

**Singapore: 2009 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Singapore**

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2009 Article IV consultation with Singapore, the following documents have been released and are included in this package:

- The staff report for the 2009 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on May 18, 2009, with the officials of Singapore on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 16, 2009. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff statement of July 29, 2009, updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its July 29, 2009 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for Singapore.

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

SINGAPORE

**Staff Report for the 2009 Article IV Consultation**

Prepared by the Staff Representatives for the 2009 Consultation with Singapore

Approved by Mahmood Pradhan and Tessa van der Willigen

July 16, 2009

- **Discussions:** May 11–18, 2009, with Minister of Finance Tharman Shanmugaratnam, Managing Director of the Monetary Authority of Singapore Heng Swee Keat, other senior officials, and representatives of the private sector.
- **Team:** Messrs. Zanello (head), Guimarães-Filho, Rozhkov, and Zebregs (Resident Representative) (all APD). Mr. Chua (OED) also participated in the meetings.
- **Mission focus:** Policies to lessen the blow of the global recession, maintain financial stability, and ensure that Singapore is well positioned when the world economy recovers.
- **Policy dialog:** Financial sector policies have been especially in line with past Fund advice. There has been less consensus on monetary and exchange rate policies, particularly as regards calls for a faster appreciation of the Singapore dollar during the cyclical upswing. For a description of policy issues discussed in the 2008 Article IV consultation, see <http://www.imf.org/external/pubs/cat/longres.cfm?sk=22274.0>.
- **Exchange rate system:** Singapore has accepted the obligations of Article VIII, Sections 2, 3, and 4. The exchange system is free of restrictions on the making of payments and transfers for current international transactions. The exchange rate arrangement is floating and it remains appropriate.
- **ROSCs:** A fiscal ROSC remains a priority for the authorities, and the exact timing is likely to be considered next year. In addition, a data ROSC would also be useful and could be considered at that time.
- **Data:** Adequate for surveillance. Authorities have committed to improve over time the reporting of the international investment position to the Fund, which is currently incomplete.

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## EXECUTIVE SUMMARY

**Background.** Singapore was among the first countries in Asia to enter a recession and is now set for its worst economic contraction since independence in 1965. The economy is projected to shrink by about 8 percent in 2009, primarily as a result of a slump in external demand and private investment. Nonetheless, Singapore's economic fundamentals remain strong and provide an important buffer against the external shocks. As elsewhere in the region, Singapore's financial markets have experienced substantial turbulence, but the impact of the downturn is being felt primarily through the trade channel. On the whole, financial markets have continued to operate in an orderly fashion.

**Policy issues.** The government tackled the unfolding crisis by deploying a broad range of instruments. The overarching strategy has been to lessen the impact of the external shocks, while ensuring that Singapore is well positioned to rebound once the global economy recovers.

**Monetary policy.** With inflation concerns out of the picture, the monetary settings are appropriate. Staff and authorities agreed that, barring a significant deterioration of the outlook for growth or inflation, monetary policy should stay the course until a recovery is well established. Fiscal policy should provide any additional countercyclical fine-tuning, if needed. There was agreement that a return to a trend appreciation for the NEER would safeguard price stability further along the recovery path.

**Fiscal policy.** The fiscal package in the FY 2009 budget has been timely, appropriately large, and diversified. It would also support growth over horizons beyond the near term through accelerated infrastructure spending. The authorities intend to undertake additional measures if the economy's trajectory proves more fragile than currently expected. Staff and the authorities shared the view that a premature fiscal withdrawal could undermine positive confidence effects of actions taken.

**Financial sector.** The global turmoil will have a negative impact on short-term earnings of most financial institutions. Nevertheless, Singapore's financial system is sound and should be able to withstand a deeper and more prolonged downturn. This resilience is in large part the result of robust supervision and regulation as well as local financial institutions' own internal risk management and business models. The authorities have been proactive in taking steps to support confidence and market functionality. There was a broad consensus that credit quality will deteriorate in the near term, as the recession drags on. However, at present, these pressures look manageable. Rigorous stress tests encompassing multi-year scenarios, tail events, and correlated shocks remain a high priority for the period ahead.

**Exchange rate.** Staff estimates the real effective value of the Singapore dollar to be somewhat weaker than its equilibrium. As such, it provides countercyclical support. The authorities noted that according to their valuation models the real effective Singapore dollar is broadly in line with its fair value. Staff and authorities agreed that unusual uncertainty clouds these assessments.

## I. INTRODUCTION

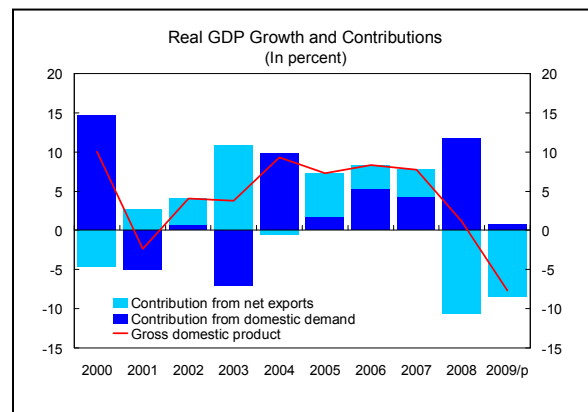
1. **Context.** While integration into the world economy continues to underpin Singapore's economic success, its exposure to the global business cycle is posing considerable challenges at present. Indeed, Singapore was among the first countries in Asia to enter a recession and is now set for its worst economic contraction ever. Nonetheless, economic fundamentals remain strong and provide an important buffer against the external shocks. As a result, policymakers have ample room to maneuver.

2. **Focus of the mission.** The 2009 Article IV discussions focused on the appropriate policies to lessen the blow of the global recession, maintain financial stability, and ensure that Singapore is well positioned when the world economy begins to recover. Given Singapore's importance as an international financial center, special emphasis was given to adverse macro-financial interactions and the possibility of outward spillovers.

## II. MACROECONOMIC DEVELOPMENTS

3. **Context.** As elsewhere in the region, Singapore's financial markets have experienced substantial turbulence, but the main impact of the downturn is being felt through the trade channel.

4. **Growth.** The decline in GDP started in the second quarter of 2008 and accelerated in the second half of the year (Figure 1 and Table 1). Activity dropped by nearly 13 percent (q/q, saar) in the first quarter of 2009 as external demand collapsed. Export-oriented sectors (electronics, engineering, transport and storage) have been hit the hardest, but services, including in the financial sector, have also suffered. By contrast, with large projects underway, construction has held up well so far.



5. **Inflation.** Headline inflation has continued to recede from a peak of 7½ percent (y/y) in mid-2008 to 1½ percent in March 2009. The drop in inflation was initially driven by lower food and commodity prices, but recently has become more broad-based, reflecting falling import prices and slack in demand.

6. **Labor market.** The unemployment rate of the resident workforce (seasonally adjusted) has risen from 2.8 percent in Q1 2008 to 4.8 percent in Q1 2009, and monthly

earnings growth has decelerated sharply.<sup>1</sup> However, employment of residents has fallen less than in previous downturns as the corporate sector entered the recession in a stronger position. In particular, employment in the construction and services is still expanding and is absorbing laid-off workers from the manufacturing sector. There is anecdotal evidence that foreign workers are bearing the brunt of adjustment. Government programs (discussed below) are also helping firms to reduce labor costs and retain employees.

7. ***Balance of payments.*** The current account surplus has shrunk markedly as a result of the slump in exports (Figure 3 and Table 2). It dropped from an average of 16.3 percent of GDP in the first three quarters of 2008 to 10.4 percent of GDP in Q4 2008. FDI and portfolio inflows have also fallen because of the deteriorating growth outlook and rising risk aversion. However, the decline has been more than offset by lower capital outflows owing to weaker corporate profits and concerns about asset quality in advanced economies. Outflows have also been mitigated by Singapore's status as a safe haven. Official reserves have declined from the peak of US\$177 billion at end-March 2008, but have begun to recover in recent months, reaching about US\$172 billion as of end-May 2009.

### III. FINANCIAL DEVELOPMENTS

8. ***Context.*** Singapore is a major funding center for South-East Asia. Accordingly, financial market conditions are highly influenced by developments abroad. In particular, the global financial volatility that erupted in late September 2008 spilled into domestic asset prices (Box 1). Markets have been severely tested but, on the whole, have continued to operate in an orderly fashion. Financial institutions have nonetheless suffered from a drop in fees and commissions as well as from an increase in intermediation cost. The attendant contraction in financial activity has contributed 1 percentage point to the y/y fall of quarterly real GDP in Q4 2008 and Q1 2009 (of 4.2 percent and 10.1 percent, respectively).

9. ***Outward spillovers.*** Overall, financial developments in Singapore had only minor impact on the Asian Dollar Market. Domestic banks, which in late 2008 were net lenders in U.S. dollars in the interbank market, became more cautious in their lending. Some foreign banks seeking U.S. dollar liquidity faced much higher costs of borrowing. While banks that needed Singapore-dollar liquidity had ready access to the MAS standing facility, financial institutions that sought to borrow Singapore dollars to swap into U.S. dollars to meet funding needs elsewhere were unable to pledge foreign currency collateral at the MAS window. Rates for some transactions in the Asian dollar market exceeded the U.S. dollar SIBOR rate at times when borrowers were charged a spread depending on their perceived creditworthiness. Strains were largely over by end-2008.

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<sup>1</sup> The overall unemployment rate has risen from 2 percent to 3¼ percent during that period.

### Box 1. Global Crisis and Financial Contagion

**The global financial crisis has propagated rapidly around the world.** In most markets (including Asia) financial contagion was the direct result of the global sell-off caused by deleveraging.

#### **What has been the impact of global financial turbulence on Singapore's asset prices?**

Preliminary insights can be drawn from vector autoregressions (VAR) comprising of a measure of risk appetite and an asset price, as well as the associated impulse response functions.<sup>1/</sup>

**Econometric analysis shows that shocks to global risk appetite have a large impact on the equity returns and exchange rates in Singapore.** A one standard deviation increase in the VIX (a proxy for global risk aversion) leads to a 100 basis points decline in equity prices and an eight basis point depreciation of the exchange rate vis-à-vis the U.S. dollar. The impact on the stock market is comparable with that in the other countries included in the estimations (the average impact on the stock market is a decline of about 105 basis points). Although Singapore is highly integrated with the global economy, the effect of the risk appetite shock on the exchange rate (vis-à-vis the U.S. dollar) is one-and-half to five times smaller than in the other countries considered (table).<sup>2/</sup> This likely reflects Singapore's exchange-centered monetary policy framework, which limits the extent to which global volatility is transmitted to the exchange rate.

Cumulative Impact to One Standard Deviation Shock to VIX (In basis points, over 5-day period) 1/		
	Exchange Rate	Stock Market
Indonesia	42	-126
Japan	-19	-119
Korea	43	-101
Malaysia	12	-70
Philippines	17	-110
Singapore	8	-100
Brazil	52	-122
Mexico	50	-94

Source: IMF staff estimates.  
1/ Increase in exchange rate corresponds to a depreciation.

**The impact of risk appetite shocks is instantaneous and long lasting.** The shape of the impulse response functions show that in almost all cases considered, the five-day cumulative effect of the risk appetite shock is similar to the immediate (one-day) impact—which can also be inferred from the VAR. Moreover, after 10 trading days the effects of financial contagion are statistically significant, consistent with the notion that repricing of risk can have long lasting global effects on prices and volatility.

1/ The VAR is estimated in first differences with daily data over the January 2004-May 2009 period. The VIX precedes the “domestic” asset price in each VAR, i.e., shocks to the latter do not affect the former contemporaneously.

2/ In the case of the Japanese yen, the finding is consistent with the unwinding of carry trades, i.e. as risk appetite decreases financial home bias reasserts itself (causing the Japanese yen to appreciate).



10. **Equity market.** Following the collapse of Lehman Brothers, the equity market fell by almost 24 percent in October 2008, the biggest month-on-month decline in more than twenty years (Figure 2). The equity sell-off reflected global deleveraging, as well as investor concerns about Asia's growth prospects. In recent months, concerns about the severity of the global downturn have eased and risk appetite has improved, lifting equity prices by 54 percent from the trough in March 2009.

11. **Money markets.** Money markets experienced considerable liquidity pressures in the fall of 2008. Interbank rates spiked with rising counterparty risk, but markets never seized up. Liquidity pressures eased by January 2009, following coordinated actions by central banks around the globe. The improved liquidity situation has been reflected in reduced volatility in interbank rates and lower TED and OIS spreads.<sup>2</sup>

12. **Foreign exchange market.** Turnover in the foreign exchange market—the fifth largest in the world—fell by about 40 percent between September and December of 2008 as financial institutions hoarded cash and U.S. dollar liquidity dried up. The Singapore dollar weakened by 3¼ percent against the U.S. dollar during this period, broadly in line with exchange rate movements elsewhere in the region. Turnover has improved with the global increase in U.S. dollar liquidity, but it remains below the levels recorded in the first half of 2008. The Singapore dollar has strengthened against the U.S. dollar since March 2009 along with other currencies in Asia as risk capital has begun to return to the region.

13. **Credit and corporate debt financing.** Credit conditions tightened significantly in October-November 2008. As banks became more conservative in their lending to protect their capital base, credit growth has declined from about 20 percent (y/y) in mid 2008 to 8¾ percent in March 2009 (Table 3). Singapore dollar loans to nonbank customers fell by 2 percent between October 2008 and March 2009, while foreign currency loans to nonbank customers outside Singapore dropped by 12 percent during that period. The relatively mild contraction in Singapore-dollar credit reflects in part the stronger balance sheets of the corporate sector than in previous downturns. Nevertheless, there appears to be considerable tiering as banks have maintained credit lines with their prime customers, while many SMEs have experienced difficulties accessing bank credit. As a result of rising counterparty risk, stress has been felt in the trade financing where banks need to settle letters of credit with overseas counterparties. Issuance of corporate debt securities, especially U.S. dollar-denominated, has also fallen sharply in tandem with global markets.

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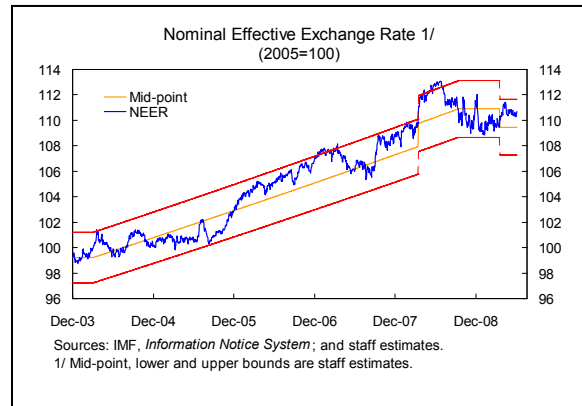
<sup>2</sup> A TED spread is the difference between the interest rate on interbank loans and that on a short-term government security. It captures perceived counterparty risks. An OIS spread is the difference between an interbank rate and that on an overnight indexed swap. It reflects the availability of credit in interbank lending.

14. **Property market.** Financial turmoil has also spilled over to the property market, which, after two years of brisk growth, has cooled off. Private home prices slipped by almost 14 percent (q/q) in the first quarter of 2009 and are down 21 percent from their peak in 2008 (Table 4). Nevertheless, they are still some 20 percent higher than in 2005. The slowdown in the private market segment has begun to trickle down to the larger and more stable public housing (or HDB) market where resale prices were marginally lower in the first quarter. Lower prices have led to a pick up in transaction volumes for private properties in the first quarter of 2009.

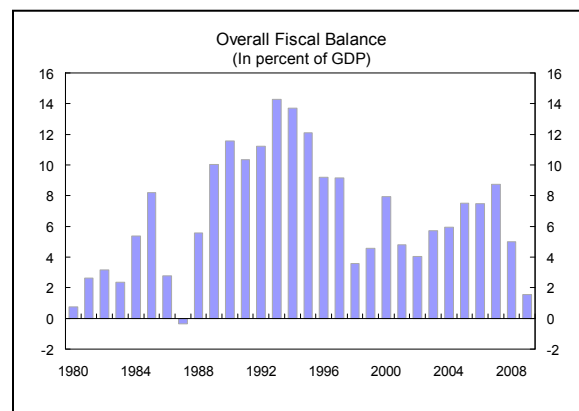
#### IV. POLICY DEVELOPMENTS

15. **A swift response.** The government tackled the unfolding crisis by deploying a broad range of instruments. The overarching strategy has been to lessen the impact of the external shocks, while ensuring that Singapore is well positioned to rebound once the global economy recovers.

16. **Monetary policy.** The Monetary Authority of Singapore (MAS) has loosened monetary conditions in two steps. The MAS (which targets the nominal effective exchange rate to safeguard price stability) started the easing cycle in October 2008. It first removed the appreciating trend from the (undisclosed) NEER policy band. Then, in April 2009, it re-centered the band around the prevailing level of the exchange rate, which had drifted down. The width of the band and the zero appreciation trend have been kept unchanged. The move validated a weaker currency and implied a slight “devaluation” of the trend NEER.



17. **Fiscal policy.** The fiscal response to the global crisis has involved a large stimulus package introduced in January 2009 (Box 2). The stimulus measures are estimated to provide a fiscal impulse of about 3 percent of GDP in 2009–10. The implementation began in FY 2008 (ending in March) and pushed the budget deficit (as defined by the authorities) to  $\frac{3}{4}$  percent of



## Box 2. Resilience Package

**The FY 2009 budget introduced the Resilience Package**, aimed at blunting the effects of the downturn and strengthening the longer-term prospects for Singapore. The package amounts to S\$20.5 billion (about 8 percent of GDP)—one of the largest stimulus packages among advanced economies.

**Measures cover five broad areas**, and are focused at saving jobs and helping viable companies to stay afloat as well as enhance their competitiveness (see table). Some measures took effect in the last quarter of FY 2008, but the bulk of the package will be implemented during FY 2009. A key element of the package is the Jobs Credit Scheme. It provides an incentive for companies to maintain or increase their workforce, by giving them grants of 12 percent of the wages of employees who contribute to the mandatory pension scheme, up to a specified maximum. This scheme is estimated to lower labor costs by 7–9 percent. Another element of the package is the Special Risk-Sharing Initiative in which, *inter alia*, the government assumes 80 percent of loan loss risk to encourage bank lending.

### Resilience Package: The Key Components

(In billions of Singapore dollars)

Preserve jobs	5.1
- Jobs Credit Scheme	4.5
Stimulate bank lending	5.8
- Special Risk-Sharing Initiative	5.8
Enhance business cashflow and competitiveness	2.6
- Property tax rebate for commercial and industrial property	0.8
- Rental rebate for selected industrial and commercial tenants	0.3
Support families	2.6
- Personal income tax rebates	0.5
- Doubling GST credits and Senior Citizen Bonuses	0.5
Build for the future	4.4
- Expanded and accelerated infrastructure spending	1.1
- Spending on security, health, education, transport	1.7
<b>Total package</b>	<b>20.5</b>

Source: Budget 2009; MAS, *Macroeconomic Review* (April 2009).

GDP. Recent constitutional amendments enable the government to use more of the returns from the investment of its reserves to fund the budget. In FY 2009 the deficit is projected to increase to 3½ percent of GDP, the largest on record (Table 5). However, given ample fiscal reserves, no public borrowing will be required.

18. **Financial policies.** To support the stability of Singapore's financial system, the authorities implemented a range of measures. In October, the MAS: (i) adopted a blanket guarantee on Singapore dollar and foreign currency nonbank deposits in domestic and foreign banks through 2010; (ii) entered into a precautionary US\$30 billion currency swap agreement with the Fed; and (iii) intensified its surveillance of the financial sector. Furthermore, the MAS announced that it would inject additional liquidity through its standing facilities, if needed.<sup>3</sup> In November, the government introduced measures to help SMEs maintain access to bank credit. The measures were adjusted and expanded in the following months to maximize their effectiveness.

## V. OUTLOOK AND RISKS

19. **Near-term outlook.** The economy is projected to contract by about 8 percent in 2009, with the trough in GDP occurring probably in 2009Q4 (Table 6). The slowdown would result primarily from a slump in external demand and private investment. The 2009 budget should mitigate the decline in aggregate demand and shore up private consumption by limiting the rise in unemployment and softening the impact of the crisis on firms' cash flow and households' disposable income. As the global economy recovers, activity is expected to pick up modestly in 2010, with GDP growth reaching 2½ percent. Inflation would fall to about zero in 2009, on the back of lower food and energy prices and a widening output gap. The authorities agreed with the broad contours of these projections, but noted that the upturn in 2010 could be stronger given signs of resilience in intra-regional trade and in advanced economies.

20. **Risks.** There was broad agreement that, given Singapore's status as a financial center and dependence on exports, the main growth risks relate to a further worsening of the external environment. First, global volatility may directly spill into local financial markets, undercutting bank credit. Second, international financial developments may precipitate a sharper contraction of the global economy, with renewed adverse effects on trade and related services. Macro-financial interactions could amplify either channel of contagion. On the upside, countercyclical policies at home and abroad could prove more effective than anticipated, and intraregional trade may pick up faster than expected.

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<sup>3</sup> Access to standing facilities had been broadened beyond primary dealers in June 2008.

21. **Medium-term outlook.** As global activity recovers, Singapore’s economy is expected to regain forward momentum. Domestic demand and exports would pick up. Growth would also be supported by increased public spending in infrastructure. Nonetheless, trend growth is likely to be weaker than before the crisis, as credit conditions remain tight and production adjusts to new patterns of external demand. In the outer years, assuming an unchanged real effective exchange rate, the current account balance would hover around 15 percent of GDP, substantially lower than before the crisis. This reflects: (i) declining savings owing to a return of corporate profitability to more normal levels and the early impact of population ageing; and (ii) rising public investment (about 2 percent of GDP per year on average over the next five years in the authorities’ plans), which partially offsets the unwinding of the recent boom in the property sector. The authorities shared staff’s views on the medium-term evolution of the current account, and noted that Singapore’s flexible economic structures should enable it to capitalize on new sources of growth. An Economic Strategies Committee—chaired by the Finance Minister and comprising representative from the public and private sectors—will be set up later this year. It will develop recommendations to identify new growth opportunities, strengthen corporate capabilities, foster a knowledge-based economy, and secure high-value jobs for Singaporeans.

## VI. POLICY DISCUSSIONS

### A. The Role of Macroeconomic Policies

22. **Context.** Recognizing the limits of countercyclical action in a small and highly open economy, policymakers have calibrated their response so as to strike a balance between supporting demand and facilitating structural adjustments.

23. **Monetary policy.** For monetary policy, this balancing act has involved loosening monetary conditions without undermining exchange rate stability or increasing the cost of credit to businesses and households.<sup>4</sup> The MAS’ actions have achieved these goals by limiting volatility in both exchange and interest rates. Staff agreed that, with inflation concerns out of the picture, the monetary settings are appropriate. Barring a significant deterioration in the outlook for growth or inflation, monetary policy should stay the course for some time to come. There was agreement that, once a recovery is well established, a return to a trend appreciation for the NEER would safeguard price stability as slack in the economy is taken up.

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<sup>4</sup> With the NEER as the intermediate target of monetary policy, a monetary loosening involving an increase in the expected depreciation of the NEER (rather than a re-centering of the band) implies an increase in nominal interest rates, consistent with uncovered interest parity.

24. **Fiscal policy.** Fiscal policymaking has also involved balancing different objectives. The authorities noted that the stimulus package for the current fiscal year supports growth without blunting incentives for structural adjustments.<sup>5</sup>

- Staff agreed that the fiscal package had been timely, appropriately large, and diversified. It would support growth also over longer horizons through accelerated infrastructure spending. Furthermore, the authorities' intention to undertake additional measures outside the normal budget cycle if the economy's trajectory proves more fragile than currently expected added a desirable element of contingency to the fiscal plans. Staff and the authorities shared the view that a premature fiscal withdrawal in the next budget could undermine positive confidence effects of actions taken. The authorities noted that lack of sustainability concerns and a strong track record of responsiveness as well as short inside and outside lags lessen the need for pre-announcing the direction of fiscal policy.
- Further along the recovery path, fiscal policy would need to play a part in fostering likely transformations in a post-crisis world. Public investment in physical and social infrastructure would continue to foster an enabling business environment. In the staff's view, consideration could also be given to strengthening automatic stabilizers by assessing taxes on the basis of current rather than previous year's income, with due regard to the administrative and compliance costs that such change might impose on taxpayers.

## B. The Outlook for the Financial Sector

25. **Context.** Although the global turmoil will have a negative impact on short-term earnings of most financial institutions, Singapore's financial system (which is bank-dominated) should be able to withstand a deeper and more prolonged global downturn. Post-crisis transformations would, if anything, boost demand for financial services, as regional trade and financial integration deepens.

26. **Banks.** Despite the turmoil, domestic banks remain profitable, liquid, and well capitalized (Figure 4 and Table 7).<sup>6</sup> Their exposure to toxic assets was low to start with, with

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<sup>5</sup> For instance, the temporary nature of the adopted measures was underscored by the unprecedented decision of funding key components of the Resilience Package from past fiscal reserves. The remaining financing of the FY 2009 deficit would come from the budgetary surpluses accumulated during the current election cycle and will not require debt issuance.

<sup>6</sup> For the banking system as a whole, the loan-to-deposit ratio is about 80 percent, regulatory capital is 16.7 percent of risk-weighted assets (Tier 1 ratio is 13.1 percent), and the liquid asset ratio is 19 percent. Banks are funded primarily through retail deposits.

total CDO investments amounting to only 0.3 percent of total assets (2.6 percent of regulatory capital). Foreign banks (which account for over 50 percent of total banking system assets) are subject to stringent licensing procedures, and the MAS has assurances of liquidity support from their head offices.<sup>7</sup> Looking forward, there was broad agreement that, although credit spreads have widened, banks will face pressure on profits from lower fee income and higher provisioning. Credit quality is expected to deteriorate in the near term, as a result of the slowing domestic economy. However, at present, these pressures look manageable. The MAS has undertaken extensive stress tests and, even under a severe scenario, domestic banks' Tier 1 capital will remain substantially above the regulatory minimum.

27. **Insurance.** Although investment income and premium revenues fell in late 2008, insurance companies continue to have strong capital and liquidity buffers. Insurers had no significant exposure to subprime loans or structured credit products, and regulations stipulate that they can only engage in derivatives trading for hedging purposes or efficient portfolio management. As a result, insurers tend to invest predominantly in cash, deposits, and government securities. Their liabilities also tend to be conservative (e.g., investment linked products account for a small fraction of their offerings). The MAS has stepped up its oversight of the industry, and the policyholders' protection scheme is under review. There was agreement that the insurance sector is unlikely to pose systemic risks, given its small size and limited financial linkages.<sup>8</sup>

28. **Property.** The slowdown in the real estate market has weakened the financial position of property firms. Given the prospective excess supply, some segments of the private property market may come under further downward pressure, leading to some consolidation in the sector. However, the authorities noted that most property developers entered the downturn with strong balance sheets, and are benefiting from government schemes to support their cash flows (e.g., through property tax rebates or deferrals). Furthermore, bank lending to the property sector remains well within regulatory limits and there are no large exposures to individual developers.

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<sup>7</sup> Domestic Banking Unit assets (primarily in Singapore dollars) are split about equally between domestic and foreign banks. However, foreign banks account for 86 percent of Asian Currency Unit assets, all in foreign currency (Box 3). Most foreign banks operate in Singapore as branches. Their liquidity needs are included as part of the head office's overall liquidity management and commitment to global operations. The MAS has regular contacts with both the head offices and home-country supervisors of the larger foreign banks in Singapore. The money market and funding operations of these entities in Singapore are important for these banks in the Asia and Pacific region and hence liquidity support by the head office is an issue often discussed and agreed upon.

<sup>8</sup> Insurance sector accounts for less than 6 percent of total financial sector assets. Local banks' loans to insurance companies account for less than 0.2 percent of total loans.

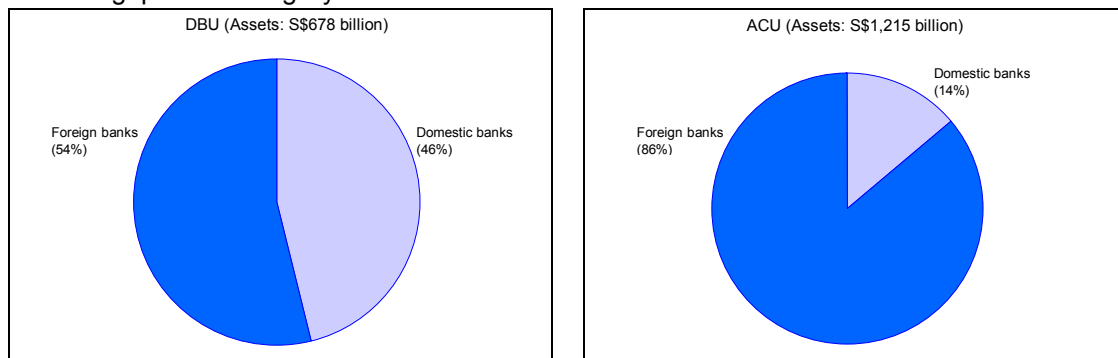
### Box 3. Asian Currency Units and Domestic Banking Units

**Banks operating in Singapore book their activities in two distinct accounting units—the Domestic Banking Unit (DBU) and Asian Currency Unit (ACU).** Singapore dollar transactions are recorded in the DBU, while foreign currency transactions are recorded primarily in the ACU.<sup>1/</sup> The distinction between the DBU and ACU is purely an accounting convention, which in itself does not have implications for assessment of banks' financial soundness. ACU and DBU are not separate legal entities. However, banks seeking to operate an ACU will need approval by the MAS. This arrangement was designed in 1970s to encourage foreign currency business in the so-called Asian Dollar Market (ADM), and thus develop Singapore as a regional financial hub. While ACUs are primarily funded from the interbank market, the main source of funding for DBUs is retail deposits.

**As in other financial centers, foreign currency activities in Singapore are subject to a different regulatory treatment.** ACUs are exempt from certain provisions of the Banking Act, notably the minimum cash balance and the minimum liquid asset ratio requirements. Historically, many foreign banks have set up operations in Singapore with the purpose of establishing an ACU.

**While ACUs are exempt from some prudential rules, they are closely supervised by the MAS.** Individual ACUs are subject to size limits set by the MAS. Banks are required to provide monthly detailed financial statements on their ACUs, and are subject to regular on-site inspections. Foreign banks with ACUs are required to provide assurances of liquidity support from their head offices.

Singapore Banking System: Distribution of Assets Between ACU and DBU Accounts



Sources: Monetary Authority of Singapore; and Fitch Ratings, *Singapore Banking System* (April 2008).

<sup>1/</sup> Banks in other financial centers also have separate books for transactions in different currencies. In Singapore, all foreign currency transactions are aggregated in the ACU. For more details, see *Financial System Stability Assessment* (IMF Country Report No. 04/104) and Fitch Ratings, *Singapore Banking System* (April 2008).



29. **Asset management.** Hedge funds, wealth managers, private banking, corporate fund advisory, and REITs are an important segment of Singapore's financial system. Assets under management in Singapore stood at US\$814 billion at end-2007, but have dropped by end-2008 as a result of the global financial turmoil. Like elsewhere in the region, hedge funds managed in Singapore (which are reportedly less leveraged than their foreign peers) have faced large redemption pressures. Lack of comprehensive data on these funds makes it difficult to assess their links with the rest of the financial system. Nonetheless, in the view of many market participants, Singapore will continue to attract asset management business.

### C. Exchange Rate

30. **Developments.** Since mid-2008, the Singapore dollar has depreciated by 2 percent in real effective terms. This reflected mostly a comparable depreciation of the nominal effective exchange rate, as the monetary stance has been loosened.

31. **Assessment.** Staff estimates the real effective value of the Singapore dollar to be somewhat weaker than its equilibrium (Box 4). As such, it provides countercyclical support. This assessment is subject to considerable uncertainty, as reflected in unusually high volatility implied by foreign exchange options as well as poor visibility about the direction of the global economy and fundamentals. In fact, since mid-2008, reserves have declined by nearly US\$7 billion, but intervention has been two-sided. The authorities noted that according to their valuation models the real effective Singapore dollar is broadly in line with its fair value. They recognized nonetheless that unusual uncertainty clouds these assessments. They also stressed that monetary policy has delivered a trend appreciation of the exchange rate and has not hindered structural adjustments. There was agreement that Singapore's exchange rate regime, which has helped achieve a track record of low inflation with prolonged economic growth, continues to serve the country well.

32. **Policy mix.** In the staff's view, once a recovery is in train, the policy settings should allow for a resumption of the trend appreciation of the NEER. A longer-term appreciation of the Singapore dollar would be facilitated by a recalibration of the policy mix toward reduced public savings and tighter monetary conditions. The authorities noted that higher public spending is planned for the medium term. They also agreed that the real effective exchange rate would likely experience a trend appreciation over the medium term, and that such appreciation should not be resisted, if driven by fundamentals.

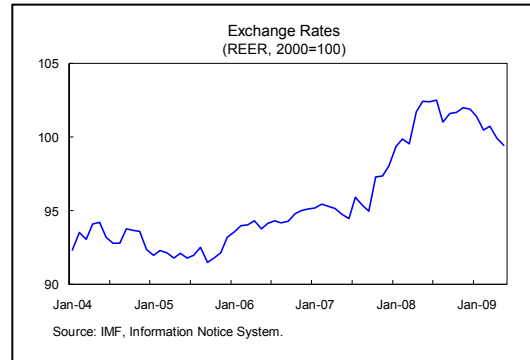
## VII. STAFF APPRAISAL

33. **Macroeconomic setting.** Singapore has been hard hit by the global recession and is set for the worst economic contraction in its history. The effects of the slowdown are being felt mostly through the trade channel as reflected in the slump in exports. Local financial

#### Box 4. Exchange Rate Assessment

*The real effective Singapore dollar is somewhat weaker than its estimated medium-term equilibrium level.*

**The exchange rate has been on an appreciation trend since early 2005.** This trend reflects relatively stable inflation differentials vis-à-vis trading partners and the appreciation of the NEER. The Singapore dollar weakened in real effective terms at the onset of the global crisis, but it has moved sideways in recent months, reflecting in part policy changes.



**To assess the level of the exchange rate in relation to its medium term equilibrium, three CGER-type methodologies have been applied:**

- **The macroeconomic balance approach** estimates current account norm of about 10 percent of GDP. The relatively large norm reflects Singapore's significant fiscal surpluses and the rising share of the working-age population. Estimates of the norm are derived from a panel of 55 advanced and emerging economies over 1973–2007. According to the macroeconomic balance approach, *the Singapore dollar is undervalued by about 5 percent (after multilateral consistency adjustments).*
- **The external sustainability approach** points to a broadly similar undervaluation. Under the assumption that the net foreign asset position (NFA) is stabilized at its 2007 level (estimated at about 175 percent of GDP), *the implied undervaluation is 10 percent.* Computing Singapore's NFA with cumulative current account balances gives an NFA of around 200 percent of GDP—and *an undervaluation of the Singapore dollar of around 2 percent.*<sup>1/</sup>
- **The estimate from the equilibrium exchange rate approach is broadly in line with those above.** According to this approach, *the exchange rate is some 3 percent below its estimated medium term equilibrium.* Productivity gains in tradables and rising NFA support a more appreciated equilibrium exchange rate, partly offsetting the effect of the steady deterioration in the terms of trade.

During the 2008 Article IV consultation, staff's assessment was that the real effective Singapore dollar was 5–15 percent undervalued relative to its equilibrium level. The lower undervaluation in the current assessment reflects *inter alia* a smaller underlying current account balance (consistent with weaker projected demand in Singapore's main export markets), negative terms of trade shock (from lower prices for financial services and refined oil products) and losses on Singapore's external assets.

<sup>1/</sup> As discussed in IMF Country Report No. 08/280, estimates based on the external sustainability approach are sensitive to the level of NFA used. For instance, adding market estimates of the GIC's assets to the reported IIP would put Singapore's NFA at about 250–300 percent of GDP. Using the MSCI-World index as a proxy for GIC's equity portfolio, estimated annual capital gains would average about 4 percent of GDP during 2001–07 (similar to the CGER's adjustment for capital gains). *In this case, the estimated undervaluation is about zero.*

markets have come under stress, but have continued to operate in an orderly fashion. Nevertheless, a further worsening of international market turbulence remains an important macroeconomic risk. Against this background, and given the openness of the economy, the authorities have rightly focused on lessening the blow of the external shocks, while ensuring Singapore is well positioned once the global economy starts to recover.

34. **Response to the global crisis.** The authorities have responded forcefully with a large fiscal stimulus package, monetary policy easing, and measures aimed at ensuring financial stability. The extraordinary circumstances have warranted some departure from the medium-term compass at the core of Singapore's policy frameworks, but the response has managed to strike a balance between supporting demand and avoiding delays in necessary structural adjustments.

35. **Monetary policy.** For monetary policy, this balancing act has involved loosening monetary conditions—*inter alia* to fend off deflation risks—without undermining exchange rate stability or increasing the cost of credit to businesses and households. The MAS' two-step decision to first eliminate the appreciation bias and then re-center the NEER target band has achieved these goals. With inflation concerns out of the picture, the monetary settings are appropriate. Barring a significant deterioration of the outlook for growth or inflation, monetary policy should stay the course until a recovery is well established. Further along the recovery path, monetary policy will need to shift to a tightening stance, including with a return to a targeted trend appreciation for the NEER, to safeguard price stability as slack in the economy is taken up.

36. **Exchange rate.** The REER is somewhat weaker than its medium-term equilibrium. This assessment—which is subject to considerable uncertainty—does not imply the need of policy adjustments at present but points to the likely evolution of the real exchange rate once a global recovery takes root. The floating exchange rate continues to serve Singapore well and the exchange-rate-centered monetary framework has been an important source of stability in times of economic turbulence.

37. **Fiscal policy.** The large stimulus for the current fiscal year will go a long way toward mitigating the impact of the output contraction on households and businesses. The package is designed to minimize tensions between limiting the downturn and fostering microeconomic incentives that will support rapid adjustment to the changes in the global economy. Further measures should be considered if the economy's trajectory proves more fragile than currently expected. As the authorities recognize, the next budget will need to be crafted in line with the evolving economic situation and avoid a premature fiscal withdrawal that could undermine positive confidence effects of actions taken. Over the medium term, fiscal policy will need to play a part in readying the economy for shifts in the pattern of global demand (as balance sheets are rebuilt in advanced economies and internal sources of growth gain prominence in emerging markets). Along with the flexible labor and product markets, stepped-up public

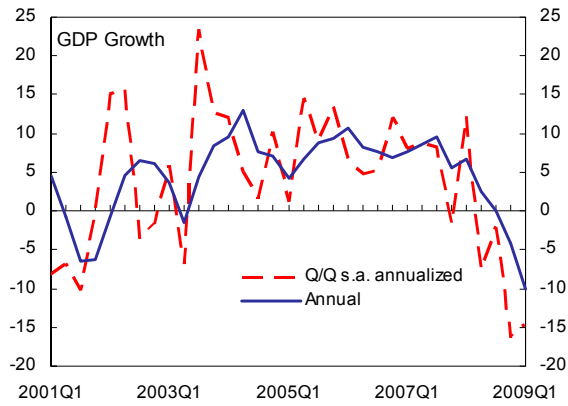
investment in physical and social infrastructure would create an enabling environment in which Singapore could seize new opportunities.

38. ***Financial sector policies.*** Singapore's financial system has entered the global crisis from a position of strength, and has coped well with the turbulence in international financial markets so far. Yet, asset quality will deteriorate as the recession drags on. Rigorous stress tests encompassing multi-year scenarios, tail events, and correlated shocks should remain a high priority for the MAS in the period ahead. Continued efforts to upgrade contingency planning and coordinate with supervisors in other jurisdictions, particularly as regards the unwinding of deposit guarantees, should also be a priority. Looking beyond the near term, the MAS should continue to adapt its supervisory and regulatory framework as lessons from the crisis are learned.

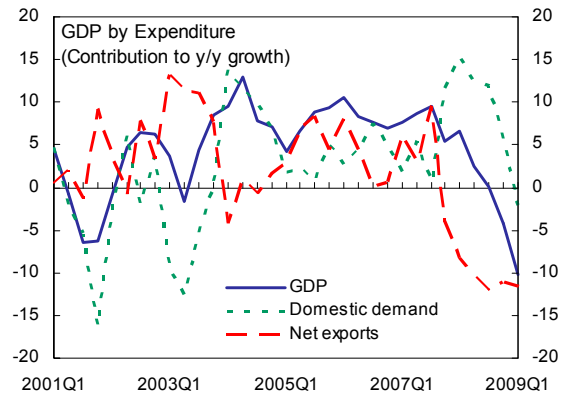
39. It is recommended that the next Article IV consultation discussions take place on the standard 12-month cycle.

Figure 1. Singapore: Real Sector Developments

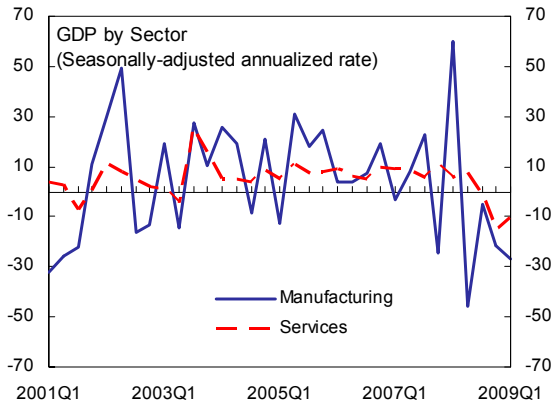
*GDP growth plunged in 2008 and early 2009....*



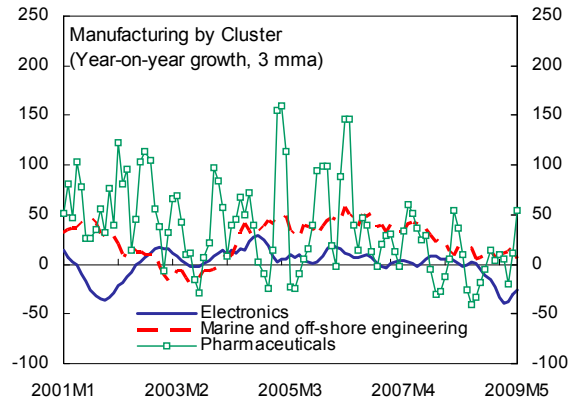
*....as net exports collapsed and domestic demand decelerated.*



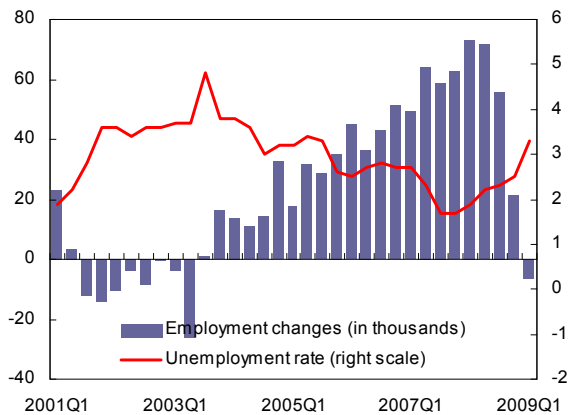
*The contraction has been experienced in both services and manufacturing....*



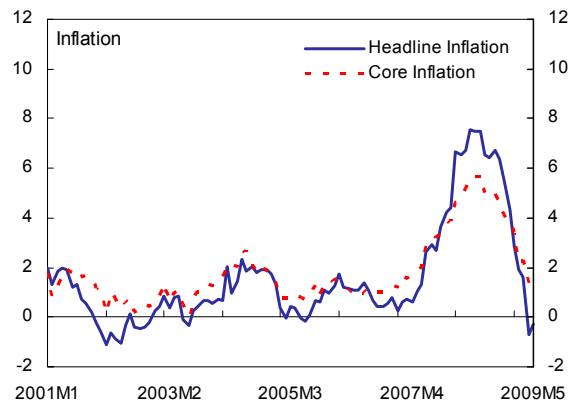
*....and all major industrial clusters have been affected.*



*Labor market conditions have weakened with the slump in economic activity.*



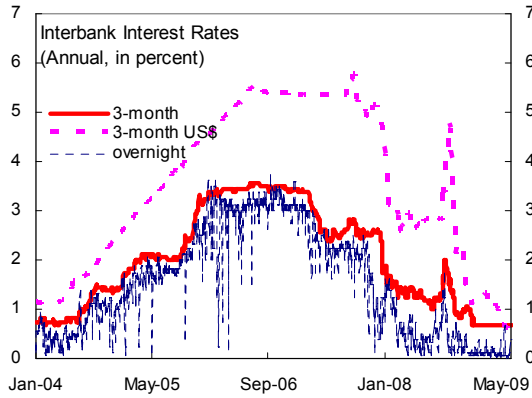
*Inflation has fallen rapidly across the board.*



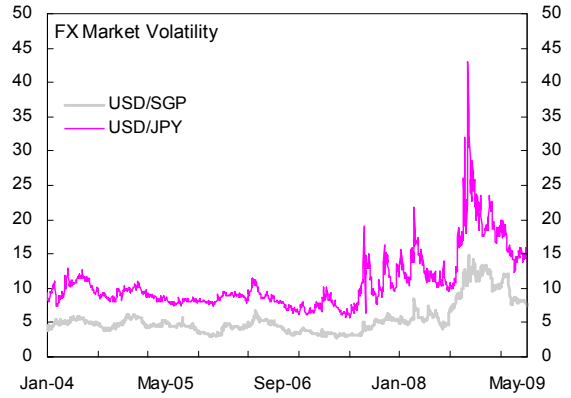
Source: CEIC Data Co. Ltd; and IMF staff estimates.

Figure 2. Singapore: Asset Market Developments

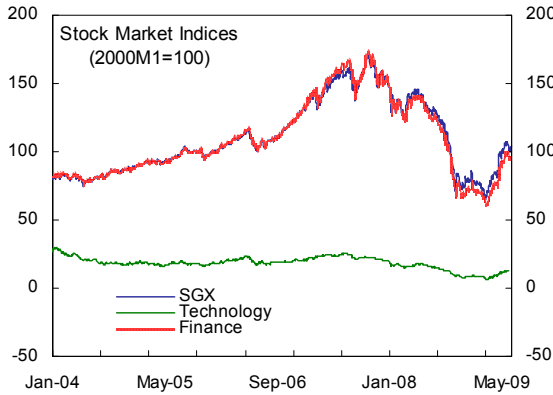
*Interbank interest rates have dropped...*



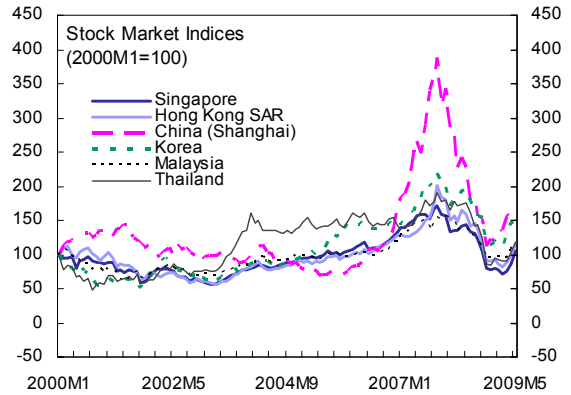
*...and volatility in the foreign exchange market is off its peak.*



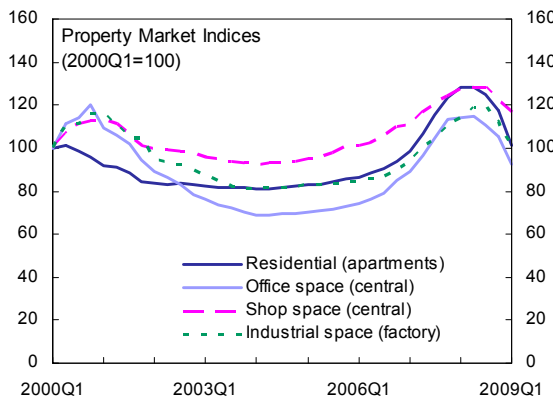
*The equity market plunged before recovering some of the ground lost,...*



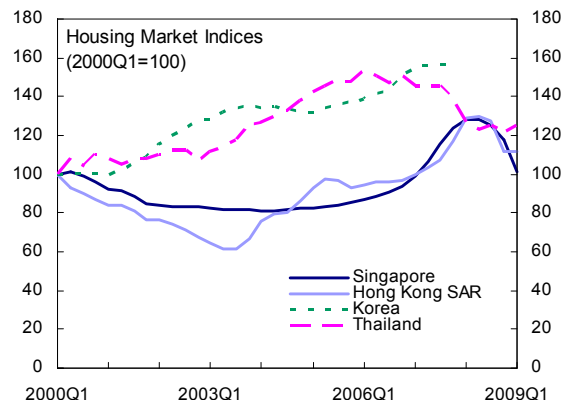
*...as elsewhere in the region.*



*Property markets are turning after the recent boom...*



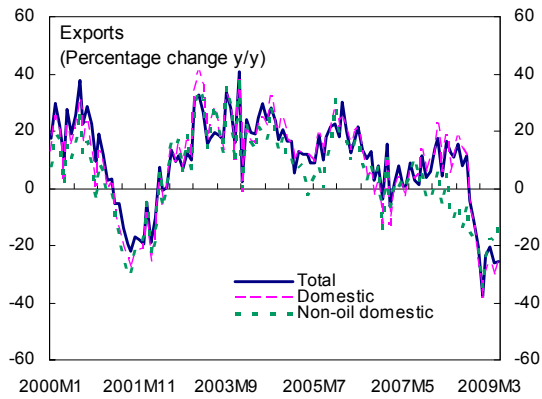
*...but the moderation has been broadly in line with that in neighboring countries.*



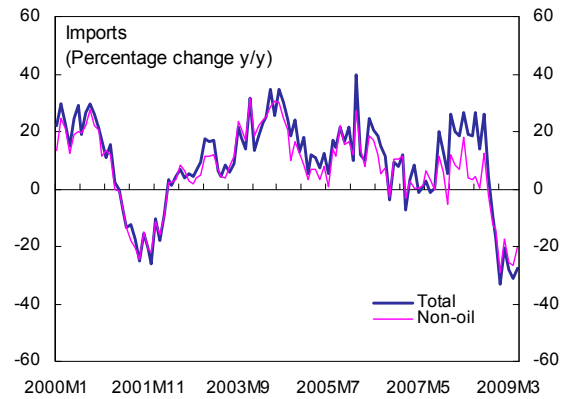
Sources: CEIC Data Co. Ltd.; Bloomberg L.P.; and IMF staff estimates.

Figure 3. Singapore: External Developments

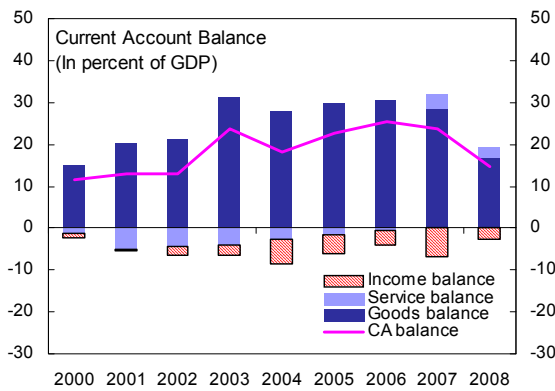
Exports plunged as the global crisis intensified...



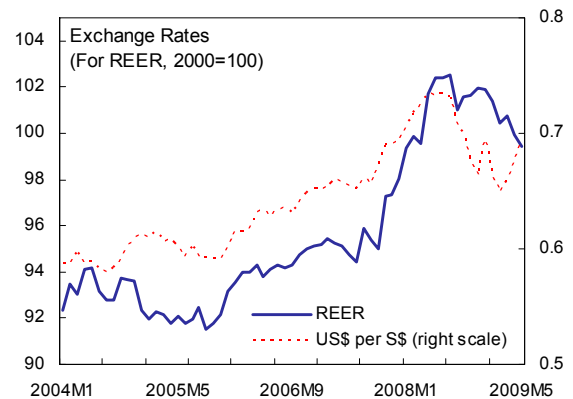
...as have imports, given the high import content of exports and lower oil prices.



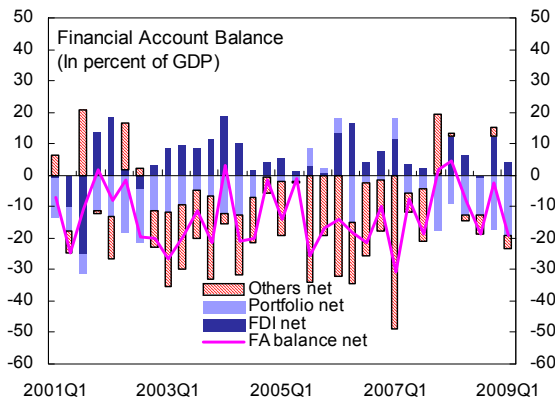
The current account surplus has fallen sharply as the trade surplus shrunk.



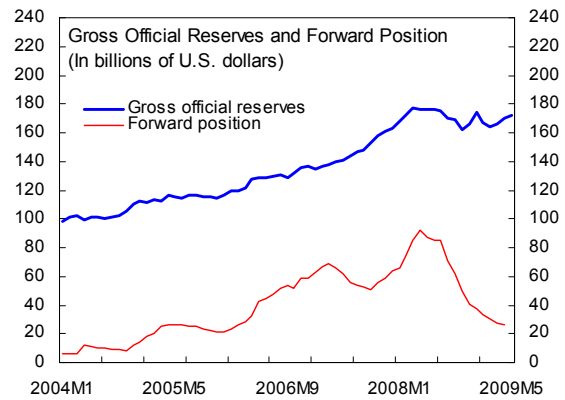
The real effective exchange rate depreciated since mid-2008, as the monetary stance has been loosened.



With sizable portfolio outflows,...



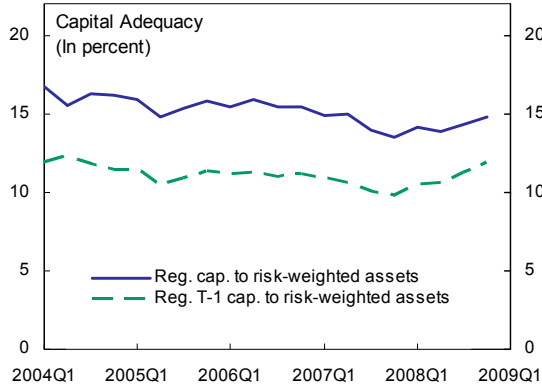
...the forward position has been unwound, but gross reserves have stabilized.



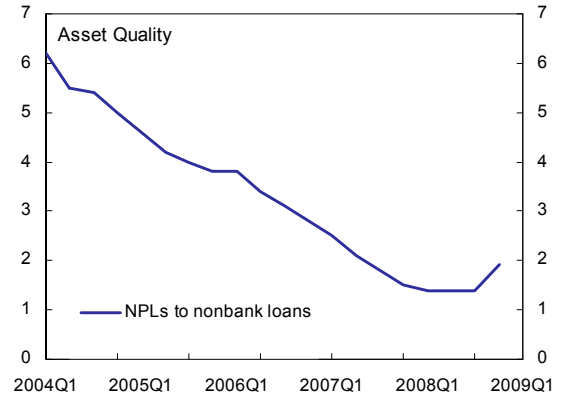
Source: CEIC Data Co. Ltd.; Singapore, Department of Statistics; and IMF staff estimates.

Figure 4. Singapore: Financial Sector Developments

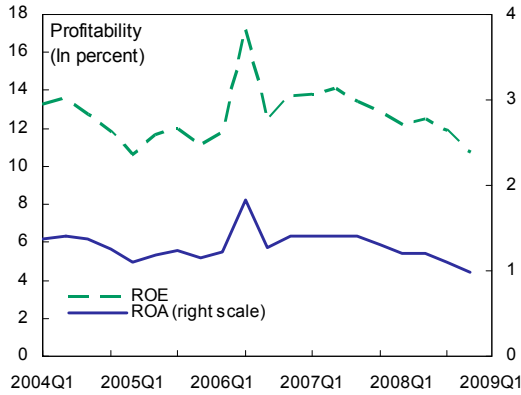
*Capital positions remain sound...*



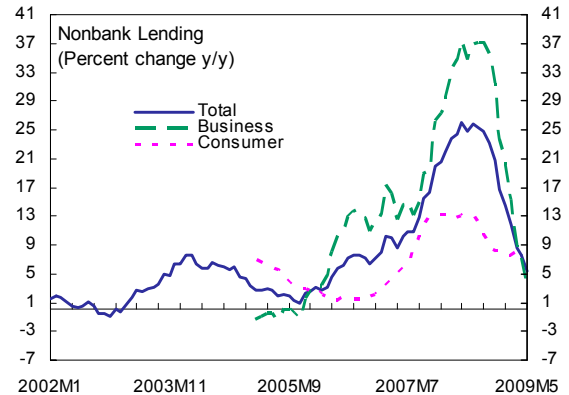
*...but NPLs have started to rise in late 2008, after reaching record lows.*



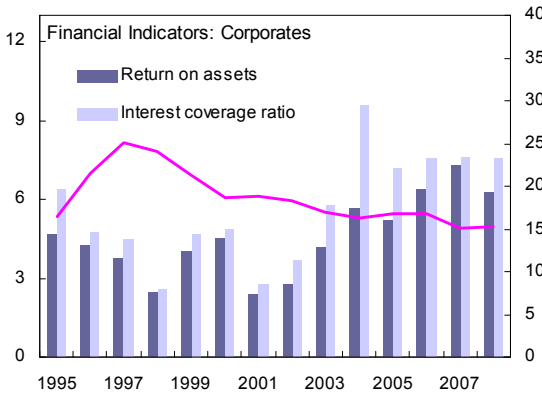
*Banks' profitability has remained relatively strong....*



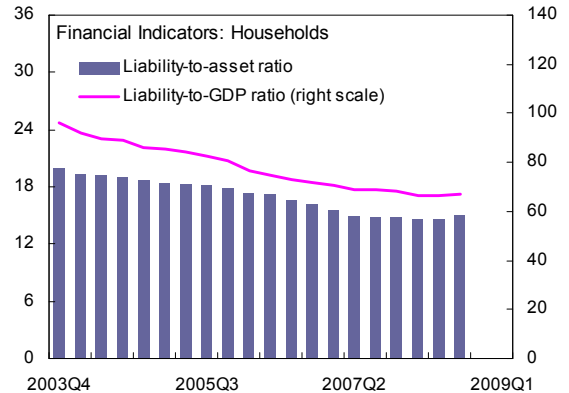
*...but lending activity has moderated.*



*Financial indicators for corporates are in good shape ...*



*...as are household balance sheets.*



Sources: CEIC Data Co. Ltd.; the Monetary Authority of Singapore; and IMF staff estimates.



Table 1. Singapore: Selected Economic and Financial Indicators, 2003–10

Nominal GDP (2008): US\$181.9 billion

Main exports (percent of total domestic exports): Electronic products (35 percent) and chemical products (17 percent)

GDP per capita (2008): US\$37,597

Population (2008): 4.8 million

Unemployment rate (2008): 3.1 percent (resident)

Net FDI (2008): US\$13.8 billion

Public debt (2008): 99 percent of GDP

Foreign government debt (2008): none

Quota: SDR 862.5 million

	2003	2004	2005	2006	2007	2008	Proj.	
							2009	2010
Growth (percentage change)								
Real GDP	3.8	9.3	7.3	8.4	7.8	1.1	-7.7	2.5
Total domestic demand	-8.3	14.3	3.3	6.8	6.9	15.9	-4.5	2.4
Consumption	0.9	4.2	4.4	4.5	4.6	3.6	-0.4	4.7
Private consumption	0.8	5.1	3.8	4.0	5.2	2.4	-1.3	4.5
Gross capital formation	-30.6	49.8	0.6	12.4	12.3	42.8	-11.1	-1.8
Net exports	56.2	-1.9	21.3	10.5	11.9	-33.8	-23.8	2.9
Contribution to GDP growth	10.8	-0.5	5.6	3.1	3.6	-10.6	-4.9	0.5
Saving and investment (percent of GDP)								
Gross national savings	39.7	39.9	43.0	45.5	44.2	45.7	40.4	37.9
Gross capital formation	16.0	21.8	20.2	20.1	20.7	30.9	27.1	24.7
Inflation and unemployment (period average, percent)								
CPI inflation	0.5	1.7	0.5	1.0	2.1	6.5	0.3	1.3
Unemployment rate	4.0	3.4	3.1	2.7	2.1	2.2	3.9	3.6
Central government budget (percent of GDP) 1/								
Revenue	20.3	20.1	21.0	21.1	25.4	24.5	23.5	23.7
Expenditure	14.1	14.2	12.9	13.9	13.0	20.3	22.0	21.9
Overall balance	6.2	5.9	8.1	7.3	12.4	4.2	1.5	1.8
Primary operating balance	-2.9	-1.9	-1.2	-1.5	0.9	-3.6	-6.4	-6.2
Money and credit (end of period, percentage change)								
Broad money (M3)	5.9	6.1	6.4	19.1	14.1	11.6	...	...
Lending to nonbanking sector	6.3	4.5	2.2	6.3	19.9	16.6	...	...
Interest rate (three-month interbank, in percent)	0.8	1.4	3.3	3.4	2.4	1.0	...	...
Balance of payments (US\$ billion)								
Current account balance	22.1	19.9	27.5	35.4	39.2	27.0	20.8	22.1
(In percent of GDP)	(23.7)	(18.1)	(22.7)	(25.4)	(23.5)	(14.8)	(13.3)	(13.2)
Trade balance	29.3	30.7	36.4	42.8	47.2	30.7	24.9	27.5
Exports, f.o.b.	161.7	199.3	232.7	274.7	303.7	343.3	258.6	287.9
Imports, f.o.b.	-132.3	-168.6	-196.3	-232.0	-256.5	-312.6	-233.7	-260.4
Net capital flows	-15.3	-7.8	-15.2	-18.4	-19.8	-13.9	-11.0	-12.0
Overall balance	6.8	12.1	12.3	17.0	19.4	13.1	9.8	10.1
Gross official reserves (US\$ billion)								
(months of imports) 2/	96.2	112.6	116.2	136.3	163.0	174.2	184.0	194.1
	(5.3)	(5.4)	(4.7)	(4.9)	(5.0)	(6.9)	(6.8)	(7.0)

Sources: Data provided by the Singapore authorities; and Fund staff estimates and projections.

1/ Fiscal year beginning April 1.

2/ In months of following year's imports of goods and services.

Table 2. Singapore: Balance of Payments, 2003–10 1/

(In billions of U.S. dollars)

	2003	2004	2005	2006	2007	2008	Proj.	
							2009	2010
Current account balance	22.1	19.9	27.5	35.4	39.2	27.0	20.8	22.1
Trade balance	29.3	30.7	36.4	42.8	47.2	30.7	24.9	27.5
Exports, f.o.b.	161.7	199.3	232.7	274.7	303.7	343.3	258.6	287.9
Imports, f.o.b.	-132.3	-168.6	-196.3	-232.0	-256.5	-312.6	-233.7	-260.4
Services balance	-3.7	-2.9	-1.8	-0.7	5.7	4.0	1.7	0.0
Exports	36.3	46.8	53.3	64.1	80.6	83.1	69.0	64.2
Imports	-40.0	-49.7	-55.1	-64.8	-74.9	-79.1	-67.4	-64.2
Income balance	-2.3	-6.5	-5.6	-5.0	-11.5	-5.0	-2.9	-2.1
Receipts	17.4	21.5	30.0	39.0	53.9	57.1	52.6	57.9
Payments	-19.7	-28.0	-35.6	-44.0	-65.4	-62.1	-55.5	-60.0
Transfer payments (net)	-1.4	-1.4	-1.4	-1.7	-2.1	-2.7	-3.0	-3.2
Net capital flows	-15.3	-7.8	-15.2	-18.4	-19.8	-13.9	-11.0	-12.0
Capital and financial account balance	-18.5	-10.9	-17.9	-22.1	-22.5	-11.5	-11.0	-12.0
Capital account (net)	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
Financial account (net)	-18.4	-10.7	-17.7	-21.9	-22.2	-11.2	-10.7	-11.7
Direct investment	9.1	9.3	3.2	14.4	7.1	13.8	7.7	8.3
Assets	-2.7	-10.8	-11.2	-13.3	-24.5	-8.9	-7.8	-8.9
Liabilities	11.8	20.1	14.4	27.7	31.6	22.7	15.5	17.1
Portfolio investment	-7.6	-8.7	0.9	-5.2	-9.5	-23.2	-22.1	-24.4
Assets	-11.3	-10.2	-5.3	-17.3	-28.1	-18.6	-17.8	-19.5
Liabilities	3.7	1.5	6.3	12.0	18.6	-4.6	-4.4	-4.8
Other investment	-19.9	-11.3	-21.7	-31.0	-19.8	-1.8	3.8	4.4
Assets	-25.5	-27.9	-33.3	-62.5	-73.1	-55.8	-51.6	-64.9
Liabilities	5.7	16.6	11.6	31.5	53.2	54.0	55.4	69.3
Net errors and omissions	3.2	3.1	2.6	3.7	2.7	-2.4	0.0	0.0
Overall balance	6.8	12.1	12.3	17.0	19.4	13.1	9.8	10.1
Memorandum items:								
Current account as percent of GDP	23.7	18.1	22.7	25.4	23.5	14.8	13.3	13.2
Trade balance as percent of GDP	31.5	28.0	30.1	30.7	28.2	16.9	15.9	16.4
Net international investment position								
(In billions of U.S. dollars)	98.3	108.2	148.2	201.5	167.7	191.4	...	...
GDP in billions of U.S. dollar	93.2	109.7	120.9	139.2	166.9	181.9	156.3	168.1
(In percent of GDP)	105.5	98.7	122.5	144.8	100.5	105.2	...	...

Sources: Monetary Authority of Singapore, *Economic Survey of Singapore*; and staff estimates and projections.

1/ Data for the current account balance, the capital and financial account balance, and net errors and omissions are converted to U.S. dollars from the official presentation in Singapore dollars using period-average exchange rate.

Table 3. Singapore: Monetary Survey, 2006–09

	2006				2007				2008				2009
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.
(In billions of Singapore dollars, end of period)													
Net foreign assets	204.1	210.5	219.7	224.8	240.3	240.4	239.4	239.4	253.6	255.5	258.0	263.8	275.5
Monetary authorities 1/	194.8	200.6	203.3	207.2	207.0	218.6	224.4	232.7	243.0	238.6	240.4	248.6	251.4
Deposit money banks 2/	9.3	9.9	16.4	17.6	33.3	21.8	15.0	6.7	10.6	16.9	17.5	15.2	24.2
Domestic credit	240.2	249.4	255.8	256.4	266.5	276.5	290.6	299.2	316.0	326.5	332.2	341.7	346.8
Claims on private sector	189.1	193.4	197.4	199.1	205.0	212.3	220.1	232.8	245.1	254.4	264.6	268.1	266.4
Nonbank lending	182.6	189.6	194.0	194.6	201.4	209.1	218.7	233.4	249.3	261.1	272.9	272.2	270.7
Claims on central government	51.1	55.9	58.4	57.3	61.5	64.2	70.5	66.4	70.9	72.1	67.6	73.6	80.4
Other items (net) 3/	-216.8	-222.4	-230.3	-218.8	-227.0	-223.2	-235.8	-241.0	-256.4	-266.3	-265.5	-272.0	-272.9
M3	233.6	243.7	251.4	268.7	286.8	301.3	302.7	306.8	322.7	325.1	333.8	342.4	357.9
M2	227.5	237.5	245.1	262.4	279.8	293.6	294.1	297.6	313.3	315.7	324.7	333.4	349.4
(Annual percentage change)													
Domestic credit	0.6	3.1	4.7	6.6	11.0	10.9	13.6	16.7	18.6	18.1	14.3	14.2	9.7
Claims on private sector	1.9	3.4	5.0	4.9	8.4	9.7	11.5	16.9	19.6	19.8	20.2	15.2	8.7
Nonbank lending	2.8	5.7	7.5	6.3	10.3	10.3	12.8	19.9	23.8	24.9	24.8	16.6	8.6
M3	8.3	11.2	12.7	19.1	22.8	23.6	20.4	14.1	12.5	7.9	10.3	11.6	10.9
M2	8.1	11.1	12.8	19.4	23.0	23.6	20.0	13.4	11.9	7.5	10.4	12.0	11.5
(Contribution to M3 growth, in percent)													
Net foreign assets	10.2	11.6	12.0	13.8	15.5	12.2	7.8	5.4	4.6	5.0	6.1	8.0	6.8
Domestic credit	0.6	3.3	5.1	7.0	11.3	11.1	13.9	15.9	17.3	16.6	13.7	13.8	9.5
Claims on private sector	1.6	2.9	4.2	4.1	6.8	7.7	9.0	12.5	14.0	14.0	14.7	11.5	6.6
Claims on central government	-1.0	0.4	0.9	2.9	4.4	3.4	4.8	3.4	3.3	2.6	-1.0	2.3	2.9
Other items (net) 3/	-2.5	-3.7	-4.5	-1.7	-4.0	0.2	-1.3	-7.2	-9.4	-13.7	-9.6	-10.2	-5.4

Source: IMF, *International Financial Statistics*; and CEIC Data Co., Ltd.

1/ Total foreign reserves (international liquidity concept) minus foreign liabilities.

2/ Commercial banks.

3/ Including other nonbank financial institutions.

Table 4. Singapore: Indicators of Vulnerability, 2003–08

	2003	2004	2005	2006	2007	2008
<b>Financial sector indicators</b>						
Broad money (M3, percent change, y/y)	5.9	6.1	6.4	19.1	14.1	11.6
Claims on private sector (percent change, y/y)	5.4	4.4	2.0	4.9	16.9	15.2
Credit to the property sector (percent change, y/y)	11.2	8.2	3.3	5.5	23.4	17.1
Share of property-sector credit in total nonbank credit (percent)	44.4	46.0	46.4	46.1	47.4	47.6
Credit rating of local banks (S&P) 1/	A/A+	A+	A+/AA-	A+/AA-	A+/AA-	A+/AA-
Three-month interbank rate (percent, end-year)	0.8	1.4	3.3	3.4	2.4	1.0
NPL ratio (local banks, percent) 2/ 3/	6.7	5.0	3.8	2.8	1.5	1.4
Capital adequacy ratio of local banks (percent) 3/	16.0	16.2	15.8	15.4	13.5	14.3
<b>Asset market indicators</b>						
Stock prices (percent change, y/y)	32.8	15.6	14.0	28.0	18.7	-49.2
P/E ratio	24.9	16.6	15.4	19.4	18.0	6.2
Stock prices of the finance sector (percent change, y/y)	23.8	9.8	5.9	29.3	39.7	n.a.
Real estate prices (percent change, y/y) 4/						
Residential	-1.8	-0.4	2.9	7.1	23.6	12.3
Office space	-13.4	-5.4	3.4	10.2	28.1	10.3
<b>External indicators</b>						
Current account balance (US\$ billion)	22.1	19.9	27.5	35.4	39.2	27.0
(In percent of GDP)	23.7	18.1	22.7	25.4	23.5	14.8
Gross official reserves (US\$ billion)	96.2	112.6	116.2	136.3	163.0	174.2
(In month of next year's imports of goods and services)	5.3	5.4	4.7	4.9	5.0	6.9
Real exchange rate (end of period, 2000=100)	92.1	91.7	93.2	95.1	98.0	101.9

Sources: Data provided by the Singapore authorities; and IMF, *Information Notice System*.

1/ Ratings of the three major local banks.

2/ In percent of global nonbank loans.

3/ Latest observation as of September 2008.

4/ The underlying price indices are computed based on the Laspeyres method and are 4-quarter moving averages.

Table 5. Singapore: Summary of Government Operations, 2005/06–2009/10 1/

(In percent of GDP)

	2005/06	2006/07	2007/08	2008/09		2009/10 Budget
				Budget	Prel.	
Total revenue	21.0	21.1	25.4	23.6	24.5	22.0
Current revenue	17.7	17.4	19.7	19.7	21.0	17.9
Tax revenue	12.5	12.7	14.2	14.2	15.1	12.9
Investment income 2/	4.1	3.6	4.1	3.8	4.8	4.0
Other nontax revenue	1.2	1.1	1.4	1.6	1.1	1.0
Capital revenue 3/	3.2	3.7	5.7	3.9	3.5	4.1
Total expenditure	12.9	13.9	13.0	18.9	20.3	24.3
Current expenditure	11.2	12.5	11.7	14.1	15.1	17.1
Operating expenditure	10.4	10.4	10.0	11.5	11.6	13.4
Debt servicing	0.1	0.1	0.0	0.0	0.0	0.0
Investment expenses	0.4	0.7	1.0	1.0	1.1	1.2
Transfer payments	0.3	1.4	0.7	1.5	2.3	2.4
Development expenditure and net lending	1.5	1.2	1.2	4.2	4.5	7.2
Development expenditure 4/	3.7	2.9	3.0	4.2	4.7	5.7
Net lending	-2.2	-1.7	-1.8	0.0	-0.2	1.5
Fund transfers 5/	0.1	0.2	0.1	0.7	0.7	0.1
Overall balance	8.1	7.3	12.4	4.6	4.2	-2.3
Primary operating balance 6/	-1.2	-1.5	0.9	-2.4	-3.6	-8.8
Memorandum items:						
Budget balance (the government's definition)	0.7	0.0	3.0	-0.3	-0.8	-3.5
Government saving	6.4	4.7	7.9	5.0	5.3	0.8
Structural primary balance 7/	-1.4	-2.4	-0.4	-2.7	-3.9	-2.7

Sources: Data provided by the Singapore authorities; and staff estimates and projections.

1/ Fiscal year runs from April 1 through March 31.

2/ Includes investment income from government assets (interest rates and dividends), including interest earnings on development loans from 2000/01.

3/ Sale of government property.

4/ Includes the land reclamation expenditure.

5/ Includes transfers to the Endowment Funds: Edusave, Medical, Lifelong Learning, and ElderCare.

6/ Overall balance excluding investment income, capital revenue, debt service, other items.

7/ Primary balance adjusted for cyclical impact on revenues associated with deviation between actual and potential economic output.

Table 6. Singapore: Medium-Term Scenario, 2006–14

	2006	2007	Prel. 2008	Proj.					
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real growth (percent change)									
GDP	8.4	7.8	1.1	-7.7	2.5	5.2	4.5	4.5	4.6
Total domestic demand	6.8	6.9	15.9	-4.5	2.4	6.8	6.3	4.5	4.2
Final domestic demand	7.1	9.2	7.1	-2.1	2.4	6.8	6.4	4.5	4.2
Consumption	4.5	4.6	3.6	-0.4	4.7	4.9	5.6	4.7	4.9
Private	4.0	5.2	2.4	-1.3	4.5	4.4	5.9	5.5	5.7
Public	6.6	2.2	8.1	3.1	5.4	6.7	4.4	1.8	1.8
Gross capital formation	12.4	12.3	42.8	-11.1	-1.8	10.2	7.6	4.1	2.9
Private	17.7	15.7	42.8	-14.1	-3.0	11.2	8.1	4.4	3.0
Public	-12.9	-10.0	42.3	13.7	6.4	4.8	4.7	2.5	2.1
Net exports /1	3.1	3.6	-10.6	-4.9	0.5	-0.5	-0.8	0.6	1.0
Saving and investment (percent of GDP)									
Gross national savings	45.5	44.2	45.7	40.4	37.9	39.1	39.3	39.1	38.8
Central government	5.1	7.1	5.9	4.0	3.5	3.7	3.8	4.1	4.3
Private and other	40.4	37.2	39.8	36.4	34.3	35.5	35.5	35.0	34.5
Gross capital formation	20.1	20.7	30.9	27.1	24.7	25.0	25.2	25.0	24.6
Inflation and unemployment (period average, percent)									
CPI inflation	1.0	2.1	6.5	0.3	1.3	1.9	1.7	1.7	1.8
Unemployment rate	2.7	2.1	2.2	3.9	3.6	3.1	2.7	2.3	2.3
Output gap	3.9	7.1	3.9	-6.5	-6.3	-3.4	-1.4	0.0	0.0
Central government (percent of GDP) 2/									
Revenue	21.1	24.3	24.7	23.8	23.7	23.9	24.1	24.3	24.6
Expenditure	13.6	13.2	18.4	21.6	21.9	21.9	22.0	21.9	21.9
Overall balance	7.5	11.1	6.3	2.2	1.7	2.0	2.1	2.5	2.7
Primary balance	-1.4	0.3	-2.5	-5.7	-6.3	-6.2	-6.3	-6.2	-6.2
Merchandise trade (percent change)									
Export volume	11.4	7.4	3.0	-3.8	2.5	4.3	4.7	5.2	5.3
Import volume	11.0	6.5	9.6	-2.8	2.0	4.3	5.1	5.1	5.1
Terms of trade	-1.1	-0.9	-1.1	1.8	-0.5	0.8	0.5	0.0	0.0
Balance of payments (percent of GDP)									
Current account balance	25.4	23.5	14.8	13.3	13.2	14.1	14.1	14.0	14.2
Balance on goods and services	30.2	31.7	19.1	17.0	16.3	17.0	16.7	16.6	16.8
Balance on income and transfers	-4.8	-8.2	-4.2	-3.7	-3.2	-2.9	-2.6	-2.6	-2.6
Gross official reserves (US\$ billions)	136.3	163.0	174.2	184.0	194.1	200.8	207.4	214.0	220.5
(In months of imports) 3/	(4.9)	(5.0)	(6.9)	(6.8)	(7.0)	(6.9)	(6.9)	(6.9)	(6.9)

Sources: Data provided by the Singapore authorities; and staff estimates and projections.

1/ Contribution to GDP growth.

2/ On a calendar year basis.

3/ In months of next year's imports of goods and services.

Table 7. Singapore: Financial Soundness Indicators: Local Banking Sector, 2004–08

	2004	2005	2006	2007	2008		
					Mar.	Jun.	Sep.
(In percent)							
Capital adequacy ratio							
Regulatory capital to risk-weighted assets	16.2	15.8	15.4	13.5	14.1	13.9	14.3
Regulatory tier I capital to risk-weighted assets	11.5	11.4	11.2	9.8	10.5	10.6	11.3
Shareholders' equity to assets	9.6	9.6	9.6	9.2	8.7	8.5	8.5
Asset quality							
NPLs to nonbank loans	5.0	3.8	2.8	1.5	1.4	1.4	1.4
Total provisions to NPLs	73.6	78.7	89.5	115.6	118.9	117.2	119.9
Specific provisions to NPLs	40.7	41.1	41.3	39.9	38.8	41.4	43.5
Loan concentrations (in percent of total loans)							
Bank loans	23.3	24.1	22.8	16.2	17.7	17.1	16.6
Non-bank loans	76.7	75.9	77.2	83.8	82.3	82.9	83.4
<i>Of which :</i>							
Manufacturing loans	7.4	7.6	8.4	9.2	9.1	8.9	9.4
Building and construction loans	8.4	8.8	9.5	11.4	12.1	12.3	12.3
Housing loans	22.5	21.7	21.0	20.6	19.8	19.7	19.2
Loans to professionals and private individuals	10.1	9.4					
Loans to nonbank financial institutions	9.8	10.0	8.7	8.6	8.2	8.4	8.1
Loans to nonbank financial institutions	9.8	10.0	10.5	12.3	11.8	11.4	11.2
Profitability							
After-tax return on assets	1.2	1.2	1.4	1.3	1.2	1.2	1.1
After-tax return on equity	11.6	11.2	13.7	12.9	12.2	12.5	11.9
Net interest margin	2.0	1.9	2.1	2.1	2.2	2.2	2.2
Non-interest income to total income	41.4	39.0	42.6	39.1	36.5	36.4	34.2
Liquidity							
Liquid DBU assets to total DBU assets	11.4	10.3	9.8	10.1	9.5	9.6	9.0
Liquid DBU assets to total DBU liabilities	12.5	11.3	10.6	10.8	10.3	10.3	9.6

Source: Monetary Authority of Singapore.

INTERNATIONAL MONETARY FUND

SINGAPORE

**Staff Report for the 2009 Article IV Consultation—Informational Annex**

Prepared by the Asia and Pacific Department

July 16, 2009

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**ANNEX I: SINGAPORE—FUND RELATIONS**

(As of June 30, 2009)

**I. Membership Status:** Joined August 3, 1966; Article VIII

<b>II. General Resources Account:</b>	<b>SDR Million</b>	<b>Quota (In percent)</b>
Quota	862.50	100.00
Fund holdings of currency	720.79	83.57
Reserve position in Fund	141.89	16.45

<b>III. SDR Department:</b>	<b>SDR Million</b>	<b>Allocation (In percent)</b>
Net cumulative allocation	16.48	100.00
Holdings	241.43	1,465.39

**IV. Outstanding Purchases and Loans:** None

**V. Financial Arrangements:** None

**VI. Projected Payments to Fund:** None

**VII. Exchange Arrangement:**

Singapore's exchange rate regime is floating. The Monetary Authority of Singapore (MAS) monitors its value against an undisclosed basket of currencies and intervenes in the market to maintain this value within an undisclosed target band. The U.S. dollar is the intervention currency.

Singapore has accepted the obligations of Article VIII, Sections 2, 3, and 4 and maintains an exchange rate system that is free of restrictions on the making of payments and transfers for current international transactions.

Singapore maintains restrictions on Singapore-dollar credit facilities to, and bond and equity issuance by, nonresident financial institutions. Singapore-dollar proceeds obtained by nonresident financial entities (such as banks, merchant banks, finance companies, and hedge funds) from loans exceeding S\$5 million, or any amount for equity listings or bond issuance to finance activities outside Singapore have to be swapped or converted into foreign currency upon draw-down. Financial institutions are prohibited from extending Singapore-dollar credit

facilities in excess of S\$5 million to nonresident financial entities if there is reason to believe that the Singapore-dollar proceeds may be used for Singapore-dollar currency speculation.

**VIII. Article IV Consultation:**

Singapore is on the 12-month consultation cycle. The 2008 Article IV consultation discussions were held during May 5–12, 2008, the Executive Board discussed the staff report (IMF Country Report No. 08/280) and concluded the consultation on July 16, 2008.

**IX. FSAP Participation and ROSCs:**

The FSAP was undertaken in conjunction with the 2003 Article IV consultation. The FSSA was published as IMF Country Report No. 04/104.

A fiscal ROSC remains a priority for the authorities, and the exact timing is likely to be considered in 2010. A data ROSC could also be considered at that time.

**X. Technical Assistance:** None

**XI. Resident Representative:** Mr. Harm Zebregs

## ANNEX II: SINGAPORE—STATISTICAL ISSUES

Singapore provides data on a timely basis and meets all the SDDS specifications. These include the coverage, periodicity, and timeliness of the data; and the dissemination of advance release calendars; quarterly certification of the metadata posted on the Fund's Dissemination Standards Bulletin Board; and provision of information to allow users to assess data quality.

While the authorities have continued to improve the quality of data, dissemination of more disaggregated data would enhance the basis for macroeconomic policy analysis, particularly in the external and fiscal areas.

- In early 2006, the Singapore Department of Statistics (DOS) completed rebasing the reference year for the Singapore System of National Accounts from 1995 to 2000. The DOS also made improvements in data sources and methodology. The reconciliation of various national accounts estimates was conducted, resulting in lower statistical discrepancies. Work on further improvements, particularly with respect to changes in inventories, is ongoing.
- The authorities have released the full set of statistics on merchandise trade including trade with Indonesia since January 2006. Prior to this, merchandise trade statistics did not fully include trade with Indonesia, although trade transactions with Indonesia are captured elsewhere in the current account of the balance of payments (BOP).
- Information on government assets held abroad is neither published nor provided to the Fund. Interest and dividend on these assets and debt service payments on domestic debt made from the extra budgetary Government Securities Fund are published on an annual basis. Data on the financial position of the consolidated public sector are not published.
- Data on the international investment position (IIP) are not provided on a disaggregated level as suggested by the *Balance of Payments Manual* (5<sup>th</sup> edition). Also, the IIP position does not include the net foreign assets held by Singapore's Government Investment Corporation, although the associated flows are included in the balance of payments data. The authorities have committed to improve over time the reporting of the international investment position to the IMF.

The Monetary Authority of Singapore has not submitted the standardized report forms (SRFs) for monetary statistics introduced in October 2004. The SRFs provide for accounting data to be broken down by instrument, sector, and currency.

Singapore—Table of Common Indicators Required for Surveillance  
(As of July 10, 2009)

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of Publication <sup>6</sup>
Exchange rates	07/10/09	07/10/09	D	D	D
International reserve assets and reserve liabilities of the Monetary Authorities <sup>1</sup>	06/2009	07/2009	M	M	M
Reserve/base money	06/2009	07/2009	M	M	M
Broad money	05/2009	07/2009	M	M	M
Central bank balance sheet	05/2009	06/2009	M	M	M
Consolidated balance sheet of the banking system	05/2009	07/2009	M	M	M
Interest rates <sup>2</sup>	07/10/09	07/10/09	D	D	D
Consumer price index	05/2009	06/2009	M	M	M
Revenue, expenditure, balance and composition of financing <sup>3</sup> —general government <sup>4</sup>	...	...	...	...	...
Revenue, expenditure, balance and composition of financing <sup>3</sup> —central government	05/2009	06/2009	M	M	M
Stocks of central government and central government-guaranteed debt <sup>5</sup>	...	...	...	...	...
External current account balance	2009: Q1	05/2009	Q	Q	Q
Exports and imports of goods and services	05/2009	06/2009	M	M	M
GDP/GNP	2009: Q1	05/2009	Q	Q	Q
Gross external debt <sup>7</sup>	2009: Q1	06/2009	Q	Q	Q
Net international investment position <sup>8</sup>	2008	2009	A	A	A

<sup>1</sup> Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

<sup>2</sup> Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

<sup>7</sup> Official external debt is zero.

<sup>8</sup> The reported number does not include the net foreign asset position of the Government of Singapore's Investment Corporation.

**Statement by the IMF Staff Representative on Singapore  
July 29, 2009**

The information below has become available following the issuance of the staff report. It does not alter the thrust of the staff appraisal.

1. ***Recent Data***

- Activity rebounded strongly in the second quarter. On advanced estimates, GDP growth (q/q saar) jumped to 20.4 percent, after 4 quarters of output contraction. On a year-on-year basis, GDP fell 3.7 percent, a slower rate of decline than that in Q1 2009 (9.6 percent) and Q4 2008 (4.2 percent). However, June industrial production (down 9.3 percent reflecting a sharp slowdown in biomedical manufacturing) and export data (showing *inter alia* electronics exports still falling at about 20 percent y/y) suggest that the Q2 outturn might have been partly driven by one-off factors.
- Singapore's CPI declined y/y by 0.5 percent in June (compared to 0.3 percent in May). Mild temporary deflation in the first half of the year is consistent with the staff's projection of inflation at about  $\frac{1}{4}$  percent for the year as a whole.

2. ***Policies***

- On July 22, the Hong Kong Monetary Authority, Bank Negara Malaysia, and the Monetary Authority of Singapore announced the establishment of a working group to coordinate the exit from full deposit guarantees in their respective jurisdictions.
- Employment growth in the public sector remains on track. Of the 18,000 new jobs in the public sector and government-supported areas such health and education envisaged under the 2009 budget, 13,000 have been created so far.

3. ***Outlook.*** On the whole, the latest data releases support the staff's view that the Singaporean economy is likely to experience slow and uneven growth in the period ahead. Nonetheless, the Q2 outturn and an upward revision in Q1 growth mechanically lift the GDP numbers for 2009. Accordingly, GDP growth for the year is likely to be revised from  $-7\frac{3}{4}$  percent to around  $-4\frac{1}{3}$  percent in the upcoming WEO round. The revised staff estimate would be on the strong side of the latest official growth forecast, a range of  $-6$  percent to  $-4$  percent.



INTERNATIONAL MONETARY FUND

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EXTERNAL  
RELATIONS  
DEPARTMENT

Public Information Notice (PIN) No. 09/110  
FOR IMMEDIATE RELEASE  
August 31, 2009

International Monetary Fund  
700 19<sup>th</sup> Street, NW  
Washington, D. C. 20431 USA

## **IMF Executive Board Concludes 2009 Article IV Consultation with Singapore**

On July 29, 2009, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Singapore.<sup>1</sup>

### **Background**

Singapore has been severely affected by the global downturn. It was among the first countries in Asia to enter a recession and is now set for its worst economic contraction since independence. Nonetheless, economic fundamentals remain strong and provide an important buffer against the external shocks.

As elsewhere in the region, Singapore's financial markets experienced considerable turbulence in the fall of 2008, but the impact of the crisis has been felt mainly through the trade channel. The collapse in external demand has led to a sharp contraction in GDP, which fell by almost 13 percent (quarter-on-quarter, seasonally adjusted annualized rate) in the first quarter of 2009. Although export-oriented sectors have been hit the hardest, services, including in the financial sector, have also suffered. Unemployment has risen and wage growth has decelerated. However, employment of residents has fallen less than in previous downturns as the corporate sector entered the recession in a stronger position.

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

The current account surplus has shrunk markedly as a result of the slump in exports. Foreign direct investment (FDI) and portfolio inflows have also fallen because of the deteriorating growth outlook and rising risk aversion. However, the decline has been more than offset by lower capital outflows owing to weaker corporate profits and concerns about asset quality in advanced economies. Outflows have also been mitigated by Singapore's status as a safe haven.

Singapore is a major funding center for South-East Asia and its financial market conditions are highly influenced by developments abroad. The equity market fell by almost 24 percent in October 2008, the biggest month-on-month decline in more than twenty years, and money and credit markets experienced considerable liquidity pressures. However, as concerns about the severity of the global downturn have eased in recent months, and risk appetite has improved, equity prices have rebounded, and the liquidity situation has also improved.

The policy response to the crisis has been forceful and has included a large fiscal stimulus package, an easing of monetary policy, and a range of measures aimed at stabilizing the financial sector. The overarching strategy has been to lessen the impact of the external shocks, while ensuring that Singapore is well positioned to rebound once the global economy recovers.

### **Executive Board Assessment**

Executive Directors noted that, given the openness of its economy, Singapore was among the first countries in Asia to enter a recession following the collapse of external demand. Nevertheless, strong economic fundamentals, coupled with the authorities' skillful implementation of a broad range of policy instruments, have helped lessen the impact of the shocks. The focus now is to preserve financial stability and to ensure that Singapore is well positioned to rebound once the global economy recovers, taking advantage of the ample room for maneuver at the authorities' disposal.

Directors considered monetary policy settings to be broadly appropriate, supporting domestic demand without undermining exchange rate stability. They agreed that, barring a significant deterioration of the outlook for growth or inflation, monetary policy should stay the course until a recovery is clearly established. Further along the recovery path, a tightening stance would be warranted to safeguard price stability, through targeting a trend appreciation of the nominal effective exchange rate.

Directors observed that the floating exchange rate regime has served Singapore well, and that the exchange-rate centered monetary policy framework has been an important source of stability in times of turbulence. They noted the staff's assessment, though subject to considerable uncertainty, that the Singapore dollar in real effective terms appears to be somewhat weaker than its medium-term equilibrium level. The real effective exchange rate would likely strengthen, in line with fundamentals, once a global recovery takes hold.

Directors agreed that the fiscal policy response, most recently the Resilience Package contained in the 2009 budget, should go a long way toward mitigating the impact of the recession on households and businesses, while also fostering the country's long-term growth potential. They welcomed the authorities' readiness to take further measures if the economy's trajectory proves more fragile than currently expected. Directors emphasized that, over the medium term, fiscal policy will need to play a part in preparing the economy for shifts in the pattern of global demand. Higher public investment in physical and social infrastructure, along with flexible labor and product markets, would create an enabling environment in which Singapore could seize new economic opportunities. Consideration could be given also to strengthening the role of automatic stabilizers.

Directors noted that Singapore's financial sector has shown remarkable resilience and should be able to withstand an even deeper and more prolonged global downturn. They commended the authorities for proactively implementing a series of measures to safeguard the stability of the financial system. Directors stressed that, in the period ahead, priority should continue to be given to rigorous stress-testing as asset quality is likely to deteriorate, upgrading contingency planning, and strengthening cooperation with supervisors abroad. They welcomed the decision of the Monetary Authority of Singapore (MAS), the Hong Kong Monetary Authority, and Bank Negara Malaysia to coordinate the unwinding of deposit guarantees in their respective jurisdictions. Directors encouraged the MAS to continue to adapt its supervisory and regulatory framework as lessons from the crisis are learned.

Given all members' obligations to provide accurate data to the Fund, Directors welcomed the authorities' intention to improve over time the currently incomplete reporting of the international investment position of Singapore.

**Public Information Notices (PINs)** form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The [staff report](#) (use the free [Adobe Acrobat Reader](#) to view this pdf file) for the 2009 Article IV Consultation with Singapore is also available.



## Singapore: Selected Economic and Financial Indicators, 2005–10

	2005	2006	2007	2008	Proj.	
					2009	2010
Growth (percentage change)						
Real GDP	7.3	8.4	7.8	1.1	-7.7	2.5
Total domestic demand	3.3	6.8	6.9	15.9	-4.5	2.4
Consumption	4.4	4.5	4.6	3.6	-0.4	4.7
Private consumption	3.8	4.0	5.2	2.4	-1.3	4.5
Gross capital formation	0.6	12.4	12.3	42.8	-11.1	-1.8
Net exports	21.3	10.5	11.9	-33.8	-23.8	2.9
Contribution to GDP growth	5.6	3.1	3.6	-10.6	-4.9	0.5
Saving and investment (percent of GDP)						
Gross national savings	43.0	45.5	44.2	45.7	40.4	37.9
Gross capital formation	20.2	20.1	20.7	30.9	27.1	24.7
Inflation and unemployment (period average, percent)						
CPI inflation	0.5	1.0	2.1	6.5	0.3	1.3
Unemployment rate	3.1	2.7	2.1	2.2	3.9	3.6
Central government budget (percent of GDP) 1/						
Revenue	21.0	21.1	25.4	24.5	23.5	23.7
Expenditure	12.9	13.9	13.0	20.3	22.0	21.9
Overall balance	8.1	7.3	12.4	4.2	1.5	1.8
Primary operating balance	-1.2	-1.5	0.9	-3.6	-6.4	-6.2
Money and credit (end of period, percentage change) 2/						
Broad money (M3)	6.4	19.1	14.1	11.6	10.7	...
Lending to nonbanking sector	2.2	6.3	19.9	16.6	5.5	...
Interest rate (three-month interbank, in percent)	3.3	3.4	2.4	1.0	0.7	...
Balance of payments (US\$ billion)						
Current account balance	27.5	35.4	39.2	27.0	20.8	22.1
(percent of GDP)	22.7	25.4	23.5	14.8	13.3	13.2
Trade balance	36.4	42.8	47.2	30.7	24.9	27.5
Overall balance	12.3	17.0	19.4	13.1	9.8	10.1
International reserves, external debt, and IIP						
Gross official reserves (US\$ billion)	116.2	136.3	163.0	174.2	184.0	194.1
(months of imports) 3/	4.7	4.9	5.0	6.9	6.8	7.0
Exchange rate (end of period)						
S\$/US\$ 4/	1.66	1.53	1.44	1.44	1.45	...
Nominal effective exchange rate 5/	100.3	104.0	106.0	107.6	108.5	...
Real effective exchange rate 5/	93.2	95.1	98.0	101.9	101.3	...

Sources: Data provided by the Singapore authorities; and Fund staff estimates and projections.

1/ Fiscal year beginning April 1.

2/ Latest observations as of May 2009.

3/ In months of following year's imports of goods and services.

4/ Latest observations as of May 2009.

5/ IMF, *Information Notice System* monthly index (2000 full-year average = 100). Latest observations as of May 2009.

**Statement by Adrian Chua, Alternate Executive Director for Singapore  
July 29, 2009**

**1 Introduction**

1.1 The Singapore authorities would like to thank the IMF staff for the 2009 Article IV Consultation. The focus of the Consultation, on policy responses to cushion the domestic economy from the adverse impact of the current global recession and to ensure it is well positioned for the eventual recovery, was appropriate and constructive. The discussions at this year's Consultation were among the most engaging in recent years.

**2 Recent Economic Developments and Outlook**

2.1 Singapore is one of the most open economies in the world. Given its deep and extensive integration with international markets, the economy could not be insulated from the unfolding global recession which gathered momentum towards the end of last year. In Q1 2009, domestic economic activity experienced its second consecutive quarter of double-digit contraction on a quarter-on-quarter seasonally-adjusted annualised rate (q-o-q SAAR) basis, with the GDP level falling to 10% below its Q1 2008 peak. Industries with a high degree of external orientation, such as manufacturing and trade-related services, bore the brunt of the downturn.

2.2 More recent data, including the *Advance Estimates* released by the Ministry of Trade of Industry, showed that the domestic economy has likely reached a trough. The Singapore economy rebounded strongly by 20% q-o-q SAAR in Q2 2009, regaining some of the previous output losses. This recovery has to be seen in the context of the sharp retraction in economic activity which took place during Q4 2008 and Q1 2009. Businesses have started to rebuild inventories to levels that are more sustainable and consistent with underlying demand, which has stabilised somewhat amidst easing financial conditions. In the domestic financial sector, several segments posted gains in the second quarter. Notably, stock market turnover was supported by improved investor sentiment, while domestic non-bank loans remained firm.

2.3 Nevertheless, the Singapore economy is unlikely to witness a sharp and decisive recovery this year, as that would be contingent on a sustained recovery of final demand in the G3. Given continued stresses in the global financial system and sluggishness in labour market conditions in the major economies, domestic GDP growth is thus likely to be concomitantly slow and uneven in the near term. Indeed, Singapore is facing the most challenging external environment in recent history. GDP growth in eight out of our top ten trading partners is expected to be negative this year, compared with five in ten during the Asian Financial Crisis. Against this backdrop, the domestic economy is forecast to contract by 4-6% in 2009, and continue to register below-trend growth in 2010.

2.4 Domestic CPI inflation has been on a downward trend since hitting a peak of 7.5% y-o-y in Q2 2008. It fell sharply to 2.1% in Q1 this year before turning slightly negative in Q2 (-0.5%). The steep falloff in inflation is attributed first to the dissipation of the impact of

the Goods and Services Tax hike in Q3 2008 and, subsequently, to the collapse in global oil prices. Other drivers of inflation in 2008, such as escalating global food prices and elevated domestic business costs, have also moderated. More recently, administrative measures from the government's FY2009 Budget have also lowered inflation through reductions in public housing maintenance costs.

2.5 CPI inflation is likely to remain slightly negative for the rest of the year, due largely to the drag from oil-related items. While global oil prices have recovered from the trough reached in February, they are expected to remain significantly lower this year compared to 2008. The slack in demand and easing domestic costs would also cap increases in consumer prices. This period of disinflation is characteristic of the adjustment process taking place during an economic downturn, although exaggerated by the sharp run-up in prices a year ago. For the whole of 2009, CPI inflation is likely to average between -0.5% and 0.5%.

### 3 Policy Responses

3.1 Amidst the rapidly evolving economic conditions over the past few quarters, the responses of monetary policy have been deliberately graduated, underpinned by its core objective of maintaining price stability in the *medium term*. In October 2008, MAS eased monetary policy by shifting to a 0% appreciation of the Singapore dollar nominal effective exchange rate (S\$NEER) policy band in light of the weak economic environment and easing inflationary pressures. This was followed by a re-centring of the policy band to the prevailing level of the S\$NEER in April this year, while keeping the 0% appreciation path. Notwithstanding the sharp economic rebound in Q2 2009, growth remains below trend and inflationary pressures continue to be muted. At this juncture, the current policy stance remains appropriate to support the economic recovery and ensure medium-term price stability. The Singapore dollar continues to play the anchor of stability role for our small and open economy.

3.2 At the same time, fiscal policy has contributed in a significant way to the required adjustments in the overall macroeconomic stance. The FY2009 Budget was announced about one month earlier than usual in response to the economic crisis. The \$20.5 billion (8.2% of GDP) Resilience Package comprised measures that targeted the multiple stress points confronting businesses and households, such as supplementing their cash flows in the short term, while providing resources for building long-term capabilities. This objective was carefully balanced against the need to ensure that the measures would not distort the market incentives for companies and workers to take the necessary steps to adjust to the new realities in the global economy. The Resilience Package is estimated to result in a deficit in the Basic Balance<sup>1</sup> of 6.0% of GDP, and an overall budget deficit of 3.5% of GDP.<sup>2</sup> However,

<sup>1</sup> The Basic Balance is the Budget Balance before accounting for Net Investment Income>Returns and transfers to endowment and trust funds.

<sup>2</sup> This is significantly more expansionary than previous off-Budget packages. In the downturns of 1998 and 2001, the off-Budget packages resulted in a surplus in the Basic Balance of 0.7% of GDP in FY1998, and a deficit in the Basic Balance of 1.5% of GDP in FY2001.

Singapore will not need to borrow to finance this deficit. The authorities remain vigilant to the continuing risks in the external environment and their ability to implement fiscal policy measures quickly will ensure a timely response as the situation requires.

3.3 The authorities noted the IMF staff's suggestion to strengthen the automatic stabilisers by assessing taxes on the basis of current rather than previous year's income. The authorities will continue to review this, bearing in mind the higher administrative and compliance costs that come with a current year basis of assessment. In the meantime, the authorities have implemented various counter-cyclical measures to mitigate the tax impact on individuals and companies, including personal income tax rebate, enhanced loss carry-back, and deferred installment payments for taxpayers with short-term financial difficulties.

3.4 Singapore's financial system has weathered the crisis well. The banking system and insurance sector had low exposures to toxic assets and remained profitable, liquid and well-capitalised. There were no disruptions to inter-bank funding markets in domestic currency and credit flows to the economy. Going forward, MAS' continuing efforts to strengthen financial stability include focusing financial institutions' attention on managing risks and safeguarding the robustness of their liquidity, earnings and capital. MAS is also shaping and adapting new international regulatory standards, strengthening the corporate governance of financial institutions, and improving safety net arrangements in Singapore such as the deposit insurance fund and the policy-owners protection fund.

3.5 Aside from cyclical policy responses, the authorities have embarked on a review of Singapore's medium-term economic growth strategies amidst the structural changes occurring in the global landscape. Moreover, as the economy transits to a more developed phase, growth would have to be increasingly underpinned by improvements in productivity. Against this, the Prime Minister has tasked a newly-established Economic Strategies Committee (ESC) to develop strategies for Singapore to build capabilities and maximise opportunities as a global city in a new world environment. Chaired by the Minister for Finance and comprising representatives from both the public and private sectors, the Committee will focus its work on five broad areas: seizing growth opportunities, strengthening corporate capabilities, growing human and knowledge capital, creating quality jobs and real wage growth for Singaporeans, and optimising the use of scarce resources. To facilitate this, eight sub-committees have been formed to undertake in-depth reviews of the various issues.<sup>3</sup> The ESC aims to put forward its key recommendations in January 2010, while the full report is expected to be released by mid-2010.

## 4 Final Remarks

4.1 The global economy is going through an unprecedented downturn. Accordingly, an ultra-open economy like Singapore has had to confront an extreme deterioration in external conditions. While domestic GDP growth has taken a sharp hit, the solid fundamentals of the

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<sup>3</sup> More information on the the ESC and its various sub-committees are available at the website: [www.esc.gov.sg](http://www.esc.gov.sg).

economy have ensured that cyclical adjustments have not derailed macroeconomic and financial stability. As the global economy is restored to health, the recovery in the Singapore economy will also pick up in pace, although the authorities recognise that this could be a slow and extended process. Appropriate macroeconomic policy settings have and will be formulated with these prospects in mind. The authorities remain fully committed to engagement in global markets and are confident that Singapore will continue to reap the full benefits of its outward-oriented development strategy.

4.2 The Singapore authorities are pleased to inform the Board that they are agreeable to the publication of the Staff Report associated with the 2009 Article IV consultation and will be releasing the Buff Statement at the same time.