HALF-YEARLY MONETARY AND FINANCIAL STABILITY REPORT

June 2006

This Report relies on statistical information available by end-May 2006.

Summary

Hong Kong's recovery has entered its third year with solid noninflationary growth still characterising economic conditions. Real GDP grew by 2.4% quarter on quarter in the first three months of 2006, and by 8.2% compared with same period a year ago. The unemployment rate at the end of April was at a 56-month low of 5.1%. The year-on-year inflation rate was 1.9%.

The outlook for the remainder of the year is also positive. The mean consensus forecasts point to a real growth rate of 5.3% for 2006 as a whole and an inflation rate of 2.3%.

This continuing real growth is the result of a favourable external environment reinforced by solid domestic consumption and investment demand. Domestic exports and re-exports are benefiting from sustained growth among Hong Kong's main trading partners, particularly the United States, the Mainland and Japan. In spite of a general tightening in monetary conditions and high energy prices, consensus forecasts, as well as those of the International Monetary Fund, imply that these economies will continue to expand during the rest of the year supporting growth of our economy. Increased household incomes due to growth in both employment and wages should sustain domestic consumption, while prospects for future demand growth should buttress strong fixed asset investment.

Inflation has been inching upwards in the past three years. But most of the increase is attributable to the rental component, which is influenced strongly by the evolution of real estate prices. While there are further increases from this source in the pipeline, these are likely to moderate if real estate prices stabilise.

The very modest increases in prices of tradable goods and in nontradables (excluding rentals) suggest there is little transmission of rental price inflation to other goods and services. In addition, strong growth in labour productivity is holding down unit labour costs despite nominal wage rises. As a result, overall inflationary pressures are expected to be contained in the medium term.

Summary

While the central projections for the economy point to continued strong growth, there are increasing uncertainties lurking in the background that may induce higher volatility in Hong Kong's monetary conditions in the future. These mainly relate to the external environment and, in particular, to the future path of monetary tightening in the United States and the recent concern about risks of the Mainland economy overheating, together with the pre-emptive policy stance adopted by the Mainland authorities. The impact of a potential unwinding of global imbalances on the US dollar exchange rate of major currencies would also influence Hong Kong, given the link between the two currencies. But as pointed out in Chapter 4, the effects of these external factors on the economy are likely to offset each other, so the total outcome is likely to be muted.

This report also contains an expanded analysis of banking sector performance as an input into the HKMA's overall assessment of monetary and financial stability in the economy. It shows that overall profitability in the banking sector improved in the past year, benefiting from increased non-interest income and a mild recovery in the net interest margin. The analysis also suggests that the quality of banks' loan portfolios has improved as a result of the rebound in property prices in recent years, and the strengthening financial health of the corporate sector.

The results of a new study into the efficiency of commercial banks in Hong Kong are summarised in Chapter 3, which indicates that efficiency declined after the Asian financial crisis until 2003. However, it has since improved, suggesting that structural adjustments by the banks in recent years have begun to bear fruit.

Overall, taking into account both the likely macroeconomic evolution over the rest of the year and the health of the banking sector, the main elements are in place to ensure continued monetary and financial stability in Hong Kong. Nevertheless, vigilance is required in monitoring the risks arising from largerthan-expected market volatilities.

Half-Yearly Monetary and Financial Stability Report June 2006

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Abbreviations

1. Global and regional setting

External environment

Chart 1.1

The global upswing has been strengthening with a strong start in 2006, despite the renewed increase in oil prices and further monetary tightening in the major economies. The favourable global economic conditions have supported the growth momentum in most East Asian economies. Recent signs of more steady and solid growth in consumer spending throughout the region suggest a broadening in the sources of growth.



Table 1.AUS: monthly indicators of activity

	Dec	Jan	Feb	Mar	Apr
Manufacturing PMI	55.6	54.8	56.7	55.2	57.3
Non-manufacturing PMI	61.0	56.8	60.1	60.5	63.0
Industrial production (% 3m-on-3m)	1.3	1.8	2.0	1.3	1.3
Durable goods orders (% 3m-on-3m)	7.0	4.0	0.8	-1.3	1.2
Non-defense capital goods orders,					
ex. aircraft (% 3m-on-3m)	2.4	2.4	3.6	4.0	2.9
Retail sales (% 3m-on-3m)	0.5	2.2	2.7	3.2	1.9
Real personal consumption					
expenditure (% 3m-on-3m)	0.2	1.3	1.6	1.3	0.8
Real disposable income (% 3m-on-3m)	1.3	1.7	0.9	0.5	0.3
Change in nonfarm payroll					
(thousand persons)	145	154	200	175	126
Unemployment rate (%)	4.9	4.7	4.8	4.7	4.7
Consumer confidence (index)					
Conference Board	103.8	106.8	102.7	107.2	109.6
Job prospects ¹	0.8	6.7	7.2	7.9	9.5
University of Michigan	91.5	91.2	86.7	88.9	87.4
Number of the state of the stat					

Note 1: Jobs plentiful less jobs hard to get

Source: Bloomberg.

1.1 United States

Following a temporary slowdown in 2005 Q4, growth in the US increased to 5.3% in 2006 Q1. The expansion was led by a strong rebound in personal consumption and business investment growth. Government spending growth reversed to positive, and export growth picked up further. However, owing to strong growth in imports, net exports continued to make a negative contribution to GDP growth (Chart 1.1).¹ Partly reflecting a cooling in the housing market, residential construction growth continued to slow. Looking ahead, survey indicators suggest that the economy will continue to expand at a solid pace (Table 1.A), although growth is expected to moderate in the light of sustained high energy and commodity prices, and as successive interest rate hikes begin to take effect.

¹ For the US, euro area, UK, Japan and Non-Japan Asia (ex-Mainland China), all quarterly percentage changes are on a seasonally adjusted annualised basis, except otherwise stated.



Chart 1.3 US: Mainland and Hong Kong's share of US goods imports



Chart 1.4 US: average oil prices and the core CPI



Personal consumption increased by 5.2% in 2006 Q1, compared with 0.9% in 2005 Q4. Consumer spending was supported by improved labour market conditions and rising household income. The unemployment rate stayed at its four-year-low of 4.7% throughout much of the first four months of the year, and growth in average hourly earnings remained strong (Chart 1.2). Nevertheless, retail sales grew less than expected in April, and the University of Michigan consumer sentiment also weakened as a result of the recent surge in petrol prices. There are further concerns that high interest rates and a cooling housing market could weigh on future consumer spending. Meanwhile, business fixed investment grew by 13.1% in Q1. As industrial activities picked up, the capacity utilisation rate rose to a recent high of 81.9% in April. Leading indicators suggest broad-based expansion ahead, with the ISM Purchasing Managers' Indexes for both the manufacturing and the service sector recording better-than-expected gains in April.

The US trade imbalances continued to widen before narrowing unexpectedly in Q1. Total exports grew at a solid pace, benefiting from strong growth in Europe and Asia, as well as a weakening dollar. Together with a slight decline in spending on petroleum imports, the trade deficit as a proportion of GDP narrowed to 6.0% in Q1, from a record-high of 6.2% in 2005 Q4. The share of Mainland China and Hong Kong in total merchandise imports stayed unchanged at around 15% on a 12-month rolling basis in recent months (Chart 1.3).

Inflation remains benign. So far, there has been limited pass-through of the run-up in energy and commodity prices. While headline CPI and PCE inflation stayed high at around 3.7% and 3.0% year on year respectively in the past two quarters, their core levels remained stable at around 2.0% (Chart 1.4). As productivity growth rebounded in Q1, growth in unit labour costs declined from the quarter before. Nevertheless, rising energy and commodity prices, the high level of capacity utilisation and the tight labour market could add to inflationary pressures. It should be noted that notwithstanding the currently benign picture of the US economy, risks remain. The risks and uncertainties facing the growth and inflation outlook are discussed in Chapter 4. In particular, the potential impact of a reversal of emerging market euphoria is discussed in Box 1.

Box 1 The risk of a reversal of emerging market euphoria and its potential impact on Hong Kong

Chart B1.1



Source: JP Morgan





Global monetary tightening and US dollar depreciation have raised concerns over their impact on financial asset prices and cross-border capital flows, particularly given the unusually narrow credit spreads in emerging market economies. The recent rise in private capital flows to emerging markets is mainly reflected in increased portfolio investment and banking sector flows, which could be reversed swiftly should liquidity conditions tighten and risk premia heighten. Given the increased globalisation of capital market activities, any adverse movements in financial asset prices in the emerging markets could affect the monetary and financial conditions in Hong Kong.

Unusually low emerging market credit spreads

Since the start of the current tightening cycle in the US, the decline in term spreads has reduced the profitability of the interest rate carry (borrow short-term funds and invest in long-term assets).² This has resulted in substantial capital flows to higher-yielding securities in the emerging markets, which has driven down the sovereign yield spreads to record-low levels (Chart B1.1).

While the declining bond spreads partly reflect improved credit quality in the emerging markets, a further tightening in global liquidity conditions could trigger a sell-off of emerging market securities.³ There has been a strong co-movement between long-term interest rates in the US and the emerging markets in recent years. However, they started to diverge in mid-2005 (Chart B1.2). The narrowing of credit spreads in the emerging markets has increased the risk of a reversal of

² The term spread between 10-year and 2-year Treasuries has declined significantly from 270 basis points in mid-2003 to 10 basis points in mid-2006.

³ Studies by the IMF show that global liquidity conditions, proxied by the 3-month US dollar interest rate, would have a bigger impact on emerging market bond spreads in recent years compared with that in the 90's. See Global Financial Stability Report, April 2004 for details.





Sources: Bank of Japan and Bloomberg

fund flows, particularly if the risk premium does not adequately reflect the fiscal strength of the government. Indeed, the recent increase in US long-term interest rates has caused some unwinding of investment positions in emerging market bonds, resulting in a rise in the yield of the EMBI+ (Emerging Markets Bond Index Plus) bonds by 70 basis points to around 7% since March.

Carry trades

The increased use of carry trades to fund cross-border investment has further increased the risk of a reversal of capital flows to the emerging markets. Flat yield curves and sizable interest rate differentials among advanced economies have encouraged the search for yields through carry trade activities, whereby international investors borrow low-yielding currencies to invest in high-yielding currencies or securities. Given the ultra-low interest rates in Japan, the yen has been actively used by international investors to fund their investment positions in US dollardenominated emerging market assets including bonds, which offer a higher yield than those in Japan and the US. There is limited information on the size and flow of the yen carry trades, but some proxy measures could be used to gauge the magnitude.⁴ For example, external claims (denominated in yen) of banks in Japan rose significantly to JPY47 trillion in 2005 Q4 from JPY36 trillion in 2004 Q2, when the US Fed started to tighten monetary policy. Past developments show that the expansion of yen carry trades, as reflected in foreign yen borrowings, is positively related to US-Japan interest rate differentials, but negatively related to the term spreads in the US (Chart B1.3).

The expected decline of US-Japan interest rate differentials and a stronger yen may have resulted in some unwinding of the yen carry trades. Following the end of the quantitative easing policy in Japan in March, long-term interest rates and term spreads have increased notably.⁵ In addition, the net purchase of foreign assets

⁴ No official estimates are available for yen carry trades as most of these activities are conducted offshore and over-the-counter.

⁵ The yield of 10-year Japanese Government Bonds (JGB) rose by 30 basis points from end-February to 1.9% at end-April, and the term spread between 10-year and 2-year JGB widened by 14 basis points during the period.

-2 000

-3.000

Jan-05

ASEAN

Chart B1.4 Net purchase of foreign assets by Japanese investors JPY bn JPY br 5.000 5.000 4.000 4.000 3,000 3,000 2,000 2,000 1.000 1.000 n -1.000 -1.000

Jul-05

EU FU

Other Asia

Apr-05

Source: Ministry of Finance of Japan

Table B1.A Financial strengthen of Asian economies ¹

	Fiscal balance	Current account	Short-term external	Foreign reserves	Banking sector	Credit rating
	(% of	balance (% of	debt (% of		NPLs (% of total	
	GDP)	GDP)	Exports)	(US\$ bn)	loans)	(S&P)
Hong Kong	1.0	11.1	n.a.	127.0	1.4	AA-
Korea	0.3	2.1	23.6	223.0	1.0	A-
Singapore	0.2	28.5	n.a.	127.9	3.8	AAA
Taiwan	-4.9	4.6	n.a.	259.0	2.5	AA-
Indonesia	-0.8	1.1	23.0	42.8	8.3	B+
Malaysia	-3.1	15.2	12.4	73.4	5.7	A-
Philippines	-3.6	2.3	23.5	20.8	8.4	BB-
Thailand	0.0	-2.1	8.4	57.2	8.2	BBB+

Note 1: All data are for 2005 or the latest estimates Sources: Bloomberg, CEIC and staff estimates. (particularly US securities) by Japanese investors has turned negative recently (Chart B1.4). So far, there have been limited signs of an impact on the financial markets in the emerging markets as sovereign yield spreads have remained relatively tight. However, should there be a surge in risk premium, a sizable withdrawal of capital flows from the emerging markets could trigger a widespread unwinding of the yen carry trades, which would have a substantial effect on financial asset prices.⁶

Implications for Hong Kong

-2.000

-3.000

Jan-06

Total

Latin America

Oct-05

As Hong Kong, with its free flow of capital, is highly integrated with global financial markets, any abrupt change in international capital flows could have a bearing on domestic asset prices. There is concern that a reversal of emerging market bond spreads and an unwinding of the yen carry trades could have a considerable impact on the domestic capital markets.

While bond spreads in most emerging markets, particularly Latin America and Eastern Europe, have declined to record-low levels, Asian bond spreads have remained relatively close to their historical average. Apart from Indonesia and the Philippines, the rest of the emerging Asian economies, including Hong Kong, appear to be less affected by a rise in risk premium, given their relatively stable credit spreads and low reliance on foreign financing. And, given the sound banking system and strong fiscal position (with no public external debt), the risk of a contagion should be small in Hong Kong (Table B1.A). In fact, the correlation between Asian and Latin American bond spreads has weakened since the end of 1998, partly reflecting the differentiation by investors between the risks of the two regions.

In Hong Kong, closer financial ties with the Mainland may also mitigate the negative impact brought about by a tightening in global liquidity.⁷ First, a portion of the foreign capital has been invested in equities of Mainland

In 1998, the Russian debt crisis caused a sharp rise in emerging market yield spreads, resulting in a widespread unwinding of yen carry trades and a 20% appreciation of the yen in two months.

In 2005, Mainland enterprises raised a total of US\$23 billion through the Hong Kong Stock Exchange, compared with US\$11 billion in 2004. The share of market capitalisation of Mainland stocks in the Hang Seng Index also increased to 25% from 20%.



 S&P500 versus Hang Seng
 -0.1

 China Enterprises Index
 -0.1

 2001
 2002
 2003
 2004
 2005
 2006

0.0

Note 1: The correlation of returns is calculated using a 90-day rolling window.

Sources: Bloomberg and staff estimates.

enterprises listed on the domestic stock market. Their prices tend to be more sensitive to changes in economic prospects on the Mainland than those in global financial conditions. The correlation in returns between the Hang Seng China Enterprises Index and the S&P 500 index has generally been lower than that between the Hang Seng Index and the S&P 500 index, especially in recent months (Chart B1.5). Secondly, Hong Kong is regarded as an avenue to invest in the Mainland's financial assets, which have become increasingly attractive given their high growth potential. Thirdly, while limited direct evidence can be observed in the existing contribution of cross-border flows from the Mainland to the domestic capital markets, the recorded gross portfolio outflows from the Mainland in 2005 may signal the beginning of a trend of increasing overseas investment from the Mainland that could potentially benefit the capital markets in Hong Kong. And, with the recently announced Qualified Domestic Institutional Investors scheme, longer-term capital is expected to be invested in the domestic financial markets in the near future.

All these factors suggest that the risk of a widespread withdrawal of fund flows from Hong Kong remains relatively low, although higher long-term interest rates and weakness of the US dollar have increased the likelihood of such a reversal. Given a strong credit standing and stable currency, as well as the increasing economic and financial integration with the Mainland, Hong Kong is likely to be more resilient to shocks compared with other emerging markets, and any potential impact on financial stability should be manageable. In fact, to the extent that investors differentiate between investments in economies with different financial strengths, a reversal of capital flows to other emerging markets could even benefit Hong Kong, as domestic capital markets could become a safe haven for international capital.



Chart 1.5 Euro area: contributions to GDP growth

Table 1.B

Euro area: survey indicators of activity

(Index)	2005	Dec	Jan	Feb	Mar	Apr
Composite PMI	53.4	56.4	56.6	57.7	58.5	58.7
Manufacturing PMI	51.2	53.6	53.5	54.5	56.1	56.7
Services PMI	53.8	56.8	57.0	58.2	58.2	58.3
European Commission survey						
Economic sentiment	98.2	100.5	101.5	102.7	103.6	105.3
Industrial confidence	-7.7	-5.0	-4.0	-2.0	-1.0	1.0
Orders component	-16.8	-13.0	-12.0	-10.0	-6.0	-2.0
Consumer confidence	-13.7	-11.0	-11.0	-10.0	-11.0	-10.0
ZEW economic sentiment						
(expectation)	32.3	51.2	66.1	66.0	61.1	58.7
Germany IFO						
(business climate)	95.5	99.7	101.8	103.4	105.5	105.9

Source: Bloomberg and Reuters.

Chart 1.6 Euro area: Mainland and Hong Kong share of euro area goods imports



1.2 Euro area and the UK

In the euro area, real GDP growth picked up to 2.4% in 2006 Q1, from 1.3% in 2005 Q4 when growth stagnated in Germany and Italy, and slowed in France. The recent recovery was supported by stronger domestic demand, with private consumption being the main contributor to GDP growth. The contribution of net exports reversed to positive for the first time in a year, whereas investment spending remained weak (Chart 1.5). By region, growth in the French and Italian economies was close to the regional average while the German economy expanded at a modest pace of 1.5%.

Although domestic demand was the main driving force of growth for much of 2005, growth in private consumption and fixed investment fell sharply towards the end of the year. Nevertheless, household consumption growth rose from 0.5% in Q4 to 2.8% in Q1. The recovery reflected an improvement in consumer confidence in Q1 compared with the previous quarter, as consumers became more optimistic about the general economic prospects. Investment growth picked up slightly to 1.2% in Q1 from its sluggish performance in the previous quarter, although the construction sector contracted due largely to unfavourable weather conditions. Business survey indicators suggest growth has been gathering momentum as both manufacturing and service PMI data improved in recent months, and confidence indicators rose to a multiple-year high (Table 1.B).

Following a slowdown in 2005 Q4, the external sector exhibited a strong rebound in export growth, owing to buoyant global demand. Imports also grew rapidly, partly reflecting the influence of higher oil prices. With exports growing faster than imports, net exports contributed to 1.2 percentage points of GDP growth in Q1. The recent increases in capacity utilisation and industrial production suggest that import volumes will continue to rise on increasing domestic demand. On a 12-month rolling basis, the share of Mainland China and Hong Kong in total euro area goods imports rose steadily to 5.4% in December 2005, from 4.6% a year ago (Chart 1.6).

Chart 1.7 The UK: real GDP and private consumption



Chart 1.8 Japan: contributions to GDP growth



Source: Cabinet Office of Japan.

Inflationary pressure remained contained, reflecting sluggish wage growth and domestic demand. While higher energy prices have kept headline inflation above 2% in recent months, core inflation has remained subdued. However, the recent pickup in economic activity and rising energy prices are likely to keep headline inflation at a high level and add to the underlying inflationary pressure.

In the UK, real GDP rose by 2.3% in 2006 Q1, the same rate as in 2005 Q4 (Chart 1.7). Growth in industrial production increased, whereas services production growth moderated, reflecting a slowdown in consumer spending growth. Business investment rebounded following a decline in the previous quarter. Benefiting from robust external demand, exports should provide continued support to growth. Inflationary pressure has been limited, as the non-energy components of the CPI inflation remained subdued. Headline CPI inflation remained close to its target of around 2%.

1.3 Japan

In Japan, real GDP growth slowed to 1.9% (annualised) in Q1 from 4.3% in 2005 Q4, mainly due to weaker consumer spending growth and stronger imports (Chart 1.8). Growth picked up in 2005 to 2.7% from 2.3% in 2004, the fastest pace of expansion in five years. The current recovery is becoming more broad-based, with domestic demand growing by 1.9% in Q1 after rising by 1.8% in the previous quarter. Forward-looking indicators point to continued expansion in business activity. The March Tankan survey shows that business confidence remained strong in the manufacturing and the service sectors, and enterprises are planning to increase fixed investment and expand their work-force in the months ahead.

There were some signs of moderation in consumer spending in the first quarter following strong growth in 2005 Q4, with household spending contracting by 2.7% year on year in volume terms after rising by 1.0%. However, the decline is expected to be temporary as labour market conditions continue to improve, with

Chart 1.9 Japan: employment, labour income and household spending



Source: Ministry of Health, Labour and Welfare

Chart 1.10 Japan: contributions to consumer price inflation



Table 1.C East Asia: real GDP growth

(% qoq, annualised)	04 Q 4	05 Q 1	05 Q 2	05 Q .3	05 Q 4	06Q.1
NIE:	4.5	3.1	6.8	7.1	7.7	4.8
Korea	3.5	2.1	5.9	6.6	6.7	4.9
Singapore	9.0	-2.1	14.6	9.6	12.5	6.8
Taiwan ¹	5.3	5.9	6.9	7.6	8.4	4.4
ASEAN:	7.1	2.4	5.3	6.8	5.7	3.3
Indonesia ¹	10.7	2.3	3.7	5.8	7.8	1.2
Malaysia ¹	5.0	9.1	0.9	6.3	4.4	9.5
Philippines	2.9	4.2	7.4	4.9	5.6	3.8
Thailand	5.8	-2.2	8.6	9.7	3.1	3.0
East Asia:	5.9	2.8	6.0	6.9	6.6	4.0

Note 1: Staff estimates

Sources: CEIC and staff estimates.

employment and labour income rising gradually (Chart 1.9). Looking ahead, increased corporate earnings are expected to support business expansion, which has reduced the jobless rate significantly over the past six months.

Benefiting from a weaker yen and stronger external demand, export growth picked up in the first quarter. In volume terms, merchandise exports increased by 3.4% quarter on quarter in Q1 after rising by 2.9% in the previous quarter, mainly driven by rising autos and equipment demand from the US and Mainland China. With exports growing faster than imports, the merchandise trade surplus widened by 7.0% in volume terms in Q1. However, the recent appreciation of the yen and high oil prices may reduce net exports in the second half of 2006.

Excluding fresh food, consumer prices have been rising since November last year. Headline CPI inflation picked up to 0.4% year on year in Q1 from -0.5% in 2005 Q4, and core CPI inflation rose higher to 0.5% from 0.1%. The modest pickup in consumer prices is broad-based, with rental costs and fuel prices registering the biggest contributions to the rise in inflation (Chart 1.10). This is seen as a positive sign of a sustained recovery in domestic demand. With the risk of deflation subsiding, the Bank of Japan started to remove its quantitative easing policy in March, while maintaining the policy rate close to zero.

1.4 Other Asia (ex-Mainland China)

In the rest of East Asia, real GDP increased by an average of 4.7% in 2005 after growing by 5.7% in 2004.⁸ Growth remained solid in most economies in Q1 despite moderating somewhat. During the first quarter, growth slowed to an average of 4.8% (annualised) in Q1 from 7.7% in 2005 Q4 in Korea, Singapore and Taiwan, and to 3.3% from 5.7% in Indonesia, Malaysia, the Philippines and Thailand, reflecting subdued business spending and stronger imports (Table 1.C). Domestic demand

Aggregate real GDP growth for Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand, which is weighted by GDP of respective economy in 2005 valued at PPP exchange rates.

Chart 1.11

Percentage point % gog annualised 16 16 12 12 8 8 4 -4 -8 04Q1 04Q2 04Q3 04Q4 05Q1 05Q2 05Q3 05Q4 06Q1 Domestic demand (lhs) Net exports (lhs) -RGDP (rhs) Sources: CEIC and staff estimates

East Asia: contributions to GDP growth





Sources: CEIC, Reuters, Bloomberg and staff estimates

Chart 1.13 East Asia: headline and core CPI inflation¹



Note 1: Simple average.

Sources: CEIC and staff estimates

remained the key driver of growth, supported by strong consumer spending (Chart 1.11). The recent upswing in global IT demand has boosted exports in the region, particularly in those economies dependent on electronics exports.

Falling unemployment and rising labour income continued to boost household spending in Korea, Singapore and Taiwan. However, private consumption remained weak in Indonesia and the Philippines, partly reflecting high unemployment rates and the effect of high oil prices. Higher interest rates have weighed on business activity, particularly in those economies where monetary policy has been tightened recently. During the first quarter, growth in industrial production turned negative in the Philippines and remained subdued in Malaysia and Thailand. It also declined notably to an average of 1.8% (quarter on quarter) from 4.7% in Korea, Singapore and Taiwan. Looking ahead, industrial production and exports are expected to benefit from strong business activity in the US, the euro area and Japan (Chart 1.12).

Higher energy and commodity prices have increased inflationary pressure in some regional economies. However, the pass-through to core consumer prices has been tepid so far, with the exception in Indonesia and the Philippines (Chart 1.13). While the year-on-year headline CPI inflation stayed high at 17.9% in Indonesia and 7.3% in the Philippines in Q1, it eased in most other East Asian economies. Further tightening in monetary policy is expected in economies with rising core inflation such as Malaysia and Thailand. Bank Negara Malaysia raised its overnight rate by 25 basis points to 3.5% in April, and the Bank of Thailand tightened its policy rate by three consecutive moves from 4.0% at the beginning of this year to 4.75% in April.

Mainland China

The Mainland economy accelerated in 2006 Q1, led by strong growth in fixed asset investment and exports. While the economy grew at a rapid pace, inflation remained tepid. The large balance of payments surplus continued to put pressure on the renminbi exchange rate, prompting the authorities to take further steps to relax controls on capital outflows.







1.5 Output, growth and inflation

Real GDP grew by 10.3% in 2006 Q1 year on year, following an almost 10% growth rate in 2005 (Chart 1.14). Rapid economic expansion was driven by strong growth in fixed assets investment (FAI) and exports, while retail sales, a proxy for consumption, were well maintained (Chart 1.15).

FAI started to rebound in 2005 Q4 and grew by almost 28% in 2006 Q1. Investment growth in the agricultural and manufacturing sectors was particularly strong, increasing by 47% and 36% year on year respectively, although the agricultural sector has a mere 1% share of the total investment. Growth in the service sector was less buoyant, but investment growth in the real estate sector remained at a relatively high level of 20%. Rapid growth in investment has raised concerns about overcapacity in certain sectors.

After a slight slowdown in the final quarter of 2005, export growth recovered to 26.6% in 2006 Q1, 8.2 percentage points lower than that in the same period a year ago (Chart 1.15). The export performance was supported by strong growth in China's key trading partners. Growth in imports also picked up strongly to 24.8% in 2006 Q1, after a sharp drop to an average growth rate of 17.6% in 2005. However, it is unclear whether the current momentum of strong import growth will be maintained because of the tightening measures to slow investment and credit growth, and import substitution due to increased domestic production capacity in certain sectors. For example, sectoral data suggest that imports in metals and chemicals have been particularly sluggish.

Chart 1.16 Mainland China: contributions to CPI inflation



Chart 1.17 Mainland China: other price indicators



Chart 1.18 Mainland China: money and credit



While the economy was growing at a rapid pace, inflation remained tepid. The CPI edged up by 1.2% year on year in 2006 Q1, following a 1.8% increase in 2005 (Chart 1.16). PPI inflation continued its downward trend from its peaks in 2004. Year on year, it rose by 1.9% in April 2006, compared with 2.9% in 2006 Q1 and 4.9% in 2005 (Chart 1.17). Given the rising prices of oil and other commodities, it is puzzling that PPI inflation remains moderate. This could be attributable to the problem of surplus capacity in some heavy industry and manufacturing sectors. For example, the PPI growth in coal mining decreased from 26.2% in April 2005 to 5.4% in April 2006.

1.6 Monetary conditions and asset prices

Growth in broad money (M2) accelerated in 2005 reaching 18.8% in Q1, which is 2.8 percentage points higher than the 2006 target (Chart 1.18). This was largely led by an increase in net foreign assets in the central bank balance sheet, which was only partially offset by sterilisation policies. The People's Bank of China (PBoC) intensified its sterilisation activities again in February 2006, reflecting concerns over renewed capital inflows





Chart 1.20 Mainland China: monetary conditions



real interest rate, real exchange rate and real credit growth. A rise in the index indicates a tightening of monetary conditions. Sources: CEIC and staff estimates



Chart 1.21 Mainland China: external capital inflows

Sources: CEIC and staff estimates

and the increased trade surplus, following a moderation of sterilisation activities since mid-2005. As a result, growth in reserve money started to stabilise (Chart 1.19).

Credit growth, after a period of relative restraint in 2005, started to accelerate to 14.7% in 2006 Q1. The amount of bank loans extended from January to April amounted to 63% of the 2006 target of RMB2,500 billion. Strong demand for credit was fuelled by low interest rates, confidence in the economy, and the new policy initiative to invest more in the rural sector. On the supply side, the easy monetary environment significantly compressed yields in the interbank market, inducing banks to lend more to maintain their earnings growth.

The overall monetary conditions started to ease in the second half of 2005, indicated by our monetary condition index. The index was tightening until August 2005 and has since started to ease (Chart 1.20), reflecting the dominating effect from rising credit growth and the depreciation of the real effective exchange rate that more than offset the tightening effect from the rising real interest rate.

Driven by the large trade surplus, foreign direct investment and net portfolio inflows, foreign exchange reserves continued to increase, reaching US\$875.1 billion in March 2006, thus overtaking Japan as the largest foreign exchange reserve holder in the world. For 2006 Q1 alone, foreign exchange reserves increased by US\$56.2 billion (Chart 1.21).

Chart 1.22 Mainland China: market RMB/USD exchange rate



Chart 1.23 Renminbi non-deliverable forward rates



The rapid build-up in reserves put continuous pressure on the exchange rate to appreciate. The market exchange rate of the renminbi has followed a steady but modest appreciation trend against the US dollar since last July, when it was revaluated by about 2%. It was close to RMB8.0 per US dollar in mid-May (Chart 1.22). On the other hand, non-deliverable forward rates at the end of April indicated that markets expected the renminbi to appreciate by 1.2% and 4.0% in three and 12 months, respectively (Chart 1.23).

To alleviate the pressure of capital inflows on the exchange rate, the PBoC has taken new policy initiatives to ease capital controls on outflows by allowing domestic firms to have easier access to foreign currencies for foreign direct investment purposes and domestic pension funds to invest abroad.

The PBoC also introduced over-the-counter transactions in the interbank spot foreign exchange market with a market-maker system at the beginning of 2006 to allow for more flexibility of the exchange rate and further development of the foreign exchange rate market. Indeed, both the pace of appreciation and the volatility of the renminbi exchange rate appear to have increased.

1.7 Policy response

Accelerated growth in bank loans has made it difficult for the PBoC to maintain the monetary target for 2006. More importantly, rapid credit growth has raised concerns about increased risks associated with asset price inflation, particularly in the property market (Box 2).

However, contrary to the previous overheating in 2004, both CPI and PPI inflation remain modest. In addition, the authorities appear to have acted early in this cycle by raising the one-year benchmark lending rate by 0.27 percentage points from 5.58% to 5.85% on 28 April, while leaving the deposit rates unchanged. The interest rate increase signalled that the PBoC was more willing to use market-based instruments to cool the economy. The move is also unlikely to lead to appreciation pressure on the renminbi because of the large interest rate differentials between the US dollar and the renminbi.

Acting in tandem, the National Development and Reform Commission announced guidelines for reducing capacity and restructuring in sectors such as cement, coal & coke, and aluminium. The State Council on 17 May also issued Six Guidelines aimed at reining in the property market by containing speculative demand and clamping down on irregular practices in the real estate sector.

Box 2 The macroeconomic impact on Hong Kong of hypothetical Mainland shocks⁹

The strong performance of the Mainland's economy has meant significant benefits for Hong Kong as its economy becomes increasingly integrated with Mainland China. At the same time, improving macroeconomic management and sustained structural reforms on the Mainland have created a virtuous cycle that reduces risks to Hong Kong from potential adverse developments on the Mainland. Nevertheless, concerns have been raised over how Hong Kong would fare in the event the Mainland was hit by major economic shocks, which could cause the economy to deviate from its projected robust medium-term growth path.

Shock transmission channels

Conceivably, shocks could be transmitted from the Mainland to Hong Kong through two main channels:

- (1) Trade Hong Kong's exports and imports are likely to be affected by sharp fluctuations in Mainland macroeconomic variables. The negative impact of reduced export earnings and changes in terms of trade will then spill over to the domestic economy.
- (2) Financial monetary and financial conditions in Hong Kong may be altered by changes in investor confidence and in fund flows following Mainland shocks. The resulting change in Hong Kong dollar interest rates will have an impact on asset prices and domestic demand.

Hypothetical shock scenarios

In order to deepen the understanding of the economic links between Hong Kong and the Mainland, He *et al*. (2005) assesses quantitatively the impact on Hong Kong from a range of Mainland macroeconomic shocks. A

A feature article with the same title is published in the *HKMA Quarterly Bulletin*, Issue No. 47, June 2006. The full technical version of the study is published as He, Dong, et al., 'The Macroeconomic Impact on Hong Kong of Hypothetical Mainland Shocks', Research Memorandum 15/2005, HKMA (http://www.info.gov.hk/hkma/eng/research/RM15-2005.pdf).

Table B2.A Shock scenarios

Scenarios	Assumption
Renminbi revaluation	10% renminbi revaluation in one step
Trade war	Export growth declines by 20ppt for 1 year
nvestment retrenchment	Investment growth declines by 15ppt for 1 ye
Credit crunch	Credit growth declines by 20ppt for 1 year
Banking and currency instability	Interest rate rises by 10ppt, exchange rate depreciates by 50% and credit growth declines by 20ppt for 1 year

Source: He, Dong et al (2005).

Table B2.B			
Summary on	impacts	of shock	scenarios

Scenarios	GDP (9	%, yoy)	Inflation (%, yoy)		
Scenarios	Year 1	Year 2	Year 1	Year 2	
Renminbi revaluation	0.0	-0.2	0.0	0.0	
Trade war	-3.2	-3.0	-0.5	-1.5	
Investment retrenchment	-1.9	-1.4	-0.3	-0.8	
Credit crunch	-0.9	-0.5	-0.1	-0.2	
Banking and currency					
instability	-4.1	-0.3	-0.7	-1.2	

Source: He, Dong et al (2005).

Table B2.C Historical episodes

	Macroeconomic A	Asian C	Crisis	
	(1994-9	6)	(1997	-98)
	Mainland	HK	Mainland	HK
GDP (%, yoy)	-3.9	-2.1	-1.8	-9.7
Consumption (%, yoy)	1.0	-1.8	-3.6	-12.2
Investment (%, yoy)	-19.2	7.1	2.9	-18.4
Exports (%, yoy)	-2.3	-7.4	2.6	-9.4
Imports (%, yoy)	-25.1	-7.8	-3.2	-10.7
Inflation (%, yoy)	+9.6 (1994) -15.9 (1995-96)	-2.5	-9.1	-3.4
Unemployment Rate				
(%, per annum)	0.4	0.8	0.1	1.6
Current account (% of GE	DP) 2.9	-8.2	2.5	2.1
Fiscal balance (% of GDP) 0.0	-0.2	-0.5	-1.2

Source: He, Dong et al (2005)

global macroeconomic model developed by *Oxford Economic Forecasting* is used to run simulations under seven **hypothetical** scenarios, which include a large renminbi revaluation, a trade war, an investment retrenchment, a credit crunch, and financial instability. In quantifying the shocks, the magnitudes are deliberately set to be large–typically taken as two standard deviations of the shock variable based on historical observations over 10 years–to assess Hong Kong's resilience even under unusual circumstances (Table B2.A).

Hong Kong will be resilient in absorbing Mainland shocks

The simulation results show that the effects of most of the shocks on Hong Kong are relatively moderate, reducing economic growth by less than 1.5 percentage points cumulatively in the two years following a shock. The trade war, investment retrenchment and financial instability shocks inflict larger losses on Hong Kong, leading to a reduction of economic growth by 3-6 percentage points over the same periods (Table B2.B).

Nevertheless, even in the worst cases, the size of the output losses pales in comparison with that experienced by Hong Kong during the Asian financial crisis (Table B2.C). Even in that extreme case, the Hong Kong economy coped without major defaults by the corporate sector, the household sector, or the Government. The simulations have also not assumed any policy response by either the Mainland or the Hong Kong government to cushion the impact of the shocks. Indeed, with a strong net asset position, the Hong Kong Government has sufficient room for policy manoeuvre, and can use fiscal measures to provide support to the domestic economy when deemed necessary. Overall, this study demonstrates that Hong Kong can withstand Mainland shocks of considerable magnitude thanks to a number of in-built sources of strength in the economy. The first resilience reflects the observation that the rest of the world is as important as the Mainland in influencing the external trade performance of Hong Kong. Hong Kong's interest rates are also fundamentally anchored to the US rates under the Linked Exchange Rate system, and deviations from the anchor rates should, therefore, be temporary. Finally, flexible labour and product markets, and strong net asset positions of both the public and private sectors, give the Hong Kong economy considerable capacity to absorb adverse shocks.

Monetary and financial conditions

The US Federal Open Market Committee continued to tighten its policy stance in 2006. Against this backdrop, the US Treasury yield curve flattened at the beginning of the year before steepening again on a strong economy and oil price increases. In Asia, the Bank of Japan announced an end to its five-year ultra loose monetary policy in March, as the pace of economic activity increased further.



Sources: Respective central banks and Bloomberg

1.8 Interest rates

The US Federal Open Market Committee has raised the federal funds target rate by a total of 75 basis points to 5% in three steps so far this year. While the Committee dropped its usual reference to further 'measured' rate increases in the recent policy minutes, concerns over inflation have led market participants to believe there will be additional rate rises by September (Chart 1.24).

The European Central Bank (ECB) has raised its policy interest rate once so far this year. Market participants generally expect another rate increase in June. In early March, the Bank of Japan (BoJ) announced an end to its five-year ultra loose monetary policy after a decade of deflation. As a first step, the BoJ will start reducing excess liquidity in the market, although the official interest rates are likely to remain at zero for the coming months.

Against this backdrop, US Treasury yields have risen across the maturity spectrum since the beginning of the year. In the first two months, the yield curve continued to flatten, with some sections of it exhibiting inversion. This prompted concerns that monetary tightening was taking the US economy to the verge of a recession. Subsequently, as economic activity gathered further pace in the US and oil prices surged on escalating geopolitical tensions in some countries in the Middle East and Africa, the yield curve has steepened since March. This indicated

Chart 1.25 Yield spread and probability of recession in twelve months



Note: In history, recession always followed when the spread entered the shaded region. Source: Based on Estrella (2005).

Chart 1.26 US dollar bilateral exchange rates



Chart 1.27 World equity indices



that risks were again tilted towards inflation rather than recession. At the end of May, the yield of the 10-year Treasury bond was 26 basis points over the 3-month Treasury yield. Some economists have estimated the probability of the economy going into a recession as a function of the slope of the yield curve (Chart 1.25).¹⁰ While the robustness of this relationship is highly controversial, it nevertheless shows that the risk of recession in the US has fallen since the beginning of the year.

1.9 Exchange rates

The US dollar was broadly stable against other major currencies in the first quarter of 2006, but has since weakened markedly (Chart 1.26). Strong Q1 performance of the US economy and expectations of further interest rate rises supported the US dollar after the turn of the year. However, the outlook was clouded by the subsequent release of a record US trade deficit, which renewed concerns over the sustainability of the country's external imbalance over the longer term. Hawkish comments by the ECB President and the ending of the quantitative easing policy by the BoJ have reinforced expectations of narrowing interest differentials with the US, thus exacerbating downward pressure on the US dollar. Since the beginning of 2006, the US dollar has depreciated by 7.7% and 4.4% against the euro and the yen respectively.

1.10 Equity markets

Major equity markets have advanced further in the first four months of 2006 as global economic activity continued to demonstrate resilience to higher interest rates and rising commodity prices (Chart 1.27). The Japanese and European markets both rode the back of a stronger economy and registered solid gains through the end of April, despite clear indications by their respective central banks that the cycle of monetary policy tightening has begun. The US market also made healthy gains, although not as large as its Japanese and European counterparts, clouded by the uncertain outlook for the

¹⁰ For example, see Estrella, A. (2005) "The yield curve and recessions". *The International Economy*, Summer. The methodology of estimation was first published in Estrella, A. and G. Hardouvelis (1991) "The term structure as a predictor of real economic activity". *Journal of Finance*, 46, pp. 555-76.



direction of the near-term monetary policy and energy prices. In May, all markets experienced sharp corrections, as strong profit-taking pressure emerged. Overall, the S&P 500 and Frankfurt DAX have gained 1.7% and 4.5% respectively since the beginning of 2006, while TOPIX has posted a loss of 4.4%. Greater uncertainties resulting from the sharp corrections have also led to a rise in the volatility of major stock indices (Chart 1.28).

2. Domestic economy

Demand

Real GDP growth in Hong Kong continued to expand strongly. The remarkable economic performance has been broadly based. Private consumption growth picked up in the first quarter due to favourable labour market conditions, the wealth effect derived from upbeat asset markets, and a faster growth in inbound tourism. Growth in private investment also accelerated, with strong capital goods investment more than offsetting sluggish building and construction activities. External trade remained buoyant, underpinned by robust growth in Hong Kong's major trading partners.



Table 2.AReal GDP growth by expenditurecomponent

				2006		
(% yoy)	2004	2005	0.2	Q 3	Q 4	Q 1
Gross Domestic Product	8.6	7.3	7.2	8.2	7.5	8.2
Domestic demand	5.1	1.9	-1.0	4.0	7.3	6.9
Consumption						
Private	7.3	3.4	2.4	3.6	3.4	4.5
Public	0.7	-3.1	-2.3	-1.6	-3.8	1.3
Gross domestic fixed	3.0	4.1	4.9	2.8	8.4	8.5
capital formation						
Private	5.1	7.9	8.6	5.7	15.2	14.5
Public	-6.7	-16.3	-19.1	-15.7	-26.6	-18.9
Change in inventories1	-0.2	-0.8	-3.3	0.9	2.6	1.4
Net exports of goods ¹	0.9	3.3	5.5	2.5	-0.7	0.2
Net exports of services1	3.1	2.3	2.7	2.3	2.3	2.1

Note 1 : Percentage-point contribution to annual growth of GDP. Source: C&SD.

2.1 Aggregate demand

The Hong Kong economy continued to grow strongly in spite of high oil prices and interest rate hikes. Real GDP growth had another robust performance in 2006 Q1, rising by 8.2% from a year ago, following an increase of 7.9% in 2005 H2 (Chart 2.1). Growth in private consumption picked up in Q1, due to favourable labour market conditions, the wealth effect derived from booming asset markets, and a rapid rise in inbound tourism. Growth in private investment also advanced in Q1, resulting from a strong increase in capital goods investment more than offsetting a decline in construction output. External trade remained vigorous in Q1, supported by solid growth in Hong Kong's major trading partners. On a seasonally adjusted quarter-onquarter basis, real GDP registered its eleventh straight quarter of growth in Q1, rising by 2.4%, compared with 0.6% in 2005 Q4.

2.2 Domestic demand

Domestic demand continued to pick up in 2006 Q1 for the third consecutive quarter (Table 2.A). Private consumption and gross domestic fixed capital formation increased at a faster pace in Q1, while public sector spending declined further. The pickup in domestic



Chart 2.3 Private investment by component



demand also reflected a rebuilding of inventories for the third straight quarter.

Consumption

Growth in consumer spending picked up in 2006 Q1, on the back of favourable labour market conditions, the wealth effect stemming from a strong rally in the stock market, and a moderate rise in the property market on the expectation of an end to interest rate rises in this cycle, as well as a faster-than-expected expansion of inbound tourism (Chart 2.2). Private consumption expenditure increased by 4.5% in 2006 Q1 from a year earlier, after expanding by 3.5% in 2005 H2. Seasonally adjusted quarter on quarter consumer spending rose markedly by 1.7% in Q1, following a mild increase of 0.9% in 2005 Q4.

However, the outlook for private consumption expenditure largely depends on future interest rate moves. Since March 2005, the best lending rate-a typical benchmark for mortgage interest rate pricing-has increased by 3 to 3.25 percentage points from 5% to 8%-8.25%. This implies that keeping all other things equal, the debt repayment burden has increased considerably, thus leaving less disposable income to support expenditures on other goods.

Government consumption expenditure increased by a year-on-year rate of 1.3% in Q1 after declining for six quarters in a row from 2004 Q3. This mainly reflects more purchases of services on the back of higher government revenues (Table 2.A).

Investment

Private investment spending continued to record doubledigit growth of 14.5% year on year in 2006 Q1, compared with 15.2% in 2005 Q4, mainly driven by a surge in capital goods investment over the same period (Chart 2.3). Private spending on machinery, equipment and computer software jumped by an averaged year-onyear rate of 26.6% in the past two quarters, compared with 8.3% in 2005 Q3. By contrast, spending on building and construction continued to decline, remaining the weakest spot in this cyclical upturn. The sluggish building and construction activities were partly





Sources: C&SD, Lands Department, and CEIC

Chart 2.5 Export growth and trade balance (in real terms)



Table 2.B Total exports of goods by major market¹

(% yoy)	Share ²	2004	2005		2005			
(%) yOy)	%	2004	2005	Q 2	Q .3	Q 4	Q 1	
Mainland China	45	20	14	15	14	14	18	
United States	16	5	6	7	8	2	4	
European Union	15	18	16	23	16	9	9	
ASEAN53 + Korea	7	19	7	8	6	8	8	
Japan	5	14	10	12	13	6	7	
Taiwan	2	16	3	4	7	3	4	
Others	10	9	10	3	15	5	11	
Total	100	16	11	12	13	10	12	

Notes: 1. Within the total, re-exports accounted for 94% in 2005.

2. Share in 2005.

 ASEAN5 includes Indonesia, Malaysia, the Philippines, Singapore and Thailand.

Sources: C&SD and CEIC.

due to a sharp reduction in land supply in recent years (Chart 2.4). However, there appears to be some early signs of recovery as the pace of decrease moderated and the growth rate of the eight-quarter moving-average reverted from negative to positive in Q1.

Public sector investment spending continued to decline in 2006 Q1 for the ninth consecutive quarter, falling by 18.9% from a year ago. This reflects the scaling down of the Public Housing Programme and the completion of several large railway projects.

2.3 External trade

Underpinned by robust economic performance in Hong Kong's major trading partners, exports of goods rose by 14.4% in Q1 from a year ago, up from a rise of 11.4% in 2005 Q4 (Chart 2.5 and Table 2.B). On a seasonally adjusted quarter-on-quarter basis, exports of goods increased by 2.2% in the past two quarters. Domestic exports grew at an exceptionally strong pace of 44.4% year on year in Q1. Supported by buoyant export growth on the Mainland, re-exports remained strong with an annual growth rate of 12.8% in Q1. Imports of goods maintained its double-digit growth for the third quarter in a row in Q1, mainly due to a pick up in domestic demand and strong growth in re-exports.

Exports of services increased by 0.8% in Q1 over the previous quarter (seasonally adjusted), following an increase of 1.1% in Q4. The year-on-year growth rate remained robust at 8.9% in Q1, compared with 8.7% for 2005 as a whole. The strong performance mainly reflected growth in trade-related services, particularly the buoyant trade flows involving the Mainland. The pace of increase in travel services picked up in Q1, with a higher-than-expected double-digit year-on-year growth in incoming tourists, compared with 6% in 2005 Q4. The faster growth in inbound tourism in Q1 was mainly associated with more Mainland visitors to Hong Kong. Year-on-year growth in imports of services also picked up in Q1, reflecting increases in trade-related and travel services. Overall, the trade surplus increased in 2006 Q1 compared with the previous quarter.

Output and supply

The service sector remained the engine of growth, particularly in areas related to external trade and financial and business services. The sustained economic recovery has led to an increase in employment opportunities, resulting in a further decline in the unemployment rate.

Table 2.CReal GDP growth by major economicsector (year on year)

(% yoy)	2004	2005	2005			
(%0 yOy)	2004	2005	Q 1	02	Q .3	Q 4
GDP at factor cost	8.5	7.1	6.5	7.4	7.6	6.9
Industrial sector	-2.7	-0.8	0.7	-1.6	-0.2	-1.4
Of which:						
Manufacturing	1.7	2.1	-2.3	-0.1	4.1	5.9
Construction	-9.8	-7.2	0.5	-8.4	-5.5	-12.4
Service sector	9.9	8.0	7.1	8.4	8.5	7.7
Of which:						
Wholesale, retail,	13.7	6.5	6.5	6.8	6.3	6.7
restaurant and hotel						
Import and export	15.4	12.2	11.5	13.3	11.9	11.8
Transport and storage	14.0	14.3	13.8	13.0	16.6	14.2
Financing, insurance	17.3	10.3	8.0	12.6	11.2	9.4
and business services						

Source: C&SD.

Table 2.D Contribution to real GDP growth by major economic sector (year on year)

8.5 -0.3	2005 7.1 -0.1	<mark>Q1</mark> 6.5	02 7.4	Q .3	Q 4
		6.5	74		
-0.3	0.1		1.4	7.6	6.9
	-0.1	0.1	-0.2	0.0	-0.1
0.1	0.1	-0.1	0.0	0.2	0.2
-0.4	-0.3	0.0	-0.3	-0.2	-0.4
8.8	7.2	6.4	7.6	7.6	7.0
0.7	0.3	0.3	0.3	0.3	0.3
3.3	2.8	2.4	2.9	2.9	2.9
1.0	1.1	1.0	1.0	1.3	1.1
2.9	1.9	1.5	2.4	1.9	1.7
	-0.4 8.8 0.7 3.3 1.0	-0.4 -0.3 8.8 7.2 0.7 0.3 3.3 2.8 1.0 1.1	0.4 -0.3 0.0 8.8 7.2 6.4 0.7 0.3 0.3 3.3 2.8 2.4 1.0 1.1 1.0	0.4 -0.3 0.0 -0.3 8.8 7.2 6.4 7.6 0.7 0.3 0.3 0.3 3.3 2.8 2.4 2.9 1.0 1.1 1.0 1.0	1.1 1.1 1.1 1.1 1.1 0.4 -0.3 0.0 -0.3 -0.2 8.8 7.2 6.4 7.6 7.6 0.7 0.3 0.3 0.3 0.3 3.3 2.8 2.4 2.9 2.9 1.0 1.1 1.0 1.0 1.3

Source: C&SD.

2.4 Output

The service sector, which accounts for 90% of GDP, has remained the growth engine (Table 2.C). Increasing integration with the Mainland in trade, tourism, and finance continued to support Hong Kong's trade in goods and services. In particular, trade-related sectors have recorded double-digit growth rates for the past two years, with the transport and storage-related sectors increasing the most. Output in the manufacturing sector increased moderately, while the construction sector continued to contract.

In terms of contribution to growth, services related to external trade accounted for more than 40% of output growth in the past year (Table 2.D). The financial and business services industry was the second largest contributor, accounting for about 25% of the total increase in the second half of 2005.

2.5 Labour and productivity

The sustained economic recovery boosted labour demand, which was reflected in a 43% surge from a year earlier in the number of vacancies received by the Labour Department in Q1. As a result, the unemployment rate fell to its lowest level since August 2001. Labour productivity increased in 2006 Q1, reflecting faster growth in output than employment.

Chart 2.6 Labour market conditions







Sources: C&SD and staff estimates

Labour market conditions

Labour market conditions continued to improve with the pace of expansion in employment edging up in recent months. However, the effect of employment growth on the unemployment rate was partly offset by a rise in the labour force. As a result, the seasonally adjusted threemonth moving-average unemployment rate dropped slightly for the first time this year to a 56-month low of 5.1% in February - April (Chart 2.6). The relatively stable participation rate suggests that the increase in the labour force was largely due to an expansion in the working-age population during the period. The fall in the unemployment rate was observed mainly in sectors such as decoration and maintenance, insurance, and retail trade.

The underemployment rate edged up to 2.4% in the three months to April, from 2.3% in the one month earlier, as fewer full-time jobs were created to replace part-time and temporary jobs. The increase was particularly noticeable in the manufacturing, hotels and education services sectors.

Productivity

The year-on-year growth in the output per worker - an indication of labour productivity growth - continued its upward trend in recent years by increasing from 4.6% in 2005 Q4 to 6.0% in 2006 Q1, resulting from a faster growth in output than employment (Chart 2.7). To some extent, this is associated with an easing in capacity constraint due to a higher capital spending on machinery and equipment acquisitions.

Chart 2.8

Prices and wages

Rises in residential rents continued to feed through into the consumer price index, together with price increases in other goods and services, resulting in a steady, albeit moderate, rise in inflation since the December Report. Inflationary pressure arising from labour costs and import prices remained modest.



2.6 Labour costs

Despite robust employment creation, labour earnings rose only moderately in 2005. In the final quarter of 2005, nominal wages, covering basic wages, regular allowances and guaranteed bonuses, increased by 1.4% from a year earlier. During the same period, the nominal payroll per worker, which also includes earnings from overtime work and discretionary bonuses, rose by 3.7% (Chart 2.8). The recent widening of the gap between the wage and payroll indices suggests that irregular allowances and non-guaranteed bonuses become increasingly important in the overall pay package. Even with the rise in labour costs, productivity gains over the past few years have helped bring down the unit labour costs to a relatively low level. This suggests that inflationary pressure stemming from wage increases remained modest.

2.7 Commodity and import prices

Import prices have been one of the important determinants of consumer price inflation, as Hong Kong is a small economy with limited natural resources and small agriculture and manufacturing sectors.¹¹ Having

¹¹ Empirical studies suggest that import prices have significant influence on the short-term inflation dynamics in Hong Kong. For details, see Ha, J., C. Leung and C. Shu (2002), "A small macroeconomic model of Hong Kong", *HKMA Research Memorandum*, June 2002 and Genberg, H. and L. Pauwels (2005), "An open-economy new Keynesian Phillips curve: evidence from Hong Kong", *Pacific Economic Review*, Volume 10, Number 2, June, pp. 261-77.

Domestic economy







Chart 2.11 Consumer price inflation by broad component



eased somewhat in the final quarter of 2005, the quarteron-quarter increase in the unit value index of retained imports picked up to 2.2% in 2006 Q1, following an increase of 1.2% in 2005 Q3 and 0.2% in Q4. The recent increase reflects a depreciation of the Hong Kong dollar effective exchange rate and rises in oil and non-fuel commodity prices (Chart 2.9).

2.8 Consumer prices

As growth continued to exceed potential, consumer price inflation has risen moderately since the December Report (Chart 2.10). However, various changes in the Composite CPI (CCPI) suggest that overall inflation remained benign. On a year-on-year basis, the CCPI rose by 1.9% in April 2006, up from an increase of 1.3% in the previous six months. On a seasonally adjusted threemonth-on-three month basis, the annualised increase in the CCPI was 1.6% in April, compared with 1.5% six months ago.¹²

Despite a further increase in import prices, tradable goods prices continued to fall, as declines in prices of durable goods more than offset increases in prices of other tradable goods (Chart 2.11). The rise in international energy prices has led to a sharp increase in retail prices of liquefied petroleum gas, towngas, and motor fuel and lubricants. However, the direct effect of energy price increases on overall inflation remained small, as weights of these items together account for only 1.9% of the CCPI basket. The increase in the rental component was the fastest among the three broad components, rising by over 5% on an annualised threemonth-on-three-month basis since October 2005. On the other hand, the rate of change in prices of nontradables, excluding rentals, has eased somewhat from earlier in 2006.

¹² The Census and Statistics Department has recently released a newly-based CPI series (see Box 3 for details). While the magnitudes of the year-on-year changes in the new and old indices are somewhat different, both suggest that inflation remains benign.

Box 3 The newly-based consumer price index series

Chart B3.1





Old index (Oct 1999-Sep 2000=100)
 Newly-based index (Oct 2004-Sep 2005=100)

Source: C&SD.

Table B3.A Component weights of the 1999/2000-based and 2004/2005-based Composite CPI

In % of total	1999/2000	2004/2005	Change
Food	26.67	26.94	0.27
Meals bought away from home	16.39	16.86	0.47
Others	10.28	10.08	-0.20
Housing	29.91	29.17	-0.74
Electricity, gas and water	2.98	3.59	0.61
Alcoholic drinks and tobacco	0.94	0.87	-0.07
Clothing and footwear	4.13	3.91	-0.22
Durable goods	6.24	5.50	-0.74
Miscellaneous goods	5.70	4.78	-0.92
Transport	9.01	9.09	0.08
Miscellaneous services	14.42	16.15	1.73
Total	100.00	100.00	0.00

Source: C&SD

The Census and Statistics Department has recently released a newly-based CPI series, for which the weights in the consumption basket are updated to reflect the changes in household expenditure patterns over the past five years. The new CPI series are based on the spending patterns obtained from the Household Expenditure Survey conducted between October 2004 and September 2005, while the old series are based on the survey carried out in 1999/2000.

Using the newly-based Composite CPI, Hong Kong's annual inflation rate since October 2005 has been found to be smaller than that of the old index (Chart B3.1). This is because households tend to consume more of the goods and services with relatively smaller price increases or relatively larger price decreases. Due to the substitution effect, the CPI with expenditure patterns fixed to a base year tends to overstate price increases or understate price decreases over time. However, although the magnitudes of the year-on-year changes are different, both indices show a similar trend of a gradual pickup in the inflation rate since October 2005. In addition, both indices suggest that the inflation rate remains benign.

Table B3.A compares the weights used in the 1999/2000based and 2004/2005-based Composite CPI. These weights are based on the Household Expenditure Survey in every five years. It shows that, in general, weights of the tradable goods components declined while those of the non-housing services components increased. In particular, the weight of miscellaneous services rose notably by 1.73 percentage points, reflecting higher expenditure on education, medical services, and beauty and fitness services. For tradables, weights of durable and miscellaneous goods fell by 0.74 and 0.92 percentage points respectively. The weight of housing services also declined by 0.74 percentage points, mainly due to a fall in private housing rentals between the two base periods. Chart 2.12

Asset markets

Equity prices in Hong Kong have been volatile since the beginning of 2006. Following a moderation in 2005, the property market has shown signs of recovering in recent months.



2.9 Equity market

Share prices have been very volatile since the beginning of 2006. The local market rallied strongly through early May before a sharp correction took place on heavy profittaking pressure towards the end of the period. Overall, the benchmark Hang Seng Index has risen by 6.6%, which still outperformed most major overseas markets. To a considerable extent, this is attributable to news of important reforms and policy changes on the Mainland, especially regarding the establishment of the scheme of approving qualified domestic (i.e. Mainland) institutional investors to acquire foreign financial assets. The H-share index has surged 25% over the period, as its constituent stocks are widely expected to be the major beneficiaries of the scheme (Chart 2.12).

The average daily turnover of derivative warrants grew 67% to HK\$3.5 billion in 2005, enabling Hong Kong to remain as the most active warrant market in the world for two years in a row.¹³ The strong growth in derivative warrants trading has led to concerns that the hedging behaviour of warrant issuers could make the underlying market more volatile.¹⁴ However, a study conducted by the Securities and Futures Commission concluded that the impact of derivatives warrants on volatility was much less significant than originally thought.¹⁵

³ Hong Kong's Derivative Warrants Market - Moving with Times amid Rapid Developments in Other Warrants Markets in Asia, Securities and Futures Commission, April 2006.

¹⁴ By issuing a warrant, the issuer is committed to buying the underlying asset from, or selling it to, the investor at a fixed price at a future date. To hedge the downside risk of such a commitment, the issuer has to buy when the market rises and sell when the market falls. This hedging behaviour could thus increase volatility.

¹⁵ There are two main reasons. First, the derivative warrants market in Hong Kong, despite the strong growth, is still small compared with the equity market. The Securities and Futures Commission estimates that for the six largest constituent stocks and Hang Seng Index, the theoretical number of shares of the underlying stocks which all warrant issuers must hold to be fully hedged only lies between 0.1% and 1.6% of the outstanding shares in the cash market. Secondly, issuers of the increasingly popular equity-linked notes will have to manage their risks by buying and selling the underlying stocks in exactly the opposite manner to warrant issuers, which would serve as a mitigating force.

Chart 2.13 Implied volatility of selected stocks in Hong Kong



Chart 2.14 Property prices and interest rates



Indeed, the implied volatility of stock prices in Hong Kong remained stable in recent years (Chart 2.13). Looking ahead, however, this may not continue for long in the current rising interest rate environment.¹⁶ The time-varying volatility of the Hang Seng Index during 1995-2005 was estimated and its causal relationship was tested with the three-month HIBOR.¹⁷ The findings suggest that interest rates positively affected the volatility of stock prices in the sample period. Hence, the rebound in local interest rates since last year could possibly trigger a repricing of the risk premium of equity investments, ending the trend of falling volatility.

2.10 Property market

The rises in interest rates since early 2005 have had a cooling effect on the property market, as indicated by a moderation in prices. Nevertheless, property prices have shown signs of recovering in recent months on the back of more stable real interest rates (Chart 2.14). After declining by 3.7% in 2005 Q4 from the previous quarter, private residential property prices increased by 0.7% in 2006 Q1, and were some 50% higher than the trough in 2003. Prices of large flats (saleable area of 160 m² or more) have increased more sharply than indicated by the overall price index, rising by over 90% from the previous trough. The recovery in non-residential properties has been even more pronounced, with prices of private office and retail space surging by 129% and 94% respectively in March 2006 from their troughs.

Having fallen substantially in the second half of 2005, property market transactions have shown signs of stabilising in recent months. After dropping by 32.4% in 2005 H2 from H1, the number of Sale and Purchase Agreements decreased by 8.1% in 2006 Q1 from the previous quarter. However, transaction volumes picked up markedly in March and April from earlier months.

⁶ It is widely argued that the fall in volatility was linked to the global 'search for yield' phenomenon caused by low interest rates. See, for instance, the IMF's *Global Financial Stability Report*, September 2005.

¹⁷ The statistical model employed in this internal study was a generalised auto-regressive conditional heteroskedasticity model. The relationship was tested on the basis of Granger causality.



Note:*
 Based on mortgage interest rates in May 2006, and prices, rents, and household incomes in 2006 C1.

 Sources:
 Rating & Valuation Department, Land Registry, Census & Statistics Department, Centaline Property Agency Limited, and staff estimates.

Reflecting rises in mortgage interest rates, increases in mortgage payments have been faster than those in household income and property rentals. As a result, housing affordability has worsened in recent quarters and the costs of owner-occupation have exceeded that of renting. The income-gearing ratio (measured as the ratio of mortgage repayment to household income) rose to 28% in 2006 Q1 from 15% in 2003 Q2.18 The buy-rent gap (measured as the ratio of mortgage repayment to rental) increased to 132% from 80% during the same period. Nevertheless, an updated graphical presentation, which summarises six key real estate indicators in the form of a hexagon, shows that by 2006 Q1 conditions in the private housing market remained benign relative to that in 1997 (Chart 2.15).¹⁹ Nevertheless, it should be borne in mind that 1997 was an extreme case when market conditions were clearly out of line with the fundamentals.

On the supply side, while new completions of residential properties have fallen markedly in recent years, a supply shortage is unlikely in the near term, as the number of vacant properties remains high. The vacancy rate of private residential properties fell slightly to 6.0% at the end of 2005, but remained higher than the average of 4.6% over the past two decades. On the other hand, the vacancy rate of office space fell markedly from 12.7% in 2004 to 8.7% in 2005, compared with its 20-year average of 9.7%. The fall in the vacancy rate was more noticeable for the best-quality Grade-A office space, declining from 13.1% to 8.1%. The relatively tighter supply in office space provides an explanation for a more rapid increase in office prices than residential property prices.

¹⁸ The mortgage repayment is estimated by assuming a 20-year mortgage on 70% of the purchase price of a representative 50 m² flat. The 75th percentile household income, instead of the median household income, is used in the calculation because it better reflects the income level of private housing owners.

¹⁹ See Chan, N., W. Peng and K. Fan (2005), "A graphical framework for monitoring the property market in Hong Kong", *HKMA Quarterly Bulletin*, March 2005.
Public finances

The fiscal position improved considerably in 2005/06, with the balances of both the Operating and Consolidated Accounts being restored for the first time in eight years. This is well ahead of the Government's previous schedule, which projected the Operating Account to be in surplus by 2008/09.

Table 2.EAnalytical presentation of fiscal account

		Budget ¹	Estimate ²	Provisional ³	Budget			
Fiscal year	2004/05	2005/06	2005/06	2005/06	2006/07			
	(In percent of calendar-year basis GDP)							
Revenue ⁴	18.7	18.2	17.4	17.9	17.7			
Tax	11.9	11.6	12.0	n.a.	11.5			
Direct tax	7.7	7.5	8.1	8.2	7.7			
Indirect tax	4.2	4.1	4.0	n.a.	3.8			
Non-tax	6.8	6.5	5.4	n.a.	6.1			
Expenditure ⁵	19.0	19.0	17.1	16.9	17.1			
Operating	15.5	15.6	14.1	n.a.	14.4			
Capital	3.5	3.4	3.0	n.a.	2.7			
Overall balance ⁶								
Before net								
borrowing After net	-0.3	-0.8	0.3	1.0	0.6			
borrowing	1.7	-0.8	0.3	1.0	0.4			
Operating balance	e -0.7	-1.2	0.4	n.a.	0.0			
Fiscal reserves	23.3	20.8	21.8	22.5	21.1			
Net fiscal reserve	s 21.3	18.9	20.0	20.7	19.6			

Notes: 1. Based on the 2005/06 Budget released in March 2005.

2. Based on the 2006/07 Budget released in February 2006.

3. Based on the release of monthly financial results in April 2006.

4. Exclude proceeds from the issuance of government bonds and

notes.

 Netting out interest expenses of government bonds and notes.
 Net borrowing refers to issuance/repayment of government bonds and notes.

Sources: Budget Speech, Financial Services and the Treasury Bureau and staff estimates.

2.11 Public finances

The fiscal position improved considerably, with the Consolidated Account recording a surplus of \$14.0 billion (1.0% of GDP) in the financial year ending in March 2006, exceeding the surplus of \$4.1 billion (0.3% of GDP) projected in February 2006 and a budget deficit of \$10.5 billion (1.2% of GDP) forecasted in March 2005 (Table 2.E). The improvement mainly reflects higher revenue from salaries and profit taxes and lower operating expenditure.

The Budget for 2006/07 forecasts a consolidated surplus of \$5.6 billion (0.4% of GDP) (Table 2.E). It proposes to lower the marginal rates of salaries tax of the second, third and top tax bands by one percentage point and to extend the home loan interest deduction from seven years to a total of 10 years. These measures are estimated to save taxpayers \$2.7 billion. The budget also proposes to earmark \$29 billion a year on average for infrastructure projects over the next five years. The Financial Secretary announced that a formal nine-month public consultation exercise on a goods and services tax would be launched in mid-2006. Currently, salaries taxes are paid by a minority of households. The introduction of a goods and services tax would help broaden Hong Kong's tax base.

Domestic economy

Chart 2.16 Medium-term projections



In the medium term, the fiscal position is expected to continue to improve. The consolidated surplus is projected to rise from 0.7% of GDP in 2007/08 to 1.8% in 2010/11, with the fiscal reserves covering more than oneyear government expenditure (Chart 2.16). However, investment income and land premium will continue to be important sources of revenue in the next few years, accounting for about one-fifth of the total revenue. Nevertheless, the fiscal position in the medium term appears to remain comfortable, as the Government's financial strength is supported by the large amount of assets accumulated over time. These not only include the fiscal reserves but also the cumulative surplus of the Exchange Fund and the Government's investments in business enterprises and fixed assets. The total net assets of the Government were estimated to amount to \$862 billion at the end of March 2005 (or 62% of GDP).²⁰ These assets generate a regular stream of income (albeit with considerable variation between years) that can be used to fund government spending or generate more assets via investment. In addition, these assets can also be used to finance temporary fiscal shortfalls through asset sales or privatisations.

²⁰ See "Accrual-based consolidated financial statements of the Government for the year ended 31 March 2005", The Treasury of the Hong Kong SAR Government, December 2005.

3. Monetary and financial sector

Exchange rate, interest rates and monetary developments

The Hong Kong dollar exchange rate weakened marginally in the first quarter of 2006, due to interest rate arbitrage activities, before strengthening on the back of equity-related inflows in the second quarter. Following rises in the US federal funds target rate by 75 basis points between January and May, Hong Kong dollar interest rates increased alongside their US dollar counterparts. Both narrow money and broad money increased, reflecting stable economic growth and (for narrow money) buoyant stock market activities.





Chart 3.2 Aggregate Balance (before Discount Window Activity)



3.1 Exchange rate and interest rates

After staying close to the strong-side Convertibility Undertaking of HK\$7.75 to each US dollar in the last few months of 2005, the Hong Kong dollar exchange rate started to weaken towards 7.76 in mid-January 2006 (Chart 3.1). The weakening was associated with interest rate arbitrage activities, in which banks borrowed Hong Kong dollars and converted the proceeds into US dollars to take advantage of the negative interest rate differentials of HIBORs over LIBORs. The Hong Kong dollar exchange rate has strengthened again since early April, reportedly due to equity-related inflows. Overall, the Hong Kong dollar exchange rate has remained close to the strong end of the Convertibility Zone since the final quarter of 2005.

Since the June 2005 Report, the Convertibility Undertakings have not been activated, and the HKMA has not carried out any market operations within the Convertibility Zone. Consequently, the Aggregate Balance has hardly changed at around HK\$1.3 billion, with small fluctuations due to interest payments on Exchange Fund paper (Chart 3.2).

Chart 3.3 Interest rates of the Hong Kong dollar and US dollar



Chart 3.4 Hong Kong dollar forward points



Q1
 Q2
 Q3
 Q4
 Q1
 Q2<



Q1
 Q2
 Q3
 Q4
 Q1
 Q2
 Q3
 Q4
 Q1
 Q2

 2003
 2004
 2005
 2006

Following a cumulative increase of 75 basis points in the US federal funds target rate to 5.0% between January and May, Hong Kong dollar interbank interest rates increased. However, they remained below their US dollar counterparts and their spreads have widened since the December 2005 Report (Chart 3.3). Box 4 analyses the potential impact of negative HIBOR-LIBOR spreads on the economy.

In line with the movements in HIBOR-LIBOR spreads, the Hong Kong dollar 12-month forward discount widened to close at 440 pips on 30 May (Chart 3.4). After the introduction of the three refinements, the interest rate adjustment mechanism has become more effective, decreasing the discount of Hong Kong dollar forward points compared with the previous episode of strong side pressure from late 2003 to early 2005.

3.2 Monetary Base and the Backing Ratio

The Backing Ratio decreased to a low of 110.76% in January, due to increases in Certificates of Indebtedness ahead of the Chinese New Year holidays.²¹ Thereafter, as the Certificates of Indebtedness were gradually redeemed after the holidays, the Backing Ratio increased to close at 111.94% on 30 May (Chart 3.5). Overall, the outstanding amount of Certificates of Indebtedness and government-issued currency notes and coins rose slightly during the period, while the market value of outstanding Exchange Fund paper and the Aggregate Balance remained stable.

Note: The Backing Ratio is the ratio of Backing Assets to the Monetary Base. Under the arrangements for transferring assets between the backing portfolio and the investment portfolio of the Exchange Fund, when the backing ratio reaches 112.5% (the upper trigger level), sufficient assets will be transferred from the backing portfolio to the investment portfolio to reduce the ratio to 110%. Should the backing ratio drop to 105% (the lower trigger level), assets will be transferred from the investment portfolio to the backing portfolio to restore the ratio to 107.5%.

Source: HKMA

²¹ Because the Backing Assets are larger in value than the Monetary Base, matched increases in the two will arithmetically decrease the Backing Ratio. Similarly, matched decreases in the two will arithmetically increase the Backing Ratio.

Box 4 Macroeconomic impact of negative HIBOR-LIBOR spreads





Chart B4.2 Headline CPI inflation rate



Chart B4.3 Monetary conditions index



From late 2003 to mid-2005, Hong Kong witnessed persistent and sizable inflows of funds. HIBORs dropped below the corresponding LIBORs for a sustained period and Hong Kong's Best Lending Rates did not increase along with US interest rates. To normalise the situation, the HKMA introduced the three refinements to the Linked Exchange Rate system in May 2005. As a result, HIBORs quickly caught up with the corresponding LIBORs.

The spreads of HIBORs over LIBORs have turned negative again in recent months (Chart B4.1). Although the current negative spreads of 40-80 basis points are not large compared with historical episodes of capital inflows (in which the peak discount on the 3-month HIBOR-LIBOR spread was over 200 basis points), there are concerns about the impact on the economy if the spreads persist and widen further.

The significance of the negative HIBOR-LIBOR spreads should be assessed relative to the overall monetary and macroeconomic conditions. This episode of negative HIBOR-LIBOR spreads is occurring when inflation remains low by historical standards, notwithstanding some increases recently (Chart B4.2). In addition, local monetary conditions have tightened markedly in recent quarters to contain overheating pressures, as indicated by the increase in the estimated Monetary Conditions Index for Hong Kong (Chart B4.3). The increase of the index is largely due to rises in real interest rates, as well as an appreciation of the Hong Kong dollar in real effective terms.

To better quantify the risks ahead, simulations are conducted on a hypothetical widening of the negative 3-month HIBOR-LIBOR spread to 250 basis points, typical peak levels in previous episodes of strong-side pressure on the Hong Kong dollar. Simulation results suggest that real GDP growth will exceed the baseline projection by 0.3-0.7 percentage points for 2006, contingent on assumptions of how property prices will react to the negative HIBOR-LIBOR spread. The CPI inflation rate will only rise marginally from the baseline projection. If the negative HIBOR-LIBOR spreads narrow to realign Hong Kong dollar interest rates with US dollar counterparts in the latter part of 2006 (this scenario is intended to show the possible impact of a sharp swing in interest rates), growth in 2007 will be reduced by 0.5 percentage points from the baseline projection.

Overall, the simulation results suggest that a further widening of the negative HIBOR-LIBOR spreads from the current level is unlikely to have a big effect on growth and inflation. This largely reflects the fact that overall monetary conditions have already tightened to contain overheating pressures, as interest rates (including real interest rates) in Hong Kong are presently at a relatively high level and the Hong Kong dollar has appreciated in real effective terms. Chart 3.6 Growth in monetary aggregates compared with three months ago



Chart 3.7 Year-on-year growth in monetary aggregates



Chart 3.8 Loans for use in Hong Kong and nominal GDP



3.3 Money and credit aggregates

Both Hong Kong dollar narrow money (M1) and broad money (M3) increased compared with three months ago in April, reflecting (for narrow money) buoyant stock market activities and healthy nominal GDP growth (Chart 3.6).²² On a year-on-year comparison, M3 increased further in April, but M1 continued to decline, albeit at a decreasing rate (Chart 3.7). The divergence in the annual growth rate of narrow and broad monies since 2005 has partly reflected a shift from liquid monetary assets to time deposits, in response to rises in time deposit rates relative to interest rates on liquid monetary assets.

Loans for use in Hong Kong fell slightly in 2006 Q1 compared with 2005 Q4, although the year-on-year rate of growth remained strong at 5.8%, generally in line with the pace of expansion of nominal GDP (Chart 3.8). The modest decline probably reflected suppressed credit demand associated with higher interest rates (see Section 3.8 for a sectoral breakdown of domestic loans).

Stock market activities (e.g. equity IPO activities) are related to demand for narrow money because they often involve the use of demand deposits. Empirical research by the HKMA shows that stock market turnover has explanatory power on short-run movements in narrow money. For details, please refer to "Estimating Demand for Narrow Money and Broad Money", *HKMA Research Memorandum 02/* 2006.



Table 3.A Balance of payments account by standard components

	2004	2005	2005			
In percent of GDP			Q.1	Q 2	Q .3	Q 4
Current Account	9.5	11.4	10.2	9.7	12.2	13.3
Capital and Financial Account	-14.3	-11.6	-16.9	-2.2	-13.7	-13.5
Capital transfers	-0.2	-0.4	-0.8	-0.5	-0.2	-0.1
Financial non-reserve assets	-12.1	-10.5	-15.3	-3.4	-12.6	-10.5
(net change)						
Direct investment	-7.0	1.9	0.3	1.2	-8.6	13.8
Portfolio investment	-23.7	-12.2	-22.0	-27.5	-5.4	3.5
Financial derivatives	3.4	1.0	1.3	1.7	0.3	0.8
Other investment	15.2	-1.2	5.1	21.1	1.1	-28.6
Reserve assets (net change)	2.0	0.8	0.8	-1.7	0.8	2.9
Net errors and omissions	4.8	0.2	6.7	-7.4	1.5	0.2

Source: C&SD.

3.4 Capital flows

After recording moderate outflows in 2005 Q2, inflows of funds into the Hong Kong dollar resumed in 2005 H2. The latest Balance of Payments statistics show a rise in reserve assets in 2005 H2 (Chart 3.9 and Table 3.A). The inflows of funds were in part underpinned by the ongoing economic recovery and were likely related to market expectations of further renminbi appreciation.

The current account was in surplus throughout 2005, accounting for about 11% of GDP in 2005. The surplus was mainly attributable to strong growth in exports of goods and trade-related services, while further increases in tourism-related services also played a role.

Despite the robust recovery in the domestic economy and buoyant stock market activities, the non-reserve capital and financial account continued to record a net outflow in 2005 Q4. Among the components, there was a sharp reversal from persistent inflows to net outflow in "Other Investment", which mainly recorded the movements in offshore loans and deposits. The outflow in "Other Investment" occurred because of a marked expansion in placements abroad by the banking sector, which exceeded the increase in external liabilities. It should be noted that, as an international banking centre, Hong Kong's fund flows related to the other investment account have always been volatile.

Portfolio investment reversed to a net inflow in 2005 Q4, after recording net outflows in the previous three quarters. The net inflow was related to an increased nonresidents' investment in domestic equities, partly reflecting the optimistic view of investors on Hong Konglisted companies, which surpassed the increase in residents' investment in foreign securities.

Banking sector performance

Retail banks' profits grew further in 2005, benefiting from improved non-interest income and a mild recovery in the net interest margin. Although operating costs have begun to rise, the overall cost pressure remains moderate. Nevertheless, domestic credit expansion slowed in recent quarters, partly due to rising interest rates. The net interest margin may have again come under pressure, with intense competition in the mortgage market. These developments have not yet posed significant difficulties for banks, but the risk arising from a sluggish loan growth is a concern.



3.5 **Profitability and capitalisation**

Profitability

Retail bank profitability, measured by pre-tax operating profit as a percentage of total assets, increased further in 2005 (Chart 3.10). Profitability was bolstered by robust growth in non-interest income and a mild recovery of the net interest margin, which more than offset higher general and administrative expenses (as a ratio of total assets).

General and administrative expenses (as a ratio of total assets) increased in 2005, due to higher staff costs arising from salary increases and recruitments, and increases in operating expenses to finance business expansion. Nonetheless, some further improvement in the productive efficiency was recorded during the year, as suggested by our analysis of retail banks' efficiency (Box 5).²³ This should have helped alleviate cost pressures.

³³ The efficiency of banks is assessed by estimating the magnitude of inefficiency, which is the extent to which production cost is not minimised, given the output levels and input (or factor) prices and the state of production technology. Inefficiency can arise as a result of the utilisation of factors of production not being optimised by bank management. Holding efficiency constant, a rise in input prices would increase a bank's general and administrative expenses. However, an improvement in efficiency would help alleviate the cost pressure from the increase in input prices.

Chart 3.11 Net interest margin of retail banks



Chart 3.12 Composite interest rate



Chart 3.13 Capitalisation of locally-incorporated Als



The net interest margin has recovered somewhat since the second quarter of 2005 (Chart 3.11). The composite interest rate, which reflects the average cost of funds of retail banks, rose by 22 basis points during the first four months of 2006, compared with a 25 basis-point rise in the Best Lending Rate (BLR), and a 39 basis-point rise in three-month HIBOR (Chart 3.12).²⁴ However, there are signs that the net interest margin may have come under pressure again, with a renewed round of price competition in the mortgage market since early this year.

Capitalisation

The average consolidated capital adequacy ratio of locally- incorporated authorized institutions (AIs) decreased slightly from 15.3% in the December Report to 15.0% at the end of March 2006 (Chart 3.13). This resulted from a slightly faster pace of expansion of risk-weighted assets than the capital base, reflecting the better availability of profit opportunities as the economic growth remained robust. The consolidated capital adequacy ratio, despite its decline, still far exceeded the minimum international standard of 8%. Core capital comprised 91% of the capital base and the ratio of core capital to risk-weighted assets was at a high level of 13.7%.

²⁴ Best lending rate refers to the rate quoted by The Hongkong and Shanghai Banking Corporation Limited.

Box 5 The efficiency of commercial banks in Hong Kong

The efficiency of commercial banks in Hong Kong was first studied by Kwan (2002).²⁵ He found that banks in Hong Kong were getting more efficient from 1992 to 1997, but less efficient in 1998 and 1999. The deterioration after 1997 may be explained by the effects of the Asian financial crisis. It is, therefore, of interest to see how the banks have fared in recent years.

The study of banks' efficiency has been updated based on a stochastic cost frontier approach, which is the minimum cost of producing a certain level of outputs at given input costs. A model is fitted by the maximum likelihood method to estimate the deviation from the stochastic cost frontier.²⁶ **Such deviation is considered as the measure of inefficiency (IE)** which can be viewed as a percentage reduction of total costs that should have occurred if the bank were operating at a minimum cost.²⁷ A higher IE will be observed when higher input costs and lower levels of output value take place resulting in a larger deviation from the minimum cost. In other words, a higher IE means lower efficiency, and vice versa.

$$\frac{\sigma\lambda}{(1+\lambda^2)} \left[\frac{g(\varepsilon_n\lambda/\sigma)}{G(\varepsilon_n\lambda/\sigma)} + \frac{\varepsilon_n\lambda}{\sigma} \right]$$

where λ is σ_u/σ_v , σ^2 is $\sigma_v^2 + \sigma_u^2$, g and G are the standard normal density and cumulative distribution functions respectively. Details of the approach can be found in Aigner et al. (1977), "Formulation and Estimation of Stochastic Frontier Production Function Models", Journal of Econometrics, 6, p.21-37.

⁷ Aigner et al. (1977) attributed such deviation to productive inefficiency arising from factors such as technical and economic inefficiency, and the will and effort of the producer and his employees.

²⁵ See Kwan (2002), "The X-efficiency of Commercial Banks in Hong Kong", HKIMR's working paper, 12/2002.

Specifically, the stochastic cost frontier, *f*, has the general (log) form: $ln C_n = f(ln y_{i,n}, ln w_{j,n}) + \varepsilon_n$, where C_n is the total operating cost for the *n*th bank, $y_{i,n}$ measures the *i*th output of the *n*th bank, and $w_{j,n}$ is the price of the *j*th input of the *n*th bank. The error term, ε_n , has two components: $\varepsilon_n = v_n + u_n$. The first component, v_n , is assumed to follow a symmetric $N(\theta, \sigma_v^2)$ to capture the effects of uncontrollable (random) factors, while the second component, u_n , is assumed to follow $|N(\theta, \sigma_u^2)|$ to represent controllable factors. For the *n*th bank, the IE_n, represented by the conditional expectation of u_n , can be derived as :

Table B5.A Descriptive statistics for retail banks as of 2005 O4

	1	Mean	Median		
		% Change		% Change	
		from 1999		from 1999	
	Amount	Q4	Amount	Q4	
Average Output values					
per bank (HK\$ mn)					
Loans to finance trade	4,997	124.7	2,475	82.1	
Non-trade related loans	68,876	107.5	34,949	76.8	
Other earning assets	47,394	310.5	20,842	383.8	
Input prices (HK\$)					
Labor					
(per HK\$1 mn of assets)	1,645	-4.4	1,442	0.9	
Borrowed Funds					
(per HK\$1 mn of deposits					
from customers)	8,431	-36.3	7,601	-42.7	
Capital					
(per HK\$1,000 of fixed assets)	872	29.0	607	6.1	
Others (HK\$ mn)					
Average total assets per bank	190,902	120.9	81,062	97.4	
Average total costs per bank	1,732	47.4	766	28.7	
Servere LIKMA					

Source: HKMA.

Banking data from 1991 Q2 to 2005 Q4 are used to estimate the model parameters. The cost of production, specified as a multi-product "translog" function, is measured as the sum of operating and interest expenses. Three outputs of the cost efficient frontier are included: (1) loans to finance imports, exports, re-exports, and merchandising trade, (2) loans for non-trade-related financing, and (3) earning assets including negotiable certificates of deposit, all other negotiable debt instruments, and equity investments. The banks are considered as employing three factor inputs: labour, borrowed funds and capital. The price of labour is proxied by the ratio of staff expense to total assets.²⁸ The price of borrowed funds is proxied by the ratio of interest expenses to the sum of deposits from customers, due to banks, amount payable under repos and negotiable debt instruments issued and outstanding. The price of capital is proxied by the ratio of expenses other than staff and rental expenses to fixed assets.

Table B5.A provides descriptive statistics for all retail banks. In 2005 Q4, the average values of the three groups of outputs (loans to finance trade, non-trade related loans and other earning assets) per retail bank were about HK\$5.0 billion, HK\$68.9 billion, and HK\$47.4 billion respectively. The average cost of labour per HK\$1 million of total assets and borrowed funds per HK\$1 million of deposits from customers were HK\$1,645 and HK\$8,431 respectively, and the average cost of capital per HK\$1,000 of fixed assets was HK\$872. Compared with 1999 Q4, all output values increased significantly by over 100%. While the average price of capital also increased, the average cost of labour and borrowed funds registered reductions.

We follow Atunbas et al. (2001) to proxy labour price by the ratio of staff expenses to total assets (see Atunbas, Y., Evans, E. and Molyneux, P. (2001), "Bank Ownership and Efficiency", *Journal of Money, Credit and Banking*, 33, 4, p. 926-954). The estimation results are in line with Kwan (2002), which measures the price of labour as the ratio of staff expenses to the number of employees.







Note: The shaded region covers all inefficiencies of retail banks. Source: Staff estimates.

Chart B5.1 plots the weighted average and median IE estimates from 1991 Q3 to 2005 Q4. Consistent with Kwan (2002), the IE declined from 1991 to 1997, but edged up slightly in 1998 and 1999. Our estimation result shows that the IE rose further to 44% in 2003 Q4, but started to fall by 2004 Q1 to reach 22% in 2005 Q4. As depicted in Chart B5.2, the IE for all retail banks was found to be skewed significantly. Both the upper and lower quartiles and the median were very close to the minimum, indicating there were more relatively efficient than inefficient banks. As suggested in Kwan (2002), the decline between 1991 and 1997 reflected that banks in Hong Kong were operating closer to the cost efficient frontier during that period. The Asian financial crisis in 1997 and the outbreak of SARS in early 2003 triggered a sharp rise in IE because banks might not have had the flexibility to adjust their labour and capital input quickly amid falling outputs as loan demand plummeted. It is also possible that banks incurred additional operational costs during these stressful periods, arising from tightening credit control, new business initiatives and strengthening customer relationships. The decline in inefficiency in 2004 and 2005 suggests that the adjustments and streamlining by the banks in recent years may have begun to bear fruit.

Chart 3.14 Liquidity ratio of retail banks







Note: 1 Debt securities comprise negotiable certificates of deposit and all other negotiable debt instruments. Source: HKMA.

3.6 Liquidity and funding

As intermediaries transforming deposits into less liquid loans, banks inevitably are subject to liquidity risk. It is important to monitor such risk and ensure that banks are sufficiently liquid to fulfil both expected and unexpected financial commitments as they arise.

In 2006 Q1, the average liquidity ratio of retail banks was 48.2%, substantially higher than the regulatory minimum of 25% (Chart 3.14). By March 2006, net placements to banks abroad and debt securities holdings, which are relatively liquid, accounted for substantial portions–some 15% and 24% respectively–of retail banks' total assets.

In addition to the holding of liquid assets, banks can obtain liquidity from the interbank market. Liquidity conditions there form a major determinant of banks' vulnerability to liquidity risk because they govern how easily banks can raise funds with short notice through interbank borrowing. Since the December Report, the interbank liquidity has remained stable. As discussed in Section 3.1, the Aggregate Balance stayed around HK\$1.3 billion, with small fluctuations due to interest payments on Exchange Fund paper.

The structure of banks' liabilities is a longer-term factor influencing the degree of liquidity risk. Customer deposits have been the most important funding source of retail banks (Chart 3.15). Since September 1998, they have accounted for over 70% of retail banks' liabilities, and the share rose slightly from 74.3% in December 2005 to 75.2% in March 2006. A substantial customer deposit base is advantageous for banks' financial strength, since retail funding is typically less expensive and less volatile than wholesale funding.

Chart 3.16 Structure of customer deposits (retail banks)







 Customers comprises an non-Ai borrowers and depositors.
 Debt securities comprise negotiable certificates of deposit and all other negotiable debt instruments.
 Source: HKMA.





Chart 3.18 Hong Kong dollar loan-to-deposit ratios

In September 2000, 72.5% of customer deposits were time deposits. The share declined gradually to 46.7% in December 2004 (Chart 3.16), with depositors shifting to savings deposits in response to the narrowing of the interest-rate difference between time deposits and savings deposits during the 'ease phase' in the interestrate cycle. However, the recent interest-rate rises have motivated depositors to search for a higher yield and, therefore, reversed the direction of deposit substitution. The share of time deposits increased to 59.8% in March 2006. This mitigated the problem of maturity mismatch between retail banks' assets and liabilities, but increased the cost of retail funding.

The liquidity level of banks also depends on the extent to which customer deposits are used to finance illiquid loans. As a whole, retail banks in recent years have maintained a negative 'customer funding gap', with the amount of customer loans being smaller than the amount of customer deposits. This gap in March 2006 was -36.6% (Chart 3.17), and made retail banks in the aggregate a net provider of interbank loans, which typically have short maturities, and net holder of debt securities comprising negotiable certificates of deposit and other negotiable debt instruments (which are liquefiable assets). At the end of March 2006, the Hong Kong dollar loan-to-deposit ratio was at 79.7% for the banking sector as a whole, and at 74.6% for retail banks (Chart 3.18). Such a structure suggests that liquidity risk may not be a major concern.

The extent of counterparty exposures among AIs is of great importance because a shock that originates at one AI may quickly spread to the rest of the banking sector. As retail banks have a strong customer deposit base, interbank funding does not constitute a significant funding source for them. For retail banks as a whole, the amount due to other AIs in Hong Kong has accounted for around 2.0% of total liabilities since December 2001. In March 2006, the percentage of interbank funding was only 2.2%, suggesting that the contagion risk stemming from interbank exposures is not a significant concern.



2.8

Chart 3.19







3.7 Interest rate risk

Given that the pricing of a sizeable part of interestbearing assets of banks is on a floating rate basis, intermediation spreads should remain relatively stable in the face of volatile interest rates. However, it should be noted that for some banks, a large portion of their assets is priced with BLR, in particular the mortgage portfolio, but their funding is partly determined by HIBORs and time deposits linked to HIBORs. The different responses of BLR and HIBORs to changes in US interest rates could put pressure on banks' net interest margin. In addition, some banks have increased their portfolio allocation to fixed-income securities over the past few years, subjecting them to re-pricing risk. The rise in the long bond yield may have caused some difficulties for these banks.

Changes in interbank rates affect interest income directly through HIBOR-based lending. Because retail banks as a whole are net lenders in the interbank market, the rise in HIBORs relative to the effective deposit rate has raised margins on HIBOR-based lending (Chart 3.19). At the same time, it also improved returns on free funds. Following the three refinements to the operations of the Linked Exchange Rate system on 18 May 2005, the catchup of HIBORs to LIBORs and the adjustments of domestic best lending rates to reflect rate hikes in the US have proceeded more quickly, supporting the net interest margin.

Although the rises in domestic interest rates seem to be favourable to the net interest margin, the risk of sharp increases in the domestic interest rate hindering domestic loan growth is a cause for concern.

3.8 Credit risk

The proportion of classified loans and that of overdue and rescheduled loans in total loans remained low and decreased further from 1.5% and 1.0% in the December Report to 1.3% and 0.9% in 2006 Q1 respectively (Chart 3.20). The improvement in asset quality reflects continued growth of the domestic economy, which has supported corporate profitability and household income.

Table 3.BLoans for use in Hong Kong by Als

	Quarter-on-quarter change (%)				Share of total (%)	
	Jun-05	Sep-05	Dec-05	Mar-06	Mar-06	
Loans for use in Hong Kong ¹	4.2	0.0	1.8	-0.3		
Of which:						
Trade financing	12.2	-1.4	-3.8	-2.6	6.7	
Mortgages ²	1.1	-1.1	-1.3	-1.1	29.0	
Manufacturing	10.1	-2.1	3.5	-2.0	5.7	
Transport and transport						
equipment	1.2	0.9	2.2	-1.0	5.9	
Electricity and gas ³	37.9	-5.3	14.6	-10.4	1.5	
Information technology ³	20.2	38.6	-5.8	5.1	1.2	
Building, construction, property						
development and investment	2.7	2.1	7.6	0.6	22.0	
Wholesale and retail trade	6.7	-2.3	-1.3	0.8	4.9	
Financial concerns ⁴	3.4	2.2	1.0	3.6	8.9	
Stockbrokers	10.9	-7.8	-36.6	5.3	0.3	
Credit card advances	0.0	5.6	15.4	-10.6	2.7	
Notes: 1. Including trade financing loans.						

2. Mortgage loans include loans for the Home Ownership Scheme, the Private Sector Participation Scheme and the Tenants Purchase

Scheme. 3. Some categories of loans have been reclassified from March 2004.

 Come categories of loans have been reclassified from watch 2004.
 Loans for financial concerns include loans to investment and insurance companies, futures brokers and finance companies.

Source: HKMA.





Source: Monthly Survey of Residential Mortgage Lending.

Chart 3.22 Annual growth of lending to households by Als



Loan growth was generally sluggish in recent quarters. Lending analysed by economic uses was mixed in the first quarter of 2006 (Table 3.B). Within property-related loans, credit for building, construction, property development and investment expanded further, albeit at a more moderate pace. However, the outstanding stock of residential mortgage loans fell continuously, as repayments on existing mortgage loans more than offset new loans. The value of new mortgage loans has declined since the December Report (Chart 3.21), reflecting a moderation in property prices and transaction volumes. Overall, the share of propertyrelated loans in total domestic lending remained at around 51% in 2006 Q1.

Among the other sectors, loans for stockbrokers registered the biggest quarter-on-quarter increase, followed by information technology and lending to financial concerns. There were declines in credit card advances, and lending to the electricity and gas, manufacturing, transport and transport equipment, and trade financing sectors.

Household exposures

Loans to households accounted for 39.1% of the loans for use in Hong Kong in March 2006.²⁹ Mortgage is the most important type of loans to households, while the remainder comprises lending via credit cards and other loans for private purposes. By the end of March 2006, 79.5% of loans to households were used to finance residential properties.

In the first quarter of 2006, residential mortgage loans fell slightly and credit card lending declined significantly. This more than offset the increase in other lending for private purposes. On balance, the annual growth of loans to households slowed from +2.1% in December 2005 to -0.1% in March 2006 (Chart 3.22).

¹⁹ Loans to households constitute lending to professional and private individuals, excluding those for business purposes.

Chart 3.23 Effective housing capital gearing ratio



Chart 3.24 Number of bankruptcies



Source: Official Receiver's Office.

Chart 3.25 Negative equity and mortgage delinguency ratio of surveyed Als



The rebound in property prices in recent years has strengthened the balance sheets of households. This has generally improved the quality of banks' mortgage portfolios. The effective housing capital gearing, defined as the ratio of market value of total housing stocks to their net asset value (i.e. the market value less the outstanding mortgage lending from banks), has decreased substantially since 2003 (Chart 3.23).

In other areas related to loans to households, some fundamental factors also have improved. As discussed in Section 2.5, labour market conditions have continued to improve since the December Report. The unemployment rate declined slightly to 5.1% in the three months ending April 2006, from 5.3% in the three months ending December 2005, and the nominal payroll per worker rose by 3.7% in 2005 Q4 year on year. Meanwhile, the numbers of bankruptcy orders made and petitions presented in 2005 decreased to 9,810 and 9,933, from 13,593 and 12,489 in 2004, respectively (Chart 3.24). In the first quarter of 2006, the numbers were 2,525 and 2,479 respectively. These developments have improved the quality of loans to households.

In line with these improvements, the three-month delinquency ratio of overall mortgages remained low at 0.19% in March 2006, while the rescheduled loan ratio fell to 0.34% in March 2006, from 0.35% in December 2005 (Chart 3.25). Although the delinquency ratio of mortgage loans in negative equity edged up to 1.04% in March 2006, from 0.89% in December 2005, the number of cases fell from 10,983 to 9,193. At the same time, the

Chart 3.26 Charge-off ratio for credit card receivables of surveyed Als



Chart 3.27 Winding-up orders and petitions







charge-off ratio for credit card receivables dropped from an annualised rate of 2.95% in the December Report to 2.89% in 2006 Q1 (Chart 3.26).

Corporate exposures

In March 2006, loans to corporations accounted for 60.4% of loans for use in Hong Kong.³⁰ Compared with March 2005, they grew by 10.3%. Generally, loans to corporations are subject to more volatile losses than mortgage lending, which forms the major part of household exposures. A reason for this is that the available collateral is usually not as robust and simple to manage as residential properties.

As the economy has continued to grow, the credit risk of the corporate sector has diminished. The numbers of compulsory winding-up orders of companies and petitions declined from 1,147 and 1,306 in 2004 to 849 and 955 in 2005 respectively (Chart 3.27). In the first quarter of 2006, the numbers were 168 and 119 respectively. Recent developments in corporate balance sheets also suggest that the financial health of the corporate sector has further strengthened (Box 6). The preliminary figures show that the average debt-to-equity ratio in the corporate sector decreased to 40.3% in 2005, from 44.5% in 2004, and the average return on equity has improved to 13% from 12%. These indicate a lowered credit risk of corporate exposures.

In addition, default probability estimates for the corporate sector obtained from a structural model also show signs of better strength.³¹ In 2006 Q1, the aggregate estimates of the Hang Seng Index (HSI) non-financial constituent companies declined to 0.03% (Chart 3.28). And the estimates for all the HSI

³⁰ Loans to corporations comprise loans and advances for use in Hong Kong except lending to professional and private individuals.

³¹ Details of the methodology can be found in Yu and Fung (2005), "A Structural Approach to Assessing the Credit Risk of Hong Kong's Corporate Sector", *HKMA Research Memorandum*, http://www.info.gov.hk/hkma/eng/research/RM24-2005.pdf.

Source: Staff estimates.

Chart 3.29 Aggregate default probabilities of HSI constituent sectors



¹⁰ **3.9** Foreign currency position

The overall foreign currency position, including both spot and forward, for all AIs increased from the December Report to HK\$38.5 billion at the end of March 2006, but remained on a downward trend from a recent high of HK\$98.5 billion at the end of May 2003. This mainly reflects the unwinding of the sizeable foreign currency positions that were built up following the Asian financial crisis in 1997 and 1998.

constituent sectors and the red-chip constituent stocks

experienced similar declines (Chart 3.29).

Key performance indicators of the banking sector are provided in Table 3.C.

Box 6 A review of the financial health of Hong Kong corporations







A common method to assess the soundness of the corporate sector is to examine an array of financial ratios reported in companies' balance sheets. At the aggregate level, these can shed light on the vulnerability of the corporate sector and the risk of spillover effects to other parts of the economy, such as the banking sector. This box reviews the development of major financial ratios of listed non-financial companies in Hong Kong during 1990-2005.^{32,33} The number of companies covered in the study ranges from 357 to 790.

Debt leverage and liabilities structures

Generally, the higher the debt leverage of a company, the more vulnerable it is to shocks, in particular an increase in interest rates or a tightening of liquidity. As shown in Chart B6.1, the average debt-to-total asset ratio of the sample companies increased during 2000 to 2003 to reach a high of 45.6%. It then fell to below 45% in 2004. Preliminary figures indicate that it may have dropped further to 40% in 2005. The reduction in companies' debt leverage has improved the capability of the corporate sector to withstand shocks.

The maturity composition of the corporate sector's debt has shifted towards longer maturity, with the share of short-term loans to total loans declining to 22.9% in 2004 from 33.6% in 2000 (Chart B6.2). Based on preliminary figures, the ratio may have risen to 27% in 2005, but it is still well below the pre-Asian financial crisis average of 35.7%. The lower proportion of shortterm loans, compared with the pre-crisis levels, indicates an improved maturity profile of the corporate sector. However, it should be noted that the proportion of bank

³² Non-financial corporations refer to companies, excluding H-shares companies, investment companies, and those engaged in banking, insurance and finance, listed on the Hong Kong Main Board and the Growth Enterprise Market. The data are from Thomson Financial. For a review of definition and methodology, see Yu et al. (2003), "An Analysis of the Financial Health of Hong Kong Corporations", *HKMA Quarterly Bulletin*, December 2003.

³³ Note that the financial ratios for 2005 are preliminary figures and cover only a limited number of companies that had reported their 2005 results by the time of writing. They are subject to revision and should be used with caution.





Source: Thomson Financial.

Chart B6.4



loans to total loans may have increased. Preliminary figures suggest that after stabilising at around the 60% level between 2001 and 2004, the share of bank loans to total loans climbed to a post-crisis high of 71% in 2005. This may be partly due to the low interest rate environment prevailing in the first half of 2005.

Profitability

Profitability is an important indicator of corporate health, as it directly affects a company's ability to repay its debt. After a slight decline in 2003, due to the outbreak of SARS, the profitability of the corporate sector measured by profit margins rose to 31.2% in 2004, supported by a strong recovery of the economy (Chart B6.3). Preliminary figures show that the corporate profit margin improved further and may have reached a postcrisis high of 34% in 2005, as the economy registered continued robust growth.³⁴

The return on equity (ROE) is another measure of corporate profitability. Chart B6.3 indicates that after two consecutive years of sharp falls in 2000-2001 to a post-crisis low of 5.2% in 2001, the ROE staged a recovery in 2002 and accelerated in 2004 to 12%. Based on preliminary figures, the ROE is expected to have risen further to 13% in 2005.

Debt-servicing ability

The debt exposure of all corporations relative to their profit, measured by the ratio of total loans to after-tax net profit, fell from the post-crisis high of nine times in 2001 to less than four times in 2004 (Chart B6.4). Preliminary figures show that, as corporate profits increased (Chart B6.3), the ratio should have reduced further to less than three times in 2005.

The financial ratios suggest that the financial health of Hong Kong's corporate sector further improved in 2005. With lower debt leverage, an improved maturity profile, higher profitability and better ability to service debt, the financial position of Hong Kong's corporate sector has, in general, strengthened during the past few years, and its ability to withstand shocks has been improved.

³⁴ The expansion of the local economy rebounded from 3.2% in 2003 to 8.6% in 2004, and sustained at 7.3% in 2005.

	Mar-05	Dec-05	Mar-06
nterest rate ²			
1-month HIBOR ³	1.28	4.10	3.98
3-month HIBOR ³	1.50	4.26	4.15
BLR and 1-month HIBOR spread	3.75	3.27	3.77
BLR and 3-month HIBOR spread	3.53	3.11	3.60
Composite interest rate	0.80	2.88	3.00
		Retail banks	
Balance sheet developments⁴			
Total deposits	-1.3	2.8	3.7
Hong Kong Dollar	-1.1	1.4	5.2
Foreign currency	-1.4	4.9	1.6
Total loans	1.6	4.3	-0.1
Loans to customers inside Hong Kong⁵	1.6	4.1	-0.8
Loans to customers outside Hong Kong ⁶	1.9	8.0 ^r	14.3
Negotiable instruments			
Negotiable certificates of deposit issued	3.5	-2.6	-0.5
Negotiable debt instruments held	1.8	-0.1 ^r	6.2
Asset quality ⁷			
As percentage of total loans			
Pass loans	94.30	95.96	95.97
Special mention loans	3.75	2.66	2.71
Classified loans (gross) ⁸	1.95	1.38	1.32
Classified loans (net) ⁹	1.40	0.98	0.95
Overdue > 3 months and rescheduled loans	1.30	0.92	0.93
Profitability ¹⁰			
Bad debt charge as percentage of average total assets	-0.02	-0.003 ^r	0.04
Net interest margin	1.59	1.68	1.69
Cost-income ratio	42.6	41.8 ^r	41.0
Liquidity ratio ¹¹	45.8	47.7 ^r	48.2
	S	Surveyed institution	S
Asset quality			
Delinquency ratio of residential mortgage loans	0.29	0.19	0.19
Credit card receivables	0.20		0.1.0
Delinquency ratio	0.45	0.37	0.40
Charge-off ratio – quarterly annualised (adjusted)	3.18	2.72	2.89
– year-to-date annualised	3.18	2.81	2.89
jour to date unidaneou		ocally incorporated	
Capital adequacy ratio (consolidated)	15.4	14.9	15.0
Sapital adequacy fallo (consolidated)	10.4	14.5	13.0

Table 3.CKey performance indicators of the banking sector1 (%)

Notes:

¹ Figures related to Hong Kong office(s) only except where otherwise stated.

² All figures are quarterly averages except the composite interest rates, which are end-period figures.

³ With reference to the HKD Interest Settlement Rates released by the Hong Kong Association of Banks.

- ⁴ Quarterly change.
- ⁵ Loans for use in Hong Kong plus trade-financing loans.
- ⁶ Includes "others" (i.e. unallocated).
- ⁷ Figures relate to retail banks' Hong Kong office(s) and overseas branches.
- ⁸ Classified loans are those loans graded as "substandard", "doubtful" or "loss".
- ⁹ Net of specific provisions / individual impairment allowances.
- ¹⁰ Year-to-date annualised.
- ¹¹ Quarterly average.
- ^r Revised figure.

4. Outlook, risks and uncertainties

Continued strong growth and moderate inflation are expected for the global economy. In Hong Kong, growth is likely to remain robust and inflation contained. Nevertheless, uncertainties surrounding this baseline scenario have increased, including the latest surge in oil prices, the less clear path of monetary tightening in the US, larger risks of overheating and continued accumulation of significant trade surpluses on the Mainland. However, risks of sharp movements in the rates of growth, inflation and asset prices that are detrimental to Hong Kong's monetary and financial stability remain limited.

Table 4.AGlobal growth and inflation 2005-07

IMF			World Bank ¹		
2005	2006F	2007F	2005	2006F	2007F
4.8	4.9	4.7	4.4	4.3	4.4
(4.3)	(4.3)	-	(4.2)	(4.1)	-
3.5	3.4	3.3	3.5	3.5	3.6
1.3	2.0	1.9	1.1	1.4	2.0
2.7	2.8	2.1	2.3	1.8	1.7
8.2	7.9	7.6	7.8	7.6	7.4
3.8	3.8	3.5	n.a.	n.a.	n.a.
2.3	2.3	2.1	2.2	2.0	1.7
3.5	3.8	3.4	n.a.	n.a.	n.a.
	4.8 (4.3) 3.5 1.3 2.7 8.2 3.8 2.3	2005 2006F 4.8 4.9 (4.3) (4.3) 3.5 3.4 1.3 2.0 2.7 2.8 8.2 7.9 3.8 3.8 2.3 2.3	2005 2006F 2007F 4.8 4.9 4.7 (4.3) (4.3) - 3.5 3.4 3.3 1.3 2.0 1.9 2.7 2.8 2.1 8.2 7.9 7.6 3.8 3.8 3.5 2.3 2.3 2.1	2005 2006F 2007F 2005 4.8 4.9 4.7 4.4 (4.3) (4.3) - (4.2) 3.5 3.4 3.3 3.5 1.3 2.0 1.9 1.1 2.7 2.8 2.1 2.3 8.2 7.9 7.6 7.8 3.8 3.8 3.5 n.a. 2.3 2.3 2.1 2.2	2005 2006F 2007F 2005 2006F 4.8 4.9 4.7 4.4 4.3 (4.3) (4.3) - (4.2) (4.1) 3.5 3.4 3.3 3.5 3.5 1.3 2.0 1.9 1.1 1.4 2.7 2.8 2.1 2.3 1.8 8.2 7.9 7.6 7.8 7.6 3.8 3.8 3.5 n.a. n.a. 2.3 2.3 2.1 2.2 2.0

Note 1: Growth in emerging Asia covers developing countries in East Asia and the Pacific region.

 Global gowth is weighted by GDP at PPP exchange rates. For other aggregates and countries, the IMF uses PPP exchange rates, while the World Bank uses market exchange rates. Figures in brackets are previous forecasts.

Sources: IMF World Economic Outlook (Apr-06) and World Bank Global Economic Prospects 2006.

Chart 4.1 US: probability distribution of growth forecasts for 2006



Source: Staff calculations based on Consensus Forecasts

4.1 Global outlook

Robust growth in the global economy is likely to continue. The International Monetary Fund (IMF) and the World bank are projecting steady global growth in 2006. The latest forecasts by the IMF show an upward revision to 4.9% for 2006, from a previous estimate of 4.3%. This in part reflects a higher-than-expected growth of 4.8% in 2005 (Table 4.A). The Consensus Forecasts also project real GDP in 2006 to grow at a steady, but slightly faster, pace than in 2005.

In the US, growth is forecast to remain the highest among industrialised countries in 2006, although it is expected to moderate towards the latter part of the year, as the effects of the successive interest rate hikes over the past two years are gradually felt and as the housing market slows. The IMF projects real GDP growth to moderate slightly to 3.4% this year. The mean of Consensus Forecasts for US growth in 2006 has been revised slightly upward to 3.4% in May from 3.2% in February, and the distribution of forecasts has become less dispersed (Chart 4.1).

Chart 4.2 Euro area: probability distribution of growth forecasts for 2006



Source: Staff calculations based on Consensus Forecasts

Chart 4.3 Japan: probability distribution of growth forecasts for 2006



Source: Staff calculations based on Consensus Forecasts

In the euro area, economic growth picked up in the first quarter of 2006. The expansion appears to be gaining some traction, and becoming more broad-based. Nevertheless, with consumption still weak, it remains vulnerable to domestic and external shocks. The mean of the latest Consensus Forecasts for euro area growth in 2006 has remained little changed at 2.1%, compared with 2.0% in February this year (Chart 4.2).

In Japan, economic activity picked up strongly in the fourth quarter of 2005, which was by far the strongest four-quarter real growth in over a decade. The strength of the mutually-reinforcing dynamics between corporate and household spending has seen broad-based contribution to growth from consumption, business investment, and exports. The mean of Consensus Forecasts for growth in 2006 has been revised upwards to 3.0% in its latest survey from 2.3% in February (Chart 4.3).

For the Mainland, the latest Consensus Forecasts revised up real GDP growth to 9.6% in 2006 from 9.0% three months ago, partly reflecting a stronger than expected growth figure in Q1. While the accelerating growth in bank loans raised fears the economy may be on the verge of overheating, both CPI and PPI inflation remain tepid. Nevertheless, asset prices, particularly housing prices, are rising rapidly. The enlarged spread between the lending and deposit rate due to the recent lending rate hike, may induce banks to lend more, especially as the banking system has abundant liquidity. Thus, it could potentially offset the intended dampening effect on loan demand. Strong investment will also have implications for the external sector. Because of increased production capacity in China's manufacturing sector, there is potential for greater import substitution. Therefore, this casts doubt on whether the recent rebound in imports will be sustained. As the balance of payments surplus remains significant, this will continue to exert pressure on the authorities to allow the renminbi to appreciate. However, given the pre-empting policy stance by the authorities to rein in investment and credit growth, the economy is expected to moderate somewhat in the coming quarters although still at a relatively high level of growth.

Chart 4.4 US: probability distribution of inflation forecasts for 2006



Source: Staff calculations based on Consensus Forecasts

Chart 4.5 Option implied volatilities of major currencies



Note: Based on three-month at-the-money option prices. Source: JP Moroan. In other emerging Asian economies, the IMF and the World Bank are projecting continued robust growth in 2006, following strong growth of around 8% in 2005. The latest forecasts by the IMF have been revised upwards to 7.9% for 2006, from an earlier estimate of 7.3%. This partly reflects the significant upward revision for Mainland China. The growth momentum is expected to be supported by favourable global economic conditions together with the ongoing domestic demand recovery in Japan. The sources of growth are expected to broaden, with signs of more solid and steady growth in consumer spending throughout the region.

Global consumer price inflation is projected to remain stable at 3.8% in 2006 by the IMF. For the US, the mean of the latest Consensus Forecasts for CPI inflation in 2006 has been revised upwards to 3.2 % from 2.9% in February (Chart 4.4). Inflation is expected to remain benign in 2007. The IMF is projecting global consumer price inflation to ease back to 3.5% in 2007, while the Consensus Forecasts also project an easing in inflation for the same year.

In terms of the outlook for global financial conditions, markets generally expect that both short-term and longterm interest rates will rise further. Interest rate differentials are also likely to narrow as the tightening cycle in the US nears completion, while in the euro area and in Japan the cycle has just begun. Although the direction towards narrowing interest differentials seems clear, the timing is less certain. Hence, the outlook for the exchange rates of the major currencies remains clouded and volatility may increase in the foreseeable future (Chart 4.5). Nonetheless, given the marked strengthening in their balance sheets in recent years, major financial institutions are expected to cope well.

Chart 4.6 Results of Business Tendency Survey: Views on expected changes in volume of output in 2006 Q1 and Q2



Note: Net balance refers to the difference between the percentage of respondents expecting a rise over those expecting a decline. Source: C&SD.

Chart 4.7 Hong Kong: probability distribution of growth forecasts for 2006



Source: Staff estimates based on market consensus

4.2 Domestic outlook

The near-term economic outlook for Hong Kong continues to be positive. According to the Quarterly Business Tendency Survey, all covered sectors expect the volume of business and output to expand in 2006 Q2 (Chart 4.6). For all sectors as a whole, the proportion of respondents expecting the business situation to be better over those expecting it to be worse increased to 30 percentage points in Q2, from 20 percentage points in Q1. This suggests that companies in Hong Kong are generally optimistic about their near-term business prospects. Consistent with the Business Tendency Survey, the Purchasing Managers' Index also rose to 54.9 in April from an average of 54.0 in Q1, pointing to a continued expansion in private sector activity.

Real GDP is expected to register solid growth in the remainder of 2006, although at a more moderate rate compared with the remarkable growth in Q1. Despite a stronger-than-expected performance in Q1, the Government maintained its growth forecast for 2006 at 4%-5%, in light of heightened uncertainties arising from the external environment and the recent volatilities in the international financial markets. The latest market consensus projects real GDP to grow at 5.3% on average (Chart 4.7). The market generally expects that the impacts on Hong Kong of the recent policy measures imposed by the Mainland authorities to stem rapid credit growth to be modest, because the risk of a sharp slowdown in growth on the Mainland remains low. Chart 4.8 Growth in Hong Kong's main trading partners



Sources: Consensus Forecasts and staff estimates





Export growth in 2006 is expected to moderate somewhat from the double-digit rate of increase in 2005, reflecting a high base of comparison and the effects of the trade protectionist measures by the US and EU against the Mainland. However, favourable economic conditions in Hong Kong's major trading partners and the expected weakening of the US dollar should help support Hong Kong's exports (Chart 4.8). In addition, growth in exports of services is expected to remain robust, supported by the third phase of the Closer Economic Partnership Arrangement, which further relaxes the market access conditions for Hong Kong service suppliers to the Mainland market.

Domestic demand is expected to remain firm in 2006. The improvement in labour market conditions should continue to support consumer spending. Although higher interest rates and slower growth in export earnings are likely to restrain domestic demand growth. While it is generally expected the magnitude of further monetary tightening in the US will be limited, uncertainties in the interest rate outlook appear to increase. If the US Fed pauses its monetary tightening cycle, this will support asset prices, particularly property prices, and thus benefit domestic demand via the balance sheet and wealth effects. However, if the monetary tightening process continues, not only will it increase the debt burden of households with mortgage loans, but the market sentiment will be adversely affected, which may hurt asset markets and possibly dampen private consumption.

Having risen steadily over the past year, consumer price inflation is expected to maintain at its current pace in the remainder of 2006. The rental component of the Composite CPI (CCPI) has been the key driver of the recent pick up in headline inflation. Looking ahead, higher residential rents will exert further upward pressure on the CCPI because increases in market rents will continue to feed through into the rental component as rental contracts are renewed. Chart 4.9 shows that the rental component correlates closely with movements in the 24-month moving average of the private residential rental index. The dotted lines suggest that, even if the rental index stabilises at its current level, the rental component will continue to adjust upwards. Nevertheless, market rentals have shown signs of





Source: Staff estimates based on market consensus

stabilisation in recent quarters, pointing to diminishing upward pressure on the CCPI if this trend continues. However, external factors, such as high oil prices, the appreciation of the renminbi, and the weakening of the US dollar could also feed into higher import prices. Although relatively low unit labour costs brought about by rising labour productivity and higher investment in machinery and equipment should help contain inflationary pressures. In addition, the expected moderation in growth is also likely to keep inflation at a modest pace. The latest market consensus predicts consumer price inflation to edge up to 2.3% in 2006, from 1.1% in 2005 (Chart 4.10). The Government revised down its inflation forecast for 2006 from 2.3% in February to 2.0% in May. However, the downward revision largely reflects the rebasing of the CCPI. The earlier forecast of 2.3% was calculated on the old 1999/ 2000-based CCPI, and the latest forecast relates to the newly-released 2004/2005-based index (see Box 3).

4.3 Uncertainties and risks

In summary, we envisage a baseline scenario of robust growth and moderate inflation in Hong Kong in the period ahead. Nevertheless, the uncertainties surrounding this baseline have increased, compared with the situation six months ago. Specifically, the latest surge in oil prices, the less-than-clear path of monetary tightening in the US, renewed signs of overheating and continued accumulation of large trade surpluses on the Mainland convey a higher degree of uncertainty in the monetary conditions in Hong Kong and market expectations of earnings growth looking ahead. At the same time, although there is much less media attention on an avian flu pandemic, the risk of an outbreak continues to lurk in the background.

The outlook for global growth and inflation has become more clouded as a result of persistently high and volatile oil prices. As pointed out by the IMF in its recent analysis of world and regional outlook, while rising oil bills have so far had only a moderate effect on global economic activity and inflation, this may change in the future. With prices increasingly driven by supply-side concerns, the adverse impact is likely to be greater than in the recent past, especially if the price hikes are considered more permanent and feed-through to core inflation increases. Consequently, central banks have emphasised growing inflation risks, although there is considerable uncertainty as to the future path of further tightening. Such uncertainty may increase volatility in asset prices and sour investor sentiment globally, including Hong Kong.

Long-term interest rates in the major financial markets have increased since early March. While the recent increase in long-term yields may represent a correction after a period of unusually low real rates, it begs the question of what factors have driven long-term real interest rates higher, and how far this increase will go. At the same time, the attention of market participants in the foreign exchange markets seems to have shifted gradually from changes in expected interest rate differentials to more structural factors, such as the global current account imbalances. The US dollar depreciated rapidly against the euro and the yen in mid-April. Nevertheless, it is not clear how much further the realignment of the exchange rates of the major currencies will take place.

Some segments of the global financial system could be vulnerable to deterioration in financial conditions. In developed economies, the greatest risks appear to lie in the household sector, particularly in countries where housing markets are elevated. In Asia, although banking soundness has improved, banks in some countries have experienced rapid growth of credit to households and may suffer from higher non-performing loans in tighter financial conditions. Asia has also benefited from the run-up in emerging market equity prices and, like other regions, could see price declines if foreign investors were to pull back amid a rise in global risk aversion.

Risks of overheating in Mainland China are becoming larger with a rapid pick up in the growth of bank lending. The authorities acted early by raising the benchmark lending rate and imposing controls on selective investment activities. Nevertheless, there is considerable uncertainty as to the amount and the strength of further tightening measures that may be needed. The trade surplus also stayed at record highs. While not being named a "currency manipulator" by the US Treasury in its latest report on exchange rate policies may have allowed the Mainland to avoid a trade war, a continued build-up of trade surpluses raises the risk of an escalation in trade protectionism against the Mainland.

In the face of such heightened external uncertainties, Hong Kong's monetary conditions and prospects of export earnings growth could be subject to greater volatilities. Nevertheless, they will be shielded from large downside risks. Indeed, the risks to Hong Kong's growth and inflation are broadly balanced. While further increases in interest rates in the US will also tend to tighten monetary conditions in Hong Kong, strengthened expectations for a further renminbi appreciation, as a result of swelling Mainland trade surpluses, is likely to attract fund flows into Hong Kong. This would offset some of the tightening effect of rising US dollar interest rates. And, although slowing Mainland exports to the US could reduce Hong Kong's re-export margins, buoyant domestic demand growth on the Mainland provides some cushion to Hong Kong, because of the increased demand for Hong Kong's services in intermediating the Mainland's imports from other parts of the world.

Overall, increased uncertainty in the external environment may lead to higher volatilities in the major economic and financial market indicators in Hong Kong in the period ahead. Vigilance is required in monitoring the impact of larger-than-expected market volatilities. However, risks of sharp movements in the rates of growth, inflation and asset prices that are detrimental to monetary and financial stability remain limited.

Glossary of terms

Aggregate Balance

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 for settling interbank payments and payments between banks and the HKMA. The Aggregate Balance represents the level of interbank liquidity.

Authorized Institution (AI)

An institution authorized under the Banking Ordinance to carry on the business of taking deposits. Hong Kong maintains a Three-Tier Banking System, which comprises licensed banks, restricted licence banks (RLBs) and deposit-taking companies (DTCs).

Backing Assets/Backing Portfolio

Specific US dollar assets of the Exchange Fund that have been designated to provide backing to the Monetary Base.

Backing Ratio

The ratio between the Backing Assets and the Monetary Base. When the Currency Board Account was first set up, sufficient US dollar assets were transferred to the Currency Board Account to provide a 105% backing of the Monetary Base (the Backing Portfolio). Under a new arrangement approved by the Financial Secretary in January 2000, when the Backing Ratio reaches 112.5% (the upper trigger point), assets will be transferred out of the Backing Portfolio to the Investment Portfolio of the Exchange Fund assets to reduce the ratio to 110%. Conversely, should the ratio drop to 105% (the lower trigger point), assets will be injected from the Investment Portfolio to restore it to 107.5%. This arrangement enables a higher investment return on excess assets while ensuring sufficient liquid assets in the Backing Portfolio.

Best Lending Rate

A benchmark interest rate that banks use to price loans. In Hong Kong, the Best Lending Rate is often used as a base for quoting interest rates on mortgage loans.

Certificates of Indebtedness

Certificates issued by the Financial Secretary under the Exchange Fund Ordinance, to be held by note-issuing banks as cover for the banknotes they issue.

Closer Economic Partnership Arrangement (CEPA)

A free trade agreement between the Government of the Hong Kong Special Administrative Region and the Central People's Government of the People's Republic of China (the Mainland) signed on 29 June 2003. CEPA aims to strengthen trade and investment co-operation between the Mainland and Hong Kong, through progressively reducing tariff and non-tariff barriers on trade in goods and services, and facilitating trade and investment activities.

Composite Consumer Price Index

The headline consumer price index (CPI) for Hong Kong. The Census and Statistics Department compiles three separate CPI series relating to households in different expenditure ranges. The CPI(A) relates to about 50% of households in the relatively low expenditure range; the CPI(B) relates to the next 30% of households in the medium expenditure range; and the CPI(C) relates to the next 10% of households in the relatively high expenditure range. The Composite CPI is compiled based on the aggregate expenditure pattern of all of the above households taken together.

Composite Interest Rate

The weighted average interest rate of all Hong Kong dollar interest-bearing liabilities, which include deposits from customers, amounts due to banks, negotiable certificates of deposit and other debt instruments, and Hong Kong dollar non-interest bearing demand deposits on the books of banks.

Consolidated Account

A government account, which gives an overview of the financial position and cash resources of the Government of the Hong Kong Special Administrative Region. It is prepared on a cash basis and comprises the General Revenue Account and the eight government funds: Capital Works Reserve Fund, Capital Investment Fund, Civil Service Pension Reserve Fund, Disaster Relief Fund, Innovation and Technology Fund, Land Fund, Loan Fund and Lotteries Fund.

Convertibility Undertaking

An undertaking by a central bank or currency board to convert domestic currency into foreign currency (or vice versa) at a fixed exchange rate. In the case of Hong Kong, the HKMA operates Convertibility Undertakings on both the strong side and the weak side of the Linked Rate of 7.80. Under the strong-side Convertibility Undertaking, the HKMA undertakes to buy US dollars from licensed banks at 7.75. Under the weak-side Convertibility Undertaking, the HKMA undertakes to sell US dollars at 7.85. Within the Convertibility Zone between 7.75 and 7.85, the HKMA may choose to conduct market operations consistent with Currency Board principles with the aim of promoting the smooth functioning of the money and foreign exchange markets.

Delinquency Ratio in Negative Equity

The ratio of negative equity mortgage loans delinquent for more than three months to the total negative equity mortgage loans.

Exchange Fund Bills and Notes

Debt instruments issued by the HKMA for the account of the Exchange Fund. Introduced in March 1990, the Exchange Fund Bills and Notes programme has expanded over the years, with a maturity profile ranging from three months to 10 years. These instruments are fully backed by the foreign reserves. The HKMA has undertaken that new Exchange Fund paper will only be issued when there is an inflow of funds, thus enabling the additional paper to be fully backed by the foreign reserves. Since 1 April 1999, interest payments on Exchange Fund paper have been allowed to expand the Monetary Base. Additional Exchange Fund paper is issued to absorb such interest payments.

Liquidity Ratio

All authorized institutions in Hong Kong are required to meet a minimum monthly average liquidity ratio of 25%. This is calculated as the ratio of liquefiable assets (e.g. marketable debt securities and loans repayable within one month subject to their respective liquidity conversion factors) to qualifying liabilities (basically all liabilities due within one month). The method of calculation and its components are specified in the Fourth Schedule to the Banking Ordinance.

Monetary Base

Part of the monetary liabilities of a central bank. The monetary base is defined, at the minimum, as the sum of the currency in circulation (banknotes and coins) and the balance of the banking system held with the central bank (the reserve balance or the clearing balance). In Hong Kong, the Monetary Base comprises Certificates of Indebtedness (for backing the banknotes issued by the note-issuing banks), government-issued notes and coins in circulation, the balance of the clearing accounts of banks kept with the HKMA, and Exchange Fund Bills and Notes.

Mortgage Delinquency Ratio

The ratio of total amount of loans overdue for more than three months to total outstanding loans. It is obtained from the monthly Residential Mortgage Survey.

Mortgage Loans in Negative Equity

A mortgage loan with the outstanding loan amount exceeding the current market value of the mortgaged property.

Operating Account

A government account, which comprises mainly the General Revenue Account, but excludes those revenue items which are treated as capital revenue and includes investment income of the Land Fund.

Rescheduled Loan Ratio

The ratio of total amount of rescheduled loans to total outstanding loans.

Underemployment Rate

The number of underemployed persons, who are involuntarily working for less than 35 hours a week, as a proportion of the labour force.

Abbreviations

3m moving avg	Three-month Moving Average
3m-on-3m	Three-month-on-three-month
ASEAN	Association of Southeast Asian Nations
Als	Authorized Institutions
bn	Billion
BLR	Best Lending Rate
BoE	Bank of England
BoJ	Bank of Japan
BoP	Balance of Payments
ССРІ	Composite Consumer Price Index
C&SD	Census and Statistics Department
CPI	Consumer Price Index
CU	Convertibility Undertaking
ECB	European Central Bank
EMBI+	Emerging Market Bond Index Plus
EU	European Union
FDI	Foreign Direct Investment
Fed	Federal Reserve Board
FOMC	Federal Open Market Committee
FX	Foreign Exchange
GDP	Gross Domestic Product
HIBOR	Hong Kong Interbank Offered Rate
HICP	Harmonised Index of Consumer Prices
HKMA	Hong Kong Monetary Authority
HSI	Hang Seng Index
IMF	International Monetary Fund
IPOs	Initial Public Offerings
IT	Information Technology
lhs	Left-hand Scale
ISM	Institute for Supply Management
JGB	Japanese Government Bond
JPY	Japanese yen
LIBOR	London Interbank Offered Rate
mn	Million
n.a.	Not available

NIEs	Newly Industrialised Economies
NPLs	Non-performing Loans
PBoC	People's Bank of China
PCE	Private Consumption Expenditure
PD	Default Probability
PMI	Purchasing Managers' Index
PPP	Purchasing Power Parity
qoq	Quarter-on-quarter
QDII	Qualified Domestic Institutional Investors
rhs	Right-hand Scale
RMB	Renminbi
ROE	Return on Equity
Sa	Seasonally Adjusted
SARS	Severe Acute Respiratory Syndrome
S&P 500	Standard and Poor's 500 Index
USD	US dollar
WTI	West Texas Intermediate
уоу	Year-on-year