

1.1 External Developments

Slowdown in the Global Economy

Growth in the Eurozone and Asia decelerated in late 2011 although the US saw a pickup.

The soft patch in global economic growth witnessed in the early part of 2011 persisted into the second half of the year, as worries that the Eurozone sovereign debt crisis would deteriorate rapidly spooked global financial markets and reduced risk appetite. The fear of a disorderly default in Greece triggered contagion across the Eurozone periphery, leading to funding stresses and precipitating a region-wide economic contraction in late 2011. (Table 1.1)

Flagging demand from the Eurozone in turn dealt a blow to Asia's exports, which were further aggravated by severe floods in Thailand. The inundation disrupted the regional automobile and electronics production chains again, after the Tohoku earthquake struck earlier in the year. (Chart 1.1) As a result, Japan's economic output fell in Q4 2011 while growth in Asia ex-Japan as a whole slowed sharply.

The US was the only key trading partner of Singapore to register faster growth in the second half of 2011, even though full-year growth was still much lower than in 2010. Corresponding slowdowns were observed in Singapore's other key markets, bringing overall external GDP growth down to 4.3% in 2011 from 6.3% in the preceding year, and marking a hiatus in the recovery of the world economy from the Global Financial Crisis. (Table 1.1)

US economic growth was supported by domestic demand ...

Following a modest 1.8% q-o-q SAAR rise in Q3 2011, US real GDP increased by 3.0% in Q4. Household spending fuelled the advance, as consumers shook off negative sentiment and took on more debt to spend on durable goods. (Chart 1.2) Private consumption increased at a 2.1% annualised rate during the quarter, supported by an average 1.7% rise in real incomes. The shortfall was financed through new consumer credit, which expanded by 6.9% q-o-q SAAR in Q4, thus helping to keep the savings rate steady at 4.5%.

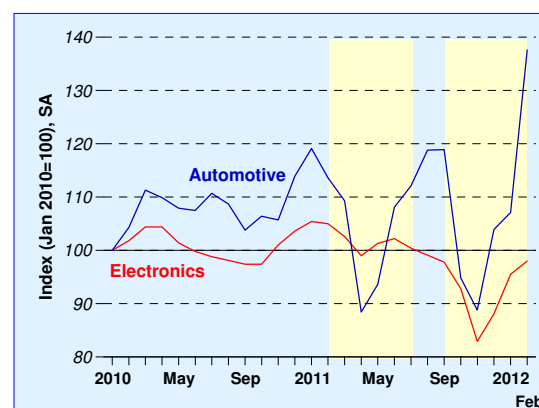
Table 1.1
GDP Growth

	2010	2011	2011	
			Q3	Q4
			q-o-q SAAR	
Total*	6.3	4.3	3.8	1.5
G3*	2.9	1.1	2.4	0.6
US	3.0	1.7	1.8	3.0
Eurozone	1.9	1.5	0.6	-1.2
Japan	4.4	-0.7	7.1	-0.7
Asia ex-Japan*	8.2	5.8	4.5	1.9
Hong Kong	7.0	5.0	0.5	1.5
Korea	6.3	3.6	3.4	1.3
Taiwan	10.7	4.0	-0.2	-0.6
Thailand	7.8	0.1	3.4	-36.4
Philippines	7.6	3.7	3.3	3.5
			y-o-y	
Indonesia	6.2	6.5	6.5	6.5
Malaysia	7.2	5.1	5.8	5.2
China	10.4	9.2	9.1	8.9
India	8.5	7.1	6.9	6.1

Source: CEIC and EPG, MAS estimates

* Weighted by shares in Singapore's NODX.

Chart 1.1
Electronics and Automotive Production in Asia*



Source: CEIC and EPG, MAS estimates

* Average of output levels in Japan, Korea, Malaysia, Taiwan and Thailand.

Fixed investment growth in the US economy moderated to a more sustainable pace in Q4, growing by 6.3% q-o-q SAAR after a robust 13% in the previous quarter. Firms' spending on non-residential structures stalled, but gross capital formation surged as businesses stocked up to meet an increase in new orders. (Chart 1.3) With home sales on an upward trend and housing starts at just one-third of their peak in 2005, residential construction outlays increased by 11.6% q-o-q SAAR in Q4 2011—the fastest rate since Q2 2010.

... while the Eurozone and Japan were hurt by the sovereign debt crisis and natural disasters, respectively.

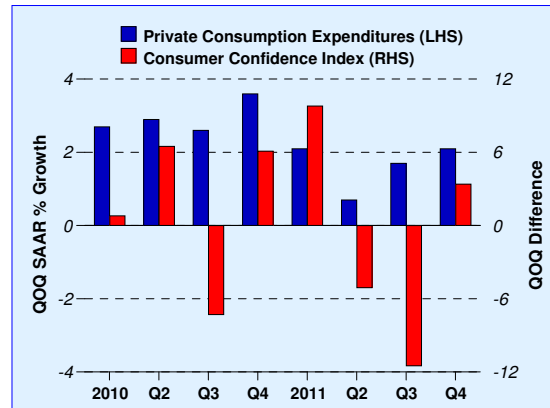
In contrast to the US, Eurozone economic growth was on a downward trajectory throughout 2011. (Chart 1.4) The region's debt crisis flared up again in August 2011, and threatened to spread to the larger economies of Spain and Italy, where sovereign debt yields rose to unprecedented levels. The ensuing crisis of confidence culminated in a real GDP contraction of 1.2% q-o-q SAAR in Q4 2011, owing primarily to a sentiment-driven pullback in domestic demand. Final consumption expenditure retracted by even more than aggregate output across both the core and peripheral economies. The ongoing budgetary tightening to meet pre-committed fiscal deficit targets acted as a further drag on growth, although lower domestic absorption reduced imports and led to an improvement in net exports.

After growing by 7.1% q-o-q SAAR in Q3 2011, the Japanese economy contracted by 0.7% in Q4. (Chart 1.5) Following the rebound from the tsunami-induced downturn, exports plummeted again by nearly 12%, as demand from the Eurozone fell and the Thai floods led to shortages of key components used by upstream Japanese automobile and electronics manufacturers. Nevertheless, private domestic demand partially mitigated the effects of these external shocks, as firms increased capital expenditures by 21% q-o-q SAAR in Q4 and household spending remained resilient.

Growth in Asia ex-Japan slipped on weaker external demand as well as supply disruptions ...

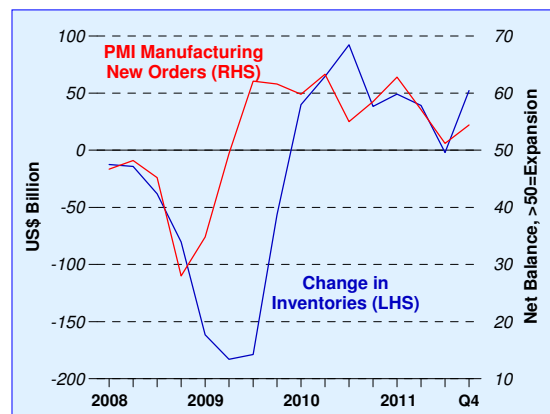
As anticipated in the October 2011 issue of the *Review*, Asia ex-Japan was impacted by faltering external demand from the industrialised economies during the

Chart 1.2
US Private Consumption and Consumer Confidence



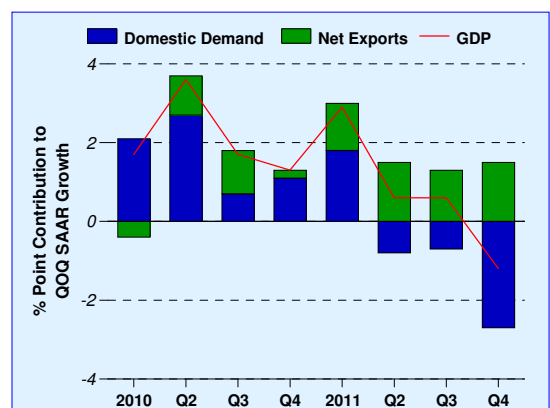
Source: BEA and Conference Board

Chart 1.3
US Inventories and New Orders



Source: BEA and ISM

Chart 1.4
Contribution to Eurozone's GDP Growth



Source: Datastream

second half of 2011. The fall-off in the region's exports was compounded by supply chain disruptions arising from the extensive floods in Thailand, as well as a measured slowdown in the Chinese economy. On average, real GDP growth in Asia ex-Japan was cut to 1.9% q-o-q SAAR in Q4 2011 from 4.5% in the preceding quarter.

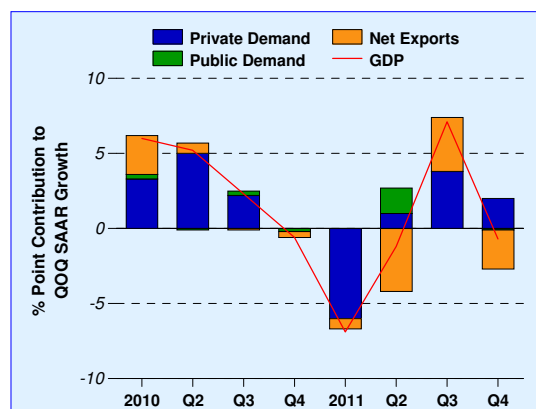
China is in the midst of a consolidation in both the export and property sectors. Real GDP growth moderated to 8.9% y-o-y in Q4 from 9.1% in Q3 as industrial production, fixed asset investment and exports all decelerated in the last quarter of the year. Retail spending was the exception, increasing by 18% y-o-y in Q4 on the back of previous strong wage growth and income tax cuts, reflecting the emerging importance of consumption as an independent growth driver. (Chart 1.6) In 2011, consumption expenditures accounted for 4.8% points of China's overall GDP growth of 9.2%, close to the 5.0% points contributed by investment. Net exports, in contrast, subtracted 0.5% point from growth, as overall import growth outpaced export growth due to stronger domestic demand. (Chart 1.7)

Being highly dependent on both global trade and the Chinese economy, the NIEs lost some momentum late last year. Domestic demand moderated in tandem with the export slowdown, with private consumption growth falling by 2.0% points, on average, in Q4 2011. While Korea and Hong Kong fared somewhat better, Taiwan entered into a mild recession as the economy contracted for two consecutive quarters in Q3 and Q4 2011.

... but resilient domestic demand buffered the impact on most ASEAN economies.

In comparison, the ASEAN economies (except Thailand) enjoyed relatively firm growth in H2 2011. Although the commodity exporters suffered from softer prices and the electronics producers were exposed to the downswing in the electronics cycle, broad-based strength in domestic demand bolstered economic activity. For example, strong public spending contributed significantly to economic growth in Malaysia and the Philippines. The Indonesian economy also benefited from an upturn in investment, driven in part by buoyant FDI inflows.

Chart 1.5
Contribution to Japan's GDP Growth



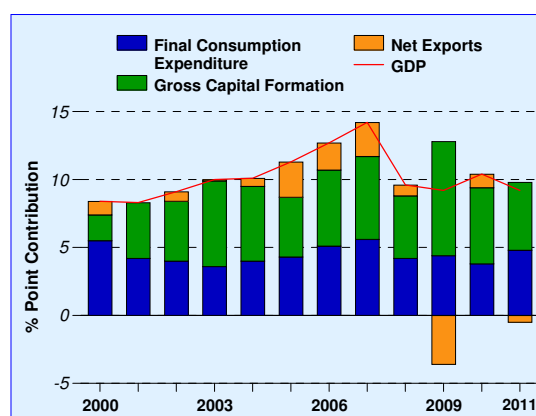
Source: CEIC

Chart 1.6
China's Retail Sales and Nominal Wage Growth



Source: CEIC

Chart 1.7
Contribution to China's GDP Growth



Source: CEIC

The Thai economy shrank by 9.0% y-o-y in Q4 2011 due to strongly negative net exports, as production at flood-affected industrial estates was brought to a virtual standstill. (Chart 1.8) The floods also caused a shortage of domestic goods and crippled transport networks which, together with heightened consumer caution, resulted in a fall in private consumption. Investment also declined alongside a deterioration in business confidence and interruptions to economic activity.

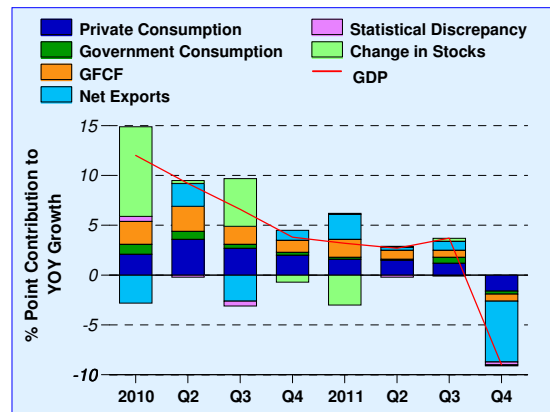
Global inflationary pressures subsided.

Global inflation moderated in H2 2011, as energy prices stabilised and economic activity slowed. The fall in inflation was steepest in China and India, reversing the run-up experienced in 2010. (Chart 1.9) These economies benefited most from the recent food price disinflation, as food items comprise a larger proportion of their consumption baskets. In China, the decline in food inflation could be attributed to improved harvests towards the end of last year and stabilising pork prices. In India, tighter monetary policy, increased food subsidies, and weakening investment helped to alleviate price pressures.

In the ASEAN countries, inflation remained relatively high, although it has started to trend down from recent peaks, particularly in Indonesia. This deceleration was largely a consequence of easing commodity prices as well as favourable base effects. However, core inflation remained sticky due to capacity constraints and relatively tight labour markets.

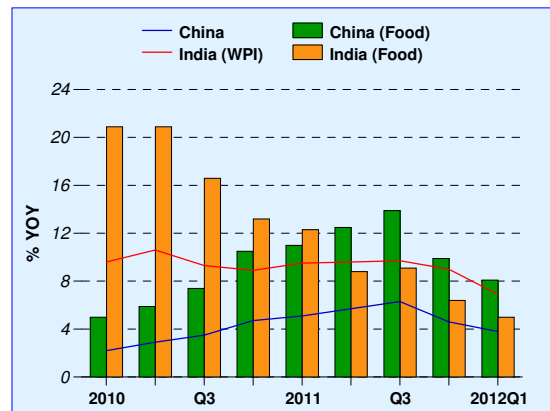
In the US and Eurozone, headline inflation began to moderate from September 2011, albeit more slowly compared to Asia ex-Japan. (Chart 1.10) Nevertheless, core inflation in Q4 rose slightly above 2% y-o-y in the US and was unchanged at 1.6% in the Eurozone. In Japan, headline inflation fell to -0.3%, as base effects from previous increases in tobacco taxes and insurance premiums dissipated.

Chart 1.8
Contribution to Thailand's GDP Growth



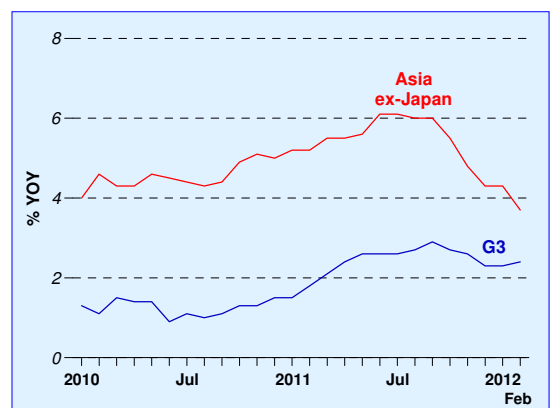
Source: CEIC

Chart 1.9
China and India's Headline and Food Inflation



Source: CEIC

Chart 1.10
G3 and Asia ex-Japan Headline Inflation*



Source: CEIC

* Weighted by 2010 nominal GDP.

1.2 Domestic Economy

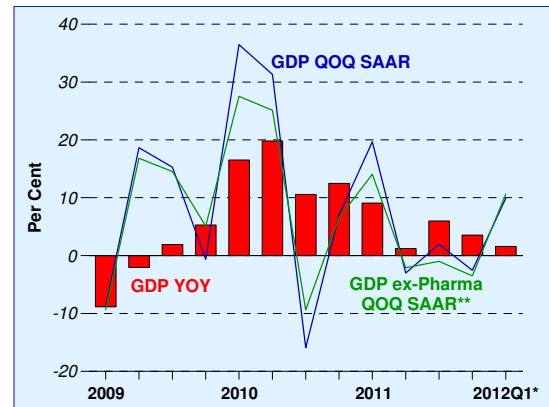
H2 2011: A Further Downshift in Activity

Weak trade-related activities weighed on the Singapore economy in H2 2011.

Amid softening external demand and regional supply-side disruptions, the Singapore economy weakened further in the second half of 2011. Excluding the volatile pharmaceutical segment, activity in the domestic economy slipped by 1.0% on a q-o-q SAAR basis in Q3 and fell a further 3.5% in Q4, following a 2.1% contraction in Q2. (Chart 1.11) Nevertheless, the fall in activity was comparatively mild, sliding 1.7% over the last three quarters from the peak in Q1 2011, compared to an average contraction of 5.5% in previous downturns.

The manufacturing sector bore the brunt of the slowdown, recording three straight quarters of negative growth. (Table 1.2) The electronics sector was particularly weak, suffering a double-digit contraction in production in the same period, following widespread output cuts across the IT production chain. The backdrop for this was the downturn in the electronics industry worldwide, which saw global chip sales declining by 2.0% q-o-q SA in Q4, following a 2.7% drop in Q3. In addition, the US Tech Pulse Index, which tracks the health of the US technology sector, continued to sink deeper into negative territory in Q3 and Q4 last year, as production slowed in line with declining shipments.¹ (Chart 1.12) The industry was also buffeted by supply shocks, including massive flooding in Thailand in H2 2011 which created temporary shortages in hard disk-related products, curbed PC shipments and hence demand for semiconductor chips.

Chart 1.11
Singapore's GDP Growth



* Advance Estimates.

** EPG, MAS estimates.

Table 1.2
Singapore's GDP by Clusters

Sectors	2011			
	Q1	Q2	Q3	Q4
GDP ex-Pharma	Green	Yellow	Yellow	Yellow
Manufacturing ex-Pharma	Green	Red	Red	Yellow
Regional-oriented Services	Green	Green	Yellow	Green
Domestic-oriented Services	Green	Yellow	Green	Green

GDP QOQ SAAR (%)

< -5%	< 0%	> 0%	> 5%
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Source: EPG, MAS estimates

¹ The US Tech Pulse Index, compiled by the Federal Reserve Bank of San Francisco, is an index of coincident indicators of activity in the US IT sector. The indicators used are investment in IT goods, consumption of personal computers and software, employment in the IT sector as well as industrial production of, and shipments by, the technology sector. The index extracts the common trend that drives these series.

The weakness in the electronics cluster spilled over to some supporting industries. Growth in the domestic precision engineering cluster fell by 11.6% q-o-q SAAR in Q4, as IT companies worldwide held back on machinery and equipment investments, in the face of growing pessimism over the near-term business outlook. Trade-related services were affected as well, with slower growth in air and sea transport in the second half of the year.

However, there was underlying support from domestic and regional-oriented services.

Unlike previous episodes of cyclical weakness where broad-based contractions across the domestic economy were observed, several key services segments remained relatively strong in the second half of 2011, boosted by resilient regional and domestic demand. (Table 1.2)

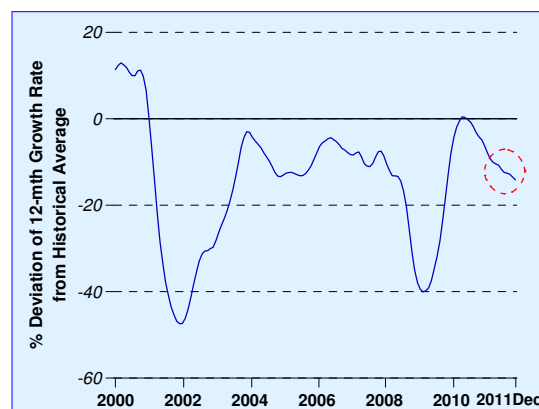
Despite heightened uncertainties in the external environment, the tourism cluster continued to be anchored by firm visitor inflows from the major Asian economies in H2 2011. Monthly tourist arrivals, which were underpinned by steady inflows from China, India and Japan, remained above 1.11 million on average throughout the second half of last year, higher than the 1.08 million recorded in H1 2011. Correspondingly, there was strong demand for hotel accommodation, with average room rates reaching a historic high of S\$260 in Q4 and hotel occupancy rates kept high at 86%.

Meanwhile, the domestic-oriented sectors were buoyed by resilient consumer spending. While overall retail sales contracted by 1.8% q-o-q SA in Q3 due to a reduction in vehicle quotas, it rose by 1.3% in Q4, supported by strong discretionary spending. (Chart 1.13) In particular, retailers reported higher sales of big-ticket items like household furniture as well as lifestyle products such as electronic gadgets.

The finance & insurance sector recorded firm growth, supported by intermediation activities.

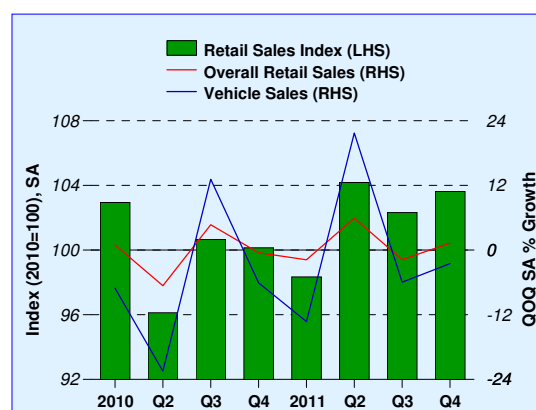
The finance & insurance sector continued to grow steadily in H2 2011 despite heightened risk aversion. The domestic business lending segment proved to be a critical anchor, contributing the bulk of gains in financial intermediation, as companies continued to

Chart 1.12
US Tech Pulse Index



Source: Federal Reserve Bank of San Francisco

Chart 1.13
Overall Domestic Retail Sales



rely on bank financing to fund both their daily operations and longer-term investments. Business loan growth was broad-based, underpinned by the business services, manufacturing and commerce segments. This reversed the dominance of consumer lending in the DBU segment in 2010, when business lending accounted for less than half of the expansion in non-bank lending. (Chart 1.14)

As for offshore loans, growth in regional lending strengthened in the latter half of 2011, posting a 7.0% q-o-q rise in Q4, following a 13% increase in Q3. This was higher than the average quarterly gain of 4.4% in the first two quarters of the year. In contrast, lending to the Americas and Europe remained sluggish. (Chart 1.15)

Meanwhile, the sentiment-sensitive cluster suffered on the back of further fund outflows from the region. The outflows were estimated to be about US\$17 billion, more than twice the US\$7.4 billion outflows in the earlier half of the year.² The risk-off environment, in turn, dampened activities in the stock broking and investment advisory segments. Demand for investment-linked life insurance also tapered off as consumers grew more risk-averse amid heightened volatility in financial markets.

Chart 1.14
Contribution to DBU
Non-bank Loans Growth

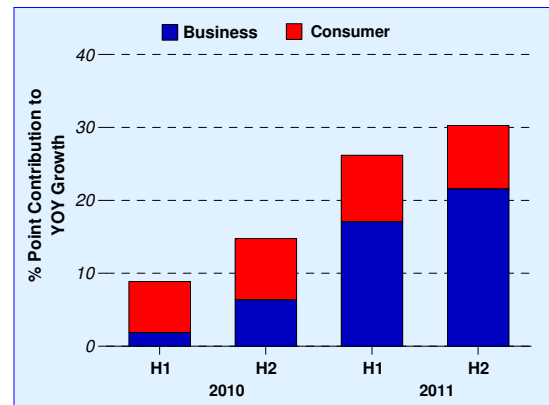
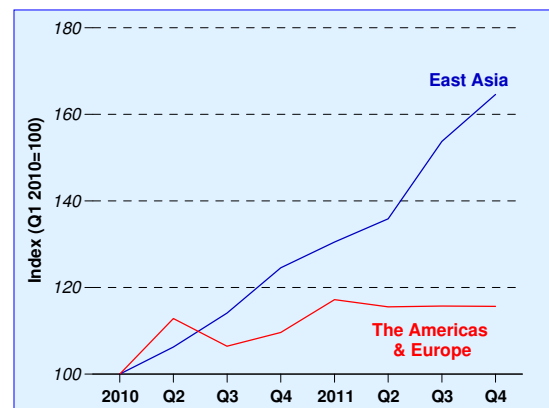


Chart 1.15
ACU Non-bank Lending



GDP in 2011: An Expenditure Perspective

GDP growth was anchored by strong domestic business and consumer spending.

Notwithstanding the downshift in domestic growth momentum in H2 2011, GDP still expanded by 4.9% for the full year, on the back of the 14.8% recorded in 2010.³ Private consumption was particularly robust, with its contribution to growth almost doubling from 17% in 2010 to 31% in 2011. At the same time, business capital expenditures remained healthy, with continued fixed investments in industrial machinery and transport equipment. Meanwhile, inventory restocking contributed about a quarter to GDP growth, reflecting in part the accumulation of stocks following the series of supply-side disruptions last year.

² According to data from EPFR Global.

³ Excluding pharmaceuticals, GDP is estimated by EPG to have grown by 4.0% in 2011, following a 13.8% expansion in 2010.

In contrast, the export sector saw a more subdued performance, in line with the weakening of demand from the advanced economies. Overall net exports fell by 1.1% in 2011, following stellar growth of 37% in 2010, due mainly to slower goods trade. Unlike net exports in services, which remained resilient and continued to grow by 11% last year, net exports of goods declined by 1.4% in 2011, after recording 25% growth in 2010.

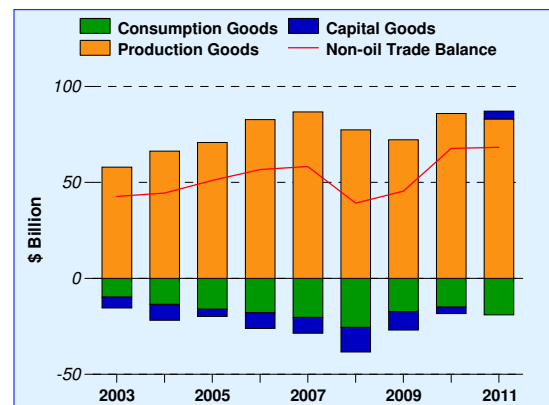
Abstracting from the cyclical weakness in merchandise trade, net exports will continue to be underpinned by the trade in goods, underscoring Singapore’s position as a global and regional production hub. In fact, the trade balance (defined here as net goods exports) has averaged above 17% of nominal GDP since 2001, three times the average of 6% in the late 1990s. The next section traces the evolution of the trade balance over the last decade in greater detail.

The composition of Singapore’s trade balance has evolved over the last decade.

The non-oil trade balance in Chart 1.16 is split into three broad categories—consumption, production and capital goods. The consumption goods balance has always been in deficit, given the lack of natural resources or a sizeable agriculture sector in Singapore. Consumption goods comprise food, beverages & tobacco, manufactured goods and motor vehicles. The production goods surplus reflects Singapore’s position as a manufacturing hub, and includes chemicals, pharmaceuticals and electronics. The capital goods balance consists mainly of machinery and industrial transport equipment.

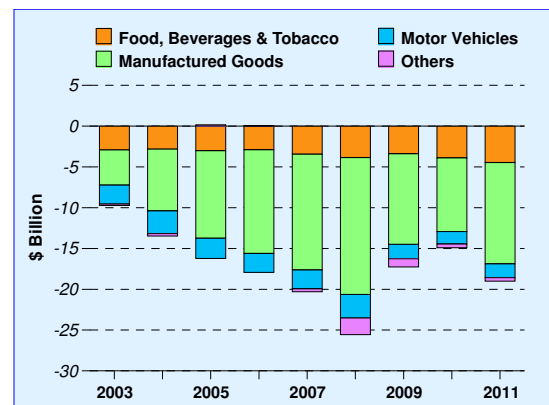
Over the last decade, the size of the consumption goods deficit has increased significantly, although it has moderated somewhat from the peak in 2008 following the Global Financial Crisis. (Chart 1.17) The growth of the deficit was largely driven by the increase in imports of consumer durables, alongside the rise in Singapore’s population and income. However, its impact on the overall trade balance was more than offset by the steep increase in the production goods surplus.

**Chart 1.16
Non-oil Trade Balance**



Source: EPG, MAS estimates

**Chart 1.17
Consumption Goods Balance**



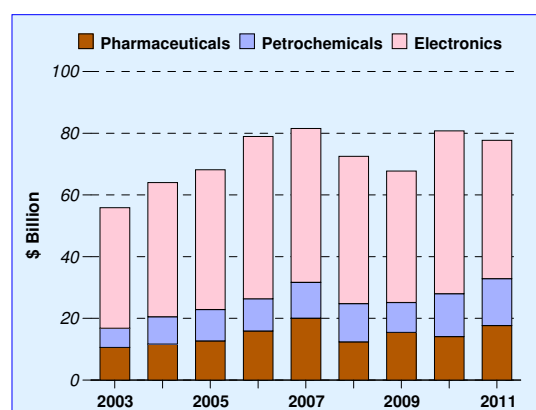
Source: EPG, MAS estimates

The rise in the production goods surplus was driven in part by the increasing prominence of the biomedical sector in the 2000s. Pharmaceuticals' share of the trade balance edged up over the last decade due to the rising value-added content of its exports. (Chart 1.18) This was underpinned by the opening of the GlaxoSmithKline, Lonza and Roche biologics plants here in the last few years. The bulk of the active pharmaceutical ingredients produced is exported to the US and European markets.

Petrochemicals also increased its share of the trade balance over time, rising from 15% in 2003 to 26% in 2010–11. New crackers from industry leaders such as ExxonMobil Chemicals and Shell Chemicals had come on-stream in recent years, enlarging and complementing existing capacity. With a greater proportion of feedstock sourced locally and a more integrated and comprehensive production chain in place in Singapore, the petrochemicals industry has been able to reduce its reliance on imports.

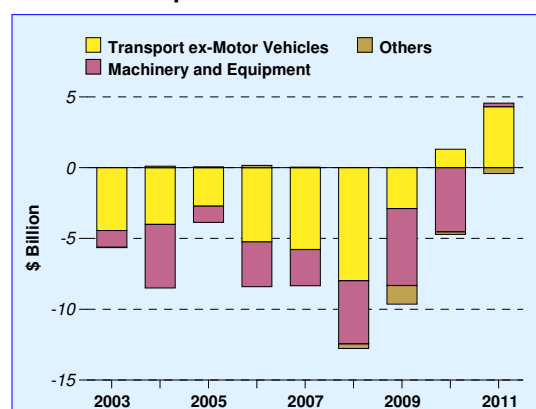
The deficit in the capital goods balance shrank gradually over the last decade. (Chart 1.19) In fact, Singapore became a net exporter last year. These changes reflect the rising importance of the transport-related and precision engineering industries in Singapore, with firms such as Rolls-Royce and Applied Materials setting up their operations here. In the marine-related segment, exports of rig-related equipment and ships surged in the last two years, buoyed by high oil prices as well as an ageing global fleet. The industry has also continued to move up the value chain, with local yards producing oil rigs that can be deployed in deeper waters. The establishment of specialised high-end component manufacturing operations, including rudders, propellers and thrusters, by global leading companies has provided a further boost to the industry.

Chart 1.18
Production Goods Balance



Source: EPG, MAS estimates

Chart 1.19
Capital Goods Balance



Source: EPG, MAS estimates

Q1 2012: A Nascent Recovery

Domestic economic activity picked up in Q1 2012, with the dissipation of negative external shocks.

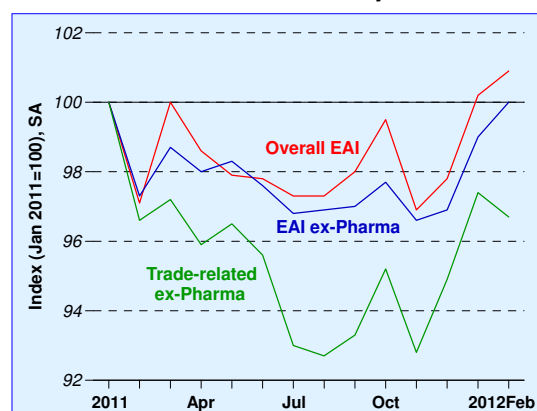
Following three consecutive quarters of sluggish performance, the Singapore economy posted an upturn at the start of the year. The latest *Advance Estimates* indicated that the economy rebounded by 9.9% q-o-q SAAR in Q1 2012, reversing the 2.5% decline recorded in Q4 2011. Excluding the volatile pharmaceutical industry, the domestic economy grew by around 11%, following three quarters of negative sequential growth.

The recovery was corroborated by EPG's monthly Economic Activity Index, which pointed to a rebound at the turn of the year.⁴ (Chart 1.20) The trade-related sub-index, which has a 46% weight in the overall index, experienced a sharp increase in early 2012.

The improvement in the trade-related cluster was propelled by a strong turnaround in IT-related activities, largely reflecting a normalisation in disk drive production. Specifically, output in the data storage segment, which was impacted by the Thai floods in Q4 last year, rebounded by 41% m-o-m SA on average in Dec–Feb, following a 42% plunge in November 2011. With the resumption of production in the region, electronics re-exports rose by 3.6% q-o-q SA in Q4 2011, halting four quarters of decline, and recorded a further 5.0% increase in Q1 this year. In contrast to the expansion in the hard disk segments, the other key segments of the electronics manufacturing cluster, such as semiconductors, continued to languish, dampened by an inventory overhang in the global midstream supply chain.

Activity in the rest of the trade-related cluster also continued to be fairly subdued amid tepid global demand. In the transportation & storage sector, container throughput slipped 0.3% m-o-m SA in March, following a 2.1% uptick in February, and air cargo volumes remained soft.

Chart 1.20
EPG's Economic Activity Index



⁴ The Economic Activity Index (EAI) is a monthly composite index which traces the performance of the economy. It aggregates a set of coincident and high-frequency indicators across the major sectors of the economy, weighted by their economic importance.

Price and cost pressures have come to the fore in the IT sector.

The export sector, particularly the IT industry, was restrained by rising costs and falling prices. Chart 1.21 highlights that Singapore's non-oil domestic exports had come under significant price pressures in the past two quarters. The price effect, as indicated by the orange bars, was the dominant factor weighing on growth in H2 2011. A further decomposition suggests that the fall in export prices was mainly caused by a steeper-than-usual decline in prices of IT products. This was because of the sharper price erosion in semiconductor chips compared to final products, reflecting the inventory glut in the midstream segment. While there was a modest improvement in prices in Q1 2012, prices in certain pockets of the global IT industry, particularly the memory segment, could continue to be weighed down by excess capacity in the near term.

Notably, the export price erosion appears to be starker in Singapore compared to the rest of the region. Relative to other key players in Asia, Singapore fared the worst in IT exports in nominal US\$ terms, reflecting its large exposure to the midstream component segment. (Chart 1.22) However, in volume terms, Singapore's export performance was comparable to some of the other regional economies. (Chart 1.23)

Concomitantly, domestic IT manufacturers also had to contend with pronounced cost pressures from tight factor markets, including higher foreign worker levies and rising input costs. Electricity prices climbed by a hefty 17% last year, owing to the spike in global oil prices.⁵

Chart 1.21
Decomposition of
Non-oil Domestic Exports Growth

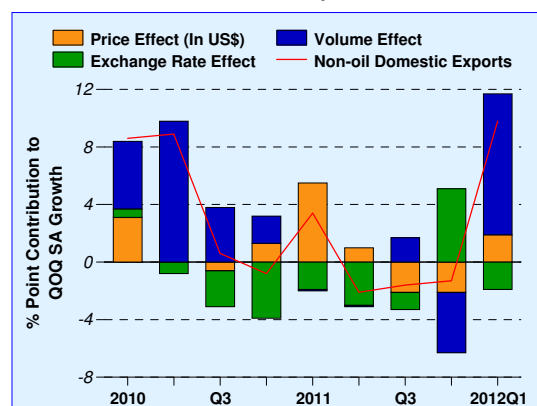
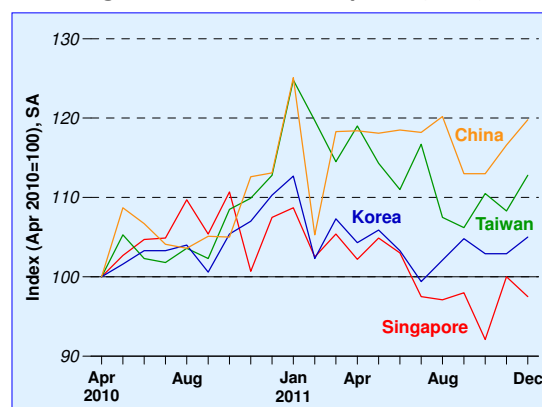
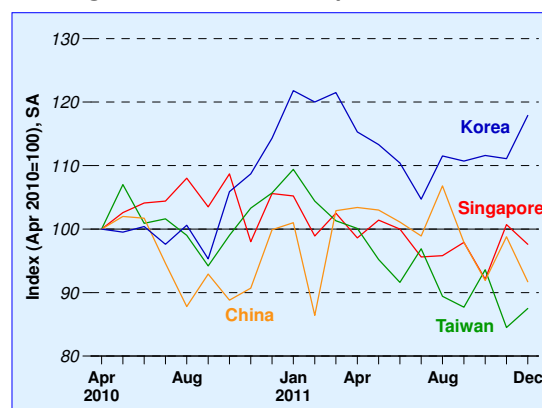


Chart 1.22
Regional Electronics Exports (US\$)



Source: CEIC

Chart 1.23
Regional Electronics Exports Volume



Source: CEIC

⁵

According to Energy Market Company, *Monthly Trading Reports*, December 2010 and December 2011.

Services remained resilient.

The non manufacturing-linked services and regional-oriented activities continued to fare well in Q1 2012. Notably, the tourism industry started the year with impressive gains, buoyed by double-digit growth in visitor arrivals from major source markets, such as China and Malaysia. Accordingly, overall arrivals grew at its fastest pace in five years, reaching a new record of 1.2 million on average each month in Jan–Feb 2012, higher than the average of 1.1 million visitors in the previous twelve months. (Chart 1.24) In line with stronger visitor inflows, hotel occupancy rates rose from 86% in Q4 to 90% on average in January and February, while room rates remained close to the record levels seen in late 2011. With the addition of the Bayfront MRT station and new facilities in the Integrated Resorts, such as the Maritime Experiential Museum & Aquarium, activity in the other services cluster also registered an uptick in Q1 2012.

Support from Asian demand was also reflected in healthy credit demand from the region. ACU non-bank loans extended to East Asia grew by 7.0% q-o-q in Q1, unchanged from the preceding quarter. At the same time, positive economic data from the US and the steps taken to resolve the sovereign debt crisis in the Eurozone bolstered business confidence. Lending to the Americas and Europe rebounded by 1.9% m-o-m in March, following three straight months of sequential declines. (Chart 1.25)

The somewhat promising start to 2012 in the US and Europe also helped financial market sentiment. Within the finance & insurance sector, average daily trading volumes in the domestic bourse rose to 1.9 billion in Q1 2012, from 1.0 billion in Q4 2011. However, the increase in activity was driven largely by trading in penny stocks rather than higher-value blue chips, as shown by the smaller 30% q-o-q increase in turnover value compared to the 83% growth in volume terms. (Chart 1.26) Business confidence also improved and companies returned to the corporate debt markets to raise funds. Reflecting this, S\$-denominated debt issuance rose to \$9.2 billion, marking a 114% q-o-q increase over the preceding quarter.⁶

Chart 1.24
Average Monthly Visitor Arrivals and Hotel Occupancy Rate



* EPG, MAS estimates.

Chart 1.25
ACU Non-bank Lending Growth

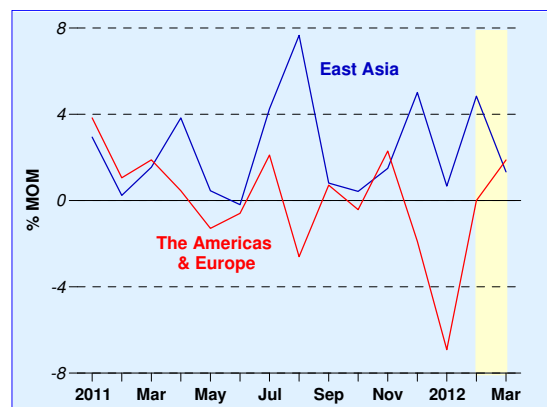
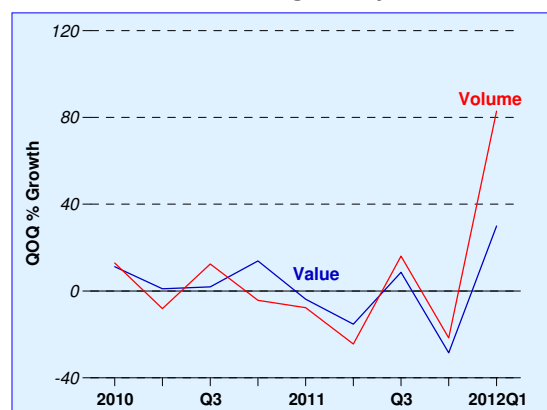


Chart 1.26
Stock Market Average Daily Turnover



Source: Singapore Exchange

⁶ According to data from Bloomberg.

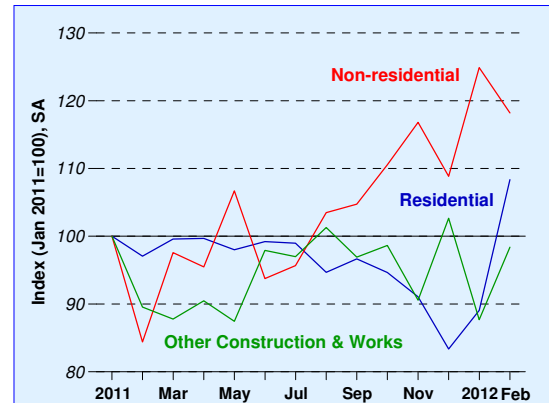
At the consumer end, retail sales remained firm in the first few months of the year, supported by a recovery in vehicle sales. Vehicle sales rebounded by an average of 7.6% m-o-m SA in Jan–Feb, after two quarters of negative growth, as car dealers reported higher luxury car sales following the introduction of new European models. Over this period, the food & beverage services sector also reported an average increase of 2.6% m-o-m in their receipts, as more locals and tourists dined at restaurants as well as other food outlets.

Construction growth surged in Q1, boosted by a strong pipeline of residential and non-residential projects. Recent data for certified progress payments pointed to a jump in residential building activities following the strong take-up of Build-to-Order projects as well as private condominium launches. (Chart 1.27) Ongoing construction of major non-residential projects such as the South Beach Complex and the Singapore University of Technology & Design also supported growth.

Growth is expected to be modest in 2012.

Despite the rebound in Q1, the pace of recovery for the rest of the year is expected to be relatively subdued. With the upturn in the manufacturing sector attributed largely to transitory drivers and with the weakness in the electronics sector expected to persist, services will account for most of the growth for the rest of the year. This will be discussed in greater detail in Chapter 3.

Chart 1.27
Certified Progress Payments in the Construction Sector



Source: EPG, MAS estimates

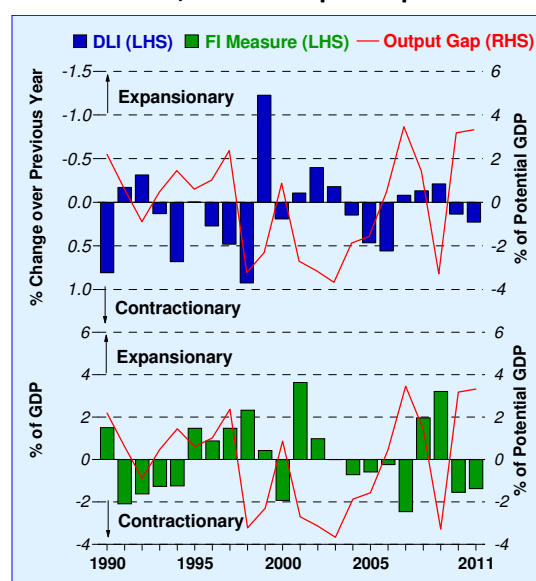
1.3 Macroeconomic Policy

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

Macroeconomic policy setting in Singapore continued to be consistent with cyclical developments in the economy, amid multiple shocks emanating from the external environment. Chart 1.28 plots the Domestic Liquidity Indicator (DLI)⁷ and Fiscal Impulse (FI)⁸ 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.

The chart shows that macroeconomic policy in Singapore has been expansionary during downturns in the economy, including the Global Financial Crisis. In 2010, the output gap turned positive as the economy recovered decisively from the recession in 2009 to post record growth. Appropriately, monetary and fiscal stimuli were withdrawn. In 2011, the positive output gap widened slightly, as full-year GDP growth remained firm even as supply-side restructuring measures were stepped up. The policy setting of a broadly tightening bias was maintained to ensure that the economy remained on a sustainable growth and inflation path in the medium term.

Chart 1.28
DLI, FI and Output Gap



Source: EPG, MAS estimates

⁷ The DLI is a measure of overall monetary conditions, which reflects changes in the S\$NEER and three-month domestic interbank rate.

⁸ See the January 2002 issue of the *Review* for more details on the methodology used to calculate the FI measure.

Monetary Policy

The appreciating exchange rate policy stance was re-calibrated in 2011.

In April 2011, MAS tightened monetary policy for the third time since April 2010 by re-centring the exchange rate policy band upwards to slightly below the prevailing level of the S\$NEER. The policy band was kept on a modest and gradual appreciating path. In October 2011, MAS reduced the slope of the band, but maintained its appreciating path. There was no change to the level at which the band was centred. Over the year, MAS kept the policy band at the wider setting adopted in October 2010 to accommodate continued volatility in international financial markets.

The S\$NEER has largely been in the lower half of the policy band since the October 2011 policy review.

Between end-October and end-November, the S\$NEER depreciated as risk aversion rose amid the sovereign debt crisis in the Eurozone. (Chart 1.29) The regional currencies similarly weakened against the US\$. (Chart 1.30) The turn of the year saw a fall in risk aversion as global macroeconomic conditions improved, and Eurozone authorities committed to measures to ensure liquidity in the financial system. This stemmed the downward pressures on the S\$NEER, and the exchange rate subsequently strengthened to around the mid-point of the policy band by end-January. Over the last six months from October 2011 to March 2012, the S\$NEER was largely in the lower half of the policy band.

The S\$REER depreciated in Q4 2011, but was still about 8% higher than in Q1 2010.

The S\$ real effective exchange rate (S\$REER) is a measure of the S\$NEER adjusted for price differentials between Singapore and its trading partners. As the key (relative) price variable for an open economy, it captures the domestic economy's adjustment to external demand shocks. Using the CPI as the price deflator, the S\$REER is estimated to have peaked in Q3 2011 before falling by 2.4% in Q4 alongside the

Chart 1.29
S\$NEER

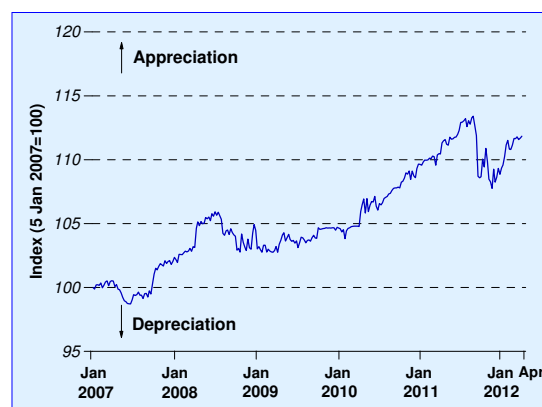
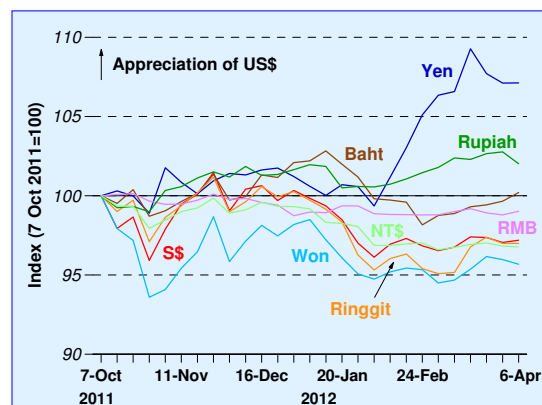


Chart 1.30
Movements of Regional Currencies against the US\$



depreciating S\$NEER. (Chart 1.31) By the end of 2011, the S\$REER had risen by 7.9% since Q1 2010, just before MAS embarked on the monetary policy tightening cycle.

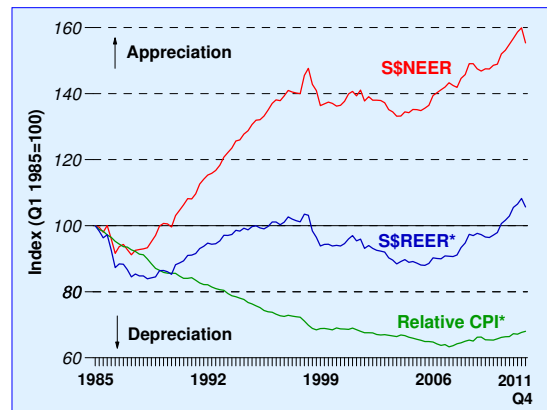
Liquidity conditions have tightened since the beginning of 2012, driven largely by exchange rate appreciation.

The DLI has been primarily driven by changes in the exchange rate, given that domestic interest rates have languished near the zero bound. From September to December 2011, the DLI turned negative in line with the depreciation of the S\$NEER, following 17 months in positive territory. (Chart 1.32) This easing in overall liquidity conditions late last year was nevertheless temporary, as the subsequent strengthening in the S\$NEER resulted in a positive DLI once again in Jan–Mar 2012.

The three-month S\$ domestic interbank rate rose from 0.44% in October 2011 to 0.50% in November. It then fell to 0.38% in December, and has stayed at this level since. (Chart 1.33) Meanwhile, the three-month US\$ SIBOR rose from 0.43% in October 2011 to 0.58% in December, as concerns over the Eurozone debt crisis and its potential spillover on global financial institutions led to a shortage of US\$ liquidity and thus a rise in the cost of borrowing US\$. As risk aversion has diminished since the turn of the year, the US\$ SIBOR correspondingly eased to 0.47% by end-March. Since mid-2011, the domestic interest rate has reverted to being at a discount to the US\$ SIBOR, following an anomalous two-year period when it was higher than the US\$ rate. The differential between the two rates has however narrowed in the first three months of this year.

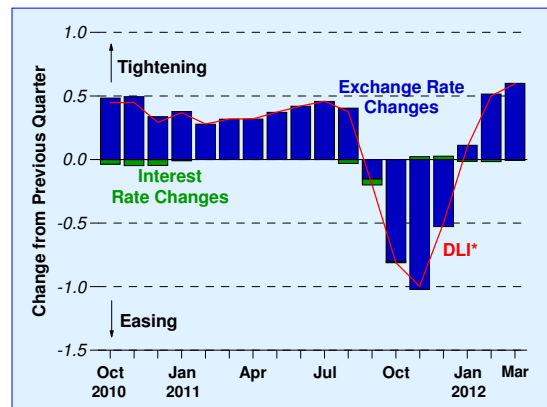
Likewise, the three-month S\$ swap offered rate (SOR), which represents the cost of borrowing S\$ via a swap out of US\$, rose to 0.55% in December 2011. This reflected the higher US\$ funding cost. The SOR then edged down to 0.39% in January 2012, in tandem with the moderation in the US\$ SIBOR, and eased further to 0.36% as at end-March. Typically, the SOR tracks the interbank rate closely, but tends to be more responsive to liquidity conditions as swap markets are deeper than deposit markets.

Chart 1.31
S\$NEER, S\$REER and Relative CPI



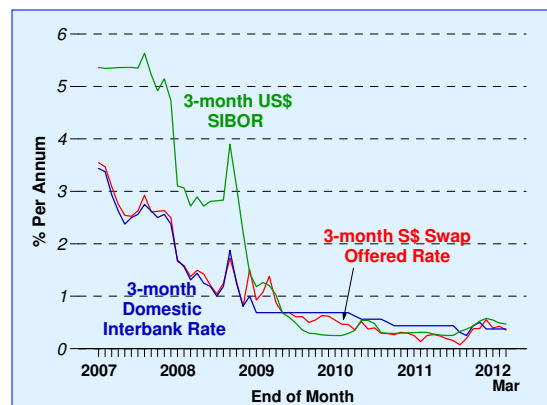
* EPG, MAS estimates.

Chart 1.32
Domestic Liquidity Indicator



* EPG, MAS estimates.

Chart 1.33
Interest and Swap Rates



Credit growth moderated late last year amid the slowdown in economic activity.

In line with the slower pace of economic activity, domestic credit growth has moderated on a sequential basis since Q4 2011. Between October 2011 and March 2012, domestic credit to the private sector grew by an average of 1.2% m-o-m, down from 1.5% in the first nine months of 2011. This reflected the slowdown in business loan growth from 3.5% m-o-m to an average of 1.1%. In comparison, consumer loan growth eased modestly over the same period, as growth in housing and bridging loans was resilient. (Chart 1.34)

M1 growth slowed while growth in broad money was stable.

The economic slowdown in Q4 2011 reduced the transactional demand for money and money-equivalents. Growth in M1 thus eased to an average of 14% y-o-y between October last year and March this year, from 20% in the first nine months of 2011, largely due to a sharp slowdown in demand deposit growth. (Charts 1.35 and 1.36) Meanwhile, growth in the broader monetary aggregates, M2 and M3, declined as well, albeit by smaller magnitudes. Despite record low interest rates, growth in fixed and savings deposits picked up over the same period, reflecting in part increased demand for low-risk S\$ assets.

Chart 1.34
Domestic Credit to Private Sector

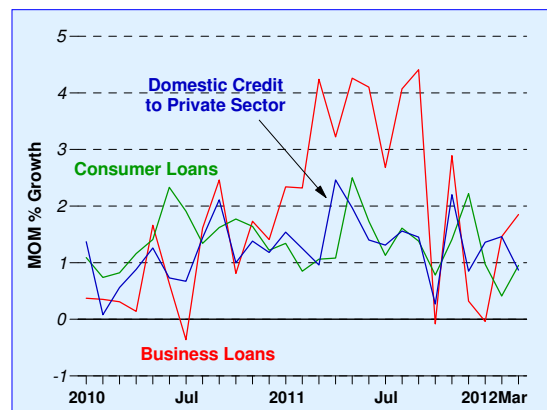


Chart 1.35
Money Aggregates

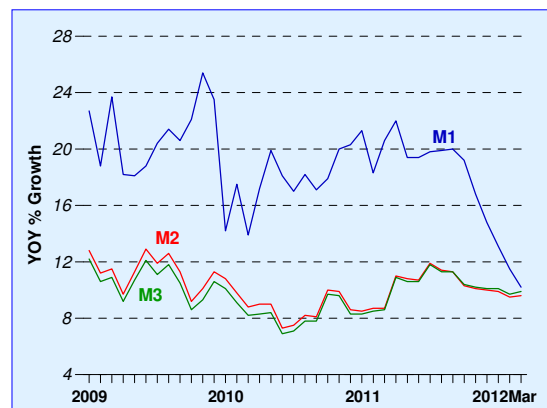
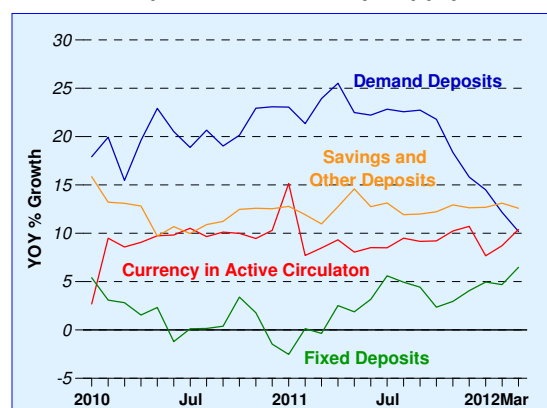


Chart 1.36
Components of Money Supply



Fiscal Policy⁹

Operating revenue rose on the back of sustained economic growth last year.

Operating revenue rose by \$6.4 billion to \$51.0 billion (15.6% of GDP) in 2011, as steady economic growth raised incomes and consumption. (Chart 1.37) The largest increases came from income tax, GST and assets taxes (including property tax), which together accounted for 80% of the total rise in operating revenue.

Income tax, which is the largest component of operating revenue, surged by \$2.7 billion to \$21.0 billion in 2011. The bulk of the increase was accounted for by the corporate sector, notwithstanding the 20% corporate income tax rebate in Year of Assessment 2011. Individual taxpayers also paid more taxes (personal and withholding income taxes) last year compared to 2010. Meanwhile, GST collections rose to \$8.9 billion last year, boosted by strong consumption growth and higher tourist receipts.

Revenue from property tax and stamp duty rose by \$1.4 billion to \$7.1 billion in 2011. Property tax collected jumped by 47% to \$3.8 billion as a result of the upward revision in valuations as well as an increase in the number of properties. Meanwhile, revenue from stamp duty rose by only 5% in 2011 as sales transactions slowed and property price increases moderated, especially towards the latter part of the year, due to the cumulative impact of the five rounds of cooling measures introduced by the government between September 2009 and December 2011. The \$3.3 billion collected in stamp duties was below the peak of \$4.1 billion recorded in 2007. (Chart 1.38)

Revenue from COE premiums—captured under fees and charges—continued to rise, as the fall in new car registrations in 2011 due to reductions in the COE quota was offset by the increase in premiums. (Chart 1.39)

Chart 1.37
Components of Operating Revenue

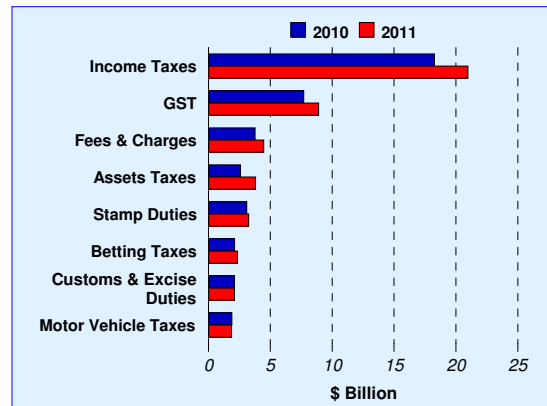


Chart 1.38
Private Residential Property Transactions and Property-related Tax Collections

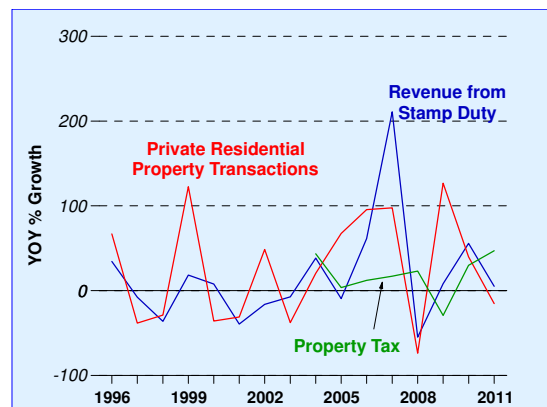
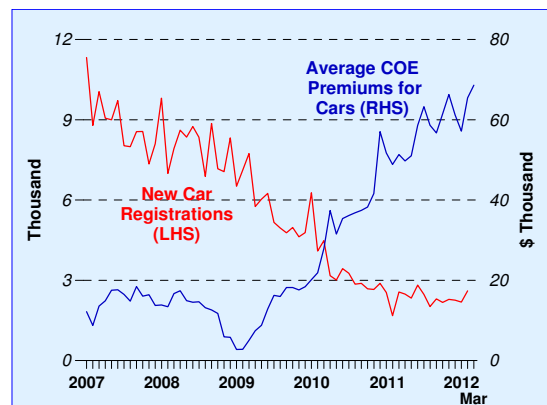


Chart 1.39
COE Premiums and New Car Registrations



⁹ This section is reported in calendar year rather than fiscal year.

The increase in government expenditure was driven by operating expenses.

Total government expenditure rose by \$2.7 billion in 2011 to \$46.8 billion (14.3% of GDP), largely because of an increase in operating expenditure. (Chart 1.40) Operating expenditure, which accounts for about three-quarters of total government expenditure, includes expenses on manpower, equipment and supplies, as well as operating grants to statutory boards and aided educational institutions to support their day-to-day operations. Development expenditure comprises longer-term investment in capitalisable assets, such as roads and buildings.

Operating expenses amounted to \$35.0 billion (10.7% of GDP) in 2011, \$2.3 billion more than in 2010, largely because of increased social spending on education (\$1.4 billion). (Chart 1.41) Specifically, the Ministry of Education dedicated more transfers to educational institutions, giving substantial seed grant endowments to the Singapore University of Technology and Design, the Yale-NUS College and the Lee Kong Chian School of Medicine. The Ministry of Health also disbursed additional funding to the restructured hospitals and intermediate and long-term care sector, and increased spending on manpower training. In addition, the Ministry of National Development (MND) recorded higher expenditures for the Public Housing Development Programme.

Development expenditure rose by \$0.5 billion to \$11.8 billion (3.6% of GDP) in 2011. MND accounted for about half the increase, as the Ministry incurred larger expenses on additional lift upgrading programmes as well as the Selective En bloc Redevelopment Scheme. (Chart 1.42)

Chart 1.40
Government Expenditure

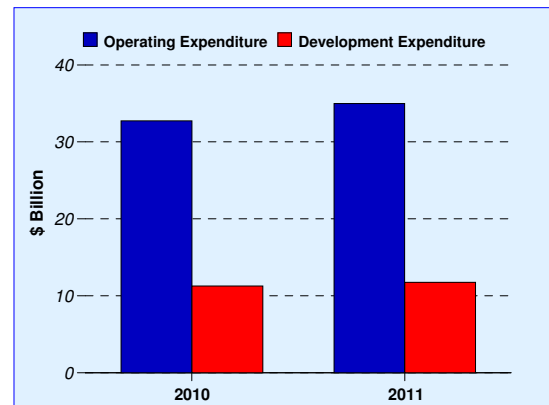


Chart 1.41
Selected Components of Operating Expenditure

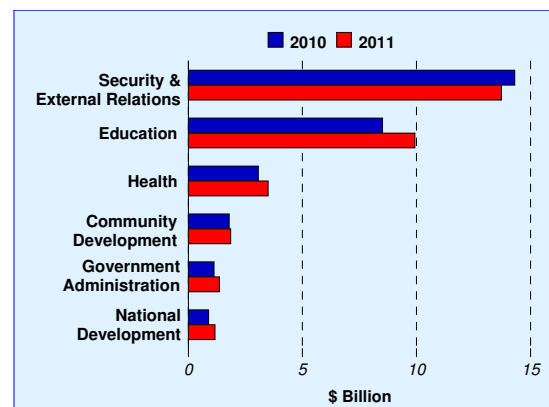
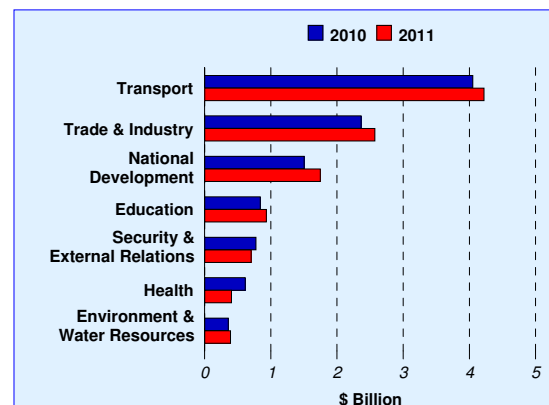


Chart 1.42
Selected Components of Development Expenditure

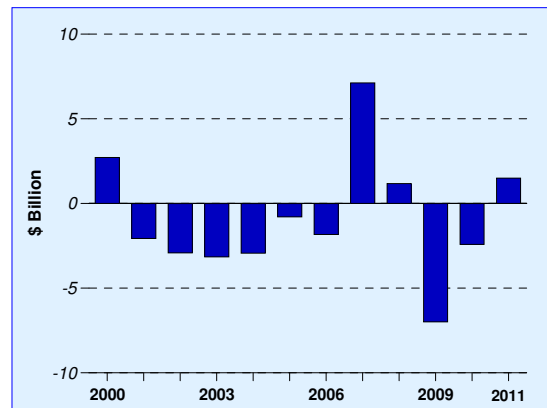


The fiscal policy stance was contractionary in 2011.

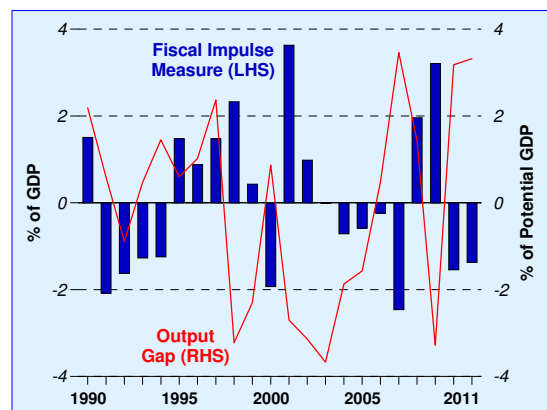
With operating revenue exceeding total expenditure, the government recorded a primary surplus of \$4.2 billion in 2011, compared to \$0.5 billion in 2010.¹⁰ Including special transfers but excluding the top-ups to endowment and trust funds, the basic balance still registered a surplus of \$1.5 billion given the strong outturn in operating revenues. (Chart 1.43) This marked a turnaround from the deficit of \$2.4 billion in 2010.

The FI measure provides a useful indication of the initial stimulus to aggregate demand arising from fiscal policy. In CY2011, the fiscal stance was contractionary, as shown by the negative FI at -1.4% of GDP. (Chart 1.44) It was also slightly more contractionary than the earlier estimate (-0.2%) based on Budget 2011 figures, given the higher revenue received for the year.

**Chart 1.43
Basic Surplus/Deficit**



**Chart 1.44
Fiscal Impulse Measure**



Source: EPG, MAS estimates

¹⁰ The primary surplus/deficit is defined as operating revenue less the sum of operating and development expenditures.