXED ASSETS

	Leasehold Land	Buildings	Building Improvements and Renovation	Mechanical and Electrical Installations	Computer Equipment and Software	Furniture Fixtures and Other Equipment	Work-in- Progress	Total
	S\$'000	S\$'000	S\$'000	S\$'000	S\$'000	S\$'000	S\$'000	S\$'000
COST								
As at 1.4.2001	25,449	105,950	1,757	35,309	14,774	3,767	4,586	191,592
Additions	-	-	742	811	3,541	11,437	652	17,183
Disposals	-	-	-	-	(323)	(6)	-	(329)
Transfers	-	-	1,426	165	219	1,767	(3,577)	-
Adjustments	-	-	-	-	(9)	12	(1,009)	(1,006)
As at 31.3.2002	25,449	105,950	3,925	36,285	18,202	16,977	652	207,440
ACCUMULATED DEPRECIATION								
As at 1.4.2001	4,237	33,583	502	35,099	8,661	2,269	-	84,351
Additions	265	2,125	392	126	3,354	3,491	-	9,753
Disposals	-	-	-	-	(321)	(6)	-	(327)
Adjustments	-	-	-	-	(1)	8	-	7
As at 31.3.2002	4,502	35,708	894	35,225	11,693	5,762	-	93,784
Depreciation for FY 2000/2001	265	2,127	176	30	3,263	913	-	6,774
NET BOOK VALUE								
As at 31.3.2002	20,947	70,242	3,031	1,060	6,509	11,215	652	113,656
As at 31.3.2001	21,212	72,367	1,255	210	6,113	1,498	4,586	107,241

17 DEPOSITS OF BANKS AND FINANCIAL INSTITUTIONS

	2001/02	2000/01
	S\$'000	S\$'000
Banks	6,789,466	6,593,521
Finance Companies	284,591	293,670
Securities Companies	6,800	6,400
	7,080,857	6,893,591
International Financial Institutions	228,857	320,982
Foreign Central Banks	405	427
	7,310,119	7,215,000

Deposits from banks and financial institutions in Singapore represent mainly the minimum cash balances maintained by banks and finance companies with the Authority as required under the Banking Act (Chapter 19, 1999 Revised Edition) and the Finance Companies Act (Chapter 108, 2000 Revised Edition) respectively and statutory deposits of securities companies under the Securities Industry Act (Chapter 289, Revised Edition 1985).

18 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, 2000 Revised Edition). The rate of contribution was changed from 20% to 24.5% of the profit for the year (after transfers to/from provisions) with effect from FY2001/2002.

Notes to the Accounts FOR THE YEAR ENDED 31 MARCH 2002 (con't)

19 PROVISIONS AND OTHER LIABILITIES

Provisions have been made for contingencies under Section 6(2) of the Monetary Authority of Singapore Act (Chapter 186, 1999 Revised Edition). Other liabilities include borrowings from banks, borrowings under reverse repurchase agreements, creditors, accounts payable and accruals.

20 STATUTORY DEPOSITS OF INSURANCE COMPANIES AND REMITTANCE LICENSEES

The following statutory deposits of insurance companies held by the Authority under the Insurance Act (Chapter 142, 2000 Revised Edition) and the remittance licensees under the Money-Changing and Remittance Businesses Act (Chapter 187, 1996 Revised Edition) are not included in the balance sheet:

	2001/02	2000/01
	S\$'000	S\$'000
Insurance Companies		
Bank Covenants	33,500	41,500
Fixed Deposits	38,479	29,917
Singapore Government Bonds	7,350	6,800
	79,329	78,217
Remittance Licensees		
Bank Guarantees	20,300	18,000

21 COMMITMENTS

International Monetary Fund

In addition to the Reserve Position and Holdings of Special Drawing Rights disclosed in Note 13, the Authority has an obligation to pay an amount of S\$1,073 million (FY2000/2001: S\$1,073 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 of up to SDR340 million [S\$779 million] (FY2000/2001: S\$767 million) in the event of a financial emergency as specified by the NAB. During the year, the Authority did not grant any loan under the NAB.

Bank for International Settlements

The Authority has a commitment, amounting to S\$29.3 million as at 31 March 2002 (FY2000/2001: S\$24.2 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.

Currency Swap Agreement

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\$1.0 billion [S\$1.8 billion] for a maximum period of 5 years. As at 31 March 2002, the outstanding principal due from BOT under the Agreement amounted to US\$402.5 million [S\$742 million] (FY2000/2001: US\$762 million [S\$1,376 million]).

Repurchase Agreements with Other Central Banks

The Authority has entered into bilateral repurchase agreements with various Asian central banks to provide liquidity assistance in times of emergency. As at 31 March 2002, there was no request for liquidity assistance from any counterpart.

ASEAN Swap Arrangement

The Authority has participated in the multilateral swap arrangement together with other ASEAN central banks and monetary authorities to provide short-term foreign exchange liquidity support for member countries that experience balance of payments difficulties. As at 31 March 2002, there was no request for liquidity support from any member country.

Committed Contracts not yet Settled

The committed aggregate long positions in forwards in foreign currencies vis-à-vis the domestic currency (including the forward leg of currency swaps) are as follows:

	2001/02	2000/01
	S\$'000	S\$'000
Long positions	350,000	3,950,000

Capital Commitments

Capital expenditure not provided for in the accounts is as follows:

	2001/02	2000/01
	S\$'000	S\$'000
Amount approved and contracted for	13,822	21,450
Amount approved and not contracted for	24,177	17,205
	37,999	38,655

Leases

Future minimum lease payments under non-cancellable operating leases are as follows:

	2001/02	2000/01
	S\$'000	S\$'000
Within 1 year	937	436
Within 2 to 5 years	400	329
	1,337	765

22 SUBSEQUENT EVENT

On 23 January 2002, the Government announced its decision to merge the Board of Commissioners of Currency, Singapore, with the Monetary Authority of Singapore by 31 March 2003. The merger is subject to the approval of Parliament.

23 COMPARATIVE FIGURES

The presentation and classification of items in the income and expenditure statement and the balance sheet have been changed in the following aspects:

- "Investment, Interest and Other Expenses" is shown separately from the Income from Foreign Operations and Income from Domestic Operations in the income and expenditure statement;
- Cash and Bank Balances, Singapore Government Treasury Bills and Singapore Government Bonds have been removed from "Other Assets" and shown as separate items on the balance sheet;
- Shareholding in Bank for International Settlements and SWIFT have been reclassified from "Other Assets" to "Foreign Assets"; and
- "Deposits of Banks and Other Financial Institutions" and "Deposits of International Financial Institutions" have been grouped together and shown as "Deposits of Banks and Financial Institutions" on the balance sheet.

Comparative figures have also been reclassified to conform with the presentation in the current year.

Calendar of Monetary and Financial Events

19.04.2001

- The Monetary Authority of Singapore (MAS) announces proposed changes to banking regulations which will make it easier for banks to outsource some of their activities to third parties and help them focus on core competencies.

04.05.2001

- The Singapore Exchange (SGX), in a joint venture with the American Stock Exchange, lists five Exchange Traded Funds.

01.06.2001

- MAS hosts the 36th Southeast Asia Central Banks (SEACEN) Governors Conference and the 20th Meeting of the SEACEN Board of Governors. The International Monetary Conference is held back-to-back with the SEACEN Governors Conference.

15.06.2001

- MAS issues new guidelines which allows hedge funds to be sold to the public, subject to a minimum initial subscription of \$100,000 per investor.

25.06.2001

- MAS signs Memorandum of Understanding (MoU) with the Commission des valeurs mobilières du Québec to facilitate the exchange of information and mutual assistance in relation to the regulation of securities markets.

26.06.2001

- MAS signs MoU with the Financial Services Board of the Republic of South Africa on greater co-operation between the regulatory authorities of South Africa and Singapore in relation to the regulation of securities markets.

29.06.2001

- SGX launches a five-year Singapore government bond futures contract.
- MAS unveils the second round of banking liberalisation, which will free up entry to the Singapore dollar wholesale market and intensify retail competition by giving foreign qualifying full banks more business opportunities.

01.07.2001

- Insurance companies have to disclose, as recommended by the Committee on Efficient Distribution of Life Insurance, their expenses with immediate effect under the guidelines for benefit illustrations for all life insurance participating and investment-linked plans.

20.07.2001

- MAS hosts a conference, *"Central Banking in the New Economic and Financial Landscape"* to mark its 30th Anniversary.

25.07.2001

- MAS and the Bank for International Settlements Representative Office for Asia and the Pacific co-host the first joint meeting of EMEAP (Executives' Meeting of East Asia and Pacific Central Banks) Forum and the Gold and Foreign Exchange Committee.

27.07.2001

- MAS announces a new risk-based Liquidity Supervision Framework for banks in Singapore.

07.09.2001

- The Association of Banks in Singapore (ABS) announces its online, image-based cheque clearing system, which will replace the traditional physical cheque flow process.

01.10.2001

- The SGX and Tokyo Stock Exchange announce plans to form a strategic alliance aimed at broadening distribution and improving the liquidity of products traded on both markets.

05.10.2001

- Parliament passes the Securities and Futures Bill and the Financial Advisers Bill.

17.10.2001

- MAS and the Commercial Affairs Department, Singapore Police Force, jointly host the 4th Asia-Pacific Group on Money Laundering Typologies Workshop.

18.10.2001

- MAS receives in-principle agreement from Continuous Linked Settlement (CLS) Bank to include Singapore dollar as a prospective CLS-eligible currency. The Development Bank of Singapore, Oversea-Chinese Banking Corporation Ltd and United Overseas Bank Ltd become shareholders of the CLS Group.

26.10.2001

- SGX launches single-stock futures contracts.

20.12.2001

- SGX and Australian Stock Exchange launch their securities co-trading link in which 50 Singapore and 51 Australian stocks will be traded on the link.

21.12.2001

- MAS signs an agreement with Japan's Financial Services Agency to boost cooperation in supervising securities and derivatives markets.

28.12.2001

- MAS issues new guidelines for the unit trust industry to protect investors against late redemption payment and stop them from bearing marketing and promotional costs.

01.01.2002

- MAS raises the trigger point for a mandatory general offer in company takeovers to 30% from 25%.

02.01.2002

- The United Overseas Bank Ltd merges with the Overseas Union Bank.

07.01.2002

- SGX launches its securities lending programme.
- MAS launches Singapore Government Securities Electronic Applications for primary dealers to submit auction bids for Singapore Treasury Bills and Bonds online.

08.01.2002

- The Insurance (Amendment) Act 2001 takes effect.
- Singapore's three local banks announce the formation of Clearing and Payment Services (CAPS), a joint venture utility to facilitate banks' participation in CLS to provide fast and safe settlement of foreign exchange trades.

31.01.2002

- MAS announces that a consumer credit bureau will be set up in September by ABS.
- MAS announces that it will introduce several risk management guidelines that banks are expected to follow to prepare themselves for financial crises and shocks.

15.02.2002

- MAS releases draft guidelines on mobile banking and payments to protect customers and their data.

25.02.2002

- The Oversea-Chinese Banking Corporation Ltd merges with Keppel-Tat Lee Bank.

13.03.2002

- MAS announces that local banks will have to rotate auditors every five years and that it is mandatory that audit committees of local banks be made up of non-executive directors and that a majority, including the chairman, be independent.

15.03.2002

- MAS signs MoU with the Office of the Commissioner of Insurance of Hong Kong (OCI) under which MAS and OCI agree to provide mutual assistance and exchange information in relation to the regulation of the insurance industry in their respective jurisdictions.

19.03.2002

- MAS announces moves to lift certain restrictions on the non-internationalisation of the Singapore dollar.

26.03.2002

- MAS signs MoU with the People's Bank of China to strengthen co-operation to promote the implementation of sound economic and prudential policies in the two countries, the effective supervision and development of the banking industry as well as staff training and development.

01.04.2002

- The Public Accountants Board unveils proposed new rules governing auditor independence.

09.04.2002

- MAS launches a dedicated website for Singapore Government Securities to provide comprehensive market information and data, to enhance market transparency and promote greater investor interest.

17.04.2002

- MAS introduces more efficient risk-based capital framework for SGX members and modular licence fees for capital market intermediaries.
- SGX launches first local Exchange Traded Fund based on the Straits Times Index.

03.05.2002

- The Government announces the 2002 Budget which includes tax concessions for the financial sector.

09.05.2002

- SGX completes review of listing rules. New listing manual to take effect on 1 July 2002.

Key Economic and Financial Statistics

	1997	1998	1999	2000	2001
National Income Aggregates					
Gross Domestic Product					
At Current Market Prices (\$m)	140,279.3	137,618.3	140,070.4	159,888.2	153,455.2
Growth Rate (% change)	9.4	-1.9	1.8	14.1	-4.0
At 1990 Market Prices (\$m)	120,190.8	120,081.2	128,404.5	141,571.5	138,682.6
Growth Rate (% change)	8.5	-0.1	6.9	10.3	-2.0
Gross National Product					
At Current Market Prices (\$m)	149,450.4	145,872.7	143,507.2	160,913.4	154,644.5
Growth Rate (% change)	14.8	-2.4	-1.6	12.1	-3.9
Labour Force					
Unemployment Rate (%)	1.8	3.2	3.5	3.1	3.3
Productivity Growth (% change)	2.3	-2.8	7.4	5.9	-5.4
Employment Growth (% change)	6.2	-1.1	2.0	5.3	0.0
Average Monthly Earnings (% change)	5.7	2.8	2.7	8.9	2.3
Unit Labour Cost (% change)	0.7	4.0	-10.4	-0.2	7.3
Savings and Investment					
Gross National Savings (\$m)	81,045.5	78,807.7	72,672.1	77,961.3	69,292.3
As % of GNP	54.2	54.0	50.6	48.4	44.8
Gross Domestic Capital Formation (\$m)	54,137.2	45,827.5	44,659.7	50,514.6	37,248.5
As % of GNP	36.2	31.4	31.1	31.4	24.1
Balance of Payments (\$m)					
Goods Balance	1,531.0	24,948.2	19,028.7	19,948.7	23,063.5
Export of Goods	186,688.0	185,086.0	195,790.6	239,724.5	219,446.1
Growth Rate (% change)	5.1	-0.9	5.8	22.4	-8.5
Import of Goods	185,157.0	160,137.8	176,761.9	219,775.8	196,382.6
Growth Rate (% change)	6.1	-13.5	10.4	24.3	-10.6
Services and Other Balances	25,377.3	8,032.0	8,983.7	7,498.0	8,980.3
Current Account Balance	26,908.3	32,980.2	28,012.4	27,446.7	32,043.8
As % of GNP	18.0	22.6	19.5	17.1	20.7
Capital and Financial Account Balance	-20,512.3	-35,538.1	-19,577.4	-18,962.0	-33,916.0
Balancing Item	5,459.7	7,538.5	-1,113.8	3,350.7	270.3
Overall Balance	11,855.7	4,980.6	7,321.2	11,835.4	-1,601.9
Official Foreign Reserves	119,616.8	124,584.4	128,457.0	139,260.0	139,942.1
Inflation (% change)					
Consumer Price Index	2.0	-0.3	0.0	1.3	1.0
GDP Deflator	0.8	-1.8	-4.8	3.5	-2.0

	1997	1998	1999	2000	2001
Monetary Aggregates (% change)					
M1	1.7	-1.0	14.2	6.9	8.5
M2	10.3	30.2	8.5	-2.0	5.9
M3	8.3	8.0	7.3	-1.8	4.0
Interest Rates (period average)(% per annum)					
Prime Lending Rate	6.30	7.49	5.80	5.83	5.68
Banks' 3-month Fixed Deposit Rate	3.47	4.60	1.68	1.71	1.54
Banks' 3-month Domestic Interbank Rate	4.09	5.20	2.12	2.57	2.00
3-month USS SIBOR	5.74	5.56	5.41	6.53	3.78
Exchange Rates (period average)(S\$ per)					
US Dollar	1.4848	1.6736	1.6949	1.7239	1.7917
Pound Sterling	2.4334	2.7722	2.7427	2.6134	2.5809
Euro	nil	nil	1.8093	1.5930	1.6050
100 Japanese Yen	1.2277	1.2823	1.4944	1.6001	1.4751
Malaysian Ringgit	0.5353	0.4271	0.4460	0.4537	0.4715
Banking and Finance					
Commercial Banks' Assets/Liabilities (\$m)	289,572.3	309,974.5	326,295.4	344,005.8	384,630.9
Growth Rate (% change)	14.6	7.0	5.3	5.4	11.8
Finance Companies' Assets/Liabilities (\$m)	22,210.6	21,941.9	20,742.4	19,801.1	14,961.1
Growth Rate (% change)	4.8	-1.2	-5.5	-4.5	-24.4
Merchant Banks' Assets/Liabilities (\$m)	66,661.2	60,545.4	56,999.6	59,871.2	56,398.4
Growth Rate (% change)	24.4	-9.2	-5.9	5.0	-5.8
Asian Currency Units' Assets/Liabilities (US\$m)	557,193.5	503,609.9	480,399.4	486,452.7	471,389.3
Growth Rate (% change)	9.9	-9.6	-4.6	1.3	-3.1
Insurance					
Life Insurers' Assets/Liabilities (\$m)	19,350.9	22,270.5	29,138.9	35,397.9	48,714.2
Growth Rate (% change)	16.4	15.1	30.8	21.5	37.6
General Insurers' Assets/Liabilities (\$m)	8,815.0	9,107.6	9,719.8	10,011.9	10,982.5
Growth Rate (% change)	10.3	3.3	6.7	3.0	9.7
CPF					
Excess of Contributions Over Withdrawals (\$m)	4,398.3	2,370.5	14.7	-478.4	-566.5
Domestic Capital Market					
Net Funds Raised in Domestic Capital Market (\$m)	17,234.4	16,994.6	24,383.6	28,919.7	34,569.5

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A.1 MONETARY STATISTICS: MONEY SUPPLY

S\$ million										
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Money Supply (M1)	22,882.2	23,411.5	25,349.2	27,040.0	27,510.9	27,239.1	31,109.1	33,261.9	36,082.9	36,269.4
Currency in circulation	8,942.1	9,420.3	9,906.5	10,293.1	10,703.8	10,146.2	11,315.4	11,289.2	11,867.8	12,017.0
Demand deposits	13,940.1	13,991.2	15,442.7	16,746.9	16,807.1	17,092.9	19,793.7	21,972.7	24,215.1	24,252.4
Quasi-money	59,248.1	70,569.1	76,618.1	84,910.8	95,932.5	133,544.8	143,365.3	137,635.9	144,825.6	146,276.8
Fixed deposits	40,321.0	53,622.8	54,908.2	59,987.0	72,704.6	81,294.6	85,988.3	83,043.8	83,308.2	82,112.6
Savings and other deposits	18,091.7	16,350.1	20,894.8	24,079.3	22,594.4	51,673.7	56,828.0	54,276.8	61,313.5	63,903.2
SSNCDS	835.4	596.2	815.1	844.5	633.5	576.5	549.0	315.3	203.9	261.0
Money Supply (M2)	82,130.3	93,980.6	101,967.3	111,950.8	123,443.4	160,783.9	174,474.4	170,897.8	180,908.5	182,546.2
Net deposits with non-bank financial institutions	29,239.1	31,854.5	34,769.3	36,543.9	37,322.6	12,797.1 ¹	11,709.3	12,014.9	9,408.4	9,368.8
Finance companies	9,301.3	11,863.8	13,273.7	13,192.0	13,969.3	12,797.1	11,709.3	12,014.9	9,408.4	9,368.8
POSBank	19,937.8	19,990.7	21,495.6	23,351.9	23,353.3	–	–	–	–	–
Money Supply (M3)	111,369.4	125,835.1	136,736.6	148,494.7	160,766.0	173,581.0	186,183.7	182,912.7	190,316.9	191,915.0

¹ 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 RESERVES¹

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Total Foreign Reserves	77,866.8	85,165.5	97,336.6	107,750.8	119,616.8	124,584.4	128,457.0	139,260.0	139,942.1	140,009.6
Gold & Foreign Exchange	77,290.7	84,559.4	96,666.2	107,072.5	118,764.7	123,570.3	127,161.0	137,974.9	138,548.7	138,629.5
Reserve Position in the IMF	361.2	381.5	430.3	428.8	564.3	614.5	908.5	868.0	919.8	909.1
Special Drawing Rights (SDRs)	214.9	224.6	240.1	249.5	287.8	399.6	387.5	417.1	473.6	471.0
Total Foreign Reserves										
(US\$ Million)	48,424.6	58,304.6	68,823.2	76,975.9	71,391.7	75,028.2	77,176.0	80,361.9	75,800.1	75,938.1

¹ Prior to May 1999, Singapore's official foreign reserves (OFR) were valued at book cost. With effect from May 1999, the book value of foreign reserve assets are translated at market exchange rates prevailing at the end of each reporting month.

A.3 MONETARY STATISTICS: EXCHANGE RATES

Period Average	S\$ per foreign currency								
	1993	1994	1995	1996	1997	1998	1999	2000	1st Qtr 2002
US Dollar	1.6158	1.5274	1.4174	1.4101	1.4848	1.6736	1.6949	1.7239	1.8330
100 Japanese Yen	1.4568	1.4951	1.5154	1.2971	1.2277	1.2823	1.4944	1.6001	1.3840
Euro	–	–	–	–	–	–	1.8093	1.5930	1.6050
Pound Sterling	2.4271	2.3377	2.2369	2.2017	2.4334	2.7722	2.7427	2.6134	2.6152
Swiss Franc	1.0940	1.1184	1.2009	1.1425	1.0245	1.1563	1.1306	1.0223	1.0630
Australian Dollar	1.0983	1.1166	1.0510	1.1040	1.1024	1.0518	1.0933	1.0031	0.9274
100 Korean Won	0.2014	0.1900	0.1838	0.1754	0.1587	0.1204	0.1426	0.1526	0.1389
100 New Taiwan Dollar	6.1279	5.7724	5.3382	5.1354	5.1752	5.0004	5.2544	5.5231	5.3031
Hong Kong Dollar	0.2089	0.1976	0.1832	0.1823	0.1918	0.2160	0.2184	0.2212	0.2297
Malaysian Ringgit	0.6277	0.5823	0.5651	0.5605	0.5353	0.4271	0.4460	0.4537	0.4715
Thai Baht	0.0638	0.0607	0.0569	0.0556	0.0488	0.0409	0.0448	0.0430	0.0403
100 Indonesian Rupiah	0.0775	0.0707	0.0632	0.0606	0.0536	0.0173	0.0218	0.0207	0.0176

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

A.4 MONETARY STATISTICS: DOMESTIC INTEREST RATES

Per Cent Per Annum										
Period Average	1993	1994	1995	1996	1997	1998	1999	2000	2001	1st Qtr 2002
Banks¹										
Prime Lending Rate	5.39	5.82	6.37	6.26	6.30	7.49	5.80	5.83	5.68	5.37
Fixed Deposit Rate										
3-month	2.30	3.00	3.50	3.41	3.47	4.60	1.68	1.71	1.54	1.06
6-month	2.54	3.26	3.77	3.67	3.72	4.66	2.04	2.06	1.87	1.34
12-month	2.84	3.54	4.11	4.01	4.02	4.82	2.46	2.45	2.17	1.57
Savings Deposit Rate	1.62	2.31	2.81	2.72	2.75	3.11	1.37	1.33	1.16	0.81
Finance Companies²										
Fixed Deposit Rate										
3-month	2.44	3.28	3.28	3.14	3.32	4.61	1.77	1.85	1.54	1.14
6-month	2.68	3.52	3.68	3.48	3.62	4.73	2.23	2.31	1.79	1.33
12-month	3.16	3.99	4.20	3.93	4.03	4.94	2.73	2.82	2.15	1.49
Savings Deposit Rate	1.95	2.33	2.56	2.50	2.55	3.04	1.30	1.31	1.15	0.82
Interbank Rate³										
1-month	2.24	3.43	2.38	2.88	4.10	5.02	1.80	2.45	1.93	0.89
3-month	2.46	3.69	2.63	2.92	4.09	5.20	2.12	2.57	2.00	1.03
SIBOR-US\$										
1-month	3.23	4.50	5.96	5.45	5.64	5.57	5.26	6.41	3.88	1.85
3-month	3.32	4.76	6.01	5.52	5.74	5.56	5.41	6.53	3.78	1.90
6-month	3.43	5.09	6.12	5.58	5.83	5.54	5.52	6.65	3.74	2.07

1 Average of 10 leading banks.

2 Average of 10 leading finance companies.

3 Closing offer rates quoted by money brokers.

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

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

End-March	1995	1996	1997	1998	1999	2000	2001	2002
Banks	140	143	152	154	142	140	133	120
Local ¹	12	12	12	12	9	8	8	6
Foreign	128	131	140	142	133	132	125	114
Full banks	22	22	22	22	22	23	23	22
Wholesale banks	14	14	13	13	13	16	20	33
Offshore banks	92	95	105	107	98	93	82	59
(Banking offices including head offices and main offices)	(463)	(473)	(482)	(474)	(561)	(538)	(485)	(444)
Asian Currency Units	209	214	224	226	205	195	184	169
Banks	132	135	144	146	135	133	127	115
Merchant banks	77	79	80	80	70	62	57	54
Finance Companies	23	22	19	19	15	14	11	7
(Finance companies' offices including head offices)	(128)	(128)	(125)	(119)	(109)	(101)	(79)	(65)
Merchant Banks	77	79	80	80	70	63	58	55
Insurance Companies	141	146	154	164	159	153	151	144 ²
Direct insurers	58	59	59	61	59	55	54	53
Professional reinsurers	35	38	45	51	49	47	46	42
Captive insurers	48	49	50	52	51	51	51	49
Insurance Brokers	–	–	–	–	–	–	88	90
Representative Offices	57	58	64	70	69	66	62	55
Banks	54	55	61	68	69	66	62	55
Merchant banks	3	3	3	2	–	–	–	–
Stockbroking Companies	81	82	89	89	78	77	81	79
SGX-ST member companies	33	33	33	32	30	31	35	27
SGX-ST non-member companies	48	49	56	57	48	46	46	52
Investment Advisers	136	151	156	156	148	154	167	167
International Money Brokers	11	10	8	9	9	9	8	8
SGX-DT Members								
Corporate clearing members	39	37	36	36	33	30	30	27
Corporate non-clearing members	30	29	29	26	22	17	14	8
Individual members	411	443	470	473	520	565	552	539
Commercial associate members	12	12	11	11	16	15	17	15

¹ All local banks are full banks.

² Figure includes 15 companies on run-off.

C.1 COMMERCIAL BANKS: ASSETS AND LIABILITIES

S\$ million										
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Cash in hand	578.3	593.5	688.8	811.2	802.2	998.2	2,556.7	1,488.9	1,234.3	1,073.6
Balances with MAS	5,198.9	5,564.3	6,471.8	7,095.4	7,702.2	5,430.8	7,524.3	5,690.9	6,970.8	6,961.0
SSNCDs held	180.3	71.0	104.9	198.5	212.5	175.0	162.5	149.7	167.3	152.2
Amounts due from banks	62,516.6	79,152.9	79,837.0	86,112.6	99,935.3	106,345.0	114,900.2	124,665.5	125,133.7	130,812.5
In Singapore	17,401.5	28,411.2	30,926.6	33,555.1	30,220.6	38,215.6	29,458.6	42,535.9	27,069.9	27,651.7
ACUs	21,328.8	26,373.8	25,398.6	24,851.9	34,517.1	29,216.6	40,026.6	34,859.9	49,988.1	54,870.5
Outside Singapore	23,786.3	24,367.9	23,511.8	27,705.6	35,197.5	38,912.8	45,414.9	47,269.7	48,075.8	48,290.3
Money market investments	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	8,103.7	11,264.5	11,023.9	13,965.1	14,155.1
Treasury bills	4,798.5	4,888.1	5,661.4	5,939.0	6,738.3	8,103.7	11,264.5	11,023.9	13,965.1	14,155.1
Other investments	13,177.6	14,608.2	16,637.6	18,694.3	19,667.5	27,134.3	28,996.2	34,439.5	56,882.3	44,868.6
In Singapore	12,777.3	13,439.6	15,508.4	17,400.4	18,340.0	25,778.6	26,330.6	31,048.7	53,023.8	40,373.8
Government securities	7,975.1	8,681.3	10,092.5	11,599.0	12,145.1	18,398.3	19,684.0	22,694.9	26,546.7	26,585.6
Other securities	4,802.2	4,758.3	5,415.9	5,801.4	6,194.9	7,380.3	6,646.6	8,353.8	26,477.1	13,788.2
Outside Singapore	400.3	1,168.7	1,129.2	1,293.9	1,327.5	1,355.8	2,665.6	3,390.8	3,858.5	4,494.8
Loans and advances to non-bank customers	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	147,185.5	154,042.1	162,920.8	159,401.8
of which bills financing	5,835.8	6,247.8	6,879.3	8,693.4	9,363.5	4,924.5	5,118.2	3,584.2	3,636.6	3,261.6
Fixed and other assets	5,346.0	6,100.3	6,203.2	6,884.7	11,270.6	10,146.6	13,705.5	12,505.3	17,356.6	27,043.1
Liabilities										
Paid-up capital and reserves	13,296.3	15,685.3	18,904.1	20,977.3	23,709.6	23,323.8	25,318.6	24,492.1	36,855.7	31,769.7
Deposits of non-bank customers	85,400.8	99,032.2	108,885.5	118,201.5	124,143.0	162,310.3	174,454.1	171,316.4	182,551.4	184,438.8
SSNCDs issued	1,015.7	667.2	920.0	1,043.0	846.0	751.5	711.5	465.0	371.3	413.2
Amounts due to banks	62,264.7	77,295.1	86,063.1	101,576.8	125,856.1	105,301.7	103,432.8	126,223.9	129,232.7	132,754.2
In Singapore	16,626.7	25,125.5	29,881.0	34,328.6	31,134.2	29,769.5	23,124.0	34,334.2	28,544.0	26,950.7
ACUs	20,450.0	24,993.0	26,293.3	31,293.4	50,049.6	43,034.2	44,623.1	53,662.4	61,177.4	64,536.2
Outside Singapore	25,188.0	27,176.6	29,888.8	35,954.8	44,672.3	32,497.9	35,685.7	38,227.3	39,511.3	41,267.4
Amounts borrowed from other creditors	1,101.6	1,337.6	1,369.8	1,423.9	1,316.0	519.3	903.0	922.3	4,265.3	3,416.2
Bills payable	752.2	511.6	503.4	589.2	552.5	478.8	754.1	598.4	516.7	530.1
Other liabilities	6,419.0	7,423.6	7,932.8	8,911.7	13,149.2	17,289.2	20,721.4	19,987.6	30,837.9	31,145.7
Total Assets/Liabilities	170,250.4	201,952.5	224,578.7	252,723.4	289,572.3	309,974.5	326,295.4	344,005.8	384,630.9	384,467.9

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

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Agriculture, mining and quarrying	105.5	119.8	159.3	132.8	187.6	223.6	191.4	178.7	159.6	241.3
Manufacturing	8,353.4	8,856.2	11,003.1	12,248.2	12,472.0	12,249.2	11,574.7	11,620.7	11,918.2	11,653.3
Building and construction	11,394.1	13,509.9	16,712.9	21,401.2	26,234.8	25,580.0	23,444.0	25,644.7	26,578.4	26,157.1
Housing loans	11,718.5	14,702.8	17,482.8	20,402.3	22,934.8	31,788.5	35,154.1	38,562.5	41,731.2	43,421.2
General commerce	17,732.6	19,442.6	21,643.9	23,931.8	26,349.5	21,549.1	19,949.3	18,967.5	17,703.0	16,739.8
Transport, storage and communication	1,837.8	1,902.2	2,178.1	2,618.7	3,575.7	4,459.7	3,743.3	4,124.2	6,148.9	4,424.4
Non-bank financial institutions	13,132.5	13,644.4	16,888.6	19,448.3	20,997.4	22,724.1	21,062.8	20,864.7	21,559.2	20,801.7
Professional and private individuals	9,352.8	13,786.0	16,889.5	20,256.1	22,775.4	21,766.1	21,594.2	24,722.1	27,743.0	26,396.9
Others	4,826.9	5,010.2	6,015.8	6,548.3	7,716.5	11,300.6	10,471.7	9,356.9	9,379.4	9,565.9
Total	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	147,185.5	154,042.1	162,920.8	159,401.8

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

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Overdrafts	19,585.6	23,620.2	26,965.7	30,306.9	36,063.2	32,680.6	28,302.8	27,020.7	23,880.4	23,395.2
Term loans	47,456.1	55,238.2	68,394.5	81,518.5	90,805.3	109,009.0	109,175.1	118,580.0	130,968.3	128,485.6
Bills discounting	5,835.8	6,247.8	6,879.2	8,693.4	9,363.5	4,924.5	5,118.1	3,584.3	3,636.6	3,261.7
Trust receipts	5,576.7	5,867.9	6,734.6	6,468.9	7,011.8	5,026.7	4,589.3	4,857.2	4,435.4	4,259.3
Total	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,640.9	147,185.5	154,042.1	162,920.8	159,401.8

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

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Demand	15,765.4	15,787.6	17,537.8	18,862.7	18,297.4	18,427.1	21,676.0	23,650.0	25,966.6	26,238.8
Fixed	49,877.9	65,083.2	67,389.6	71,802.7	80,089.1	88,658.1	92,118.7	89,774.6	90,845.1	89,680.1
Savings	16,895.3	16,900.2	23,501.3	27,168.2	25,439.4	54,862.4	60,271.8	57,477.4	65,331.1	68,052.0
SSNCDs (net)	835.4	596.2	815.1	844.5	633.5	576.5	549.0	315.3	203.9	261.0
Others	2,862.1	1,261.1	456.8	368.0	317.2	362.7	387.6	414.4	408.7	467.9
Total	86,236.2	99,628.3	109,700.6	119,046.0	124,776.5	162,886.8	175,003.1	171,631.7	182,755.4	184,699.8

C.5 COMMERCIAL BANKS: LIQUIDITY POSITION

S\$ million										
Period Average	1993	1994	1995	1996	1997	1998	1999	2000	2001	1st Qtr 2002
Liabilities Base	80,743.0	87,580.0	100,138.0	114,828.5	122,777.4	134,282.4	162,193.4	168,185.3	177,264.5	184,393.0
Liquid Assets										
(a) Minimum Requirement	19,378.3	21,019.2	24,033.1	27,558.9	29,466.6	30,125.4	34,060.6	35,318.9	37,225.5	38,722.5
(b) Total Actual Liquid Assets	20,232.9	21,932.2	25,039.1	28,632.1	30,556.7	31,968.6	37,419.2	39,518.6	44,342.4	47,003.7
(c) Free Liquid Assets (b) - (a)	854.6	913.0	1,006.0	1,073.3	1,090.2	1,843.2	3,358.6	4,199.7	7,116.8	8,281.1
Liquidity Ratios	25.1	25.0	25.0	24.9	24.9	23.9	23.1	23.5	25.0	25.5

D.1 FINANCE COMPANIES : ASSETS AND LIABILITIES

S\$ million										
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Reserves with MAS	578.7	728.2	836.1	812.7	871.8	401.7	357.5	368.5	286.1	284.6
Deposits with banks and other financial institutions	1,802.2	2,333.6	2,666.1	2,165.9	1,904.2	2,721.8	2,729.7	1,664.5	1,241.9	1,271.1
Banks	1,197.0	1,830.9	1,998.3	1,734.1	1,628.1	2,408.1	2,654.4	1,635.2	1,218.0	1,229.5
Other institutions	605.2	502.7	667.8	431.8	276.1	313.7	75.4	29.4	23.9	41.5
Loans and advances	11,516.8	14,708.6	16,251.9	16,762.7	17,900.2	16,779.4	15,636.4	15,790.9	11,983.0	11,685.8
Housing loans	1,826.9	2,314.2	2,637.3	3,221.1	3,721.7	3,821.2	3,500.1	2,768.0	1,884.7	1,793.3
Hire purchase	4,245.7	5,616.1	5,580.2	4,982.4	4,958.8	4,331.6	4,413.3	5,700.1	4,394.8	4,268.0
Lease finance	84.0	46.2	20.2	8.7	6.1	2.4	1.4	1.1	0.8	0.7
Others	5,360.2	6,732.0	8,014.2	8,550.5	9,213.7	8,624.2	7,721.6	7,321.8	5,702.7	5,623.7
Securities and equities	845.5	942.9	1,089.8	1,139.4	1,201.6	1,705.2	1,691.5	1,680.4	1,257.0	1,251.3
Other assets	251.2	284.5	291.6	308.8	332.8	333.8	327.3	296.7	193.1	182.7
Liabilities										
Capital and reserves	1,850.2	2,202.9	2,621.0	3,014.7	3,268.5	3,371.2	3,408.1	3,164.9	2,425.5	2,183.3
Deposits	10,567.7	13,790.3	15,417.8	15,071.6	15,611.8	15,344.6	14,321.9	13,645.9	10,641.4	10,624.1
Fixed	9,729.2	12,345.5	13,584.6	13,311.8	15,124.9	14,882.9	13,875.5	13,425.4	10,431.4	10,409.1
Savings	350.5	320.5	348.8	371.6	392.7	341.7	344.3	194.6	202.4	206.3
Others	488.0	1,124.4	1,484.4	1,388.2	94.2	120.0	102.1	26.0	7.6	8.7
Borrowings	1,113.2	1,248.1	1,215.0	1,381.9	1,398.0	1,180.4	899.2	998.5	254.3	243.1
Other liabilities	1,463.3	1,756.4	1,881.7	1,721.2	1,932.2	2,045.6	2,113.2	1,991.8	1,639.9	1,624.9
Total Assets/Liabilities	14,994.4	18,997.7	21,135.5	21,189.4	22,210.6	21,941.9	20,742.4	19,801.1	14,961.1	14,675.4

E.1 MERCHANT BANKS: CONSOLIDATED ASSETS AND LIABILITIES¹

S\$ million										
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Amounts due from banks	15,828.2	18,590.9	21,678.6	21,796.7	28,222.0	27,632.0	27,337.8	30,386.1	25,703.8	23,348.9
In Singapore	609.0	997.6	715.2	771.9	1,221.3	1,771.2	1,704.7	1,554.7	1,427.1	1,243.6
Outside Singapore ²	15,219.2	17,593.3	20,963.4	21,024.8	27,000.7	25,860.8	25,633.1	28,831.4	24,276.7	22,105.3
Loans and advances to non-bank customers	11,545.8	13,138.8	15,258.2	17,348.9	21,777.5	19,321.2	20,846.5	21,833.8	20,309.8	20,676.6
Securities and equities	13,547.4	10,880.2	10,550.1	11,678.3	14,339.0	9,662.9	6,934.8	6,263.4	9,354.9	9,481.9
Other assets	1,283.9	2,439.4	2,766.3	2,756.7	2,322.8	3,929.2	1,880.5	1,387.9	1,029.9	1,123.7
Liabilities										
Capital and reserves	5,777.4	5,704.7	6,089.9	6,646.0	8,193.7	7,597.8	8,008.6	8,296.2	8,094.0	8,206.3
Amounts due to banks	27,473.3	28,668.5	30,543.6	34,571.8	41,111.3	30,363.7	26,501.8	26,943.4	27,617.9	26,518.4
In Singapore	471.2	399.0	657.5	481.5	974.2	1,083.2	649.0	671.8	895.1	723.4
Outside Singapore ²	27,002.1	28,269.5	29,886.1	34,090.3	40,137.1	29,280.5	25,852.8	26,271.6	26,722.8	25,795.0
Borrowings from non-bank customers	6,711.3	7,453.2	8,779.6	9,030.0	13,814.9	17,751.6	18,914.6	21,587.0	17,861.3	17,151.4
Other liabilities	2,243.4	3,223.0	4,840.0	3,332.9	3,541.2	4,832.3	3,574.6	3,044.7	2,825.2	2,755.1
Total Assets/Liabilities	42,205.3	45,049.4	50,253.1	53,580.6	66,661.2	60,545.4	56,999.6	59,871.2	56,398.4	54,631.1

¹ Data are 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 UNIT OPERATIONS¹

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Amounts due from banks	4,558.8	4,787.9	5,191.9	5,339.3	6,553.5	6,753.9	6,454.7	5,958.0	5,743.8	5,878.0
In Singapore	599.8	994.0	712.3	761.7	1,215.8	1,769.2	1,702.7	1,545.1	1,425.5	1,240.6
Outside Singapore ²	3,959.0	3,793.9	4,479.6	4,577.6	5,337.7	4,984.7	4,752.0	4,412.9	4,318.3	4,637.4
Loans and advances to non-bank customers	1,398.0	1,131.0	1,295.1	1,246.6	1,089.8	834.2	675.8	791.8	801.1	814.8
Securities and equities	479.7	393.1	406.1	494.2	513.2	430.0	449.8	485.1	609.2	605.6
Other assets	422.5	387.6	351.7	416.4	555.8	574.5	319.8	303.8	249.5	227.6
Liabilities										
Capital and reserves	3,902.0	3,739.9	4,036.7	4,104.7	4,889.6	5,254.6	4,874.0	4,802.7	4,734.5	4,901.2
Amounts due to banks	1,304.9	1,376.3	1,509.7	1,720.2	2,046.5	1,855.6	2,053.7	1,677.3	1,659.3	1,627.0
In Singapore	381.9	299.2	412.0	297.7	284.6	183.3	411.3	395.5	658.3	723.2
Outside Singapore ²	923.0	1,077.1	1,097.7	1,422.5	1,761.9	1,672.3	1,642.4	1,281.8	1,001.0	903.8
Borrowings from non-bank customers	1,185.2	1,229.4	1,324.9	1,194.3	1,082.0	786.0	516.3	565.5	562.7	591.6
Other liabilities	466.9	353.9	373.5	477.3	694.2	696.5	456.1	493.1	447.1	406.2
Total Assets/Liabilities	6,859.0	6,699.6	7,244.8	7,496.5	8,712.3	8,592.6	7,900.1	7,538.6	7,403.6	7,526.0

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 & PREMIUMS

	S\$ million									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Total Assets of Insurance Industry (End Period)	14,199.2	17,026.1	20,451.3	24,622.6	28,165.9	31,378.1	38,858.7	45,409.8	59,696.7	N.A
Direct Insurers	12,049.3	14,537.4	17,599.3	21,516.2	24,628.1	27,823.4	34,918.8	41,058.8	54,710.3	N.A
Professional Reinsurers	1,455.5	1,649.8	1,969.3	2,222.0	2,581.0	2,710.7	3,081.2	3,504.3	4,208.7	N.A
Captive Insurers	694.4	838.9	882.7	884.4	956.8	844.0	858.7	846.7	777.7	N.A
General Business: Gross Premiums										
Total General Business	2,369.3	2,609.5	2,716.1	2,793.8	2,914.9	2,670.9	2,752.6	3,269.6	3,819.1	1,091.9
Domestic Business	1,230.0	1,397.2	1,544.7	1,616.4	1,645.4	1,527.9	1,479.2	1,622.2	1,800.5	584.5
Offshore Business	1,139.3	1,212.3	1,171.4	1,177.4	1,269.5	1,143.0	1,273.4	1,647.4	2,018.6	507.4
Life Business: Premiums										
Premiums in Force (End Period)	2,070.4	2,547.8	3,016.0	3,538.0	4,202.5	4,468.6	4,680.5	5,071.6	5,221.9	5,219.9
New Business Premiums										
Annual Premium Policies	485.0	578.3	584.5	656.7	837.1	540.5	552.6	705.6	455.1	109.1
Single Premium Policies										
Life Insurance	480.1	509.9	551.5	699.5	1,288.1	529.3	1,785.1	3,337.7	8,961.6	1,676.0
Annuity	54.9	60.5	74.5	104.2	120.8	103.7	174.3	266.2	450.2	152.1

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

										S\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	1st Qtr 2002
Excess Of Contributions Over Withdrawals (During Period)	-522.2	3,977.6	6,270.0	4,078.3	4,398.3	2,370.5	14.7	-478.4	-566.5	750.1
Members' Contributions	10,427.0	11,278.5	13,536.1	14,623.0	15,873.8	15,999.8	12,826.6	14,092.8	18,322.3	4,660.1
Withdrawals*	10,949.2	7,300.9	7,266.1	10,544.7	11,475.5	13,629.3	12,811.9	14,571.2	18,888.8	3,910.0
Approved Housing Schemes ¹	3,509.4	3,500.4	4,590.7	5,058.4	5,786.7	7,834.7	9,528.4	8,655.1	8,262.5	2,163.8
Under Section 15 ²	1,187.0	1,372.9	1,450.0	1,633.0	1,548.2	1,847.0	1,671.1	1,679.9	2,226.1	498.4
Medical Schemes ³	292.1	335.2	360.0	389.5	420.8	441.0	444.9	518.1	531.6	121.2
Others	5,960.7	2,092.4	865.4	3,463.8	3,719.8	3,506.6	1,167.5	3,718.1	7,868.6	1,126.6
Interest Credited to Members' Balances (During Period)	1,329.6	1,337.3	2,116.2	2,452.8	2,692.6	3,248.9	3,105.3	2,379.8	2,489.5	717.7
Advanced Deposits with MAS (During Period)⁴	1,782.8	4,617.3	8,184.6	8,075.9	6,337.8	5,967.5	3,576.7	577.7	1,648.9	813.9
Interest Earnings from Investments (During Period)	1,387.8	1,397.4	2,198.7	2,596.6	2,853.0	3,479.6	3,309.8	2,537.8	2,662.4	756.2
Holdings of Government Securities (End Period)⁵	44,620.0	43,620.0	45,120.0	51,620.0	57,120.0	59,620.0	62,620.0	60,620.0	89,410.3	91,326.6
Members' Balances (End Period)	52,334.3	57,649.2	66,035.4	72,566.6	79,657.4	85,276.8	88,396.9	90,298.3	92,221.2	93,689.0

Source: Central Provident Fund Board

* Includes refunds and transfers to Reserve Account.

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 and 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									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	1st Qtr 2002
A Net funds raised by Government	2,538.0	5,519.1	10,417.9	10,096.6	6,626.4	11,491.6	8,973.9	8,873.2	11,044.1	1,196.6
1) Gross issue of Government securities ¹	3,260.0	3,750.0	7,200.0	12,150.0	10,460.0	12,800.0	12,430.0	12,100.0	44,990.3	3,116.3
Less:										
Redemption of Government securities	2,768.4	4,100.0	4,000.0	3,998.0	5,008.2	5,438.3	6,549.2	7,636.9	7,080.0	500.0
Government holdings of Government securities	-5.7	-	-	-2.8	-15.2	-0.1	-0.1	0.1	0.0	0.0
Conversion from accumulated advance deposits	-	-	3,000.0	8,000.0	7,000.0	5,000.0	5,000.0	0.0	30,790.3	2,416.3
2) New advance deposits	2,040.7	5,869.1	10,217.9	9,941.8	8,159.4	8,829.8	6,093.0	2,910.2	2,399.1	996.6
3) Net issues of statutory boards' securities	-	-	-	-	-	300.0	2,000.0	1,500.0	1,525.0	0.0
B New capital raised by the private sector	8,168.8	4,732.7	1,680.0	3,150.6	3,928.0	1,606.0	6,144.7	5,514.8	3,118.2	463.4
1) Public issues of shares	5,832.2	1,399.5	644.6	906.2	1,379.3	411.2	2,019.6	3,393.9	485.7	46.6
2) Rights issues	1,352.3	2,050.0	571.5	1,154.8	1,769.6	822.2	1,325.7	341.2	192.5	47.9
3) Private placements of listed shares	984.3	1,283.2	463.9	1,089.6	779.1	372.6	2,799.4	1,779.7	2,440.0	368.9
C Issues of debt securities	3,659.3	2,926.9	3,766.6	2,309.5	6,680.0	3,897.0	9,265.0	14,531.7	20,407.2	4,233.53
1) Listed bonds, debentures and loan stocks ²	1,518.3	643.9	1,695.0	589.5	1,168.1	721.4	6,067.1	8,727.4	11,814.2	1,387.72
2) Unlisted bonds	1,325.0	1,808.0	1,784.6	1,620.0	5,511.9	3,013.6	2,955.4	5,754.3	8,443.0	2,806.66
3) Revolving underwriting facilities/Note issuance facilities	615.0	445.0	280.0	-	-	-	92.5	-	-	-
4) Negotiable certificates of deposits ³	201.0	30.0	7.0	100.0	-	162.0	150.0	50.0	150.0	39.15
Total net funds raised (A+B+C)	14,366.1	13,178.7	15,864.5	15,556.7	17,234.4	16,994.6	24,383.6	28,919.7	34,569.5	5,893.53

¹ Government securities, excluding treasury bills.

² Singapore dollar-denominated bonds listed on the SGX.

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	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Loans to										
non-bank customers	136,857.4	145,822.5	173,264.7	180,505.5	173,286.3	131,712.7	110,593.9	89,446.0	79,324.2	77,974.2
Interbank funds	214,276.8	234,338.5	258,769.8	278,743.1	330,685.5	330,193.3	318,776.6	338,488.2	329,818.7	333,680.1
In Singapore	12,716.9	17,106.7	18,591.6	22,357.2	29,846.3	25,930.5	26,781.7	31,221.6	33,054.5	35,046.7
Inter-ACU	31,713.5	36,356.6	39,669.5	40,236.8	48,882.9	40,696.6	34,698.2	31,512.8	30,916.8	27,900.2
Outside Singapore	169,846.4	180,875.2	200,508.7	216,149.1	251,956.3	263,566.2	257,296.7	275,753.8	265,847.4	270,733.2
NCDs held	2,899.5	3,917.7	6,450.4	7,952.7	5,837.0	3,378.7	3,777.6	3,226.6	3,012.2	2,806.5
Other assets	32,069.4	32,266.7	39,747.8	39,668.8	47,384.7	38,325.2	47,251.3	55,291.9	59,234.1	58,221.8
Liabilities										
Deposits of										
non-bank customers	62,669.0	65,787.8	80,603.6	95,373.8	113,683.4	113,077.0	121,319.5	124,651.5	122,472.3	119,170.6
Interbank funds	308,940.1	333,537.8	376,106.5	389,469.6	414,526.2	365,479.4	326,542.7	321,650.1	316,068.2	323,493.4
In Singapore	18,502.4	22,676.3	25,133.5	25,257.4	32,271.9	20,742.4	28,200.3	27,975.8	31,670.1	36,216.5
Inter-ACU	31,716.6	36,354.3	39,670.2	40,243.3	48,905.3	40,694.4	34,701.6	31,517.0	30,926.4	27,897.1
Outside Singapore	258,721.1	274,507.2	311,302.8	323,968.9	333,349.0	304,042.6	263,640.8	262,157.3	253,471.7	259,379.8
NCDs issued	760.2	797.2	1,737.5	2,229.5	2,198.1	1,571.6	1,148.1	594.1	636.6	893.7
Other liabilities	13,733.6	16,222.6	19,785.2	19,797.3	26,785.9	23,481.7	31,389.3	39,556.9	32,212.3	29,125.0
Total Assets/Liabilities	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9	480,399.4	486,452.7	471,389.3	472,682.7

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

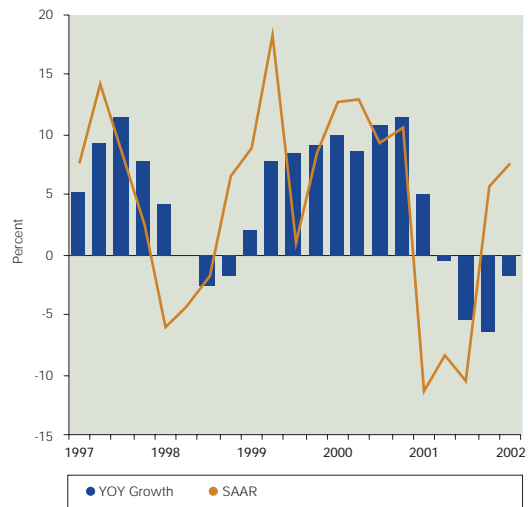
										US\$ million
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Assets										
Up to 7 days	78,267.1	75,774.0	89,709.1	102,544.6	131,356.6	117,190.0	87,481.1	106,221.8	120,064.0	107,047.2
Over 7 days to 1 month	77,557.8	76,180.8	84,731.7	88,029.3	106,318.6	100,885.7	131,322.7	101,957.4	84,324.9	84,312.9
Over 1 to 3 months	86,333.6	105,446.9	116,031.0	116,119.3	115,402.8	110,067.7	103,024.8	105,939.5	92,348.7	96,515.6
Over 3 to 12 months	69,544.2	81,102.7	102,093.3	112,104.8	112,918.7	95,641.1	82,454.4	97,000.8	88,571.6	98,951.7
More than 1 year	74,400.2	77,841.1	85,667.7	88,072.1	91,196.8	79,825.4	76,116.4	75,333.2	86,080.0	85,855.3
Liabilities										
Up to 7 days	108,432.5	110,093.2	123,729.0	147,901.2	165,240.8	159,112.1	103,457.6	161,792.0	161,777.2	150,872.1
Over 7 days to 1 month	109,383.7	104,555.7	129,946.3	136,728.0	150,252.5	141,014.5	190,966.4	137,522.2	127,783.4	120,181.8
Over 1 to 3 months	101,099.5	118,392.3	129,254.7	138,149.5	136,103.3	116,857.3	113,707.3	100,017.9	95,920.8	105,350.7
Over 3 to 12 months	55,177.2	71,221.4	81,408.7	65,738.6	87,882.6	68,630.9	51,287.2	63,510.5	65,443.3	72,116.1
More than 1 year	12,010.2	12,082.8	13,894.2	18,352.9	17,714.3	17,995.0	20,980.9	23,610.0	20,464.5	24,162.1
Total Assets/Liabilities	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9	480,399.4	486,452.7	471,389.3	472,682.7

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

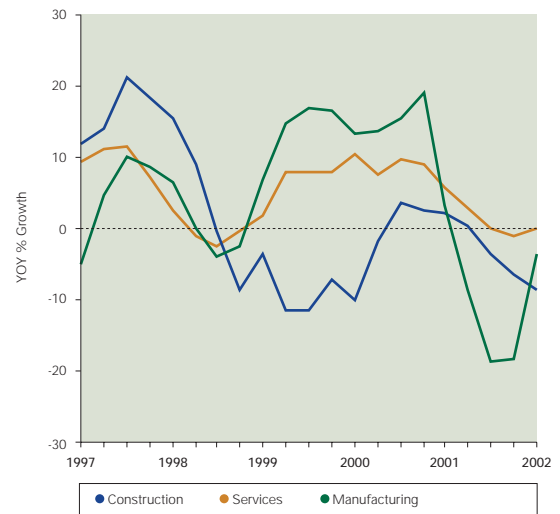
US\$ million										
End of Period	1993	1994	1995	1996	1997	1998	1999	2000	2001	March 2002
Net Position										
Up to 3 months	-76.7	-75.6	-92.4	-116.1	-98.5	-88.9	-86.3	-85.2	-88.8	-88.5
3 months to 1 year	14.3	9.9	20.7	46.4	25.0	27.0	31.2	33.5	23.2	26.9
More than 1 year	62.4	65.7	71.8	69.7	73.5	61.8	55.1	51.7	65.6	61.7
Claims										
Up to 3 months	242.2	257.4	290.5	306.7	353.1	328.1	321.8	314.1	296.7	287.9
3 months to 1 year	69.5	81.1	102.1	112.1	112.9	95.6	82.5	97.0	88.6	99.0
More than 1 year	74.4	77.8	85.7	88.1	91.2	79.8	76.1	75.3	86.1	85.9
Liabilities										
Up to 3 months	318.9	333.0	382.9	422.8	451.6	417.0	408.1	399.3	385.5	376.4
3 months to 1 year	55.2	71.2	81.4	65.7	87.9	68.6	51.3	63.5	65.4	72.1
More than 1 year	12.0	12.1	13.9	18.4	17.7	18.0	21.0	23.6	20.5	24.2

GDP GROWTH

REAL GDP GROWTH

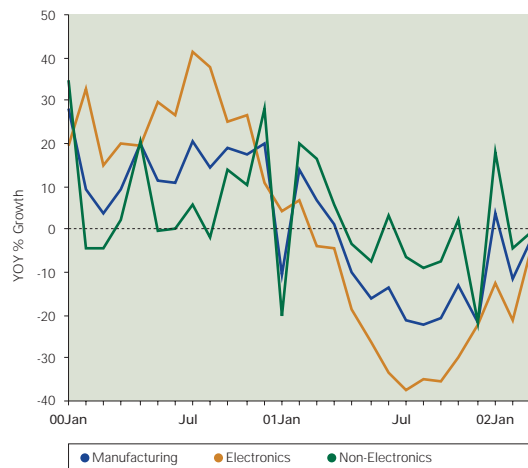


GROWTH BY SECTORS

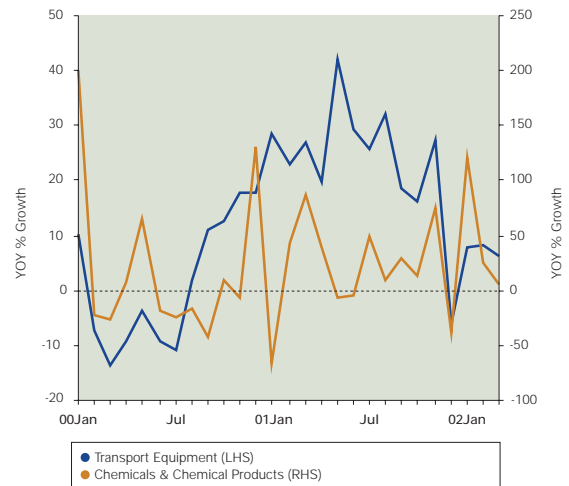


DOMESTIC OUTPUT

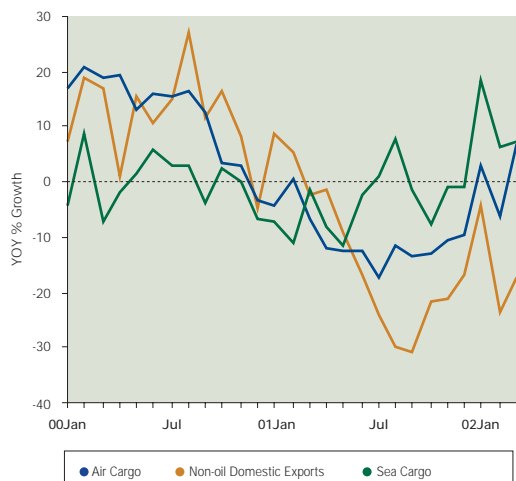
MANUFACTURING



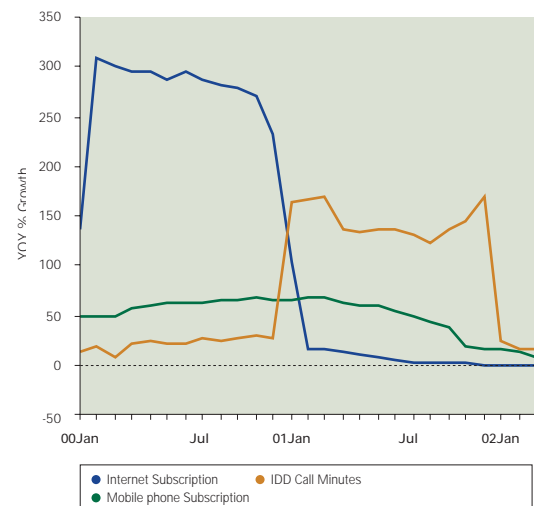
NON-ELECTRONICS PRODUCTION



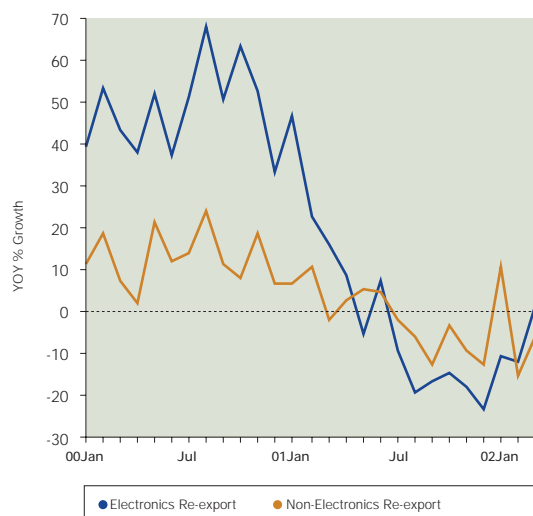
TRANSPORT



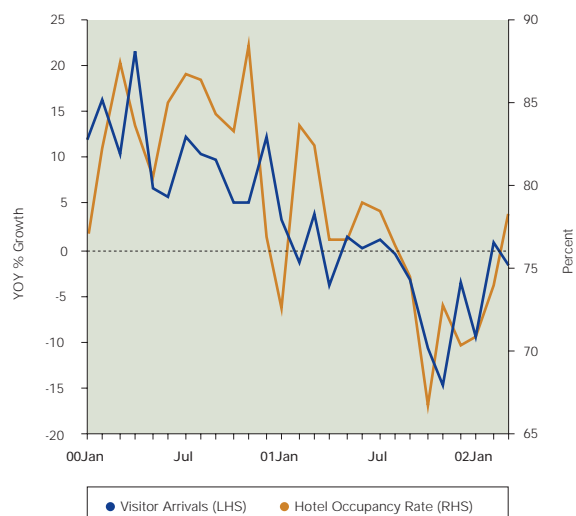
COMMUNICATIONS



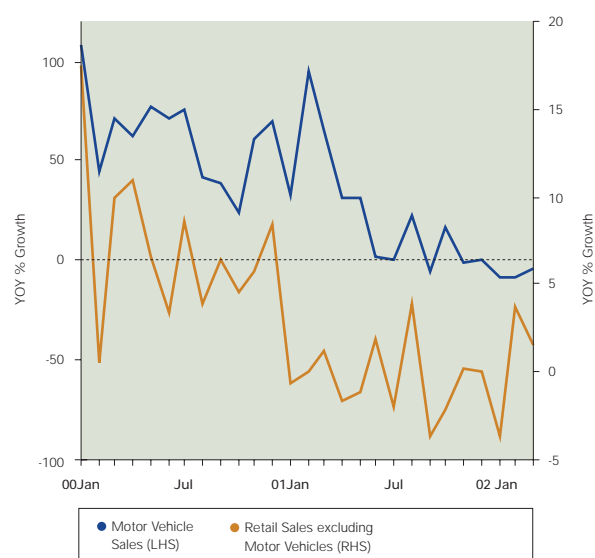
ENTREPOT TRADE



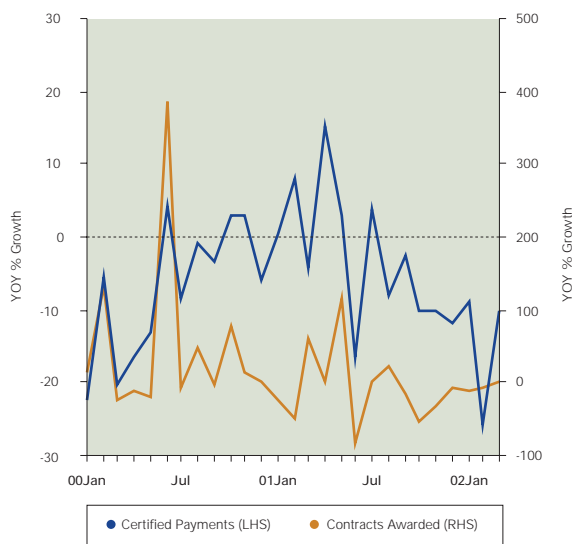
VISITOR ARRIVALS



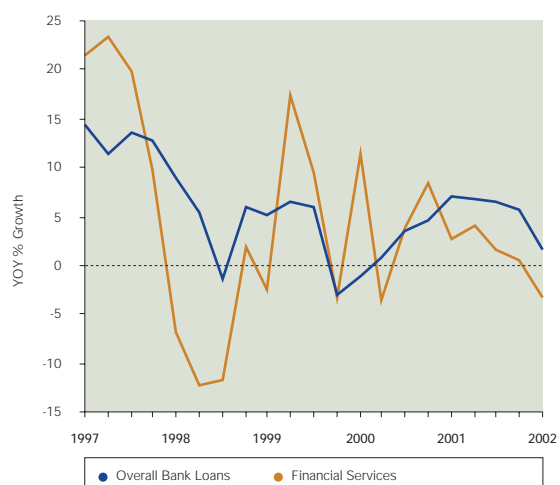
RETAIL SALES VOLUME



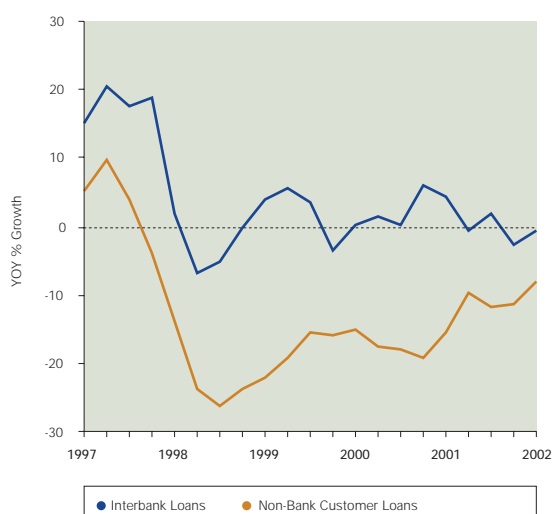
CONSTRUCTION ACTIVITY



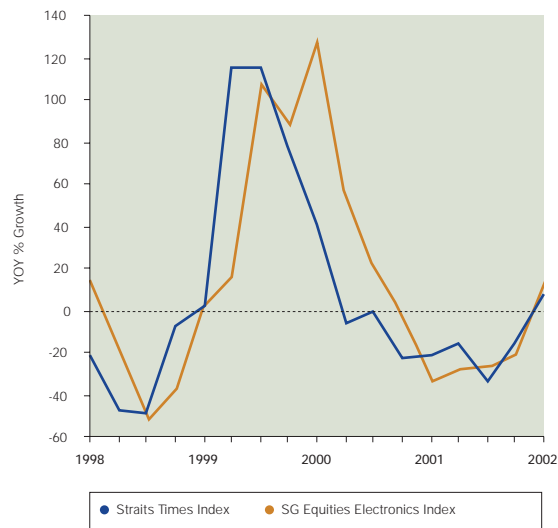
FINANCIAL SERVICES



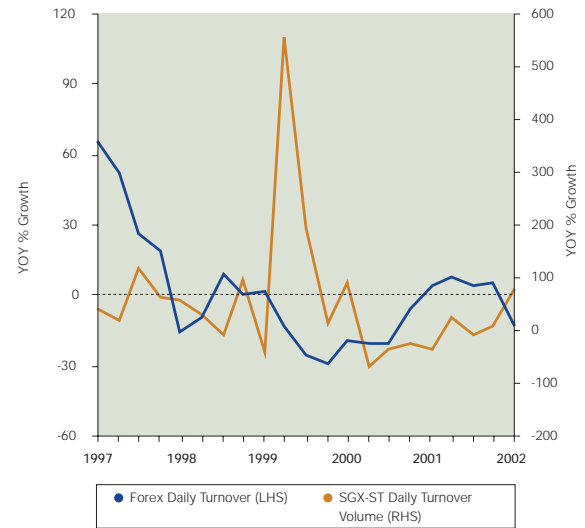
ASIAN CURRENCY UNITS



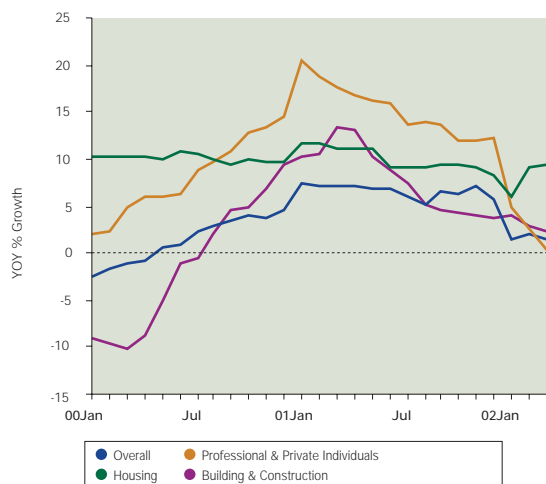
EQUITY INDICES



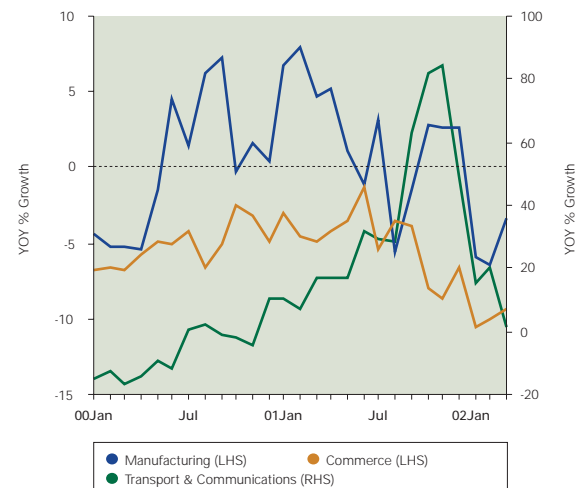
FINANCIAL SERVICES



BANK LOANS TO SELECTED SECTORS

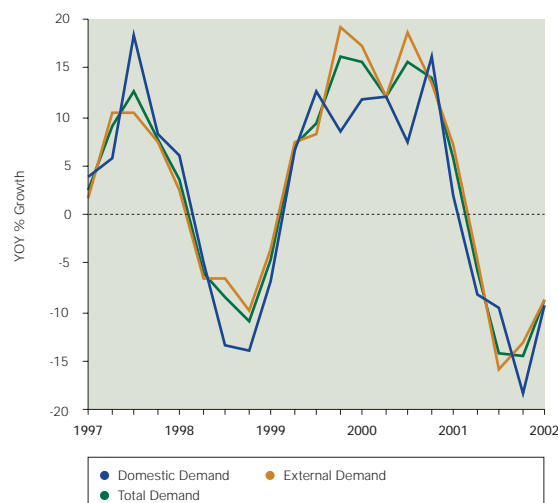


BANK LOANS TO SELECTED SECTORS

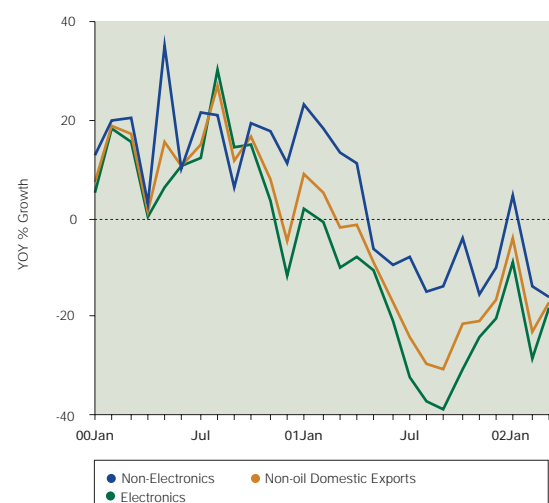


AGGREGATE DEMAND

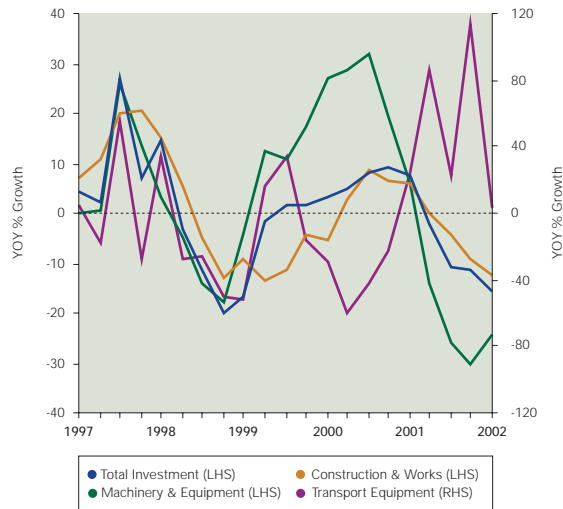
TOTAL DEMAND



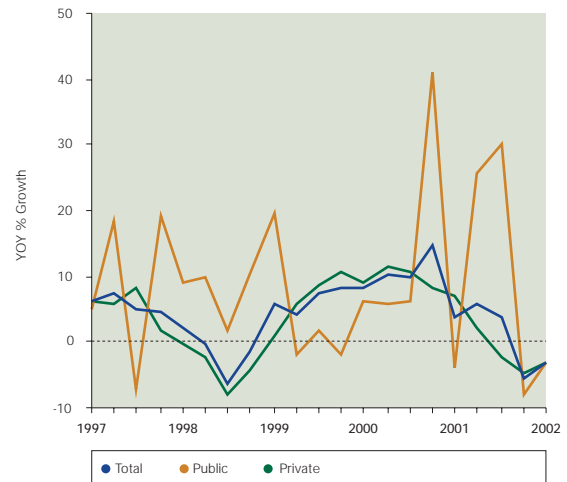
NON-OIL DOMESTIC EXPORTS



TOTAL INVESTMENT

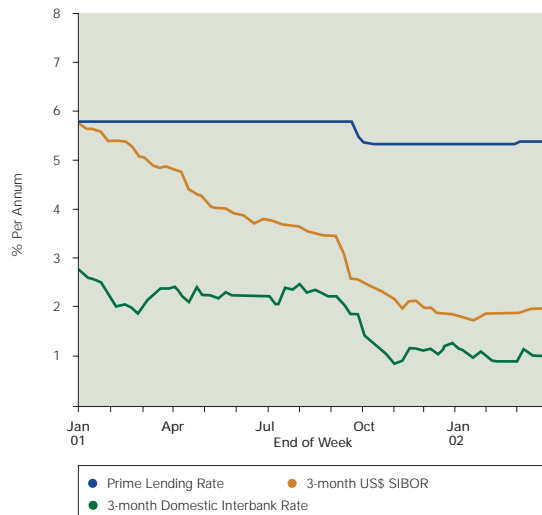


TOTAL CONSUMPTION

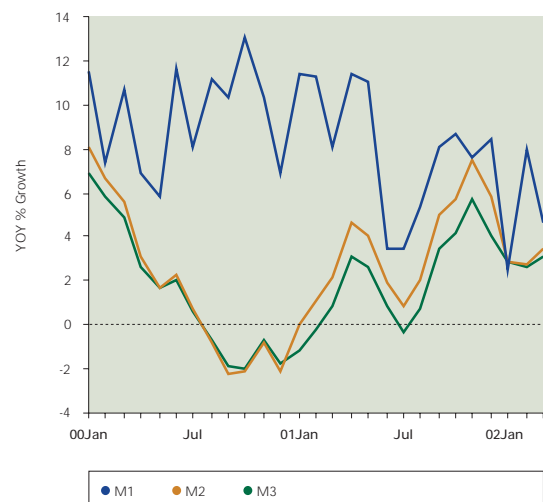


MONETARY CONDITIONS

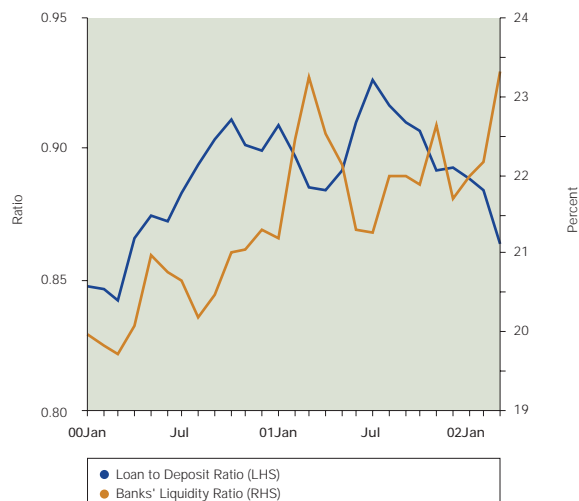
INTEREST RATES



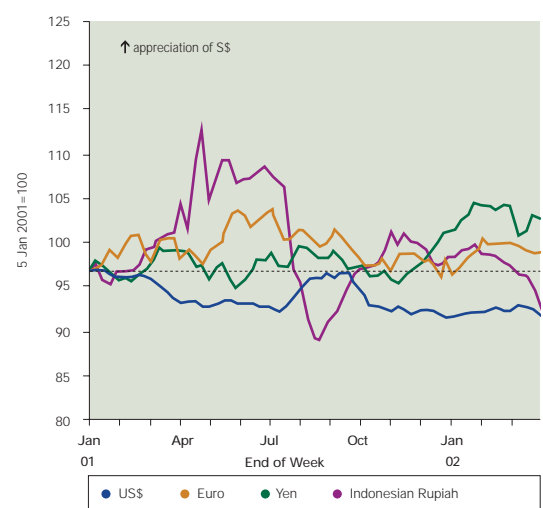
MONEY SUPPLY



LIQUIDITY IN THE BANKING SYSTEM

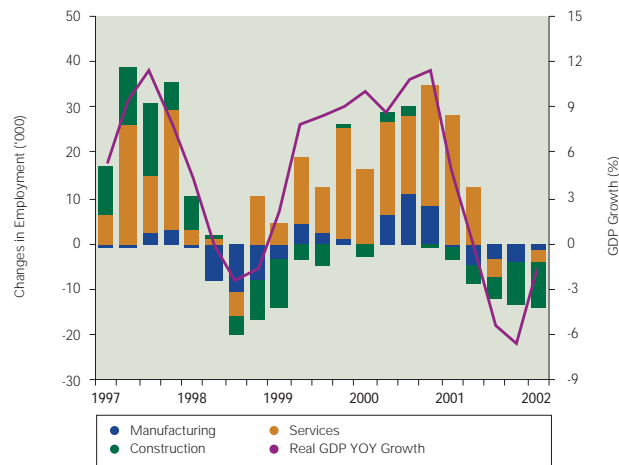


EXCHANGE RATES

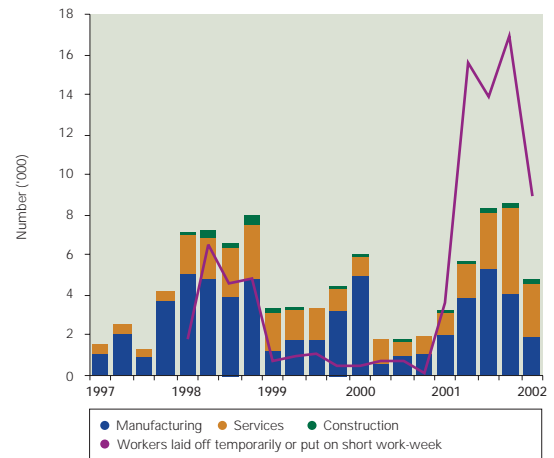


WAGE-PRICE DYNAMICS

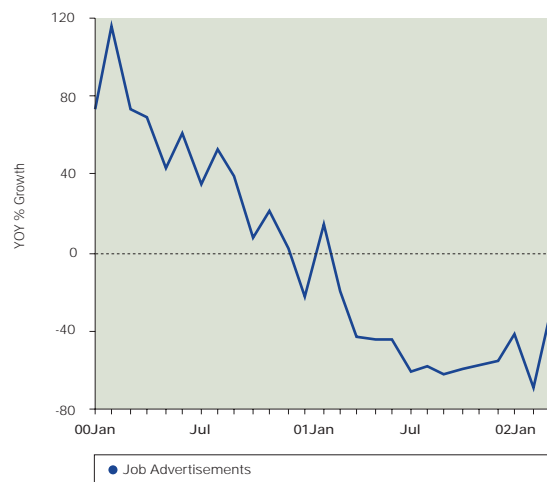
EMPLOYMENT



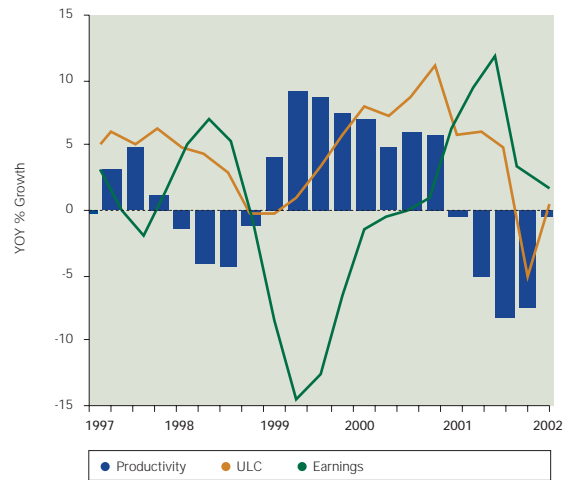
RETRENCHMENT



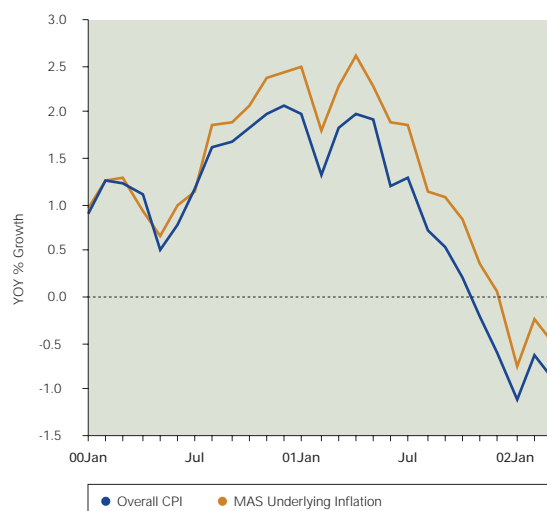
JOB ADVERTISEMENTS



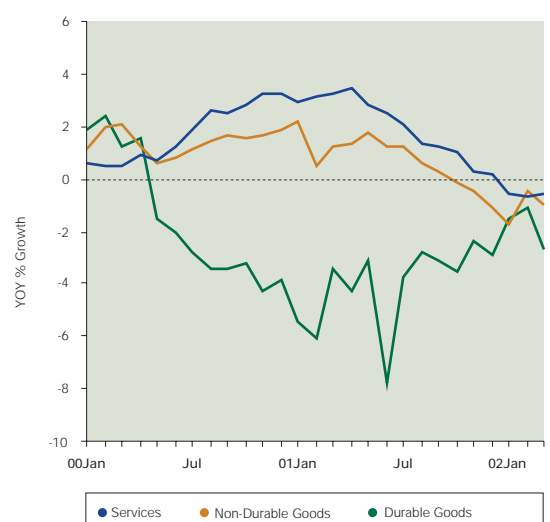
EARNINGS, PRODUCTIVITY & ULC



CPI

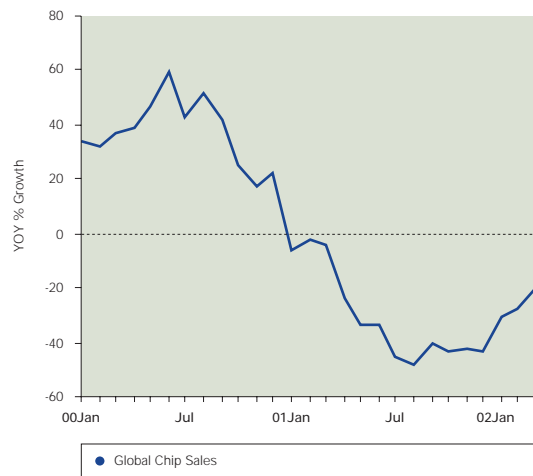


CPI BREAKDOWN

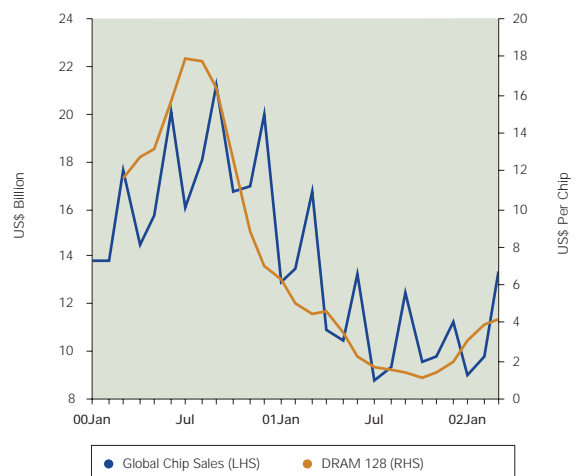


LEADING INDICATORS

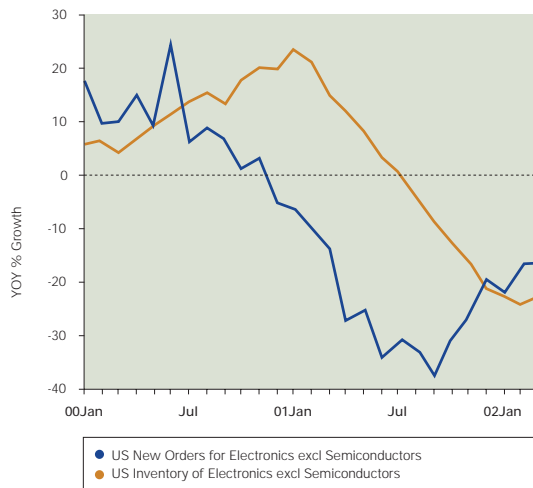
GLOBAL IT INDUSTRY



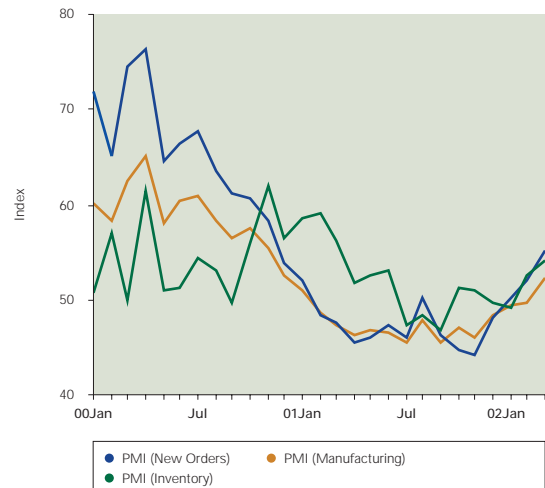
GLOBAL IT INDUSTRY



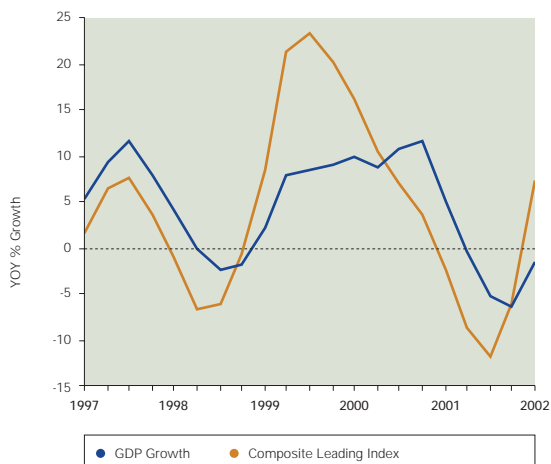
GLOBAL IT INDUSTRY



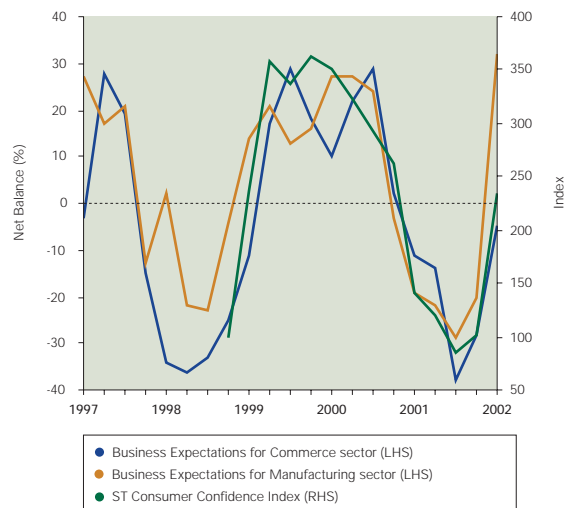
LEADING INDICATORS OF DOMESTIC MANUFACTURING



COMPOSITE LEADING INDEX



BUSINESS & CONSUMER CONFIDENCE INDICATORS



Glossary

ACU	Asian Currency Unit
ADM	Asian Dollar Market
AMEX	American Stock Exchange
APG	Asia-Pacific Group on Money Laundering
ASEAN	Association of Southeast Asian Nations
ASX	Australian Stock Exchange
ATM	Automated Teller Machine
AUM	Asset Under Management
BI	Bank Indonesia
BIS	Bank for International Settlements
CAPS	Clearing and Payment Services
CCB	Consumer Credit Bureau
CEDLI	Committee on Efficient Distribution of Life Insurance
CIRC	China Insurance Regulatory Commission
CLS	Continuous Linked Settlement
CPF	Central Provident Fund
CPSS	Committee on Payment and Settlement Systems
DASC	Disclosure and Accounting Standards Committee
DBS	Development Bank of Singapore Limited
EFTPOS	Electronic Funds Transfer at Point of Sale
EMEAP	Executive's Meeting of East Asia-Pacific Central Banks
ESFTA	EFTA-Singapore FTA
ETF	Exchange Traded Fund
FAA	Financial Advisers Act
FSAP	Financial Sector Assessment Program
FSDF	Financial Services Development Fund
FSF	Financial Stability Forum
FTA	Free Trade Agreement
GIAS	General Insurance Association of Singapore
HKMA	Hong Kong Monetary Authority
IAIS	International Association of Insurance Supervisors
IAP	International Advisory Panel
IBG	Interbank GIRO
IMF	International Monetary Fund
IMF-STI	IMF-Singapore Regional Training Institute
IOSCO	International Organisation of Securities Commissions
IRC	Information Resource Centre
IWG	Industry Working Group
JSEPA	Japan-Singapore Agreement for a New Age Economic Partnership
MAS	Monetary Authority of Singapore
MASRC	MAS Recreation Club
MEPS	MAS Electronic Payment System

MITF	Motor Insurance Task Force
MLA	Minimum Liquid Assets
MMS	Monetary Model of Singapore
MPS	Monetary Policy Statement
MoU	Memorandum of Understanding
MPSVC	Multi-purpose Stored Value Card
NEER	Nominal Effective Exchange Rate
NETS	Network for Electronic Transfers (S) Pte Ltd
NPL	Non-performing loan
OCBC	Oversea-Chinese Banking Corporation Limited
OPERA	Offers and Prospectus Electronic Repository and Access
PBC	People's Bank of China
QFB	Qualifying Full Bank
RBC	Risk-Based Capital
REER	Real Effective Exchange Rate
SACH	Singapore Automated Clearing House
ROSC	Reports on the Observance of Standards and Codes
SEACEN	Southeast Asian Central Banks
SFA	Securities and Futures Act
SGS	Singapore Government Securities
SGS e-Apps	SGS Electronic Applications
SGX	Singapore Exchange
SGX-DT	SGX-Derivatives Trading
SGX-ST	SGX-Securities Trading
STP	Straight-Through-Processing
TIES	Training Infrastructure Enhancement Scheme
TiF	Technology in Finance
UOB	United Overseas Bank