

1.1 External Developments

Growth Moderated in Developed Economies but Remained Resilient in Asia

Following three consecutive years of strong growth, the G3 economies expanded at a more moderate pace of 2% in H1 2007, from around 3% in 2006. (Chart 1.1) However, the impact of the slowdown in the G3 economies has, to some extent, been offset by the continued strong expansion in the larger emerging economies, such as China and India. Against this fairly sanguine backdrop and lifted by stronger domestic demand – especially private consumption – most East Asian economies performed well in H1 this year.

The US economy grew at a more moderate pace in H1, with weakness in housing and consumer spending.

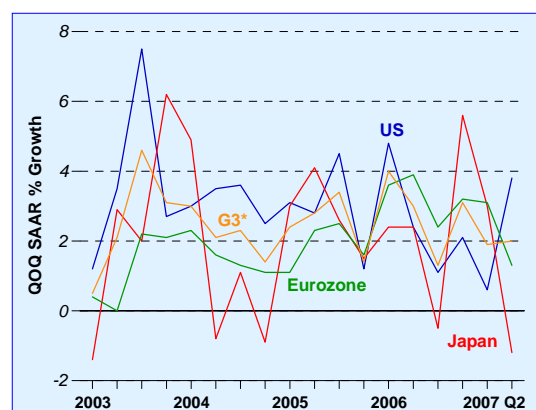
The US economy grew at a slower pace of 2.2% in H1 2007, compared to around 3% for the whole of 2006. Growth rebounded to 3.8% q-o-q SAAR in Q2 2007, from a weak 0.6% in Q1. Notwithstanding the stronger headline GDP growth in Q2, there were weaknesses in some areas of the economy. In particular, housing remained sluggish, with residential investments contracting for the sixth consecutive quarter. This mirrored the poor existing home sales, which declined on a sequential basis during the quarter and continued to fall to a record low in September. The sustained weakness in house prices (Chart 1.2), job cuts in housing-related sectors and higher gasoline prices also weighed on consumer spending, which rose by 1.4% q-o-q SAAR, the slowest since Q4 2005.

GDP growth in the Eurozone and Japan also slowed.

Economic growth in the Eurozone eased to 1.3% q-o-q SAAR in Q2 2007, from a buoyant 3.1% in the first quarter. Fixed investments contracted marginally after posting a strong 7.8% growth in Q1, as business confidence moderated from previously elevated levels.

However, consumer spending picked up on the back of a strong labour market, with unemployment rate at a historic low. Meanwhile, Japan's real GDP contracted by

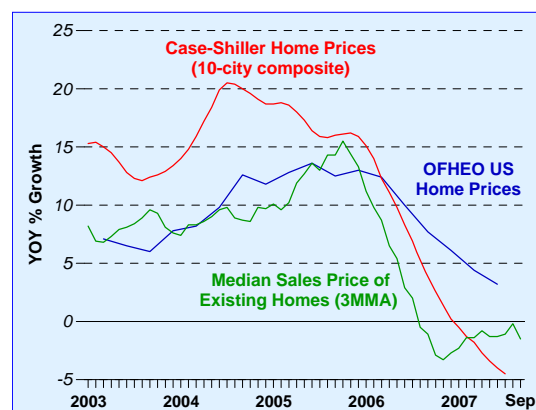
Chart 1.1
G3 GDP Growth



Source: Datastream

* Weighted by 2005 nominal GDP in US\$

Chart 1.2
US House Prices



Source: CEIC and Bloomberg

1.2% q-o-q SAAR in Q2 2007, after expanding by a robust 3% in Q1. Averaging the quarterly fluctuations, the Japanese economy grew by around 1% in H1, a fairly significant slowdown from the 2.2% growth in 2006. The weakness in the second quarter was broad-based, with residential and non-residential fixed investments contracting, while exports and personal consumption slowed.

Economic activity in Asia remained buoyant, supported by firm domestic demand.

Apart from Japan, many Asian economies continued to grow at a rapid pace in Q2 2007, led by China, which expanded by 12% y-o-y, up from 11% in Q1 2007. (Table 1.1) While export growth eased across much of Asia in line with the consolidation in the global IT industry, overall economic activity was supported by firmer domestic demand, which expanded by 4.9% y-o-y in Q2 2007, the fastest in three years. (Chart 1.3) In particular, household spending was strong, buttressed by sustained employment and disposable income growth, which boosted consumer confidence. Fixed investments also grew strongly in most countries, in part to address increasingly tight capacity and emerging infrastructure bottlenecks.

Global financial conditions tightened temporarily in July and August, but eased following the Fed rate cut in mid-September.

Financial and credit market conditions tightened across a number of major economies in July and August. In the ensuing rise in risk aversion and flight to quality, short-term interest rates rose sharply in a number of countries (Charts 1.4 and 1.5), as banks hoarded liquidity and tightened lending criteria. Asset prices, especially for equities and US subprime mortgage securities, also corrected sharply in August.

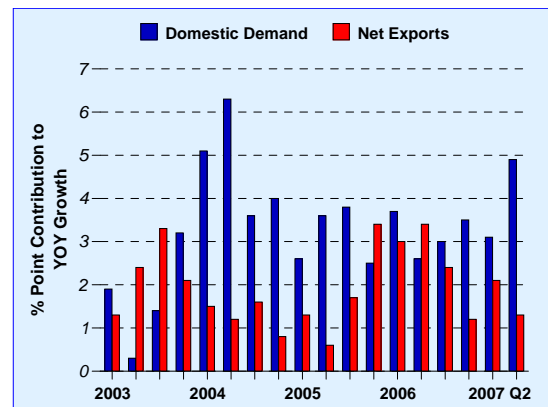
More recently, global financial conditions have eased after the US Federal Reserve cut the overnight Fed funds rate by 50 bps on 18 September. Likewise, stock prices have staged a recovery after the sharp decline in August.

**Table 1.1
East Asian GDP Growth
y-o-y (%)**

	2005	2006	2007	
			Q1	Q2
China	10.4	11.1	11.1	11.9
Hong Kong	7.1	6.8	5.6	6.6
Indonesia	5.7	5.5	6.0	6.3
Korea	4.2	5.0	4.0	5.0
Malaysia	5.0	5.9	5.5	5.7
Philippines	4.9	5.4	7.1	7.5
Singapore	6.6	7.9	6.5	8.7
Taiwan	4.1	4.7	4.2	5.1
Thailand	4.5	5.0	4.2	4.4

Source: CEIC

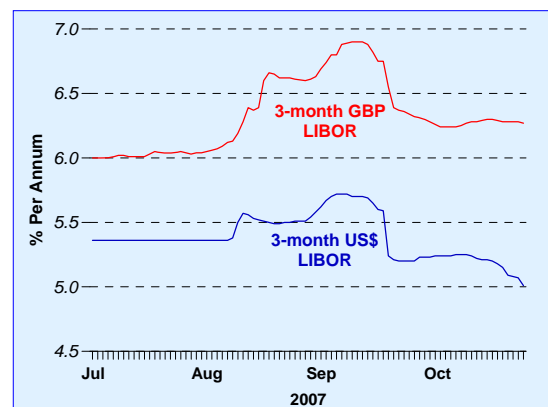
**Chart 1.3
Contribution to EA-8 GDP Growth**



Source: CEIC

Note: EA-8 refers to the East Asia-8 economies, namely Hong Kong, Indonesia, Korea, Malaysia, Singapore, Philippines, Taiwan and Thailand.

**Chart 1.4
Interbank Interest Rates**



Source: CEIC

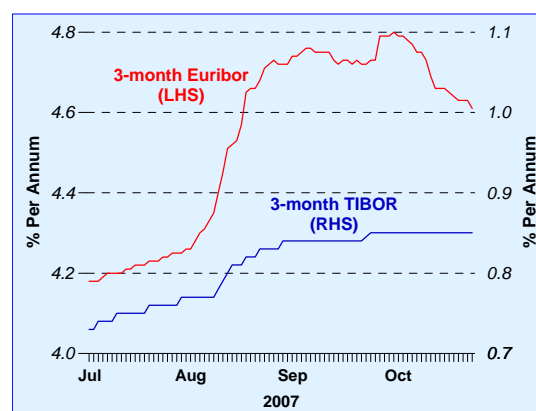
**Inflationary pressures are generally contained,
allowing some central banks to adopt a less
hawkish monetary policy.**

Global inflation has remained generally well-contained this year. The housing market correction in the US has checked the increase in the prices of housing-related items in the CPI, while headline inflation in the Eurozone fell to a 10-month low in August. The Japanese economy remained in mild deflation in the second quarter. While headline CPI has edged up in some Asian countries in recent months, particularly in China, this largely reflected near-term supply factors. Nevertheless, strong global demand has resulted in higher food and/or energy prices in a number of countries.

Core inflation has remained at moderate levels in most economies. This provided some room for a number of central banks to mitigate the potentially adverse impact of tighter financial conditions on economic activity. Notably, the US Federal Open Market Committee lowered the overnight Fed funds target rate by 50 bps to 4.75% at its September policy meeting. Meanwhile, the European Central Bank and the Bank of Japan opted to keep policy rates on hold, but injected liquidity in the interbank markets to ease the credit crunch.

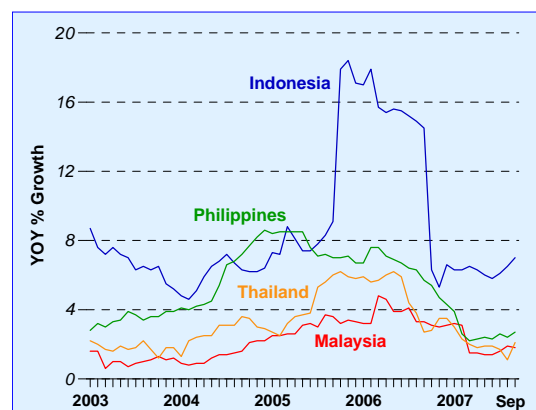
Central banks in the Southeast Asian economies of Thailand, Indonesia and the Philippines have also kept monetary policy on hold, as inflationary pressures remained relatively contained. (Chart 1.6) In comparison, central banks in Northeast Asia have generally maintained a tight monetary policy stance in view of stronger inflationary pressures. For example, overheating concerns prompted the People's Bank of China to raise the reserve requirement ratio and policy interest rate by a total of 300 bps and 117 bps respectively since the start of this year. The Central Bank of the Republic of China (Taiwan) also raised interest rates at its September meeting, citing concerns about rising price pressures due to higher import costs, solid underlying growth momentum and a tight labour market.

**Chart 1.5
Interbank Interest Rates**



Source: CEIC

**Chart 1.6
CPI Inflation**



Source: CEIC

1.2 Domestic Economy

Seemingly Unrelenting Growth

Strong momentum was seen in the Singapore economy at the half-year mark.

The Singapore economy grew strongly in H1 2007, expanding by 7.6% compared to the same period last year. Growth momentum reached 14% q-o-q SAAR in Q2 2007, on the heels of an 8.9% expansion in the preceding quarter. The expansion was broad-based, with rapid growth recorded in financial services, non-electronics manufacturing and construction. (Chart 1.7)

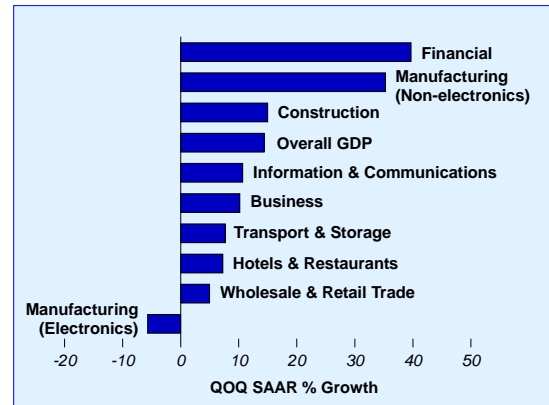
Electronics manufacturing was the exception.

The IT-related cluster – comprising electronics manufacturing and its related services industries – was the only laggard in Q2. Electronics production shrank by 5.7% q-o-q SAAR in Q2 amidst lacklustre conditions in the global IT market, reversing the 23% growth in the preceding quarter. (Chart 1.8)

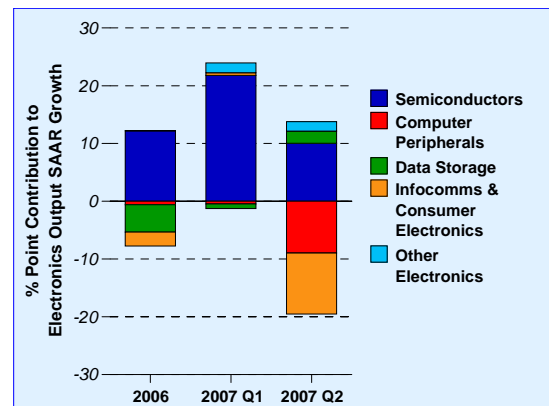
Production of semiconductors – the largest segment within the domestic electronics industry – moderated sharply in Q2 alongside severe price pressures in the global chip industry. Chip prices, as estimated by the US Producer Price Index (PPI) of integrated circuits (ICs), began their steep descent at the beginning of the year and fell a further 6.8% q-o-q in Q2, triggered by overcapacity and an escalation of the inventory build-up worldwide. (Chart 1.9) Heightened midstream competition – as producers of final products sourced from a wider range of semiconductor suppliers – further intensified price pressures in the global semiconductor industry, squeezing operating margins across chip companies.

Meanwhile, output of the other electronics segments, including computer peripherals and infocomms & consumer electronics, were affected by company-specific factors. The fall in overall output, for example, was due to declines in the global market share of manufacturers of particular products.

**Chart 1.7
GDP Growth, Q2 2007**

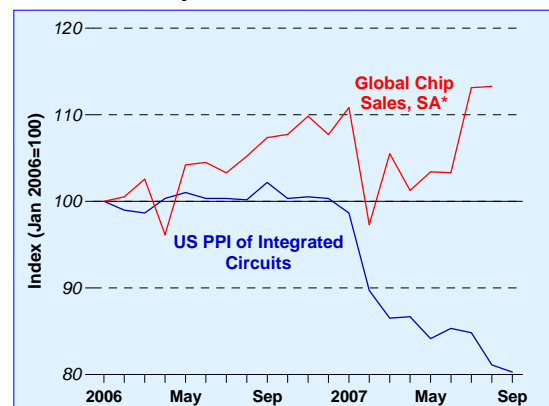


**Chart 1.8
Contribution to Electronics Output Growth**



Source: EPD, MAS estimates

**Chart 1.9
Global Chip Sales and US PPI of ICs**



* EPD, MAS estimates

Source: Semiconductor Industry Association for global chip sales, US Bureau of Labour Statistics for US PPI of ICs

The general weakness in the domestic and regional IT industries caused some spillover to transport-hub services. Entrepôt trade fell by 6.6% q-o-q SAAR in Q2, dragged down by a 19% drop in electronics re-exports. The weakness was concentrated in the semiconductor re-export segment, which saw a 24% decline, and was reflective of the pricing squeeze in the global chip industry.

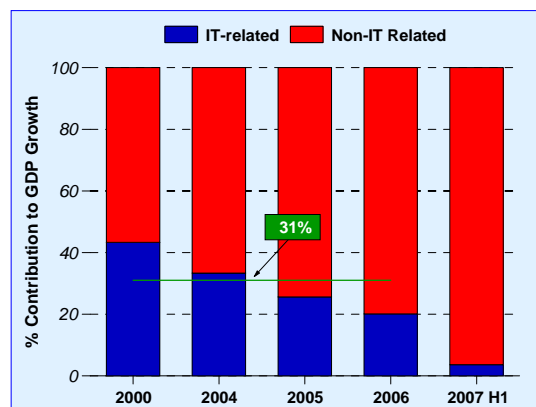
IT's contribution to GDP growth declined in H1.

The contribution of the IT-related industries to overall GDP growth has accordingly declined in importance this year. Chart 1.10 illustrates the contribution of IT and non IT-related industries during various "strong-growth" years since 2000 when GDP growth was above 6%. Together, electronics manufacturing and IT-related services have been an important pillar of growth, contributing about one-third to overall GDP growth over the period 2000-06. However, the contribution of this IT-related cluster fell to about 4% in the first half of 2007.

Non-IT drivers of growth have emerged from both external and domestic sources.

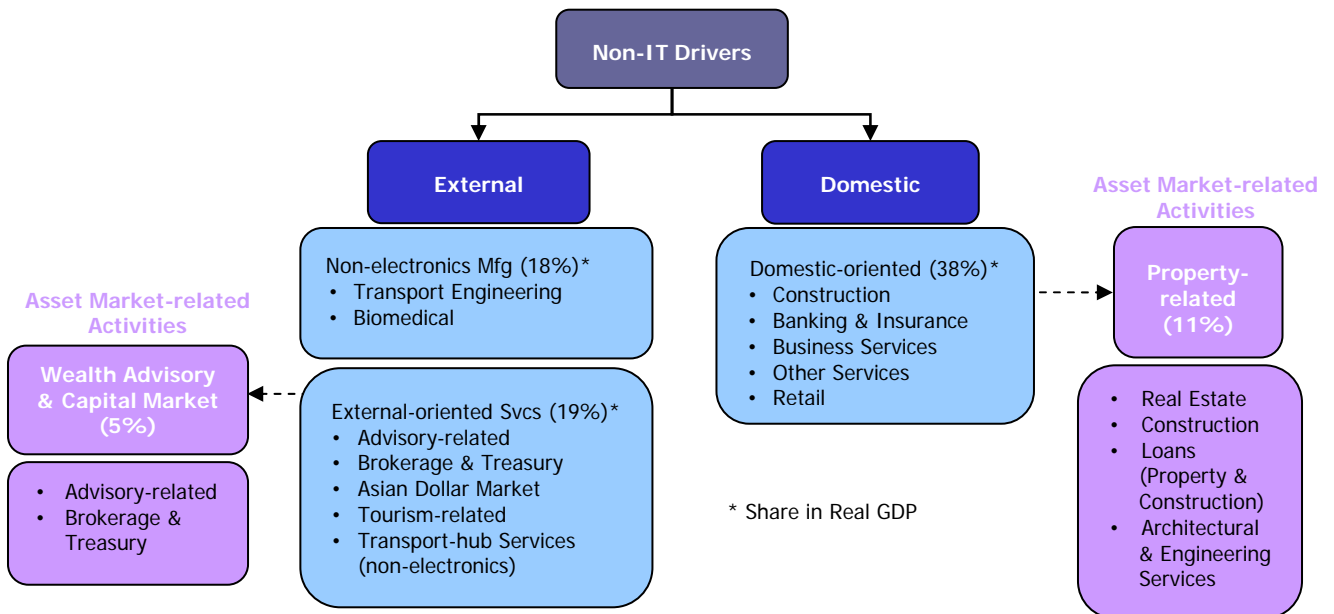
In comparison, the non-IT engines of growth have provided a significant boost to the economy this year. In the April 2007 issue of the *Review*, these non-IT industries were categorised into non-electronics manufacturing, external-oriented services and domestic-oriented industries. This categorisation helped to identify the other relatively stable sources of growth in the economy in light of the weakening IT-related cluster. Each of these non-IT industries has very different dynamics and supports. (Figure 1.1)

Chart 1.10
Contribution to GDP Growth



Source: EPD, MAS estimates

**Figure 1.1
Non-IT Drivers of Growth**



Source: EPD, MAS estimates
Note: Only a selected list of key activities is shown in the boxes.

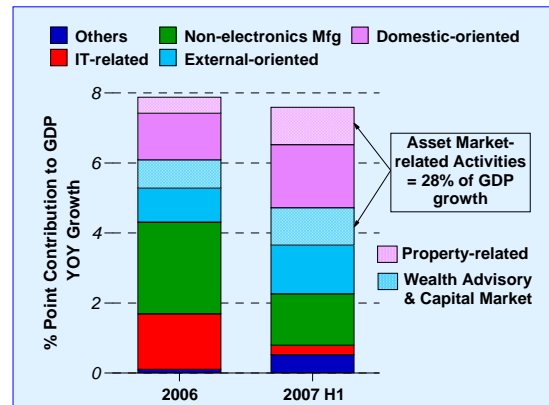
Strong growth in asset market-related activities was observed in H1 2007 ...

An interesting trend within the non-IT segment is the strong performance and increased contribution of “asset market-related” activities to overall growth. (Chart 1.11) These activities cut across the external-oriented services and domestic-oriented industries, which have seen their contributions soar in H1 2007. Asset market-related activities alone contributed almost 30% to GDP growth in H1, up from 16% last year. (Chart 1.12)

... reflecting the rapid expansion of emerging segments within the financial services sector ...

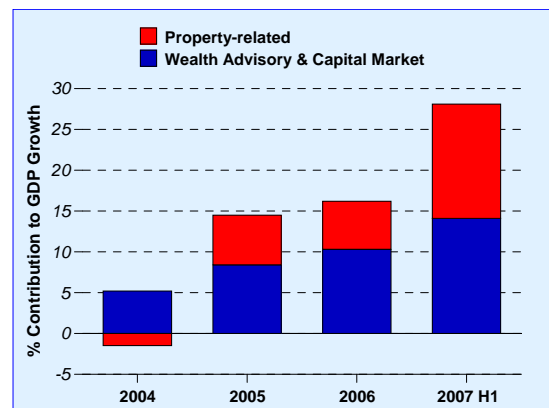
Selected segments in financial services make up the first group of asset market-related activities. (Chart 1.12) These are the wealth advisory and capital market segments, which have benefited from the buoyant investment climate in the first half of the year. In the wealth advisory segment, demand was also boosted by the rapid growth of private investible wealth in Asia-Pacific, including Singapore. The latest *Asia Pacific Wealth Report* by Merrill Lynch and Capgemini reported an 8.6% expansion in Asian high net worth individuals in the region in 2006, with Singapore showing a strong 21% increase.

**Chart 1.11
Contribution to GDP Growth**



Source: EPD, MAS estimates

**Chart 1.12
Asset Market-related Activities**



Source: EPD, MAS estimates

The strong performance of Asia as a whole has also enhanced Singapore's standing as an investment destination for global investors. Domestic capital markets turned in a solid showing in H1 2007. Trading activity in the stock market surged, as equity prices saw a sustained rise. Turnover volumes were markedly higher in Q2, growing by 45% over the previous quarter. (Chart 1.13) In the debt market, activity was boosted by the issuance of project bonds by developers to meet infrastructure financing demands, alongside the ongoing property market boom. Meanwhile, forex market activity surged to new highs in Q1-Q2 2007 (Chart 1.14), fuelled in part by the continued buildup in yen carry trades. At the same time, the non-interest income of the offshore banking segment has been driven in part by the rise in M&A activities, as corporates sought to buy into the fast-growing regional telecommunication market.

... as well as property-related activities.

The second group of asset market-related activities is linked to the property market.

The Singapore property market saw a sustained upturn in Q2. Private property prices climbed by 8.3% during the quarter, the strongest quarterly increase since Q2 1999. This brought the price appreciation in the first six months of the year to 13.5%. (Chart 1.15) The price increase in Q2 was more broad-based than in previous quarters, with the Rest of Central Region (RCR) and Outside Central Region (OCR) recording strong growth in tandem with the Core Central Region (CCR).¹ (Chart 1.16)

In addition, the increase in property prices has extended to the public segment. The HDB resale price index rose by 3.0% in Q2, following a 1.3% gain in the first quarter. (Chart 1.15) Property analysts have partly attributed this to the purchase of large HDB units – five-room and executive flats – by property owners who had sold their apartments in en bloc transactions.

Chart 1.13
Stock Market Total Turnover and
Straits Times Index (STI)

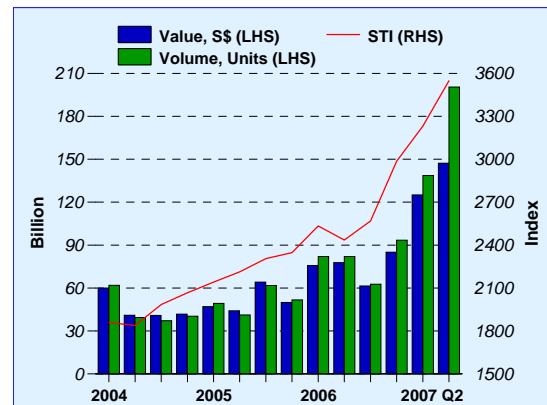


Chart 1.14
Total Forex Turnover

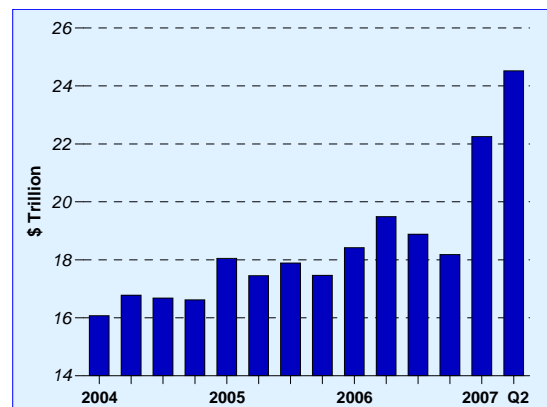
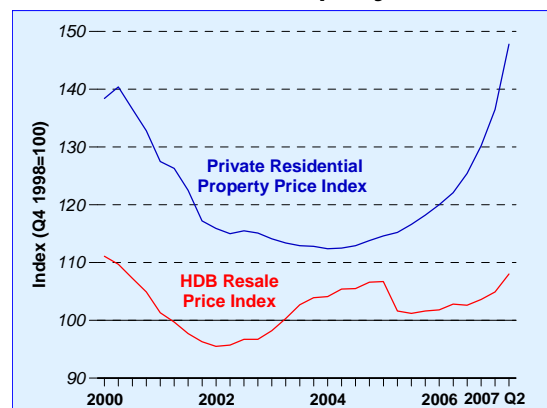


Chart 1.15
Private Residential Property Price Index



¹ CCR consists of postal districts 9, 10, 11, Downtown Core and Sentosa. RCR broadly refers to the districts bordering the CCR. OCR refers to the remaining districts.

The strong recovery in the property market has spurred the growth of a number of related activities in other sectors of the economy. Figure 1.2 shows the timeline and typical stages of a construction project from excavation to finishing work. The table below it attempts to map the economic activities that are associated with each stage of the project.

The first half of 2007 witnessed a significant amount of upstream Stage 1 construction activity, driven by the start-up of large-scale non-residential projects such as the Marina Sands Integrated Resort and the Marina Bay Financial Centre. Indeed, certified payments from the non-residential segment surged by 32% in H1, significantly higher than the 11% growth for 2006.

The uptick in construction activity has spilled over into financial and business services. (Chart 1.17) For example, loans to the building and construction industry have registered double-digit growth since H2 last year. More recently in Q2, there was a concerted pickup in housing loans as well, with growth hitting 11% as of end-August. The business services sector also grew more rapidly this year, with the property-related segments such as real estate and architectural & engineering services being the main beneficiaries.

Chart 1.16
Price Indices of Non-landed Properties by Locality

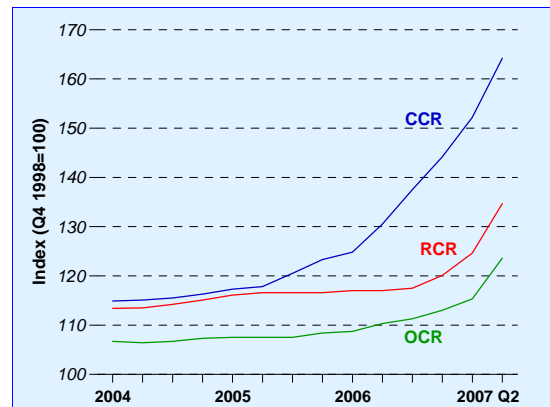


Chart 1.17
DBU Loans

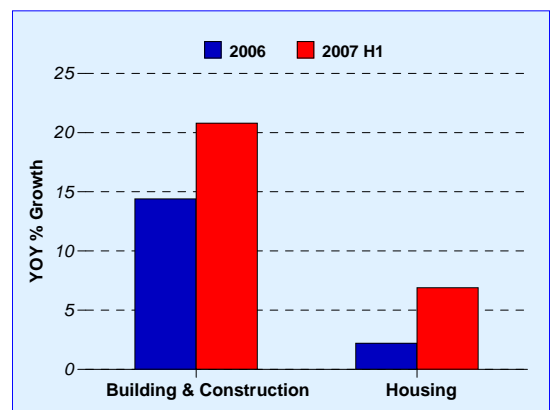
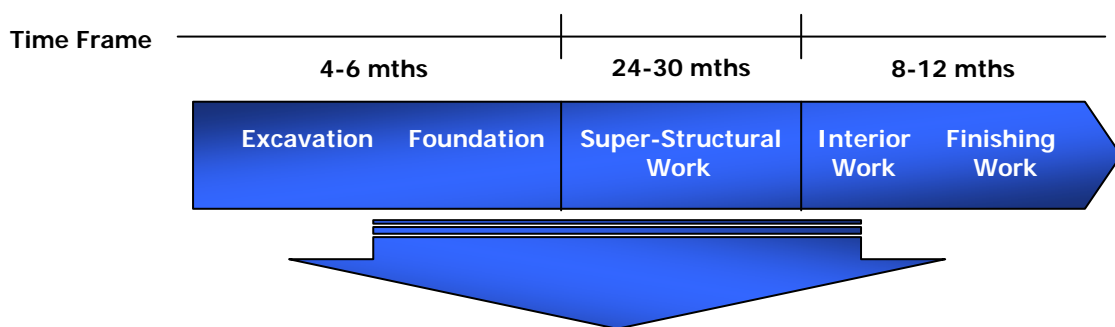


Figure 1.2
Property-related Activities



Sectors	Stage 1	Stage 2	Stage 3
Construction	Certified Payments	Certified Payments	-
Financial Services	Bank Loans (Building & Construction)	Bank Loans (Housing)	Bank Loans (Housing)
Business Services	Real Estate (Developers) Architectural Services	-	Real Estate (Consulting & Marketing) Engineering Services

The other non-IT segments also performed well.

Meanwhile, the other non-IT segments also turned in strong growth in the first half of this year.

In the non-electronics manufacturing segment, output expanded strongly by 35% q-o-q SAAR in Q2, more than reversing the 20% decline in Q1. Growth was bolstered by the biomedical and transport engineering clusters, which surged by 100% and 34% respectively.

Biomedical output was lifted by the sharp turnaround in pharmaceutical production, which reflected a short-term shift in the product mix to higher value added active ingredients. At the same time, the marine & offshore engineering segment expanded rapidly, as shipyards continued to ramp up to meet robust demand for oil exploration equipment in locations such as the Northern Atlantic Ocean and the Gulf of Mexico, in tandem with the strong global demand for energy.

The tourism-related services cluster in H1 continued to be supported by growth in visitors from the Asian region. Average hotel room rates scaled new heights to hit \$210 per night in June as the hospitality industry benefited from the increase in visitor arrivals in Q2. (Chart 1.18)

Growth in the domestic-oriented services also remained firm in Q2, amidst generally positive consumer sentiment and a healthy labour market. In particular, retail sales volume grew by 14% q-o-q SAAR, significantly higher than the 5% increase in Q1. For most of 2006, retail sales were driven by motor vehicles. In comparison, sales were dominated by big-ticket items and department store merchandise in H1 this year. (Chart 1.19)

Some slowdown in growth momentum in Q3 ...

Following the blistering pace in H1, growth momentum in the Singapore economy slowed in Q3. According to the Advance Estimates, sequential GDP growth moderated to 6.4% in Q3. The non-electronics manufacturing industries were the key supports to growth, largely as a result of the spike in pharmaceutical output, which surged by 170% q-o-q SAAR.

Chart 1.18
Visitor Arrivals and Average Hotel Room Rate

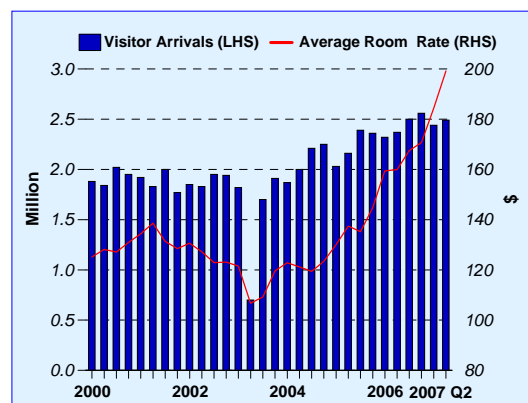
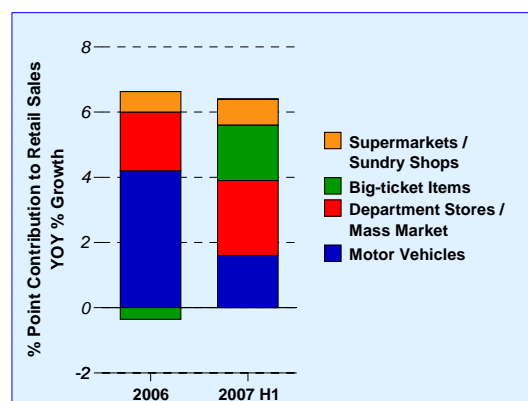


Chart 1.19
Contribution to Retail Sales Growth



Source: EPD, MAS estimates

... following a pullback in asset market-related activities.

The moderation in the economy was attributed to a pullback in asset market-related activities, in the face of the global financial market turmoil in August.

In the domestic financial services sector, the equity market plunged sharply, with the STI falling from a high of 3,648 around end-July to 3,130 in mid-August. Turnover volumes also declined by 42% in August, compared to strong double-digit growth in the preceding months. However, there were some tentative signs of recovery in late August, when investor sentiment was lifted by the Fed's decision to cut its discount rate. More recently, investors were cheered by a 50 bps reduction in the Fed funds rate in September, which sparked a rebound in equity prices and trading activity globally. Regional markets have also been on the mend, as witnessed by the climb in the MSCI (ex-Japan) since end-August. (Chart 1.20) In the Singapore bourse, the decline in turnover volumes also levelled off, although activity has remained modest compared to the highs registered in Q2. (Chart 1.21)

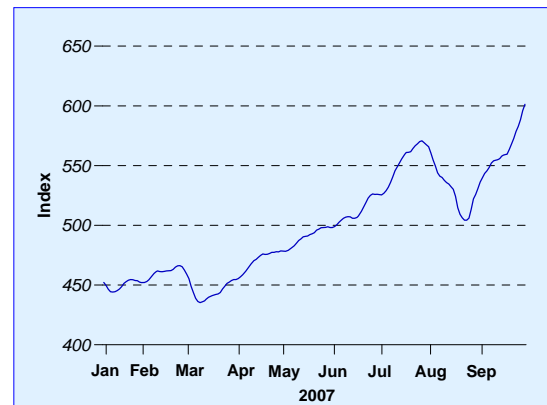
The weaker investment climate also temporarily affected activity in the wealth advisory cluster. Investor sentiment dived as several major investment banks announced potentially large exposures to the US subprime housing market.

In the property market, sentiments were affected by the financial market turmoil as well. Private residential property transactions fell to 1,144 units in September, less than half the volume in August, and about a third of that in July. This reflected more muted new sales and resale activity.

The GST hike in July led to a temporary cutback in consumption spending.

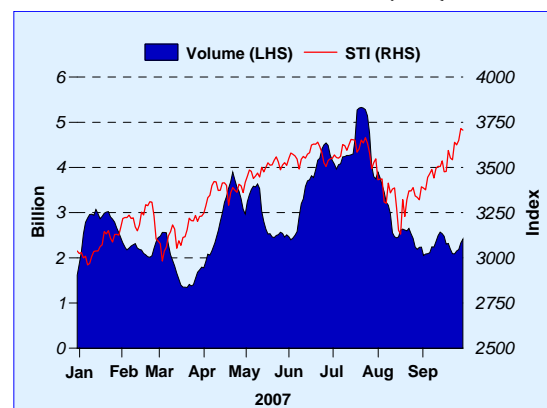
Activity elsewhere in the economy slowed as well. The expected pullback in consumption following the implementation of the GST in July has impacted the retail and restaurant businesses. The 16% m-o-m SA decline in retail sales in July was mostly due to the contraction in sales of motor vehicles and big ticket items, by 28% and 29% respectively.

**Chart 1.20
MSCI Asia (ex-Japan)**



Source: Bloomberg

**Chart 1.21
Stock Market Turnover Volume and
Straits Times Index (STI)**



However, the pullback in overall retail sales was less severe compared to 1994. Chart 1.22 plots an estimate of the “GST effect” on retail sales during the episodes of GST implementation/hike. Typically, there would be a surge in retail spending a month prior to the GST hike, followed by a sharp fall-off in the subsequent month, as consumers bring forward their purchases to avoid the tax hike. Following the most recent hike, the GST impact is estimated to have subtracted about 13% points from July’s retail sales, compared to the 23% points in April 1994.

IT-related cluster rebounded in Q3.

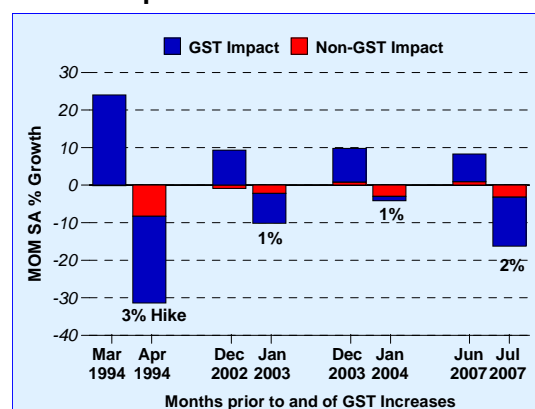
Reflecting some improvement in the global IT industry, the IT-related cluster recovered in Q3. Electronics output registered a strong upturn of 24% q-o-q SAAR in Q3, while electronics NORX rose by 30% to climb back firmly into positive territory. The volume of air cargo handled through Singapore, which is the main mode of distribution for electronics components, also expanded by 7.9%, in line with improvements in electronics output and re-exports. (Chart 1.23)

The economic expansion remained intact.

The Singapore economy is in a strong position, notwithstanding some moderation in growth in the third quarter. The global financial turmoil caused market sentiments to turn bearish, which dampened activity in the asset market-related sectors. In addition, there was some temporary pullback in consumption following the GST hike. However, the latest incoming data indicates that the negative impact from these factors has been contained and other drivers of growth, such as non-electronics manufacturing, have taken up some of the slack.

With growth in the first three quarters averaging some 8.2%, the economy remains on track to reach the upper end of the 7-8% range in 2007. The near-term economic outlook is further discussed in Chapter 3.

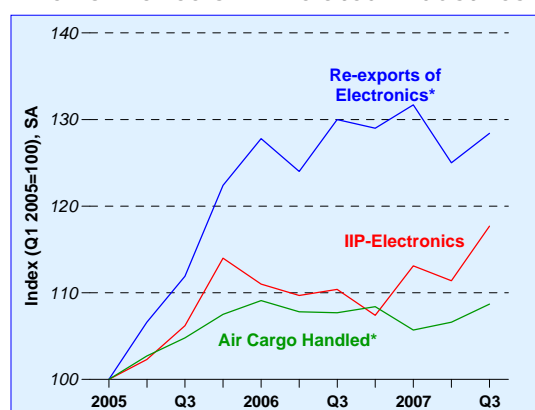
Chart 1.22
GST Impact on Retail Sales Volume



Source: EPD, MAS estimates

Note: Dummy variables are used to isolate the impact of the GST implementation/increase in an OLS regression model of retail sales volume.

Chart 1.23
Performance of IT-related Industries



* Source: EPD, MAS estimates

1.3 Macroeconomic Policy

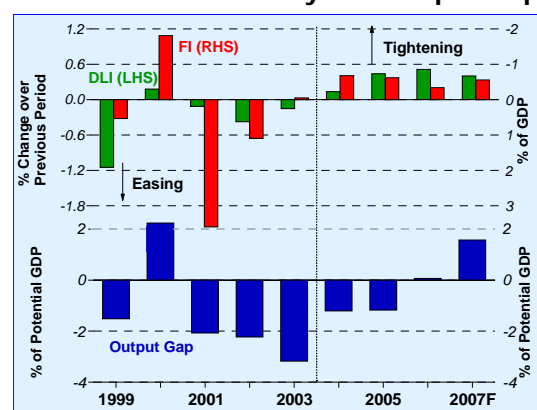
Singapore's macroeconomic policy stance has evolved in line with the economy's cyclical developments.

The macroeconomic policy setting in Singapore has a medium-term orientation aimed at providing the basis for sustained and non-inflationary growth and stability. In the short term, it has also evolved in a countercyclical fashion in response to developments in the economy. Over the last four years, including 2007, the policy stance has been in the direction of tightening, against the backdrop of robust economic growth averaging almost 8% per annum.

This is shown in Chart 1.24, which plots the macroeconomic policy stance – proxied by the Domestic Liquidity Indicator (DLI)² for monetary policy and Fiscal Impulse (FI) measure³ for fiscal policy – in the top panel and the corresponding output gap in the bottom panel over the period 1999-2007. In the top panel, a point above the horizontal axis indicates a tightening policy, while one that is below the axis represents an easing policy. In the bottom panel, a positive output gap signals that economic output is above potential, leading to inflationary pressures as the economy is unable to meet demand; conversely, when the output gap is negative, the economy is producing at below full capacity, resulting in an easing of cost and price pressures. However, it should be noted that *changes* in the output gap can be just as important in determining inflationary pressures.⁴

In the rest of this section, the most recent developments in monetary and fiscal policies are reviewed.

Chart 1.24
Macroeconomic Policy and Output Gap



² The DLI is a measure of overall monetary conditions, reflecting changes in the S\$NEER and domestic interbank rate.

³ For more details on the methodology used to calculate the FI measure, please refer to the January 2002 issue of the *Review*.

⁴ For more details on the relationship between the output gap and inflation, please refer to Box D in the April 2006 issue of the *Review*.

MONETARY POLICY

MAS continued its policy of a modest and gradual appreciation of the S\$NEER band, but with a slightly steeper slope.

In its Monetary Policy Statement (MPS) in April 2007, MAS announced that it was maintaining the policy of a modest and gradual appreciation of the S\$ nominal effective exchange rate (S\$NEER) policy band, which has been in place since April 2004. This policy stance has contributed to low and stable inflation amidst the robust economic growth over the past few years.

Thus far in 2007, the Singapore economy has performed better than expected, with non-IT manufacturing and asset market-related activities, in particular, recording strong expansions in the first half of the year. Notwithstanding the moderation in growth momentum in Q3, underlying economic conditions remain supportive and GDP growth is on track to come in at the upper end of the 7-8% forecast range in 2007. In 2008, given the weaker global economic outlook, the domestic economy is expected to expand at a more moderate pace of 4-6%, in line with its potential growth rate.

Singapore's CPI inflation rose by an average of 2.8% in Jul-Aug 2007, compared to 0.8% in the first half of the year and 1% in 2006. This can be attributed to three factors: the one-off impact of the GST hike, imported inflation with the recent rise in global food and oil prices, and domestic inflationary pressures especially wage and rental increases, as a consequence of short-term supply constraints and strong GDP growth. These sources of inflationary pressures are likely to persist. Accordingly, headline CPI inflation is projected to come in at 1.5-2% in 2007, and 2-3% in 2008.

Taking all these factors into consideration, MAS announced in its MPS of 10 Oct 2007 that it would continue with the policy of a modest and gradual appreciation of the S\$NEER policy band, but the slope of the band would be increased slightly. There was no re-centring of the policy band, or any change in its width.

Monetary policy focuses on price stability over the course of the business cycle.

Chart 1.25 documents the movements in the S\$NEER and changes in monetary policy decisions since the release of the first MPS in February 2001. It also shows the corresponding output gap, inflation and GDP growth over the same period.

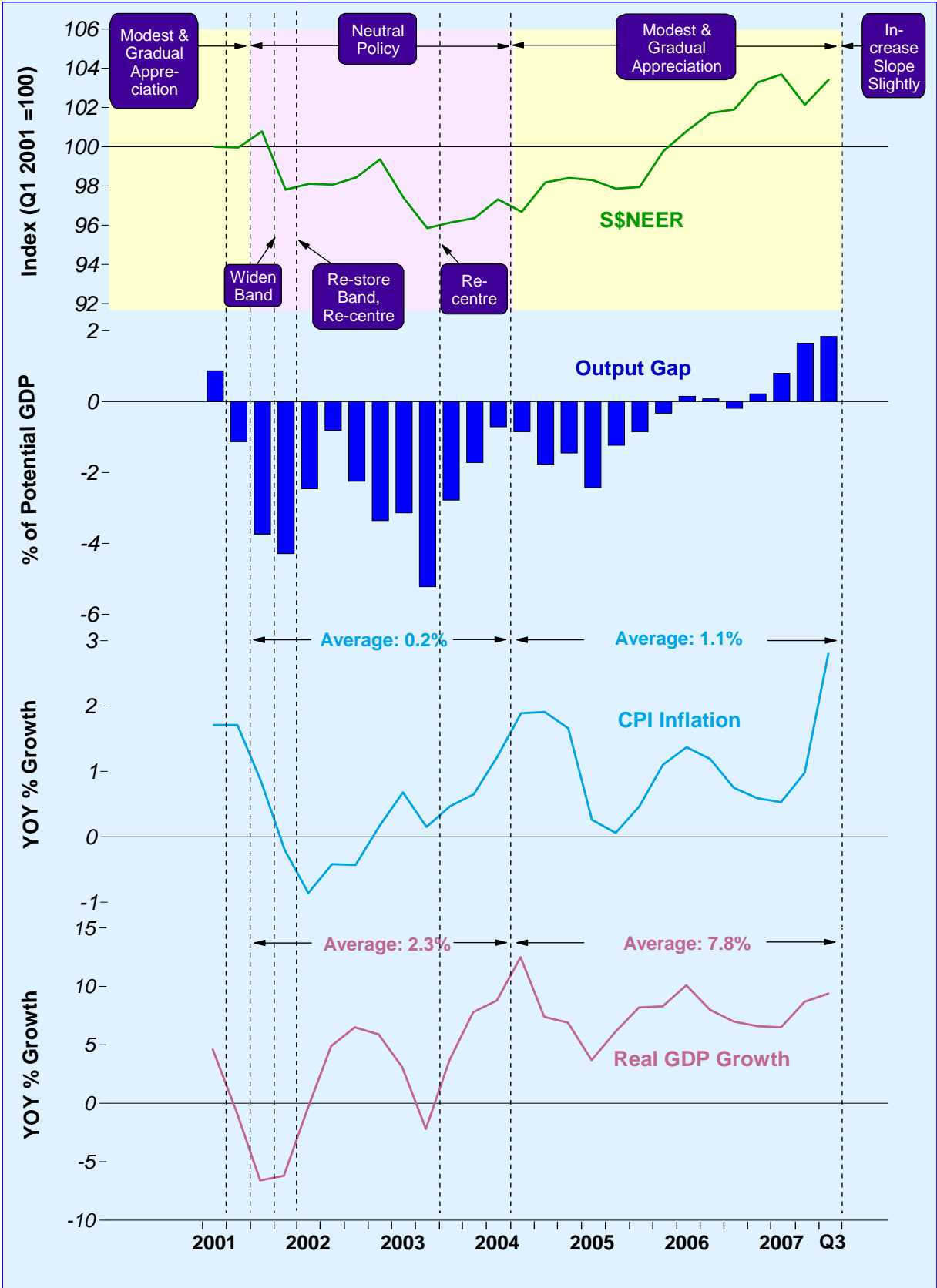
The objective of MAS' monetary policy is the attainment of medium-term price stability. In line with this objective, the monetary policy setting has evolved with the stages of the business cycle as reflected in the output gap and inflation.

For example, policy was eased – either by adopting a gentler slope of the policy band or re-centring the band to a lower level – on three occasions since 2001 in the face of weak economic conditions and benign inflationary pressures: the global electronics downturn in 2001, the September 11 terrorist attack, and the Sars crisis in 2003.

The economy rebounded strongly in H2 2003, following the rapid containment of Sars. In April 2004, MAS restored the tightening policy of a modest and gradual appreciation of the S\$NEER policy band. It was a pre-emptive move at that time in light of the continuing robust recovery in the domestic economy and external environment, and signs of intensifying price pressures. Notably, MAS formulates policy in a forward-looking manner, given the inherent lags in the impact of monetary policy on real economic activity. Since Q2 2004, the economy has chalked up strong growth averaging almost 8%, with CPI inflation kept low at around 1%.

More recently, in October 2007, the policy stance was tightened slightly by allowing a steeper appreciation of the policy band. This recommendation took into account the emergence of a positive output gap in the economy and attendant pickup in inflationary pressures. Further analysis of the inflation outlook is provided in Chapter 3 of the *Review*.

Chart 1.25
Key Macroeconomic Variables and Changes in Monetary Policy Stance



The S\$NEER eased from the upper end of the policy band, before trending up again recently.

Since the policy review in April 2007, the S\$NEER has eased from the upper end of the policy band. (Chart 1.26) However, in the weeks leading up to the MPS announcement in October, the trade-weighted index trended upwards, reflecting the renewed weakness of the US\$, and market expectations of MAS maintaining its appreciating policy stance.

The S\$REER has remained competitive due to relatively modest price increases.

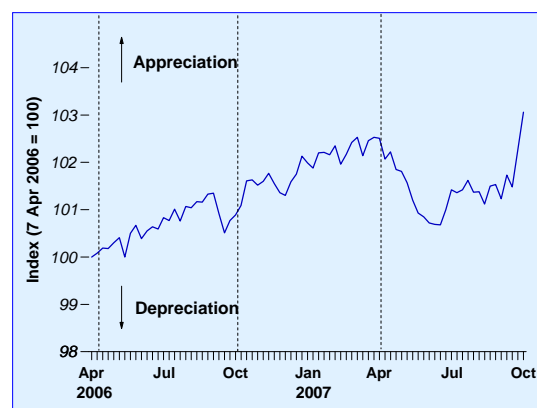
Given the strong appreciation in the S\$NEER in early 2007, the S\$ real effective exchange rate (S\$REER) deflated by the CPI edged up in Q1 2007, before dipping in the subsequent quarter as the S\$NEER weakened. During this period, Singapore's CPI relative to its trading partners continued on its gradual declining trend. In fact, domestic consumer prices have consistently lagged behind those of our trading partners. (Chart 1.27)

As a result, Singapore's REER has remained relatively low since the downward adjustment of prices and costs following the Asian Financial Crisis, despite the subsequent appreciation of the trade-weighted S\$. In addition, movements in Singapore's REER have generally been in line with those of the other regional economies. (Chart 1.28)

Liquidity conditions softened over the past few months before tightening again.

Since mid-March this year, liquidity conditions in the economy have generally softened, as shown by the DLI. (Chart 1.29) This loosening from Q2 this year was due initially to the fall in interest rate, but subsequently, the depreciation of the S\$NEER played a major part. The loosening also coincided with a marked increase in asset prices in the domestic economy. In August and September, however, the DLI turned positive, with the tightening in both the exchange rate and interest rate.

Chart 1.26
S\$NEER



Note: --- indicates release of Monetary Policy Statement

Chart 1.27
Relative CPI

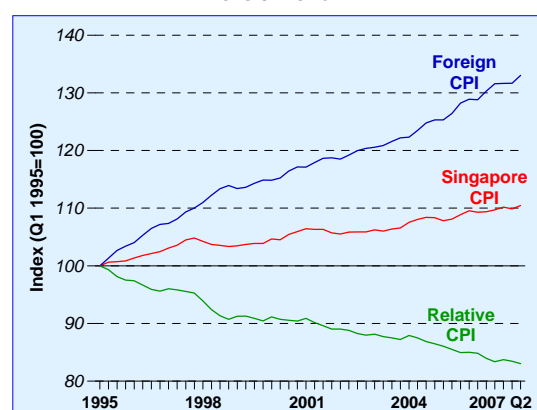
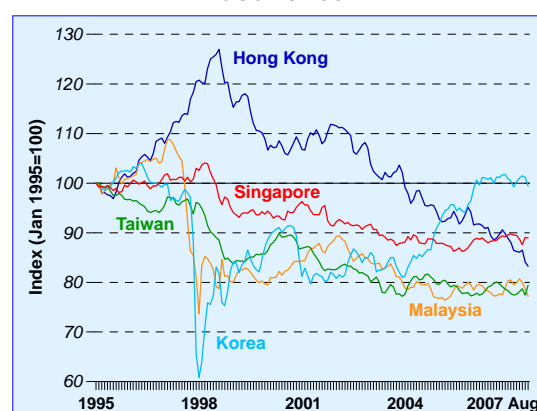


Chart 1.28
REER in Singapore and the Regional Countries



Source: Datastream

Note: JP Morgan Real Trade-weighted Index, except for Singapore.

Domestic interest rates softened over the period March to May 2007, with the three-month S\$ interbank offer rate (S\$ SIBOR) falling by 100 bps from 3.38% at end-February to 2.38% at end-May. (Chart 1.30) With the three-month US\$ SIBOR remaining constant during this period (given the unchanged Fed funds rate of 5.25%), the spread between US and Singapore interest rates widened. While the disruption of US and European money markets in early August led to a temporary spike in the domestic interbank rate to around 3%, it has since fallen to 2.63% as at end-September, following the 50 bps reduction in the Fed funds rate to 4.75% around the middle of the month.

Home loan rates have edged up slightly though they remain relatively low. The 12-month fixed deposit rate has also been fairly stable this year, at about 0.8% to 0.9%.

Over the course of the year, MAS' money market operations (MMOs) ensured that there was sufficient liquidity in the banking system to meet banks' demand for reserve and settlement balances. The amount of liquidity in the banking system was estimated by taking into consideration the banking sector's demand for funds and the net liquidity impact of autonomous money market factors. Box A at the end of the chapter provides a review of MAS' MMOs in FY2006/07.

Chart 1.29
Domestic Liquidity Indicator

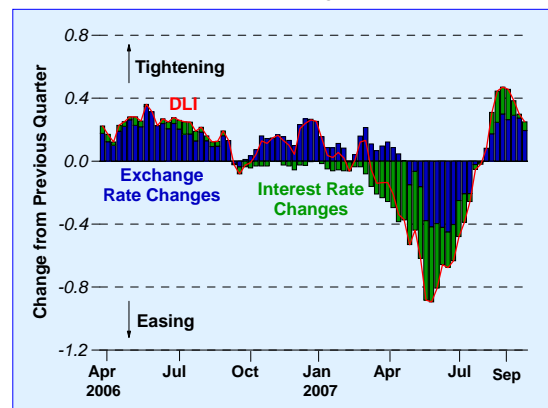
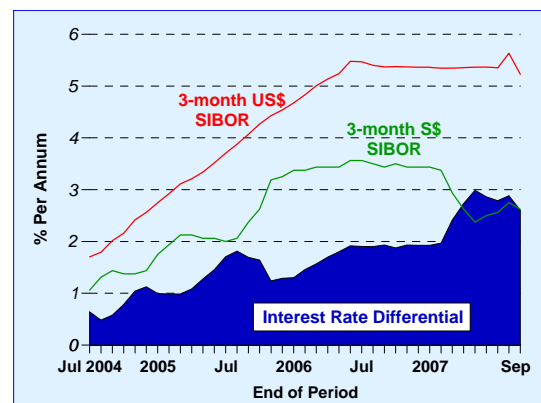


Chart 1.30
3-month S\$ SIBOR and US\$ SIBOR



FISCAL POLICY⁵

Government operating revenue hit a record high in H1 2007, boosted by income tax and stamp duty collections.

The government's operating revenue surged to a record high of \$18.3 billion (16.3% of GDP) in the first half of 2007, compared to \$15.2 billion in the same period last year, and the previous half-year peak of \$15.4 billion in 2001. The jump in operating revenue in H1 2007 was largely accounted for by the marked increase of more than \$1 billion each in collections from income taxes (corporate and personal) and stamp duty. (Chart 1.31)

Income tax collections were boosted by strong earnings, which resulted from the robust economic growth in 2006 (income tax is assessed on a preceding year basis). This was in spite of the cut in the top personal income tax rate from 21% to 20%, with comparable reductions in all other tax brackets. However, the increase in corporate and personal income tax collections was partially offset by the fall in statutory boards' contributions to the government, which tend to be more lumpy and concentrated in particular quarters. A breakdown of corporate income tax collection by economic sector shows that the financial sector has been the largest contributor in recent years relative to its share in GDP. (Chart 1.32)

Of all the revenue components, the government's collection of stamp duty picked up the most in H1 2007, to \$2.1 billion, a more than threefold increase from the \$0.6 billion raised in H1 2006. Stamp duty is a tax on commercial and legal documents used in certain transactions, the bulk of which comes from property purchases.⁶ (Chart 1.33) As shown in Chart 1.34, the recent boom in the property market – with increases in both the number of property transactions and prices – contributed to the surge in stamp duty collections. In addition, stamp duty collections in 2007 were boosted by the withdrawal of the stamp duty deferment

Chart 1.31
Selected Components of Operating Revenue

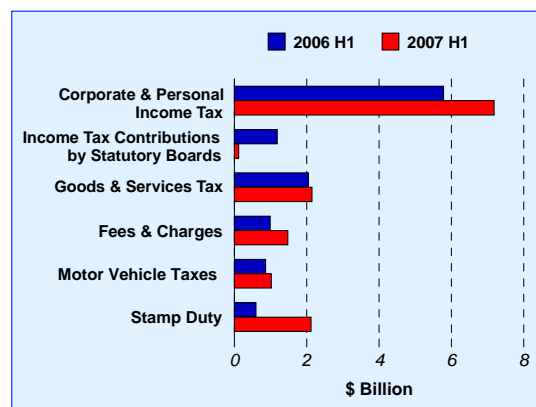


Chart 1.32
Corporate Tax Collection and GDP by Economic Sector (2005-06 Avg)

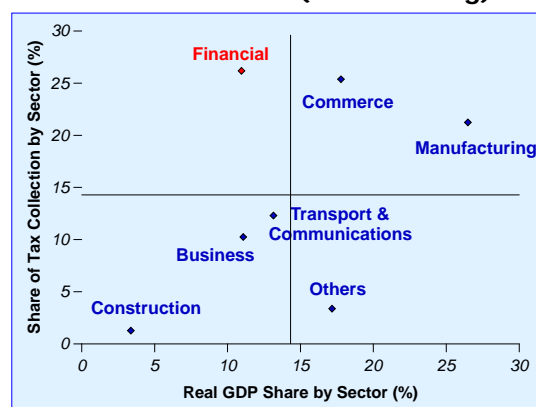
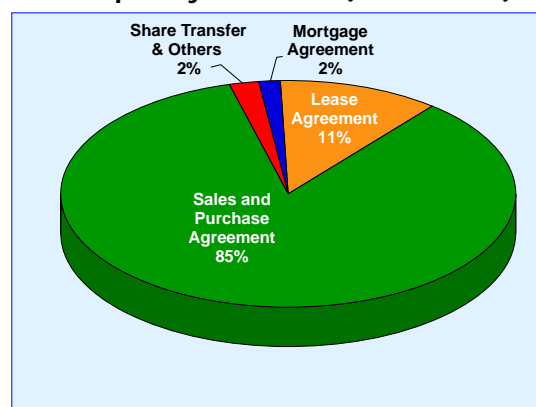


Chart 1.33
Stamp Duty Assessed (FY2006/07)



⁵ This section reviews the government's budget outcome on a y-o-y basis.

⁶ For immovable property, stamp duty is calculated as a percentage ranging from 1% to 3% of the property purchase price.

concession with effect from December 2006.⁷ The takings for the first six months of this year have surpassed the \$1.3 billion recorded for 2006 as a whole, and the \$1.8 billion collected in 1996 at the peak of the last property cycle. (Chart 1.35) In H1 2007, stamp duty was the third largest contributor to the government's operating revenue – after income tax and GST – with its share rising to 11.6%, from an average of less than 5% in previous years. (Chart 1.36)

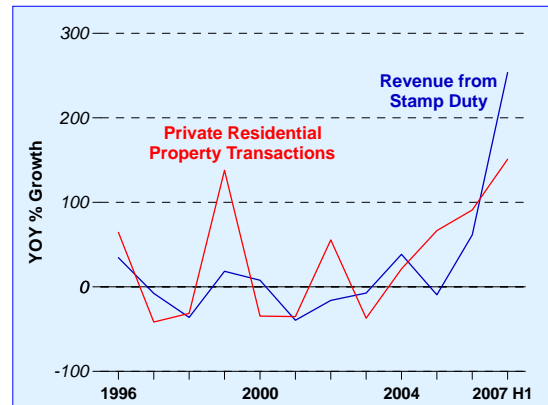
Government's operating expenditure rose in H1 2007, while development expenditure fell.

Government expenditure rose from \$15.9 billion in H1 2006 to \$16.4 billion (14.6% of GDP) in the first half of this year. The increase came entirely from operating expenditure, while development spending declined over this period. (Chart 1.37)

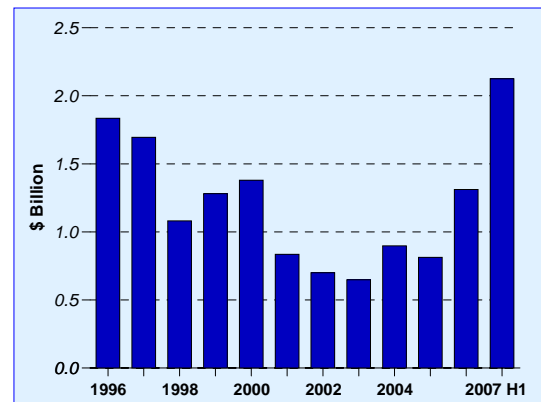
Operating expenditure was \$1 billion higher at \$13.1 billion (11.7% of GDP), with increases across all major categories, except for security. Education spending in particular, recorded the largest rise of \$0.8 billion. This was mainly due to the larger grants provided to higher education institutions. The changes in the funding model for universities, whereby they are now provided with annual sinking fund for future renovation and redevelopment projects, also led to the increase in education spending. Spending on health and national development increased by about \$0.1 billion each, with the former partly the result of new health initiatives, and the latter from the reclassification of capital grants to the Housing Development Board (HDB) as operating expenditure instead of development expenditure.

Meanwhile, development expenditure was lower at \$3.3 billion (3% of GDP) in H1 2007, compared to \$3.7 billion in the same period last year. The largest decline was in the area of transport – a fall of \$0.2 billion – with lower expenditure for the MRT Circle Line project.

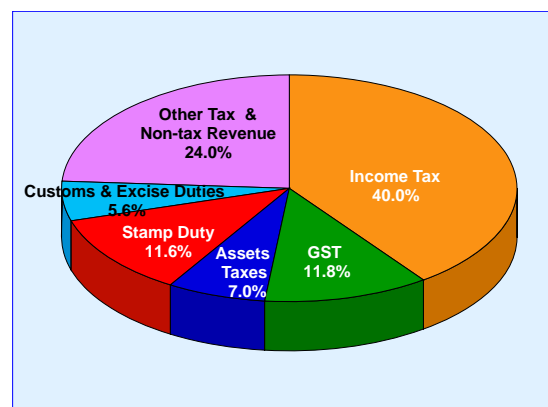
**Chart 1.34
Property Cycle and Stamp Duty Collection**



**Chart 1.35
Stamp Duty Collection**



**Chart 1.36
Sources of Operating Revenue, H1 2007**



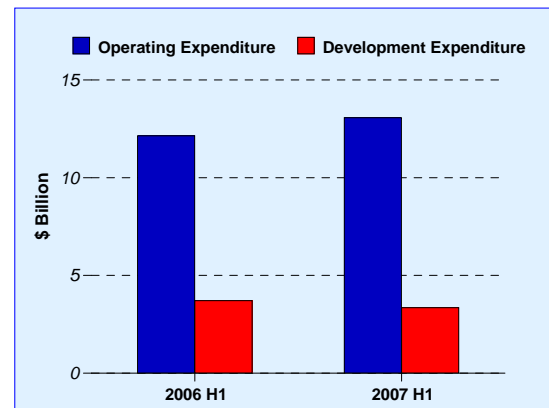
⁷ The concession was reintroduced in June 1998 as part of the off-Budget measures to cushion the impact of the economic slowdown. The concession allowed property buyers to pay the stamp duty at a later date. For newly constructed properties, the due date was the date of Temporary Occupation Permit (TOP). For completed properties, the payment was due when the property sale was completed. Without the concession, property buyers are required to pay the stamp duty within 14 days from the date of acceptance of the Option to Purchase, instead of deferring the payment.

Fiscal policy stance will remain slightly contractionary in 2007 amidst robust economic growth.

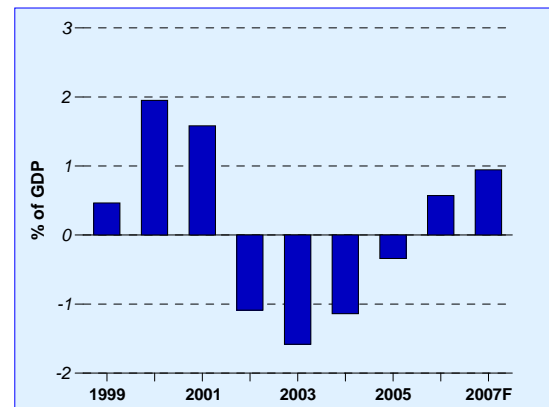
Overall, the government recorded a primary surplus of \$1.9 billion (1.7% of GDP) in the first half of 2007, reversing the deficit of \$0.6 billion in the same period a year ago.⁸ For 2007 as a whole, the government's primary surplus is estimated to increase further to \$2.2 billion⁹ (0.9% of GDP), from \$1.2 billion (0.6% of GDP) in 2006. (Chart 1.38)

To get a more accurate measure of the stimulus to aggregate demand arising from fiscal policy, the FI measure can be used. A positive (negative) FI measure implies a more expansionary (contractionary) fiscal stance compared to the previous year. In 2007, the FI measure is expected to remain negative at -0.6% of GDP, suggesting a more contractionary fiscal stance. (Chart 1.39) This is appropriate, given the sustained robust expansion in the domestic economy since 2004 and the output gap turning positive in 2006 and 2007.

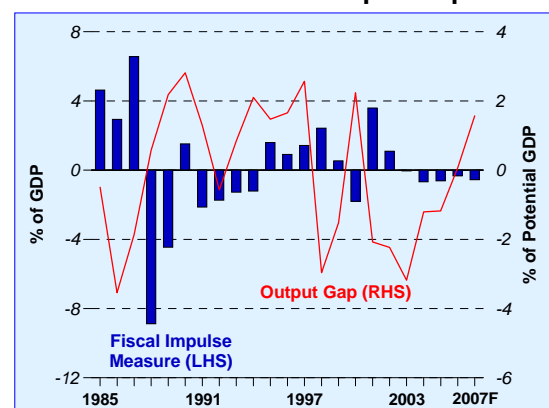
**Chart 1.37
Government Expenditure**



**Chart 1.38
Primary Fiscal Surplus/Deficit**



**Chart 1.39
FI Measure and Output Gap**



Source: EPD, MAS estimates

⁸ The primary surplus/deficit is defined as operating revenue (excluding net investment income contributions) less operating and development expenditure.

⁹ MAS' estimates are based on previous years' trends and take into consideration the primary surplus budgeted for FY2007.

Box A**Review of MAS' Money Market Operations in FY2006/07**

This box reviews the conduct of MAS' Money Market Operations (MMOs) in FY2006/07. As explained in the monograph on "Monetary Policy Operations in Singapore" first published in January 2003, MAS' MMOs are undertaken to manage the liquidity within the banking system and are distinct from the implementation of its exchange rate policy.

We first provide a brief description of how MMOs are conducted, followed by a review of the banks' demand for cash balances with MAS, and the behaviour of autonomous money market factors in FY2006/07. We complete the box with an examination of the MMOs conducted during this period.

Conduct of MMOs

As a result of Singapore's open capital account and its exchange rate-centred monetary policy, domestic interest rates and the money supply are endogenous. This is the principle underlying the open-economy trilemma, which states that a country cannot simultaneously manage its exchange rate and domestic interest rates while maintaining an open capital account. MAS' MMOs are therefore not targeted at any level of interest rate or money supply. Instead, they are aimed at ensuring that there is sufficient liquidity in the banking system to meet banks' demand for reserve and settlement balances.

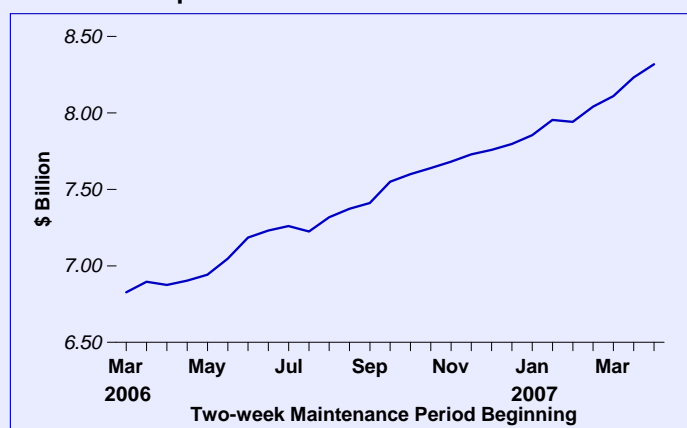
MMOs are conducted daily by the Monetary Management Division in MAS. The amount of liquidity in the banking system is estimated by taking into consideration the banking sector's demand for funds and the net liquidity impact of autonomous money market factors. Money market transactions are then carried out, after which market and liquidity conditions are monitored throughout the day.

Banks' Demand for Cash Balances

Banks hold cash balances with MAS to meet reserve requirements and for settlement purposes. In particular, banks in Singapore are required to maintain a Minimum Cash Balance (MCB) equivalent to 3% of their liabilities base with MAS on a two-week average basis.

In FY2006/07, banks' demand for balances to meet reserve requirements rose strongly as a result of a growing liabilities base. (Chart A1) This in turn reflected rising bank intermediation activity on account of strong economic growth.

Chart A1
Average Reserve Requirements over a Two-week Maintenance Period



This box is contributed by the Monetary Management Division of the Reserve & Monetary Management Department.

Demand for Settlement Balances

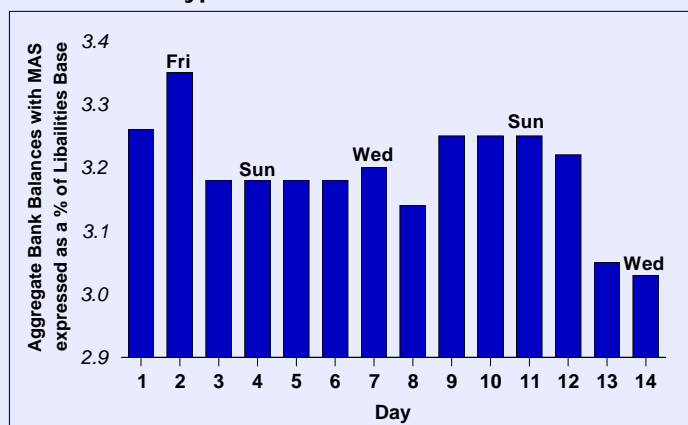
MAS also takes into account banks' demand for settlement balances when planning its MMOs, apart from meeting banks' demand for reserve balances. Based on historical experience, a liquidity buffer of about 0.1-0.3% in excess of reserve requirements has generally been adequate for meeting banks' demand for settlement balances.

Patterns in Bank's Daily Demand for Cash Balances with MAS

Although banks are required to keep an average MCB ratio of 3% over the two-week maintenance period, their daily MCB ratios can fluctuate between 2% and 4% of their liabilities base, giving them more flexibility in their liquidity management. Hence, within each maintenance period, there may be day-to-day variations in banks' demand for cash balances with MAS.

Chart A2 illustrates the daily fluctuations in the MCB ratios within a typical maintenance period in FY2006/07. Two observations continue to hold since our last review in 2006. First, banks tend to keep higher MCB ratios on most Fridays (day two and day nine of the maintenance period) to cover their positions over the weekends. Second, banks keep slightly higher MCB ratios during the earlier part of the maintenance period so as not to be caught short of cash towards the end of the period. As a result, the daily MCB ratios required by the banking system during the last few days of a typical maintenance period are generally lower.

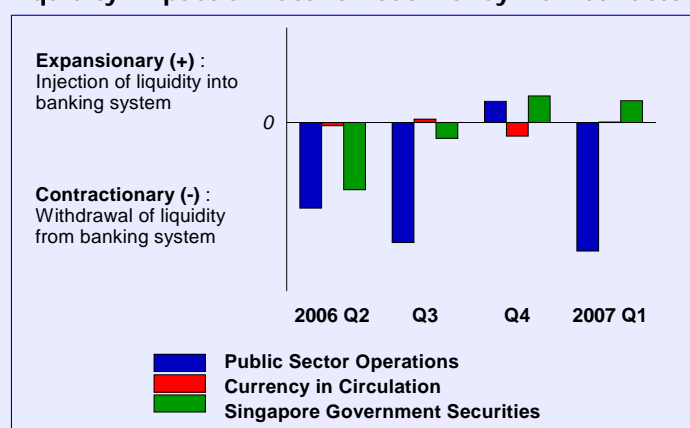
Chart A2
Daily MCB Ratio over a Typical Two-week Maintenance Period in FY2006/07



Liquidity Impact of Autonomous Money Market Factors

Chart A3 shows the liquidity impact of each of the autonomous money market factors, which include (i) public sector operations, (ii) currency in circulation, and (iii) Singapore Government Securities (SGS) issuance, redemption and coupon payments, over FY2006/07. Public sector operations include the government's and CPF Board's net transfers of funds between their accounts with MAS and their deposits with commercial banks.

Chart A3
Liquidity Impact of Autonomous Money Market Factors



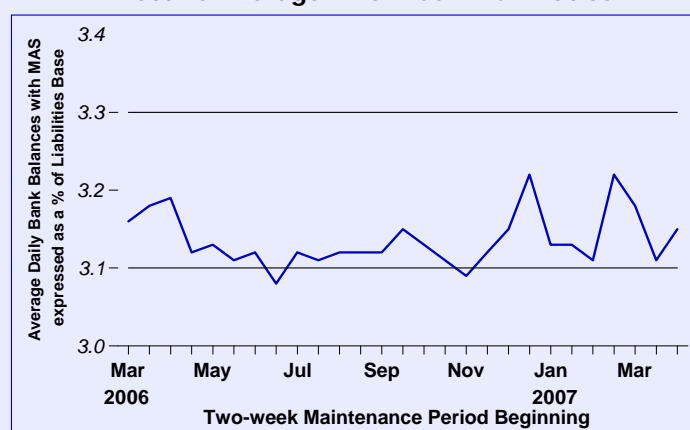
In FY2006/07, the liquidity impact of the autonomous money market factors was largely dictated by public sector operations, which continued to have a contractionary impact on the banking system. SGS issuance and redemption was expansionary in Q4 2006 and Q1 2007, because maturing SGS bonds exceeded new issuances. The liquidity impact of currency in circulation was negligible.

Money Market Factors

Net Liquidity Impact of MAS' MMOs

Over FY2006/07, MAS' MMOs took into consideration the impact of autonomous money market factors and MAS' foreign exchange (FX) intervention operations on liquidity. Due to improvements in banks' liquidity management, the average effective bank balances as a ratio of liabilities base was generally at the lower half of the range of about 3.1-3.3% for the two-week maintenance periods. (Chart A4)

Chart A4
Effective Average Two-week MCB Ratios



Instruments for MMOs

For its MMOs, MAS uses three key instruments to inject liquidity into the banking system and to withdraw liquidity from it, namely (i) FX swaps or reverse swaps; (ii) SGS repos or reverse repos; and (iii) clean lending or borrowing. Chart A5 illustrates the distribution of MMOs amongst the three key instruments.

Chart A5
Distribution of MMOs by Instrument

