

## 1.1 External Developments

### A Pickup in External Demand

#### Strong activity in Asia offset a G3 contraction in Q4 2012.

Global growth gained momentum in the last quarter of 2012 despite subdued economic activity in the G3. On a trade-weighted basis, real GDP of Singapore's major trading partners increased by 5.1% q-o-q SAAR in Q4 2012, compared to 3.9% in the previous quarter. (Table 1.1) The pickup came largely from Asia, led by faster growth in China and the ASEAN economies. This turnaround was in turn underpinned by a recovery in intra-regional trade and an increase in exports to the US, where anaemic headline GDP growth belied relatively firm private demand. (Table 1.2) In contrast, Asia's shipments to the Eurozone continued to contract in Q4 2012, as the latter sunk deeper into the recession that began in late 2011.

The cyclical upswing towards the end of 2012, however, could not fully offset the weakness in the middle of the year. As a result, on a trade-weighted basis, the external economies as a whole grew by only 3.9% in 2012, the slowest pace since the recovery from the Global Financial Crisis (GFC).

**Table 1.1**  
GDP Growth

	2011	2012	2012	
			Q3	Q4
			q-o-q SAAR	
<b>Total*</b>	<b>4.4</b>	<b>3.9</b>	<b>3.9</b>	<b>5.1</b>
<b>G3*</b>	<b>1.2</b>	<b>1.1</b>	<b>0.2</b>	<b>-0.8</b>
US	1.8	2.2	3.1	0.4
Eurozone	1.5	-0.5	-0.3	-2.3
Japan	-0.5	2.0	-3.7	0.2
<b>Asia ex-Japan*</b>	<b>5.9</b>	<b>5.1</b>	<b>5.3</b>	<b>7.6</b>
Hong Kong	4.9	1.4	3.4	4.9
Korea	3.7	2.0	0.2	1.1
Taiwan	4.1	1.3	3.9	7.3
Thailand	0.1	6.4	6.1	15.0
Philippines	3.9	6.6	5.2	7.5
			y-o-y	
Indonesia	6.5	6.2	6.2	6.1
Malaysia	5.1	5.6	5.3	6.4
China	9.3	7.8	7.4	7.9
India	7.5	5.0	5.3	4.5

Source: CEIC and EPG, MAS estimates

\* Weighted by shares in Singapore's NODX.

**Table 1.2**  
Heat Map of Global Trade Flows in 2012

	Exports				Imports			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
Japan	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
Eurozone	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
Asia ex-Japan	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
ASEAN-4	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
NIE-3	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
China	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding
India	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding	Expanding

Expanding

Contracting

Source: CEIC and EPG, MAS estimates

Note: The colours on the heat map reflect the current quarter's SA growth rate relative to the previous quarter.

Eurozone comprises Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

Asia ex-Japan comprises NIE-3 (Hong Kong, Korea, Taiwan), ASEAN-4 (Indonesia, Malaysia, the Philippines, Thailand), China and India.

**Weak headline growth in the US masked the economy's underlying strength.**

The US economy ended 2012 on a flat note, expanding by just 0.4% q-o-q SAAR in Q4 as Hurricane Sandy and other transitory factors exerted a drag on overall growth. Following an unusually large 22% q-o-q SAAR pullback in defence spending during Q4 2012, government expenditure plummeted by 7.0% after expanding by 3.1% in the preceding quarter. (Chart 1.1) The change in inventories also subtracted another 1.5% points from Q4 GDP growth, as private businesses shed stocks at the fastest pace since Q4 2010.

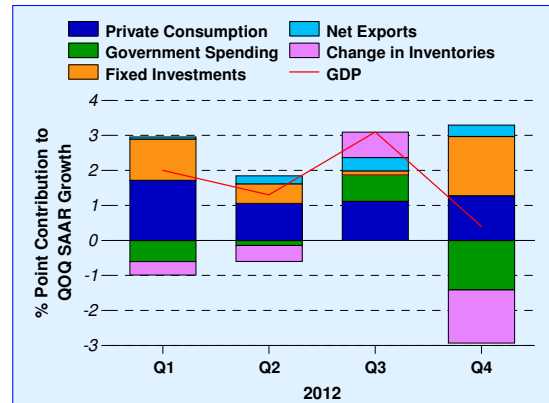
Beyond these factors, the underlying momentum of the US economy had in fact strengthened, driven by steady increases in household and corporate spending. Private consumption rose by 1.8% q-o-q SAAR in Q4 2012, reflecting an improving labour market, low interest rates and positive wealth effects arising from higher asset values. Households were possibly more willing to spend as disposable incomes received a boost from social security payments and dividends ahead of the tax changes at the turn of the year. Despite fiscal uncertainties, strong capital spending on equipment and software, and an 18% annualised rise in residential investment from the previous quarter helped push gross private fixed investment up by 14% q-o-q SAAR in Q4 2012.

**The recession in the Eurozone periphery was more severe than expected.**

In the Eurozone, the contraction in economic activity intensified to 2.3% q-o-q SAAR in Q4, from a decline of 0.3% in the preceding quarter. For 2012 as a whole, the region's GDP fell by 0.5%, with the recession in the peripheral economies turning out to be worse than initially anticipated.

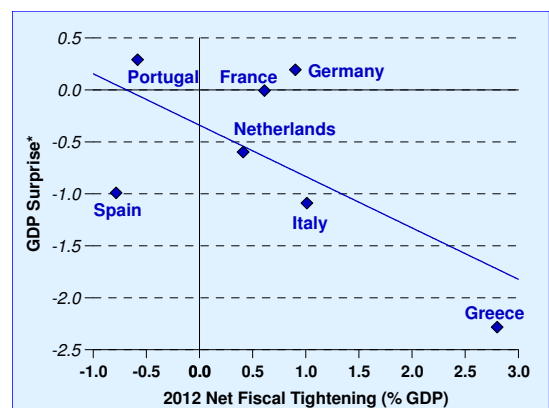
Apart from weak aggregate demand caused by rising unemployment and poor economic sentiment, ongoing fiscal austerity measures implemented by Eurozone member states appear to have exacerbated the situation. The impact of fiscal consolidation was likely underestimated by most analysts. As Chart 1.2 shows, the size of the deviation in the growth outcomes from

**Chart 1.1  
Contribution to US GDP Growth**



Source: Bureau of Economic Analysis

**Chart 1.2  
Net Fiscal Tightening and GDP Surprise in Selected Eurozone Countries**



Source: Consensus Economics Inc., Eurostat and EPG, MAS estimates

\* The GDP surprise is defined as the difference between the Jan 2012 consensus growth forecast and the actual 2012 outturn.

the prior forecast is systematically related to the degree of fiscal tightening. Separately, recent IMF research suggests that fiscal multipliers may exceed unity and also tend to be larger during downturns. Hence, measures to reduce budget deficits, while necessary for long-term fiscal sustainability, pose significant short-term impediments to growth.

**Japan’s economy ceased contracting in Q4 2012.**

Following two successive quarters of negative growth, Japan’s economy expanded marginally by 0.2% q-o-q SAAR in Q4 2012. (Chart 1.3) Net exports exerted a 0.6% point drag on GDP growth as the slump in Eurozone demand was compounded by the economic impact of bilateral tensions with China. However, overall growth was supported by a 3.3% q-o-q SAAR expansion in public demand, driven primarily by reconstruction spending in the earthquake-hit areas. Private consumption also edged up by 2.0% q-o-q SAAR, reversing the sharp decline in the previous quarter.

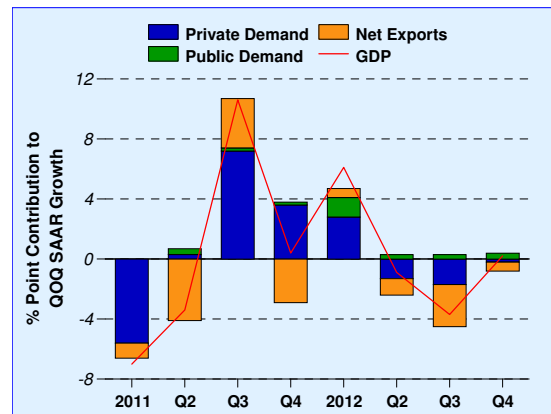
**China’s growth uptick and a manufacturing pickup spurred intra-Asian trade ...**

Trade flows in Asia ex-Japan gathered pace in Q4 2012, following retractions in the preceding two quarters. (Table 1.2) Together with a contemporaneous upturn in the manufacturing sector that was partly driven by inventory replenishment, this contributed to an acceleration in the region’s growth to 7.6% q-o-q SAAR, from 5.3% in Q3 2012.

China’s economy expanded by 7.9% y-o-y in Q4 2012, giving pause to the growth slowdown over the previous seven quarters. In Q4, industrial output expanded by 10% y-o-y, the first double-digit rise in three quarters, while the PMI new export orders sub-index recovered to just below the 50 mark. (Chart 1.4) In addition to steady demand from the US, overall orders were also boosted by domestic retail sales, which rose by 15% y-o-y during the quarter. (Chart 1.5) Year-to-date fixed asset investment grew by 21% y-o-y in the same period, as the rollout of agricultural and infrastructure projects had offset the impact of curbs on real estate investment.

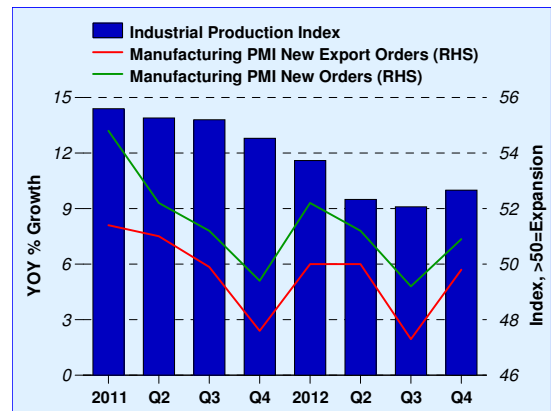
Buffeted by external headwinds in the first half of last year, the NIEs grew at their slowest pace in three years. Nonetheless, these trade-dependent economies

**Chart 1.3**  
Contribution to Japan’s GDP Growth



Source: Japan’s Cabinet Office

**Chart 1.4**  
China’s Industrial Production and PMI Indices



Source: CEIC

**Chart 1.5**  
China’s Retail Sales and Fixed Asset Investment Growth



Source: CEIC

registered faster export growth in Q4 2012 on the back of China’s recovery and an incipient upturn in the global electronics industry. While domestic demand also improved in Hong Kong and Taiwan, fixed investments continued to contract in Korea as business confidence was dampened by political uncertainties. (Chart 1.6)

In contrast, India’s GDP growth fell to a decade low of 4.5% y-o-y in Q4 2012. The weakness in the economy was broad-based, as the large and previously resilient services sector decelerated alongside a slowdown in agriculture, while manufacturing growth remained subdued. Although the Indian government enacted a slew of reforms to spur investment and restore fiscal health in late 2012, the real economic impact of these changes has yet to be seen. Investment continued to be sluggish despite some improvement in domestic business sentiment.

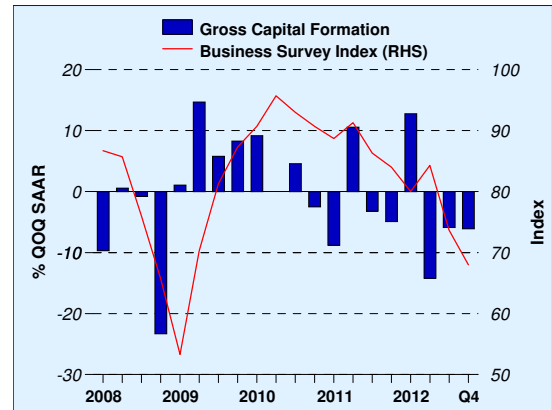
**... but current account surpluses in ASEAN-4 narrowed due to strong domestic demand.**

Underpinned by robust domestic demand, the ASEAN-4 economies expanded briskly by 6.0% in 2012, up from 4.5% in the previous year. Given buoyant domestic absorption, import growth outpaced that of exports, causing net exports to be a drag on growth for the full year. Alongside the shrinking trade balance, the region’s current account surplus narrowed further to 0.3% of GDP in 2012.

The deterioration in the ASEAN-4 current account can be traced primarily to a narrowing of the merchandise trade surplus.<sup>1</sup> (Chart 1.7) Last year, ASEAN’s merchandise exports contracted by 0.5%, due to flagging demand from advanced economies as well as subdued commodity prices. (Chart 1.8) At the same time, merchandise imports increased by 6.7%, with private consumption in the region growing briskly by 6.1%, supported by fiscal transfers, sustained wage gains and consumer optimism. Moreover, country-specific policies boosted the region’s import bill. In Indonesia, sustained fuel subsidies encouraged strong growth in oil consumption and imports, while tax rebates for first-time car buyers in Thailand added to the demand for imported vehicles and related components.

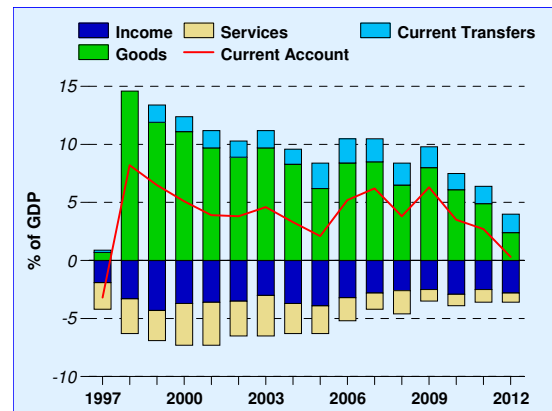
<sup>1</sup> ASEAN-4’s services trade deficit has shrunk over the years due to the burgeoning business processing sector in the Philippines and rising tourism revenues in Thailand.

**Chart 1.6**  
**Korea’s Investment Growth and Business Confidence**



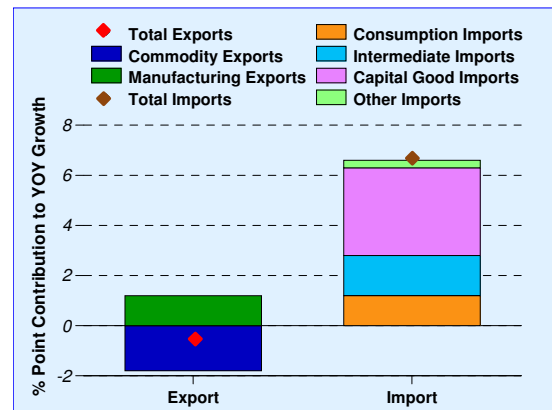
Source: CEIC

**Chart 1.7**  
**ASEAN-4 Current Account Balance**



Source: CEIC and EPG, MAS estimates

**Chart 1.8**  
**Contribution to ASEAN-4 Export and Import Growth in 2012**



Source: CEIC and EPG, MAS estimates

From a savings-investment perspective, the reduction in ASEAN's current account surplus over the past few years can be explained by rapidly rising investment. After languishing at about 25%, the region's investment-to-GDP ratio reached 30% last year, the highest since the Asian Financial Crisis. (Chart 1.9) Double-digit growth in fixed investment spending, of 12% in 2012, was supported by large-scale infrastructure projects and sustained FDI in the manufacturing sector. Correspondingly, imports of capital goods picked up sharply by 20% during the year, which accounted for half of total import growth in the region. (Chart 1.8) Although the savings rate has been on the rise over the last decade, the sharp spike in investment in recent years led to a gradual closing of the savings-investment gap. This has in turn been mirrored by a progressive narrowing of current account surpluses.

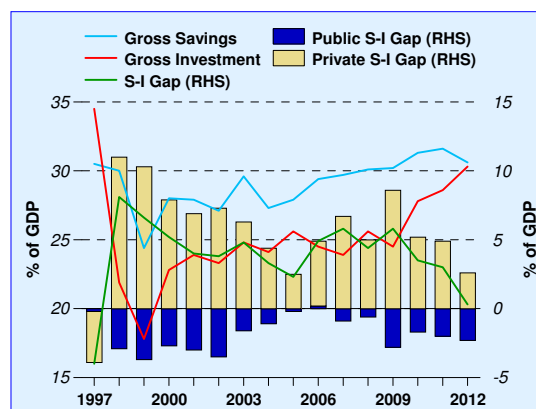
To the extent that the recent deterioration in the current account balance stems from rising productive investment (as reflected in increased imports of intermediate and capital goods), rather than consumption, there is less cause for concern. With higher investment, the ASEAN countries will be able to raise their long-term export potential, which in turn will result in a more sustainable current account trajectory.

### **Inflation, while remaining quiescent in H2, has started to rise more recently in Asia.**

Global inflationary pressures remained largely subdued in H2 2012 due to some slack in the advanced economies and contained food and energy prices. Headline inflation in the G3 was stable at 1.7% y-o-y in Q4 2012 and softened further to 1.4% in Q1 2013. (Chart 1.10) Inflation in both the US and Eurozone fell further in Q1, despite indirect tax hikes in the latter, while deflation persisted in Japan.

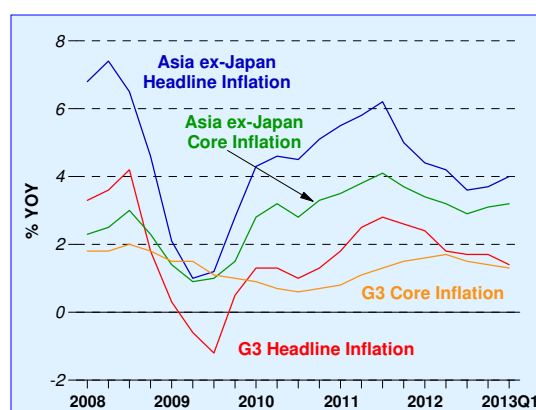
In Asia ex-Japan, headline CPI inflation rose marginally to 3.7% y-o-y in Q4 from 3.6% in Q3, before picking up to 4.0% in Q1 2013. Indonesia and India both witnessed higher food inflation, due to import restrictions on horticultural products in the former, and supply-side constraints in the latter. Nonetheless, core inflation throughout the region has remained relatively subdued, despite strong domestic demand and tight labour markets.

**Chart 1.9**  
**ASEAN-4 Savings-Investment Gap**



Source: CEIC, IMF and EPG, MAS estimates

**Chart 1.10**  
**G3 and Asia ex-Japan**  
**Core and Headline Inflation**



Source: CEIC and EPG, MAS estimates

Note: Core inflation strips out food and energy prices.

## 1.2 Domestic Economy

### A Hesitant Recovery

**The incipient turnaround in Q4 last year lost some traction in early 2013.**

Over the last two quarters, the Singapore economy continued to display the tepid but volatile profile that has characterised its growth since 2011. The gradual dissipation of external tail risks provided some respite in Q4 2012—GDP growth came in at 3.3% q-o-q SAAR, following a contraction of 4.6% in the preceding quarter. (Chart 1.11) Notably, after languishing in Q3, external-oriented activities staged a tentative upturn across the board, supported by strengthening regional demand. GDP growth in Q4 was further lifted by an increase in pharmaceutical production. Excluding this volatile segment, overall growth was 1.9% q-o-q SAAR, following a contraction of 3.4% in the previous quarter.

Nonetheless, several high-frequency indicators suggest that the upward momentum waned in early 2013. The latest *Advance Estimates* indicate that GDP growth lapsed back into negative territory in Q1 this year, with the outturn projected at -1.4% q-o-q SAAR. While the sectors dependent on domestic demand remained resilient, the external-oriented industries registered a setback, reflecting mainly the drag from the pharmaceuticals and transport engineering segments. On balance, despite the consolidation in Q1, growth should gradually pick up over the course of the year alongside an improving external environment. The prospects for the domestic economy will be discussed in greater detail in Chapter 3.

**The external-oriented sectors saw a pickup in Q4 2012 ...**

The externally-dependent industries witnessed a tentative rebound towards the end of last year as global headwinds receded. (Table 1.3) On the manufacturing front, the Index of Industrial Production posted a modest gain of 2.1% q-o-q SA in Q4 2012 after two consecutive quarters of decline. Output was buoyed by increased production of pharmaceuticals and marine transport equipment.

**Chart 1.11**  
Singapore's GDP Growth



\* Advance Estimates.

\*\* EPG, MAS estimates.

**Table 1.3**  
Singapore's GDP Growth by Cluster

	2012			
	Q1	Q2	Q3	Q4
Manufacturing				
Trade-related Services*				
Regional-oriented Services*				

GDP QOQ SAAR (%)



\*EPG, MAS estimates.



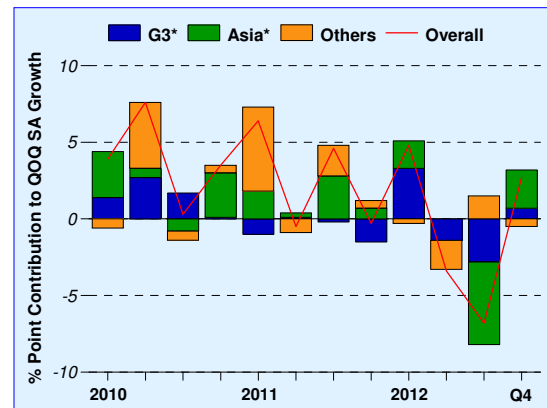
However, the electronics cluster remained lacklustre, as semiconductor output contracted for the third successive quarter amid sluggish demand for PC-related products. According to estimates by Gartner, the soft patch in the global PC industry showed little signs of abating, with worldwide shipments shrinking by 4.9% y-o-y in Q4 2012.

Mirroring the stronger performance in the manufacturing sector as a whole, domestic exports posted their first sequential increase since Q1 2012. Exports edged up by 2.7% q-o-q SA in Q4 last year, boosted by robust growth in oil shipments. There were also pockets of strength in the non-oil segments such as transport equipment.

The turnaround in Q4 was largely due to regional demand, while shipments to the G3 provided only modest support. (Chart 1.12) Exports bound for Asia contributed to over 90% of the growth in domestic exports in Q4 2012. Notably, shipments to China expanded by 3.0% q-o-q SA, more than double its pace in the previous quarter. This followed from the pickup in Chinese production activity towards the end of last year which strengthened demand for Singapore's exports, given our role as an intermediate goods supplier in the regional production network. Indeed, the bulk of the increase in domestic exports to China during the latter half of 2012 was in production goods. (Chart 1.13)

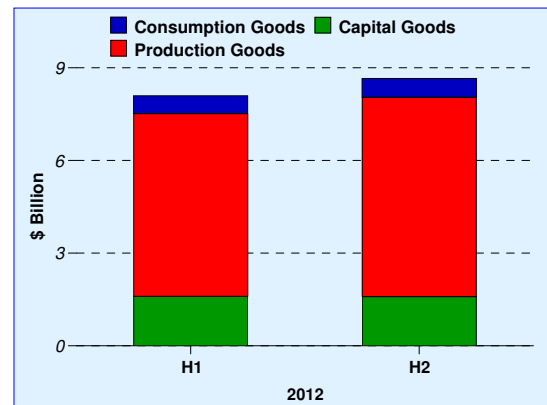
External-oriented services also recorded an improved performance in Q4 last year. The upturn in manufacturing generated positive spillovers to the trade-related services. For instance, the wholesale trade sector registered modest growth of 1.1% q-o-q SA in Q4, reversing a mild decline in the previous quarter. (Chart 1.14) Excluding petroleum-related services, it expanded by 5.2% q-o-q SA. Meanwhile, sea cargo volumes handled ticked up by 1.0% q-o-q SA in Q4, although the air cargo cluster remained sluggish.

**Chart 1.12**  
Contribution to Domestic Export Growth



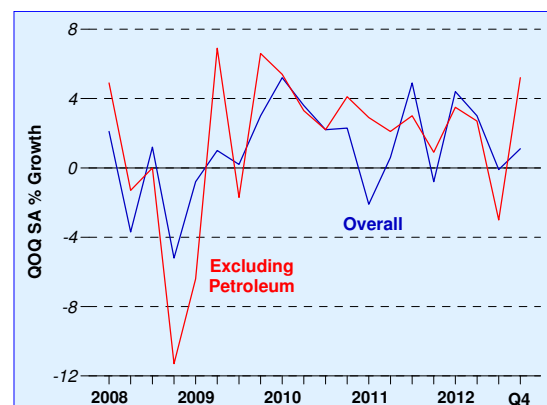
\*EPG, MAS estimates.

**Chart 1.13**  
Domestic Exports to China



Source: EPG, MAS estimates

**Chart 1.14**  
Foreign Wholesale Trade Index



Renewed vigour in the Asian economies also provided a fillip to the services industries. In the tourism segment, air passenger arrivals from Southeast Asia posted solid growth of 8.5% q-o-q in Q4 2012, after dipping by 5.1% in Q3. Correspondingly, average hotel room rates rose to a record high of \$266, from \$261 the quarter before. Improved business sentiment also underpinned an increase in bank lending to the region, following a subdued performance in the first half of 2012. Overall offshore loan growth to East Asia accelerated to 4.0% q-o-q in Q4, from 3.4% in the preceding quarter.

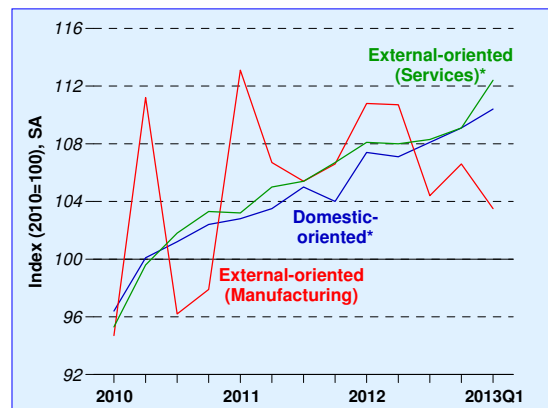
**... but the momentum tapered off in Q1 this year.**

The nascent recovery in the external-oriented industries conceded some momentum in early 2013. EPG’s Economic Activity Index suggests a pullback in early 2013, with activities such as manufacturing reverting to contraction mode. (Chart 1.15) This setback reflected headwinds in the global economy, such as outstanding fiscal issues in the US and repercussions from the Cyprus bailout.

Such lingering uncertainties have posed a challenge to the fledgling recovery in the manufacturing sector. The modest expansion in manufacturing output in Q4 was short-lived, as production contracted by 2.9% q-o-q SA on average in Q1 2013. (Chart 1.16) Besides the volatile pharmaceuticals segment, transport engineering also contributed to the decline. Although the order books of major shipyards domiciled in Singapore remained firm, stronger competition from regional players, such as China and Korea, exerted downward pressure on their profit margins.

Meanwhile, some of the sentiment-sensitive clusters responded sharply to heightened uncertainties in the external environment. Average daily stock market turnover volumes fell by 26% m-o-m in March, reversing entirely the gains in the preceding month. Forex trading likewise saw a loss in momentum, contracting by an average of 10.3% m-o-m SA in Feb–Mar. (Chart 1.17)

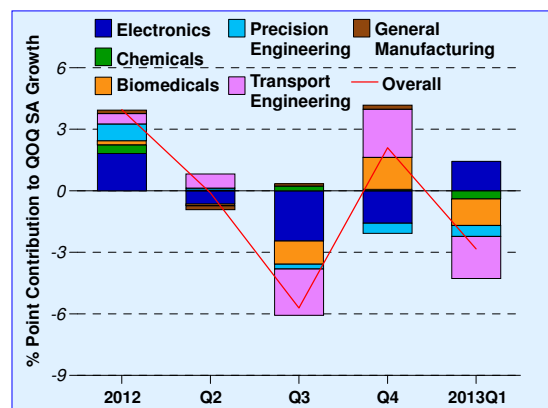
**Chart 1.15**  
**EPG’s Economic Activity Index**



Source: EPG, MAS estimates

\* Readings for Q1 2013 are based on an average of Jan–Feb data.

**Chart 1.16**  
**Contribution to Manufacturing IIP Growth**



**Chart 1.17**  
**Forex Market Turnover**



Source: EPG, MAS estimates



### There were pockets of strength in the external-oriented industries.

However, there were some bright spots in the external-facing cluster. Notably, the domestic IT sector saw tentative signs of bottoming out. (Chart 1.18) Following three consecutive quarters of decline, the electronics cluster expanded by 5.3% q-o-q SA in Q1 2013. This was largely on account of increased production of semiconductors and computer peripherals, which expanded by 11.6% and 12.1% q-o-q SA respectively over this period. Specifically, semiconductor demand from China rose early this year. As China is the regional assembly point for electronics goods, this could indicate a tentative resumption in global IT final demand. In addition, after languishing at contractionary levels during the last few months of 2012, Singapore's electronics PMI reading rose above 50 for the second straight month in March this year.

Meanwhile, some regional-oriented services remained on a positive growth trajectory. Total air passenger arrivals grew by 6.9% m-o-m SA in February, underpinned by visitor arrivals from China. Spending in department stores, an indicator of tourist expenditure, also remained firm, posting a sequential gain of 6.0% m-o-m SA in February, up from 3.5% the month before.

### Domestic-oriented industries provided a steady source of support for the Singapore economy.

Increased consumer spending on the back of employment and wage gains supported growth in some domestic-oriented industries. Excluding motor vehicles, retail sales volumes rose by a modest 0.5% q-o-q SA in Q4 2012 after two quarters of decline, due to higher discretionary spending on items such as consumer durables, jewellery and electronic gadgets. This was sustained into the first two months of 2013. Further, the growth in restaurant revenues exceeded that of the overall food services industry, reflecting greater willingness to spend on costlier meals. (Chart 1.19)

Chart 1.18  
IIP Electronics Segments

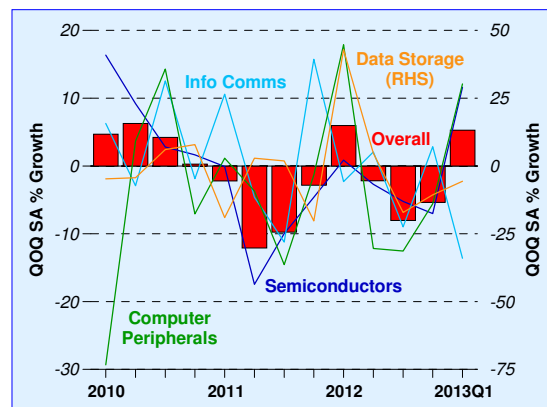


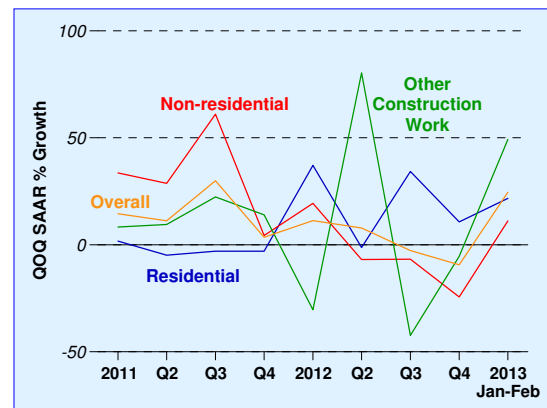
Chart 1.19  
Food & Beverage Services Indices



The construction sector registered a mild contraction in Q4 last year, but activity levels remained elevated and were 3.3% higher compared to the start of 2012. Despite the sequential decline, property-related financing rose in Q4 in view of the strong pipeline of building projects. This credit segment grew by 5.2% q-o-q, up from 3.6% in the preceding quarter.

The domestic-oriented activities remained resilient going into 2013. For instance, the community, social & personal (CSP) services cluster benefited from increased government expenditure on healthcare and education. In turn, the ongoing supply-side expansions in these areas—together with the ramp-up in housing and public transport infrastructure projects—have generated positive spillovers to the construction industry. Certified payments saw a broad-based pickup in Jan–Feb, as building activities in the residential and civil engineering segments intensified. (Chart 1.20) Payments were also boosted by the completion of petrochemical and gas-related complexes on Jurong Island. The construction sector is hence expected to turn in double-digit growth in Q1 this year.

**Chart 1.20**  
**Construction Certified Payments**



Source: EPG, MAS estimates

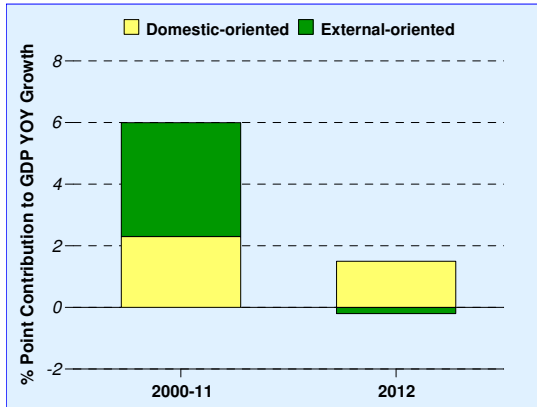
## 2012 in Perspective: An Atypical Growth Profile

**The growth drivers in 2012 differed from those in previous years, reflecting the strength of domestic-oriented industries.**

On the whole, the Singapore economy grew by a modest 1.3% last year. A decomposition of GDP growth from four different angles—production, expenditure, income and supply-side—shows that the growth drivers were different from those in the past. From the production perspective, growth in the domestic economy was underpinned by the externally-driven industries over the past decade or so. (Chart 1.21a) In contrast, growth in 2012 was anchored by those activities that are reliant on domestic demand, in particular construction and business services. (Chart 1.22)

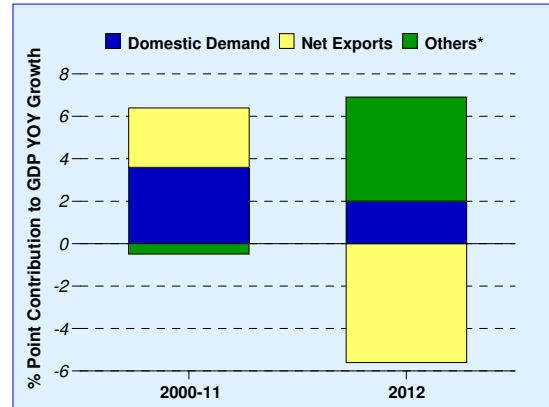
**Chart 1.21**  
**Composition of GDP Growth**

**Chart 1.21a**  
**Production**



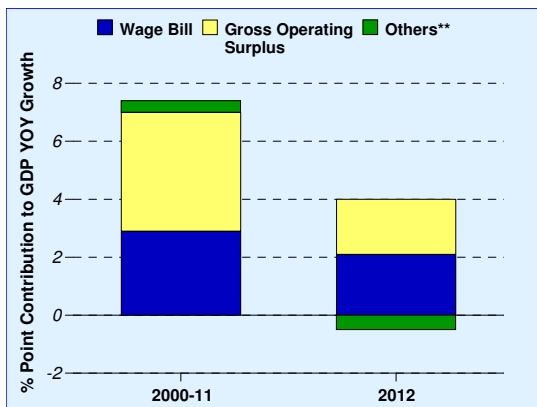
Source: EPG, MAS estimates

**Chart 1.21b**  
**Expenditure**



\* Includes changes in inventories and statistical discrepancies.

**Chart 1.21c**  
**Income\***



\* In nominal terms.

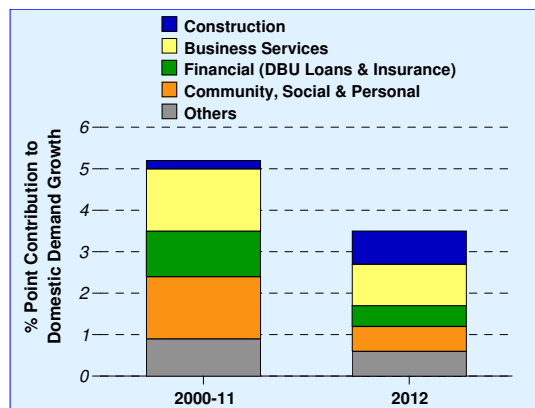
\*\* Includes taxes and statistical discrepancies.

**Chart 1.21d**  
**Supply-side**



Source: EPG, MAS estimates

**Chart 1.22**  
**Domestic-oriented Industries**



Source: EPG, MAS estimates

From the expenditure perspective, domestic demand remained relatively firm last year, supported by private investment and consumption. (Chart 1.21b) Some 90% of private investment growth was driven by capital expenditure on transport and machinery equipment—particularly in the marine & offshore segment—as well as residential construction. Conversely, net exports exerted a significant drag of 5.6% points on GDP growth, due to strong import growth and sluggish export performance. Accordingly, the trade surplus narrowed last year. A further breakdown indicates that this drag stemmed partially from a retraction in oil exports as the global economy slowed. (Chart 1.23) The trade balance for both production and capital goods also deteriorated, albeit by a smaller amount, weighed down mainly by weaker exports of semiconductors and chemical products, as well as machinery and transport equipment.

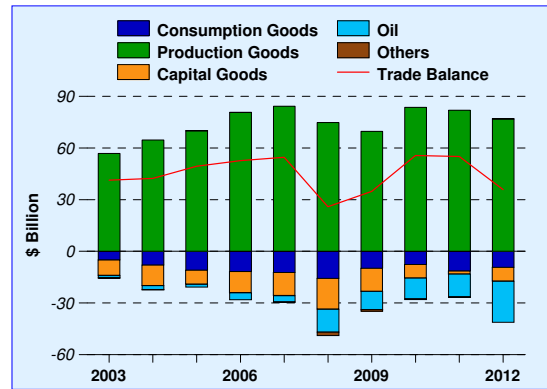
**Job creation was strong in industries reliant on domestic demand.**

Turning to the income approach, the weakness in the external-oriented sectors manifested as a decline in the contribution of gross operating surplus to GDP growth in 2012. (Chart 1.21c) In comparison, the wage bill stayed relatively resilient, supported by robust hiring, especially in the construction and business services industries. (Chart 1.24)

The supply-side approach confirms that GDP growth in 2012 was anchored by employment gains, while productivity exerted a drag of 2.6% points. (Chart 1.21d) This could have been the result of some labour hoarding by firms, particularly those in the externally-dependent industries, during the slowdown last year.

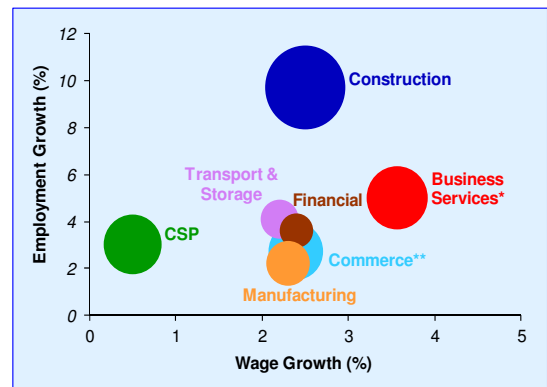
In sum, 2012 saw the emergence of a dual track economy. External-oriented activities bore the brunt of the global downturn, while sectors dependent on domestic demand stayed resilient. This resulted in an atypical growth profile for the Singapore economy, with the external-facing industries—which have traditionally underpinned GDP growth—taking a backseat, and domestic-oriented activities coming to the fore.

**Chart 1.23**  
**Singapore’s Trade Balance**



Source: EPG, MAS estimates

**Chart 1.24**  
**Employment and Resident Wage Growth in 2012**



Note: The size of the circles represents the share of total employment gains in 2012.

\* Business services comprise real estate, professional and administrative & support services.

\*\* Commerce comprises wholesale & retail trade and accommodation & food services.

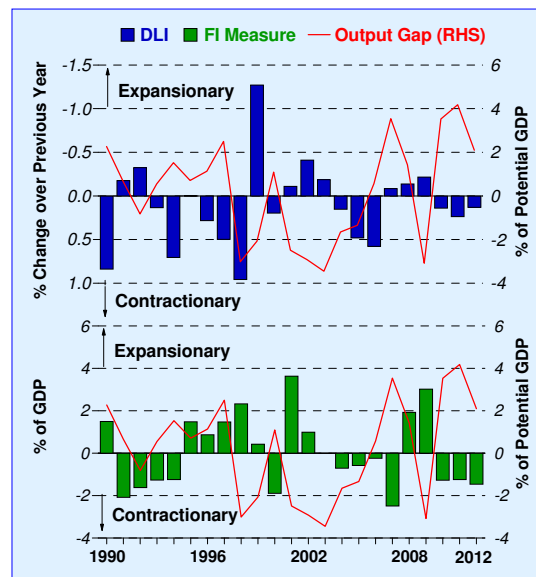
## 1.3 Macroeconomic Policy

**Macroeconomic policy in Singapore plays a countercyclical role, while maintaining a medium-term orientation.**

Macroeconomic policy settings in Singapore continue to be congruent with cyclical developments in the economy. Chart 1.25 plots the Domestic Liquidity Indicator (DLI)<sup>2</sup> and Fiscal Impulse (FI)<sup>3</sup> measure, which are proxies for the monetary and fiscal policy stance respectively, against the output gap. Points above the horizontal axis denote a positive output gap and an expansionary policy stance, and vice versa for points below the axis. A positive output gap signals that output is above potential, leading to inflationary pressures as the economy faces bottlenecks in meeting demand. Conversely, a negative output gap indicates that the economy is producing below capacity, resulting in the easing of cost and price pressures. Movements in the DLI and/or FI in the opposite direction to the output gap indicate that macroeconomic policy is countercyclical in the short term.

As shown in the chart, during the Global Financial Crisis of 2008–09 when Singapore's output gap narrowed sharply and dipped into negative territory, macroeconomic policy was expansionary. The economy staged a strong rebound in 2010, leading to a large reversal in the output gap. Monetary and fiscal stimuli were thus appropriately withdrawn. The positive output gap widened slightly in 2011, as full-year GDP growth remained firm even as supply-side restructuring measures were intensified. With softer external conditions weighing on domestic economic activity in 2012, the output gap narrowed considerably, although it remained positive. The policy setting of a broadly tightening bias was maintained to ensure that the economy remained on a sustainable growth and inflation path over the medium term.

**Chart 1.25**  
**DLI, FI and Output Gap**



Source: EPG, MAS estimates

<sup>2</sup> The DLI is a measure of overall monetary conditions combining changes in the S\$NEER and the three-month domestic interbank rate.

<sup>3</sup> See the January 2002 issue of the *Review* for more details on the methodology used to calculate the FI measure.

## Monetary Policy

**The monetary policy stance was formulated to temper, but not fully offset, the pass-through of supply-side cost increases in 2012.**

In April 2012, MAS maintained the modest and gradual appreciation path of the S\$NEER policy band. The slope of the band was increased slightly, while a narrower band width was restored. This tighter monetary policy stance was a measured move to “temper but not fully offset” the pass-through of supply-driven cost increases amid the ongoing restructuring in the economy, while anchoring inflation expectations and keeping growth on a sustainable path. This policy stance was maintained in October 2012.

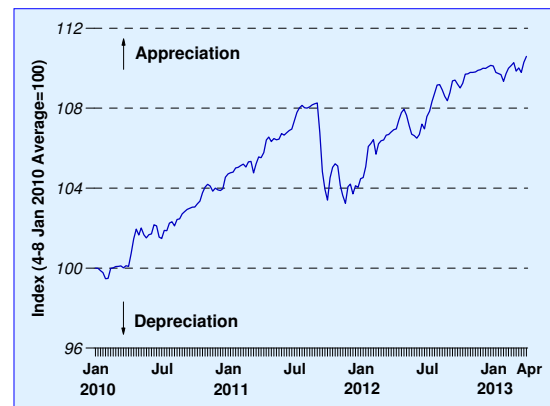
**The S\$NEER has fluctuated in the upper half of the policy band since the October 2012 policy review.**

Since the October 2012 policy review, the S\$NEER has fluctuated within the upper half of the exchange rate policy band. (Chart 1.26) This took place alongside weakness in the Japanese yen, on expectations of bolder monetary policy action. (Chart 1.27) In Q1 2013, the S\$NEER eased slightly in specific episodes of broad-based US\$ strength, such as when there was speculation that QE would be unwound in the US and following setbacks in the Eurozone. Nevertheless, the S\$NEER resumed its upward trajectory towards the end of March, upon conclusion of the bailout deal in Cyprus.

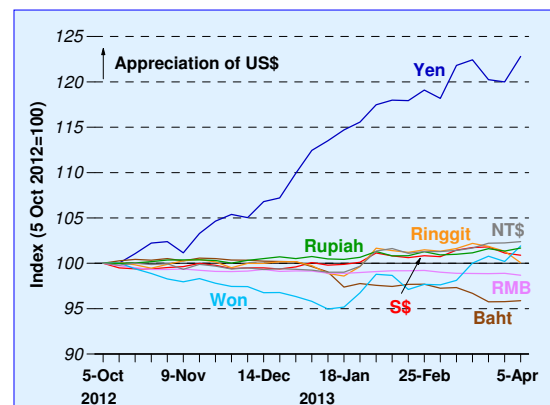
**The S\$REER strengthened on the back of the appreciating S\$NEER.**

The S\$ real effective exchange rate (S\$REER) is a measure of the prices of goods and services in Singapore relative to its trading partners, measured in terms of a common weighted exchange rate index, the S\$NEER. Using the CPI as the price deflator, the S\$REER continued to appreciate over H2 2012, by 1.3% q-o-q in Q3 and by a further 1.2% in Q4. (Chart 1.28) This was primarily due to the strengthening of the nominal exchange rate. As of Q4 2012, the S\$REER was 15% above its level in Q1 2010, the quarter before MAS embarked on its policy tightening cycle. From a longer-term perspective, the S\$REER has exceeded its Q1 1998 peak by 7.6%.

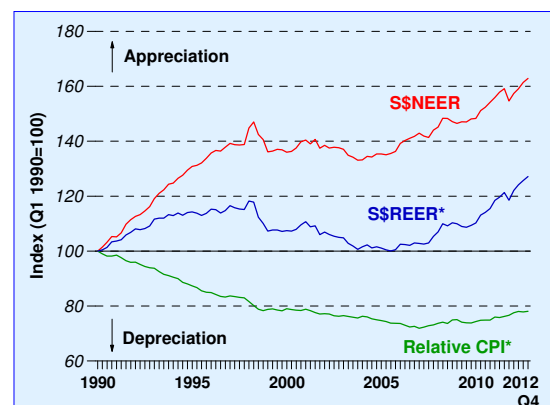
**Chart 1.26**  
S\$NEER



**Chart 1.27**  
Movements of Regional Currencies  
against the US\$



**Chart 1.28**  
S\$NEER, S\$REER and Relative CPI



\* EPG, MAS estimates.



### The S\$REER can be analysed from the perspective of the relative prices of tradables and non-tradables.

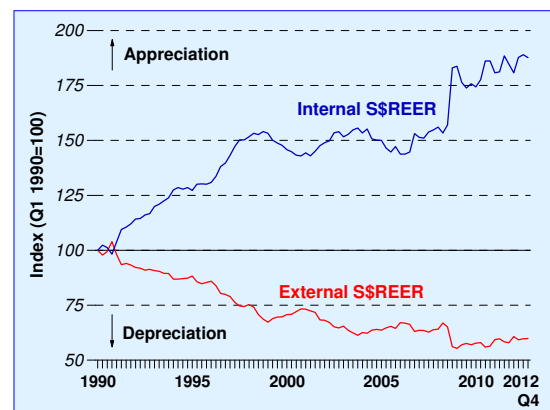
The S\$REER can be decomposed into the ‘external’ S\$REER and the ‘internal’ S\$REER. The former represents the domestic price of tradable goods relative to the foreign price in terms of a common reference currency, while the latter corresponds to the relative price of non-tradables to tradables in the domestic market compared to foreign markets.

The external S\$REER has been on a broadly depreciating trend, reflecting the rise in prices of tradable goods abroad coupled with the decline in prices of tradable goods in Singapore. (Chart 1.29) In comparison, the internal S\$REER has generally appreciated over the years. While the relative prices of non-tradables to tradables have risen both in Singapore and abroad, the increase has been faster domestically, especially during the 1990s and the GFC. Recently, the Singapore economy has experienced a period of supply constraints in the housing and private road transport markets, while the ongoing restructuring has also resulted in tightness in the labour market. These have driven up the prices of non-tradables relative to tradables in Singapore to a greater extent than abroad.

### Liquidity conditions have eased.

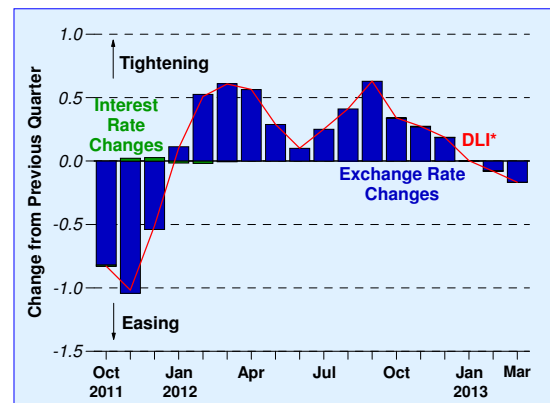
Overall liquidity conditions in the economy, as captured by changes in the Domestic Liquidity Indicator (DLI), continued to tighten in the last quarter of 2012, albeit at a more moderate pace compared with the previous quarter. However, since the beginning of this year, liquidity conditions have eased, in tandem with some downward pressure on the S\$NEER. (Chart 1.30) Changes in the S\$NEER have dominated liquidity conditions, given that the three-month domestic interbank rate—the other component of the DLI—has remained unchanged since December 2011.

**Chart 1.29**  
External and Internal S\$REER



Source: EPG, MAS estimates

**Chart 1.30**  
Domestic Liquidity Indicator



\* EPG, MAS estimates.

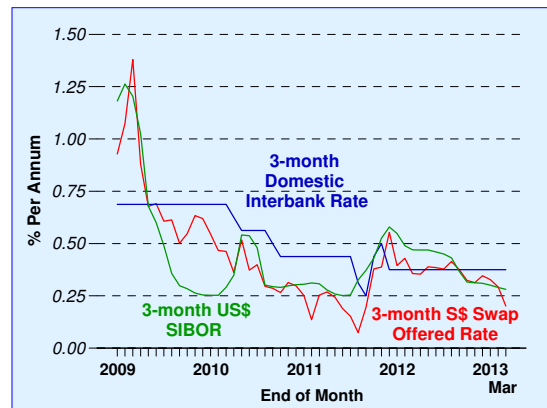
The US \$SIBOR was at a premium over the S\$ three-month interbank rate from November 2011 to August 2012, as global US\$ borrowing costs rose on concerns over the Eurozone debt crisis and fears of a shortage of US\$ liquidity. (Chart 1.31) The interest rate differential reversed in September as the US\$ SIBOR fell to 0.37%, following an abatement of global risk aversion. The US\$ SIBOR continued to trend down to 0.28% in March 2013, widening the differential with the domestic interbank rate, which remained at 0.38%.

Likewise, the three-month S\$ swap offered rate (SOR), which represents the cost of borrowing S\$ via a swap out of US\$, has hovered around the level of the domestic interbank rate since the beginning of 2012. The SOR eased from 0.55% in December 2011 to reach parity with the domestic interbank rate at 0.38% in September 2012. It then dipped further to 0.20% in March 2013, alongside an improvement in investor risk sentiment. The SOR typically tracks the interbank rate closely, but tends to be more responsive to liquidity conditions as swap markets are deeper than deposit markets.

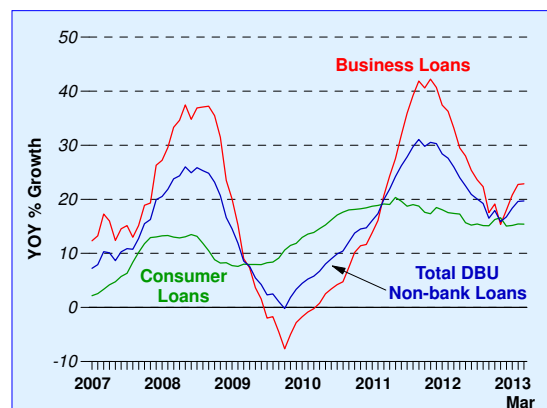
**Credit growth picked up at the turn of the year.**

Domestic credit to the private sector remained strong given a low interest rate environment and relative resilience of the Singapore economy. Nevertheless, the pace of expansion slowed over the course of 2012, from a peak of 31% y-o-y in September 2011 to 17% in December 2012, following the moderation in domestic economic activity. (Chart 1.32) Credit growth picked up again at the turn of 2013, averaging 19% in the first quarter, supported by business loans to manufacturing, general commerce and non-bank financial institutions. Meanwhile, consumer credit growth, which is largely driven by housing loans, remained stable.

**Chart 1.31**  
**Interest and Swap Rates**



**Chart 1.32**  
**DBU Loans to the Non-bank Private Sector**

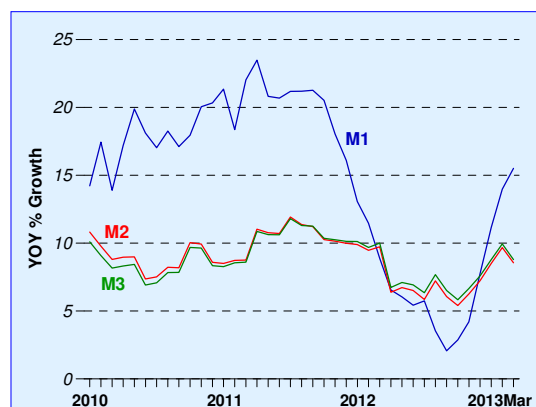


### Growth in monetary aggregates turned around in Q1 2013.

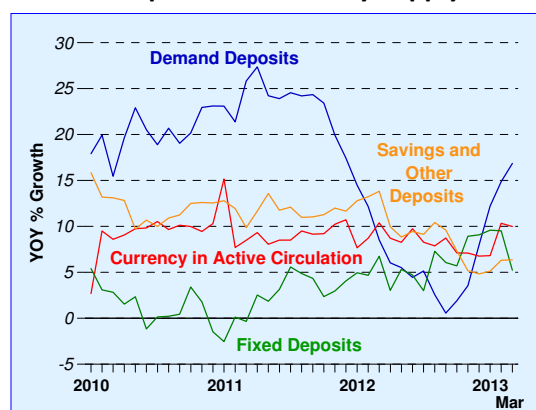
Growth in M1 rebounded from its low of 2.1% in September 2012 to 16% in March 2013. (Chart 1.33) As economic activity ticked up in Q4, this lifted the demand for money and money equivalents for transaction purposes, namely demand deposits. (Chart 1.34)

Growth in the broader monetary aggregates, M2 and M3, also turned around, albeit by smaller amounts. M2 growth rose from a low of 5.4% in October 2012 to 8.6% y-o-y in March 2013, while M3 growth rose from 5.8% to 8.8% over the same period. This was supported by higher growth in fixed deposits, on the back of relatively more attractive fixed deposit rates. Foreign banks have reportedly raised fixed deposit rates in the face of the new Basel III regulations that require them to hold a higher level of ready capital. Correspondingly, local banks are following suit with more attractive rates in order to maintain market share. The fixed deposit rate hit a historic low of 0.29% from January to May 2012, but has since edged up to 0.32% in August. (Chart 1.35)

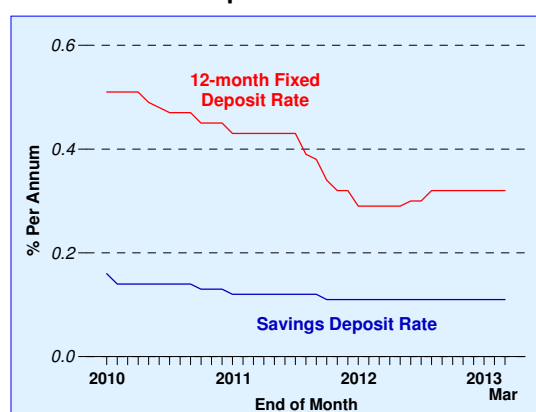
**Chart 1.33**  
Monetary Aggregates



**Chart 1.34**  
Components of Money Supply



**Chart 1.35**  
Deposit Rates



Note: This is the simple average of the top 10 banks' deposit rates.

## Fiscal Policy<sup>4</sup>

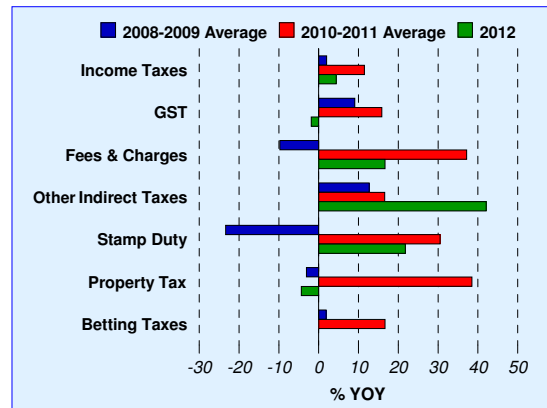
### Operating revenue increased at a more modest pace amid the slowdown in economic growth in 2012.

The government’s operating revenue rose by 6.5% to \$54.3 billion (15.7% of GDP) in CY2012. This was about half the average rate of increase recorded in 2010 and 2011, on account of a marked slowdown in economic growth last year. In 2012, revenue growth continued to be driven by income taxes, stamp duty, foreign worker levies and vehicle quota premiums.<sup>5</sup> (Chart 1.36) In comparison, the contributions from other sources of revenue which recorded high growth rates in the preceding two years, such as GST, property tax and betting taxes, ebbed.

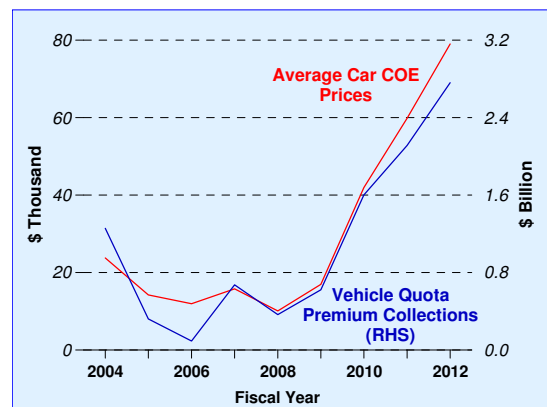
Income tax (including statutory boards’ contributions), which is the largest component of operating revenue, rose to \$21.9 billion in 2012. Specifically, corporate income tax and personal income tax collections increased by \$0.4 billion and \$0.8 billion, respectively. Receipts from stamp duty and COE premiums recorded double-digit growth, supported by the buoyant property market and record high bids for COEs, respectively. (Chart 1.37) The imposition of the Additional Buyer’s Stamp Duty on residential property purchases in December 2011 also contributed to the rise in stamp duty revenue.

GST collections fell slightly by \$0.2 billion to \$8.7 billion last year, reflecting slower growth in consumption and tourist spending. The previous occasion when GST collections contracted was in 2001 when the economy was hit by the global electronics downturn. (Chart 1.38) Revenue from property tax declined by \$0.2 billion from its peak in 2011. The strong collection in 2011 reflected the upward revision in valuations and an increase in the stock of houses. Revenue from betting duty also stabilised, following the double-digit growth recorded in 2010 and 2011 on the back of the opening of the two integrated resorts.

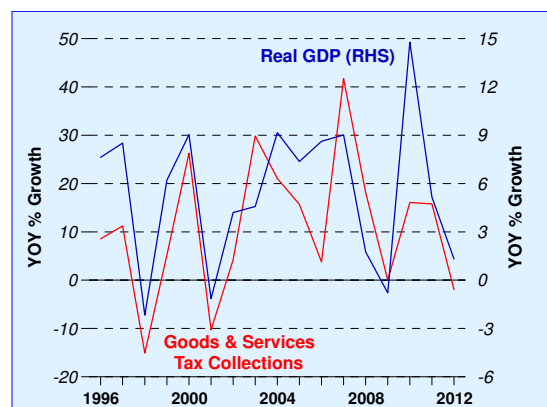
**Chart 1.36**  
Operating Revenue Annual Growth



**Chart 1.37**  
Vehicle Quota Premium Collections and COE Prices



**Chart 1.38**  
GST Collections and GDP



<sup>4</sup> This section is reported for the calendar year (CY), not the fiscal year.

<sup>5</sup> The foreign worker levy is captured under “other indirect taxes”, while vehicle quota premiums are recorded in “fees and charges”.

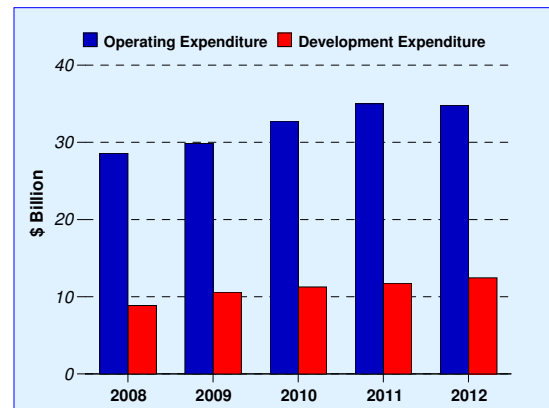
### The increase in government expenditure was driven by development expenses.

Total government expenditure rose by \$0.5 billion in 2012 to \$47.3 billion (13.7% of GDP), due to higher development spending. (Chart 1.39)

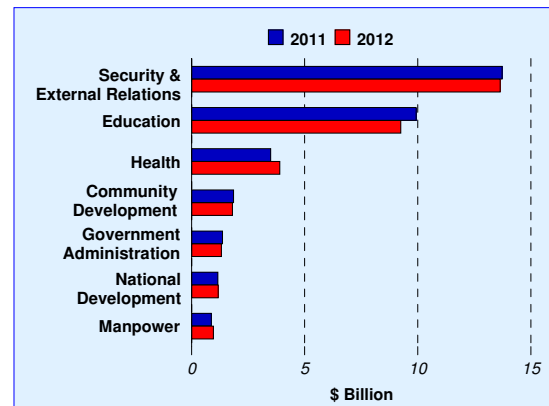
Operating expenditure, which captures expenses on manpower, equipment and supplies, as well as operating grants to statutory boards and aided educational institutions, declined by \$0.2 billion to \$34.8 billion (10.1% of GDP) last year. The bulk of this contraction was recorded by the Ministry of Education, reflecting the winding down of seed endowment grants disbursed in 2011 for establishing the Singapore University of Technology and Design, Yale-NUS College and Lee Kong Chian School of Medicine. (Chart 1.40) In comparison, the Ministry of Health posted the largest increase in operating expenses, as more funds were channelled to public healthcare institutions to implement initiatives under the ambit of Healthcare 2020. This was launched in March 2012 with the aim of enhancing the accessibility, affordability and quality of healthcare.

Development expenditure, which comprises longer-term investment in capitalisable assets such as roads and buildings, increased by \$0.7 billion to \$12.5 billion (3.6% of GDP) in 2012. This was mainly due to ongoing works to enhance the public transport infrastructure, including the construction of the MRT Downtown Line and Tuas West Extension projects. (Chart 1.41) The higher spending on transport infrastructure was partially offset by declines in the expenditures of the Ministry of National Development (MND) and Ministry of Trade and Industry. Spending by MND fell as fewer replacement flats were due for completion under the Selective En Bloc Redevelopment Scheme (SERS), while several major infrastructure projects such as the Lift Upgrading Programme, tailed off.

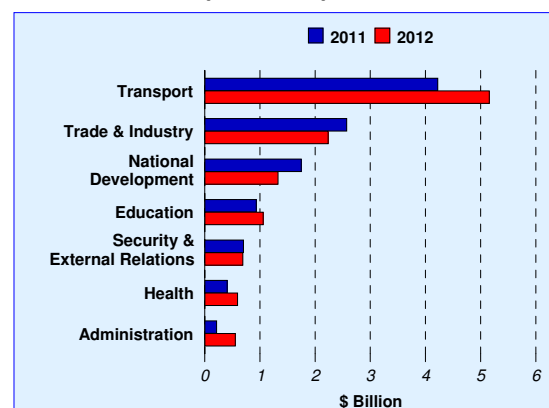
**Chart 1.39**  
Government Expenditure



**Chart 1.40**  
Selected Components of Operating Expenditure



**Chart 1.41**  
Selected Components of Development Expenditure

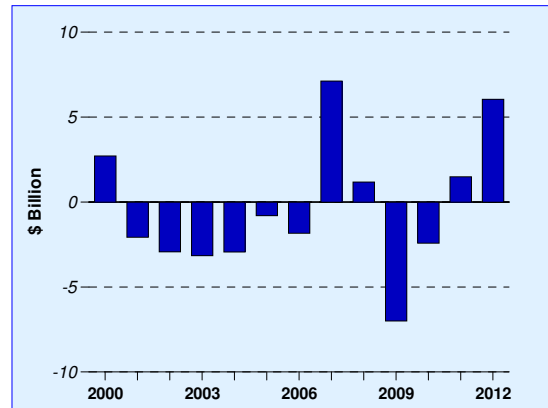


**The fiscal policy stance was contractionary in 2012.**

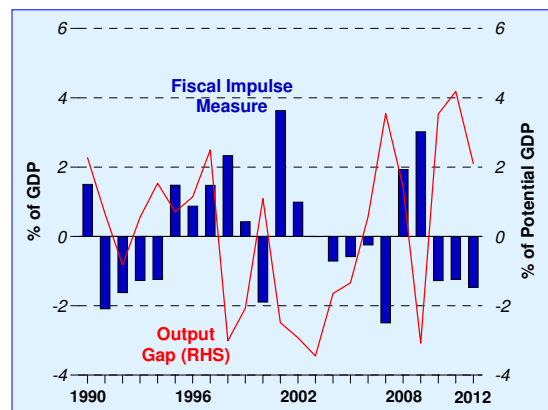
With operating revenue exceeding total expenditure, the government recorded a primary surplus of \$7.0 billion (2% of GDP) in 2012, compared to \$4.2 billion in 2011.<sup>6</sup> Including special transfers but excluding the top-ups to endowment and trust funds, the basic balance was \$6.1 billion (1.8% of GDP), up from the \$1.5 billion surplus posted in 2011. (Chart 1.42)

The Fiscal Impulse measure, which provides an indication of the initial stimulus to aggregate demand arising from fiscal policy, stayed negative at -1.5% of GDP in 2012. (Chart 1.43) This suggests a contractionary fiscal policy stance compared to the previous year, against the backdrop of a positive output gap for the economy.

**Chart 1.42  
Basic Surplus/Deficit**



**Chart 1.43  
Fiscal Impulse Measure**



Source: EPG, MAS estimates

<sup>6</sup> The primary surplus/deficit is defined as operating revenue less the sum of operating and development expenditures.