2.1 Consumer Price Developments

Domestic CPI inflation was benign in H1 2007 but picked up after the GST hike in July.

CPI inflation averaged a mild 0.8% in H1 2007, after coming in at 1% in 2006. However, partly due to the 2% GST hike in July, inflation rose to 2.7% in Q3. This brought CPI inflation to 1.4% over the first nine months of the year. (Chart 2.1) All categories of the CPI basket registered more rapid price increases in Q3 following the GST hike. (Chart 2.2)

On a m-o-m basis, CPI inflation rose by 2.1% after the GST rate was raised on 1 July. However, in August and September, m-o-m CPI changes slowed to 0.3% and -0.3% respectively, and were generally in line with previous average m-o-m CPI changes.[1]

Meanwhile, the MAS underlying inflation measure, which excludes accommodation and private road transport costs, slowed from 1.7% in 2006 to 1.2% in H1 2007, before rising to 2.8% in Q3 2007.

Direct energy-related inflation was lower this year …

In H1 2007, CPI inflation was weighed down by lower electricity tariffs, as reflected in the decline in the housing cost component. (Chart 2.2) The cut in electricity tariffs was a lagged adjustment to the sharp pullback in global oil prices from over US$70 per barrel in August 2006 to US$50 in January 2007. Along with a reduction in petrol prices earlier in the year, the contribution of direct energy-related items[2] to inflation fell from 0.7% point in 2006 to -0.3% point in H1 2007. (Chart 2.3) However, following the run-up in oil prices to over US$83 per barrel in September, the negative contribution from direct energy-related items dissipated in Q3 2007. Overall, for the first nine months of this year, the contribution of these items to overall CPI inflation averaged -0.2% point.

Chart 2.1
CPI Inflation and MAS Underlying Inflation

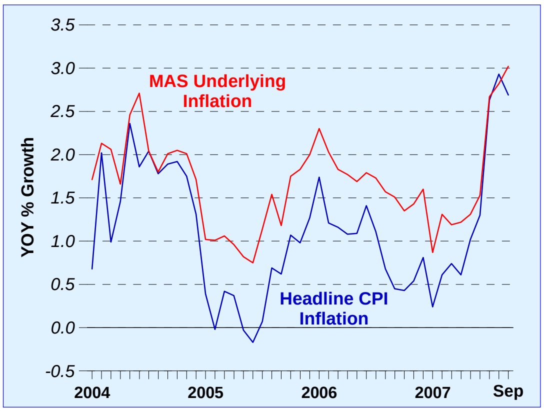


Chart 2.2
Contribution to CPI Inflation

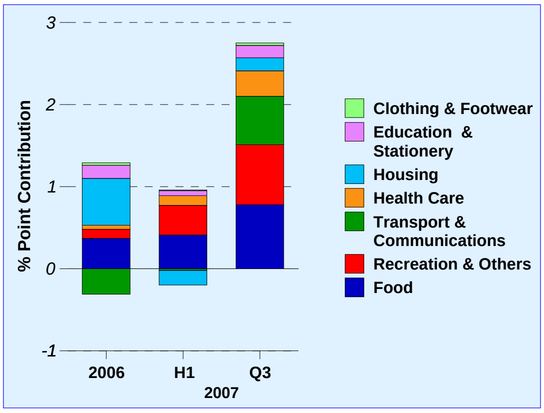
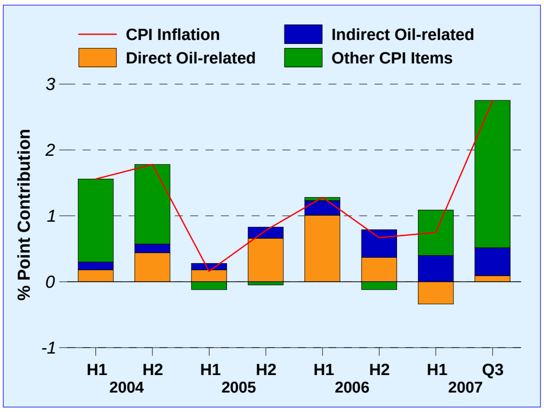


Chart 2.3
Contribution of Oil and Non Oil-Related Items to CPI Inflation



Source: EPD, MAS estimates

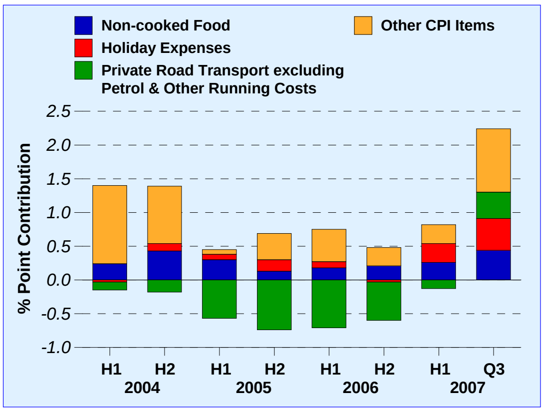
1 Average of 0.1% over the period Jan 2004–Jun 2007.

2 Direct energy-related items in the CPI basket are electricity, residential piped gas, LPG and petrol. Indirect energy-related items are cooked food, public road transport and other travel & transport.

... but non oil-related items contributed more strongly to price increases.

In comparison, price increases in non oil-related items in the CPI basket (the green bars in Chart 2.3), which had generally been muted in 2005-06, added to inflation this year, particularly after July. These non oil-related price pressures stemmed from both external and domestic influences. The cost of food – the main source of imported inflation – rose, while holiday travel also became more expensive. (Chart 2.4) On the domestic front, car prices climbed in recent months after years of decline, and consumer services such as healthcare also registered stronger price gains.

Chart 2.4
Contribution to Non Oil-related Inflation

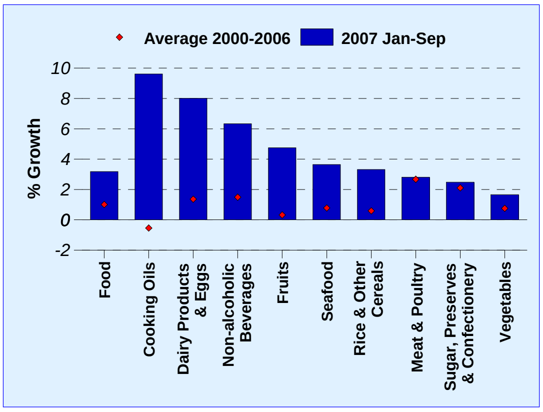


Source: EPD, MAS estimates

Food prices were the principal external influence on inflation ...

Higher imported food prices were a significant contributor to inflation this year as almost all non-cooked food categories in the CPI basket registered stronger price increases, compared to previous years. (Chart 2.5)

Chart 2.5
Change in Food Prices



The surge in world food prices was underpinned by positive income effects arising from the strong global economic expansion in recent years. In particular, rising incomes in developing nations, such as China, have led to greater demand for protein-rich and staple food products.

Meanwhile, stronger demand for biofuel drove prices of biofuel crops such as corn, palm oil, soybean and sugar to new highs. Increased crop prices, in turn, raised the cost of animal feed which translated into more expensive meat products and eggs.

Short-term supply-side factors also played a part in pushing food prices up. Higher vegetable, fruit and wheat prices were partly the result of dry climatic conditions in the Asia-Pacific region arising from the El Niño effect. In particular, the severe drought in Australia has affected livestock, dairy and crop outputs, causing the prices of these items to rise sharply.

Separately, the removal of export subsidies for milk powder in the EU sent global milk prices soaring, while vibrant international trade also sent freight charges to record high levels which added to the cost of domestic food imports.

... although their impact was dampened by diversification of Singapore's food import sources.

Despite rising costs of imported food, food price inflation has actually been more benign in Singapore than in many other economies, including those in the Asian region over the period Jan 1995-Aug 2007. (Chart 2.6) Singapore also exhibited lower food price volatility compared to other Asian countries, with the exception of Japan. (Chart 2.7)

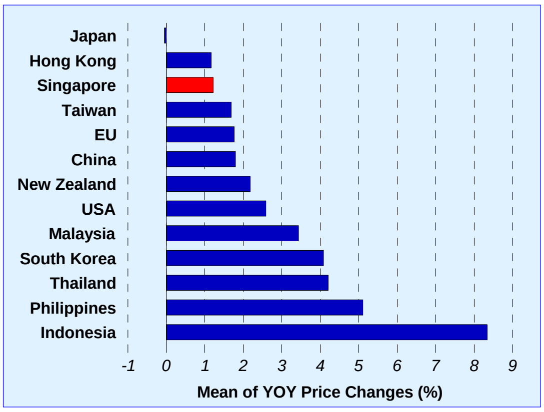
The relatively more stable food prices in Singapore could be due to the ability of domestic importers to source for food products from many countries. Over the years, domestic food importers have widened their network of suppliers across countries, facilitated by stronger international trade ties and more efficient transport and communication links.

In addition, the Agri-Food & Veterinary Authority of Singapore, in collaboration with the private sector, has actively sought out new sources of supply to ensure continued food deliveries in the event of a disruption in supply from any particular source.

We further examined the recent trends in food source diversification in Singapore with the use of some tools commonly employed in industrial organisation economics. First, we calculated the concentration ratio, which gives the share of the top *n* import sources (in per cent). Second, we computed the Herfindahl Index, which is typically used to assess market concentration and competition in an industry. The index is obtained by summing the squares of the share of each individual import source, thus giving more weight to sources with larger shares. A Herfindahl index of less than 0.1 indicates well-diversified import sources while an index above 0.18 indicates high concentration of imports from a small number of countries. A fall in the index thus represents a decline in concentration.

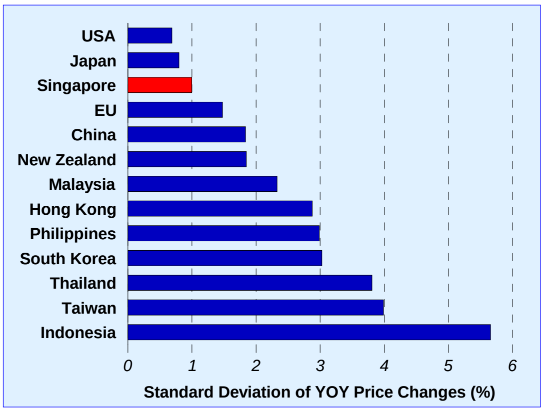
Using annual data from 1995-2006, the concentration ratios show that about 78% of our food is imported from only 10 countries – including our traditional import suppliers, such as Malaysia and Australia. The next 10 largest sources include countries as far away as South Africa and Chile, suggesting some success in sourcing from alternative markets. (Chart 2.8) While Singapore remains dependent on the top 10 import sources, the Herfindahl index (for all import sources) has largely been close to, or less than, 0.1, confirming that Singapore's food sources are well-diversified. (Chart 2.9)

Chart 2.6
Average Monthly Food Price Inflation, Jan 1995-Aug 2007



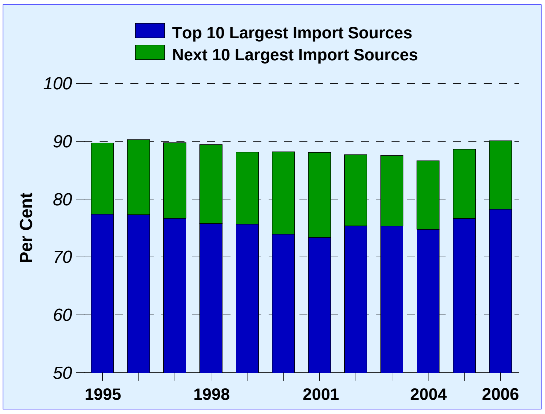
Source: CEIC and Statistics New Zealand
Note: For EU, China and Indonesia, data starts from January 1997, January 2002 and January 2003, respectively. For comparability, the overall food and beverage CPI which includes both fresh and cooked food (consumed away from home) was used for all countries.

Chart 2.7
Volatility of Consumer Food Prices, Jan 1995-Aug 2007



Source: CEIC and Statistics New Zealand
Note: Volatility is calculated as the standard deviation of y-o-y changes in monthly food CPI. The time periods used are the same as in Chart 2.6.

Chart 2.8
Concentration of Top 20 Food Import Sources

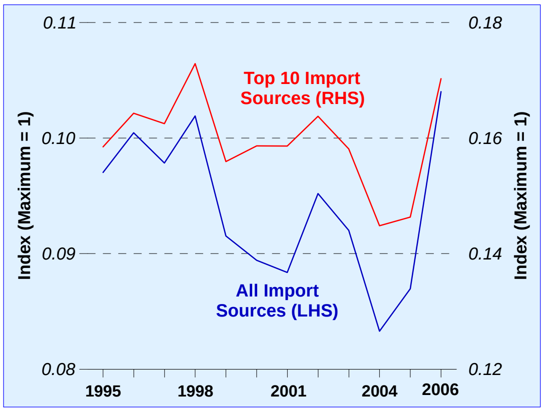


Source: EPD, MAS estimates

Overall import price inflation remained subdued due to falling prices of machinery and equipment.

Apart from food, the import prices of primary commodities and intermediate inputs, such as crude materials and manufactured goods[3], continued to soar in 2007. (Chart 2.10) However, these were offset by the continued decline in the prices of final products. (Chart 2.11) For instance, lower prices of machinery & transport equipment translated into cheaper household durables and electronics products for consumers. Overall, the non-oil import price index (IPI) fell by 3.2% y-o-y in Jan-Aug 2007, after declining by 0.9% last year.

Chart 2.9
Herfindahl Index for Import Sources

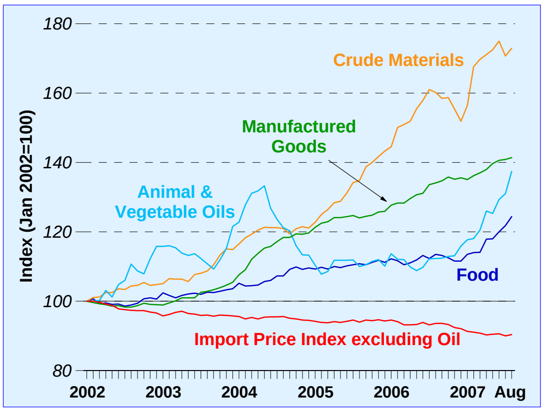


Source: EPD, MAS estimates

Travel costs were higher due to strong global demand for travel and accommodation.

The boom in global economic activity has given rise to more frequent business and holiday travel. Room rates of hotels in the Asia-Pacific region rose as a consequence, as supply lagged demand. Air fares also increased this year, amidst strong demand and higher oil prices. Together, these factors caused holiday travel (classified under "recreation & others" in the CPI basket in Singapore) to rise by 7.2% y-o-y in Jan-Sep 2007, which was stronger than in previous years.

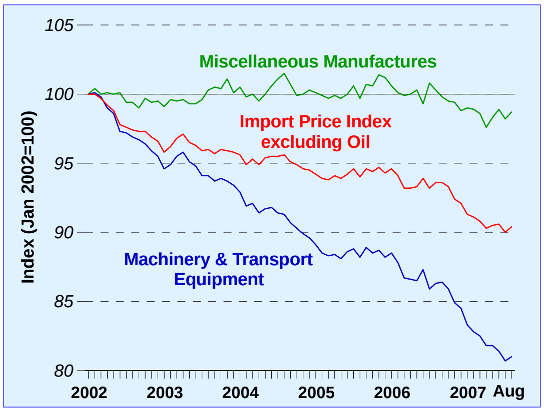
Chart 2.10
Import Prices of Primary and Intermediate Products



The GST hike led to a one-off increase in consumer prices.

Turning to domestic sources of inflation, the GST hike and other costs had an anticipated one-off impact on prices in Q3 2007. In principle, with about 71% of the CPI basket subject to GST, the maximum impact of the 2% GST hike would be about 1.4% points (= 0.7 x 2% GST hike). However, actual inflation was higher, averaging 2.7% in Q3. This was a step up from the average inflation of 0.8% in H1 2007, even after abstracting from the GST impact.

Chart 2.11
Import Prices of Final Products



Thus, apart from the GST, there was a pass-through of other business costs in July as well. For example, with the run-up in import prices of non-cooked food items, cooked food items rose sharply in July. (Chart 2.12)

Indeed, indicators show that underlying cost pressures are building up as the economic expansion reaches a fairly advanced stage. The Unit Business Cost Index

[3] The category "Manufactured Goods" in the IPI basket consists mainly of intermediate products, such as metallic products, rubber, wood products etc.

(UBCI) for the manufacturing sector registered its fifth consecutive quarter of y-o-y growth in Q2 2007 of 1.9%, after staying negative from Q3 2005 until early 2006. (Chart 2.13) This was mainly due to the increase in Unit Labour Cost. Similarly, the Unit Services Cost Index (USCI) – EPD's internal gauge of cost pressures in the services sector – posted strong y-o-y growth of 5.7% in H1 2007. (Chart 2.14) Labour cost contributed to about half of the increase in the USCI while rentals accounted for another 30% (1.6% points).

Wage growth accelerated as the labour market tightened further.

Sustained economic growth has led to unprecedented job creation in recent quarters. With a tighter labour market, nominal earnings grew by 6.9% in H1 2007. In comparison, wage growth had averaged just 3.3% over the 2005-06 period despite rapid job creation since end-2004. There could have been some pent-up wage pressures over the last two years. However, wage growth varied across sectors, according to their performance.

Commercial rentals surged as demand outstripped supply.

At the same time, business costs were pressured by rising commercial rentals, particularly in the Central Business District. For example, office rentals in the central region surged by 41% in the first nine months of 2007, after jumping by 30% in 2006. This compares with the average increase of 1.9% over the preceding three years. Strong demand for retail space also pushed up rentals in the central region by 17% in Jan-Sep 2007 compared to the 5.6% increase last year. (Chart 2.15)

Prices of domestic consumer services continued to rise.

With the run-up in domestic operating costs, prices of some consumer services went up further in 2007. In particular, health care costs rose by 2.2% in y-o-y terms in H1 due to higher treatment/ward charges at government restructured hospitals and polyclinics. Similarly, average y-o-y price increases ranging from 0.5% to 4.2% over Q1-Q3 were observed for other services such as education, personal care, public road transport, recreation & entertainment and cooked food.

Chart 2.12
Food IPI vs Cooked Food CPI

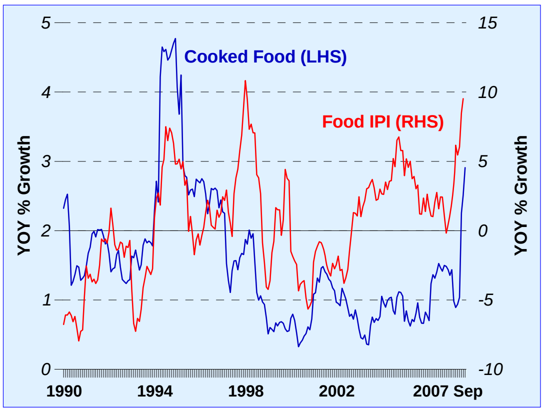


Chart 2.13
Unit Business Cost Index for the Manufacturing Sector and Real GDP Growth

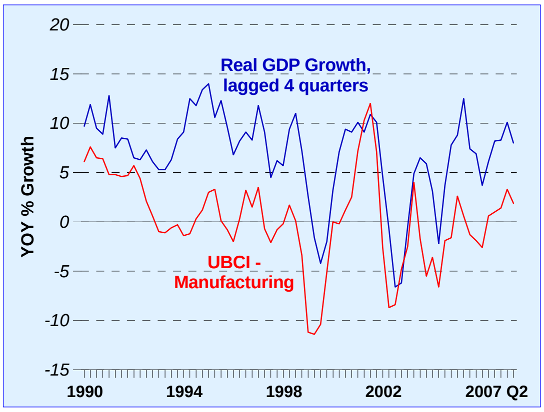
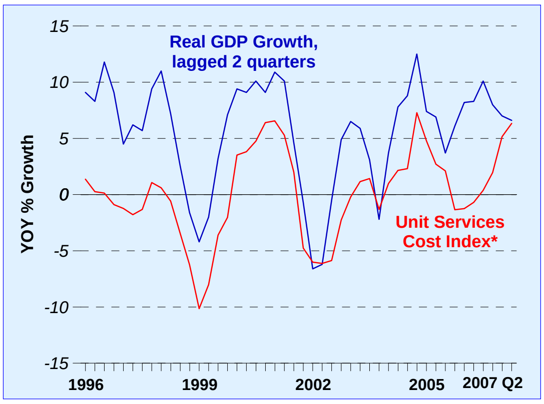


Chart 2.14
Unit Services Cost Index and Real GDP Growth



* Source: EPD, MAS estimates

Car prices started to contribute positively to inflation in mid-2007.

Car prices have added to CPI inflation since May, after nearly four consecutive years of negative contribution. Following the announcement of a 9.3% cut in the COE quota for cars in the new quota year (May 2007-Apr 2008), average COE premiums for Category A and B cars jumped from below $10,000 in February 2007 to above $18,000 in September. (Chart 2.16) Prices were supported by resilient car demand amidst healthy wage growth in a robust economic environment.

Chart 2.15
Office and Shop Rentals in the Central Region

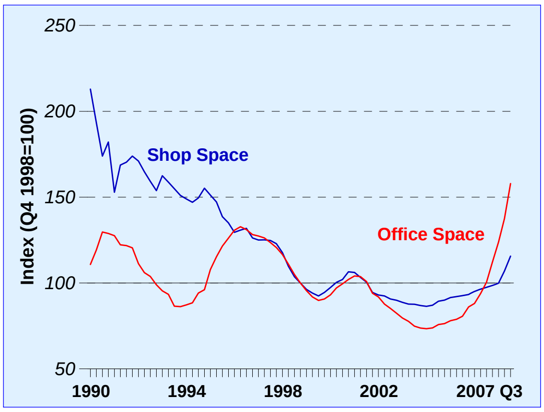
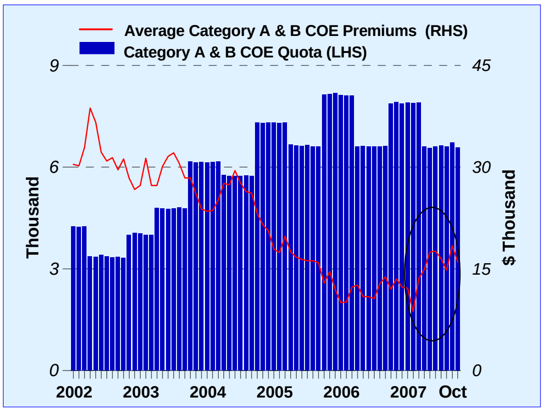


Chart 2.16
Monthly COE Premiums and Quota



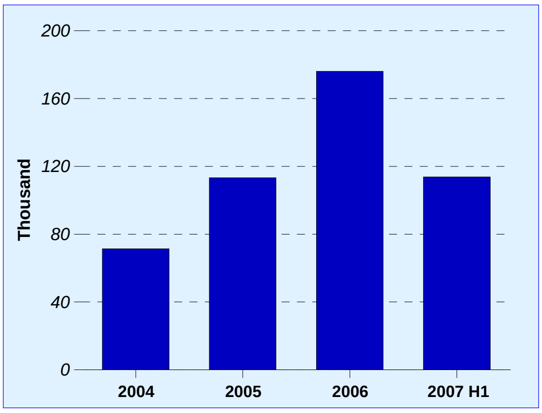
2.2 Labour Market

Unprecedented job creation reduced the unemployment rate to its lowest level in six years.

Employment gains rose to 113,800 in H1 2007, after reaching an all-time high of 176,000 in 2006. (Chart 2.17) In fact, the number of jobs added in H1 this year exceeded all the annual gains in the period 1998-2005.

As a consequence, the headline unemployment rate fell to 2.3% in Q2 this year, the lowest since Q2 2001 before the labour market felt the full impact of the 2001 recession. Indeed, given strong labour demand and declining unemployment, the seasonally adjusted ratio of job vacancies to unemployed persons rose to 0.89 (89 openings for every 100 job seekers) in Q2, up from 0.68 in the previous quarter. (Chart 2.18)

Chart 2.17
Total Employment Changes



The expansion in employment was, however, less broad-based than in previous quarters, with the employment diffusion index[4] registering 89.6 in Q2 this year compared to a quarterly average of 93.0 over the past two years. (Chart 2.19)

Job creation was boosted by the upturn in construction and property-related segments.

Indeed, employment growth varied across industries. Fuelled by the rebound in building activities and the property market boom, the property-related industries (including the construction sector and real estate & leasing activities within the business services sector) witnessed pronounced growth (6.9%) in H1 2007. (Chart 2.20) Employment increased significantly by 7.0% (or 17,000) for business services (excluding real estate), which benefited from the sustained economic growth.

The upturn in construction and property also boosted employment in the financial services sector. (Chart 2.21) The banking cluster increased hiring due to the pickup in construction/property loans as well as expansion in the middle and back offices. The strong performance in property-related stocks and investment instruments also contributed to a pickup in job creation in the wealth advisory and treasury & brokerage clusters this year.

Within manufacturing, the non-electronics segment added jobs much faster (6.9% or 27,900) than the rest of the manufacturing industries. This was on account of the expansion in the marine & offshore engineering segment, which was supported by the growth in oil rig fabrication and ship repair/building activities.

In contrast, the electronics industry saw net job losses (-1.7% or -1,900) in the first half of this year. This reflected weak external demand as well as ongoing restructuring, particularly in the semiconductor and hard disk drive industries.

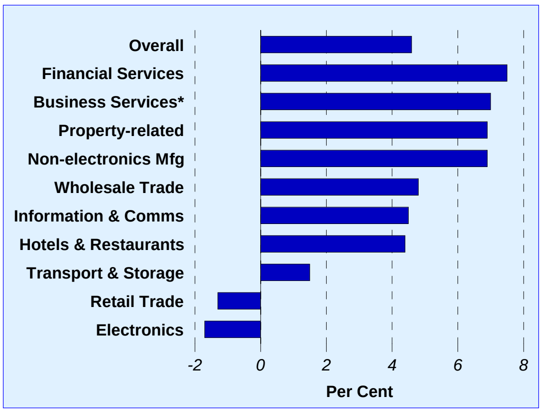
Layoffs in manufacturing were due to ongoing restructuring.

The impact from the restructuring in the electronics industry appeared to have spilled over on to other

Chart 2.18
Ratio of Job Vacancies to Unemployed Persons and Unemployment Rate

Chart 2.19
Employment Diffusion Index

Chart 2.20
Employment Growth by Sector, H1 2007



* Business Services in this chart consists of Professional Services and Administrative & Support Services only. Real Estate & Leasing Activities is combined with Construction in the Property-related segment.

4 The index is equal to 100 when all industries are increasing employment and 0 when they are all decreasing employment. An index of 50 indicates an equal balance between industries with increasing and decreasing employment.

supporting industries in manufacturing such as fabricated metal products and machinery & equipment. As such, the manufacturing sector as a whole accounted for seven out of every ten retrenched workers this year.

The impact of upgrading in the manufacturing sector was also evident from the increased proportion of the lower skilled[5] among the retrenched. Specifically, as many as 80% of the retrenched in manufacturing were from this lower skilled group in Q2 2007, compared to 75% in Q4 2006.

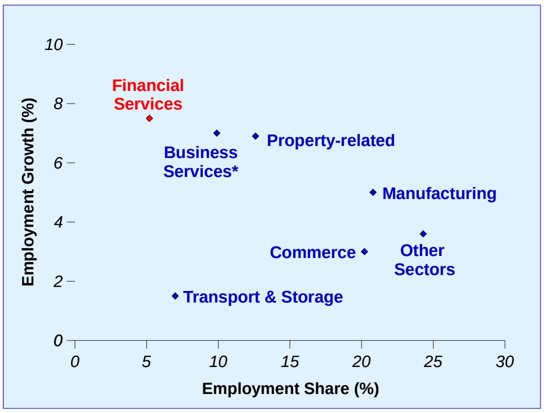
Higher turnover especially in services sectors.

In tandem with the generally buoyant job market, turnover increased in Q2. This is proxied by the overall resignation rate which edged up further to 2.2% in Q2 2007, from 2.0% in Q1 2007. The higher turnover was more evident in the services sector. In particular, financial services saw a spike in the resignation rate, from 1.7% in Q1 to 2.4% in Q2, the highest on record. Hotels & restaurants, administrative & support services, real estate & leasing services saw even higher resignation rates of 4.9%, 3.8% and 3.5% respectively. (Chart 2.22) Among the occupational groups, resignation rates rose for the professionals, managers, executives & technicians (PMETs) and clerical, sales & service workers, but remained the same for production & transport operators and cleaners & labourers.

Robust wage growth in the high-growth segments and PMETs.

In tandem with robust job creation and high turnover, the property-related segments (9.5%) and financial services sector (8.2%) registered high wage growth in H1 this year. The community, social and personal services (CSP) sector also saw strong wage gains mainly due to the salary revision in the public sector. (Chart 2.23) However, other industries such as manufacturing (4.3%) and hotels & restaurants (4.5%) experienced smaller increases in earnings. Excluding the property-related segments, financial services and CSP, which accounted for about 40% of total employment, wage growth was more modest at 4.8%.

Chart 2.21
Employment Growth and Share, H1 2007



* Refer to note for Chart 2.20

Chart 2.22
Resignation Rates by Industry

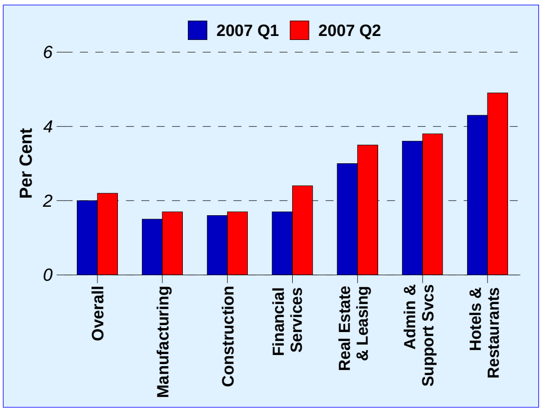
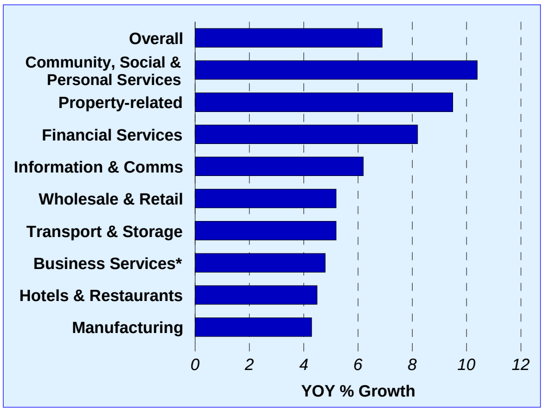


Chart 2.23
Wage Growth by Industry, H1 2007



* Refer to note for Chart 2.20

5 The lower skilled group comprises Clerical, Sales & Service Workers, Production & Transport Operators and Cleaners & Labourers.

Wage growth has been uneven across different skills groups.

Wage growth has been uneven across different skills groups in the last two years. Specifically, the median gross monthly wages of lower skilled residents are estimated to have remained stagnant in 2005-06. This contrasts with the estimated 2.8% average nominal wage growth among the PMETs.

Indeed, the number of lower skilled residents who found employment increased by 4.1% p.a. in 2005-06 which was lower than the average 6.1% employment growth for PMETs. In addition, the vacancy rate for production & transport operators and cleaners & labourers (1.9%) remained much lower than those for PMETs (3.2%) and clerical, sales & service workers (2.9%).

Given the diverse wage growth across industries and occupations, the distribution of earnings has become more uneven among the various income groups. As shown in Chart 2.24, there was a slightly larger proportion (18%) of residents earning below $1,000 in 2006 compared to the 16% in 2002. In comparison, the proportion of residents in the high income brackets of $8,000 & above increased from 4.7% to 6.0% over the same period.

Chart 2.24
Earnings Distribution of Employed Residents