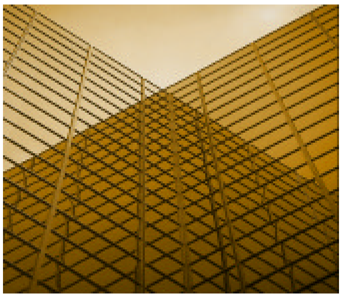
Monetary Authority of Singapore



Financial Stability Review

June 2005

CONTENTS

FOREWORD

The financial system plays a critical role in the economy. It acts as an intermediary between savers and borrowers, allocates financial resources efficiently and thereby contributes to economic growth. A sound and stable financial system is therefore fundamental to the well-functioning of the Singapore economy, particularly its ability to mobilise savings for investment and to redistribute risks across the economy.

In this respect, the Monetary Authority of Singapore (MAS) conducts a regular assessment of Singapore's financial system by identifying potential sources of risks and vulnerabilities, and assessing the ability of the financial system to withstand these potential shocks. The results of the assessment are contained in the *Financial Stability Review* (FSR), which is published on a semi-annual basis. The FSR aims to contribute to a greater understanding and exchange of views among market participants, analysts and the public on issues affecting Singapore's financial system.

Section I of the FSR provides an assessment of the macro environment that encompasses macroeconomic conditions and financial market developments in the global and the Singapore context. Against this backdrop, Section II analyses the non-financial sector, which includes both the corporate and household sectors while Section III focuses on the banking sector given its dominant role in Singapore's financial sector as well as the insurance sector. Finally, Section IV highlights the major developments in the financial infrastructure underpinning a stable and progressive financial system.

The FSR is coordinated by the Macroeconomic Surveillance Department and incorporates contributions from the following departments: Economic Policy Department, Complex Institutions Supervision Department, Banking Supervision Department, Insurance Supervision Department, Securities and Futures Supervision Department, Specialist Risk Supervision Department, Prudential Policy Department, and Reserve and Monetary Management Department. The FSR reflects the views of the staff of the Macroeconomic Surveillance Department and the contributing departments.

The next issue of the FSR will be released in December 2005.

Macroeconomic Surveillance Department
Monetary Authority of Singapore
1 June 2005

OVERVIEW

Since the December 2004 *Financial Stability Review* (FSR), the global economy has moderated on the back of sustained high oil prices, tighter monetary conditions and soft business sentiments amid the ongoing correction in the global electronics industry. The US economy grew by 3.5% quarter-on-quarter (QOQ) on an annualised basis in Q1 2005, compared to 3.9% in Q4 2004, while the Euro-zone and Japanese economies experienced a technical rebound from a weak Q4 2004. Full year economic growth for 2005 is likely to be lower compared to 2004, given further monetary policy tightening in the US, weaker exports in Japan, and labour market uncertainties and poor business sentiments in the Euro-zone. In line with weaker economic growth in the G3 economies, exports and industrial production in Asia (ex-Japan) have slowed, while inflationary pressures in some Asian economies, including China, Indonesia, the Philippines and Thailand, have led to varying degree of monetary policy tightening over the past year. For 2005, the East Asian economies of China, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand are projected to achieve a more sustainable growth rate of around 6.6% in 2005, from 7.4% in 2004.

The Singapore economy expanded by 8.4% last year, although the growth momentum slowed significantly to an average annualised 4.3% QOQ in H2 2004 from 8.8% in H1 2004. In Q1 2005, the economy contracted by 5.5% QOQ on an annualised basis. For 2005, GDP is expected to grow by 2.5-4.5% while CPI inflation is likely to come in at 0-1%. In our latest Monetary Policy Statement on 12 April 2005, the Monetary Authority of Singapore maintained the policy of a modest and gradual appreciation of the S$NEER, which has been in effect since April 2004. The policy took into account risks to domestic inflationary pressures over the medium term, with the economy close to its potential output level and with upside risks to external inflation from higher oil prices.

In East Asia, the financial health of both the banking and corporate sectors continued to improve amid further de-leveraging and consolidation. Bank asset quality and profitability have improved on account of continued financial restructuring and cost-cutting exercises. Banks have diversified their businesses to include a greater proportion of fee-based income, and thereby reduced their vulnerability to interest-rate volatility. The steady recapitalisation of banks has further strengthened the capital adequacy ratios of banks to between 10% and 20% in September 2004. The trend of banking sector liberalisation in East Asia has also continued. For example, the Indonesian government divested a 15.2% stake in Bank Internasional Indonesia in January 2005 while Bank Negara Malaysia has further increased the foreign equity cap on investment banks from 30% to 49% in April 2005.

The profitability and liquidity of the corporate sector in the region also improved, while dividend yields have increased in the past six months. The strong performance of the corporate sector in 2004, especially in Indonesia, the Philippines and Korea, helped provide support for the equity markets in these economies. Nevertheless, there remain some concerns over the continued rise in the level of household indebtedness in East Asia. In an environment of rising interest rates, a sharper-than-expected economic downturn could significantly increase the incidence of household defaults. However, the increase in household indebtedness is unlikely to pose significant risks to the banking systems as regulators have taken prompt action to curb household credit excesses even as household non-performing loan (NPL) ratios remained low.

Against this background, Singapore's domestic banking system remained robust, supported by strong financial positions of both the corporate and household sectors. The Singapore corporate sector turned in higher profitability in 2004 although it has slowed slightly in recent months. The median net income of the Singapore corporate sector grew by 26% year-on-year (YOY) in Q4 2004 and 24% YOY in Q1 2005, compared to 11% YOY in Q4 2003. Except for the Construction sector, the median return on assets (ROA) has risen in Q4 2004 across all sectors. The Transport, Storage and Communications sector, in particular, saw its ROA increase markedly as stronger international trade last year buoyed shipping and logistics businesses. The higher profitability of the corporate sector in turn contributed to stronger liquidity positions and boosted equity prices. The stronger financial positions should help firms to weather the expected slowdown in economic growth this year, as well as the impact arising from potential external shocks.

The financial health of resident households in Singapore continued to improve with household net wealth estimated to have grown to SGD666 bn in Q4 2004, up from SGD609 bn a year ago. At the same time, households' financial gearing has continued to decline. Household assets were mainly boosted in the second half of 2004 by increased valuation of residential property and higher CPF savings and cash holdings, while household liabilities remained relatively stable as mortgage loans registered a marginal increase. Although the recent rise in banks' mortgage rates could affect the household sector's debt repayment ability, the impact would be cushioned by its strong cash position and CPF savings.

For the banking sector, outstanding loans increased by 8.6% YOY in 2004, with 6.1% points coming from Asian Dollar Market (ADM) activities, and 2.5% points from domestic lending where mortgages remained a key driver. Interbank lending peaked at a record SGD606 bn in December 2004 before retracting in Q1 2005. Mirroring the broad strength of the banking sector, the three local banks turned in a robust financial performance in 2004, maintaining strong capital adequacy ratios, interest margins and returns to shareholders. Local banks' aggregate profits grew by 5% YOY in Q4 2004 while net operating income increased by 5.3% over the same period. NPL ratios also continued to decline in 2004. However, in line with the moderation in the economic cycle, Q1 2005 results showed modest improvements in financial performance, with profits and operating income slowing to 4.1% and 1.6% YOY respectively. The banking sector's liquidity position remained strong despite the recent decline in its liquid asset ratio, as banks' liquid asset holdings remained above the statutory requirement.

The financial performance of the Singapore insurance sector remained resilient, with no signs of a significant increase in investment risk in asset holdings of insurers. In Singapore's life insurance industry, total new business premiums in 2004 exceeded that of 2003 on the back of improved consumer confidence and stronger equity market performance. However, new business in Q1 2005 declined as single premium insurance products became less competitive compared to other shorter term financial products due to the rise in short-term interest rates and the flattening of the yield curve. Nevertheless, demand for regular premium insurance products remained strong, recording 43.7% YOY growth in Q1 2005. The general insurance industry continued to see improving financial positions amid further decline in credit rating downgrades among global reinsurance companies. Total operating profits in Q1 2005 rose to SGD127 mn from a decline in the last three quarters, mainly due to an increase in underwriting income. Despite a decline in overall incurred loss ratios for the Singapore Insurance Fund and an improvement in operating profitability, softening premium rates would continue to pose underwriting risks to general insurers.

Notwithstanding the positive assessment of Singapore's financial system, several downside risks remain. While the global financial markets have thus far adjusted in an orderly manner to rising interest rates, the macro environment appears more uncertain now than in December 2004. Firstly, with the expected moderation in global economic growth, there have been concerns over deteriorating corporate credit quality as indicated by widening spreads. For example, the recent credit rating downgrades of General Motors and Ford have led to concerns over the possible unwinding of large positions by investors including hedge funds. Secondly, the possibility of a disorderly unwinding of carry trades has increased as the spread between long and short-term rates has narrowed with the continued rise in short-term interest rates. Thirdly, while oil prices have moderated to about USD50 per barrel, prices could rise markedly again should there be supply disruptions that would further worsen the already tight capacity. Finally, notwithstanding the recent strength of the USD, the persistent global savings-investment imbalance continues to raise concerns over the risk of a sharp and disorderly adjustment in the USD and related financial assets.

To assess the resilience of the three local banking groups to these risks, a stress test was conducted based on a scenario where the USD was assumed to fall sharply following a loss of confidence in USD-denominated assets. Under the scenario, many countries would experience significantly lower GDP growth, higher unemployment rate, lower asset prices and steeper yield curves. The results of the stress test showed that the aggregate NPLs for the three local banks would rise by SGD8.7 bn while provisioning would increase in tandem by SGD2.8 bn over the stress test period. The aggregated losses from both credit and market risks of the local banks under the stress test scenario would amount to about 74% of the banks' average profits over the past five years and about 10% of their Tier-1 capital. The financial buffers maintained by the local banks appear resilient under the severe stress test assumptions, reflecting prudent management and high levels of liquidity and capital.

I MACRO ENVIRONMENT

1.1 Macroeconomic Conditions

Since the last *Financial Stability Review* (FSR) in December 2004, growth disparities between the G3 economies of the US, Euro-zone and Japan have narrowed. The US economy grew by its slowest pace since Q2 2004 while the Japanese and Euro-zone economies experienced a technical rebound. However, sustained high oil prices in early 2005, monetary policy tightening in the US, and the ongoing correction in the global electronics industry contributed to softer business sentiments, especially those of manufacturers. Consumer sentiments in the US and Euro-zone also weakened. As global demand eased, exports and industrial production in East Asia[1] have also moderated accordingly. Inflation has risen in Northeast and Southeast Asia due to higher food prices and the rollback in government fuel subsidies respectively, and some central banks have tightened monetary policy. East Asia is likely to slow to a more sustainable growth rate of around 6.6% in 2005 from 7.4% in 2004. China would continue to lead East Asia's economic growth, with its GDP growth expected to moderate slightly from 9.5% in 2004 to 9.2% in 2005.

Global Economy

Leading indicators point to continued moderation in economic growth over next few months

The world's major economies slowed in recent months against the backdrop of higher oil prices and tighter monetary policy in the US (Table 1.1). In the US, higher oil prices weighed on consumer spending and corporate capital expenditure in Q1 2005. The economy expanded by 3.5% on a quarter-on-quarter (QOQ) annualised rate, compared to 3.9% in Q4 2004. While Japan's Q1 2005 GDP rebounded after three quarters of weak growth, industrial production and business confidence continued to moderate as exports slowed. Although growth in the Euro-zone economies also picked up, private consumption was further dampened by higher energy prices and uncertainty over labour market reforms. Business confidence in Germany, Euro-zone's largest economy, remained soft in early-2005. The OECD leading indicators (Chart 1.1) for the US, Japan, and Euro-zone continued to fall in March 2005, pointing to softer economic activity in the next three to six months.

In East Asia, exports growth moderated in recent months on the back of softer demand in the G3 economies, with the pace of slowdown exacerbated by the ongoing inventory correction in the electronics industry. As a result, industrial production and capacity

[1] East Asia refers to the Northeast Asian economies of China, Hong Kong, Taiwan and Korea, and the Southeast Asian economies of Malaysia, Indonesia, the Philippines and Thailand.

utilisation in several East Asian economies have weakened in recent months. While private sector fixed investment spending expanded by double-digit rates in China, Hong Kong, Taiwan, Malaysia and Thailand in 2004, the pace is likely to moderate in 2005 as export growth slows. At the same time, inflation has risen in most economies (Table 1.2). The recent weakness notwithstanding, manufacturing capacity is tighter across most economies compared to the beginning of 2004. Since the beginning of the year, inflation in much of Northeast Asia has picked up, as consumer prices were driven up by higher food prices from festive demand and higher oil prices. In particular, Hong Kong appears to have emerged from deflation, helped by recovering property prices. In Southeast Asia, inflationary pressures have accelerated as the governments of Indonesia, Malaysia and Thailand reduced fuel subsidies, raising pump prices by up to 30% through a series of price hikes between March and May 2005. The Indonesian and Philippine central banks raised interest rates in April 2005, joining those of China, Taiwan and Thailand in tightening monetary policy in the past twelve months. Although exports and investment spending are expected to slow, the economic outlook on the whole remains benign as growth would continue to be supported by household spending as employment rises. The expected slowdown in economic activity should cap inflationary pressures, allowing governments to tighten monetary policy gradually.

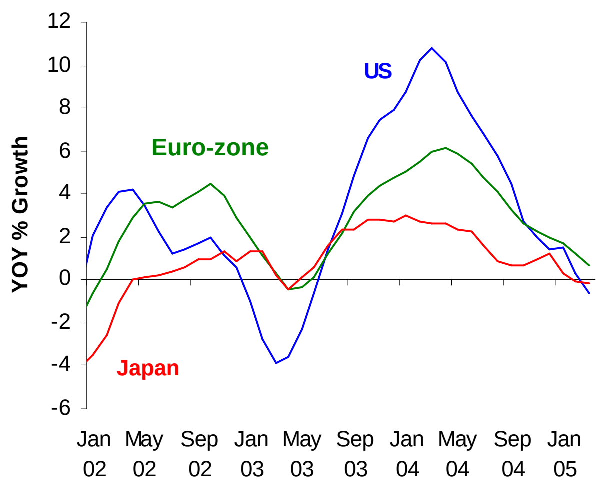
Table 1.1
Real GDP Growth (YOY % Change)

Per Cent

	2003	2004	4Q04	1Q05(p)	2005f	2006f
Industrialised Countries						
US	3.0	4.4	3.9	3.7	3.2	3.4
Japan	1.3	2.7	0.8	1.2	0.9	1.8
Euro-zone	0.5	1.8	1.6	1.4	1.4	1.9
Southeast Asia						
Malaysia	5.3	7.1	5.6	n.a.	5.6	5.8
Indonesia	4.5	5.1	6.7	6.3	5.3	5.5
Philippines	4.7	6.1	5.4	n.a.	4.3	4.7
Thailand	6.9	6.1	5.1	n.a.	4.8	5.5
Northeast Asia						
China	9.3	9.5	9.5	9.4	9.2	8.0
Hong Kong	3.2	8.1	7.2	n.a.	5.3	5.1
Taiwan	3.3	5.7	3.3	2.5	3.8	4.4
Korea	3.1	4.6	3.3	2.7	4.0	5.0

Source: CEIC and MAS

Chart 1.1
OECD Leading Indicators



Source: Datastream

Table 1.2
Consumer Price Inflation (YOY % Change)

	2003	2004	Jan 2005	Feb 2005	Mar 2005	Apr 2005
Industrialised Countries						
US	2.3	2.7	2.9	2.9	3.2	3.5
Japan	-0.3	0.0	-0.1	-0.3	-0.2	0.0
Euro-zone	2.1	2.1	1.9	2.0	2.2	2.1
Southeast Asia						
Malaysia	1.1	1.4	2.4	2.4	2.6	2.7
Indonesia	6.8	6.1	7.3	7.2	8.8	8.1
Philippines	3.5	6.0	8.4	8.5	8.5	8.5
Thailand	1.8	2.8	2.7	2.5	3.2	3.6
Northeast Asia						
China	1.2	3.9	1.9	3.9	2.7	1.8
Hong Kong	-2.6	-0.4	-0.5	0.8	0.9	0.4
Taiwan	-0.3	1.6	0.5	1.9	2.3	1.6
Korea	3.5	3.6	3.1	3.3	3.1	3.2

Source: CEIC and Datastream

While global economic outlook on the whole remains benign, several downside risks remain

While the above scenario posits a moderation in economic growth, controlled inflation and a measured pace of monetary policy tightening, there are several downside risks to this assessment. These include a disorderly adjustment of the USD, faster-than-expected interest rate hikes on the back of higher inflation and sustained high oil prices.

First, the risk of a disorderly adjustment of the USD remains. While the USD has seen sporadic rallies over the past six months, concerns over the widening US current account deficit, escalating fiscal deficit and low private savings rate could further weigh down the currency. A disorderly adjustment could lead to a sell-off in USD-denominated assets, which would in turn create negative wealth effects on holders of these assets, leading to a drag on US and global growth. Nonetheless, the probability of a free-fall in the USD appears to be low at the current juncture due to the strong institutional backing for the USD – its role as an international reserve currency, strong credibility enjoyed by the US Federal Reserve (Fed), deep financial markets in the US, and strong demand for USD-denominated assets. The series of interest rate hikes by the Fed and expectation of further tightening have also helped to support the dollar.

Second, global interest rates may rise more quickly than expected. The risk of inflation in the US surprising on the upside appears to have increased as indicated in the latest FOMC minutes in May 2005. While core CPI remained unchanged in April 2005 compared to the previous month, the underlying momentum in core inflation has picked up. Core CPI has risen by 2.3% year-to-date, higher than the 1.8% recorded in the whole of 2004. The April 2005 Michigan Consumer Confidence survey also showed that consumer expectations of inflation have increased. Should inflationary pressures escalate and interest rates rise more quickly than anticipated, corporate investment and household spending growth could slow much more sharply, threatening the current outlook of a benign moderation in economic growth.

Third, current high oil prices may be sustained over the year. Oil prices have risen by more than 60% since the beginning of 2004, breaching the USD57 per barrel mark in April 2005 due to strong demand, supply disruptions and heavy speculation. While prices have averaged about USD50 per barrel since May 2005, it is not inconceivable for prices to rise markedly again should there be events that exacerbate the current tight capacity problem.

East Asian Financial System

Since the December 2004 FSR, the banking and corporate sectors of the East Asian economies have continued to de-leverage and consolidate. Bank asset quality has improved and capital positions have generally strengthened. Corporate profitability and liquidity have also improved, while dividend yields have increased in the past six months. Continued reforms and restructuring in both the corporate and banking sectors have placed East Asian financial systems in good stead to cope with the foreign capital inflows in the past year and also the challenges posed by slower economic growth this year. Nonetheless, there have been some concerns with the rise in household indebtedness in some economies. While household debt as a percentage of GDP is still lower than that of developed economies including the US and the UK, the rate of growth of household indebtedness in China, Indonesia and Thailand has been rapid.

De-leveraging and strong profits have resulted in a more resilient East Asian corporate sector

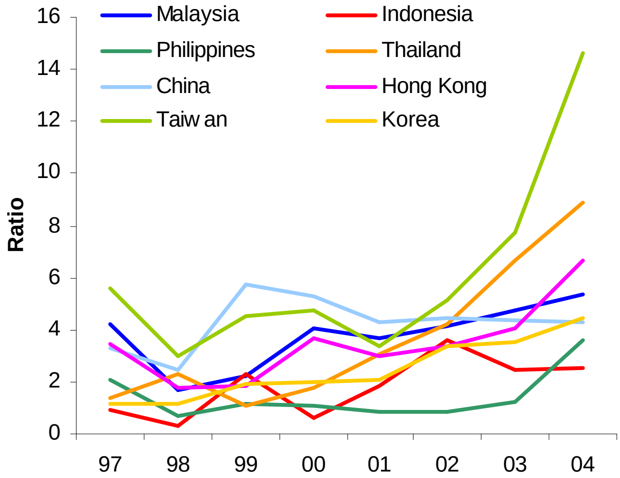
In most East Asian economies, the leverage of publicly listed firms has declined in 2004 while corporate profitability has improved in Q4 2004 compared to Q3 2004 (Table 1.3). The significant rebound in profitability in 2004, especially in Indonesia, the Philippines and Korea, underpinned the strong performance of the equity markets in these economies. The interest coverage ratios of listed firms in East Asia rose (Chart 1.2), as earnings before interest and tax increased while interest payments declined with continued low interest rates. Firms' liquidity positions remained favourable as indicated by current ratios that were greater than one (Chart 1.3), reflecting a reduction of liabilities even as firms built up their cash holdings. Firms have started to return some of the surplus cash in the form of increased dividends (Table 1.4), as the average dividend yields for listed firms have increased across most East Asian stock exchanges. In Korea, while listed firms have also seen an improvement in performance, some vulnerabilities remain among the small and medium enterprises (SMEs), which account for 45% of bank lending in Korea. Weak domestic demand has hurt the profitability of Korean SMEs in the past two years. The consequent scale-back of bank lending to SMEs has led to liquidity problems in the sector, although the risks to the banking sector are mitigated by the fact that around 70% of SME loans are secured by a combination of government credit guarantees and real estate collateral.

Table 1.3
Non-Financial Corporate Ratios (Median)

	2000	2001	2002	2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004
Debt to Equity Ratio (%)								
Malaysia	30.7	29.2	27.1	30.5	30.9	34.8	33.9	30.7
Indonesia	26.6	19.3	32.9	43.5	45.0	43.5	39.4	39.7
Philippines	39.4	22.6	18.0	19.0	15.0	30.6	28.3	32.7
Thailand	54.7	44.0	36.5	30.0	44.2	44.5	38.1	36.5
China	42.3	44.9	48.3	55.6	57.1	56.8	59.6	57.9
Hong Kong	20.1	21.3	18.0	21.2	21.2	23.8	21.8	19.5
Taiwan	47.2	45.2	45.1	50.3	40.6	43.7	45.6	43.7
Korea	58.8	56.6	54.9	46.4	33.7	34.5	34.1	33.3
Return on Assets (%)								
Malaysia	3.2	2.9	3.3	3.8	3.9	3.9	3.9	4.2
Indonesia	4.0	5.1	6.1	4.5	3.9	3.4	3.5	4.9
Philippines	2.7	0.7	0.3	1.3	2.5	1.8	2.0	5.4
Thailand	6.1	6.3	6.7	8.0	7.4	7.6	7.6	8.2
China	6.4	5.0	4.1	4.3	3.8	6.2	3.6	4.0
Hong Kong	4.4	3.0	2.1	3.0	3.7	3.8	4.9	4.8
Taiwan	5.5	3.1	4.7	5.2	4.8	5.1	6.1	7.2
Korea	4.6	4.3	5.2	4.5	4.6	4.5	4.8	5.2

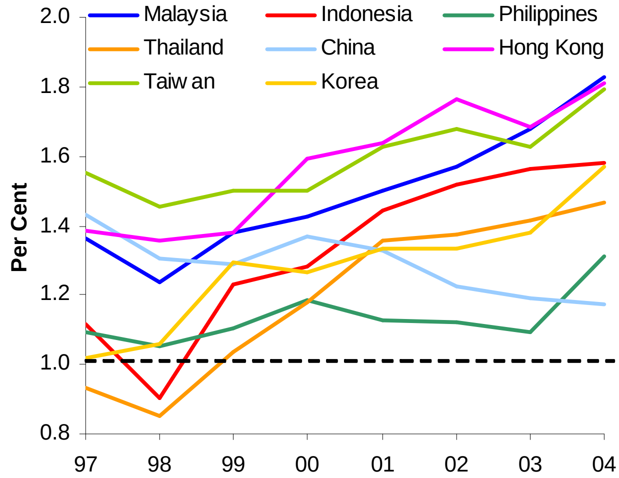
Source: Thomson Financial
Note: Annual figures are as at year-end

Chart 1.2
Interest Coverage Ratio



Source: Thomson Financial

Chart 1.3
Current Ratio



Source: Thomson Financial

Table 1.4
Average Dividend Yield on Selected Regional Stock Indices

	2003	2004	3Q 2004	4Q 2004	1Q 2005	Apr 2005
Malaysia: KLCI	2.8	2.9	3.0	2.9	3.2	3.6
Philippines: PSE	1.6	1.9	1.9	1.7	1.9	2.0
Thailand: SET	2.8	2.7	2.9	2.8	3.4	3.9
Hong Kong: Hang Seng	4.1	3.4	3.5	3.2	3.4	3.6
Taiwan: TSEC	3.5	3.9	4.7	4.6	4.7	5.2
Korea: KOSPI 200	2.1	2.6	2.4	2.2	1.9	2.1

Source: CEIC. Latest Thailand, Hong Kong and Korea data as of April 2005. Malaysia, Philippines and Taiwan as of March 2005. Hong Kong's dividend yield measures for Hong Kong firms listed on the Hang Seng Index only. Data for Indonesia and China are not available.

Regulators act to curb household credit excesses as household indebtedness increased

Since the December 2004 FSR, household indebtedness has continued to expand across all the East Asian economies (Chart 1.4). Year-on-year (YOY) household credit in Hong Kong, Korea and the Philippines expanded more quickly in Q4 2004 compared to Q3 2004, a sign of returning consumer confidence in these economies. In the other East Asian economies, household credit growth rates remained strong in Q4 2004, averaging between 15% YOY in Malaysia to 35% YOY in Indonesia. In China, Malaysia and Indonesia, household credit has expanded by double digit rates for four consecutive years. The sustained rapid pace of credit growth has led to increased concerns over households' indebtedness in these economies.

Concerns stem firstly from the traditionally stable mortgage sector.[2] Over the past year, property prices have risen rapidly in cities such as Kuala Lumpur, Bangkok and Shanghai, surpassing national income growth. For example, the prices of detached houses in Kuala Lumpur rose by over 11.6% in 2004. The average price of a detached house in Bangkok also doubled from THB6.7 mn to THB13.6 mn between December 2003 and December 2004 whereas national estimates showed that Thai household earnings[3] rose only 4.4% on average over the same period. Likewise, property prices in Shanghai have risen by double digits, consistently outstripping the city's per capita income growth since Q3 2002. The structure of mortgages may worsen pressures on households. Across Asia, most mortgages are of a hybrid type whereby rates are fixed for one to five years, compared to the US where fixed rate mortgages of 15 to 30 years are the norm. Borrowers thus face floating rates for the remaining duration of the loan, which may last up to 30 years. In an environment of rising interest rates, households with floating rate mortgages are likely to face higher borrowing costs and thus debt payments.

A second potential source of vulnerability comes from households taking on more non-mortgage consumer debt, especially through credit cards. In Malaysia, bankruptcies rose to

[2] Housing loans, which make up 50-70% of total household debt (except in Indonesia and the Philippines), have historically seen low default rates of 1-2%. For example, even during the steep decline in property prices from 1997-2003, the mortgage delinquency rate for Hong Kong homeowners was only about 2%.
[3] Source: Thailand National Statistics Office.

a record 16,251 in 2004, and credit card defaults accounted 8.6% of these cases.[4] Credit card-related expenditures have been rising in Thailand in the past few years, although at a slower rate than Korea in the run-up to the peak of its credit card bubble in 2002.

While households in some East Asian economies have become more indebted, they may not be of significant risks to their banking systems due to a number of mitigating factors. First, household non-performing loan (NPL) ratios have remained low in Indonesia and Malaysia despite the extended period of rapid credit expansion. In Indonesia, household NPLs shrank by 1.7% in March 2005, compared to 60% growth a year ago. Although the NPL ratio for residential purchases increased in Malaysia in Q4 2004 and Q1 2005, the consumer credit NPL ratio continued to decline.[5] Second, tighter regulations have already been put in place to minimise the likelihood of prolonged periods of rapid household credit growth in China and Thailand (Table 1.5). As property prices ease and with tighter loan-to-value ratio on new mortgages, household mortgage growth is likely to slow in the months ahead. With the Bank of Thailand's (BoT) tighter regulations, the number of new credit cards issued in Thailand declined to 416,000 in Q4 2004, compared to the peak of 2.4 mn new cards issued in Q4 2002, when the BoT lowered the minimum income requirement for credit cards. The growth of credit card debt has also slowed (Chart 1.5).

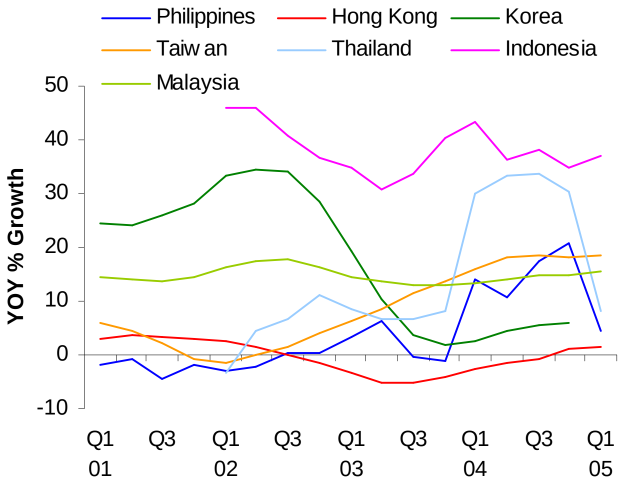
Table 1.5
Recent Measures to Curb Household Credit Excesses

	Sector of Household Debt	**Effective from**	**Measures**
China	Consumer	Jul 04	Down payment of car loans increased to 50% of total amount, loan terms shortened from 5 years to 3 years
	Mortgage	Jun 05	Resale of unfinished flats prohibited
		Jun 05	Residential flats sold within 2 years subject to sales tax
		Apr 05	Shanghai: Existing mortgages must be paid off before selling home
		Mar 05	Shanghai: 5.5% property gains tax on homes sold after less than 12 months of ownership
		Mar 05	Increase in minimum mortgage rate
		Mar 05	Increase in minimum down payment to 30% of property purchase price
		Sep 04	Homeowners to be denied loans if monthly payments exceed 50% of homeowner's income, or if debt payments exceed 55% of income
Thailand	Consumer	Jan 05	Limiting credit line to no more than 5x monthly income, across individual's total credit card debt
		Apr 04	Increasing minimum monthly payments to 10% of outstanding credit card debt
			Cancellation of credit cards whose debt is delinquent for > 3mths

Source: Bank of Thailand, People's Bank of China and Shanghai City Government

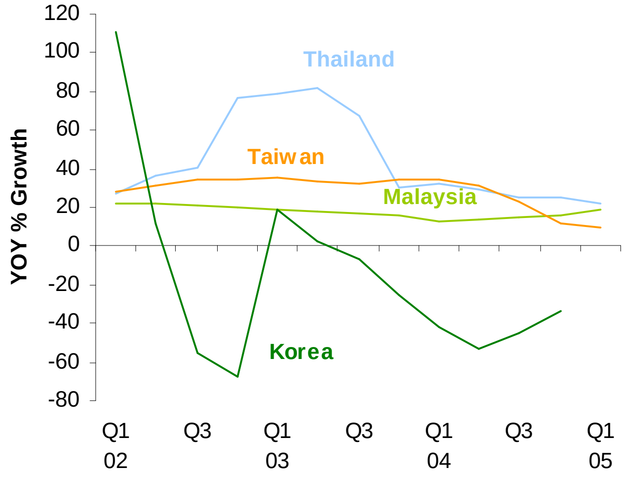
[4] Finance Ministry Parliament Secretary Datuk Dr. Hilmi Yahaya. Quoted in "Credit Card Control", *The Star*, 19 May 2005.
[5] Consumer credit refers to loans made on credit cards, loans made for purchases of durable goods and cars, as well as loans for personal use.

Chart 1.4
Household Credit



Source: CEIC

Chart 1.5
Credit Card Loans



Source: CEIC

East Asian banks strengthened as post-Asian financial crisis reform and consolidation continue

Banks have restructured and repaired their balance sheets since the 1997 Asian financial crisis, and this has helped to bring down NPL ratios (Table 1.6). Since the December 2004 FSR, Malaysia's asset management company, Danaharta, has successfully redeemed all the bonds it had issued to purchase NPLs from the financial institutions, and is expected to cease operation in December 2005, marking the end of the post-crisis bank clean-up phase. The trend of banking sector liberalisation has also continued. In January 2005, the Indonesian government divested a 15.3% stake in Bank Internasional Indonesia for USD148 mn to a group of local and foreign investors, while Standard Chartered purchased a stake in Korea First Bank. Bank Negara Malaysia also increased the foreign equity cap on investment banks in April 2005 to 49% (up from 30%), which would enhance foreign banking presence in Malaysia.

Financial restructuring and cost-cutting exercises have boosted bank profitability. Banks have also diversified their business to include a greater proportion of fee-based income, which has helped to reduce vulnerability to interest-rate volatility. The steady recapitalisation of banks has increased capital adequacy ratios (CARs) of Southeast Asian banks to between 10% and 20% in September 2004. While CARs of banks in some countries have declined slightly in 2004 as compared to 2003, they remained above the Basel minimum requirement of 8%. The decline may bode well for banks' profitability if it reflects lower risk aversion and an increased willingness to lend.

Table 1.6
Non-Performing Loans and Capital Adequacy Ratios[1]

	2001	2002	2003	Jun 2004	Sep 2004	Dec 2004	2005 latest
Non-Performing Loans (as % of commercial bank loans)							
Malaysia	10.5	9.3	8.3	7.7	7.4	6.9	6.6
Indonesia	12.1	8.1	8.2	7.6	6.9	5.8	5.9
Philippines	17.3	14.9	14.1	13.8	13.9	12.7	11.8
Thailand	10.5	15.7	12.8	12.4	11.5	11.0	11.1
China [2]	n.a.	21.6	16.9	15.6	15.7	15.6	n.a
Hong Kong	5.2	3.9	3.2	2.3	2.0	1.6	n.a
Taiwan	7.5	6.1	4.3	3.5	3.3	2.8	n.a
Korea	2.9	1.9	2.2	2.2	2.1	1.7	n.a
Capital Adequacy Ratio (%)							
Malaysia	12.8	13.1	14.0	14.5	14.1	14.2	13.6
Indonesia	20.5	23.0	19.3	20.9	20.5	19.4	22.3
Philippines	15.3	16.6	17.3	18.4	n.a	n.a	n.a
Thailand	13.9	13.6	14.0	12.3	13.0	12.7	13.2
China [2]	4.4	4.3	n.a	n.a	n.a	n.a	n.a
Hong Kong	16.5	15.7	15.3	15.9	15.9	15.4	n.a
Taiwan	10.4	10.6	10.1	10.0	n.a	10.7	n.a
Korea	10.8	10.5	10.5	10.9	10.9	n.a	n.a

Source: CEIC, Asia Development Bank and Official National Sources
[1] Definitions may vary across countries
[2] State-owned commercial banks
Note: Annual figures are as at year-end

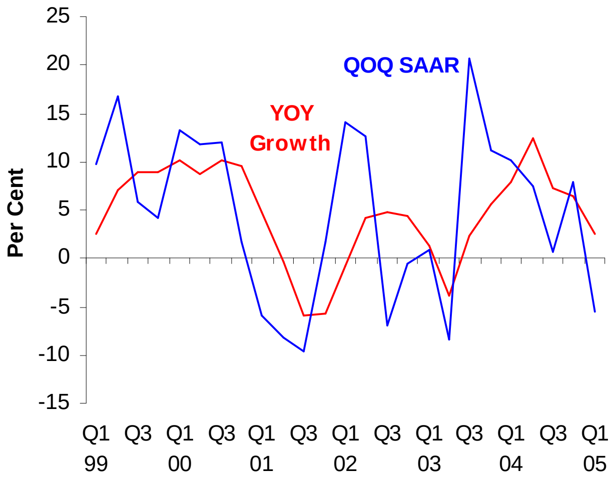
Singapore Economy

The Singapore economy expanded by 8.4% in 2004, although the growth momentum slowed significantly to an average annualised 4.3% QOQ in H2 2004 and turned negative in Q1 2005 (Chart 1.6). Leading indicators suggest slower global economic growth in 2005 with domestic economic growth this year expected to moderate to between 2.5-4.5%. With the economy close to its potential output level and with upside risks to external inflation from higher oil prices, the Monetary Authority of Singapore (MAS) reaffirmed our policy of a modest and gradual appreciation of the S$NEER, in effect since April 2004.

Slowdown in electronics and trade-related sectors led to moderation in economic growth

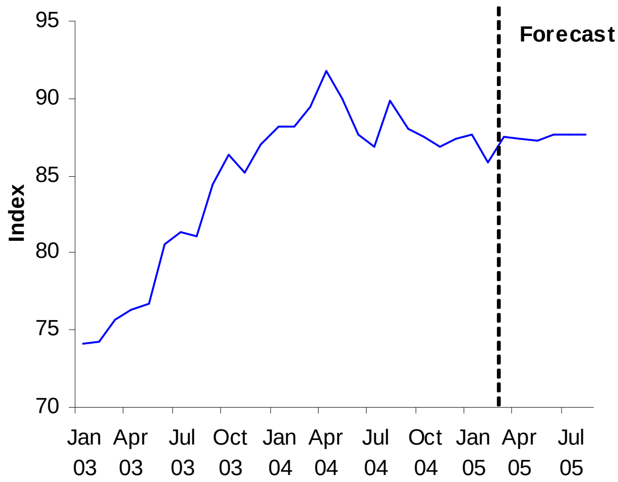
Singapore's economic growth moderated in H2 2004 as electronics output fell. The MAS Electronics Leading Index points to continuing softness in the domestic IT sector into Q3 2005 (Chart 1.7). Furthermore, sales of chip-making equipment worldwide stayed below parity for an eighth consecutive month in April, suggesting that weakness in the electronics sector would likely continue in the near future. Companies that supply equipment used to manufacture semiconductors saw a 37% drop in orders compared with April 2004. The benchmark book-to-bill ratio compiled by Semiconductor Equipment & Materials International (SEMI) was 0.80 in April, against 0.78 in March and 0.77 in February.[6]

Chart 1.6
Economic Growth



Source: DOS

Chart 1.7
Electronics Leading Indicator



Source: EPD, MAS

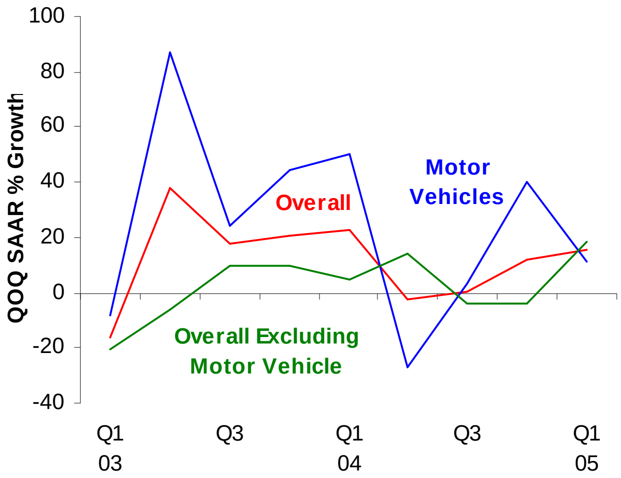
Excluding the volatile biomedical manufacturing cluster, which saw a 18.8% YOY contraction in Q1 2005, the broader economy experienced continued growth in the first quarter of this year. Output growth for 2005 is likely to be more evenly distributed across the various economic sectors, unlike in 2004 when much of it was driven by the manufacturing and trade-related sectors.

Singapore's manufacturing sector slowed in Q1 2005, growing by 3.1% YOY, down from 14.1% YOY in Q4 2004. The Purchasing Managers' Index (PMI) fell for the first time in nearly two years in April 2005, registering 49.7, a decline of 1.1 points over the previous month.[7] The marginal contraction was due to lower new orders, as well as declining levels of production output and employment. However, new export orders and overall stocks of finished goods posted higher readings. The key electronics sector also performed better with its corresponding index showing a reading of 51.8 in April 2005.

The slowdown in the tradables sector has affected the domestic retail sector (Chart 1.8). The Q1 Business Expectations Survey by the Singapore Department of Statistics (DOS) indicates more pessimistic business sentiments in the domestic wholesale and retail industries for H1 2005 (Chart 1.9).

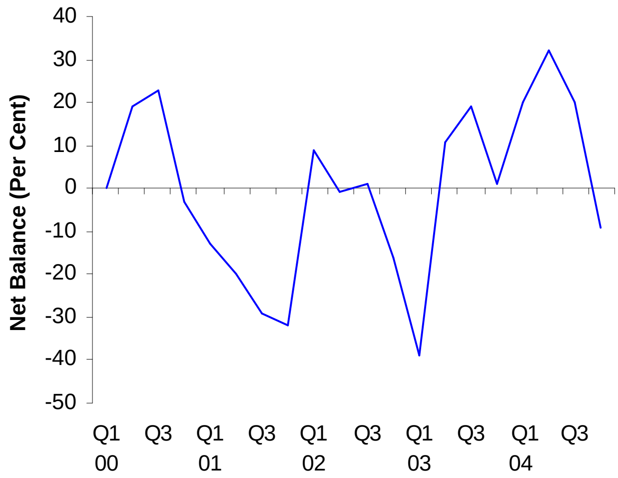
[6] A book-to-bill of 0.80 means USD80 of orders was received for every USD100 of product billed for the month.
[7] A reading below 50 indicates that the manufacturing sector is generally declining.

Chart 1.8
Retail Sales Volume



Source: DOS

Chart 1.9
Business Expectations for Retail and Wholesale Trade

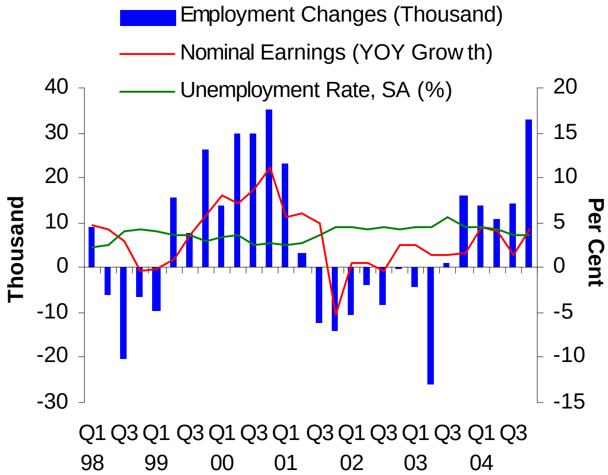


Source: DOS

Lower unemployment rate and property market turnaround expected

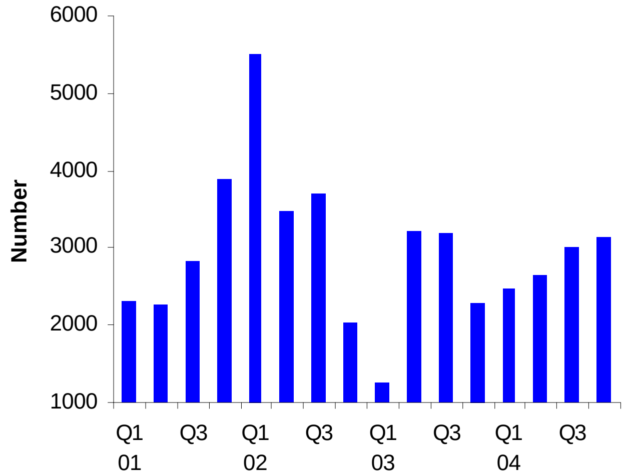
Employment expectations have fallen somewhat since mid-2004, but they remain positive in certain sectors. The overall unemployment rate is expected to fall further in line with continued growth in the domestic economy (Chart 1.10). The unemployment rate was 3.9% in March 2005, and is expected to average around 3.5% for the year, compared to 4% in 2004.

Chart 1.10
Employment Expectations A Quarter Ahead



Source: DOS

Chart 1.11
New Private Residential Units Sold



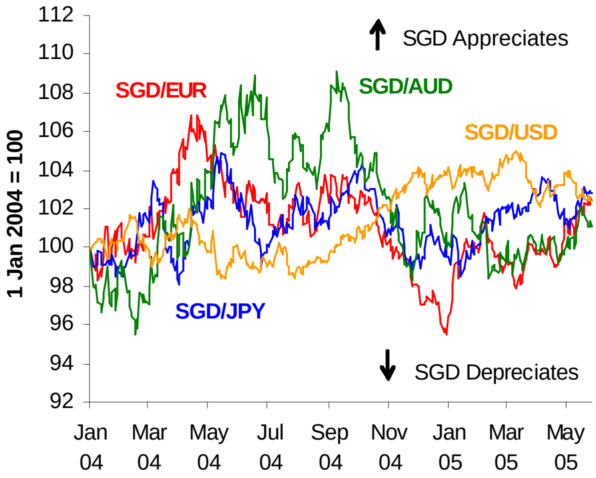
Source: URA

The property market experienced a turnaround in H2 2004, with improving occupancy rates across the various commercial segments and higher sales of new private residential units (Chart 1.11). Landed property sales saw strong growth last year. Nevertheless, the construction sector contracted a further 6.5% in 2004 and 7.3% in Q1 2005. After six consecutive years of contraction, its share of real GDP has shrunk from 8.9% in 1998 to 4.5% in 2004. Construction activity is not expected to improve significantly this year.

Policy of modest and gradual appreciation of the S$NEER maintained

The Singapore dollar (SGD) broadly strengthened against the major currencies in 2005 (Chart 1.12), although it has generally weakened against the Asian currencies (Chart 1.13) as a result of strong capital inflows into the region. Following MAS' latest Monetary Policy Statement on 12 April 2005, which maintained the policy of a modest and gradual appreciation of the S$NEER, the SGD further strengthened against the Australian dollar, Euro and Yen in May 2005.

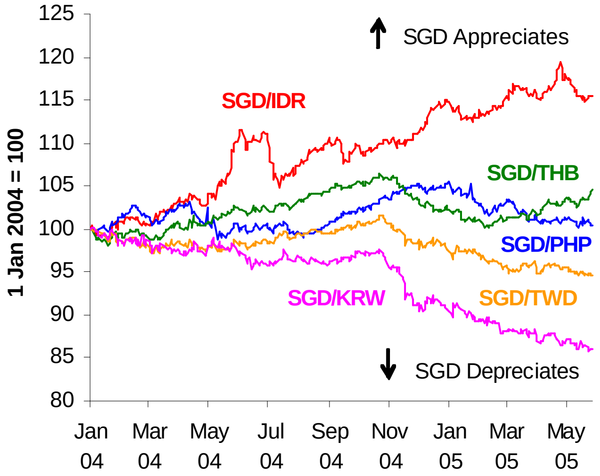
Chart 1.12
SGD Against Major Currencies



Source: Bloomberg

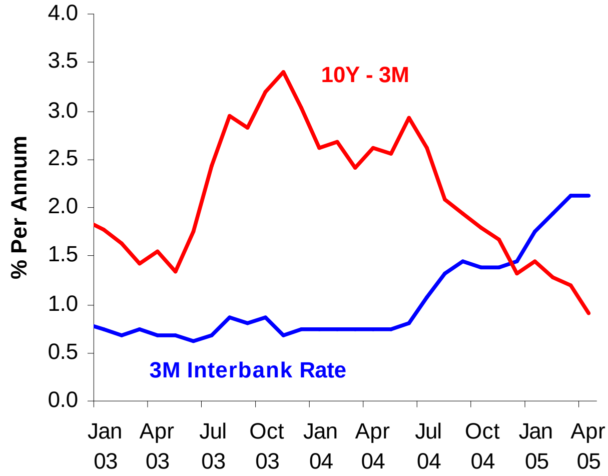
Following the SGD's broad appreciation against the USD since July 2004, domestic interest rates also rose in line with US monetary policy tightening, with the 3-month Singapore interbank rates increasing steadily over the period (Chart 1.14). However, yields of longer term Singapore Government Securities (SGS) have declined, reflecting concerns over Singapore's growth prospects for this year. This continued flattening of the yield curve suggests that longer-term inflationary expectations remain benign despite the build-up of medium-term inflationary concerns.

Chart 1.13
SGD Against Selected Asian Currencies



Source: Bloomberg

Chart 1.14
SGS Yields & SGD 3-Month Interbank Rate



Source: MAS

1.2 Financial Market Developments

Global financial markets have thus far adjusted in an orderly manner to the rising interest rate environment. However, conditions in global financial markets appear more uncertain now than in December 2004. With the expected moderation in global economic growth, there have been concerns over deteriorating corporate credit quality as indicated by widening spreads. The recent rating downgrades in the US automobile industry has also led to concerns over the possible unwinding of large positions by investors including hedge funds. There remains a potential risk of a disorderly unwinding of carry trades should there be a sharper-than-anticipated rise in interest rates. In addition, while the downward pressure on the USD has eased somewhat, concerns about the sustainability of the US current account deficit remain.

Global Financial Markets

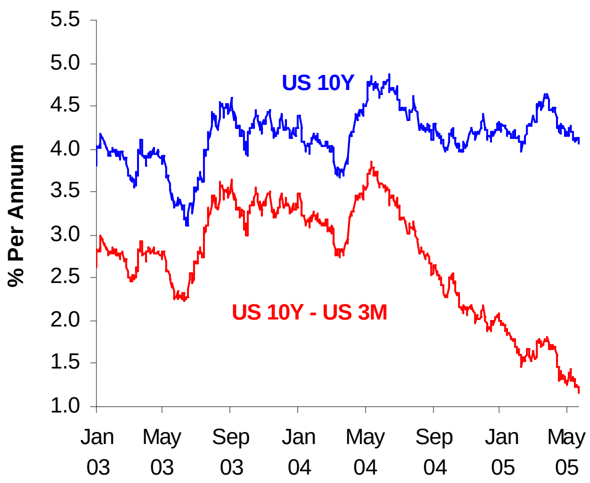
Concerns of corporate credit quality have resulted in a widening of spreads

US long-term bond yields have fallen since March 2005 although they rose initially in the early part of 2005 on the strength of the US economy and rising inflationary expectations (Chart 1.15). The low interest rate environment over the last few years has encouraged a search for yield which has resulted in a rapid growth of structured products such as collateralised debt obligations (CDOs)[8] (Chart 1.16). The complex nature of most structured products raises questions as to whether investors have correctly priced in the risk exposure in credit derivatives or the different CDO tranches. The growing number of investors moving

[8] USD120 bn worth of CDOs were issued in and sold to investors in Europe and the US in 2004.

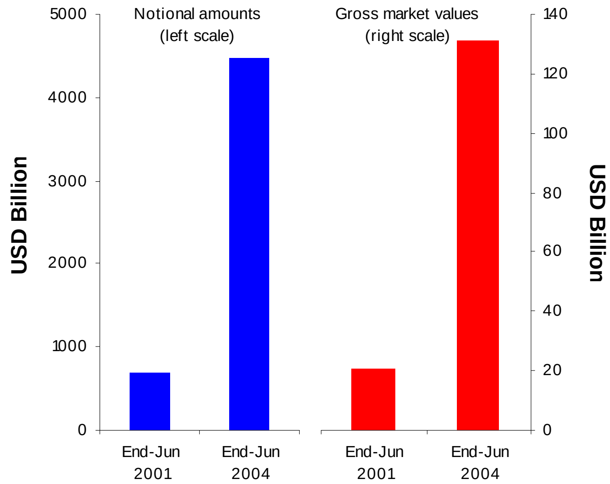
into the credit derivative markets in search for yield has also resulted in concerns over the possibility of large leveraged losses should the credit environment deteriorate.

Chart 1.15
US Treasury Yield Curve



Source: Bloomberg

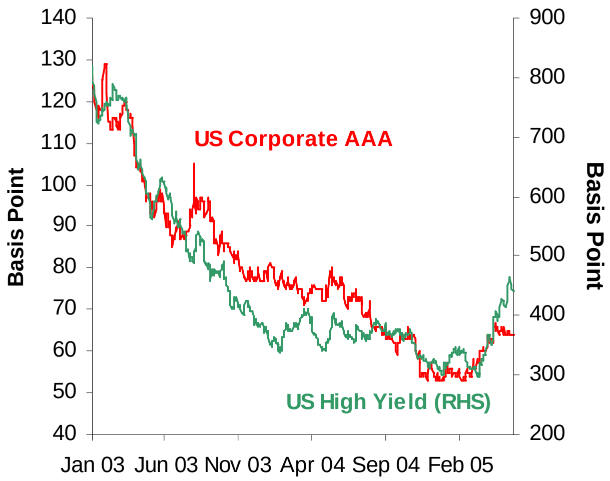
Chart 1.16
Credit Derivatives



Source: BIS

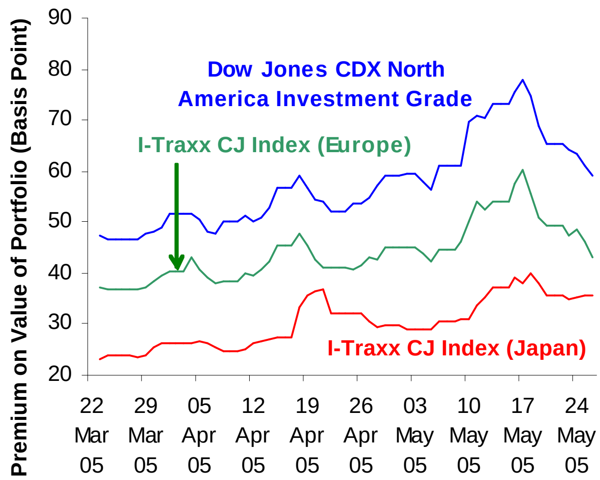
Concerns of corporate credit quality have led to a widening of spreads on USD corporate bonds since March 2005 (Chart 1.17). The recent credit downgrades of GM and Ford by both Standard & Poor's and Moody's to junk status in May 2005 have also raised concerns that heavy hedge fund losses could spark a larger contagion affecting all markets. Premiums on credit default swaps (CDS) rose sharply in the US, Europe and Japan in May 2005, reflecting the increase in risk aversion amid these concerns, although premiums have since levelled off somewhat (Chart 1.18).

Chart 1.17
US Corporate Bond Spreads



Source: Thomson Financial

Chart 1.18
Cost of Corporate Credit Protection

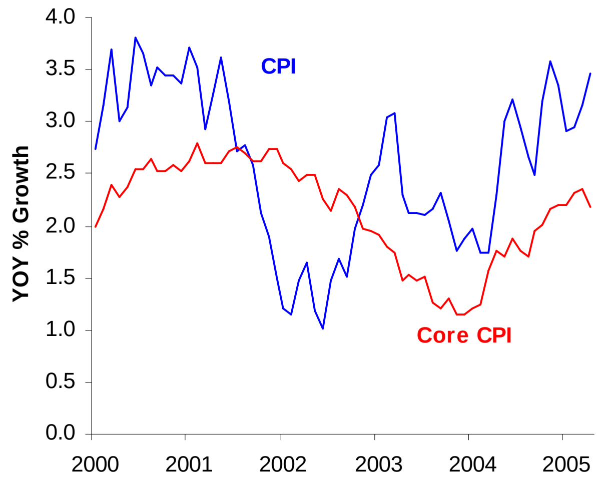


Source: Bloomberg

Inflationary pressures may result in faster-than-expected rises in interest rates

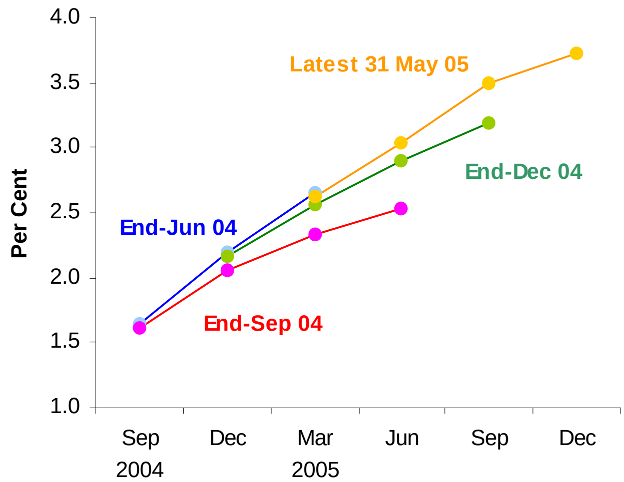
Greater inflationary pressures in the US in recent months have increased the risks of more aggressive Fed tightening as indicated by the steepening Fed Funds futures. Although the April 2005 core CPI was 2.19% YOY, compared to 2.35% YOY in March 2005, risks to inflation remain on the upside as indicated in the latest FOMC minutes in May 2005. (Charts 1.19 & 1.20)

Chart 1.19
US Inflation- Consumer Price Index



Source: CEIC

Chart 1.20
US Fed Fund Futures



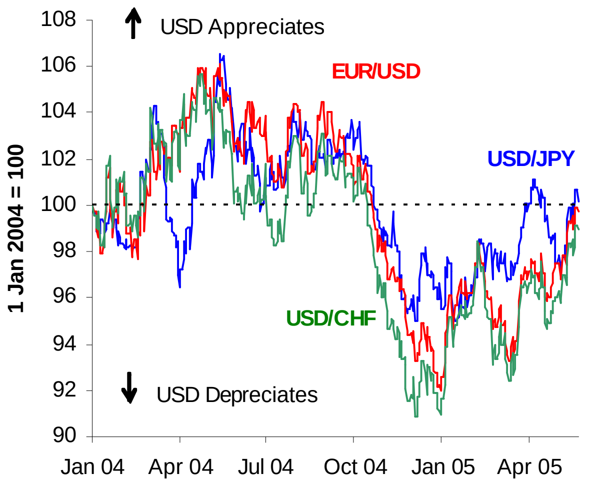
Source: Bloomberg

Leveraged investors may face potential risks should a there be a sharper-than-expected Fed tightening. There have been concerns of a disorderly unwinding of carry trades should interest rates rise more quickly then expected. Thus far, leveraged investors have exploited the spread between short-term borrowing costs and longer term investment rates. This spread, however, has narrowed as short-term rates continued to rise.

USD continues to be supported by foreign portfolio inflows and higher interest rates

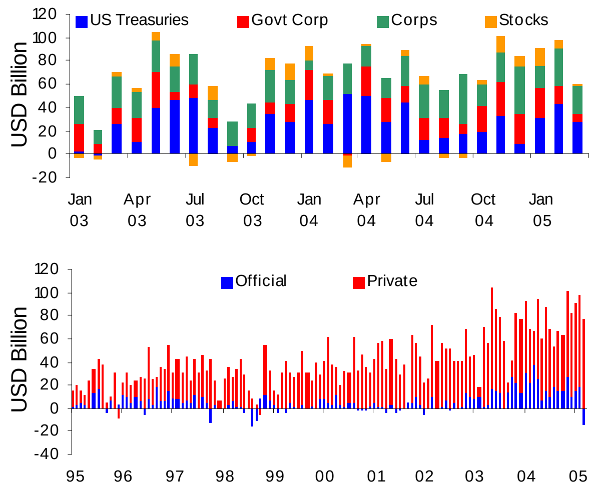
Since the December 2004 FSR, the USD has regained some of its losses against the major currencies (Chart 1.21). The USD has continued to be supported by foreign portfolio inflows, particularly in the fixed income market, as well as central bank buying (Chart 1.22). However, official flows receded in March 2005 as foreign exchange reserve accumulation slowed following an easing of the downward pressures on the USD.

Chart 1.21
USD Against Major Currencies



Source: Bloomberg

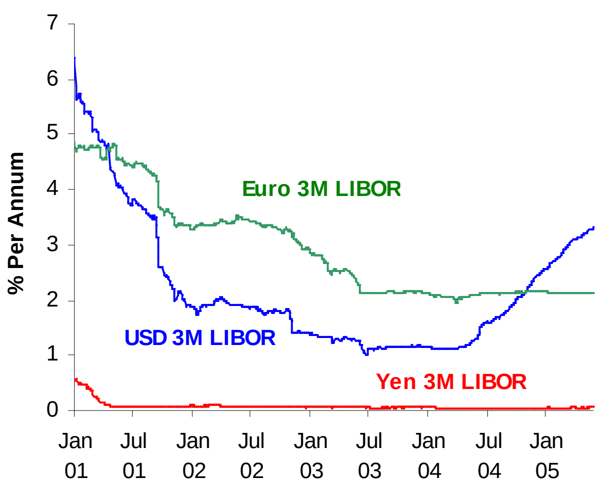
Chart 1.22
Net Foreign Purchases of USD Securities



Source: US Department of the Treasury

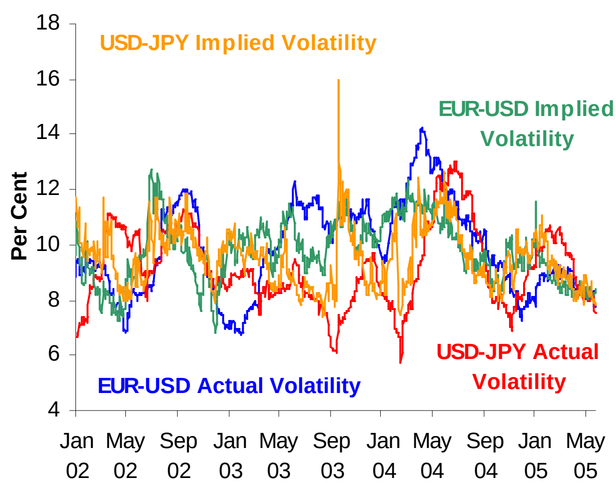
The USD has also been supported by continued increases in short-term interest rates (Chart 1.23) as the Fed delivered its latest eighth successive rate increase to bring the Fed Funds Target Rate to 3% in May 2005. This has lifted US short-term interest rates above that of the Euro and Yen. A decline in the trade deficit to USD55 bn in March 2005 from USD61 bn in the previous month has also helped ease downward pressures on the USD. Notwithstanding the relatively low implied volatility of the USD against major currencies at the current juncture (Chart 1.24), there remain concerns over the sustainability of the large US current account deficit, which reached 5.7% of GDP in 2004.

Chart 1.23
G3 3-Month Interest Rates



Source: Bloomberg

Chart 1.24
Actual and Implied Volatility of G3 Currencies



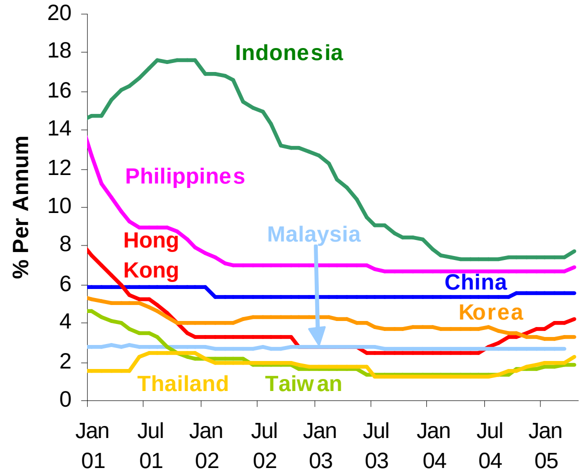
Source: Bloomberg

East Asian Financial Markets

Inflationary concerns have resulted in continued tightening of monetary policy

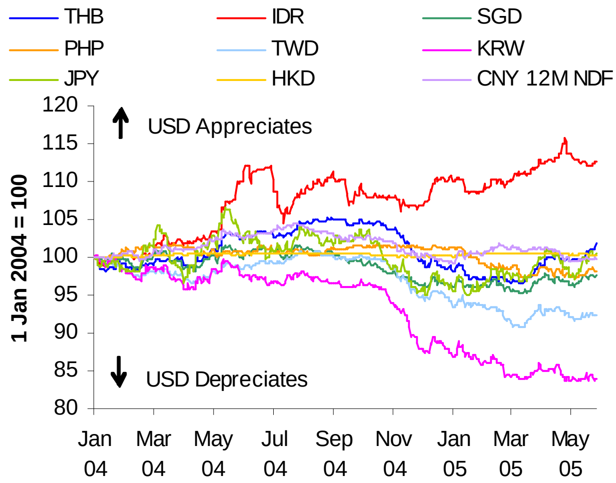
Since the December 2004 FSR, monetary authorities in Indonesia, the Philippines, Taiwan and Thailand have continued to tighten monetary policies and raised their policy rates (Chart 1.25). With on-going concerns over rising inflationary pressures on the back of sustained high oil prices, more significant monetary tightening across the East Asian region remains a possibility.

Chart 1.25
Policy Rates in Asia



Source: CEIC

Chart 1.26
Asian Currencies



Source: Bloomberg

In Northeast Asia, while the People's Bank of China maintained its policy rate at 5.58% since the last hike in October 2004, continued high property price inflation particularly in the coastal cities had led authorities to impose further selective tightening measures.[9] In Hong Kong, liquidity outflows reflecting the unwinding of RMB revaluation trades and expectations for higher US interest rates led to a continued decline in the aggregate balance of commercial banks with the Hong Kong Monetary Authority (HKMA)[10] to about HKD1.4 bn in late May 2005, down from HKD15.6 bn at end-January 2005. The drawdown of domestic liquidity and the HKMA's announcement of modifications to its currency board system[11] in May 2005 led to a rapid rise in Hong Kong interbank rates by about 230 basis points (bps) to a high of 3.3% during that period. Meanwhile, the Bank of Korea (BoK) maintained its policy stance since its last rate cut in November 2004, bringing policy rates to a record low of 3.25% to support sluggish domestic demand.

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[9] The central authorities have raised the minimum down payment and maximum interest rate on mortgages, while Shanghai has imposed a capital gains tax and prohibited the sale of property until its entire mortgage has been paid off.
[10] Aggregate balance is the sum of balances in the clearing accounts and reserve accounts maintained by commercial banks with the central bank. In Hong Kong, this refers to the sum of the balances in the clearing accounts maintained by the banks with the HKMA.
[11] The modifications effectively created a 7.75-7.85 band for the HKD versus the previous single 7.80 convertibility level and were intended to bring HK interest rates closer to US rates, reduce the use of the HKD as a vehicle for speculation on the RMB and lead to more stable monetary conditions.

In Southeast Asia, the BoT raised policy rates by a cumulative 75 bps since October 2004, with the latest rate move raising the 14-day repurchase rate to 2.25% per annum on 2 March 2005 (Chart 1.26). The BoT Monetary Policy Committee cited concerns over a likely build-up in inflationary pressures as growth remained firm and production costs increased in the recent period. In the Philippines, the Monetary Board of Bangko Sentral ng Pilipinas (BSP) increased the BSP's policy interest rate by 25 bps to 7.0% for overnight borrowing and 9.25% for the overnight lending on 7 April 2005, marking the first increase since October 2000. The Monetary Board noted that, although demand-driven inflationary pressures remained limited given the fairly high unemployment, modest credit growth, and spare capacity in manufacturing, the upside risks to the inflation outlook have increased as oil prices are expected to remain high for the foreseeable future.

Asian currencies have given up some of the earlier gains against the USD

Since the start of the year, speculative pressures related to RMB revaluation have eased and this has been reflected in the forward markets for both the RMB and the HKD. On the whole, regional currencies have given up earlier gains on the back of the unwinding of RMB revaluation flows and expectations of a more aggressive pace of Fed tightening (Chart 1.26). Since early April, however, speculative pressures related to RMB revaluation have returned, providing support for Asian currencies.

Southeast Asian currencies broadly appreciated against the USD over the past 6 months due to sustained USD weakness from concerns over the sustainability of the US current account deficit. However, these currencies have weakened against the USD from March 2005 on the back of concerns over the possibility of steeper hikes in US interest rates. However, as fears of a more rapid rate hike dissipated, regional currencies had begun to stabilise since May 2005. In addition, the Philippine peso was supported by progress made on the proposed VAT bill that is expected to help the government cut its large budget deficit. The Indonesian rupiah however has continued to weaken against the USD owing to growth in demand for imports of raw materials, debt repayments and higher oil prices.

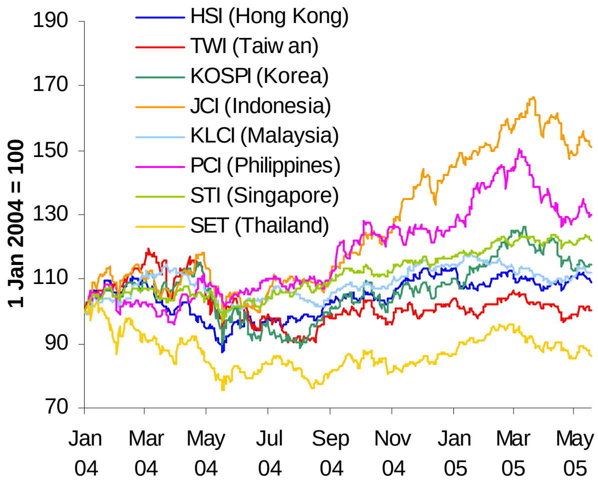
Expectation of more aggressive Fed tightening and sustained higher oil prices have led to some capital outflows since early March

Since early this year, speculation on both RMB revaluation as well as the removal of Malaysian ringgit (MYR) peg, improvement in macroeconomic and political environment and the continued search for yield have led to strong foreign portfolio inflows into Asia (see Box Item A). These inflows have supported a liquidity boom, and boosted equity markets and regional currencies. Since early March, however, higher oil prices and expectations of an acceleration in the pace of Fed tightening have led to some reversal of these capital flows[12],

[12] Net foreign purchase of equities in Thailand, South Korea, Taiwan, Philippines and Indonesia reversed from USD6.6 bn in February 2005 to –USD2.0 bn and -USD1.1 bn in March and April 2005 respectively.

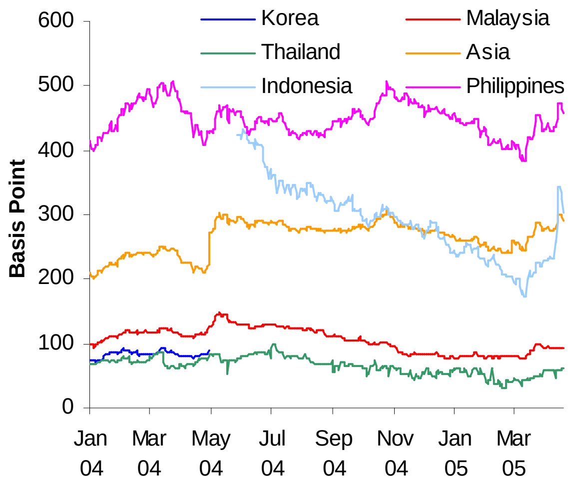
resulting in regional currencies and equities giving up some of their earlier gains. Southeast Asian equity markets, which were initially lifted by broad strength in the regional corporate sector, were weighed down by concerns of the adverse impact of higher oil prices on the economies (Chart 1.27). Sovereign bond spreads remained tight, although they have also widened since mid-March (Chart 1.28).

Chart 1.27
Asian Equities



Source: Bloomberg

Chart 1.28
Asian Sovereign & Quasi-Sovereign Bond Spreads

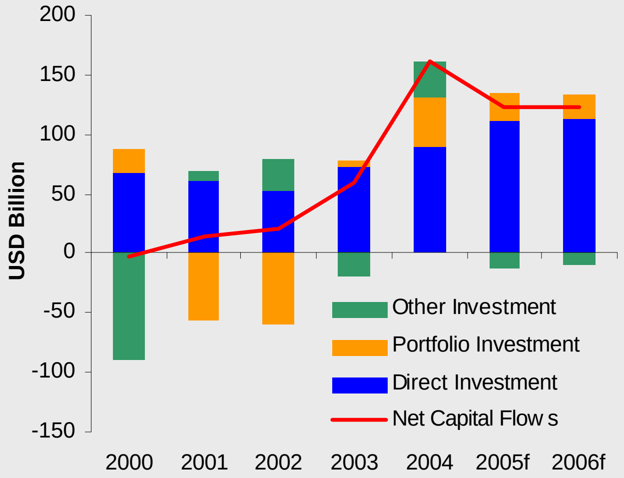


Source: Bloomberg

Box Item A
Capital flows into East Asia

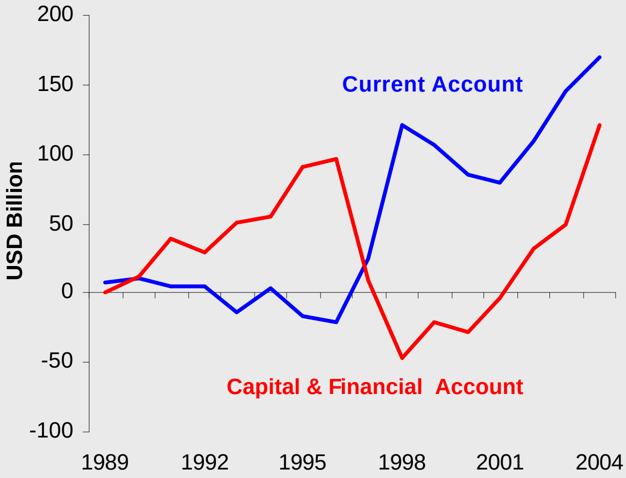
Net capital flows into East Asia rose sharply to USD162 bn in 2004 from USD59 bn in 2003, driven largely by a sharp increase in portfolio flows and the reversal in other investment flows[1] (Chart A1). Together with the continued large current account surpluses (Chart A2), these inflows have contributed to a build up of foreign exchange reserves. Last year, the foreign reserve holdings of East Asian economies rose to about USD1.6 trn from USD1.2 trn in December 2003, with China, South Korea and Taiwan accounting for nearly 80% of this gain.

Chart A1
Net Capital Flows to Asia*



Source: IMF WEO February 2005
* Includes developing Asia and newly industrialised Asian economies

Chart A2
Balance of Payments in East Asia*



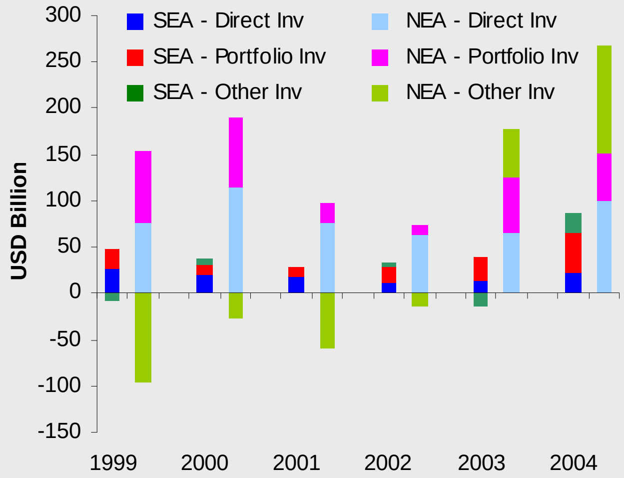
Source: CEIC
* Includes China, South Korea, Taiwan, Hong Kong and ASEAN-5

Last year, gross capital inflows into Northeast Asia rose to USD268 bn from USD178 bn in 2003, while that for Southeast Asia also increased sharply to USD87 bn from USD26 bn (Chart A3). In terms of composition, the sharp jump was largely due to the other investment inflows which saw a significant surge of about USD100 bn to USD138 bn, of which 90% went into China, Hong Kong and Singapore. China and Hong Kong accounted for the bulk of the FDI inflows, with about 75% share of total direct investment inflows into Asia ex-Japan. Portfolio inflows into Malaysia and China increased to USD37 bn and USD13 bn from USD20 bn and USD8 bn respectively, while Korea and Taiwan in particular, experienced a YOY decline in inflows from USD51 bn to USD34 bn last year. The large increase in capital flows into China[2], Hong Kong and Malaysia[3] was mainly driven by speculation that the authorities will move to revalue the RMB exchange rate and remove the ringgit peg.

Thus far, these strong inflows into the region have not been destabilising due in part to central bank intervention and sterilisation operations and the risk of a reversal in capital flows is not expected to have an adverse impact on financial stability for several reasons. First, as capital flows are now dominated by portfolio flows rather than short-term bank flows, the risk of a sudden reversal leading to a liquidity crunch among banks and firms is not likely to be significant. Moreover, the maturity and currency mismatches that precipitated the 1997 Asian financial crisis are now far less prevalent. Second, Asia's balance of payments positions are much stronger than pre-1997, and together with its large foreign reserves, provide a strong buffer in the event of a sudden reversal of inflows. Third, authorities in some of the regional economies have put in place and tightened regulations on short-term capital inflows. For example, BoT imposed THB50 mn limit on loans to commercial banks, from non-residential investors, unless the loans have an underlying transaction and are held for more than 3 months. Finally, substantial restructuring in both the corporate and banking sectors has taken place, as firms have de-leveraged, while financial institutions have reduced bad loans and been recapitalised. Furthermore, continued improvements in risk management and strong capital buffers provide some comfort that these shocks can be absorbed smoothly.

Box Item A (continued)

Chart A3
Capital Flows into East Asia



Source: CEIC
* NEA: China, Taiwan, Hong Kong, Korea;
SEA: Thailand, Indonesia, Philippines, Malaysia, Singapore

1/ Other investment flows refers to trade credits, loans, currency and deposits, and other assets and liabilities (e.g., miscellaneous accounts receivable and payable).

2/ Errors & omissions (a common proxy for hot money flows) grew from USD18 bn in 2003 to USD27 bn in 2004.

3/ More recently in March 2005, as part of its policy of gradual and progressive liberalisation of the financial sector, Malaysia announced further relaxation of the foreign exchange controls w.e.f. April 2005 to facilitate the development of its capital markets.

II NON-FINANCIAL SECTOR

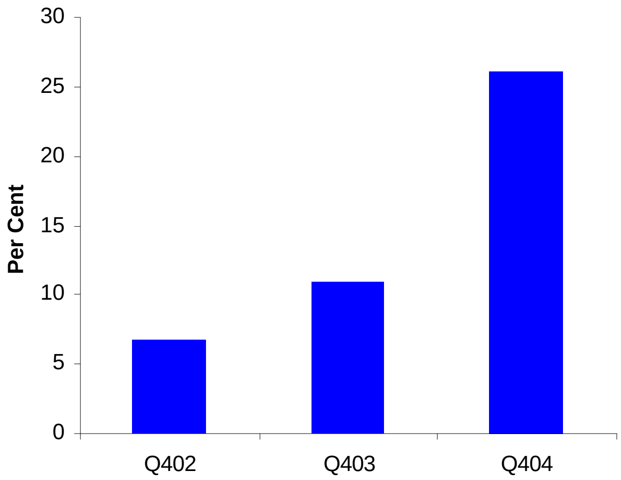
2.1 Non-financial Corporate Sector[13]

The Singapore corporate sector performed well in Q4 2004 as strong domestic and regional economic growth boosted corporate profitability and liquidity.[14] There were also tentative signs that firms were beginning to borrow again. Stronger financial positions suggest that the corporate sector should be able to weather the expected slowdown in economic growth this year.

Corporate profits improved in Q4 2004 on the back of robust economic growth

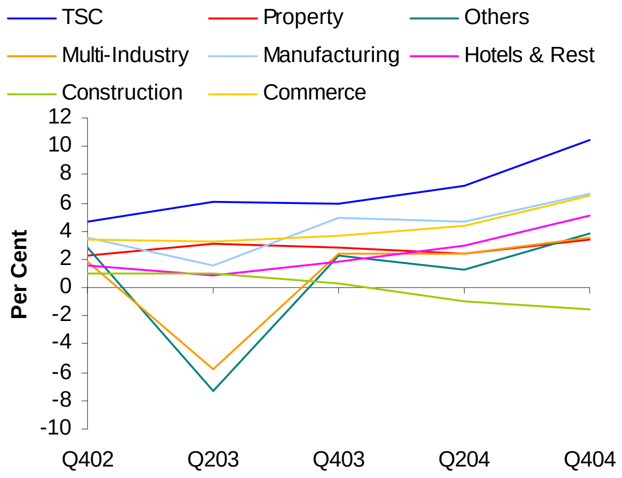
The median net income of the Singapore corporate sector grew 26% YOY in Q4 2004, compared to 11% YOY a year earlier (Chart 2.1). Profit growth remained strong although it has slowed slightly in recent months, with latest Q1 2005 median net income growth of 24% YOY. Except for the Construction sector, the median return on assets (ROA) has risen in Q4 2004 across all sectors (Chart 2.2). The Transport, Storage and Communications (TSC) sector, in particular, saw its ROA surge as stronger international trade buoyed shipping, logistics and ship repair businesses.[15]

Chart 2.1
YOY Net Income Growth (Median)



Source: Thomson Financial

Chart 2.2
Return on Assets (Median)



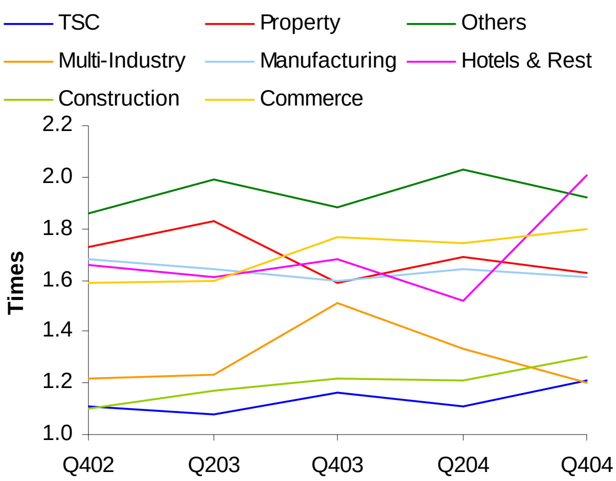
Source: Thomson Financial

[13] All corporate data cover listed companies only and since they were only required to furnish quarterly figures since last year, the time series in the charts compare Q2 2004 figures to 2000-2002 annual figures and Q2 2003. Seasonal variations could account for some of the divergence between the quarterly and annual figures.
[14] The sectoral breakdown of listed firms follows the SGX methodology. The detailed list of firms in each sector may be obtained from www.sgx.com.sg.
[15] COSCO Corporation, for example, benefited from higher freight rates and demand for shipping and ship repair activities. Neptune Orient Lines also saw its net income rise 120% to USD943 mn in 2004.

Adequate liquidity levels and good equity market performance

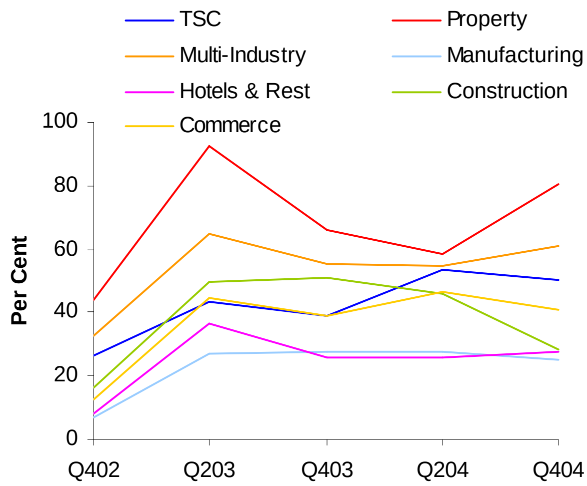
Higher revenues and profits helped to improve the corporate sector's liquidity position, with all sectors recording current ratios of above one in Q4 2004 (Chart 2.3). Liquidity conditions among construction firms improved, while their leverage positions declined sharply as they reduced debt. The Property and Multi-Industry sectors remained the most highly leveraged sectors. Increased borrowing among the Property, Multi-Industry and Hotel & Restaurant sectors in Q4 2004 may augur a turning point in the generally negative trend in corporate sector financing during the last few years (Chart 2.4).

Chart 2.3
Current Ratio (Median)



Source: Thomson Financial

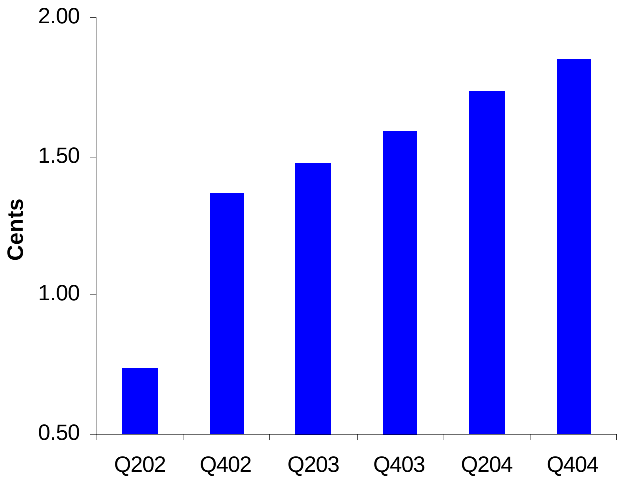
Chart 2.4
Leverage Ratio (Debt-to-Equity) (Median)



Source: Thomson Financial

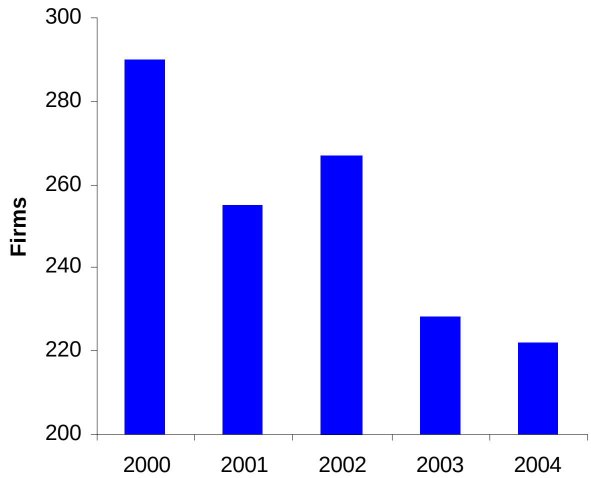
Improved profitability translated into a rise in median earnings per share (EPS) (Chart 2.5), which grew 16.4% YOY in 4Q 2004. The higher earnings also boosted equity prices. As business activities recovered, the number of firms liquidated declined steadily, with 222 firms wound-up last year compared to 290 in 2000 (Chart 2.6).

Chart 2.5
Earnings Per Share (Median)



Source: Thomson Financial

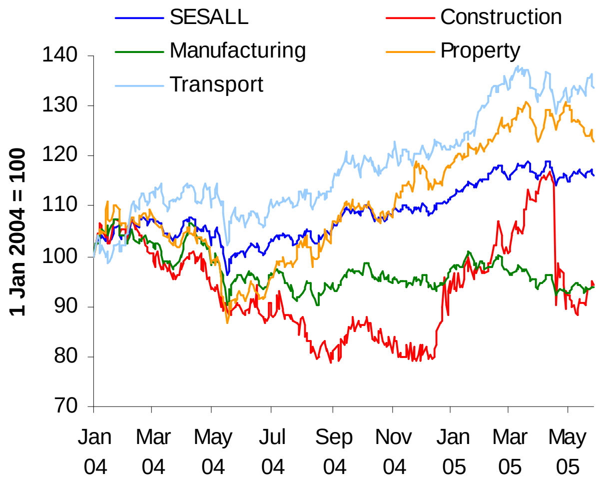
Chart 2.6
Number of Firms Wound-up



Source: Ministry of Law

Equity market prices, as a leading indicator of corporate sector performance, may portend a relatively sanguine outlook. Singapore equities have risen by 16.7% since the start of 2004, outperforming the US, Hong Kong and Japanese equity markets. The sectoral indices for the Property and TSC sectors have performed particularly well on the back of the strong economic and trade growth last year (Chart 2.7). The Construction sector, however, continued to lag the overall market.

Chart 2.7
Stock Indices, January 2004 to April 2005



Source: Bloomberg

Despite the decline in the PMI for April 2005, the latest Business Expectations Survey of the manufacturing sector showed an expectation of improvement in manufacturing activity between April and September 2005. Activity in the services sector is also expected to improve although the retail sector is likely to see weaker business conditions ahead. While corporate profits are expected to moderate going forward, business confidence appears to be robust on the whole.[16]

2.2 Household Sector[17]

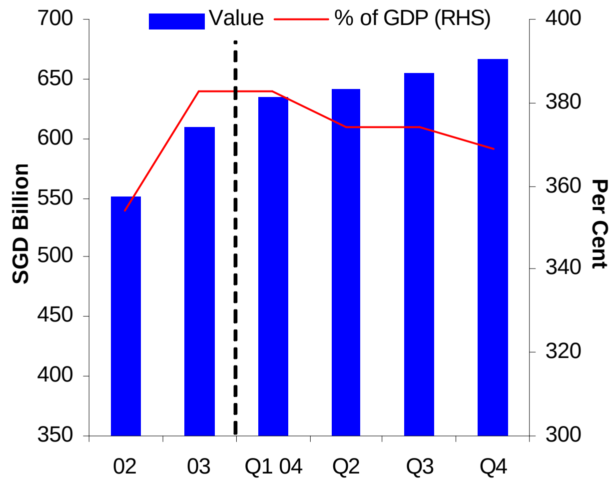
The financial health of resident households in Singapore continued to improve on the back of strong economic growth in 2004. Household net wealth, defined as household assets less household liabilities, was estimated to have grown to a high of SGD666 bn, or about four times nominal GDP as at end-Q4 2004 (Chart 2.8), a level similar to that of the US, UK, Japan and France. Given the stronger financial position of households, the recent increase in domestic interest rates is not expected to have a severe impact on households' debt servicing burden.

[16] Surveys were released in May 2005. The survey on business expectations in the manufacturing sector is administered by the Economic Development Board (EDB), while that on the services sector is done by the Department of Statistics (DOS). Both surveys are conducted on a quarterly basis.
[17] Data in this section are mostly MAS' estimates using data from other ministries and statutory boards.

Households' financial health strengthened on the back of favourable economic conditions

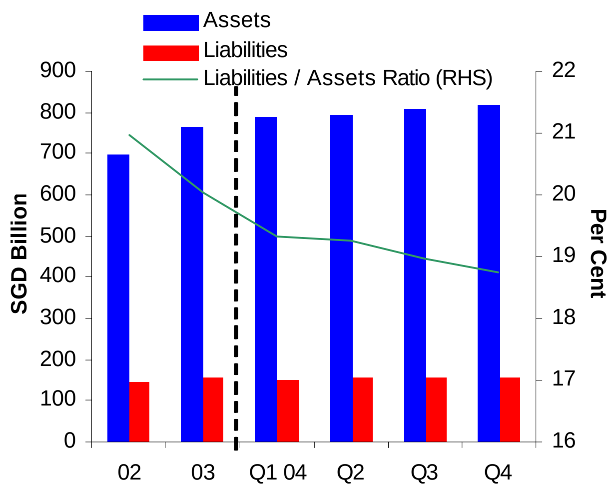
Total household assets were estimated to have grown by 3.1% to SGD820 bn in Q4 2004 compared to Q2 2004, while total household liabilities were projected to be largely unchanged at SGD154 bn. Consequently, households' financial gearing was estimated to have fallen marginally to 18.8% in Q4 2004 from 19.3% in Q2 2004 (Chart 2.9).

Chart 2.8
Household Net Wealth



Source: MAS estimates

Chart 2.9
Household Assets and Liabilities



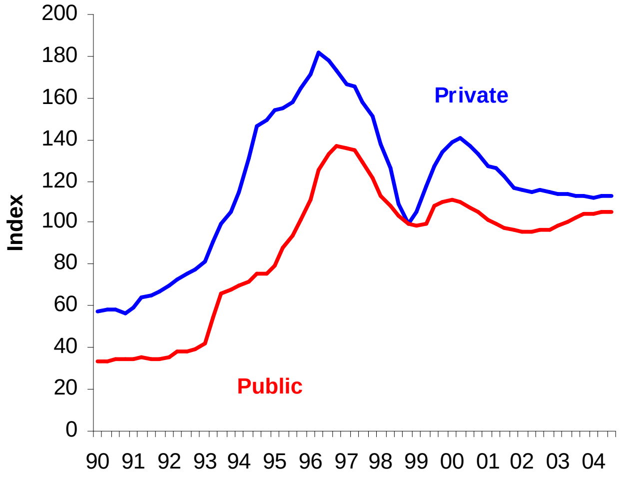
Source: MAS estimates

Household assets were mainly boosted in the second half of 2004 by increased valuation of residential property, higher CPF savings and cash holdings. The gradual recovery in the residential property market in the second half of 2004 was estimated to have contributed to an increase in residential property value, driven largely by increases in the resale prices of private residential apartments and condominium properties (Chart 2.10).

In the second half of 2004, household liabilities were estimated to have remained relatively unchanged. Mortgage loans, which make up about three-quarters of household liabilities, increased slightly as the growth in mortgage loans extended by banks outpaced the fall in mortgage loans by Housing Development Board (HDB) in the second half of 2004. Financial institutions have started to extend new mortgage loans, rather than compete to refinance mortgage loans originated by HDB. Other household loans, which include credit card and motor vehicle loans, increased marginally by 1.1% over the period (see Box Item B).

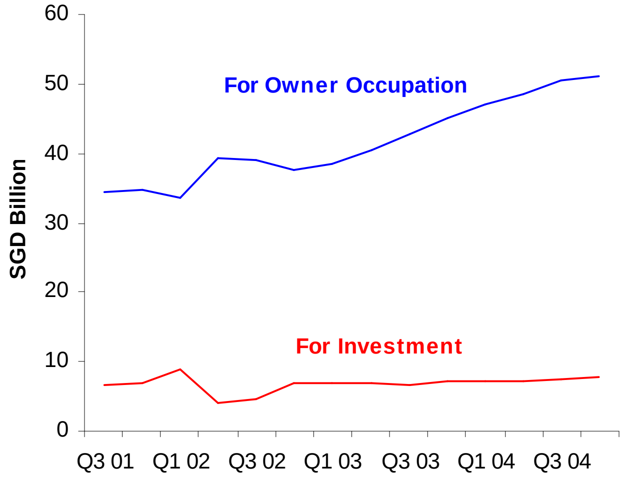
Banks' mortgage loans growth continued to pick up over the past six months. The increase was primarily in mortgages for owner-occupied properties, which outpaced the growth of mortgages for investment over the period (Chart 2.11).

Chart 2.10
Residential Property Prices



Source: URA and HDB

Chart 2.11
Housing Mortgages



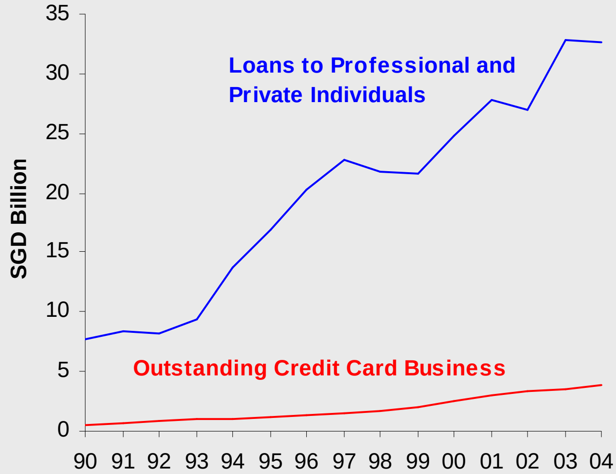
Source: MAS estimates

Box Item B
Singapore's Credit Card Debt

Credit card debt in Singapore accounts for less than 2% of GDP and non-bank loans. Outstanding credit card loans represent a modest proportion of loans to professional and private individuals (PPI) (11.7% as of March 05). In recent years, the growth of credit card debt has slowed, as rollover balance grew by 3% in 2004 compared to 25% in 2000. Relative to other consumer loans, credit card loans have been growing at a much slower pace (Chart B1).

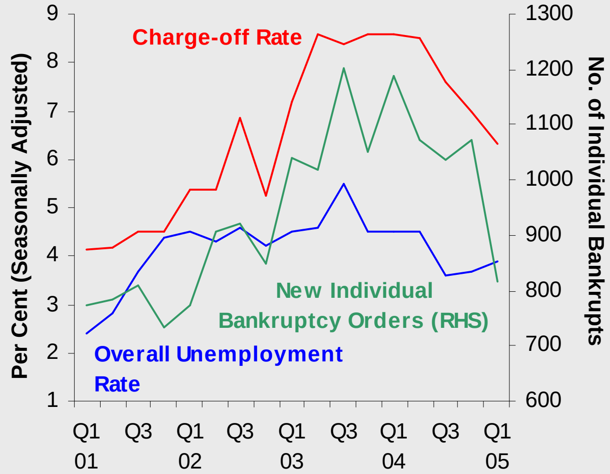
Credit card charge-off rates, defined as bad debts written off divided by average rollover balance, fell from the high of 8.6% in June 2003 to 6.3% at March 2005, on the back of improving economic conditions, falling unemployment and bankruptcies (Chart B2). Charge-off rates for Singapore averaged at 5.8% between 2003 and 2004. This is comparable to that in other countries such as the US, and is lower than that in Hong Kong and Korea which was 7.7% and 13.4% during the same period respectively. MAS' credit card policies (Table B1), such as the minimum income requirement may have capped higher charge-off rates by prohibiting card issuance to the sub-prime market, which could have a higher probability of default.

Chart B1
Credit Card Loans



Source: MAS estimates

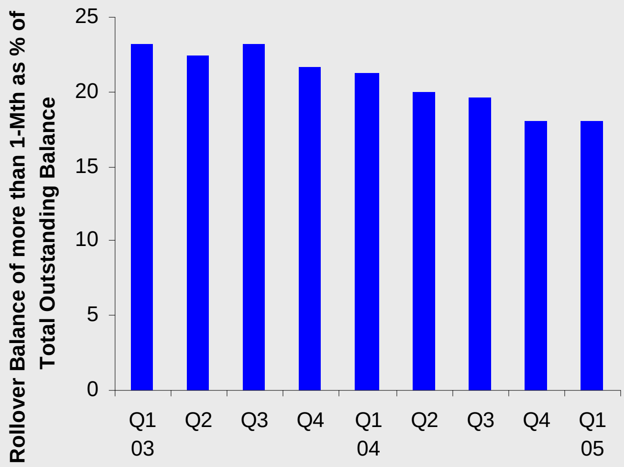
Chart B2
Singapore's Charge-off Rate, Unemployment and Individual Bankruptcies



Source: Unemployment Rate from MOM, Bankruptcy Data from Ministry of Law

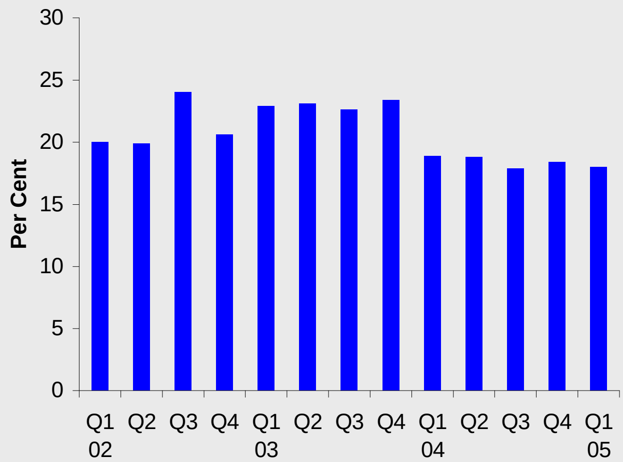
Singapore cardholders generally use credit cards as a payment instrument as only 18% of the stock of credit card debt has been rolled over for more than 1 month as of March 2005. This ratio has improved slightly over the last few quarters as credit card holders' interest-bearing balances have fallen (Chart B3). Credit card debt has also declined from a high of 24% of credit limits in Q3 2002 to 18% as at end-Q1 2005 (Chart B4).

Chart B3
Credit Card Rollover Balance



Source: MAS estimates

Chart B4
Utilisation of Credit Limits



Source: MAS estimates

Box Item B (continued)

Table B1: MAS' credit card measures

- In 2003, MAS prohibited card issuers from using temporary booths to accept credit card applications.
- Unlike most countries, Singapore has a minimum annual income requirement of SGD30,000 for credit card holders and the credit limit is restricted to two times of monthly wages.
- In April 2004, MAS allowed individuals such as retirees to have access to secured credit card, provided these individuals have a minimum deposit of SGD10,000 which they can borrow against.

III FINANCIAL INSTITUTIONS

3.1 Banking Sector

Since the December 2004 FSR, the financial strength of Singapore's banking sector has not changed materially. The local banks turned in a robust financial performance in 2004, maintaining strong capital adequacy ratios (CARs), interest margins, and reasonable returns to shareholders. In particular, the trend increase in interest income gained strength, underpinned by robust lending to households and greater loan demand from the wholesale and retail sectors.

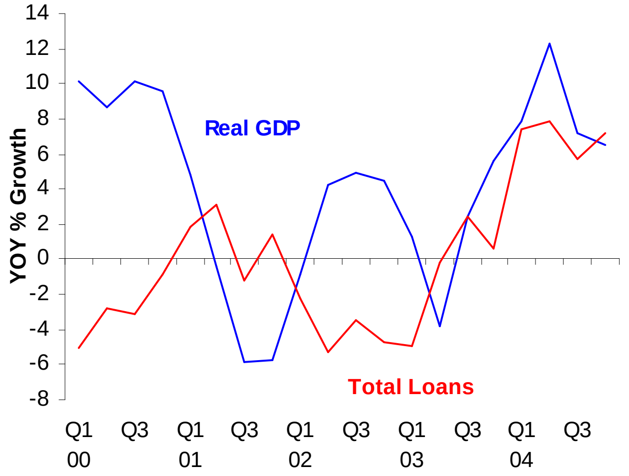
The results of a stress-testing exercise allowing for significant macroeconomic shocks suggested that the financial buffers maintained by Singapore's local banks remain adequate (see Box Item C), reflecting prudent management, high levels of liquidity, provisioning, and capital. The stress test scenario assumed a hypothetical loss in confidence surrounding USD-denominated assets that would result in substantially weaker GDP growth and steeper yield curves. Such a shock would be expected to depress Singapore's business cycle and banking sector performance, not unlike the experience during the Asian financial crisis. For example, the adverse contagion or spillover effects of the crisis led to Singapore's GDP declining by 1% in 1998, loan demand falling by 6%, and financial sector value-added dropping by 9%. Although the stress test scenario was severe, the results showed that these macroeconomic shocks would not have a significant impact on the local banks' capital.

Singapore's banking sector remained strong although loan demand is likely to moderate with the GDP cycle

The overall trend in commercial bank lending in the interbank and non-bank markets reflects the strength of the business cycle (Chart 3.1). Growth in commercial bank loans increased 8.6% YOY in 2004, with 6.1% points coming from Asian Dollar Market (ADM) activities, and 2.5% points from domestic lending (Chart 3.2). Data released for the first three months of this year suggests some moderation in growth rates, as the strong loan demand in 2004 converges to more sustainable levels.

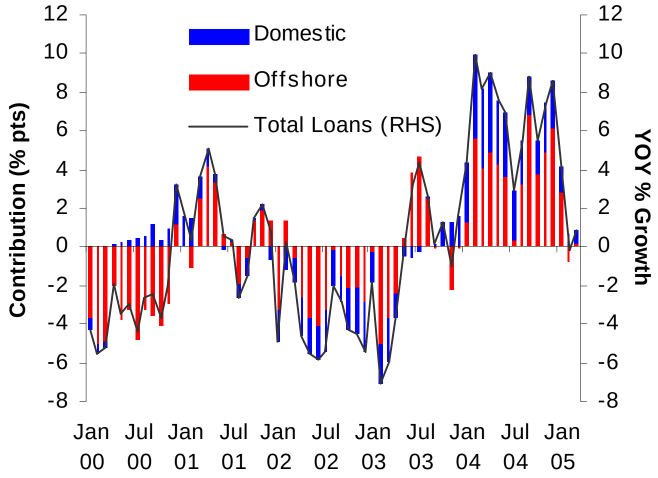
Interbank lending activity, which accounts for about two-thirds of total bank lending, reached a record high of SGD606 bn in December 2004 (Chart 3.3). The interbank market is driven by ADM transactions, where Singapore's role as international financial centre facilitates banks' re-lending to borrowers elsewhere. Key offshore interbank exposures are to Japan, Hong Kong, Switzerland, UK and the US. The key driver underpinning domestic loan demand remained household mortgages (Chart 3.4). With the exception of wholesale and retail trading firms, lending to the corporate sector continued to be flat.

Chart 3.1
Commercial Bank Loans and GDP Growth



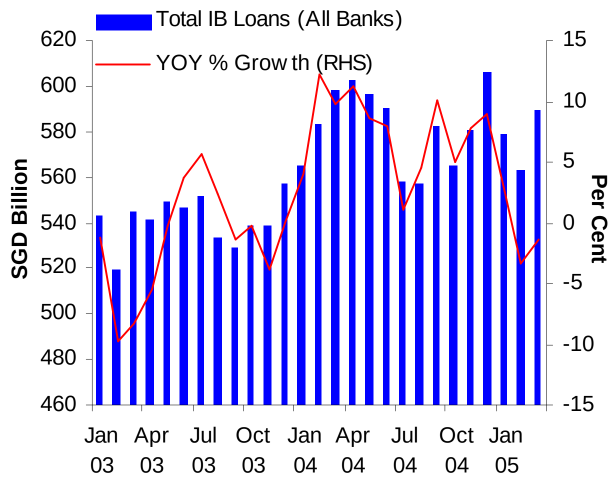
Source: MAS

Chart 3.2
Commercial Bank Lending



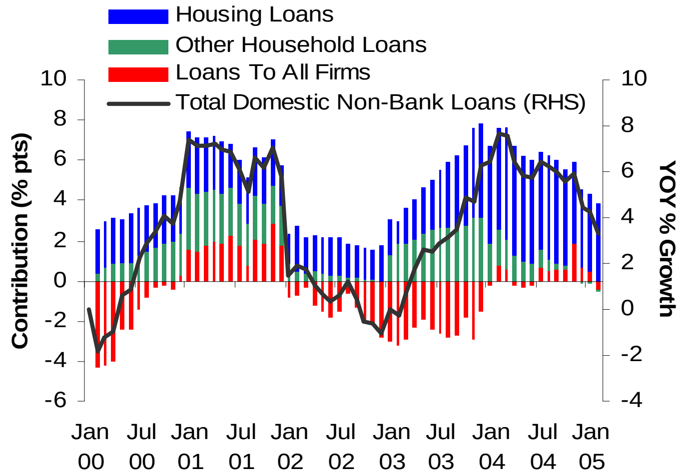
Source: MAS

Chart 3.3
Total Interbank Lending



Source: MAS

Chart 3.4
Domestic Non-Bank Loans



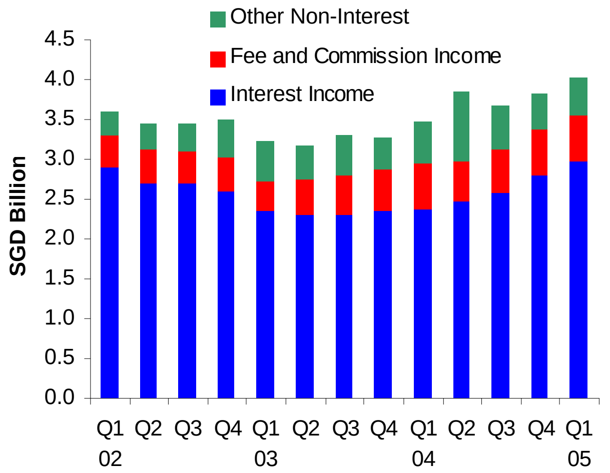
Source: MAS

Robust financial performance for the local banks continues to provide a significant risk buffer

The growth in local banks' aggregate gross income has remained strong, driven by interest income since the second half of 2004 (Charts 3.5 and 3.6). However, total expenditure also increased significantly, largely driven by interest expense, reflecting growth in the volume of deposits and higher interbank interest rates (Charts 3.7 and 3.8). Nevertheless, net interest margins remained reasonably steady, assisted by greater mark-ups, especially over deposit-based funding costs (Chart 3.9). Overall, the financial performance of the local banks was robust in 2004, with operating income increasing by 5.3%, and net profit attributable to shareholders' rising by 5% (see Box item D for an analysis of the key drivers of the local banks' profitability in recent years). NPL ratios also continued to decline in 2004 (Chart 3.10).

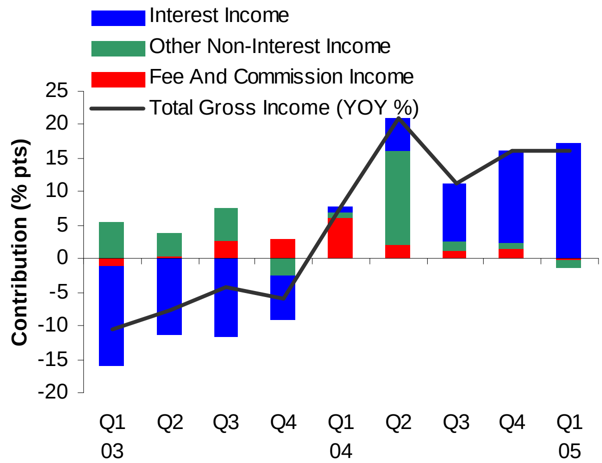
In line with the moderation in the economic cycle, Q1 2005 results revealed modest improvements in financial performance, with net profit growth slowing to 4.1% YOY, and operating income slowing to 1.6% YOY.

Chart 3.5
Local Banks' Total Gross Income



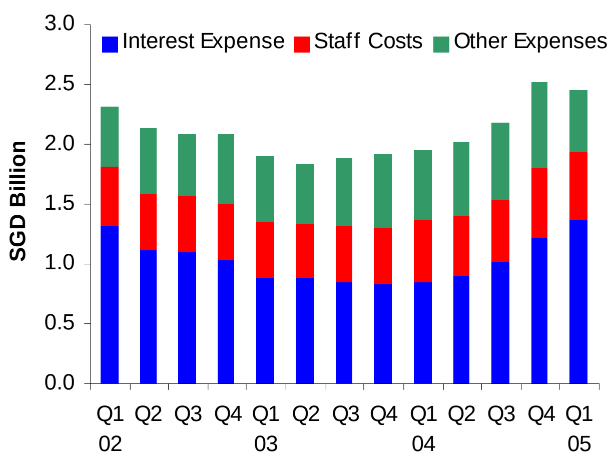
Source: MAS

Chart 3.6
Local Banks' Total Gross Income: Contributions to YOY Growth by Components



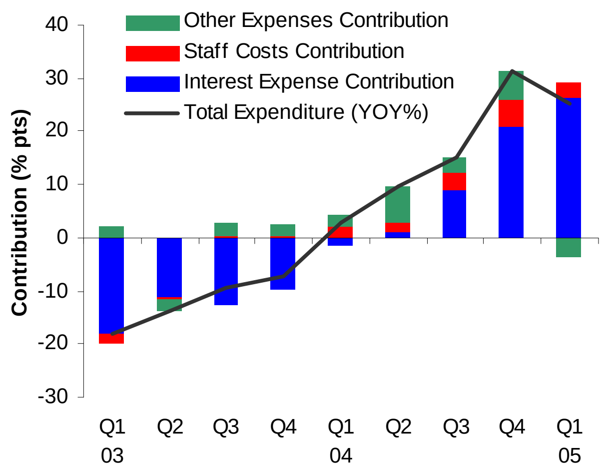
Source: MAS

Chart 3.7
Local Banks' Gross Expenditure



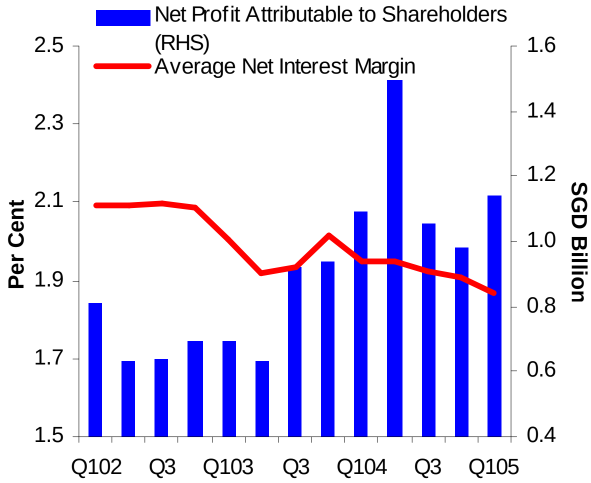
Source: MAS

Chart 3.8
Local Banks' Total Expenditure: Contributions to YOY Growth by Components



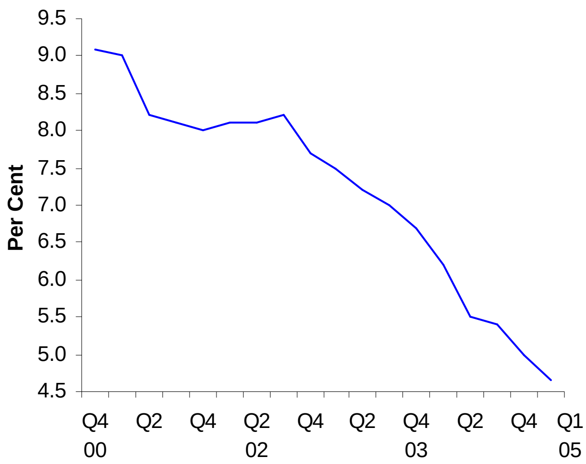
Source: MAS

Chart 3.9
Local Banks' Aggregate NIM and Profit



Source: MAS

Chart 3.10
Local banks' NPL ratio



Source: MAS

Annual total group operating income increased by 13.4% in 2004**,** with contributions of 10% points from the Singapore market and 3.4% points from overseas operations. Of the overseas market, Hong Kong remained the greatest exposure, with around 10% of the aggregate net asset holding, closely followed by Malaysia (about 9%), Korea and Thailand (about 2% each). In terms of total assets, the local banks' overseas exposure remained reasonably steady at 32%. Variations in performance across the local banks' regional markets reflect the nature of the exposure, economic conditions, and the level of competition in the market. For example, in 2004, DBS' operating income from the Hong Kong market increased by a modest 2%, while OCBC's operating income from its Malaysian operations increased by 52%. The difference largely reflects OCBC's 85% increase in Malaysian asset exposure, as a result of its acquisition of Great Eastern Holdings. OCBC's Malaysian foreign asset exposure, however, remained at a relatively lower base of SGD21 bn, compared to DBS' in Hong Kong at SGD40 bn.

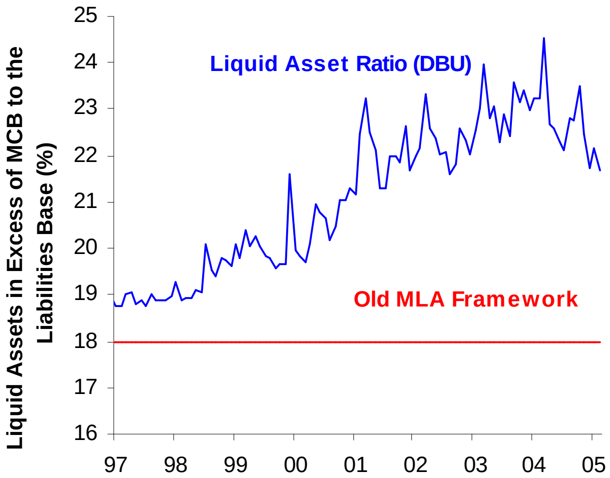
Despite recent falls, banks' liquid asset holding remained well above statutory requirements

The banking sector's liquid asset ratio, defined as liquid assets in excess of required Minimum Cash Balance relative to the liabilities base in the Domestic Banking Unit[18], declined between November 2004 and March 2005. This was due in part to some banks lightening their inventory of Singapore Government Securities (SGS). Despite the recent decline of liquid asset holding by some banks, liquid asset ratio remained well above the

[18] Banks in Singapore book banking transactions in either their Domestic Banking Units (DBUs) or Asian Currency Units (ACUs). Banks are required to record their transactions in SGD in the DBU, while transactions in foreign currency may be booked in either the ACU or the DBU. Under MAS' regulation, all banks in Singapore are required to maintain an MCB of 3.0% of DBU liabilities base with MAS.

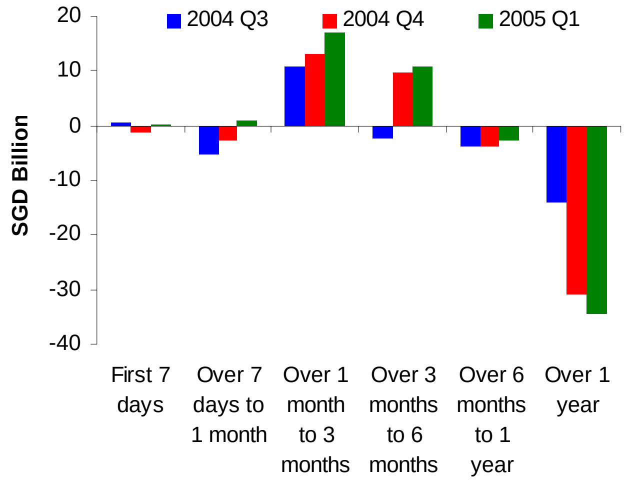
18% required of banks that do not qualify for inclusion in the new Minimum Liquid Assets (MLA) framework[19] (Chart 3.11).

Chart 3.11
Banks' Liquid Asset Ratio (DBU)



Source: MAS

Chart 3.12
Banks' SGD Net Cashflow by Maturity



Source: MAS

Banks' projected SGD cash flows well managed, liquidity risk relatively subdued

Banks' projected SGD cash flows[20] remained well-managed, despite net cash outflows of SGD5 bn in the shorter maturity brackets (less than 1 month) during the past three quarters (Chart 3.12). Given the depth of the SGD money markets, with an estimated average weekly transaction volume of SGD40 bn, banks would be able to readily meet their short-term liquidity needs. Banks' projected net cash outflows for longer maturities (more than 1 year) are of lesser concern from a liquidity perspective as they would have sufficient time to roll over existing funds or source for new funds. Banks have shown that the short-term (less than 1 month) cash outflows could be easily covered as short-term cash outflows only represent about one-quarter of the liquid asset holdings in excess of MLA requirements (Table 3.1). On the whole, liquidity risk appears to be relatively subdued as banks display high reserve positions and could easily source for funds in the interbank market.

[19] Under the new risk-based framework introduced in 2001, banks with better liquidity risk management can have MLA between 12% and 18%

[20] SGD cash flow projection data are from 11 major banks that constitute about 90% of the liabilities base.

Table 3.1
Banking Sector's Short-Term Cash Outflow as % of Liquid Assets in Excess of MLA Requirement

	Short-Term (< 1 month) Net Cash Outflow/Inflow SGD Billion (A)	Liquid Assets in excess of MLA[21] SGD Billion (B)	Short-Term (<1 month) Net Cash Outflow as % of Liquid Assets % (C) = (A)/(B)
Q1 2005	0.2	15.3	1.3
Q4 2004	-4.1	16.0	-25.6
Q3 2004	-4.6	18.3	-25.1
Q2 2004	-0.4	17.0	-2.4

Source: MAS

[21] Liquid assets in excess of MLA requirement data are from the same 11 major banks.

Box Item C
Stress Test of Local Banking Groups

A stress-testing exercise was conducted on the three local banks based on a scenario where the USD falls sharply following a loss of confidence in USD-denominated assets. Within the stress test period from December 2004 to December 2005, the USD depreciates 5% against all currencies (except for the pegged currencies) in one day, following which it trades at high volatility and declines by another 15% against all currencies over the next 3 months before stabilising at the new lower level for the rest of the period. It is assumed that a shock stemming from a loss in confidence in USD-denominated assets would result in significant adverse spillover effects into global consumer and corporate confidence. As a result, the US economy would slow significantly, which would in turn cause many countries to experience significantly lower GDP growth, higher unemployment rate and lower asset prices. Global stock markets would also decline sharply. Despite central banks lowering short-term interest rates in order to offset the impact on economic growth arising from the sharp depreciation in the USD, market participants would push long-term interest rates sharply higher (Table C1).

Table C1: Stress Test Assumptions

Variables	Stress Test Scenario
	2005
Exchange Rate (% change; negative denotes depreciation of USD)	
USD vis-a-vis SGD	-10
USD vis-a-vis all currencies except pegged currencies such as MYR, HKD and RMB	-20
Equity Prices (% change)	
US	-30
Europe, Japan & NIEs	-20
Asean excl Singapore	-10
Others	-10
Interest Rates (bps change)	
Short & medium term (up to 1 year)	-100
Long term (10 years and above)	
US	400
Others	200
Singapore GDP (% year-on-year)	-3.0
Singapore's Sectoral Breakdown (% year-on-year)	
Manufacturing	-14.0
Construction	-2.3
Financial and Business	-2.8
Commerce	-0.8
Transportation & Communications	-0.9
Singapore Property Prices (% year-on-year)	-15.0
Singapore Unemployment Rate (% of labour force)	6.0

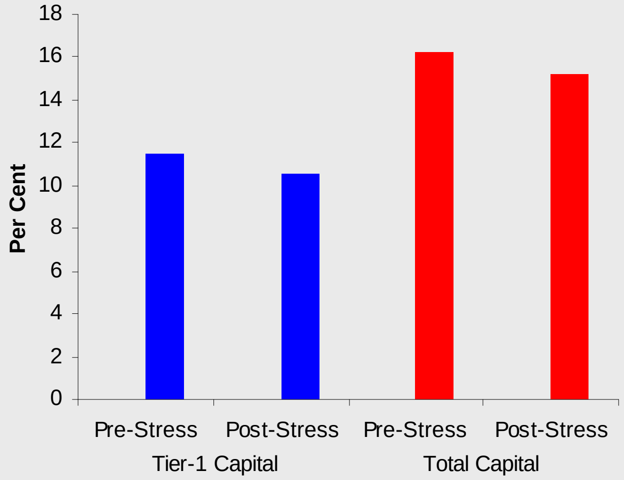
The results of the stress test show that the aggregate NPLs for the three local banks would rise by SGD8.7 bn (or an increase of 85%) over the stress test period. Provisioning would increase in tandem by SGD2.8 bn (or an increase of 67%). Compared to the stress test results in the December 2004 FSR, which was based on a scenario of high oil prices and a significant slowdown in the technology sector, the estimated increase in NPLs under the current scenario would be about 50% higher, primarily because of the more severe risk assumptions. Consequently, aggregate CAR for the banks would decline to 15.2% from the pre-stress test level of 16.2%. (Chart C1).

Box Item C (continued)

On the banks' market risk exposure, the stress test results show that the local banks would incur overall losses of about SGD404 mn due mainly to the sharp fall in Singapore equity prices. Losses on banks' equity portfolios were offset by gains on their interest rate sensitive assets, as lower short-term rates and sharply higher long-term yields appeared to have an overall positive impact on the banks. Similarly, the sharp depreciation of the USD was estimated to have produced some net gains for the banks.

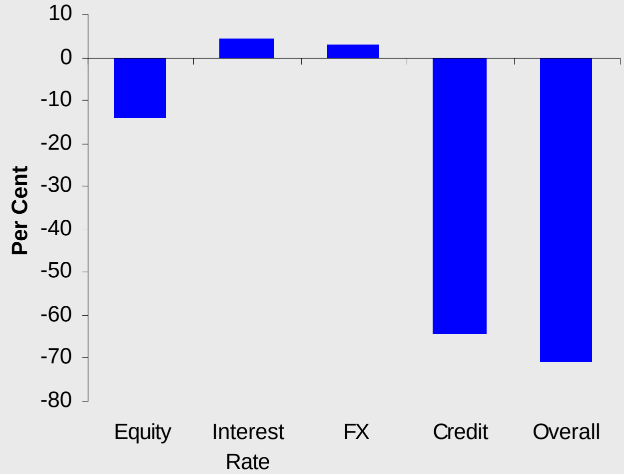
Overall, the estimated net aggregated losses from both credit and market risks of the local banks under the stress test scenario would be about 74% of their average pre-tax profit over the past five years (Chart C2).

Chart C1
Local banks' Capital Adequacy Ratio



Source: MAS

Chart C2
Net Aggregated Losses by Category of Risk as at December 2005
(% of Average Pre-Tax Profit from 1999-2004)



Source: MAS

Box Item D
A Decomposition Analysis of Local Banking Groups' Return on Equity

To analyse the key drivers of and trends in their profitability in recent years, the Return on Equity (ROE) of the three local banking groups was decomposed into four components: pre-tax profit margin, risk-adjusted income, risk-taking and leverage, with their definitions and implications for financial stability as set out in Table D1.

Table D1: Decomposition of ROE[1]

Pre-tax ROE = Pre-tax Profit x Risk-adjusted Income x Risk Taking x Leverage Ratio

Ratios	Descriptions	Impact of a rise on financial stability
Pre-tax profit margin = $\frac{\text{Pre-tax profit}}{\text{Operating income}}$	Pre-tax profit margin measures the margin between income and costs	Positive – Indicates higher profitability margin
Risk-adjusted income = $\frac{\text{Operating income}}{\text{Risk-weighted Assets}}$	Risk-adjusted income measures efficiency, which is the ability to generate income on the risk-weighted assets	Positive – Indicates higher return efficiency on a risk-adjusted basis
Risk-Taking = $\frac{\text{Risk-weighted Assets}}{\text{Total Assets}}$	This ratio measures the degree of risk-taking	Negative – However, this could be managed by adequate risk-management systems that commensurate with risk and complexity of business
Leverage Ratio = $\frac{\text{Total Assets}}{\text{Equity}}$	Leverage ratio measures the impact of gearing	Negative – Generally, one should be mindful of large increases in leverage

The decomposition analysis shows that the general improvement in the local banks' ROEs[1] since 2003 was largely due to improving pre-tax profit margins (Chart D1). This is positive from a financial stability perspective, as the higher profitability margin provides local banks with a larger buffer to withstand unforeseen shocks. While risk-adjusted income and risk-taking remained relatively unchanged over the period, the leverage ratio increased marginally. Thus overall, the improvement in the local banks' ROE is positive for financial stability.

The drivers of the local banks' pre-tax profit margins were identified by further decomposing pre-tax profit margin into their cost-to-income ratios, provisions and other non-operating items (Table D2). The increase in pre-tax profit margins from 2003 to Q2 2004 was mainly attributable to the improvement in cost efficiency and write-back of provisioning charges as a result of improving economic conditions and strengthening asset quality.

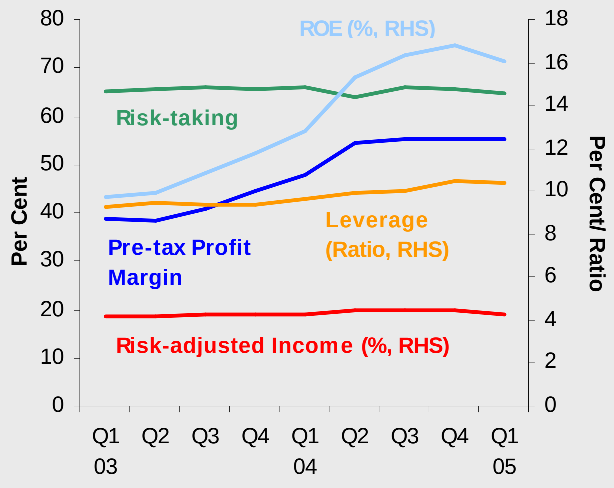
Table D2: Decomposition of Pre-tax Profit Margin

$$\text{Pre-tax Profit margin} = 1 - \frac{\text{Operating Expense}}{\text{Operating Income}} - \frac{\text{Provisions}}{\text{Operating Income}} + \frac{\text{Other Income}}{\text{Operating Income}}$$

Ratios	Descriptions	Impact of a rise on financial stability
$\frac{\text{Operating Expense}}{\text{Operating Income}}$	Cost-to-income ratio measures cost efficiency	Negative – Indicates less cost efficiency in generating income
$\frac{\text{Provisions}}{\text{Operating Income}}$	Provisions measures the impact of bad debts	Negative – Generally arises from an increase in bad debts
$\frac{\text{Other Income}}{\text{Operating Income}}$	Other non-operating income, including one-off items	Positive or negative, depending on nature of item,

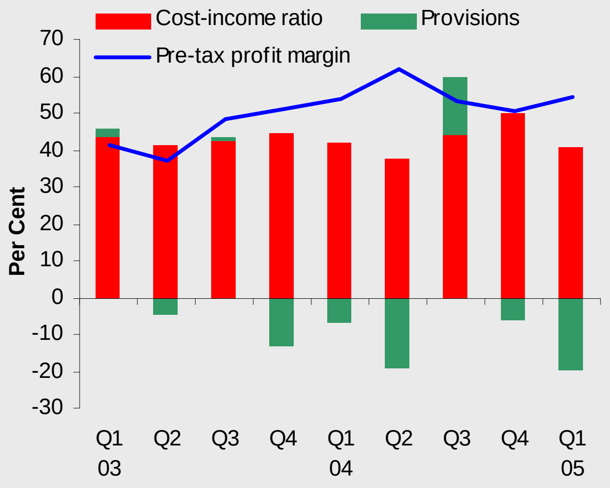
Box Item D (continued)

Chart D1
Decomposition of Local Banks' Profitability



Source: Banks' published accounts and MAS' calculations

Chart D2
Contributions to Local Banks' Pre-tax Profit Margins



Source: Banks' published accounts and MAS' calculations

1/ ROEs refer to annualised pre-tax ROEs, including goodwill amortisation.

3.2 Insurance Sector

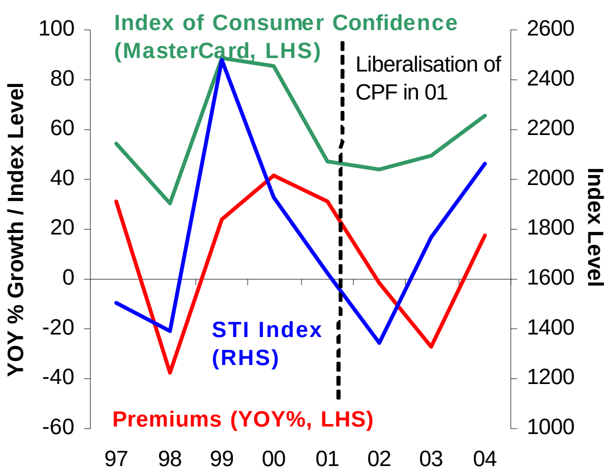
Since the December 2004 FSR, credit ratings for global reinsurance have been maintained on the back of better than expected results for the 2005 renewal season. In the Singapore insurance sector, overall financial performance remained strong, in line with market expectations and the strength of the Singapore economy in 2004. While there does not appear to be signs of increases in investment risks from the search for yield, risks could arise from underwriting activities due to softening premium rates going forward.

Singapore Life Insurance

Single premium business declined in Q1 2005 although annual premium business continued to register positive growth

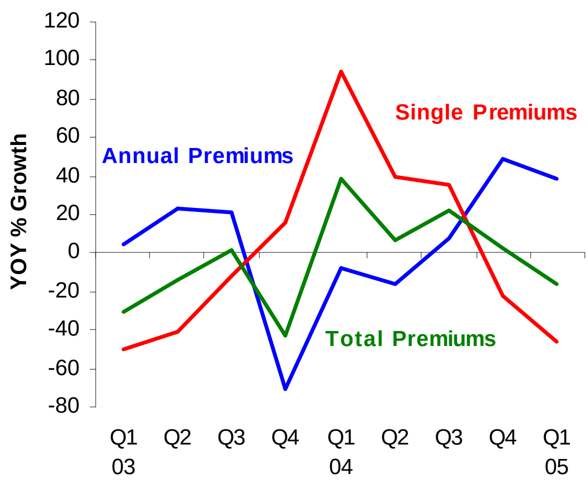
Since the December 2004 FSR, the 2004 full year un-audited results have been released. As anticipated, total new business of the Singapore life insurance industry exceeded that of 2003, with weighted new business premiums[22] growing by 20.4%. This was attributable to a 31.7% growth in single premiums and 10.0% growth in regular premiums, supported by the strength of the Singapore economy, improved consumer confidence as well as stronger equity market performance (Chart 3.13).

Chart 3.13
Annual Premium Growth & Economic Conditions



Source: MAS, Mastercard and Bloomberg

Chart 3.14
Quarterly Premium Growth



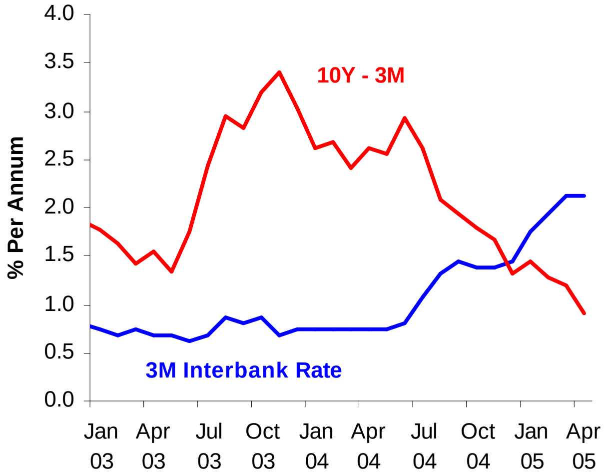
Source: MAS

However, the life insurance industry suffered a 11.5% decline in new business in Q1 2005 on a weighted premium basis. Data for Q1 2005 showed a 46.1% decline in single premium income (Chart 3.14). This could be due to the rise in short-term interest rates and the flattening of the yield curve, which made the yield on the single premium insurance products,

[22] Weighted premiums = 10% of Single Premiums + Regular Premiums

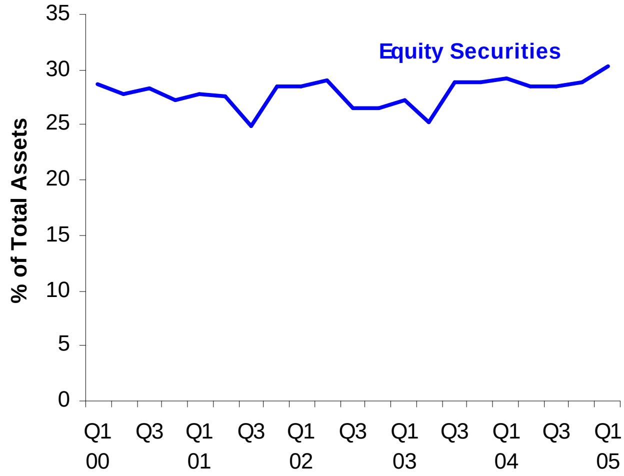
typically priced based on the yield of medium and long term interest rates, less competitive to short-term deposits and other shorter term financial products (Chart 3.15). While single premium insurance products might not have been as competitive in the current investment climate, regular premium insurance products were still appealing and registered a strong growth of 43.7% in Q1 2005 over Q1 2004.

Chart 3.15
Singapore SGS Yields & SGD 3-Month Interbank Rate



Source: MAS

Chart 3.16
Holdings of Equities



Source: MAS

No signs of significant increase in investment risks in asset holdings of life insurers

The prolonged low yield environment of the last few years has led to concerns of investment risks should insurers' search for higher yields in order to continue to offer attractive products. The holdings of equity securities as a percentage of total assets, however, have remained stable over the last few years with an average of 28% since 2000. Recent equity holdings in Q1 2005 have trended up slightly to 30% due mainly to equity securities being marked to market as a result of the new Risk Based Capital framework (Chart 3.16).

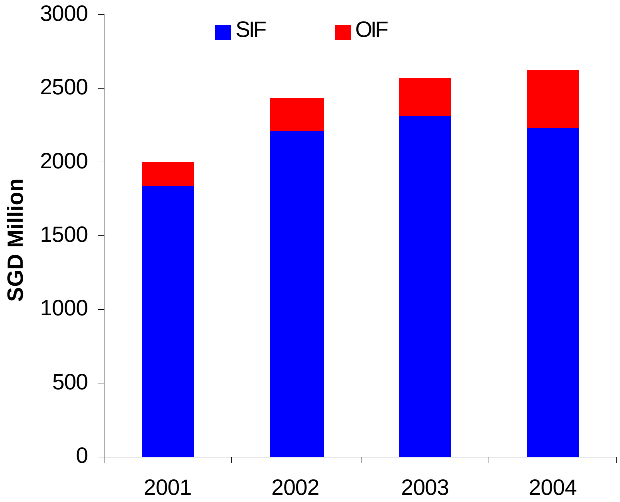
A survey conducted on all direct life insurers as at March 2005 also showed that insurers did not hold substantial amounts of credit derivative exposures. In addition, the survey results showed that some insurers' investment policy prohibited investment in credit derivatives.

Singapore General Insurance

Overall incurred loss ratios for Singapore Insurance Fund fell while operating profitability improved

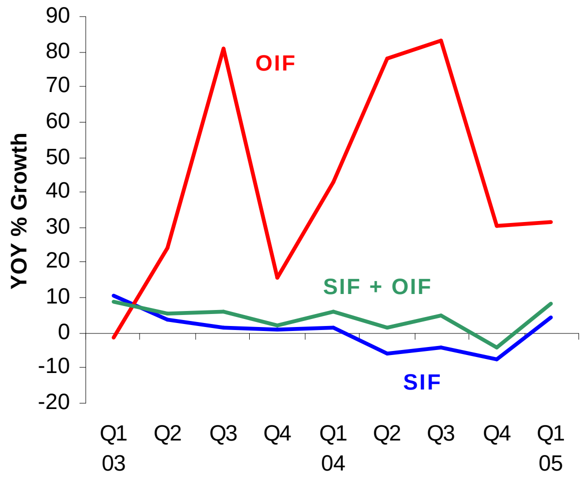
Total gross premiums written by general direct insurers maintained its growth over the last 4 years, increasing from SGD2.56 bn in 2003 to SGD2.62 bn in 2004 (Chart 3.17). Quarterly data showed a premium growth of 8.5% in Q1 2005 (Chart 3.18).

Chart 3.17
Annual Gross Premium Level



Source: MAS

Chart 3.18
Quarterly Premium Growth



Source: MAS

Total operating profitability for the sector continued to improve. Since 2003, operating profits increased by 34% from SGD301 mn in 2003 to SGD404 mn in 2004. Operating profits in Q1 2005 increased to SGD127.5 mn from a decline in the last three quarters, mainly due to an increase in underwriting income (Chart 3.19). This is a positive development for the industry as stable underwriting profits reduces reliance on investment income and the impact of market volatility on profits. The improving profitability in the sector is also reflected in the annual combined ratio[23] of 85% in 2004 (annual average) and the recent quarterly combined ratio of 78% in Q1 2005. The overall incurred loss ratios[24] for the Singapore Insurance Fund (SIF) fell from 76% in Q3 2002 to 50% in Q1 2005. (Chart 3.20) This can be attributed to the improved underwriting results of historical loss-making lines of businesses such as Motor and Workmen's Compensation that forms the main part of general insurers' portfolio.

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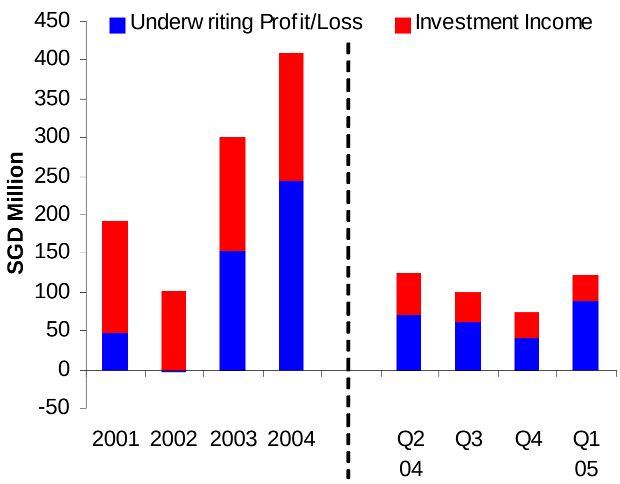
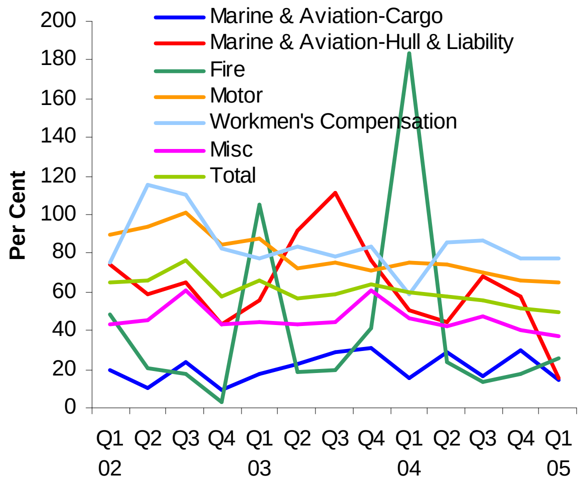
[23] Combined ratio is calculated by dividing the sum of incurred claims and incurred underwriting expenses by earned premiums.
[24] Incurred loss ratio is derived by dividing the sum of incurred claims by earned premiums, indicates an insurer's claims experience relative to its premiums received and is an indication of the quality of business written.

Chart 3.19
Underwriting & Investment Income



Source: MAS

Chart 3.20
Loss Ratios by Lines of Business



Source: MAS

Softening premium rates continue to pose underwriting risks

Going forward, softening premium rates continue to pose underwriting risks to the general insurance industry. The premium rates of general insurance industry are influenced by the reinsurance rates available to them since general insurers transfer around two-fifths of their risks to reinsurance companies. Companies may also offer lower premium rates to compete for market share in an environment of slower economic growth. If premiums are not priced properly, insurers may suffer losses, hence increasing the risk of the industry.

Global Reinsurance

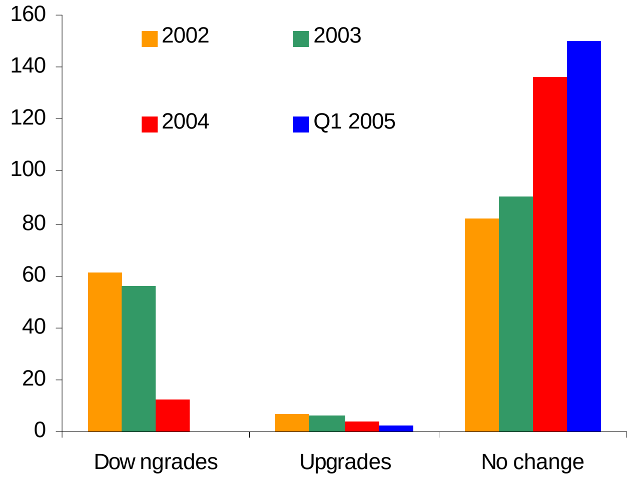
Rating actions maintained on the back of a modest decline in premium rates for the 2005 renewal season; Outlook for the sector stable

In the December 2004 FSR, it was assessed that while global reinsurance premium rates had passed their peak, the absence of high investment returns and the record amount of claims experienced in 2004 would keep insurers focused on underwriting activity and put a floor on premium rates. Since then, the 2005 renewal season's premium rates have held up well with estimates of January 2005 premium rate change in the range of -5% to -15% for US casualty and property and European property lines. The modest decline in overall premium rates despite the downward pricing cycle was attributable to 2004 being a record year of catastrophic events with insurers suffering losses of USD49 bn following a series of hurricanes, typhoons and the Boxing Day tsunami. These events and the ensuing modest decline in premium rates resulted in credit rating agencies maintaining their financial strength ratings on the sector. In all likelihood, the credit ratings for the majority of players in the industry would not change during the course of the year. Notwithstanding this stable outlook, there remains a possibility of some credit rating downgrades, while upgrades are likely to be exceptional (Chart 3.21).

Equity prices rose on account of better-than-expected profits in 2004

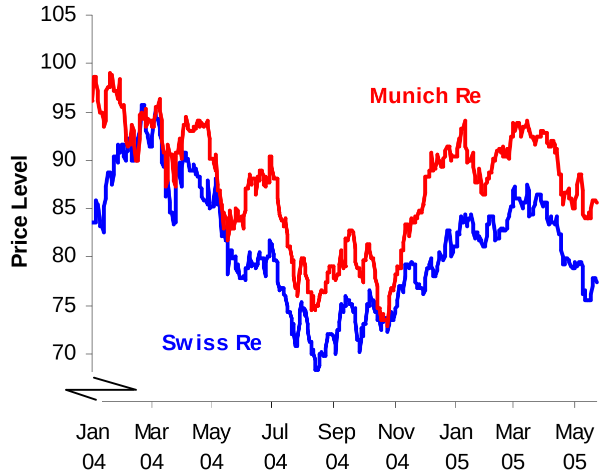
Equity prices of the two largest global reinsurers (Chart 3.22), Swiss Re and Munich Re, rose on account of better than expected profits in 2004, positive results for the January renewal season and a continued focus on underwriting activities with reinsurers renewing profitable business lines and cancelling polices where rates have been declining. However, equity prices have fallen again since March 2005 on concerns of slowing growth.

Chart 3.21
Ratings Changes (S&P)



Source: Standard & Poor's

Chart 3.22
Swiss Re & Munich Re Equity Prices



Source: Bloomberg

Continued cyclical pressure on rates though duration and depth of soft market likely to be less severe than previously

While the cyclical pressure on rates is likely to continue, the duration and depth of the next soft market is unlikely to be as severe as the last one experienced in the 1990s as the current low investment return environment is likely to force reinsurers to maintain focus on underwriting discipline.

IV FINANCIAL INFRASTRUCTURE

A robust financial infrastructure is critical in ensuring the sound functioning of the financial system, which could be achieved through effective risk-focused regulation and supervision of financial institutions' (FIs) payment, clearing and settlement systems. Besides seeking out the industry's views on the latest technological developments, regulators need to assess the risks arising from these developments, and put in place regulatory arrangements to mitigate these risks.

A major development in the electronic financial services landscape has been the rapid growth of electronic financial services and products driven by technology innovations. The global internet and the interconnectivity of financial systems offer opportunities for FIs to tap into new markets and expand their range of financial products and services. Some of these products and services include internet banking, phone banking, cross border automated teller machine (ATM) and electronic funds transfer point-of-sale (EFTPOS) services, online payments and credit card transactions. However, the significant growth of these services and products carries with it attendant risks including electronic security as well as IT outsourcing risks.

Electronic Security Risks

In recent years, the velocity of cyber security threats has risen sharply, particularly in the case of internet-based services and products. The growing number and variety of cyber attacks from the internet pose increasingly complex risk management challenges to FIs. Firstly, the critical banking infrastructures on which FIs' operations depend on could be attacked from remote locations. The proper functioning of computer networks, which are linked to one another and to other devices which act as access points for customers is crucial for the operation of FIs. Secondly, the scope of cyber attacks on FIs has broadened considerably, For example, prolonged interruption in system access through denial-of-service attacks or impairment of the operation of FIs' systems would be enough to undermine public confidence. Major electronic security risks in the financial industry include:

- Inadequate risk management oversight, assessment and monitoring of cyber threats, system vulnerabilities and incidents.
- Security flaws and vulnerabilities in systems and operations.
- Inadequate security safeguards against cyber attacks from terrorists, criminals and hackers.
- Loss of system integrity and data confidentiality due to inadequate identification, authentication and access control systems.
- Disruption and unavailability of mission-critical systems due to system failures or network outages.

- Inadequate recovery capability and responsiveness.

MAS regularly seeks the financial industry's views on new developments in the area of electronic banking, particularly the development of multi-channel strategies (including the convergence of internet, ATM, EFTPOS, phone and mobile banking) and the coexistence, within the same institution, of legacy systems and new technologies. In 2004, surveys were conducted with the major players in the banking and securities industries to get insights into the emerging trends in electronic banking, online fraud control systems, risk management practices, card fraud detection systems and online trading facilities provided to customers. The feedback helps MAS in developing supervisory programmes, guidelines and security advisories relating to electronic safety and soundness. Table 4.1 below lists some of the guidelines and security advisories that have been published by MAS:

Table 4.1
Guidelines and Security Advisories Published by MAS

	Guidelines	**Date of issue**
1	Internet Banking Technology Risk Management Guidelines	Jun 03 (First version Mar 01)
2	Security Guidelines for Mobile Banking and Payments (consultative paper)	Feb 02
3	Technology Risk Management Guidelines for Financial Institutions (consultative paper)	Nov 02
4	Guidelines on Business Continuity Planning	Jun 03
5	Guidelines on Outsourcing	Oct 04
	Security Advisories	
1	Internet Banking Network Security	Jul 01
2	Internet Banking Security Responsibility	Nov 01
3	Internet Banking PIN Verification	Apr 02
4	Wireless Local Area Network	Dec 02
5	Internet Kiosk	Sep 03
6	Phishing	Nov 03
7	Spyware	Apr 04

Some of the security principles promoted in the guidelines and security advisories include:

- Establishment of sound and robust technology risk management processes;
- Strengthening system security, availability and recovery capabilities;
- Implementation of strong cryptography to protect customer data and the adoption of two factor authentication.

In Singapore, FIs are establishing more comprehensive and robust policies and controls to address electronic security risks. Most FIs are following a layered security approach by investing in security technologies and tools such as firewalls, vulnerability scanning, penetration testing, intrusion detection devices, incident response processes, encryption, content filtering, anti-virus/ anti-spyware software and other security measures to protect their critical systems and infrastructures. Banks, in particular, have undertaken initiatives, such as publication of consumer alerts on their websites, to improve customer awareness and education on how to protect their passwords as well as take appropriate security precautions when utilising online banking services.

IT Outsourcing Risks

The emergence of new technologies, products and services has exerted increased competitive pressure on FIs to look at third-party service providers for system development expertise and cost-effective data centre operations, customer service call centres, back office processing and network administration. The increasing scale and proliferation of outsourcing raises issues relating to risk management and supervisory oversight. Some IT outsourcing risks include:

- Exposure of the FIs' systems, operations and processes to security weaknesses in the service provider's infrastructure. This could be compounded by difficulty in monitoring service providers who are located overseas or outsourcing arrangements that involve several layers of vendors and subcontractors.
- Concentration risk due to the industry's dependence on a small number of service providers (for example vendor's facilities that are commingled and shared by different FIs and other clients of the service provider).
- Lack of audit and supervisory power to inspect the systems, operations and functions of the service provider.

To address these outsourcing risks, MAS has issued or incorporated specific guidelines and supervisory requirements to ensure that outsourcing arrangements entered into by FIs are subject to appropriate due diligence, risk management controls and ongoing vendor monitoring and reporting.

The use of outsourcing vendors and service providers does not diminish the responsibility of the FI's board of directors and management to ensure that these activities are conducted in a safe and sound manner and compliance with applicable laws and regulations is met. MAS requires FIs to have comprehensive outsourcing risk management processes to govern their outsourcing relationships. The confidentiality of customer information in the custody or possession of service providers must be articulated clearly in the outsourcing arrangements. Outsourced operations, services and functions should also be subject to the same risk management, security, privacy and other internal control requirements that would normally be expected of a FI whether the activities were outsourced or not.

Statistical Appendices

SINGAPORE NON-FINANCIAL SECTOR

SINGAPORE FINANCIAL INSTITUTIONS

SINGAPORE NON-FINANCIAL SECTOR

Table A.1: Corporate Sector: Return on Assets (Median)

	FY2001	FY2002	FY2003	FY2004	Q2 2004	Q4 2004
Per Cent						
Commerce	2.5	3.1	4.2	6.4	4.3	6.5
Construction	-4.2	0.9	0.0	0.3	-1.0	-1.5
Hotels & Restaurants	1.6	1.3	1.9	4.7	3.0	5.0
Manufacturing	3.2	3.6	5.4	6.5	4.6	6.6
Multi-Industry	1.2	1.6	2.8	3.4	2.4	3.5
Property	1.4	2.2	2.5	3.4	2.4	3.4
Transport, Storage & Communications	5.8	5.1	6.0	10.0	7.2	10.5

Source: Thomson Financial

Table A.2: Corporate Sector: Current Ratio (Median)

	FY2001	FY2002	FY2003	FY2004	Q2 2004	Q4 2004
Ratio						
Commerce	1.5	1.5	1.7	1.8	1.7	1.8
Construction	1.3	1.1	1.2	1.3	1.2	1.3
Hotels & Restaurants	1.2	1.6	1.7	2.0	1.5	2.0
Manufacturing	1.5	1.6	1.6	1.6	1.6	1.6
Multi-Industry	1.3	1.2	1.5	1.2	1.3	1.2
Property	1.5	1.6	1.6	1.6	1.7	1.6
Transport, Storage & Communications	1.4	1.1	1.1	1.2	1.1	1.2

Source: Thomson Financial

Table A.3: Corporate Sector: Total Debt/Equity (Median)

	FY2001	FY2002	FY2003	FY2004	Q2 2004	Q4 2004
Per Cent						
Commerce	40.8	52.7	40.2	41.0	46.8	41.0
Construction	69.3	49.7	43.7	28.2	45.8	28.2
Hotels & Restaurants	14.2	21.3	25.5	27.4	25.5	27.4
Manufacturing	29.8	28.4	28.1	24.1	27.4	25.2
Multi-Industry	75.8	63.7	48.4	56.4	54.6	60.8
Property	86.4	61.9	56.5	71.8	58.3	80.4
Transport, Storage & Communications	38.6	37.7	38.8	50.3	53.5	50.1

Source: Thomson Financial

Table A.4: Corporate Sector: Interest Cover Ratio (Median)

	FY2001	FY2002	FY2003	FY2004	Q2 2004	Q4 2004
Ratio						
Commerce	3.6	6.0	7.8	10.1	9.2	9.7
Construction	1.5	3.4	0.6	2.7	2.4	2.0
Hotels and Restaurants	5.0	5.8	9.6	8.8	8.7	8.1
Manufacturing	9.2	11.8	15.0	18.9	16.7	17.8
Multi-Industry	3.0	4.9	5.0	9.1	10.6	6.0
Property	2.3	3.4	5.9	3.9	5.9	5.1
Transport, Storage & Communications	9.1	14.4	13.9	17.2	17.7	17.4

Source: Thomson Financial

Table A.5: Household Sector

	2001	2002	2003	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004
Per Cent (unless otherwise stated)											
Household Assets (SGD Bn)	47.2	47.5	762.1	n.a.	n.a.	n.a.	762.1	782.3	794.8	807.5	819.7
Household Residential Property Assets as % of Total Assets	51.3	50.1	47.7	n.a.	n.a.	n.a.	47.7	47.0	47.0	46.4	46.2
Household Liabilities (SGD Bn)	143.1	146.3	152.8	n.a.	n.a.	n.a.	152.8	152.1	153.0	153.2	153.8
Household Liabilities to Assets Ratio	21.2	21.0	20.0	n.a.	n.a.	n.a.	20.0	19.5	19.3	19.0	18.8
Household Liabilities as % of GDP	93.3	93.9	96.0	n.a.	n.a.	n.a.	96.0	91.8	89.3	87.6	85.1
URA Residential Property Price Index	117.2	115.1	112.8	114.1	113.4	112.9	112.8	112.4	112.5	113.0	113.8

Source: MAS estimates, Ministry of National Development, Urban Redevelopment Authority and Singapore Department of Statistics

SINGAPORE FINANCIAL INSTITUTIONS

Table B.1: Banking Sector Financial Soundness Indicators

	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
Loan Concentrations (% of Total Commercial Bank Loans)									
Bank Loans	66.1	65.6	64.8	65.8	67.1	66.2	65.6	66.0	65.3
Non-Bank Loans	33.9	34.4	35.2	34.2	32.9	33.8	34.4	34.0	34.7
Loans through the Asian Dollar Market (% of Total Commercial Bank Loans)									
Total ADM Loans	73.8	73.6	72.3	72.8	71.9	72.3	72.7	72.6	71.4
Of which to (% of Total Asian Dollar Market Loans):									
United Kingdom	15.6	15.7	15.9	16.8	17.6	17.3	18.7	20.2	20.4
Japan	26.5	26.3	26.2	23.5	22.7	22.6	21.2	19.3	17.4
Hong Kong	6.6	6.4	7.1	6.6	6.7	7.5	8.2	9.0	8.5
USA	6.2	5.0	5.3	6.6	6.3	4.8	5.6	6.3	5.5
Switzerland	3.4	3.7	4.1	4.5	5.3	5.7	4.8	5.6	6.2
Banks	80.5	80.2	79.6	80.8	81.2	80.4	80.1	80.0	79.0
Non-Bank	19.5	19.8	20.4	19.2	18.8	19.6	19.9	20.0	21.0
Loans through Domestic Banking Units (% of Total Commercial Bank Loans)									
Total DBU Loans	26.2	26.4	27.7	27.2	28.1	27.7	27.3	27.4	28.6
Of which to (% of Total DBU Loans):									
Manufacturing	4.7	4.8	4.7	4.6	4.1	4.1	4.2	3.9	3.9
Building & Construction	11.0	11.0	10.6	10.4	9.5	9.5	9.5	9.3	8.8
Housing	20.9	21.5	21.8	22.7	21.6	22.5	23.9	23.4	23.4
Professionals & Private Individuals	13.8	14.1	14.0	14.2	12.9	13.1	13.3	13.0	12.6
Non-Bank Financial Institutions	10.0	10.0	9.6	9.4	8.8	8.5	8.7	8.9	8.4
Banks	25.6	24.9	26.2	25.5	30.8	29.3	26.9	28.8	30.9
Profitability (Per Cent)									
DBU Net Interest Income to Total DBU Loans	2.88	2.76	2.60	2.48	2.30	2.32	2.38	2.42	2.33
Liquidity (Per Cent)									
Liquid DBU Assets to Total DBU Assets	12.6	12.0	12.5	12.5	12.4	11.6	12.0	11.4	11.2
Liquid DBU Assets to Total DBU Liabilities	13.8	13.2	13.8	13.8	13.7	12.8	13.2	12.5	12.4
DBU Non-bank Loans to DBU Non-Bank Deposits	87.4	88.9	90.4	88.3	85.9	85.7	88.2	86.9	84.3
All DBU Loans to All DBU Deposits	95.1	96.4	98.7	98.1	101.8	100.6	98.3	100.8	98.8

Source: MAS
* Data relates to all commercial banks, Singapore operations only.

Table B.2: Local Banks' Selected Financial Soundness Indicators

	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
Capital Adequacy (Per Cent)									
Regulatory Capital to Risk-Weighted Assets	16.7	15.4	15.9	16.0	16.7	15.5	16.3	16.1	15.9
Regulatory Tier I Capital to Risk-Weighted Assets	11.4	11.3	11.7	12.0	11.9	12.3	11.8	11.4	11.5
Shareholders' Funds to Total Assets	10.8	10.5	10.6	10.7	10.3	10.1	10.0	9.7	10.1
Asset Quality (Per Cent)									
NPLs to Non-Bank Loans	7.5	7.2	7.0	6.7	6.2	5.5	5.4	5.0	4.7
NPLs to Regulatory Capital	37.2	38.9	37.1	34.8	29.9	28.1	26.7	23.9	22.1
NPLs Net of Specific Provisions to Regulatory Capital	23.8	24.7	23.3	22.2	18.8	17.5	16.0	14.1	12.8
Total Provisions to NPLs	61.8	62.9	64.4	64.9	67.8	71.5	72.8	76.6	77.7
Specific Provisions to NPLs	36.1	36.3	37.0	36.2	37.1	37.6	40.0	41.3	41.9
Loan Concentrations (% of Total Loans)									
Bank Loans	29.3	28.0	25.4	24.0	23.9	22.0	23.2	24.3	25.7
Non-Bank loans	70.7	72.0	74.6	76.0	76.1	78.0	76.8	75.7	74.3
Of which to (% of Total Loans):									
Manufacturing	6.1	6.3	6.6	6.5	6.7	6.7	7.3	7.3	7.2
Building & Construction	9.8	9.4	9.7	9.4	9.3	9.4	8.6	8.4	8.9
Housing	19.5	20.0	21.1	22.2	22.5	23.1	22.6	22.5	22.3
Professionals & Private Individuals	9.8	10.0	10.5	10.4	10.5	10.3	10.1	10.1	9.8
Non-Bank Financial Institutions	9.7	9.9	10.0	10.2	9.6	10.6	10.2	9.8	9.2
Regional Exposure (Net exposure, % of Total Assets)									
Hong Kong & Greater China	10.3	10.0	10.2	10.2	10.4	10.5	10.3	9.6	10.2
Malaysia	6.8	6.9	7.3	7.5	7.4	7.4	7.3	7.0	7.0
Indonesia	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8
Thailand	2.0	1.9	2.0	1.9	1.8	0.9	2.1	2.1	1.9
Korea	1.8	1.9	1.9	1.8	2.0	1.9	1.9	2.1	2.4
The Philippines	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Assets in Singapore	68.8	68.5	66.7	66.6	68.0	67.8	66.6	67.3	66.8
Profitability (Per Cent)									
ROA (Simple Average)	0.82	0.79	1.11	1.12	1.19	1.21	1.16	1.04	1.13
ROE (Simple Average)	7.5	7.1	10.1	10.1	11.2	11.5	10.5	9.6	10.6
Net Interest Margin (Simple Average)	2.01	1.92	1.93	2.01	1.95	1.95	1.92	1.91	1.87
Non-Interest Income to Total Income	37.0	38.1	41.0	37.5	41.6	47.1	41.2	38.6	39.3
Total Operating Expenses to Income	43.5	41.4	42.7	44.7	37.4	37.5	43.8	49.9	40.7

Source: Local Banks' Financial Accounts
MAS estimates for regional exposure: Mar 04 and Mar 05

Table B.3: Life Direct Insurers: Total New Business Gross Premiums

	2002	2003	2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
Year-on-Year % Change											
Policies	55.2	-55.3	10.6	-7.7	11.7	-81.0	17.2	8.8	5.5	4.2	-6.5
Annual Premiums	50.9	-27.2	10.0	4.2	19.8	-70.8	-5.2	-12.2	14.7	50.7	43.7
Single Premiums	-33.6	-22.4	31.7	-41.3	-11.7	16.0	94.0	39.4	35.8	-22.6	-46.1
Sum Insured	-12.5	-7.1	21.0	-6.0	0.4	4.4	8.3	-2.4	41.1	32.3	30.1

Source: MAS

Table B.4: Life Direct Insurers: Assets Distribution of Singapore Insurance Fund (Non-Linked Assets)

	2002	2003	2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
SGD Million (% of Total Admitted Assets)											
Debt Securities	25,025 (54.6)	29,309 (55.8)	35,439 (60.3)	27,757 (56.0)	28,672 (56.6)	29,576 (56.5)	30,814 (57.1)	32,750 (59.0)	34,618 (59.9)	35,460 (60.3)	38,512 (60.8)
Equity Shares	8,573 (18.7)	11,367 (21.7)	11,640 (19.8)	9,049 (18.3)	10,715 (21.2)	10,955 (20.9)	11,119 (20.6)	11,000 (19.8)	11,224 (19.4)	11,414 (19.4)	13,302 (21.8)
Cash & Deposits	4,267 (9.3)	4,161 (7.9)	4,625 (7.9)	4,859 (9.8)	3,326 (6.6)	4,190 (8.0)	4,641 (8.6)	4,477 (8.1)	4,564 (7.9)	4,611 (7.8)	4,114 (6.5)
Loans	4,450 (9.7)	4,024 (7.7)	3,685 (6.3)	4,136 (8.3)	4,090 (8.1)	4,018 (7.7)	3,923 (7.3)	3,874 (7.0)	3,783 (6.5)	3,686 (6.3)	3,559 (5.6)
Land & Buildings	2,354 (5.1)	2,344 (4.5)	2,188 (3.7)	2,365 (4.8)	2,369 (4.7)	2,344 (4.5)	2,350 (4.4)	2,198 (4.0)	2,211 (3.8)	2,172 (3.7)	2,057 (3.2)
Other Assets	1,137 (2.5)	1,292 (2.5)	1,241 (2.1)	1,413 (2.9)	1,480 (2.9)	1,290 (2.5)	1,125 (2.1)	1,218 (2.2)	1,393 (2.4)	1,437 (2.4)	1,302 (2.1)
Total Assets	45,806 (100.0)	52,498 (100.0)	58,818 (100.0)	49,579 (100.0)	50,653 (100.0)	52,372 (100.0)	53,972 (100.0)	55,518 (100.0)	57,795 (100.0)	58,780 (100.00)	63,347 (100.0)

Source: MAS

Table B.5: General Direct Insurers: Gross Premiums

	2002	2003	2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
SGD Million											
Total Operations	2,487.6	2,669.2	2,568.9	606.4	582.9	639.5	782.9	616.9	610.2	613.7	849.6
SIF	2,230.9	2,344.2	2,151.3	552.5	525.6	578.4	668.1	521.0	505.5	533.9	698.6
OIF	256.7	325.0	417.6	53.9	57.3	61.1	114.8	95.9	104.8	79.8	151.0

Source: MAS

Table B.6: General Direct Insurers: Composition of Net Premiums of Singapore Insurance Fund

	2002	2003	2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
					SGD Million						
Marine & Aviation											
- Cargo	84.0	94.1	105.4	20.7	22.8	23.2	27.2	25.7	29.6	26.0	27.8
- Hull & Liability	39.8	42.5	47.6	6.9	10.6	14.4	14.1	5.4	13.3	14.7	13.9
Fire	101.8	100.5	99.4	25.9	19.5	20.6	29.5	25.4	24.7	21.8	39.7
Motor	571.0	646.0	627.5	158.7	158.7	152.5	175.0	162.8	148.2	149.5	185.3
Workmen's Compensation	117.6	133.0	129.2	31.3	28.7	24.4	47.5	32.3	28.2	24.2	53.7
Miscellaneous	485.6	530.3	422.1	129.1	123.6	114.1	151.6	94.3	111.9	110.9	146.8
Total	1,399.8	1,546.4	1,431.1	372.7	363.8	349.2	444.8	346.0	355.7	347.1	467.1

Source: MAS

Table B.7: General Direct Insurers: Incurred Loss Ratio of Singapore Insurance Fund

	2002	2003	2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q3 2004	Q4 2004	Q1 2005
					Per Cent						
Marine & Aviation											
- Cargo	18.6	23.9	22.7	23.2	28.5	31.3	15.2	28.5	16.4	30.3	14.1
- Hull & Liability	45.5	95.0	53.0	91.3	111.1	76.6	50.4	44.6	67.6	57.5	15.4
Fire	21.3	30.5	28.7	18.9	19.4	41.5	183.3	23.5	13.4	17.9	25.9
Motor	91.2	80.5	70.3	72.3	75.2	70.7	74.8	74.2	70.6	65.9	65.2
Workmens' Compensation	100.7	83.0	82.5	83.0	78.2	83.2	58.4	85.1	87.0	77.8	77.5
Miscellaneous	48.7	42.9	42.4	43.6	44.4	61.2	46.1	42.5	47.9	40.3	37.2
Total	66.2	61.5	55.7	56.9	58.4	64.3	59.7	57.9	55.6	51.8	49.7

Source: MAS