

3.1 External Outlook

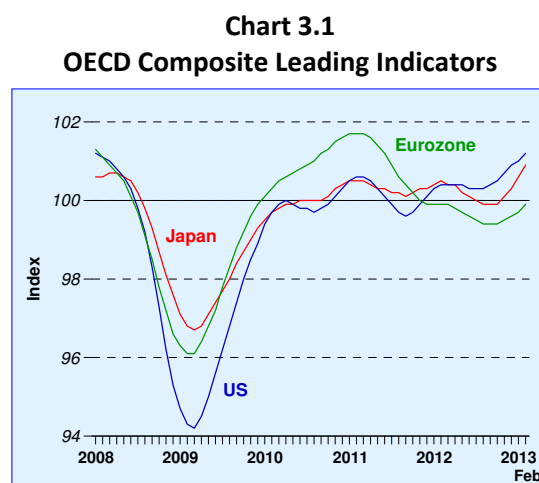
Global Growth is Expected to Improve Only Gradually

**Given near-term uncertainties,
global growth prospects remain modest.**

Since the last *Review* in October 2012, the uncertainty which loomed over US fiscal policy, the Eurozone, and China's growth momentum have eased, at least for the time being. Sentiment was boosted, to some extent, by reflationary policies adopted by the Bank of Japan (BOJ), as it set out to achieve an inflation target of 2% by doubling the monetary base.

While there appears to be an incipient turnaround in composite leading indicators since late last year (Chart 3.1), consensus forecasts envisage only a gradual pickup in global growth. Singapore's major trading partners are expected to expand by 4.3% this year and a stronger 4.7% in 2014, compared with 3.9% in 2012. (Table 3.1) The reasons for such caution can be traced to the deep-seated structural issues confronting the advanced economies. In the US, the reinstatement of payroll contributions, income tax hikes, and reduced benefits payments, in addition to the ongoing deleveraging of balance sheets, have squeezed household incomes further. Meanwhile, continuing fiscal austerity in the Eurozone will preclude an early return to trend growth, even though the Cyprus bailout shows that the risk of another crisis in the region has not fully abated. Consequently, economic activity in the G3 is expected to be tepid in the near term, picking up only gradually towards the latter part of the year.

Meanwhile, the Asia ex-Japan economies will continue to post relatively steady growth rates through 2013. While the NIEs should see higher growth, economic momentum in the ASEAN countries is likely to ease modestly, following last year's exceptional performance. The growth upside in China may be restrained by potential policy tightening at any sign of a resurgence in asset and consumer price inflation. On a trade-weighted basis, GDP growth in Asia ex-Japan is projected to rise to 5.7% in 2013 from 5.1% last year.



Source: OECD

Table 3.1
GDP Growth Forecasts

	2012	2013F	2014F
Total*	3.9	4.3	4.7
G3*	1.1	0.9	1.7
US	2.2	2.1	2.7
Eurozone	-0.5	-0.4	0.9
Japan	2.0	1.3	1.3
Asia ex-Japan*	5.1	5.7	5.9
NIE-3*	1.5	3.4	4.0
Hong Kong	1.4	3.5	4.1
Korea	2.0	2.9	3.7
Taiwan	1.3	3.6	4.0
ASEAN-4*	6.0	5.6	5.7
Indonesia	6.2	6.3	6.3
Malaysia	5.6	5.2	5.4
Thailand	6.4	5.0	4.9
Philippines	6.6	6.2	5.9
China	7.8	8.2	8.0
India**	5.0	6.1	6.8

Source: CEIC and Consensus Economics Inc.

* Weighted by shares in Singapore's NODX.

** Forecast refers to fiscal year ending March.

US private demand will provide some offset to fiscal restraint ...

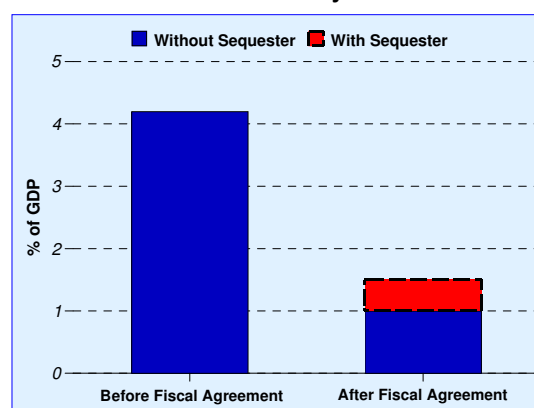
The US economy narrowly escaped a substantial drag on growth at the beginning of 2013, as the two major political parties managed to forge a last-minute agreement to avert the “fiscal cliff”. (Chart 3.2) However, the resulting compromises cut into real disposable incomes, which fell by 4.1% m-o-m SA in January 2013. Despite private consumption growth averaging 0.3% m-o-m SA over the first two months of this year, household demand may soften somewhat as income growth is expected to remain subdued. Recent ISM PMI readings also suggest that the manufacturing and services sectors will expand at a slower pace compared to the last few months.

On a more encouraging note, the US housing market recovery looks set to solidify, with a quickened pace of household formation providing some support to housing demand. In turn, this has elicited a supply response by way of a rise in building permits, which will boost construction activity and contribute to fixed residential investment growth. (Chart 3.3) The Federal Reserve’s Beige Book in April 2013 has confirmed that most districts in the US experienced increases in manufacturing activity through early April, with particular strength seen in residential construction and automobiles. Nonetheless, outstanding fiscal issues such as the upcoming debate on the US debt ceiling will heighten uncertainty, while progressive sequestration cuts are expected to dampen government spending. On balance, growth in the US is forecast to slip marginally to 2.1% in 2013, before rising to 2.7% in 2014.

... while the Eurozone will lag the global recovery.

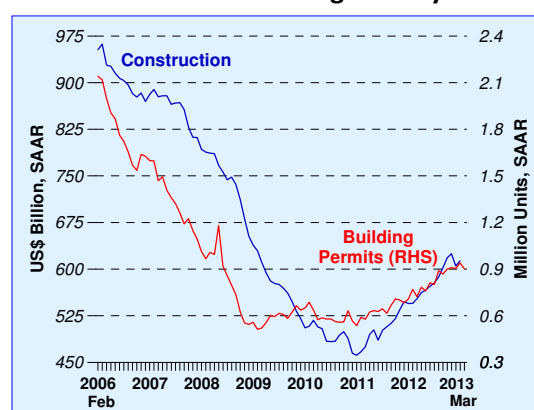
Strong structural forces will continue to hold back the recovery in the Eurozone and delay “positive contagion” from calmer financial markets to the real economy. Fiscal austerity continues to dampen aggregate demand, while bank lending standards have tightened as stricter capital requirements and a poor outlook forced banks to be more cautious in extending credit. Given the financial fragmentation in the currency bloc, firms in some economies continue to find it more difficult and costly to borrow. (Chart 3.4)

Chart 3.2
Size of US Fiscal Adjustments



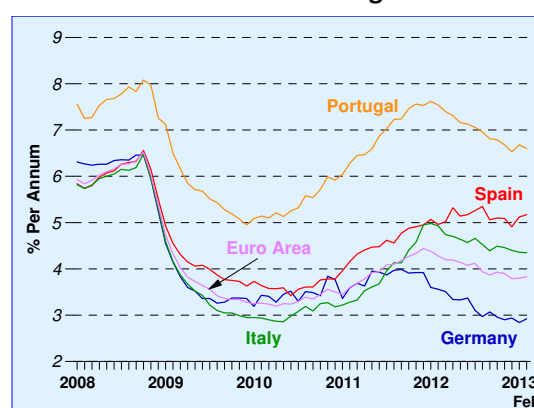
Source: EPG, MAS estimates

Chart 3.3
US Private Housing Activity



Source: CEIC

Chart 3.4
Eurozone Bank Lending Rates



Source: ECB

Note: Lending rates are for new business loans to non-financial corporations of up to €1 million and maturity of one year.

Structural reforms are urgently needed across a large swathe of the Eurozone in order to regain competitiveness and lay the foundations for sustained growth. The critical reforms are not confined to the periphery—France, for example, continues to grapple with labour market inefficiencies, a rising welfare burden and weak investment. Across the region, growth-enhancing reforms to labour markets and pension systems can help mitigate the negative impact of fiscal austerity.

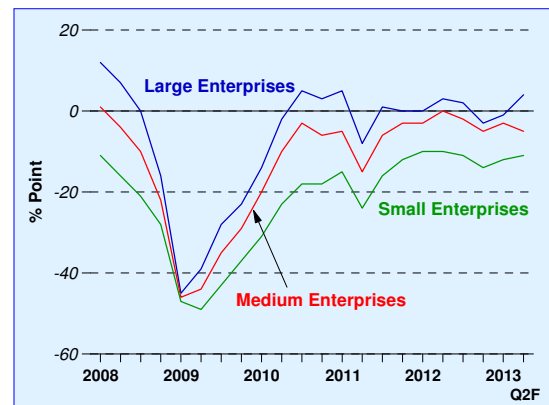
Japan's fiscal and monetary stimuli could benefit the region.

After a sluggish performance in H2 2012, Japan's economy is tipped for faster growth on the back of unprecedented monetary expansion by the BOJ and the fiscal stimulus announced by the Abe government. Domestic demand will be supported by direct government spending of ¥10.3 trillion, equivalent to 2.2% of GDP. Further, through the new inflation target of 2%, the BOJ aims to raise inflation expectations and spur household consumption. In order to achieve this target, the BOJ will replace its Asset Purchase Program with a new monetary policy framework centred on purchases of long-term government bonds and exchange-traded funds. The central bank will effectively commit itself to doubling the size of its balance sheet, with the intention of lowering long-term interest rates through a reduction in the term premium.

Largely as a result of these developments, business conditions in Japan, as gauged by the Tankan survey of enterprises, have improved in the first two quarters of this year. (Chart 3.5) Concurrently, the yen has weakened by 14% on a trade-weighted basis since November 2012. Although this will not bring about an immediate improvement in exports and the trade balance due to the "J-curve effect", it should encourage businesses to increase their investment in the near term. Accordingly, Japan's economy is expected to expand by 1.3% this year.

A revival of growth in Japan and the yen depreciation could have some spillovers on other Asian economies. Economies with a high degree of export similarity to Japan, such as Korea and Taiwan, could face greater competition in the short run due to the negative substitution effect favouring relatively cheaper Japanese goods. (Chart 3.6) In comparison,

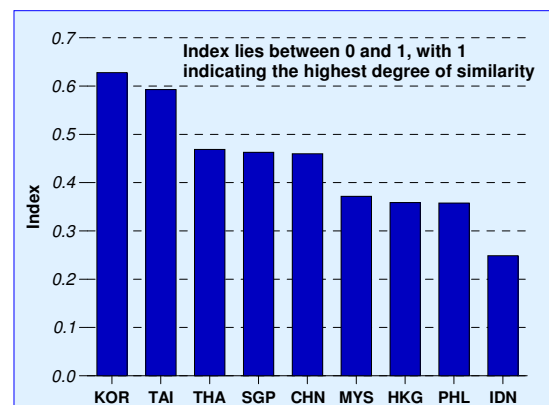
Chart 3.5
Japan Tankan Diffusion Indices,
All Industries



Source: CEIC

Note: The diffusion index refers to the percentage of favourable responses less unfavourable responses.

Chart 3.6
Regional Export Similarity with Japan



Source: CEIC and UN Comtrade

Note: The export similarity index measures the extent to which an economy's export structure resembles that of another. The higher the index, the more similar an economy's exports are to those of Japan. The analysis was based on SITC definitions at the 3-digit level, apart from Taiwan, which was based on SITC 2-digits due to data unavailability.

ASEAN’s role as a “downstream producer” for Japan suggests that it is unlikely to be as significantly affected by a weaker yen. For example, Thailand, which serves as a production hub for Japanese companies, is likely to benefit from Japan’s increased export competitiveness. In general, stronger growth in Japan is expected to stimulate imports from the region.

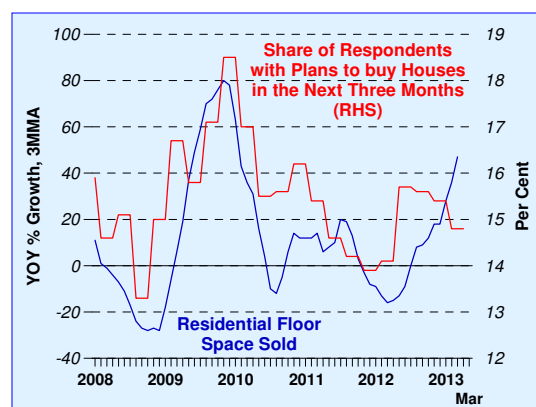
China and the NIEs will expand at a steady pace ...

China’s economic growth decelerated to 7.7% y-o-y in Q1 2013, confounding expectations of a continued strengthening. This can be attributed to a slowing manufacturing sector and a drop in retail sales, precipitated by initiatives to rein in extravagant spending at official events. These measures will continue to dent restaurant and retail spending in the near term. Also, additional restrictions on property speculation will weigh on the real estate sector in the coming months. Chart 3.7 shows that intentions to purchase houses have declined, although residential property sales continued to rise in the first quarter of this year in anticipation of the new rules.

Nevertheless, China is still on track to achieve the official growth target of 7.5% in 2013. The government’s renewed push for urbanisation implies that economic activity will be buoyed by a step-up in infrastructure and public housing investment. Meanwhile, private consumption will be buttressed by rising wages amid a tight labour market. The recent surge in credit growth also indicates that economic momentum could gather pace in the coming quarters. However, the authorities in China will be vigilant against a rise in inflation, which could prompt a new round of monetary tightening.

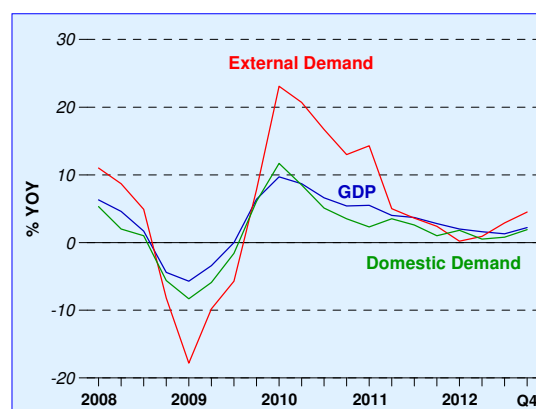
Overall GDP growth in the NIEs is projected to rise to 3.4%, from 1.5% in 2012. As the global recovery gains traction, domestic spending in the NIEs will also strengthen in tandem with external demand. (Chart 3.8) In Hong Kong, fiscal top-ups for low-income groups will provide a stimulus to household consumption, while supplementary budget measures in Korea will shore up private demand. However, Korean households’ elevated debt levels, which are in excess of 130% of disposable income, will continue to constrain consumer spending.

Chart 3.7
China Housing Purchase Intentions and Sales



Source: CEIC and EPG, MAS estimates

Chart 3.8
NIE-3 Domestic and External Demand Growth



Source: CEIC and EPG, MAS estimates

... while growth in ASEAN will ease only modestly.

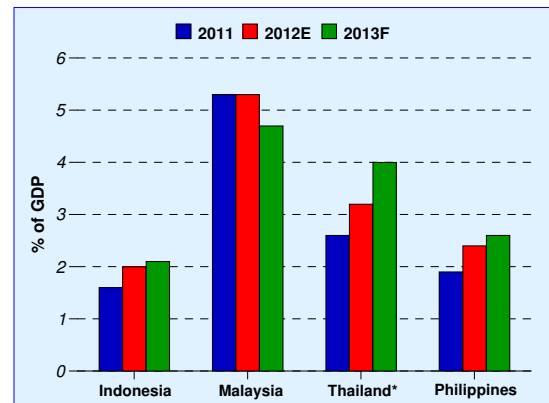
The ASEAN-4 economies are expected to expand at a healthy clip in 2013 as minimum wage increases and ongoing fiscal transfers bolster household incomes and spending. At the same time, a sustained implementation of infrastructure projects across the region and rising FDI will underpin the investment upswing that is underway. (Chart 3.9) The Philippines is expected to cement its investment grade status this year, having already been upgraded by one major rating agency in March 2013. Nonetheless, growth in ASEAN-4 is still likely to moderate, due, in part, to an end to pre-election spending in Malaysia and the normalisation of economic activity in Thailand following the post-flood rebound. In Indonesia, supply-side constraints that have become more binding after several years of strong growth will also temper economic outcomes.

Similar supply-side issues have plagued India's economy lately. Power outages caused by a coal shortage have stymied the country's industrial output, while domestic demand has remained subdued. However, the expansionary budget unveiled in March 2013 will help growth to recover from 5.0% in 2012 to a projected 6.1% in the next fiscal year, although this is predicated on an investment rebound.

Inflation should remain subdued in the G3, but Asia faces upside risks.

Inflation stayed comfortably within the tolerance zones of central banks in most advanced economies. Despite an exceptional degree of monetary stimuli in the US and Japan, inflation expectations have been contained. This is not surprising, given persistent negative output gaps and elevated unemployment levels. The notable exception is the UK, where inflation is forecast to remain above target, mainly due to increases in administered prices. According to the latest PMI survey, global input prices have declined further, supporting the benign outlook for inflation. (Chart 3.10)

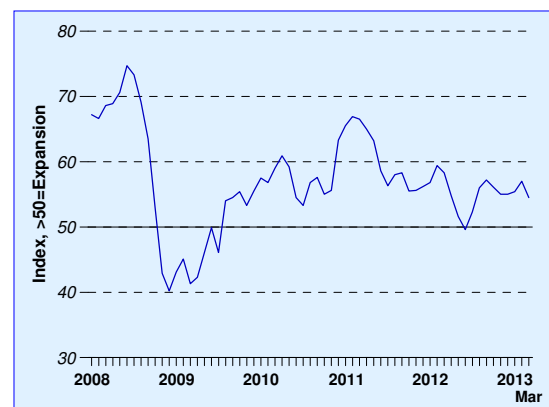
Chart 3.9
Infrastructure Budgets
in Selected ASEAN Countries



Source: Official sources and EPG, MAS estimates

* Thailand's budget is based on the fiscal year. The FY2012 figure refers to the actual realisation.

Chart 3.10
Global Composite PMI for Input Prices



Source: Markit

In comparison, price pressures in Asia are expected to increase in H2 2013 alongside a strengthening in economic activity. Output gaps in the ASEAN-4 economies have either closed or turned mildly positive, while capacity utilisation rates have approached pre-crisis peaks. The minimum wage hikes implemented at the start of the year in Indonesia, Malaysia and Thailand could also push up business costs, especially in the labour-intensive services sector. Similarly, cost pressures might rise on the back of the tight labour market in China and an expected minimum wage increase in Hong Kong. Further fuel price subsidy rationalisation may take place in Indonesia and Malaysia, posing additional upside risks to inflation.

3.2 Outlook for the Singapore Economy

Mild Cyclical Uplift amid Structural Change

The Singapore economy is forecast to grow by 1–3% in 2013.

Over the last two years, the ebb and flow of global headwinds has proven to be a challenge to a firm and sustained recovery of the Singapore economy. While the pace of growth picked up in Q4 2012, momentum waned in Q1 this year. Apart from the external uncertainties that have resurfaced, the Singapore economy was also weighed down by weak performances in the pharmaceuticals and transport engineering segments.

Despite the consolidation in Q1, domestic economic activity should pick up gradually over the course of 2013 as the global environment improves. While a recovery in the Eurozone is not yet in sight, the US and Japan seem to be on track for a modest upturn. Concomitantly, demand from Asia is expected to stay resilient amid an investment upswing and growing household incomes in the region.

The sources of growth for the Singapore economy will be more balanced between internal and external drivers compared to last year, when growth was predominantly driven by the former. However, domestic demand is still likely to remain the mainstay of the Singapore economy, supported in part by infrastructure-related expansions. All in, GDP growth is projected to come in at 1–3% for the whole of 2013.

Nevertheless, risks to the growth outlook remain. Lingering uncertainties from outstanding fiscal issues in the US and the potential for policy missteps in the Eurozone could jettison the nascent turnaround in global business and consumer confidence. As such, the Singapore economy is likely to continue to be confronted by intermittent bouts of external volatility, although a sharp deceleration is not envisaged at this juncture. On the domestic front, resource pressures from economic restructuring could translate into higher business costs, which may restrain the pace of growth.

The sentiment-sensitive industries are expected to strengthen ...

Should the global recovery become more entrenched, the bellwether sentiment-sensitive clusters within the financial sector would be among the first in Singapore to pick up. Some segments have indeed shown signs of improvement. Notably, trading activity on the domestic bourse was buoyant in Q1 this year, with average daily turnover volumes surging by 158% q-o-q, the highest since Q2 2009. Further, IPO volumes rose from \$53 million in Q4 2012 to \$814 million in Q1 2013 amid improved regional prospects. Companies which tapped the equity markets indicated that the bulk of proceeds would be used for expansion in both domestic and regional markets. Looking ahead, the IPO pipeline is expected to remain firm as larger listings which were held off during the downturn in 2012 come on-stream.

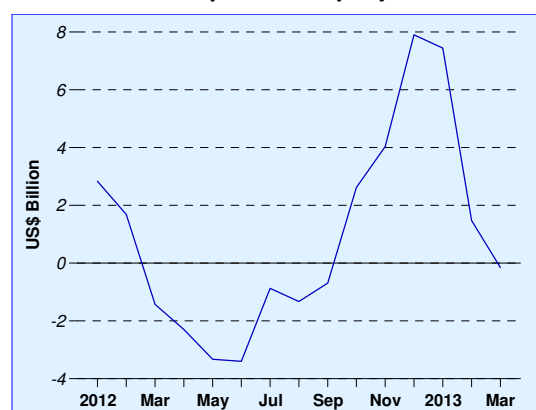
... although the road to recovery could be choppy.

Nonetheless, the sentiment-sensitive clusters are highly susceptible to external shocks. The overall Q1 rally in stock market turnover volumes masked a contraction in March, which reflected rising stresses in the global financial markets over the Cyprus bailout towards the end of February. Likewise, Asia ex-Japan equity flows also saw a sharp pullback over Feb–Mar this year, recording the first net outflow since September 2012. (Chart 3.11) Thus, the sentiment-sensitive segments could see some see-sawing of activity around a modest recovery trend, especially if external challenges reassert themselves.

The global IT cycle appears to have troughed.

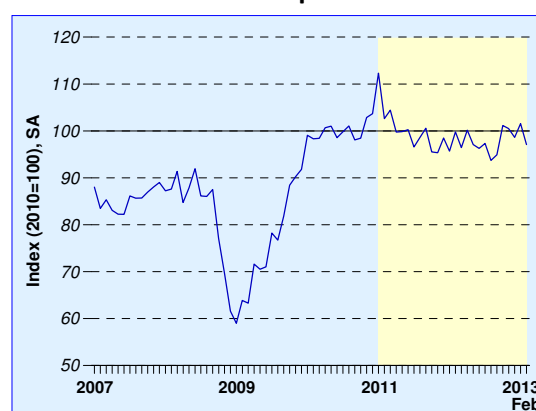
This uneven profile has likewise been evident in the global IT industry. (Chart 3.12) However, abstracting from sequential volatility, global chip sales seem to be on a modest upward trajectory, having risen by around 4% from their trough in Q3 2012. The improvement was supported by some resumption in final demand, particularly from China. Corporate IT spending by Chinese firms expanded by 16% on average in the first two months of this year over Q4 2012, while retail sales of electronics saw strong double-digit growth over the same period.

Chart 3.11
Asia ex-Japan Net Equity Flows



Source: EPFR Global

Chart 3.12
Global Chip Sales



Source: Semiconductor Industry Association and EPG, MAS estimates

The pickup in final demand, in turn, restored some balance to the supply and demand dynamics within the midstream semiconductor segment. Having stayed at elevated levels throughout much of last year, inventory stockpiles finally showed signs of normalising following a significant drawdown in Q4 2012. Consequently, semiconductor prices appeared to have bottomed out. (Chart 3.13)

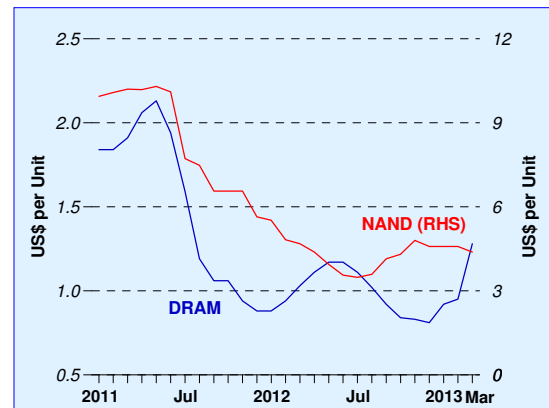
However, the growth profile of global chip sales has been weaker compared to the 2008–10 cycle, which saw a V-shaped rebound. A decisive upturn in semiconductor revenues has remained elusive this time round. Further, the recovery in the earlier cycle was largely driven by a surge in volumes. In contrast, the recent increase in semiconductor volumes has been tentative, although the mild uptick in prices provided some support. (Chart 3.14)

Leading global IT indicators point to a modest turnaround in 2013 ...

EPG's Electronics Leading Index (ELI)—a composite index of several electronics leading indicators¹—suggests a modest turnaround in the global IT cycle. (Chart 3.15) While sales in the PC cluster are likely to remain sluggish, as reflected in the slow uptake of the Windows 8 platform, prospects for the mobile computing segment remain bright. In fact, the International Data Corporation recently upgraded its annual growth forecast for worldwide tablet shipments to over 50% in 2013, up from 40% previously. Concomitantly, global demand for smartphones is projected to rise by 48% for the whole of this year.

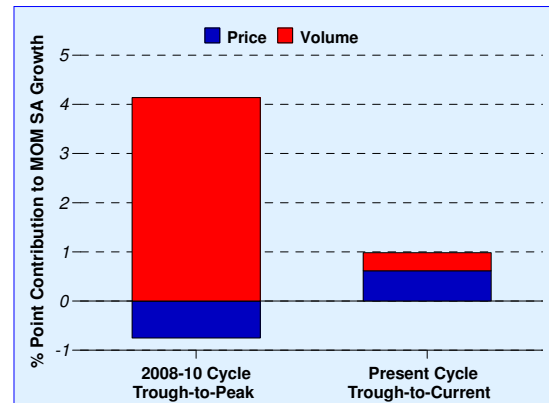
Forward-looking indicators in key end markets have affirmed this prognosis. For instance, both the US Empire State Manufacturing Future Technology Spending Index and China's Entrepreneur Expectation Index have risen from their troughs in mid-2012. After the mild contraction last year, industry analysts expect the global semiconductor industry to grow by 4–5% in 2013.

Chart 3.13
DRAM and NAND Contract Prices



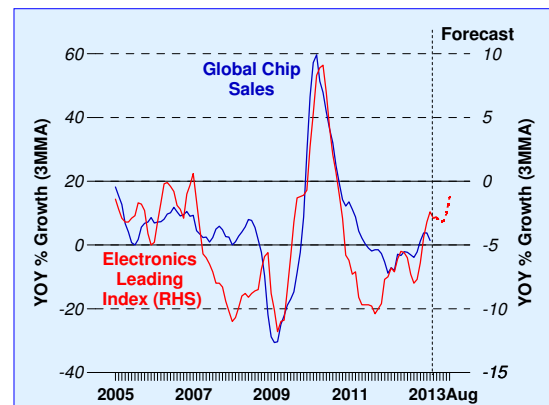
Source: DRAMeXchange

Chart 3.14
Price and Volume Components of Global Chip Sales (GCS)



Source: World Semiconductor Trade Statistics and EPG, MAS estimates

Chart 3.15
EPG's ELI and Global Chip Sales



Source: Semiconductor Industry Association and EPG, MAS estimates

¹ The Electronics Leading Index is a composite indicator constructed by EPG that attempts to predict turning points in the global electronics cycle. It comprises variables including orders, inventories, shipments and prices. For more details, refer to Ng, Y P, Tu, S P, Robinson, E and Choy, K M (2004), "Using Leading Indicators to Forecast the Singapore Electronics Industry", *MAS Staff Paper* No. 30.

... which should impart some upside to Singapore's electronics sector.

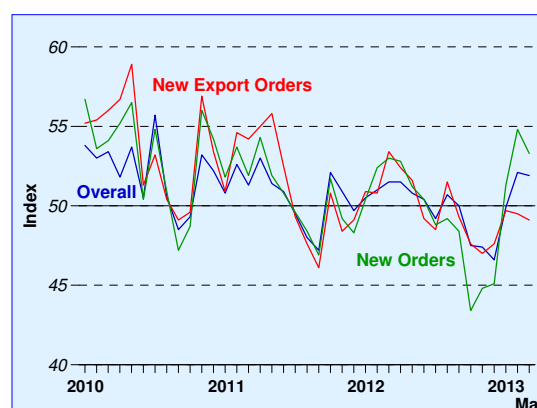
The improved outlook for the global IT industry should lead to a cyclical uplift in Singapore's electronics sector. This is tentatively borne out on several fronts. Following three quarters of sequential contraction, domestic electronics output increased by 5.3% q-o-q SA in Q1 2013. Further, the overall electronics PMI posted an expansionary reading for the second consecutive month in March. Notably, the forward-looking sub-indices for new orders and new export orders have ticked up considerably since late 2012, although the latter still remained slightly contractionary. (Chart 3.16)

Over the medium term, while domestic cost pressures from the restructuring drive could cause less sophisticated production to relocate out of Singapore, high-end manufacturing activities should increasingly be anchored here. Singapore's share of high-end products, such as semiconductors, has been fairly stable since the latter half of the 2000s, suggesting that such activities tend to display greater stickiness location-wise given their higher skill content and technological intensity. (Chart 3.17) Moreover, there has been a healthy pipeline of investment commitments in electronics over the past few years. (Chart 3.18) This implies that a boost to high value-added IT output is in the offing, once these production facilities come on-stream.

Prospects for the non-IT manufacturing clusters are likewise expected to improve over 2013.

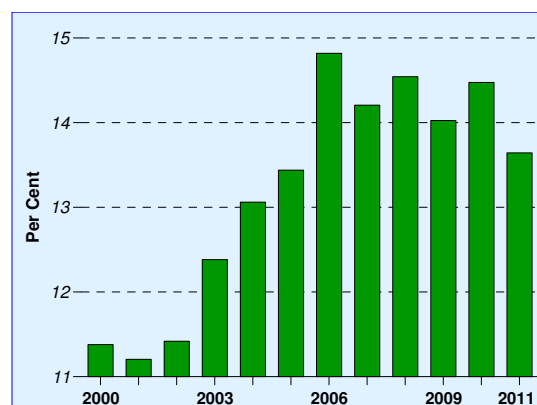
Aside from electronics, several other developments also point to an upturn in the domestic manufacturing industry over the rest of 2013. For instance, the transport engineering cluster should register stronger outturns ahead, on the back of solid order books and the completion of Sembcorp Marine's Integrated New Yard facility in the latter half of this year. Activity in the chemicals segment should likewise pick up in view of the expected production increase at ExxonMobil's new petrochemical plant, one of the world's largest ethylene steam crackers.

**Chart 3.16
Electronics PMI**



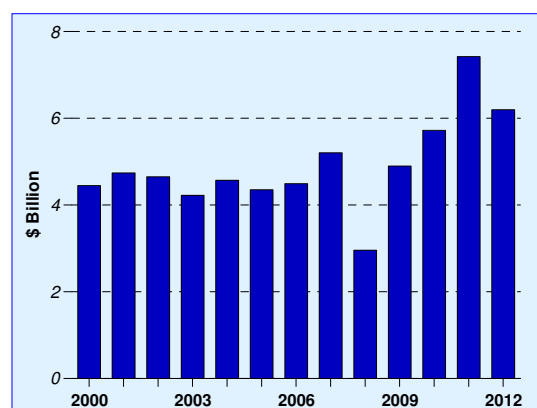
Source: Singapore Institute of Purchasing & Materials Management

**Chart 3.17
Singapore's Share of the
Global Semiconductor Market**



Source: UN Comtrade

**Chart 3.18
Investment Commitments in Electronics**



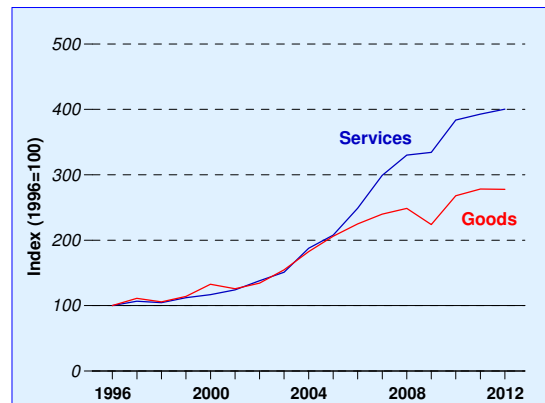
The external-oriented services should perform better in 2013.

The envisaged pickup in manufacturing should in turn engender positive spillovers to the trade-related services. For instance, the wholesale trade sector is expected to regain traction. Further, industry experts project a better performance by the global container industry, as freight rates and volumes strengthen, and bunker costs decline. This is likely to benefit Singapore's water transport segment, given its role as a transshipment centre. Some tentative improvement is evident, with the growth in sea container throughput volumes rising from -1.6% q-o-q SA in Q4 2012 to 0.1% in Q1 2013.

From a broader perspective, Singapore's exports of goods and services have charted increasingly divergent paths since the second half of the 2000s. (Chart 3.19) A sectoral breakdown shows that growth in services exports has been especially strong in the intellectual property and information & communications technology segments. (Chart 3.20) This comports well with the evolving activity mix in the domestic economy over this period, as Singapore repositioned itself towards more services-based growth. In fact, while growth in merchandise exports has lagged that of Singapore's regional counterparts recently, exports of services have outperformed in comparison, especially since the mid-2000s. (Chart 3.21)

The external-oriented services clusters are set to see continued expansion in the future, boosted by several structural developments. For instance, Singapore has announced plans to position itself as a regional intellectual property hub, in anticipation of increased demand from Asia as economies modernise and become increasingly knowledge-based. Further, there is a growing impetus among manufacturing firms globally to "servicise" their activities. Aside from hardware production, these companies are placing greater emphasis on the delivery of IT services and innovative solutions. Specifically, the advent of cloud computing holds the potential to transform physical products such as data storage into services which are delivered over networks. These global trends are likely to augur continued upside developments in the domestic manufacturing-related services segments, especially in business services and information & communications technology.

Chart 3.19
Singapore's Real Exports of Goods and Services



Source: EPG, MAS estimates

Chart 3.20
Singapore's Exports of Services

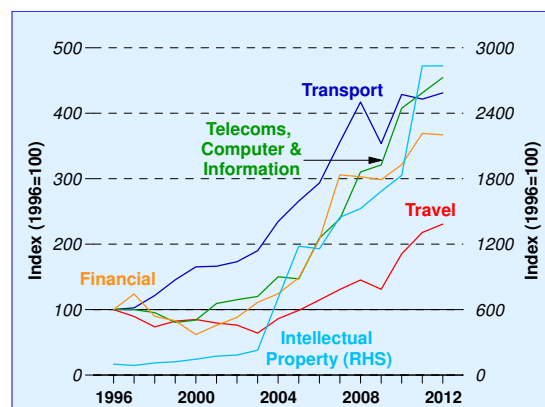
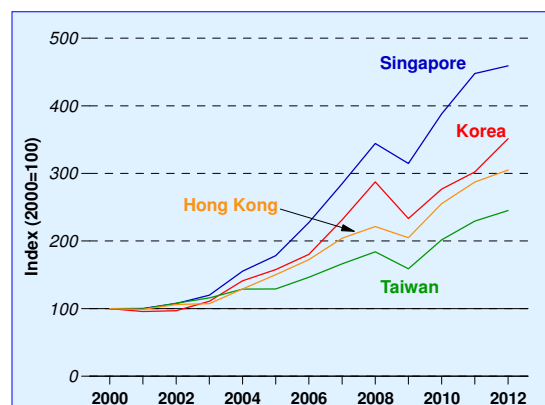


Chart 3.21
NIE Exports of Services



Source: CEIC and EPG, MAS estimates

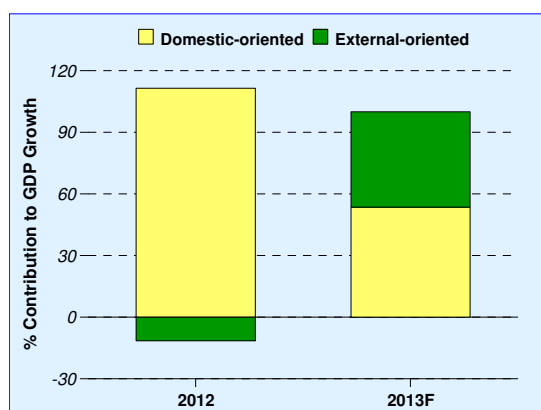
Economic activity in 2013 will be more broad-based ...

As described in Chapter 1, the Singapore economy was characterised by an atypical growth profile last year. While external-oriented activities stagnated amid the global slowdown, the domestic-oriented industries emerged as a key pillar of growth. Compared to 2012, the expansion in overall economic activity this year is likely to be driven by a turnaround in external

demand while domestic sources of growth remain resilient. (Chart 3.22a) The drag from net exports should dissipate, which will in turn boost corporate profits slightly. (Charts 3.22b and 3.22c) Further, the improvement in external-oriented activities—which have exhibited larger productivity gains during past recoveries compared to other sectors—suggests that the significant drag from productivity last year will also fade in 2013. (Chart 3.22d)

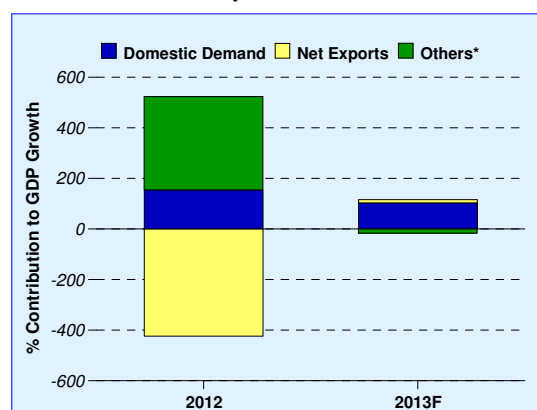
Chart 3.22
Composition of GDP Growth²

Chart 3.22a
Production



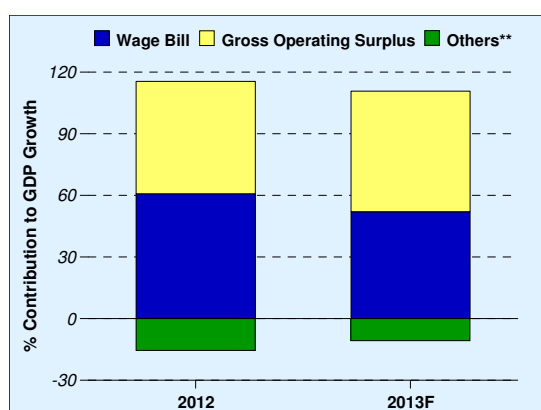
Source: EPG, MAS estimates

Chart 3.22b
Expenditure



* Includes changes in inventories and statistical discrepancies.

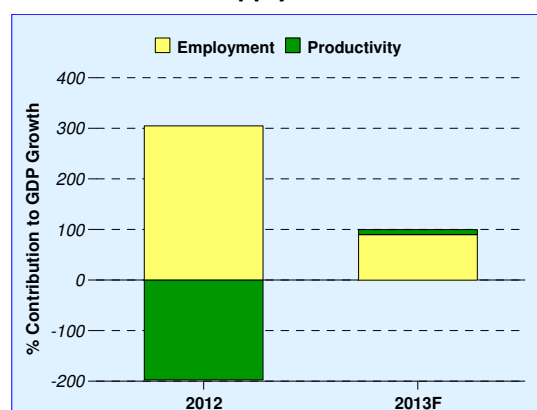
Chart 3.22c
Income*



* In nominal terms.

** Includes taxes and statistical discrepancies.

Chart 3.22d
Supply-side



Source: EPG, MAS estimates

² Chart 3.22 shows the composition of GDP growth from various perspectives, expressed in percent share terms. The components for each year will sum to 100%. If a component acts as a drag on growth, it will show a negative contribution in the chart.

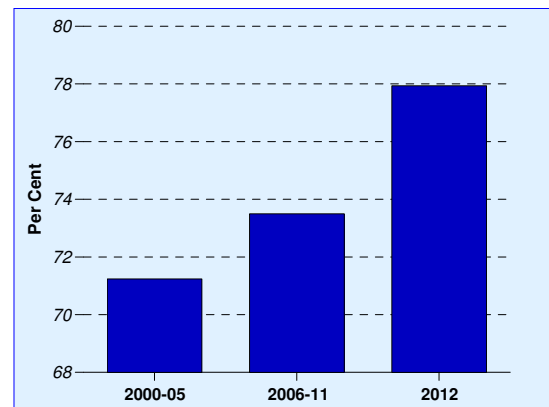
**... with domestic demand providing a floor
to the GDP outcome.**

The primacy of domestic demand is expected to be sustained into 2013, providing a lower bound to overall growth. Its continued resilience will be underpinned by several factors.

First, private consumption is likely to stay firm. The tightness in the labour market could lead to higher wage growth, which will, in turn, support household expenditure. The projected cyclical improvement in the global economy should also lift consumer sentiment. Notably, households in Singapore are consuming more personalised services on the back of rising incomes. The share of services in private consumption expenditure has increased from an average of 71% in 2000–05 to 78% last year, with the largest increments in financial services, communications, healthcare and education. (Chart 3.23)

Second, Singapore is upgrading its social infrastructure, particularly in healthcare and education, which should provide a fillip to public consumption. Demographic challenges will be increasingly brought to bear, as over a quarter of the current citizen population is expected to reach retirement age between now and 2030. The government has therefore planned to scale up expenditure on medical services, home-care and aged-care programmes. At the same time, consumption of education services is set to increase, in view of initiatives to enhance social mobility, such as providing more affordable pre-school facilities, as well as enhancing existing programmes for tertiary education and vocational training.

Chart 3.23
Services' Share of Private
Consumption Expenditure



Source: EPG, MAS estimates

Third, investment demand will be anchored by ongoing capacity expansions in housing and public transportation, as Singapore augments its physical infrastructure to cater to the needs of a larger population base. Major projects in the pipeline include Changi Airport Terminal 4, new port facilities in Tuas and several recently-announced additions to the MRT network. (Table 3.2) Residential investment is likewise expected to remain firm. Based on current projections, a total of 30,408 residential units are slated to be completed by end-2013, more than 1.5 times the average annual increase over 2000–11. (Chart 3.24) Meanwhile, EDB reported record investment commitments of some \$16 billion last year. The ongoing drive to raise productivity should also translate into higher capital expenditure by firms, thereby providing a further boost to investment demand. Moreover, the trend of rising services consumption will support growth in domestic investment in the coming years, as new facilities, such as hospitals and schools, will need to be built.

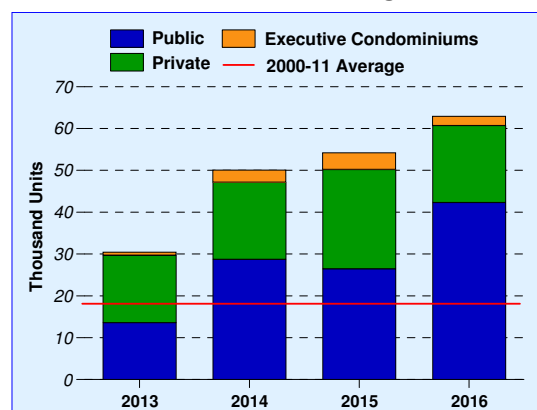
Investment spending will create positive spillovers to construction and other downstream ancillary activities.

Using input-output analysis, EPG decomposed the sectoral spillovers from a per dollar increase in domestic investment spending. Our estimates suggest that over half of such effects will accrue to the domestic-oriented sectors. (Chart 3.25) The construction industry is the key beneficiary, accounting for some 25% of total investment spillovers. Further, the strong pipeline of infrastructure projects will generate downstream benefits to ancillary activities such as real estate, and financial and business services.

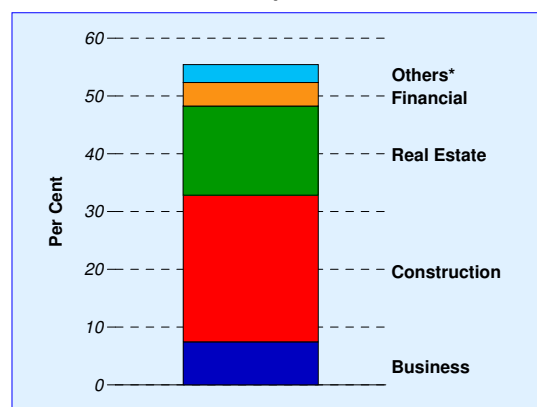
**Table 3.2
New MRT Projects Announced in 2013**

Expansion Plans	Estimated Completion
Circle Line Stage 6 (Harbourfront to Marina Bay)	2025
Downtown Line Extension (East Coast)	2025
Jurong Region Line (between Jurong, Choa Chu Kang, and West Coast)	2025
Northeast Line Extension (Punggol North)	2030
Cross Island Line (Jurong Industrial Estate to Changi)	2030

**Chart 3.24
Projected Completions of Residential Dwellings**



**Chart 3.25
Sectoral Spillovers of a Dollar Increase in Gross Fixed Capital Formation**



Source: EPG, MAS estimates

* Others include information & communications technology, retail trade, other services, utilities and other goods.

Strong investment will boost the capital-labour ratio over the next few years.

The increase in investment expected over the next few years will support a steady rise in the economy's capital-labour ratio, which had generally weakened in the latter half of the 2000s. (Chart 3.26) This should in turn lead to an improvement in Singapore's productivity performance. The discussion is developed further in Section 3.3.

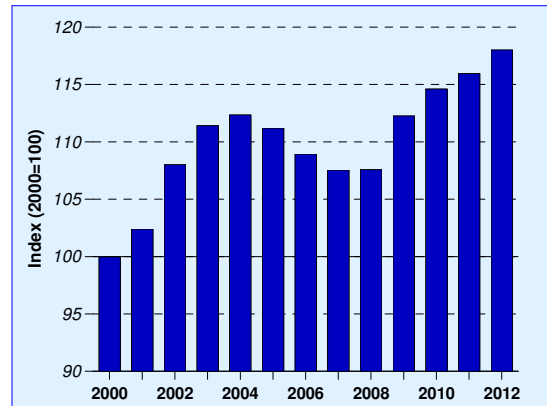
There are risks to the short-term outlook as the economy transits to sustainable growth over the medium term.

There are several downside risks for the Singapore economy. Critically, the expected recovery is contingent on relatively sanguine conditions in the advanced economies. This is not a foregone conclusion, as a severe negative shock in the developed countries would quickly reverberate through the global trade and financial channels. Even barring a full-scale crisis, there are forces which could cap the potential for global growth, such as bank deleveraging in Europe and more broadly, the ongoing fiscal consolidation and structural challenges in some developed economies.

On the domestic front, supply-side constraints could limit the pace of the cyclical turnaround in the Singapore economy. During the restructuring period, firms will face pressures on their profit margins in view of higher transitional costs, particularly in rentals and wages. Moreover, as the Singapore economy orients itself towards higher value-added activities, the accompanying reallocation of resources will need time to run its course. It will take time for firms to adjust, and for workers to acquire new skills.

Given these continuing external and domestic challenges, growth in the Singapore economy may not take off in the same way that has characterised past upturns. Therefore, EPG's baseline prognosis points to a modest expansion in 2013, during the transition towards sustainable and inclusive growth in the future.

Chart 3.26
Total Private Net Capital Stock Per Worker



Source: EPG, MAS estimates

Note: The dip in 2008 followed the sharp retrenchment in investment during the Global Financial Crisis, even though employment in the domestic industries held up.

3.3 Labour Market

Labour Market to Remain Tight

The labour market will remain tight in 2013 as demand for workers, particularly in the non-tradable sectors, continues to outpace supply. Growth in overall labour supply is expected to moderate, due partly to the continued tightening of the foreign labour policy. With more firms turning to locals to fill job vacancies, resident wages will rise at a slightly faster pace across all sectors. As a result, unit labour costs will continue to increase, despite some improvement in productivity.

**Job creation will be led by the
non-tradable sectors ...**

Labour demand is expected to pick up moderately as the economy gradually recovers from the mild contraction in Q1. A recent survey by ManpowerGroup, for example, reports a modest turnaround in the net employment outlook, as a greater proportion of employers expect to increase headcount.³ (Chart 3.27)

The domestic-oriented sectors will continue to account for the bulk of job creation in 2013. (Chart 3.28) Within services, public administration & education services are the most optimistic in their hiring outlook, due in part to the planned expansion in pre-school and tertiary education facilities. Similarly, labour demand in construction is expected to remain firm, given the large number of public infrastructure and residential building projects already in the pipeline. (Chart 3.29) In addition, new contracts for the Thomson MRT line, JTC's very large floating structure and the fourth storage tank for the LNG terminal will be awarded in 2013. The Building & Construction Authority (BCA) expects construction demand this year to be comparable to that in 2012.

**... even as hiring sentiment recovers in the
external-oriented sectors.**

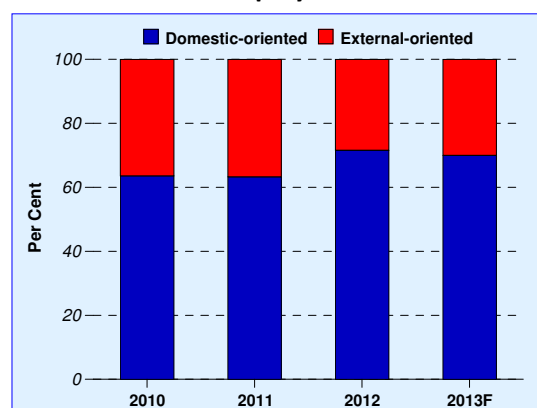
In the more external-oriented sectors, the employment outlook is also likely to improve slightly in line with

**Chart 3.27
Net Employment Outlook**



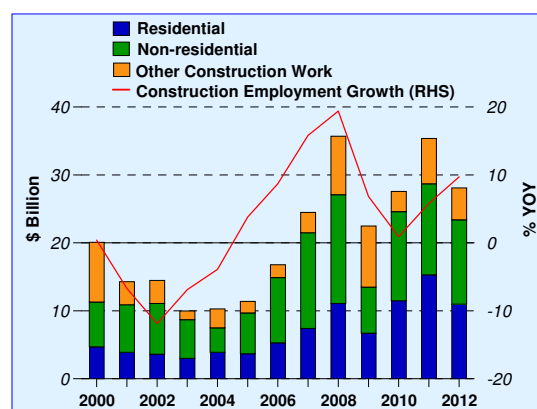
Source: ManpowerGroup

**Chart 3.28
Share of Employment Gains**



Source: EPG, MAS estimates

**Chart 3.29
Construction Contracts Awarded**



³ The Net Employment Outlook is the difference between the percentage of employers expecting total employment to increase and the percentage expecting a decrease in the next quarter.

the gradual recovery in the global economy. Hiring intentions in the financial & insurance sector rose modestly in Q2 2013, bolstered by brisk lending activities to the region and the firm IPO pipeline. In the wholesale trade and transportation & storage segments, the pace of redundancies has also eased and some slight pickup in net job growth can be anticipated.

**However, tighter foreign worker policy
will constrain overall employment growth.**

Despite stronger labour demand, overall employment growth will be constrained by the tighter foreign labour policy. Apart from the foreign worker levy increases in January and July this year, the new tightening measures announced in Budget 2013 will further cap the inflow of low- and mid-skilled foreign workers, particularly in the services industries.

From July 2013, the Dependency Ratio Ceiling (DRC) and the S Pass sub-DRC will be cut further for the services sectors, while the minimum qualifying salary for S Pass holders will be raised across all sectors. (Table 3.3) Employment growth in construction will also be dampened by the cumulative 45% reduction in Man-Year Entitlements (MYE) since 2010.⁴

**Resident unemployment will stay low,
placing upward pressure on wages.**

Meanwhile, the resident labour supply is likely to increase at a slower pace, following the sharp rise in the labour force participation rate to a record high in 2012. On balance, overall employment growth will moderate, as supply constraints in both the foreign and local labour forces become more binding.

For the year as a whole, the overall unemployment rate is expected to remain low at around current levels. Further, improvements in hiring sentiment are likely to push the already elevated ratio of job vacancies to unemployed persons higher, and place greater upward pressure on wage growth. (Chart 3.30) Nominal wages

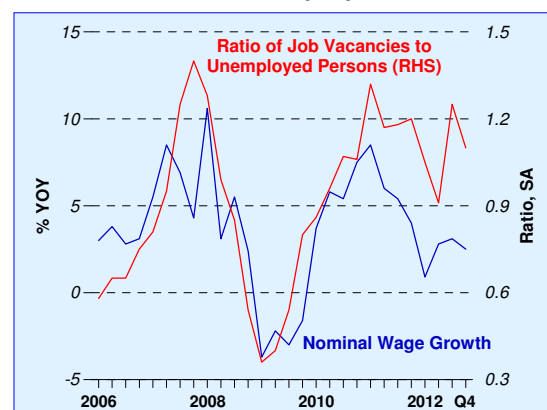
**Table 3.3
New DRCs, Sub-DRCs and Qualifying Salaries**

	Services DRC	Services S Pass Sub-DRC
Before July 2013	45%	20%
July 2013*	40%	15%
S Pass Qualifying Salary		
Before July 2013	\$2,000	
July 2013	From \$2,200**	

* The DRC reductions will only affect new applicants. Companies will be given time to adjust their existing workforce, and have until June 2015 to comply with the new DRCs.

** From July 2013, older S Pass applicants will need to qualify at higher salaries, commensurate with their work experience. This is similar to changes made to the Employment Pass qualifying criteria that took effect from January 2012.

**Chart 3.30
Nominal Wage Growth and Ratio of Job
Vacancies to Unemployed Persons**



⁴ MYE is the total number of Work Permit holders (WPHs) from non-traditional sources (NTS) and the People's Republic of China (PRC) that a main contractor is entitled to employ based on the value of contracts awarded by developers. Companies without MYE may still employ WPHs from these countries subject to compliance with the Dependency Ratio Ceiling by paying higher foreign worker levy rates.

are expected to rise at a faster pace across all sectors, particularly in the external-oriented segments, where recent salary increases have been relatively muted. Overall wage growth could average 3% in 2013, compared with 2.3% in 2012.

Unit labour costs will rise, as higher labour costs outpace the cyclical improvement in productivity.

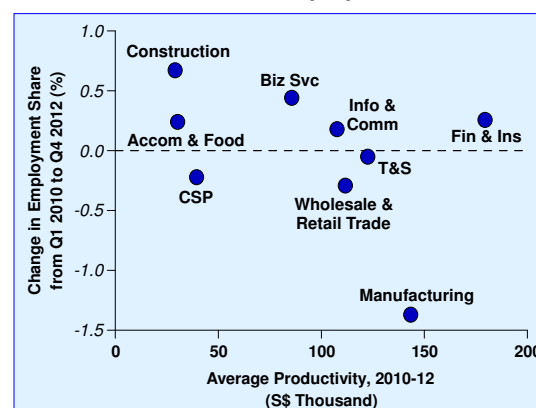
Bolstered by a gradual pickup in economic activity and slower employment growth, overall productivity is expected to improve, especially in the second half of the year. However, productivity growth is unlikely to be as strong as in previous recoveries, largely because the rebound in manufacturing and trade-related services is likely to be relatively modest this time round. In 2013, Singapore's productivity performance as well as the employment-productivity mix will be better than that in 2012, although productivity growth will still be below its historical average.

At the aggregate level, higher foreign worker levies and stronger wage growth will continue to result in higher unit labour costs (ULC), following the 4.1% increase in 2012. The rise in ULC largely reflects the adjustment costs facing the Singapore economy as it restructures towards a more sustainable growth path. Nonetheless, the recently introduced Wage Credit Scheme, together with the other measures announced in this year's Budget, will provide some cost relief to firms over this transitional period.

The shift in employment towards construction and domestic-oriented services will weigh on trend productivity growth ...

As noted in past issues of the *Review*, the step-up in labour-intensive infrastructure projects and essential services has shifted the employment share towards construction and business services, where productivity levels are lower than in manufacturing and financial & insurance sectors. (Chart 3.31) This shift has exerted a drag on trend productivity growth, and is likely to persist over the next few years until the intended catch-up in infrastructure capacity is completed.⁵

Chart 3.31
Change in Employment Share and Productivity by Sector



Source: EPG, MAS estimates

⁵ EPG's internal estimates suggest that this negative shift-effect has reduced trend productivity growth by 0.26% point per annum since 2010.

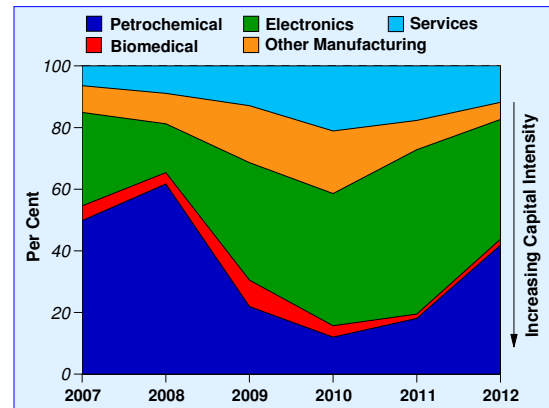
... though this could be offset by capital deepening and higher labour quality.

However, several factors could boost trend productivity growth and offset the negative shift-effects over the medium term.

First, as mentioned in Section 3.2, capital deepening should accelerate over the next few years, given the ramp-up in physical capital investment. Further, the rising share of investment commitments in the petrochemicals and electronics clusters is likely to raise the economy's capital-intensity further. (Chart 3.32) This shift towards capital could, in part, reflect the rise in the relative cost of labour due to the tighter foreign worker policies, and more broadly, the shortage of labour in the economy. At the same time, government schemes, such as the Productivity & Innovation Credit (PIC), will lower the relative cost of capital further and encourage more investment.

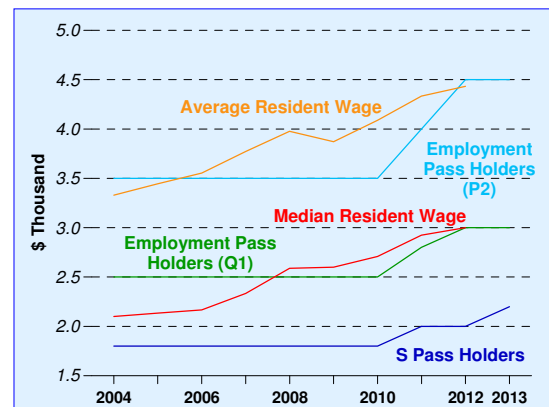
Second, labour quality is set to improve at a faster rate in view of policies to raise the educational attainment and overall skill level of the workforce. For example, with the expansion in the number of universities offering full-time degrees to six, enrolment is expected to rise to 16,000 in 2020, from 13,000 last year. The increase in the number of Continuing Education and Training (CET) places from 6,400 presently to 10,100 by 2015, coupled with expanded CET subsidies, will also enhance the human capital of existing workers.⁶ For non-residents, the recent hikes in qualifying salaries for Employment Pass and S Pass holders, as well as higher levies for lower-skilled WPHs, will serve to raise the quality profile of the foreign workforce. (Chart 3.33) The introduction of the Job Flexibility Scheme, which allows WPHs in the services sector to work in different job functions, will further complement these measures.

Chart 3.32
Share of Fixed Asset Investment Commitments



Source: EPG, MAS estimates

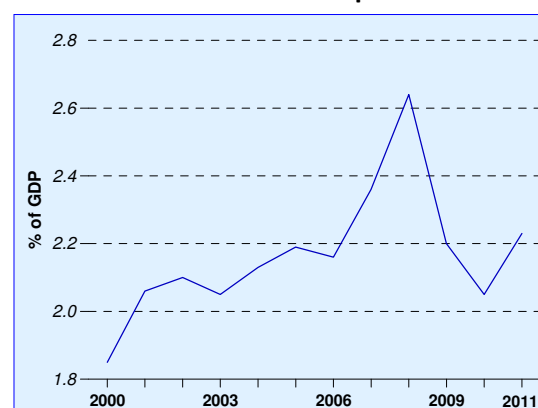
Chart 3.33
Qualifying Salaries for Employment Pass and S Pass Holders



⁶ CET provides opportunities for residents to pursue further studies in polytechnics and universities on a part-time basis. CET subsidies were recently expanded to include existing diploma and degree holders to facilitate re-training.

Third, improvements in total factor productivity growth may arise from an increase in research & development (R&D) spending. Gross expenditure on R&D as a proportion of GDP ticked up to 2.2% in 2011, following two consecutive years of decline. (Chart 3.34) The increase was led mainly by higher private sector R&D spending. Moreover, the government has allocated \$16.1 billion to boost research, innovation and enterprise over FY2011–15, with the aim of increasing gross expenditure on R&D to 3.5% of GDP by 2015. As a major source of technical change and innovation, domestic R&D directly results in new goods and services, higher quality output and new production processes. Further, significant productivity spillovers beyond the private return may occur as experienced in some OECD countries in the 1990s.⁷

Chart 3.34
Gross Expenditure on
Research & Development



Source: A*STAR

⁷ See for example, Guellec, D and van Pottelsberghe, B (2001), "R&D and Productivity Growth: Panel Data Analysis of 16 OECD Countries", *OECD Science, Technology and Industry Working Paper* No. 2001(3).

3.4 Inflation

Higher Domestic Costs will Support Consumer Price Increases

Given tentative signs of a global recovery, the Singapore economy is expected to experience a mild pickup in growth in the latter half of the year. Accordingly, the labour market is likely to continue operating at or near full employment. Against this backdrop, domestic cost pressures are expected to persist and will be the key upside risk to inflation. External price pressures, however, should remain muted, given surplus capacity in the advanced economies and supply buffers in commodity markets.

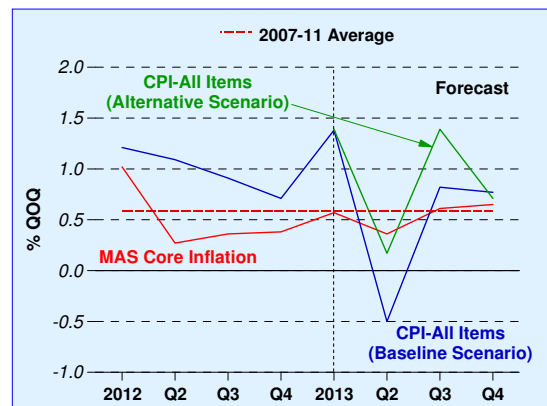
Core inflation will likely pick up in H2, on a year-ago basis ...

Sequential core price increases are likely to strengthen in the second half of 2013 when the economic outlook turns more favourable and cost pressures rise. Core inflation is likely to be slightly above its historical average and similar to what was envisaged in the October 2012 monetary policy review. (Chart 3.35)

The overall CPI will be volatile mainly due to private road transport costs, which will continue to incorporate the effects of the recent motor vehicle policy measures.⁸ (Chart 3.36) In EPG's baseline forecast, COE premiums are assumed to average around current levels. An alternative scenario, where COE premiums return to their levels before the measures were introduced, was also considered.

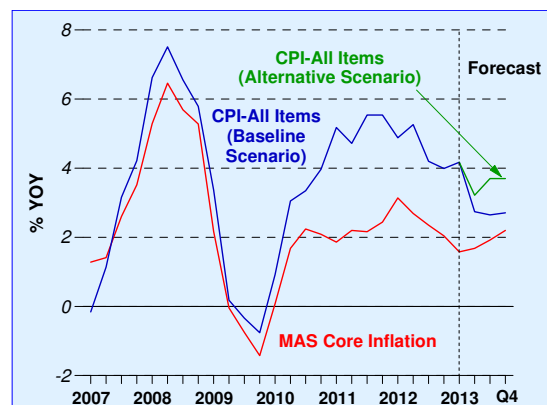
On a year-ago basis, core inflation is likely to stay at slightly above 1.5% in H1 before rising gradually to around 2.0% at the end of the year. (Chart 3.36) In comparison, CPI-All Items inflation is forecast to fall from 4.0% in Q1 2013 and remain broadly stable at below 3% for the rest of the year, assuming COE premiums stay at around current levels. In the alternative scenario, CPI-All Items inflation is projected to decline temporarily in Q2 and then rise to around 3.5% in Q4.

Chart 3.35
Sequential CPI Inflation Forecasts



Source: EPG, MAS estimates

Chart 3.36
CPI-All Items Inflation and
MAS Core Inflation Forecasts



Source: EPG, MAS estimates

⁸ For cars, taxis and goods-cum-passenger vehicles registered with COEs obtained from March 2013, a tiered Additional Registration Fee (ARF) structure will be applied, replacing the previous flat rate of 100% of the Open Market Value of the vehicle. In addition, financing restrictions on motor vehicle loans granted by financial institutions were introduced from end February. Car loans are now limited to no more than 60% of the vehicle's purchase price and the repayment period to no more than five years.

For the whole of 2013, MAS Core Inflation and CPI-All Items inflation will ease from last year. MAS Core Inflation is now expected to come in at 1.5–2.5%, lower than the previous forecast of 2–3%. This downgrade is entirely due to weaker-than-expected price increases in the past two quarters and, hence, a lower starting point in 2013. Reflecting this, as well as the lower projection for COE premiums, CPI-All Items inflation is now likely to be 3–4%, compared with the previous forecast of 3.5–4.5%. Imputed rentals on owner-occupied accommodation and car prices will account for more than half of CPI-All Items inflation. (Chart 3.37)

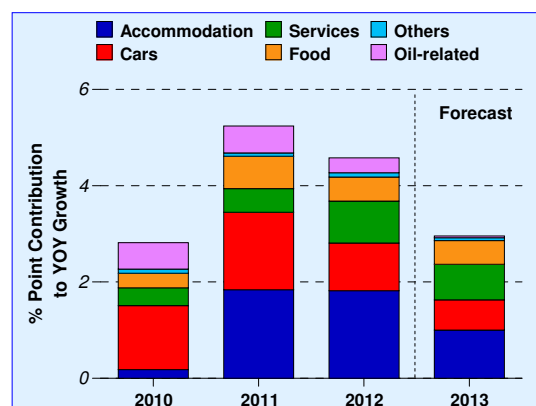
... exacerbated by significant base effects.

Apart from sequential price movements, the profile of y-o-y inflation will also be influenced by base effects arising from atypical changes in the consumer price index one year ago.⁹

Base effects stemming from imported and domestic sources were largely negative over 2012 and in Q1 2013 due to strong price increases in the corresponding period a year ago. (Chart 3.38)

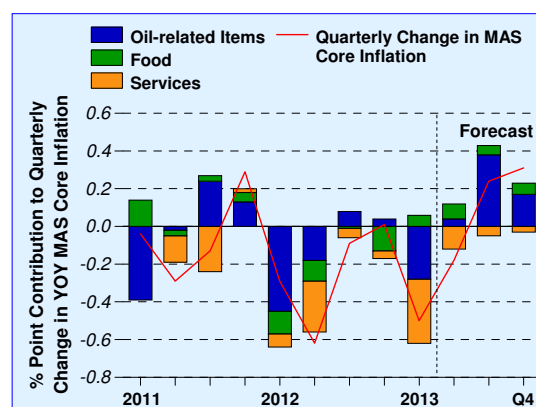
However, base effects are likely to add to y-o-y core inflation in H2 this year on account of the drop in oil prices and lower-than-average food inflation in the latter half of 2012. In addition, the negative base effects witnessed in the services sector are expected to be more modest for the rest of 2013, given the significant moderation in services fee increases over Q2–Q4 2012. On average, base effects will account for around half of the pickup in MAS Core Inflation in H2.

Chart 3.37
Contribution to CPI-All Items Inflation



Source: EPG, MAS estimates

Chart 3.38
Contribution of Base Effects in Major CPI Components to the Quarterly Change in MAS Core Inflation



Note: A base effect is calculated using the deviation of the q-o-q rate of change in the base period (i.e. the comparison period one year ago) from its usual or normal pattern. When the sequential change in the base period is weaker (stronger) than the normal pattern, base effects will add to (subtract from) the y-o-y inflation rate.

⁹ A base effect on the y-o-y inflation rate stems from a deviation in the sequential rate of change in the base period (i.e. the comparison period one year ago) from its usual or normal pattern. When the sequential change in the base period is weaker (stronger) than the normal pattern, base effects will add to (subtract from) the y-o-y inflation rate.

Global food prices are likely to ease from the high in Q3 last year...

External price pressures are likely to be subdued, as any demand uplift arising from an improvement in global economic conditions would initially be accommodated by tapping on current spare capacity in the advanced economies and supply buffers in the commodity markets.

The sharp rise in global food commodity prices in Q3 2012 partially unwound in Q4 as weather conditions normalised and high grain prices encouraged farmers to increase production.¹⁰ Going forward, prices of key food crops are expected to remain much lower than the levels in Q3 2012, as indicated by the futures market. (Chart 3.39)

Nonetheless, some of the earlier increases in global prices are still expected to filter through to domestic food prices. The lagged pass-through occurs as food importers typically enter into long-term contractual agreements with their suppliers and higher grain prices take time to feed into processed food product prices. Correspondingly, the rise in global food prices in Q3 2012 has now started to impact imported food prices, which picked up slightly at the turn of this year after declining throughout 2012. (Chart 3.40)

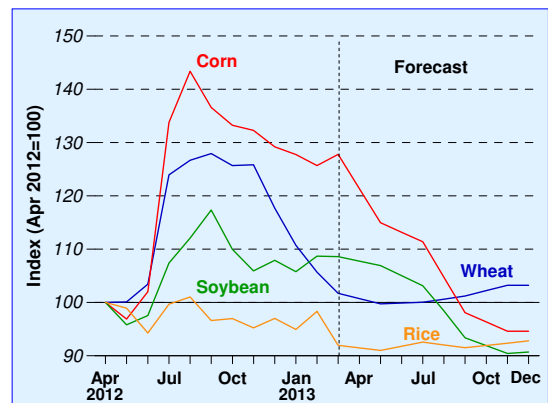
For 2013, domestic food inflation is expected to be marginally higher than the 2.3% in 2012, but lower than the 3.5% average over the last five years.

... while oil prices are also expected to edge lower.

Meanwhile, global oil prices were generally higher at the beginning of 2013 due to growing optimism over global economic prospects. This led to a recent increase in the prices of oil-related items, including petrol prices and electricity tariffs.

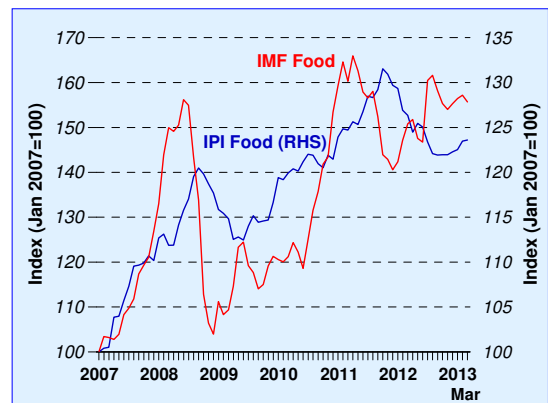
However, global oil prices are projected to trend down gradually over the coming quarters, given the expected increase in commercial inventories in the OECD countries and OPEC's surplus production capacity. (Chart 3.41) This in turn reflects a number of factors,

Chart 3.39
Spot and Futures Prices of Selected Food Commodities



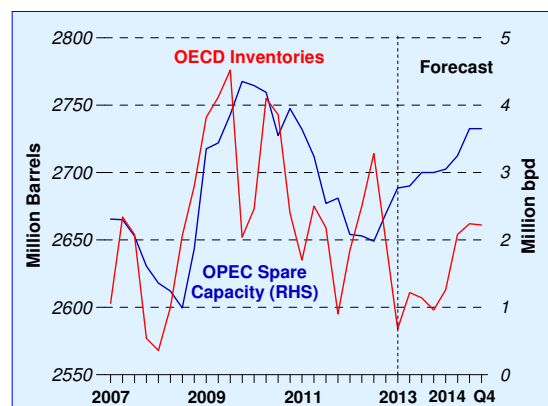
Source: Bloomberg

Chart 3.40
Global and Import Food Price Indices



Source: IMF

Chart 3.41
OECD Commercial Inventory and OPEC Spare Production Capacity



Source: EIA

¹⁰ US farmers intend to sow 97.3 million acres of corn this year, the highest since 1936, according to the US Department of Agriculture's spring planting survey, released on 28 March 2013.

including the projection of modest incremental oil demand, supply growth from non-conventional fuel sources and easing geopolitical concerns. (Chart 3.42)

Given these developments, EIA now expects the West Texas Intermediate (WTI) benchmark oil price to average close to that in 2012. As a result, oil-related items will contribute negligibly to CPI-All Items inflation this year.

Business cost pressures will intensify, particularly in the services sector.

Turning to domestic sources of inflation, cost pressures will continue to emanate from the labour market. Labour demand is likely to remain firm as employers step up hiring alongside the pickup in economic activity. At the same time, the cumulative effects of the tighter foreign labour policy over the past three years will be felt more acutely in 2013, thereby keeping the labour market tight while contributing to the increase in labour costs.

As such, wage growth is anticipated to pick up from 2.3% in 2012 to around 3% in 2013. Similarly, ULC will rise further, following an average 4% increase in the preceding two years, as wage growth continues to outpace productivity gains in the near term.

The impact of rising labour costs will, however, vary across sectors. Notably, the effects will be stronger in the services sector, particularly in consumer services such as food & beverage, healthcare and education services, as manpower costs constitute a larger proportion of their total operating outlay. (Chart 3.43)

Chart 3.42
Projected Global Oil Consumption in 2013

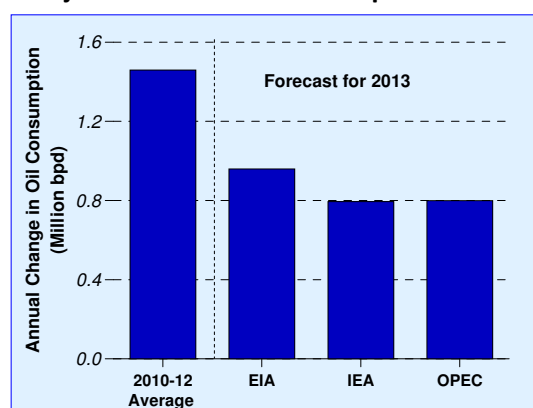
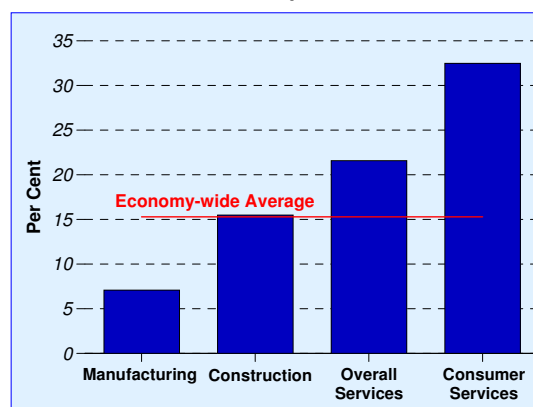


Chart 3.43
Labour Cost as a Proportion of Total Input Cost



Source: EPG, MAS estimates

Apart from labour cost, other operating expenses could increase. Although retail space rentals were broadly stable through 2012, firms' actual leasing cost would have risen if the lease was up for renewal. (Chart 3.44) For instance, a shop space lease that was renewed in Q4 2012 after three years could have seen a rental increase of around 5%, which is the accumulated rise in rentals over 2010–12.

Given that profit margins, as proxied by the mark-up on ULC, are currently at unusually low levels, firms are likely to partially restore them by passing on some of the cost increases to consumers. (See Chart 2.18 in Chapter 2.) Taking into account all these factors, services inflation will rise in H2 this year, though still remain slightly below the 2010–11 average. (Chart 3.45)

Imputed rentals will continue to moderate gradually ...

The contributions of the non-core CPI categories to overall inflation are likely to be lower for the rest of 2013 compared to Q1 this year.

The outlook for market rentals differs across the private housing and HDB segments. Private residential rentals will face downward pressure from the slower inflow of foreign labour and a large number of housing completions. (Chart 3.46) In comparison, HDB rentals are expected to continue to increase, given firm demand for HDB units due to their relative affordability, and tight supply which, in the short term, will be affected by further curbs on the subletting of HDB flats.¹¹

Overall, the increase in imputed rentals will slow gradually over the course of the year. For 2013, it will add close to 1% point to CPI-All Items inflation compared to 1.5% points in 2012.

Chart 3.44
Commercial Shop Space Rental

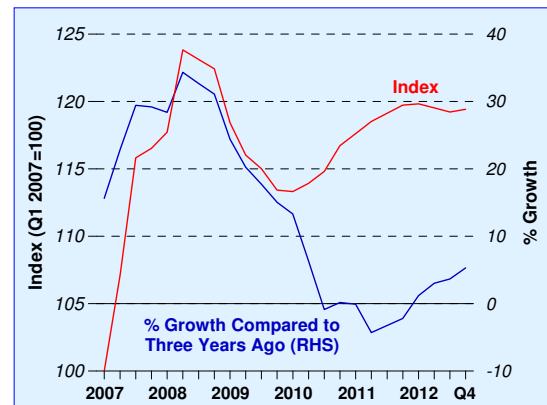
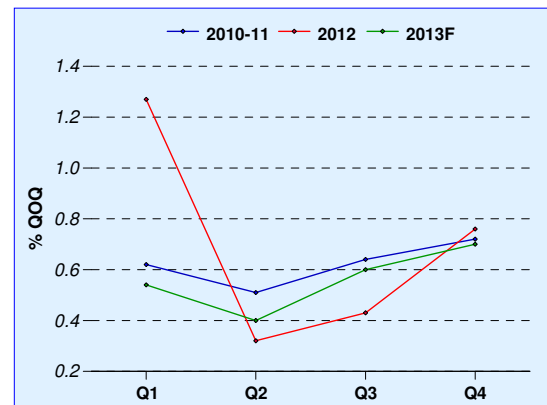


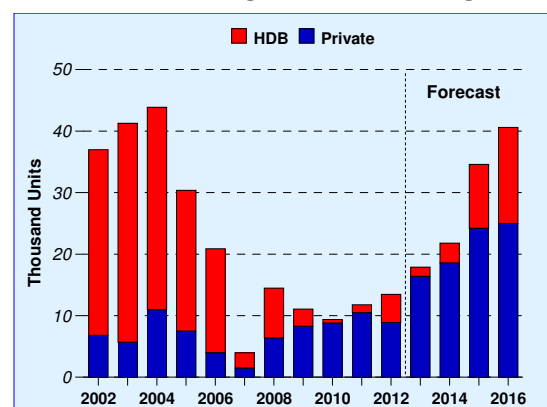
Chart 3.45
Sequential Services Fee Increases*



Source: EPG, MAS estimates

* Increases in Q1 2011 and Q1 2013 were adjusted to remove the impact of the abolition of TV and vehicle radio license fees and the new regulations for foreign domestic helpers.

Chart 3.46
Addition to Stock of Completed Private and HDB Units Eligible for Subletting



¹¹ From March 2013, the maximum period for subletting of HDB flats and rooms involving foreign subtenants will be reduced from three years to one and a half years. A quota on the percentage of non-citizen subtenants renting entire HDB flats and bedrooms will also be introduced in the near term.

... while car price developments will be the key determinant of fluctuations in CPI-All Items inflation.

Changes in car prices will be the single largest factor accounting for the month-to-month fluctuations in overall inflation.

Following the announcement of a tiered Additional Registration Fee system and more stringent financing rules in February, COE premiums have corrected by an average of 30%. As the car market continues to adjust to the policy measures, COE premiums could be volatile for the rest of the year.

Nonetheless, the recent measures have reduced the upward pressure on COE premiums. Furthermore, the COE quota for the next period starting from August 2013 could rise slightly if de-registrations pick up. The number of cars reaching the compulsory age for either de-registration or COE renewal is increasing. (Charts 3.47 and 3.48)

If COE premiums average close to current levels, car prices will add slightly more than 0.5% point to overall inflation in 2013. This will be doubled if premiums revert to levels prior to the policy changes.

Chart 3.47
Number of Cars Aged between 9 and 10 Years as at End of Year

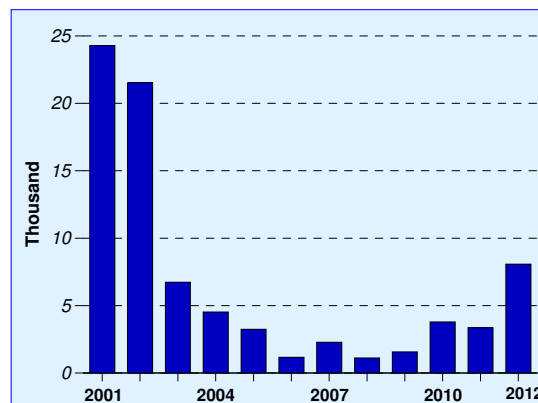


Chart 3.48
Number of Monthly Car COE De-registrations



3.5 Assessing the Macroeconomic Policy Mix

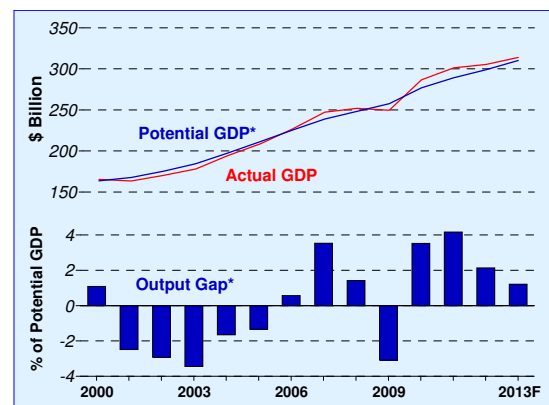
Monetary Policy

The monetary policy stance was maintained in April 2013 in anticipation of higher wage cost pressures on core inflation.

The Singapore economy contracted by 1.4% on a q-o-q SAAR basis in Q1 2013 based on the *Advance Estimates*, following the 3.3% expansion in the previous quarter. The decline was largely due to the fall in manufacturing output, in particular from the biomedical and transport engineering industries. Economic activity was instead supported by the financial services and construction sectors, amid resilient regional demand and a firm pipeline of building projects in Singapore. While uncertainties in the world economy remain, as illustrated by recent developments in Europe, stimulative monetary policies in the advanced economies have provided some support to global GDP. The Chinese economy has also experienced a soft landing, and activity should broadly pick up over 2013 on the back of resilient domestic demand. These factors should underpin sustained growth in the rest of Asia ex-Japan. Against this backdrop, the Singapore economy is projected to recover gradually, with full-year growth estimated at 1–3%.

Core inflation has trended downwards since the second half of 2012, as external and domestic sources of upward price pressures have been weaker than anticipated. Imported inflation was mild due to favourable supply conditions in key commodity markets and a stronger S\$. Moreover, firms have been cautious in passing on higher wages to prices of consumer services amid continuing vulnerabilities in the economic outlook. Nevertheless, domestic sources of core inflationary pressures are likely to re-emerge. The level of output is converging to, but remains above its potential, as shown by the smaller but still-positive output gap of around 1% of potential GDP. (Chart 3.49) The demand for workers in the domestic-oriented sectors, such as construction and personal services, will be robust, even as constraints on the supply of foreign labour, including lower Dependency Ratio Ceilings (DRC) and higher foreign worker levies, become more binding. As such, the pace at which costs are

Chart 3.49
Real GDP and Output Gap



* EPG, MAS estimates.

passed through to consumer prices could begin to pick up in the latter half of the year. While MAS has lowered its forecast for MAS Core Inflation in 2013 to 1.5–2.5% from 2–3%, this largely follows from weaker-than-expected price increases over the past few months.

CPI-All Items inflation has averaged around 4% since Q3 2012, with considerable volatility in the monthly figures arising mainly from sharp swings in COE premiums. Beyond Q1 2013, however, overall inflation should moderate as imputed rentals on owner-occupied accommodation rise at a slower pace in line with the increased supply of completed houses in the private residential segment. COE premiums have also corrected from their peak in early 2013, following MAS' tightening of financing restrictions on motor vehicle loans. While the prices of cars could fluctuate as the market continues to adjust to the policy measures, their contribution to overall inflation is likely to be lower. MAS has thus revised the forecast for CPI-All Items Inflation to 3–4% from 3.5–4.5%.

With both GDP growth and core inflation expected to rise over the course of the year, MAS announced on 12 April 2013 that it would keep the S\$NEER policy band on a modest and gradual appreciation path. There was no change to the slope and width of the policy band, and the level at which it was centred.

The appreciating stance of exchange rate policy since April 2010 has helped to dampen imported inflation, temper the build-up of inflationary pressures and anchor inflation expectations. The careful calibration of the appreciation path will continue to facilitate the adjustment of domestic prices as part of the ongoing restructuring in the economy towards sustainable growth.

Fiscal Policy

The FY2013 Budget looked beyond cyclical challenges to focus on structural issues.

Budget FY2013 was delivered at a time when the Singapore economy is confronting an interplay of cyclical and structural factors. On the cyclical front, the trade-related sectors have been experiencing a patchy recovery, while the domestic-oriented sectors remained resilient on the back of firm demand. Meanwhile, the labour supply has continued to adjust to structurally tighter foreign worker policies, the first of which was introduced in 2010. Consequently, the labour market tightened and wages rose over 2012, even though GDP growth slowed to 1.3% from 5.2% a year ago.

Despite these cyclical challenges, the Budget focused on structural issues confronting the economy, aptly summed up in the theme, “Quality Growth, An Inclusive Society”. The key measures of Budget FY2013 are summarised in Table 3.4.

The Budget continued to tighten the supply of foreign workers ...

The Budget describes “Quality Growth” as output growth driven mainly by innovation and higher productivity that will benefit all Singaporeans. This involves re-orienting the economy towards capital- and skill-intensive activities where Singapore has a comparative advantage. Through a calibrated tightening of foreign worker policies, the price of lower-skilled foreign labour relative to other factor inputs should rise. In response, firms should adjust production by upskilling workers and investing in machinery and equipment to improve productivity. Over time, labour, capital and land should be reallocated more efficiently across the economy.

To this end, the Budget announced schemes to further reduce firms’ reliance on low- and mid-skilled foreign labour. The S Pass holder qualifying salary was increased from \$2,000 to \$2,200, while foreign worker levies were raised across all sectors. However, adjustments to the Dependency Ratio Ceilings (DRC) were scaled to

target sectors that depended more on less-skilled foreign workers and whose productivity levels lagged behind international industry leaders. For example, the DRC for the manufacturing sector, where productivity growth has averaged 4.7% p.a. in the past decade, was unchanged, whereas that for the services sector was reduced.

... while implementing measures to facilitate the transition to productivity-driven growth.

To be sure, economic restructuring engenders frictional costs in the transition phase. Since the restructuring began in 2010, productivity growth has averaged 3.3% over the past three years. However, wages have increased more rapidly, causing unit labour costs in the overall economy to rise by an average of 1.7% p.a., impacting firms’ profitability. Consequently, Budget FY2013 provided a three-year Transition Support Package worth \$5.3 billion to improve firms’ cash-flow and ease the adjustment costs. Existing schemes, which encourage innovation in firms, were also enhanced.

Within the Transition Support Package, the corporate income tax rebate and Wage Credit Scheme (WCS) will directly reduce remuneration and tax bills for firms during the restructuring period. Under the WCS, the government will co-fund 40% of the annual wage increases for Singaporean employees earning up to a gross monthly wage of \$4,000, from 2013 to 2015. Recognising that wage pressures are inevitable in a tight labour market, the Scheme seeks to provide some relief to firms during this transition period, and at the same time, reduce inflationary pressures that could otherwise result from the pass-through of higher wage costs to consumer prices.

EPG’s assessment of the WCS can be summarised in two key points. First, it can be seen as a temporary risk-sharing mechanism to encourage firms to reward workers now for possible productivity gains to be reaped in the future. Second, the WCS facilitates the market-clearing wage outcome at lower cost to businesses in the short term.

The Transition Support Package also incorporates a Productivity and Innovation Credit (PIC) Bonus, which is a dollar-for-dollar matching cash bonus that businesses can receive if they invest a minimum of \$5,000 a year in qualifying productivity-enhancing activities, such as research and development, innovation, automation and training. This is on top of the existing benefits that businesses already receive in the form of tax deductions when they invest in activities under the PIC Scheme established in 2010. The PIC Scheme itself has been enhanced over the years, allowing firms to obtain more payouts at a faster rate, for example. This Budget further liberalised the requirements for qualifying equipment for PIC benefits.

On top of the improvements to the PIC Scheme, Budget FY2013 provided \$500 million over three years for additional enhancements to other productivity programmes. Several of the measures were aimed at tackling firm- and industry-level impediments to restructuring. The Collaborative Industry Projects programme, for example, will allow productivity solution providers to develop processes tailored to industry needs, while reducing firms' costs in searching for, and developing, such solutions on their own.

Budget FY2013 provided one-off transfers and reliefs to reduce the cost of living ...

The other key tenet of the FY2013 Budget, "Building a More Inclusive Society", is targeted at the young, the elderly, and lower- to middle-income Singaporean workers. It is largely associated with the longer-term objective of promoting social mobility, strengthening social safety nets, and sustaining a fair and progressive system of taxes and benefits. It also encompasses some short-term assistance to alleviate the cost of living for households during this period of restructuring. This comes in the form of one-off special payments of GST Vouchers¹², Service & Conservancy Charges (S&CC) rebates,

CPF Medisave top-ups, personal income tax rebates and reductions in concessionary foreign domestic worker levies. Together, households should receive up to \$1.7 billion in direct assistance this financial year.

... and enhanced schemes to reduce inequality in opportunities and outcomes.

Recognising that globalisation and meritocracy can result in economic advantages becoming entrenched if the gains from growth are unequally distributed, the Budget provided measures to improve inter-generational mobility and reduce income inequality. For example, the government plans to more than double the spending on the pre-school sector to increase the number of pre-school places and to hire better teachers. At the same time, Budget FY2013 also stepped up financial assistance to students from low-income families from pre-school to tertiary levels.

The Budget also paid special attention to helping low-income and elderly workers. The Workfare Income Supplement Scheme (WIS) that was first implemented in 2007 was enhanced as follows: the maximum monthly income for eligibility was raised to \$1,900 from \$1,700; recipients will also receive up to 40% of WIS in cash as compared to 29% previously; and the maximum WIS payouts will increase by 25–50%. This will benefit about 30% of the Singaporean workforce. As Workfare is a form of negative income tax for employees earning lower wages, it contributes to the progressivity of the income tax structure in Singapore. The top 20% of Singaporean households paid 80% of income taxes collected¹³, while the top 0.5% of resident tax payers accounted for more than a fifth of net income taxes payable in YA 2011. (Chart 3.50)

¹² The GST Voucher is a permanent transfer scheme introduced in 2012 to help lower- and middle-income Singaporean households with their expenses. There are three components: cash, Medisave and U-Save (i.e. utility rebates).

¹³ "Transcript of Budget 2013 Debate Round-up Speech" by Deputy Prime Minister and Minister for Finance Tharman Shanmugaratnam, 7 March 2013.

In line with the government’s policy emphasis, total expenditure on social development is projected to rise by 9.8% to \$24.6 billion in FY2013. The bulk of the increase will be spent on the education, health, and culture, community & youth segments. (Chart 3.51) In terms of the share of overall expenditure, spending on social development is the largest component, and it has trended up from 43% in FY2007 to 46% in FY2013, mainly reflecting the rise in healthcare and education expenditures. (Chart 3.52)

In addition, the property tax system was made more progressive in this Budget, following the changes already announced in the FY2010 Budget and implemented in 2011.¹⁴ For owner-occupied residential properties, the 0% property tax band will be widened to the first \$8,000 of a property’s annual value from the current \$6,000, while new tax rates of 8–16% will be introduced. Due to these changes, the top 1% of owner-occupied residential properties will see an increase in taxes payable, while the rest will see lower taxes. Meanwhile, investment residential properties, currently taxed at 10%, will see new tax rates of 12–20%. This will result in higher property tax payable for the top one-third of such properties. Budget FY2013 also introduced a tiered Additional Registration Fee (ARF) such that luxury cars will incur higher ARF rates, expressed as a percentage of a car’s Open Market Value.

Chart 3.50
Resident Taxpayers and Net Income Taxes Assessed by Income Brackets, YA 2011

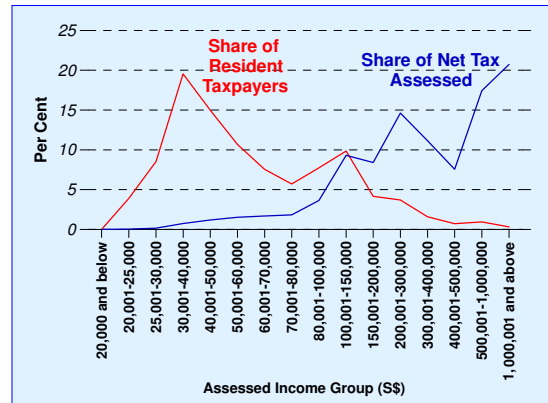


Chart 3.51
Total Expenditure on Social Development

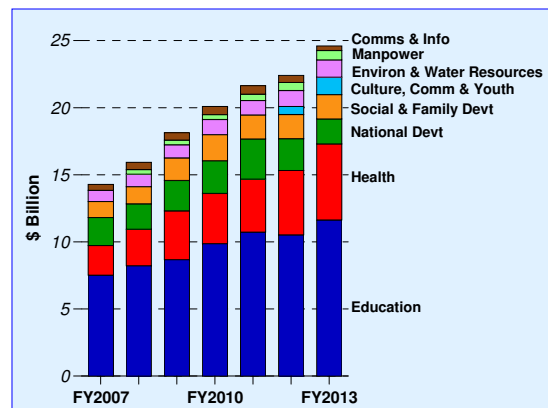
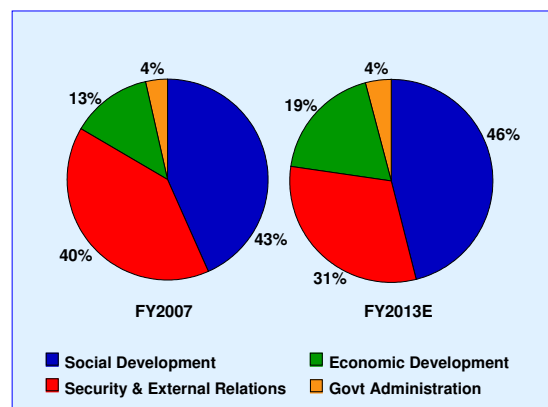


Chart 3.52
Components of Total Expenditure



¹⁴ In FY2011, private residential properties accounted for about 85% of property taxes collected from all residential houses.

Table 3.4
Key Initiatives of the FY2013 Budget: “Quality Growth, An Inclusive Society”

Restructuring for Quality Growth
<ul style="list-style-type: none"> • Selective reductions in Dependency Ratio Ceilings (DRC) • Increase in the foreign worker levy • S Pass Qualifying Salary raised to a minimum of \$2,200 from \$2,000, and eligibility requirements for EPH to be tightened • Transition Support Package (over three years): <ul style="list-style-type: none"> ○ Wage Credit Scheme to co-fund 40% of Singaporean employee’s wage increases (\$3.6 billion) ○ Productivity and Innovation Credit Bonus (\$450 million) ○ Corporate Income Tax Rebate (\$1.3 billion) • COEs for commercial vehicles can be extended for another five years • Strengthening productivity incentives (\$500 million over the next three years) • Enhance training schemes for workers such as Workfare Training Support and the SME Talent Programme • Support for emerging growth opportunities such as satellite development, data analytics and infrastructure development • Top-up to Lifelong Learning Endowment Fund (\$500 million)
Building a More Inclusive Society
<p><i>Promoting Social Mobility</i></p> <ul style="list-style-type: none"> • Enhanced pre-school subsidies, MOE Financial Assistance Scheme benefits, and bursaries for students from lower- and middle-income families • Expanding capacity in preschools by up to 16,000 additional places offered by Anchor Operators • Increased salary grants for graduate pre-school teachers • Establishment of Early Childhood Development Agency • Injection to Opportunity Fund and extending it to polytechnics (\$72 million) • Top-up to Edusave Fund (\$300 million) <p><i>Better Jobs and Incomes</i></p> <ul style="list-style-type: none"> • Increased the WIS ceiling to \$1,900 • Increased WIS payouts such that average maximum payout will rise by 25% to 50% • Increased the proportion of WIS payouts in cash from 29% to 40% • Increased employer and employee CPF contribution rates for low-wage workers <p><i>A Fair and Progressive Fiscal System</i></p> <ul style="list-style-type: none"> • Increased property tax rates for top-end owner-occupied residential properties, and lower tax rates for the remaining 99% of properties • Higher property tax rates for high-end investment properties • Tiered ARF in line with open market value of cars <p><i>Partnering the Community</i></p> <ul style="list-style-type: none"> • Review of healthcare financing to reduce Singaporeans’ out-of-pocket share of medical costs, broaden insurance coverage, and increase the role of Medisave and Medifund • Expansion of Senior’s Mobility Fund to Senior’s Mobility and Enabling Fund, and top-up to defray costs of consumables used by elderly (\$40 million) • Top-ups to Medifund (\$1 billion), ElderCare Fund (\$250 million), and ComCare Fund (\$200 million) • Increase in monthly allowance under Public Assistance Scheme • Increase in Singapore Allowance and monthly pension ceiling for pensioners • Direct Assistance for Cost-of-Living <ul style="list-style-type: none"> ○ One-off GST Voucher Special Payment in cash and U-Save (\$680 million) ○ One to three months of S&CC Rebates (\$77 million) ○ One-off CPF Medisave Account top-up (\$300 million) ○ Personal Income Tax rebate for Year of Assessment 2013 (\$615 million) ○ Reduced concessionary foreign domestic worker levy to \$120 from \$170 (\$73 million) • Top-up to GST Voucher Fund (\$3 billion)

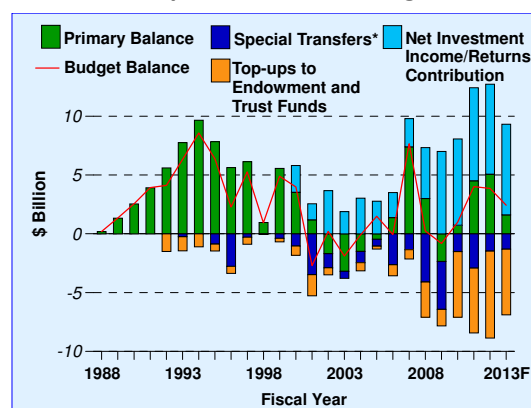
Table 3.5
Budget Summary

	FY2012 Revised		FY2013 Budgeted	
	\$ Billion	% of GDP	\$ Billion	% of GDP
Operating Revenue	55.2	16.1	55.0	14.9
Total Expenditure	50.1	14.6	53.4	14.5
Operating Expenditure	37.2	10.8	40.6	11.0
Development Expenditure	12.9	3.8	12.8	3.5
Primary Surplus/Deficit (-)	5.1	1.5	1.6	0.4
Less: Special Transfers (excluding top-ups to endowment/trust funds)	1.5	0.4	1.3	0.4
Basic Surplus/Deficit (-)	3.6	1.1	0.3	0.1
Add: Net Investment Returns Contribution	7.7	2.2	7.7	2.1
Less: Special Transfers (top-ups to endowment/trust funds)	7.4	2.2	5.6	1.5
Budget Surplus/Deficit (-)	3.9	1.1	2.4	0.7

A small budget surplus is projected for FY2013.

In FY2013, the government is projected to post an overall budget surplus of \$2.4 billion, or 0.7% of GDP. (Table 3.5 and Chart 3.53) The basic balance, which is the primary balance less special transfers but without taking into account top-ups to endowment and trust funds, is estimated to be \$0.3 billion compared to \$3.6 billion in the previous year, largely due to the expected increase in operating expenditure. Excluding top-ups to endowment and trust funds, the government is projected to disburse \$1.3 billion in special transfers, primarily in the form of a one-off GST Voucher Special Payment and CPF Medisave top-ups. Meanwhile, top-ups to endowment and trust funds are expected to fall to \$5.6 billion from \$7.4 billion in FY2012. This is largely due to the Bus Service Enhancement and Special Employment Credit Funds established in February 2012, for which there are no top-ups this year. Instead, the government will add another \$3 billion to the GST Voucher Fund and \$2.3 billion to other existing funds such as Medifund, ComCare, Edusave, and ElderCare. Together, these top-ups will strengthen the government's safety net for the elderly and needy households, and build capacity for long-term investments in social assistance and education.

Chart 3.53
Components of the Budget



* Excluding top-ups to endowment and trust funds.

The fiscal impulse measure indicates a slightly expansionary stance in CY2013.

At around 1.6% of GDP, the fiscal policy stance, as represented by the fiscal impulse (FI) measure, will be slightly expansionary in CY2013. Amid the positive, albeit narrowing output gap, this expansionary Budget incorporates targeted measures designed to help households cope with the higher cost of living and tide businesses over this period of economic restructuring. (Chart 3.54)

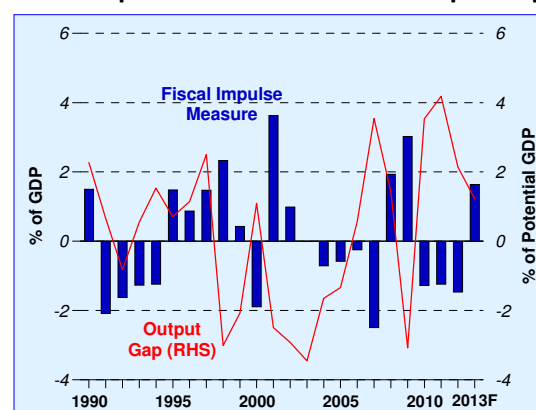
While the FI measure provides an indication of the short-term aggregate demand stimulus arising from fiscal policy, it does not fully quantify the impact of the Budget on the economy. To assess the effects of Budget FY2013 on GDP and consumer prices over 2013–14, EPG simulated some of the key measures that would affect households and firms using the Monetary Model of Singapore (MMS). (Table 3.6)

The combined macroeconomic effects of these measures on households and firms are reported in Table 3.7. The results for Simulation 1 show that GDP growth in 2013 would be boosted by about 0.3% point from its baseline, with the bulk of this coming from an increase in private consumption due to the cash and U-Save components of the GST Voucher Special Payment. At the same time, the additional spending by households will only impact CPI All-Items inflation marginally.

EPG also carried out a second simulation (Simulation 2) which includes all the measures listed in Table 3.6 plus the impact of the tiered increase in the ARF, the reduction in the concessionary foreign domestic worker levy (FDWL), and the S&CC rebates on prices. While the changes to the ARF structure will add 0.2% point to CPI All-Items inflation in 2013, this will be fully offset by the cuts in the concessionary FDWL and S&CC rebates. Should the S&CC rebates be discontinued the following year, however, CPI All-Items inflation would be about 0.2% point higher than the baseline in 2014.

Overall, the FY2013 Budget measures are estimated to have a small impact on GDP growth and inflation in 2013.

Chart 3.54
Fiscal Impulse Measure and the Output Gap



Source: EPG, MAS estimates

Table 3.6
Budget FY2013 Measures
Simulated in MMS

Measures	\$ million	
	Amount in 2013	Amount in 2014
<i>Affecting Households</i>		
Workfare Income Supplement	195	260
One-off GST Voucher Special Payment (Cash)	380	-
One-off GST Voucher Special Payment (U-Save)	88	88
Personal Income Tax Rebate	615	-
<i>Affecting Firms</i>		
Wage Credit Scheme	-	900
Corporate Income Tax Rebate	325	433
Road Tax Rebate	46	-
Total	1,600 (0.5% of GDP)	1,700 (0.5% of GDP)

Table 3.7
Impact of Selected Budget Measures on
GDP Growth and CPI All-Items Inflation

	% point deviation	
	2013	2014
GDP Growth*	0.28	-0.18
Simulation 1: CPI All-Items Inflation	0.03	0.09
Simulation 2: CPI All-Items Inflation	0.03	0.23

Note: The measures will raise GDP levels in 2013 and 2014. However, with the higher GDP level in 2013, GDP growth in 2014 will be slightly lower than the baseline.

* The GDP growth outcome was the same across simulations.