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SINGAPORE—STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION

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 2013 Article IV consultation with Singapore, the following documents have been released and are included in this package:

- The **Staff Report** for the 2013 Article IV consultation, prepared by a staff team of the IMF for the Executive Board's consideration on November 8, 2013, following discussions that ended on July 8, 2013, 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 October 25, 2013.
- An **Informational Annex** prepared by the IMF.
- A **Press Release** summarizing the views of the Executive Board as expressed during its November 8, 2013 consideration of the staff report that concluded the Article IV consultation with Singapore.
- A **Statement by the Executive Director** for Singapore.

The documents listed below have been or will be separately released.

Selected Issues Paper
Financial System Stability Assessment
Report on Observance of Standards and Codes

The publication policy for 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 2013 ARTICLE IV CONSULTATION

October 25, 2013

KEY ISSUES

Context. Growth recovered and inflation declined sharply in 2013. Leverage has risen, with real estate a major beneficiary, but providing only a muted growth impulse. Intensive use of macroprudential measures recently stabilized house prices, which had grown rapidly. The financial sector has so far absorbed expectations of tapering by the Federal Reserve with limited volatility. Measures to encourage productivity growth continue to be rolled out, including through further tightening of foreign worker policies, which has pushed up wages.

Outlook, risks and macroeconomic policies. Growth is likely to reach 3½ percent in 2013–14, supported by stronger G3 demand, despite softening in the region. A positive output gap and rising labor costs will raise core inflation, but headline inflation will stabilize on smaller asset price increases. External and domestic factors tilt the balance of growth risks to the downside. Cyclical conditions warrant a restrictive stance overall. The current policy of modest gradual appreciation is consistent with limiting the output gap and anchoring inflation expectations, while continued targeting of macroprudential policies will help contain asset prices and ensure prudent lending. The budgeted fiscal stimulus is warranted to support the goal of raising productivity to relieve future supply constraints.

Financial sector issues. Significant risks have built up under very low interest rates, but appear manageable, although confirmation will come only once the cycle has turned. Regional and global interconnectedness also brings risks. A countercyclical capital buffer, stepped-up onsite bank inspections, strengthened fx liquidity management practices by banks, and vigorous enforcement of international AML/CFT commitments are advised. Higher leverage increases aggregate sensitivity to macroeconomic shocks and interest rate cycles, exacerbated by significant balance sheet heterogeneity.

Demographic shifts. Prospective population aging and workforce shrinkage call for continuing to boost labor productivity, aided by the higher education levels of younger cohorts and continuing to tap foreign workers—though at a slower pace than previously. Recent commitments to strengthen social safety nets in a targeted manner, especially for the elderly, are welcome.

External sector assessment. From a multilateral perspective and taking into account Singapore's unique characteristics, the external position is stronger than warranted by fundamentals. Increased public spending and a tighter labor market caused by a slower pace of foreign worker inflows—consistent with the authorities' plans—and appropriate adjustments in other countries should narrow the large current account surplus.

Approved By
Jerry Schiff and Ranil Salgado

Mission dates: June 26-July 8, 2013
The mission comprised Rachel van Elkan (Head), Elif Arbatli, Sanaa Nadeem, Niamh Sheridan (all APD), and Ravi Balakrishnan (Resident Representative). Steve Dawe (LEG) assisted from Headquarters.

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Glossary

ACU	Asian Currency Unit
AML/CFT	Anti-Money Laundering and Combating the Financing of Terrorism
AMR	Asset Maintenance Requirement
ASEAN	Association of Southeast Asian Nations
BoP	Balance of Payments
BPM6	Balance of Payments and International Investment Position Manual, 6th Edition
CA	Current Account
CGER	Consultative Group on Exchange Rates
CPF	Central Provident Fund
CPI	Consumer Price Index
DBU	Domestic Banking Unit
DOS	Singapore Department of Statistics
EC	Executive Condominiums
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
FSSA	Financial System Stability Assessment
FW	Foreign Worker
fx	Foreign Exchange
GDP	Gross Domestic Product
GFA	Gross Floor Area
GFC	Global Financial Crisis
G-SIFI	Global Systemically Important Financial Institutions
HDB	Housing and Redevelopment Board
IIP	International Investment Position
LtV	Loan-to-Value
MaPs	Macroprudential Policies
MAS	Monetary Authority of Singapore
MNC	Multinational Corporation
MSR	Mortgage Servicing Ratio
NEER	Nominal Effective Exchange Rate
NFA	Net Foreign Assets
OTC	Over-the-Counter
plc	Publicly-Listed Company
QE	Quantitative Easing
QFBs	Qualifying Full Banks
REER	Real Effective Exchange Rate
SGX	Singapore Stock Exchange
SIBOR	Singapore Interbank Offered Rate
SSD	Seller's Stamp Duty
SWF	Sovereign Wealth Fund
TDSR	Total Debt Servicing Ratio
ULC	Unit Labor Cost
UMP	Unconventional Monetary Policy

BACKGROUND

A. Challenges and Opportunities

1. Transformed by decades of rapid growth, the Singapore economy is now facing several challenges common to advanced country peers, and others unique to a mature city state. Singapore is grappling with the economic effects of a rapidly-aging population, limited room for productivity catch-up in sectors close to the technology frontier, and widening income inequality. These challenges are amplified by growing land scarcity, the social choice to slow the intake of foreign workers, and the likely more moderate growth trajectory for large advanced and emerging market economies over the long haul. Nonetheless, Singapore's flexible markets, strong finances, and forward-looking policymaking should position it to manage these challenges and benefit from opportunities brought by the pivot of global growth toward Asia, with its burgeoning middle- and upper-income classes.

2. In concluding the 2012 Article IV consultation, Executive Directors endorsed the view that weak external demand, price pressures from labor market tightening, large property exposures, and growing cross-border financial linkages present a challenge. In the interim, however, notable progress has been made in moderating consumer price inflation, but the outlook for Singapore's main trade partners has been revised down. Also, while credit and household indebtedness have continued to rise, but at a more moderate pace, property prices appear to have recently stabilized.

B. Recent Developments

3. In recent years, external weakness, ultra-low global interest rates, and domestic structural reforms have shaped the Singapore economy. As a very small, very open economy, activity is heavily influenced by developments abroad, and in a multi-speed global economy, G3 (United States, euro area, and Japan) demand remains Singapore's main external growth engine. Unconventional monetary policies (UMPs) in advanced countries and shifts in global risk sentiment have boosted Singapore's financial market activity and demand for real estate. Managing the dependence on foreign workers (FWs) is a domestic policy priority, and measures to slow the increase in FWs were introduced in 2010 and subsequently tightened with the aim of encouraging faster wage and productivity growth in labor-intensive sectors while easing congestion.

4. These factors have had a notable effect on the real economy:

- *The pace of growth has slowed and the external sector contribution has become more erratic.* Growth weakened from 5¼ percent in 2011 to 1¼ percent in 2012, before rebounding strongly in H1:2013 (Figure 1). This variability reflects mainly swings in G3 demand and shifts in global risk sentiment that impacted financial services. Domestic demand—especially consumption—has been considerably less volatile, though generally subdued, despite the tight labor market and low interest rates.[1]

- *On the external side, the current account surplus shrank by 6 percentage points in 2012, and the real effective exchange rate continued to strengthen*. The current account fell to a still-high 18½ percent of GDP as exports declined while imports continued to expand. This occurred against further real appreciation from wage and price increases and nominal appreciation. The CPI-based real effective exchange rate (REER) has risen by a cumulative 8¾ percent since end 2010, while the unit labor cost-based REER has jumped 17 percent.

- *Inflation fell sharply in 2013 as asset price appreciation eased.* Rising prices of housing and rationed vehicle ownership permits pushed headline inflation to 4–5 percent during 2010–12. Core inflation (which excludes the cost of accommodation and private road transport) increased more modestly as pass through of rising unit labor costs was dampened by faster nominal appreciation and subdued global commodity prices. More recently, restrictive macroprudential (MaP) measures on housing and cars pushed down headline inflation (to 1.6 percent in September).

- *Despite slower GDP growth, the labor market has remained tight.* At 2.9 percent, the resident unemployment rate is hovering close to historical lows as labor supply growth has slowed on tighter limits on FWs.[2,3] As a result, resident labor force participation, including among older workers, has edged up to high levels, and unit labor costs are rising at an annual rate of 6¼ percent in 2013.

5. Bank loans have expanded briskly alongside the higher credit intensity of GDP. Loans to nonfinancial resident borrowers increased by a cumulative 60 percent since end 2009 (Figure 2). Real estate-related loans (housing loans, loans to the building and construction sector) grew an even faster 75 percent and now account for 46 percent of DBU loans to nonbank customers.[4] However, the sizable increase in leverage—from 151 percent of GDP in 2008 to 182 percent of GDP

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[1] Within investment, stock-building has played an important countercyclical role. Also, the global slump in personal computer sales has adversely impacted Singapore's external demand more than some other Asian economies that are more focused on smart phones and tablets.

[2] Nonresident foreign workers are regulated through a system of levies and firm-level quotas (dependency ratio ceilings) that vary by sector and/or skill level. Further tightening measures have been announced through 2016.

[3] Singapore's labor force was among the fastest growing in Asia during the past decade, considerably outstripping that of other advanced or emerging market Asian countries. As a small city state with space constraints, this strategy could not continue indefinitely.

[4] Real estate loans account for 28 percent of total (DBU plus ACU) loan portfolios. The domestic banking unit (DBU) and Asian currency unit (ACU) accounting distinction no longer provides a useful delineation between: (i) resident versus nonresident borrowing because domestic banks extend loans to nonresidents through their DBU books (about a third of the total); and (ii) activities of domestic versus foreign banks because some foreign banks have sizable DBU books in view of their significant presence in the domestic retail market. While DBU housing loans to residents would provide the best indicator of banks' mortgage exposure to Singapore, this data is not available by sector.

in mid 2013—appears to have provided a diminishing impetus to real activity.[5] This may reflect significant and growing credit leakage abroad given Singapore's role as a regional financial center and/or that a large part of credit was used to purchase financial and pre-existing assets, including real estate (see Box 1).

6. **After having risen some 54 percent on average from their mid-2009 trough, private and public resale house prices have recently stabilized on intensive application of MaPs** (Figure 3).[6] Residents' appetite for real estate has been fueled by very low mortgage rates (around one percent), low returns on alternative savings vehicles, provisions in the pension scheme allowing part of savings to be used for house purchases, and a strong increase in the number of residents against a more limited increase in the stock of housing. Nearly half of household wealth is held as real estate (see Box 2). Demand by nonresidents and domestic corporates—which accounted for nearly 25 percent of transactions in late 2011—was buoyed by ample global liquidity, trend appreciation of the Singapore dollar and Singapore's safe-haven status. Since late 2009, an escalating series of MaP measures targeting private and public housing (see Box 3) has reduced the volume of transactions, lowered average loan-to-value (LtV) ratios, and in recent months scaled back the average tenor of new mortgages. Guidelines on prudent total debt service ceilings were issued at end June.[7] The cumulative impact of these measures has been to slow and more recently stabilize residential property prices. However, price growth has continued for commercial and industrial space.

7. **Singapore's financial markets have so far absorbed expectations of future QE tapering by the Federal Reserve with limited volatility** (Figure 4). A large net foreign asset position, deep financial markets, and role as a regional financial hub—whereby large bank-related financial inflows are broadly matched by contemporaneous outflows—provide resilience (see Box 4). Nonetheless, at high frequencies, Singapore's equity and currency markets are positively correlated with global risk appetite (see Box 5). During late April to late October, the stock price index has fallen 7 percent, while the Singapore dollar eased by less than 1 percent against the U.S. dollar and the nominal effective exchange rate (NEER) has returned to the upper half of the policy band. Longer-dated government bond yields have risen by ¾–1¼ percentage points, while short-term rates are unchanged.

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[5] Leverage is defined as (DBU and ACU) credit to the private sector and outstanding Housing Development Board (HDB) mortgage loans to households. For Singapore, the ratio of resident credit to GDP may be a somewhat less informative indicator of leverage and may not be fully comparable to ratios for other countries because resident foreigners and resident foreign companies together generate more than 40 percent of GDP.

[6] Prices of private houses are pro-cyclical, and dropped 25 percent during the GFC, but have since recovered strongly, increasing by 62 percent. Prices of public resale housing are more stable but, nevertheless, have risen 46 percent since mid-2009. The greater cyclicality of private house prices reflects the larger fraction of non-owner occupied buyers, including foreigners and companies, who tend to be more sensitive to interest rates and other macroeconomic conditions.

[7] The total debt servicing ratio (TDSR) caps payments at 60 percent of household income, calculated using an interest rate of 3½ percent (or the prevailing market interest rate, if higher) for the marginal mortgage loan. The maximum allowable mortgage loan tenor is now 35 years, with shorter limits for older borrowers.

C. Structural Challenges

8. **Singapore is facing a strong demographic headwind**. Very low fertility rates for several decades, already-high labor force participation, and physical and social constraints on absorbing a further large influx of foreign workers suggest that Singapore's workforce will plateau later this decade and decline thereafter. Absent structural changes to shift the economy from the previous labor-intensive growth model, per capita income could decline and prices of labor-intensive goods could rise sharply. In addition, rising life expectancy will increase the citizen old-age dependency ratio (those aged 65 and above relative to those of working age) from less than one-in-five in 2012 to one-in-two in 2030.

OUTLOOK AND RISKS

9. **With support from G3 external demand, Singapore's GDP is forecast to grow moderately during 2013–14, despite softening in regional emerging market economies**.[8] Growth is forecast to reach 3½ percent this year and next (with carryover accounting for 1½ percentage points of growth in 2014), keeping output just above potential. Strengthening G3 activity is expected to offset slower regional growth, returning the external sector to expansion. Consumption is likely to increase modestly as the impact of sustained real wage growth is tempered by a squeeze on households' "free" income as debt service costs begin to rise. Public investment is forecast to remain robust. A sustained positive output gap and pass through of higher employment costs from labor market tightening amid continued subdued import prices are expected to raise core inflation from temporary lows in 2013. However, headline inflation is likely to stabilize at about 2½ percent on smaller increases in housing rents and car permit costs. The current account surplus is forecast to narrow modestly to around 17½ percent of GDP by 2014.

10. **Over the medium term, tight labor market policies and increased public spending will continue to support demand rebalancing**. Potential GDP growth is expected to dip significantly in the next few years on slower labor force expansion, and then recover gradually as faster labor productivity growth takes hold, reaching just under 4 percent in the medium term—well below the pace during 2000–08. Tighter labor supply due to slowing foreign worker intake in the near term and population aging in the medium term will boost wages, and with productivity gains unlikely to fully compensate, core inflation will increase temporarily and—together with continued nominal appreciation—push up the REER, dampening exports.[9] Frictional unemployment is expected to increase in the transition as workers move between firms and across sectors in response to new wage and productivity patterns. Supported by a 2½ percentage points of GDP increase in primarily

[8] Based on analytical work for the forthcoming April 2014 Asian Regional Economic Outlook, inward growth spillovers to Singapore from China and other ASEAN countries have risen in recent years relative to those from the U.S., euro area, and Japan. However, in absolute terms, growth spillovers from the advanced economies continue to dominate.

[9] See "Singapore: Restructuring to Raise Productivity," in the accompanying selected issues paper.

aging-related social spending, the more appreciated REER is expected to rebalance growth toward domestic demand and narrow the current account surplus.

11. A challenging external environment and possible adverse effects of domestic policies tilt the balance of Singapore's growth risks to the downside (Appendix 1). Stronger-than-anticipated recoveries in the G3 would benefit Singapore through increased export demand. However, as host to G-SIFIs and with the large regional presence of its domestic banks, Singapore could be exposed to strains from asset repricing and liquidity pressures in the event of a disorderly UMP exit, flare up in euro area financial stress, and/or emerging market capital flow reversals. In addition, with high leverage among households and firms, an unexpectedly sharp increase in interest rates could constrain spending. Prolonged slow euro area growth, weaker growth in emerging markets, or a sharp medium-term slowdown in China would depress Singapore's externally-oriented economy through trade, financial, and tourism channels. Domestic policies to reduce labor intensity carry the risk that productivity gains will be insufficient, undermining competitiveness, and causing significant business closures—especially among SMEs—and structural unemployment. Recent public reports that Singapore's foreign banks, companies and trusts may have permitted nonresidents to conceal beneficial ownership of assets for the purpose of evading taxes in other jurisdictions could expose Singapore to reputational risk, with negative implications for financial and external stability.

Authorities' Views

12. Growth is expected to pick up in 2013 on somewhat better global prospects. Improved conditions in advanced economies and recovery in the global IT sector should cause the economy to expand by 2½–3½ percent this year. These factors outweigh headwinds from the slowdown in China and softer regional trade. Headline inflation is expected to ease considerably to 2.5–3 percent in 2013 on measures already taken, but with core inflation rising mildly from the middle of 2013 as pent up wage and rental cost pressures are passed on to prices in the context of firmer demand conditions.

13. While the probability of extreme events has receded, several risks remain. Conditioned on a smooth exit, prospective unwinding of UMPs was viewed in a generally positive light, with deep financial markets, exchange rate flexibility within the band, and scope for fx intervention expected to ensure an orderly adjustment. However, a mis-timed exit from UMPs, a hard landing in China, or a renewed flare up in euro area stress would adversely affect the Singapore economy through trade, credit, and financial channels. The ongoing domestic restructuring was also seen as posing potential risks in the event inflation expectations become unhinged or productivity significantly lags wage growth.

POLICIES TO PRESERVE MACROECONOMIC STABILITY

A. Monetary and Macroprudential Policies—A Complementary Pair

14. The MAS's moderately restrictive monetary policy is appropriate to contain demand pressures and prevent possible second round inflation effects. Ongoing structural reforms will alter the growth-inflation trade off, making inflation more responsive to an increase in demand.[10] In the context of the exchange rate-centered monetary policy, the modest gradual appreciation of the band since early 2012 continues to be appropriate for keeping aggregate demand in line with output and preventing restructuring-related transitory price effects from becoming entrenched. Although the specific parameters of the basket-band-crawl framework are not made public, staff estimates that the NEER band—with a width of about ±2 percent—is appreciating at an annual rate of around 2½ percent (Figure 5).[11] Sustained deviations from the baseline growth forecast or evidence of significant second round inflation effects would warrant a compensating adjustment to the policy rate of crawl.

15. Macroprudential tools are an essential complement to the exchange rate-based monetary policy, but may be subject to operational limits:

- Using the NEER to affect aggregate demand is consistent with Singapore's very large external sector (trade is nearly four times GDP). However, tightening policy through faster appreciation could increase financial stability risks by depressing nominal interest rates, which are determined by interest parity conditions in the context of the very open financial account. The authorities' extensive targeted and well-coordinated arsenal of MaP measures has been effective in slowing house and car prices, thereby dampening the contribution of asset prices to headline inflation.[12] MaPs have also helped make lending more prudent by capping tenors on new loans and reducing the number of multiple mortgages.

- The MaP toolkit may be implemented in a countercyclical manner, and a roadmap for relaxing existing measures should be readied in the event the financial cycle turns.

- Despite their demonstrated effectiveness at slowing asset prices, growing demands on MaPs may test their limits through circumvention and demand spillovers to near substitute assets. Also, internationalization of a segment of the housing market suggests that adoption of MaPs

[10] Reduced recourse to foreign workers will affect the output gap asymmetrically across the business cycle. When demand is weak, non-renewal of short-term employment contracts of FWs will reduce potential output, thereby limiting the negative output gap. However, during a strong upswing in demand, quotas on FWs will become more binding, constraining the potential supply response to higher demand, and opening up a large positive output gap.

[11] See Box 3 in the 2012 Article IV staff report for a discussion of Singapore's monetary policy framework and "Singapore: Some Observations on Singapore's Monetary Policy Framework" in the accompanying selected issues paper.

[12] An interagency Financial Stability Committee is chaired by the Deputy Prime Minister, who also oversees the MAS. Agreed measures are implemented by the agency with jurisdiction over the specific policy instrument.

abroad may cause demand for property to spill over to Singapore. The authorities have been obliged to plug loopholes through an ever-broader and more complex set of measures, thereby increasing administrative complexity.[13]

Authorities' Views

16. Modest, gradual appreciation of the NEER policy band is appropriate to contain inflation amid economic restructuring and low global interest rates. The resulting real appreciation helps facilitate productivity gains and demand rebalancing over the medium term, while guarding against a buildup of inflation expectations. While efficacy of the exchange rate-centered regime is more challenging when global interest rates are near the zero lower bound, the current policy framework remains superior for Singapore because unilaterally raising interest rates would attract additional capital inflows. Moreover, because exchange rate-sensitive components continue to dominate real activity, an exchange rate-based framework minimizes output volatility, including from unpredictable capital flows.

17. Sustainable asset prices are fundamental to financial stability and to low consumer price inflation. Because monetary policy cannot adequately address asset inflation, a coordinated set of MaP measures has been adopted to dampen asset price cyclicality. The heavy focus on property-related measures reflects the structural importance of housing to the Singapore economy. Singapore's approach has been to target demand at its source, minimize unintended consequences by adopting measures incrementally, and reduce distortions and the risk of circumvention by defining measures comprehensively. Some MaPs—including the total debt servicing ratio—should be considered permanent features of the financial stability architecture, to be dialed up and down in line with cyclical conditions.

B. Fiscal Policy

18. While cyclical conditions warrant a somewhat restrictive fiscal stance in 2013–14, some stimulus can be justified given the budget's emphasis on restructuring. Consistent with prevailing cyclical conditions, fiscal policy was restrictive in 2012-13 owing to large one-off revenue from property transaction taxes and proceeds from the auction of car ownership certificates. Initiatives in the FY 2013 Budget (in effect during April 2013-March 2014) focus on restructuring and raising inclusiveness. Specific measures include continuing the calibrated tightening of the FW policy, encouraging businesses to enhance productivity through cost defrayments, making the tax system more progressive, strengthening social safety nets, and increasing spending on public transport. In all, staff expects fiscal policy to inject a stimulus of about 1¾ percent of GDP this year and next, although leakage abroad of demand is likely to be significant given the very open economy. With a sizable part of the budgeted spending increase aimed at boosting productivity,

[13] In June 2013, MAS stipulated that the mortgage borrower must be the same as the holder of the legal title to the property. Also, several measures originally applied to housing loans were subsequently extended to loans for other types of real estate and cars.

and hence relieving future supply constraints, some stimulus is appropriate, provided monetary policy maintains a tightening bias.

Authorities' Views

19. Fiscal policy continues to focus on medium-term objectives of strengthening productivity and fostering greater inclusiveness. It is essential that firms begin adjusting to the permanently tighter labor market conditions arising from restrictive FW policies and population aging. A three-year budget-financed transition support package is intended to promote restructuring by absorbing part of the cost to firms of wage increases and new investments. These support mechanisms, including wage credits, corporate income tax rebates, and investment subsidies, are designed to benefit the most impacted firms, particularly SMEs. Social measures include improving access to education, expanding wage supplements for low-income workers, and increasing direct assistance to the elderly. All told, the Budget implies a fiscal impulse of 1¾ percent of potential GDP. However, the macroeconomic impact will be dampened considerably as some of stepped-up social transfers will be saved and monetary policy decisions will internalize the fiscal stance. Moreover, some near-term impulse can be justified because successful economic restructuring would increase potential output and hence lower inflationary pressure over the medium term.

SHORING UP FINANCIAL SECTOR RESILIENCE

A. Adapting to Changing Global Monetary Conditions

20. Notwithstanding important strengths identified in the 2013 FSAP update, risks to financial stability have risen under the aegis of UMPs. Healthy balance sheets of banks and the sovereign provide important buffers to absorb risks, as confirmed by investment ratings that are among the highest in the world and joint MAS-IMF stress tests conducted as part of the FSAP update. Financial positions of the household and corporate sectors, which provide the first line of defense in the event of shocks, are robust in the aggregate. However, the wide dispersion of household income and wealth, and significant firm heterogeneity coupled with weak profits in recent years may conceal pockets of risk. In addition, the buildup of leverage has increased exposure to turns in the economic cycle and potential shocks. With property and interest rate cycles now having reached a mature phase, and with Singapore's ongoing restructuring expected to bring slower GDP growth and possibly higher frictional unemployment, the economy's future debt-carrying capacity may be reduced.

21. Given the important economic and social role of housing, the authorities' proactive approach to addressing related risks is warranted. *First,* property prices could accentuate the cyclicality of the economy because about 70 percent of mortgages have variable rates that are tied to the 3-month SIBOR, suggesting that most rates would reprice in unison when short-term market rates increase. With tenors of mortgages having risen sharply in recent years, scope is limited to cushion the impact of higher interest rates on debt service payments by refinancing to longer duration loans. *Second*, net housing wealth is large, but assets are subject to valuation changes while liabilities are fixed, suggesting possibly sizable wealth effects if prices fall. *Third*, while housing generally remains affordable, this has been achieved for new HDB flats by increasing the public subsidy and not adjusting prices in line with the resale market. And *fourth*, real estate-related activities account for a non-negligible share of GDP and employment, with potential feedback to loan quality in a slowdown. Therefore, the recent TDSR guidelines and credit card issuance rules are positive steps to ensure prudent underwriting standards and to slow credit growth. As highlighted in the FSSA (see Box 6), broadening the coverage of banks' real estate exposure limits to include loans for owner-occupied housing, encouraging excessively leveraged households to reduce housing debt, and increased on-site inspection of banks' credit risks would further help contain housing market-related financial stability risks.

22. Heavy reliance on MaPs may reflect some concern about disadvantaging local banks vis-a-vis foreign branches. Capital risk weights applied to mortgages by local banks (averaging about 10 percent) are very low by international standards. MAS does not have explicit authority over risk weights and other capital-based measures used by foreign branches, which are regulated by home supervisors. On the other hand, all financial institutions operating in Singapore (local banks, foreign branches, and nonbank financial institutions) are subject to the MaP measures. Limited reliance on capital-based measures may imply that banks do not adequately internalize the extent of systemic risk caused by the large stock of mortgages.[14] Risk weights used by several major foreign banks in Singapore and Hong Kong SAR (together) are lower than those applied elsewhere within the banking groups, but are similar to weights at local Singapore banks.[15] Scope may exist to raise mortgage risk weights without creating an unlevel playing field provided home supervisors respond accordingly by revising up the risk weights they require on mortgages in Singapore. The recent conversion of a major foreign bank branch into a Singapore subsidiary further strengthens the case for introducing a minimum mortgage risk weight floor that exceeds prevailing weights.

Authorities' Views

23. Singapore's financial system is resilient to the normalization of global monetary conditions, but a significant minority of households could be over leveraged.

- Locally incorporated banks hold capital in excess of MAS's minimum requirements, which exceed Basel III standards, have buffers against large property price declines, and are subject to rigorous

[14] Lower risk weights allow banks to maintain higher capital ratios for any given amount of leverage. This tends to amplify the return on equity and encourages lending procyclicality.

[15] This is based on 2011 data, prior to the Hong Kong Monetary Authority establishing a risk weight floor of 15 percent (considerably above previous actual practice) for all new residential mortgages in February 2013. See "Singapore and Hong Kong Banks: The End of Super Low Mortgage Rates," Barclay's Equity Research, March 8, 2013. Unlike Singapore, most foreign banks active in Hong Kong SAR operate as subsidiaries.

stress testing to assess resilience to property market shocks. MAS periodically reviews local banks' Internal Rating Based models that are used to determine risk weights, including for mortgages. The high proportion of variable rate loans is seen as helping to cushion the impact on banks of higher interest rates in the event of UMP exit.

- However, pockets of concern exist, with an estimated 5–10 percent of households over-leveraged on their property purchases (defined as total debt service payments in excess of 60 percent of income), which could rise to 10–15 percent if mortgage rates rise by 3 percentage points. Lower-income households with smaller savings pools and those with multiple mortgages or longer loan tenors are most at risk, although they may not necessarily default. Proactive use of macroprudential measures is intended to ensure that credit supplied at low interest rates does not drive house prices beyond levels compatible with underlying income growth.

- Large government assets provide scope for systemic support in the event of financial stability risks, including a prolonged period of elevated unemployment.

B. Financial Center Considerations

24. The financial sector's strong regional and global orientation brings benefits of diversification and scale economies, but also creates the potential for spillover risk (Box 7).

- *Foreign banks in Singapore mainly operate as branches, which are closely interconnected with their much-larger parent banks.*[16] In view of the special challenges foreign branches pose for supervision, MAS has adopted mitigating measures, while also advocating in international fora for enhanced sharing of supervisory information, including on G-SIFIs active in Singapore.

- *Rapid expansion of cross-border trade finance by the Big 3 local banking groups has increased their presence in relatively under-banked, fast-growing neighbors, but which also gives rise to liquidity and credit risks*. Trade-related lending mainly to China and ASEAN has allowed the domestic banks to utilize their excess Singapore dollar liquidity by swapping it into U.S. dollars. These loans are short term, self liquidating, and collateralized, and banks have increased their on-balance sheet U.S. dollar funding at the request of the MAS. Nonetheless, reliance on the fx swap market, which could seize up during periods of global stress episodes (including a disruptive unwinding of UMPs or a resurgence of euro area financial turbulence), remains high.[17] These loans may also carry additional operational risk reflecting weaker creditor rights and enforcement mechanisms in host countries.

[16] Using comprehensive international banking data, the FSAP update performed numerical simulations of potential spillovers from other jurisdictions onto Singapore's banking system through its cross-border interbank exposures, highlighting the importance of major financial centers, including the U.K.

[17] However, Singapore's fx swap market has been resilient to earlier stress episodes, including the global financial crisis, which may to some extent reflect support from the MAS.

- *The large size and rapid growth of assets under management and weaknesses identified during the 2008 AML/CFT assessment expose Singapore's financial sector to the risk of being used as a harbor or conduit for illicit assets*. Measures already in place or in the process of implementation —including making tax evasion a predicate crime for money laundering, bolstering the framework for international tax cooperation and sharing of tax information, and committing to undergo in 2015 an AML/CFT assessment under the revised FATF methodology—are therefore welcome. Addressing previously identified deficiencies regarding transparency of beneficial ownership of companies and trusts established or operating in Singapore is also urged.

Authorities' Views

25. Preemptive steps have been adopted to contain risks inherent in being a regional financial hub. MAS actively participates in Supervisory College and Crisis Management group meetings hosted by respective home supervisors. Growth of nonbank loans by local banks to Asia-10 countries has been in line with Asia-10's GDP growth, although a large part of their loan portfolios remain in Singapore. In discussion with MAS, banks broadened their U.S. dollar funding profile by issuing commercial paper and stepping up deposit taking. Singapore has implemented stringent measures as part of international efforts to combat money laundering and terrorism financing, and tax evasion. On tax, the "exchange of information" regime is aligned to internationally-agreed standards, and since July 2013, Singapore has criminalized the laundering of the proceeds of tax evasion and tax fraud.

ADJUSTING TO DEMOGRAPHIC DECLINE

26. A large education dividend, supplemented by inflows of foreign workers with key skills, would cushion the impact of the coming demographic decline. The much higher educational attainment of younger relative to retiring cohorts will allow the smaller labor force to be used more effectively.[18] Greater reliance on labor-saving technologies would also help deal with a shrinking domestic labor force. However, this process may result in the hollowing out of labor-intensive tradables, leading to labor redundancies if workers cannot be successfully re-trained. Local shortages of critical skills should be alleviated by continuing to tap foreign manpower.

27. An aging population will raise demand for private and public resources and help rebalance the economy. The mandatory defined-contribution savings scheme (Central Provident Fund), where contributions are based on income, implies that fiscal obligations for old-age income support are limited to providing a guaranteed minimum rate of return on accumulated savings. However, only citizens and permanent residents may participate in the CPF, and the uneven distribution of income within and across generations, as well as incentives in the CPF that encourage saving in the form of real estate, implies that some elderly may retire with insufficient liquid assets (Figure 6). An aging population will also require more health care spending, which is currently largely privately financed. Despite the

[18] See "Singapore: Education-Augmented Labor Supply," in the accompanying selected issues paper.

dominant private sector role in financing retirement and health costs, in recent years, the government has increased spending for social safety nets and infrastructure, including for the elderly. The government's commitment to further increase spending while drawing on income from public sector reserves and, to a lesser extent, raising taxes, is commendable. The consequent narrowing of the fiscal surplus and stepped up spending by retirees of their CPF and other savings are expected to further narrow the current account surplus over the medium term.[19]

Authorities' Views

28. A comprehensive approach has been adopted to address Singapore's demographic challenges beginning later this decade. The government's strategy balances social concerns and physical space constraints and focuses on: (i) enhancing labor productivity; (ii) raising fertility rates and further increasing resident labor force participation; (iii) continuing immigration and FW inflows in a calibrated manner, and offshoring some labor- and land-intensive activities; and (iv) expanding infrastructure to accommodate a growing population. As the economy restructures and businesses adopt laborsaving technologies, some increase in unemployment is to be expected, but with retraining, no permanent uptick is likely.

29. A strategic shift is underway to strengthen social safety nets while preserving the goal of self reliance. As a result of the CPF, Singapore's contingent fiscal liabilities related to population aging and social security are limited. Nonetheless, the government provides significant income assistance to the low-income elderly and families. Going forward, it will play a greater role by allocating an additional 1–2 percentage points of GDP over the medium term for social and economic priorities, including healthcare, income support, education, housing grants, and transport infrastructure . To ensure these policies are commensurate with preserving strong public finances, benefits will be well targeted, and work incentives will be retained. The government has sufficient space to fund the policy shifts for now. However, it will need to ensure that revenues will continue to be able to meet expenditure increases.

EXTERNAL SECTOR ASSESSMENT

30. From a multilateral perspective, standard indicators suggest the external sector remains stronger than warranted by medium-term fundamentals and desired policies (Appendix 2). Singapore's large current account surplus since 2000 reflects a heavy reliance on low-wage foreign workers that discouraged fixed capital investment, policies that boost public and private saving, and, as a major financial center, a large stock of net international assets to safeguard against financial shocks (Figure 7). Current reserve levels—at 95 percent of GDP—appear adequate,

[19] Population aging will lower the current account by increasing imports of consumption goods and reducing income inflows as foreign assets of retirees are drawn down.

and there is no clear case for further accumulation for precautionary purposes.[20] Nonetheless, income generated by the existing large net foreign assets keeps the current account elevated.[21] The recent sharp narrowing of the current account during 2011–12 appears to have been driven by structural factors, rather than multilateral output and terms of trade gaps. While rebalancing by the rest of the world is likely to have contributed significantly, Singapore's efforts at reducing labor intensity and the resulting increase in the REER probably also played a role in lowering the structural surplus. Despite the recent narrowing, projected future population aging, and the authorities' plans to further increase public spending, deliver a more-even distribution of consumption across generations, and maintain slower foreign worker inflows, various standard indicators—including CGER methods—suggest the current account remains 4½–8 percent of GDP above its norm in the medium term**.**

31. However, additional considerations beyond the scope of—or not fully accounted for by—standard quantitative benchmarks are likely to make a sizable contribution to Singapore's current account and increase uncertainty surrounding any quantitative assessment. Because Singapore is an outlier across several dimensions included in multilateral empirical estimates of the current account (extent of population aging, a major financial center but not a reserve-currency issuer, a large lagged current account and NFA stock), it is reasonable to conclude that estimated contributions from these factors may be understated. In addition, structural features beyond those included in standard methodologies may also raise Singapore's saving rate. The low labor share of GDP from a cross-country perspective implies a large share accruing to the corporate sector. In turn, corporate saving—defined as profit less dividends—may be higher on account of the significant presence of foreign multinationals that, on a global basis, have tended to retain a large part of earnings in recent years. Greater income inequality than in many other countries (as measured by the Gini coefficient), together with the higher saving propensity of wealthier households, could also have raised the aggregate saving rate and hence the current account. While data limitations preclude quantifying their current account contributions, the combined impact is unlikely to overturn the assessment that the external sector is overly strong.

Authorities' Views

32. The external sector is expected to continue to move toward equilibrium over the medium term. While it is difficult to identify equilibrium values with precision, the current account surplus will likely continue to narrow and the real exchange rate continue to appreciate over the

[20] Liquidity stress tests indicate that under the severe but short-lived V-shaped risk scenario described in Box 2 of the accompanying FSSA report, over a one-year horizon, banks could face a U.S. dollar funding gap of US$50 billion (about one-fifth of official reserves).

[21] Maintaining a constant net foreign asset-to-GDP ratio requires an ongoing current account surplus of about 10 percent of GDP. In the CGER macrobalance approach, the lagged current account surplus is the main contributor to Singapore's current account norm (but this does not necessarily imply that past surpluses were themselves appropriate).

medium term. This reflects additional spending related to population aging and the ongoing shift to a less labor-intensive growth model.

STAFF APPRAISAL

33. Singapore's economic conditions improved considerably in 2013. Following the weak performance of 2012, growth is expected to recover this year to a moderate pace, reflecting the shift in global growth dynamics toward advanced economies, despite weaker activity in the region and higher interest rates. Inflation has fallen sharply from elevated levels on containment of house and car price increases and subdued world commodity prices, and inflation expectations have eased. Unemployment remains low, with robust job creation. Meanwhile, credit growth has moderated to low double-digit rates and house prices have stabilized. However, a combination of external and domestic factors tilts the balance of growth risks to the downside.

34. Cyclical conditions warrant a somewhat restrictive macroeconomic stance overall. MAS's current policy of modest gradual appreciation is consistent with keeping the output gap contained and inflation expectations anchored. The authorities have appropriately applied a targeted toolkit of MaPs to address financial stability risks. These have been effective in slowing asset price increases and making lending more prudent, but could face operational limits if utilized excessively. While the FY 2013 Budget is expansionary, this is appropriate in view of significant expected leakage abroad, the tightening bias in monetary policy, and to deliver the goal of enhancing productivity to relieve future supply constraints.

35. Singapore's financial system is highly developed, well regulated and supervised, and risks faced by domestic banks—though significant—appear manageable. Since the previous FSAP, domestic banks have performed well, based on diversified business strategies and a favorable environment of low interest rates and strong economic growth. Key risks stem from high leverage in the economy, elevated real estate prices, and future tightening of monetary policies in advanced economies. On the basis of comprehensive stress tests, these risks appear manageable, although the extent to which systemic risks have built up will become apparent only once the cycle has turned. Therefore, further enhancing resilience by implementing a countercyclical capital buffer and stepping up onsite inspections of banks' credit risk are advised. In addition, banks should further strengthen their foreign currency liquidity management practices to limit potential shortages during periods of market stress.

36. The buildup of leverage in recent years has heightened the sensitivity of the economy to macroeconomic shocks and interest rate cycles. Property prices and interest rates may now have reached a turning point, and with the prospect of slower GDP growth and possibly higher unemployment due to ongoing restructuring, the economy's debt-carrying capacity could decline. Recent measures to limit the pace of credit growth are therefore welcome. Expanding the cover of banks' real estate exposure ceilings to include owner-occupied mortgages and encouraging excessively leveraged households to divest some real estate holdings is also advised.

37. The financial sector's regional and global interconnectedness brings its own risks. MAS is addressing risks of cross-border contagion and protecting domestic deposits by converting large retail branches into domestic subsidiaries and imposing asset maintenance requirements on remaining foreign branches. Cross-border interbank liabilities, the bulk of which are intragroup, and liquidity coverage ratios for significant foreign currencies should be closely monitored. The authorities have adopted important legal changes and made key international commitments related to anti-money laundering and combating the financing of terrorism, and these should be implemented in a timely manner and vigorously enforced.

38. Addressing the challenges brought by a shrinking workforce and population aging requires a multi-faceted response. As a small city state, Singapore faces limits on labor-driven growth. Continuing to raise productivity is also needed to adjust to future declines in the resident labor force, aided by the higher education levels of younger cohorts. But continuing to tap foreign workers—though at a slower pace than in recent decades—will also be necessary to fill critical skill gaps and smooth labor supply to guard against a large loss of competitiveness. Singapore's defined-contribution Central Provident Fund limits fiscal obligations related to aging, health care and other social spending. Nonetheless, discretionary social spending will need to increase over the medium term to ensure basic needs are met. Recent commitments to significantly strengthen social safety nets in a targeted manner, especially for the elderly, are therefore welcome.

39. From a multilateral perspective and taking account of Singapore's unique features, the external position remains stronger than warranted by medium-term fundamentals. In addition to policy adjustment in the rest of the world, achieving a more balanced external position in Singapore calls for increasing public spending, a more-even distribution of consumption across generations, and maintaining a slower pace of foreign worker inflows, consistent with the authorities' current policies and commitments. A number of Singapore's unique structural characteristics may have also elevated the current account.

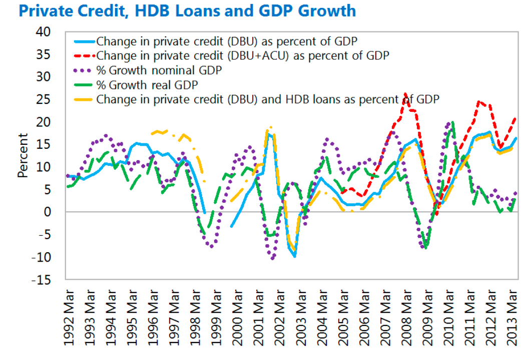
40. It is proposed that the next Article IV consultation with Singapore be held on the standard 12-month cycle.

Box 1. Singapore: Credit Growth and the Credit Intensity of Output

After peaking in 2011 at about 18 percent, the growth of bank and Housing Development Board (HDB) credit to the private sector moderated to 13 percent in 2012. As a result, relative to GDP, bank and HDB credit to the private sector jumped from 157 percent in 2009 to about 182 percent as of mid-2013. Yet despite the recent cooling of credit growth, the flow of new credit—i.e., the change in the stock of credit—has remained elevated at around 18–20 percent of nominal GDP per year owing to the now-larger volume of credit outstanding.

The sustained large flow of new credit has occurred alongside a sharp drop in the rate of real and nominal GDP growth. This implies that the credit-intensity of Singapore output—the amount of new lending required to generate a unit of output—has risen sharply. Credit intensity has now reached levels observed in the mid-late 1990s and prior to the GFC. Until recently, the credit intensity of output was closely correlated with the pace of real and nominal activity (with a short lag). However, the period since the GFC has been unusual in that credit intensity has been elevated while activity has remained subdued on a persistent basis.

Private Credit, HDB Loans and GDP Growth

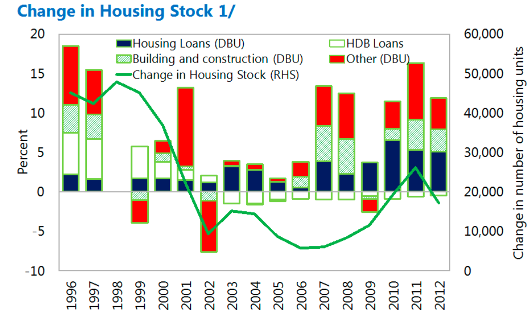


Sources: MAS; and CEIC Data Company Ltd.

Several factors may have contributed to the divergence between credit intensity and output growth since the GFC:

(i) *Purchase existing assets*: To the extent that housing loans are used to purchase already-built properties, rather than new construction, the effect of lending on output would be weakened. The contribution of housing loans (mortgages and HDB loans) to total credit growth in the recent period has been much larger than pre-GFC, but similar in magnitude to the pre-Asian crisis period. However, during that earlier period, HDB loans were the dominant type of housing finance, and may have been more closely associated with new housing construction. This conjecture is consistent with data on the stock of housing, where the annual increase in the number of housing units was much smaller in recent years than pre-Asian crisis and pre-GFC, despite the recent strong housing demand.[1/] Also, during earlier periods, growth of "other" credit categories—possibly more highly correlated with real activity—was much stronger.

Components of Private Credit (DBU) Growth, HDB Loans and Change in Housing Stock 1/



Source: MAS; CEIC Data Company; and Department of Statistics, Singapore.
1/ All growth numbers are as of end-year.

(ii) *Credit leakage abroad:* In view of Singapore's role as a regional financial center and the strong presence of multinational firms, a rising share of credit may have been used to finance activity abroad. Because locally-incorporated firms are residents of Singapore—irrespective of ownership—data on credit to the private sector may include a substantial part that is used abroad, including for outward expansion by locally-owned companies.

(iii) *Changes in corporate funding strategy:* Within their overall funding needs, nonfinancial corporates may have shifted from equity financing toward debt financing—both bank loans and bond issuance. This conjecture is consistent with the observed decrease in IPOs at the Singapore Exchange in 2012 and increase in corporate bond issuance in recent years.

1/ While construction loans have also grown strongly in recent years, a significant part is used for "en bloc" redevelopment, whereby an existing building is demolished and replaced with new construction that includes more housing units. Thus the net increase in the number of housing units is smaller than in the case of a new development. The average age of private residential buildings in Singapore at the time of en-bloc redevelopment is about 10–15 years (but somewhat older for HDB buildings).

Box 2. Singapore: Balance Sheets of the Private Sector

Households

Household finances are strong in the aggregate. Assets—half of which are in the form of residential property—are more than 6 times liabilities, of which nearly three quarters are mortgages. Nonetheless, household debt is among the highest in the region at 77 percent of GDP in 2012 (about 210 percent of household income), reflecting the high home-ownership rate and high property values in the city state. Mortgage debt has risen more than 40 percent since end 2009, and one third of outstanding loans are for non-owner occupied properties. Nearly all loans are at variable interest rates. Despite the concentration of assets into real estate, households have large liquidity buffers, with currency and deposits exceeding total household debt.[1/] However, the health of balance sheets is not uniform across households, and financial assets and debts are likely concentrated in different segments of the household population, with implications for the ability to absorb higher interest rates.

Corporates

Leverage in the publicly listed corporate sector has edged up, although interest costs are low. The median debt-to-equity ratio during 2011−2012 increased in nearly all sectors, while returns on equity and assets have declined after a short-lived rebound in 2010 (except in finance and real estate sectors). Rising corporate leverage reflects an increase in bank loans as well as corporate debt issuance . The interest coverage ratio (earnings before interest and tax divided by interest expense) has declined since 2010 to about 6 in 2012, which reflects rising leverage amid subdued earnings. With interest costs at a cyclical trough, there may be some pressure on corporates' debt servicing capacity going forward, in particular if earnings do not recover at a sufficient pace.

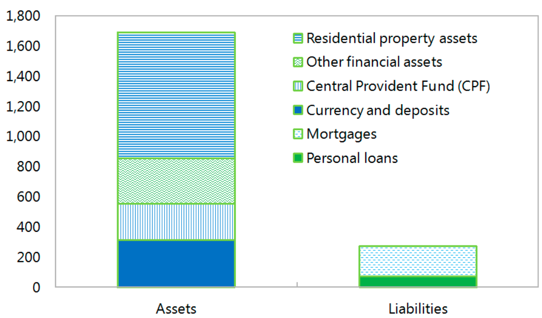
Domestic Banks

Domestic banks are among the highest-rated in the world. They comfortably meet minimum Basel III capital requirements (with total and Tier 1 capital ratios of 17 percent and 14 percent respectively at end-March 2013), rely predominantly on nonbank deposit funding, maintain liquidity cover consolidated across all currencies in excess of 100 percent (but lower for U.S. dollars), are highly profitable, and have limited maturity mismatches and very low nonperforming loans (about 1 percent). Expansion by domestic banks into the region has contributed significantly to their recent profitability as the banks took advantage of faster-growing markets with higher interest margins. Loan growth in Singapore and the region has been rapid in recent years, increasing banks' exposure to regional and global effects of exit from UMPs.

1/ Households also have large savings in the mandatory defined-contribution Central Provident Fund.

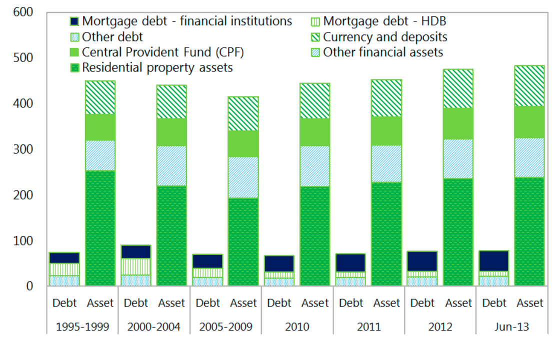
Box 2. Singapore: Balance Sheet of the Private Sector (Concluded)

Household Net Worth, June 2013
(In billions of Singapore dollars)



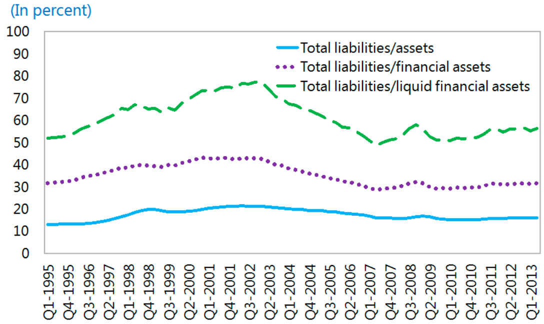
Source: Department of Statistics Singapore.

Composition of Household Debt and Asset
(In percent of GDP)



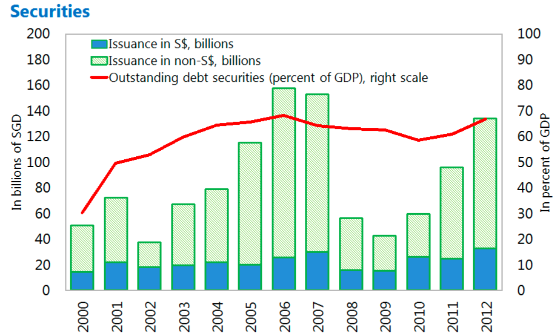
Source: Singstat; and IMF staff calculations.

Household Leverage 1/
(In percent)



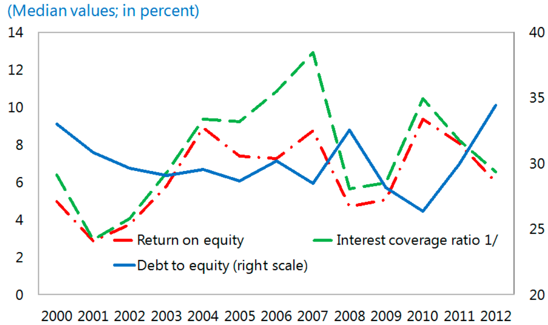
Sources: Singstat; and IMF staff calculations.
1/ Liquid financial assets include currency and deposits and shares and securities.

Corporate Debt Issuance and Outstanding Corporate Debt Securities



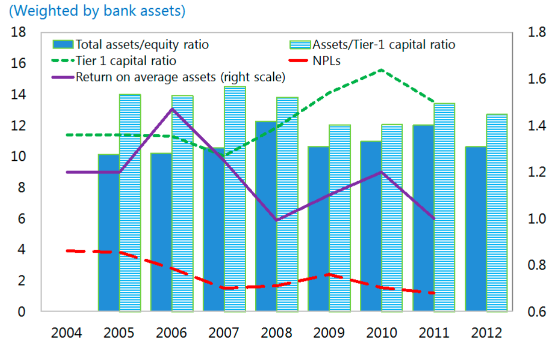
Source: MAS, *Corporate Debt Survey*.

Publicly Listed Corporates' Financial Indicators
(Median values; in percent)



Source: IMF, *Corporate Vulnerability Unit* based on Thompson Reuters data.
1/ EBIT/interest payments due.

Domestic Banks: Tier 1 Capital, NPLs, Return on Assets, and Leverage
(Weighted by bank assets)



Sources: Bankscope; MAS; and IMF staff estimates.

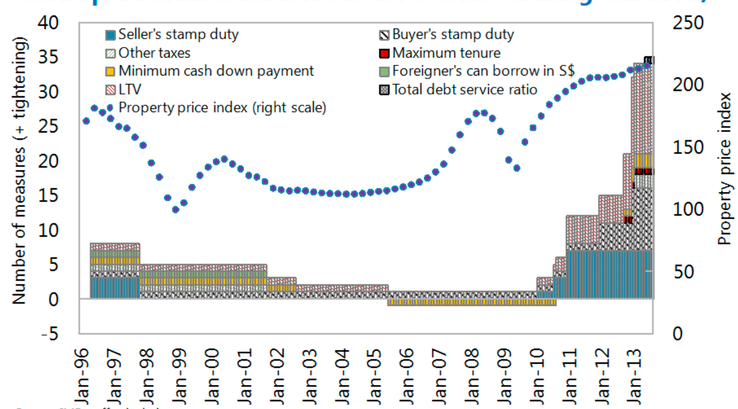
Box 3. Singapore—Macroprudential Measures on Housing—A Historical Perspective

Singapore is a pioneer in the use of macroprudential policies (MaPs) to moderate financial stability risks arising from the housing market. This usage dates back to 1996, when a package of cooling measures was adopted amid sharply rising prices and speculative activity. Some of these measures were subsequently reversed following the onset of the Asian financial crisis and with house prices remaining relatively subdued through the early 2000s. A new tightening cycle began in 2009 in an effort to cool renewed housing market pressures.

During both tightening episodes, measures targeted mainly speculative activity, while protecting owner-occupied mortgages.[1/] Buyer stamp duties on purchases of unfinished properties (introduced in 1996), higher seller stamp duties on properties sold within four years (introduced in 2011), and capital gains on properties sold within three years of purchase (introduced in 1996 and rescinded in 2001) were intended to discourage property "flipping." LtV limits were set at lower levels for holders of multiple mortgages to reduce access to credit for investment properties, while insulating households with single mortgages. Concern about speculative activity by foreigners and domestic corporations led to the imposition of a higher buyer's stamp duty for these groups. New types of measures, including caps on loan tenors and debt service-to-income ratios, were introduced recently to prevent borrowers from becoming over-extended.

Since 2009, the range of MaP tools has become broader, while some classes of tools have been used more intensively. Relative to the 1990s, in recent years the variety of MaPs has increased, with the introduction of maximum loan tenors and the total debt service to income limit (illustrated in the chart by a broader array of colors than previously). Also, some categories of measures (e.g., LtVs, stamp duties) have been tightened incrementally over time (where introduction or tightening of a specific measure is shown as an increase in the area of the corresponding color)—for example, by capping the LtV on second and additional mortgages at a lower level.

Macroprudential Measures For the Private Housing Market 1/



Source: IMF staff calculations.

1/ The figure shows the cumulative number of changes in the macroprudential framework under different instruments, where an increase (decrease) means tightening (loosening). A change in macroprudential measures includes a) revising an existing measure (eg. lowering the LTV for the first mortgage loan from 90 to 80) and b) the introduction of a new measure (eg. the additional buyers' stamp duty on non-residents and non-individual buyers or introducing a higher LTV for the second mortgage).

Sequential refinement of individual classes of measures has tended to introduce greater specificity, and hence complexity, into the regulations. This highlights the inherent trade-off between minimizing policy errors and closing loopholes on the one hand, and introducing administrative complexity on the other.

1/ Boosting housing supply was also part of the policy response.

Box 3. Singapore: Macroprudential Measure on Housing—A Historical Perspective (Continued)

Date	Property Market Measures
September 2009	The *interest absorption scheme* (allowing some deferment of principal payments) and *interest-only housing loans* for private residential projects were disallowed.
February 2010	*Loan-to-value (LtV) ceilings* were lowered to 80 percent from 90 percent for all housing loans provided by banks (including for HDB flats).
	A *seller's stamp duty (SSD)* was introduced on all residential properties sold within one year of purchase at the rate of 1 percent for the first S$180,000, 2 percent for the next S$180,000, and 3 percent for the remaining balance.
August 2010	*LtV ceilings* were reduced from 80 percent to 70 percent for buyers with at least one existing mortgaged property.
	The *SSD* was extended to sales within three years of purchase, with rates depending on the holding period (the full SSD rate (i.e. 1 percent for the first S$180,000, 2 percent for the next S$180,000, and 3 percent for the remaining balance) if sold within one year of purchase, 2/3 of the full SSD rate if sold within the 2nd year after purchase, and 1/3 of the full SSD rate if sold within the 3rd year after purchase).
	For buyers with at least one existing mortgaged property, the *minimum cash payment not sourced from CPF savings* was increased from 5 percent to 10 percent of the valuation limit.
January 2011	The *SSD* was extended to sales within four years of purchase, with the rates raised to 16 percent, 12 percent, 8 percent, and 4 percent correspondingly.
	LtV ceilings were lowered to 60 percent for individuals with at least one existing mortgaged property and to 50 percent for corporates.
December 2011	An *additional buyer's stamp duty* on residential property purchases was imposed (in addition to the existing duty of up to 3 percent). The rate is 10 percent for foreigners and corporate entities buying any residential property, 3 percent for permanent residents buying their second or subsequent property or for Singapore citizens buying their third or subsequent property.
October 2012	The maximum tenor of all new residential property loans (including refinancing loans) will be capped at 35 years. This will apply to both private properties and HDB flats. Refinancing facilities are also subject to loan tenor rules in that the sum of the tenor of the refinancing facility and the number of years since the first housing loan granted to the borrower for the purchase of that residential property was first disbursed, cannot exceed 35 years.
	If loans exceed 30 years tenor or if the loan period extends beyond the retirement age of 65 years, the *loan-to-value (LTV)* limit will be 40 percent for a borrower with one or more outstanding residential property loans and 60 percent for a borrower with no outstanding residential property loan. *LTV* limit for residential property loans to non-individual borrowers will also be reduced from 50 percent to 40 percent.
January 2013	*Additional buyer's stamp duty rates* will be raised between 5 percent and 7 percent across the board. Permanent residents purchasing their first property and Singaporeans purchasing their second residential property will now be subject to additional buyer's stamp duty rates of 5 percent and 7 percent respectively. Permanent residents purchasing their second and subsequent properties and Singaporeans purchasing their third and subsequent properties will have to pay additional buyer's stamp duty of 10%. Companies and foreigners will be subject to additional buyer's stamp duty of 15% on all purchases of residential property.
	Loan to value limits on loans granted by financial institutions will be tightened for a) individuals obtaining a second housing loan (from 60 percent to 50 percent for individuals, from 40 percent to 30 percent if loan tenor exceeds 30 years or if the loan period extends beyond the borrower's retireement age of 65); b) individuals obtaining a third or more housing loan (from 60 percent to 40 percent for individuals, from 40 percent to 20 percent if loan tenor exceeds 30 years or if the loan period extends beyond the borrower's retireement age of 65); c) non-individuals such as companies (from 40 percent to 20 percent).
	The minimum cash down payment for individuals applying for a second or subsequent housing loan will also be raised from 10 percent to 25 percent.
	Measures on Public Housing: Cap on the Mortgage Servicing Ratio (MSR) for housing loans to buy HDB flats (public housing) granted by financial institutions at 30 percent of a borrower's gross monthly income. For loans granted by HDB, the cap on the MSR will be lowered from 40 percent to 35 percent. Permanent residents who own a HDB flat will be disallowed from subletting their whole flat. Permanent residents who own a HDB flat must sell their flat within six months of purchasing a private residential property in Singapore. An additional measure will take effect on 1 July 2013 to tighten the terms for granting HDB loans and the use of CPF funds for the purchase of HDB flats with remaining leases of less than 60 years.
	Measures on Executive Condominiums: The maximum strata floor area of new EC units will be capped at 160 square metres. Sales of new dual-key EC units will be restricted to multi-generational families only. Developers of future EC sale sites from the Government Land Sales programme will only be allowed to launch units for sale 15 months from the date of award of the sites or after the physical completion of foundation works, whichever is earlier. Private enclosed spaces and private roof terraces will be treated as gross floor area (GFA). The GFA of such spaces in non-landed residential developments, including ECs, will be counted as part of the 'bonus' GFA of a residential development and subject to payment of charges. This is in line with the treatment of balconies under URA's current guidelines.
	Measures on industrial space: Introduction of Seller's Stamp Duty (SSD) on industrial property and land bought on or after 12 Janaury 2013 and disposed within three years of purchase. The following SSD rates will be imposed: 15 percent if sold within one year, 10 percent if within two years, and 5 percent if within three years.
February 2013	*Property taxes*: The progressivity of property taxes for owner-occupied and non-owner-occupied properties are increased. New rates will be effective January 1, 2014.
June 2013	*Total Debt Servicing Ratio*: Total debt servicing ratio should not exceed 60 percent for credit facilities that are collateralized by property. Debt service on the housing loan under application needs to be calculated based on a medium-term interest rate of 3.5 percent or the prevailing market interest rate, whichever one is higher. Further, debt service on non-residential property loans under application is to be computed based on medium-term interest rates of 4.5% or the actual rate, whichever is higher. Debt service on all other debt obligations is based on the actual debt service paid. Income needs to be calculated applying certain haircuts to the variable component of income and rental income.
	Refinement to previous measures: Borrowers named on a property loan are required to be mortgagors of the residential property for which the loan is taken. Guarantors need to be brought in as co-borrowers if the borrower does not meet the TDSR threshold of 60 percent. In case of joint borrowers, income-weighted average age of borrowers should be used in applying rules on loan tenor.
August 2013	Measures on public housing: Maximum tenor for HDB housing loans are reduced from 30 years to 25 years. The Mortgage Servicing Ratio (MSR) limit is also reduced from 35 percent to 30 percent of the borrower's gross monthly income. In tandem, the maximum tenor of new housing loans and re-financing facilities granted by financial institutions for the purchase of HDB flats (including DBSS flats) were reduced from 35 years to 30 years. New loans with tenors exceeding 25 years and up to 30 years will be subject to tighter loan-to-value (LTV) limits. Permanent residents (PRs) will need to wait three years from the date of obtaining PR status, before they can buy a resale HDB flat. Conditions for qualifying for CPF Housing Grants for (first-time and second-time purchasers)were loosened.
2009-present	*Supply of public housing and land* sold to private developers has been increased.

Box 3. Singapore: Macroprudential Measure on Housing—A Historical Perspective (Concluded)	
Date	Other Macroprudential Measures
March 2009	*Unsecured Credit:* Financial institutions will be required to conduct comprehensive checks with the credit bureau before granting each new credit card, charge card or unsecured credit facility. Financial institutions will be restricted from unsolicited offers of unsecured credit facilities, unless a written request is provided by the customers. More explicit requirements on disclosure of credit cards and unsecured credit.
	Unsecured Credit: Minimum income requirement for credit cards remain the same but it will be lowered from $30,000 to $20,000 for other unsecured credit facilities. An aggregate maximum credit limit for all unsecured credit and credit cards across all affiliated entities will be set at four times the borrower's monthly income for individuals earning at least $30,000. For individuals with an annual income below $30,000, who are therefore not eligible for credit cards, a maximum credit limit of two times the borrower's monthly income will apply.
February 2013	Motor Vehicle Lons: Loan-to-value (LtV) ceilings were introduced. For cars with an open market value not more than $20,000, maximum LTV is set at 60 percent of the purchase price, including relevant taxes and the price of the Certificate of entitlement. Maximum LTV for cars with a higher open market value is set at 50 percent.
	Motor Vehicle Loans: Maximum tenor of a motor vehicle loan is capped at 5 years.
April 2013	*Motor Vehicle Loans:* Restrictions introduced in February 2013 will be lifted for a period of 60 days for the purchase of used cars that were part of car dealers' inventory before the introduction of restrictions.
	Motor Vehicle Loans: The scope of financing restrictions will be extended to all entities that finance car purchases, including those that are not regulated by MAS.
September 2013	*Credit card and unsecured credit rules:* Financial institutions will be required to review a borrower's total debt and credit limits before granting a new credit card or unsecured credit facility, or increasing the credit limit on such facilities. Financial institutions will be required to disclose to individuals who roll over their credit card debts and revolving credit facilities the potential cost of doing so and how the debt will accumulate. Financial institutions will be required to obtain a borrower's express consent for the amount of each credit limit increase. Financial institutions will not be allowed to grant further unsecured credit to individuals whose unsecured debts with those financial institutions are more than 60 days past due, until all past due amounts are paid. Financial institutions will not be allowed to grant further unsecured credit to individuals whose aggregate interest-bearing outstanding unsecured borrowings across all financial institutions exceed 12 months of their income for 90 days or more. These changes are to be implemented progressively between December 2013 and June 2015.

Box 4. Singapore as a Financial Center

Notwithstanding volatile global financial conditions in recent years, Singapore has continued to grow as a major international financial center:

- Balance sheets of domestic and foreign banks total almost 6 times GDP (US$1.7 trillion). In recent years, the "Big 3" domestic banks, accounting for about one third of total bank assets, have expanded regionally (mainly in China, Indonesia, Malaysia), where credit penetration is lower and margins are wider. Foreign banks operate mainly as branches, with funding from and lending to all regions of the world, but with a focus on East Asia, including Singapore.

- Assets managed by fund managers have grown rapidly over the past decade to US$1.3 trillion in 2012. About 70 percent of AUM is invested in the Asia-Pacific region.

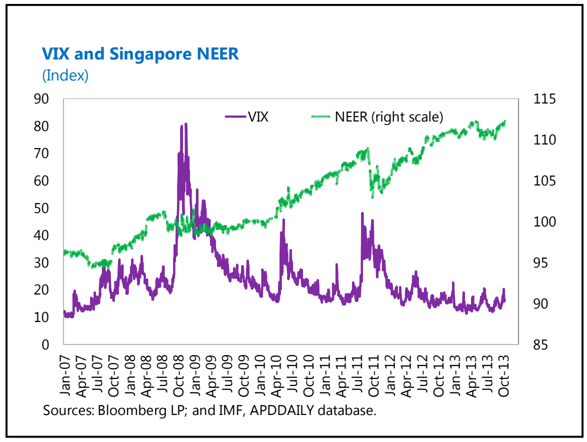
- With average daily turnover equivalent to US$360 billion during the first seven months of 2013, Singapore has become the third largest global fx trading platform, and the largest in Asia.

- Singapore is one of the largest trading centers for over-the-counter (OTC) derivatives in Asia, with a notional amount outstanding of S$8.9 trillion (US$7.2 trillion) as of January 2013, composed mainly of interest and fx derivatives.

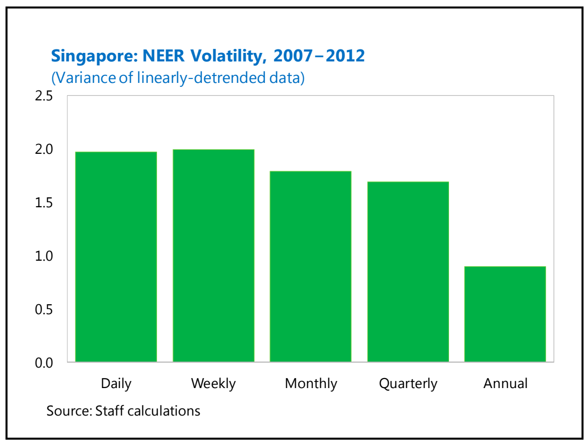
- Singapore is a large regional player in the corporate debt market. Outstanding corporate debt securities were US$189 billion (S$231 billion) at end-2012 . Issuance volumes picked up in recent years, recording US$74 billion and US$110 billion in 2011 and 2012, respectively. In 2012, about 75 percent of all issuances were in foreign currencies. Among Singapore dollar issuances, non-Singaporean firms accounted for nearly one quarter of the total.

Box 5. Is Singapore a Safe Haven?

Safe haven currencies are those that hold their value or appreciate during bouts of elevated global risk aversion. Economies with safe haven currencies tend to be issuers of a reserve currency, have deep and liquid financial markets, and may have a strong net foreign asset position. A safe haven is typically identified by observing a positive correlation between changes in the NEER and the VIX at high frequencies. Only the U.S. dollar, Japanese yen, and Swiss franc have exhibited this feature since the onset of the global financial crisis (see 2013 Pilot External Sector Report). This correlation has been negative for Singapore (-0.48), but the estimated correlation is influenced by periods of extreme volatility when thresholds for uncertainty are breached. This finding is consistent with anecdotal reports of increased short-term inflows during periods of moderate global stress, and suggest that Singapore may be considered a safe haven "during a tremor, but not an earthquake."



Over longer horizons, on the other hand, several structural features make Singapore an attractive safe haven. These include its high sovereign investment rating, large reserves, and strong banks. In addition, Singapore's monetary policy framework may contribute to its safe haven status through the appreciating exchange rate trend over the medium term. This can be seen by comparing the variance of the linearly detrended NEER at different frequencies, where one observes a marked decline at the annual frequency (see text figure). Thus, the appreciating trend, combined with the reduced variance, suggests that the Singapore dollar provides predictable returns for longer-term inflows.



These results suggest that although Singapore does not possess all the characteristics typical of economies with safe haven currencies, a predictable exchange rate trend combined with strong fundamentals may make Singapore a safe haven for medium-to-long term investment inflows.

Box 6. Singapore: FSAP Update—Key Recommendations 1/

Short-Term Implementation (within 12 months)

1. Increased attention to onsite inspections of banks' credit risk (paragraph 12).
2. Monitor LCR ratios for significant foreign currencies (paragraph 13).
3. Mitigate legal risks to CCPs from conflicts of law across jurisdictions (paragraph 30).
4. The CCPs to explore with members the possibility of widening their collateral pool and examine the feasibility of receiving Singapore government securities as collateral to improve access to central bank liquidity in times of stress (paragraph 33).
5. Consider subjecting loans for owner-occupied housing to a limit to be set by MAS (paragraph 43).
6. Encourage over-extended households to reduce their leverage (paragraphs 44 and 45).
7. Stand ready to adjust macroprudential measures in the housing market in line with changes in market conditions (paragraph 46).

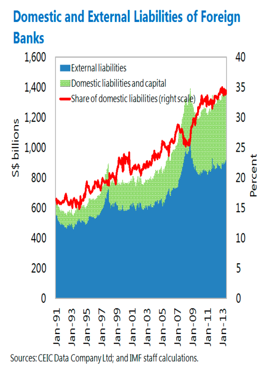
Medium-Term Implementation (1–3 years)

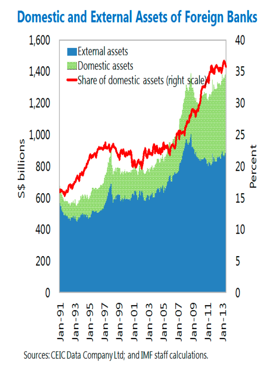
8. Further strengthen banks' capital framework, with implementation of the countercyclical capital buffer in line with the Basel III timelines (paragraph 10).
9. Further develop SGX recovery plans, identifying additional scenarios (paragraph 29).
10. Upgrade the collateral that covers credit exposures related to the link with the Chicago Mercantile Exchange (CME) (paragraph 34).
11. Formalize bilateral cooperative crisis management agreements for FMIs (paragraph 56).
12. Collect more granular data on household balance sheets, drawing on surveys and strengthened credit bureau practices (paragraph 45).
13. Authorize the Singapore Deposit Insurance Corporation (SDIC) to provide support, on a least-cost basis, for the transfer of deposit liabilities to a bridge bank or healthy institution (paragraph 65).
14. Ensure that the banking industry adequately contributes to the costs of bank failures (paragraph 65).
15. Further facilitate cross-border cooperation in bank resolution (paragraph 64).
16. Consider changes to the structure of the MAS Board to strengthen operational independence in financial supervision (paragraph 49).
17. Ensure that MAS' mandate for prudential supervision is not compromised by its developmental mandate (paragraph 49).
18. Review and strengthen the resolution framework to enhance MAS' operational independence in bank resolution (paragraph 59).

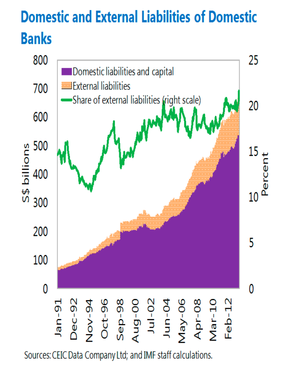
1/ Paragraph references relate to the *2013 Financial Sector Stability Assessment* report. Additional specific recommendations are found in the FSSA's Detailed Assessment Reports (DARs).

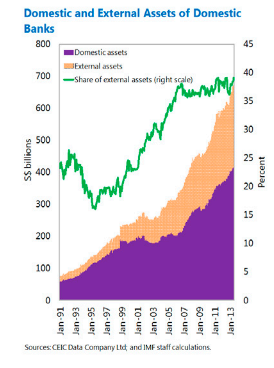
Box 7. Singapore: Financial Sector Spillovers

Banks operating in Singapore have gradually reduced their geographic specialization. Historically, domestic banks maintained an almost exclusive home orientation in their funding and lending activities, while foreign branches intermediated funds between jurisdictions outside of Singapore. Although this broad pattern still persists, it has become less pronounced in recent years. Domestic banks have increased their regional footprint in order to diversify lending into markets with wider interest margins and lower credit penetration, while also raising their foreign funding, but by less than the increase in foreign assets. At the same time, liberalization of banking and financial regulations encouraged foreign subsidiaries and branches to tap onshore Singapore dollar funding. Alongside this increase in local funding, foreign banks expanded their Singapore-domiciled assets, thereby maintaining a "hedged" geographic exposure. As a result of foreign and domestic banks' expansion in Singapore and the region, banking assets stood at close to 600 percent of GDP in 2012.







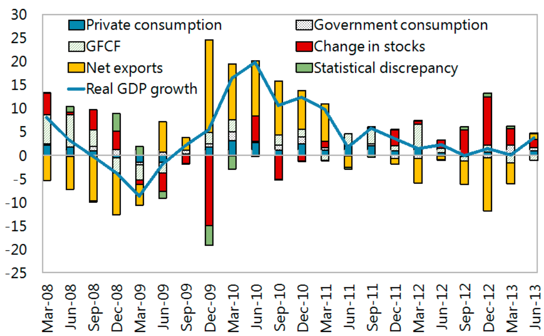


The cross-border expansion of banks' activities has increased transmission channels for external stability risks. Foreign branches, especially G-SIFIs, rely heavily on cross-border interbank funding, which tends to have short maturities and the cost of which varies with global financial market volatility and perceptions of counterparty risk. In fact, since the GFC, foreign banks in Singapore have increased their onshore funding at the expense of external interbank funding in view of the scaling back of the global interbank market on concerns over elevated counterparty risk. Of their remaining interbank funding, a higher share is now sourced from within the bank group, exposing Singapore branches to potential liquidity shortfalls in the parent. While domestic banks do not rely significantly on interbank funding, they retain some exposure to global risk sentiment because an important segment of their overseas lending is denominated in U.S. dollars, which is funded in part by swapping out of Singapore dollars. The fx swap market is vulnerable to rollover and repricing risk and may seize up during stress episodes. Regional lending may also entail higher credit risk.

MAS has adopted several measures to dampen cross-border financial spillovers. Enhanced supervision of foreign branches and monitoring of emerging risks are critical. Singapore's regulation and supervision of its financial sector was judged by the 2013 FSAP Update to be among the best in the world, as warranted by its role as one of the world's largest financial centers. Nonetheless, because foreign banks—including several G-SIFIs—are present in Singapore as branches, this restricts MAS's regulatory authority, particularly as regards capital, which is determined by the home supervisor and held at the level of the parent. To overcome these limitations, MAS has adopted two policies:
(i) qualifying full banks (QFBs) with significant domestically-sourced deposits will be required to incorporate their local retail business in Singapore as a subsidiary, and hence be subject to MAS regulation and supervision of capital; and
(ii) for remaining foreign branches, an asset maintenance requirement (AMR) mandates them to hold Singapore-domiciled assets in proportion to their nonbank deposits booked in Singapore. This requirement may account for the geographically hedged position of foreign banks. The AMR may have had a role in limiting foreign branches' drawdown of their Singapore assets at the height of the Lehman crisis. MAS also asked domestic banks to reduce exposure to potential U.S. dollar funding shocks.

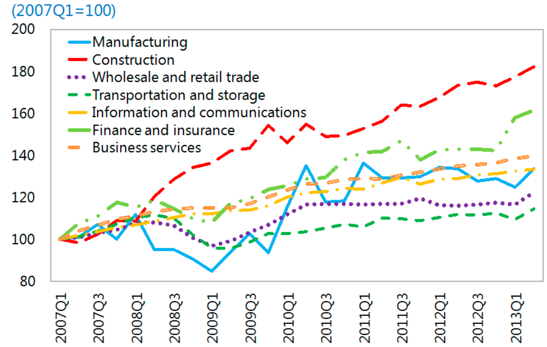
Figure 1. Singapore: Real Sector

Contribution to Real GDP Growth
(In percent, year-on-year)



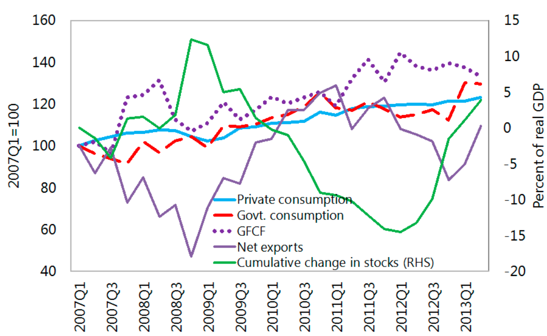
Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Real GDP by Industry, Seasonally Adjusted
(2007Q1=100)



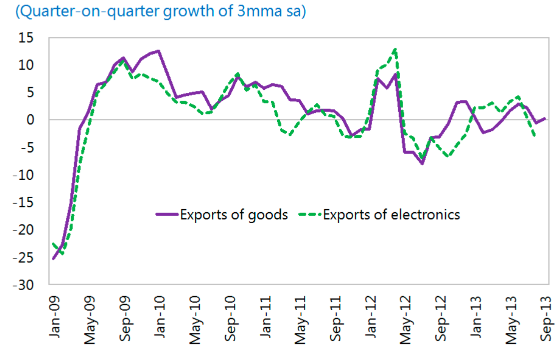
Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Real GDP by Expenditure, Seasonally Adjusted



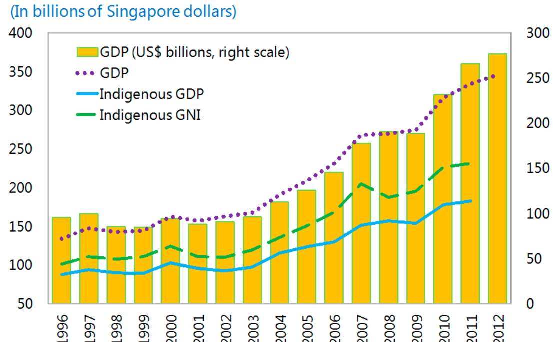
Sources: CEIC Data Company Ltd; and IMF staff calculations.

Exports
(Quarter-on-quarter growth of 3mma sa)



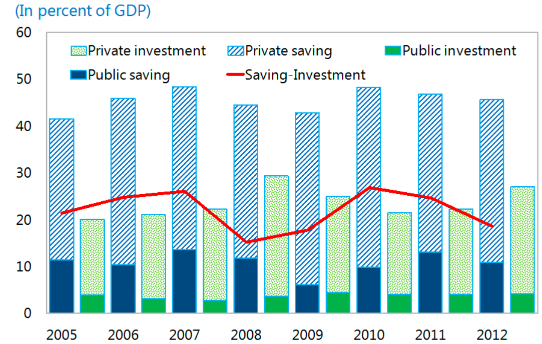
Sources: Haver Analytics; and IMF staff estimates.

Indigenous GDP and GNI
(In billions of Singapore dollars)



Sources: *Yearbook of Statistics Singapore*; and CEIC Data Company Ltd.

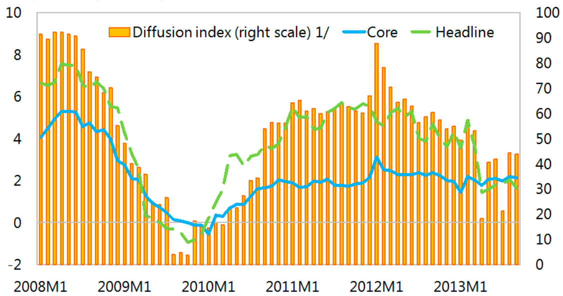
Saving and Investment
(In percent of GDP)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.

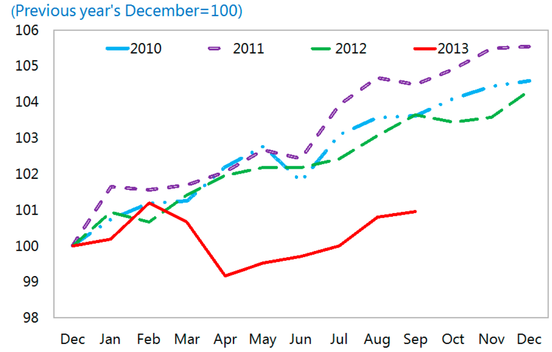
Figure 1. Singapore: Real Sector (Concluded)

Inflation
(In percent, year-on-year)



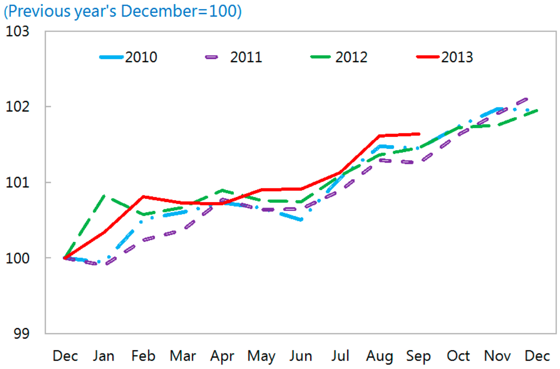
Sources: CEIC Data Company Ltd.; and IMF staff calculations.
1/ Share in the overall CPI basket of components for which y/y inflation exceeds 3 percent.

CPI: Headline
(Previous year's December=100)



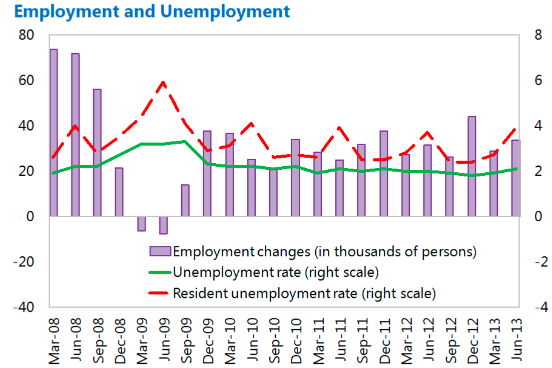
Source: CEIC Data Company Ltd.

CPI: Core (IMF)
(Previous year's December=100)



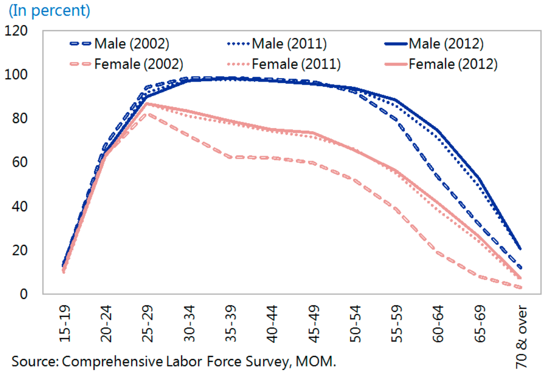
Source: CEIC Data Company Ltd.

Employment and Unemployment



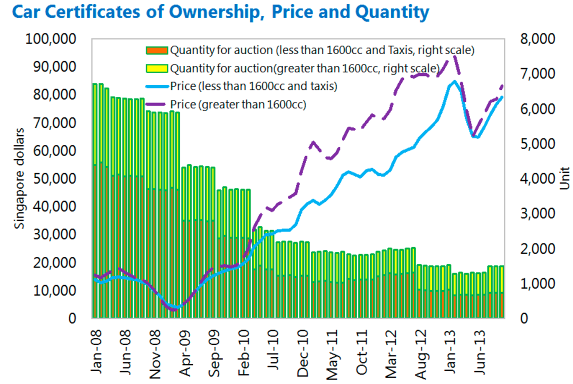
Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

Resident Labor Force Participation Rate by Gender and Age
(In percent)



Source: Comprehensive Labor Force Survey, MOM.

Car Certificates of Ownership, Price and Quantity

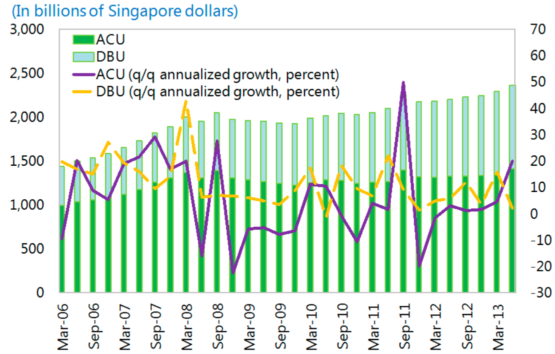


Source: CEIC Data Company Ltd.

Figure 2. Singapore: Banking Sector 1/

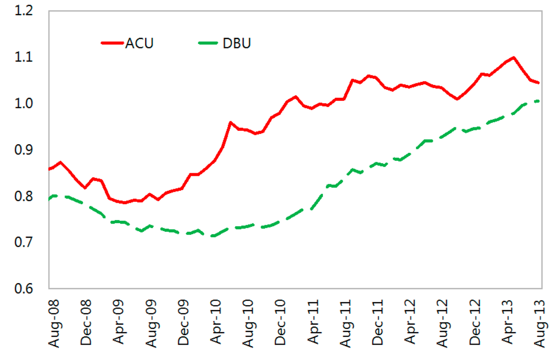
Banking Sector: Combined Assets

(In billions of Singapore dollars)



Source: CEIC Data Company Ltd.

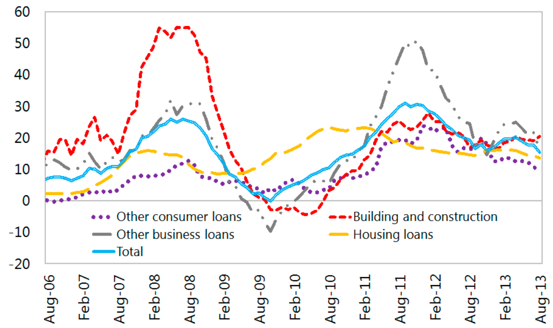
Banking Sector: Loan to Deposit Ratio



Source: CEIC Data Company Ltd.

DBU Loans and Advances by Sector

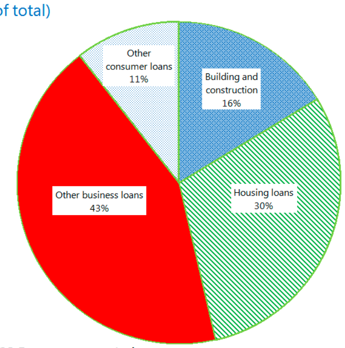
(Year-on-year growth)



Source: CEIC Data Co. Ltd.

DBU Loans and Advances by Sector, August 2013

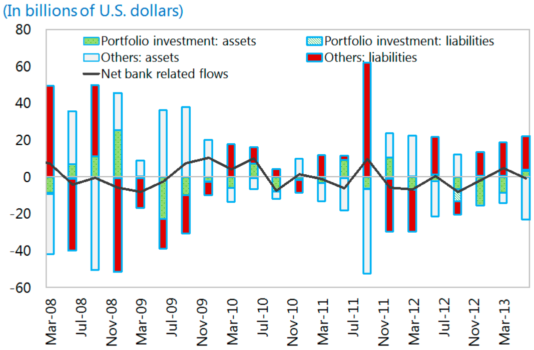
(In percent of total)



Source: CEIC Data company Ltd.

Gross Bank-Related Financial Account Flows in the BoP

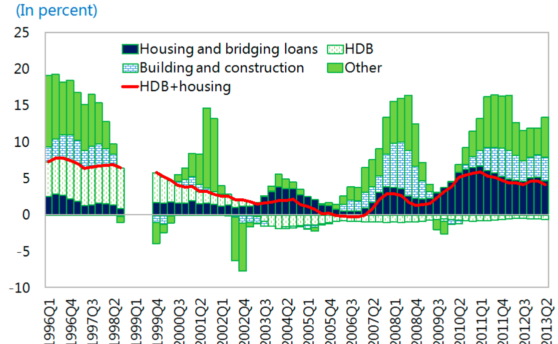
(In billions of U.S. dollars)



Source: CEIC Data Company Ltd.

Composition of Loan Growth

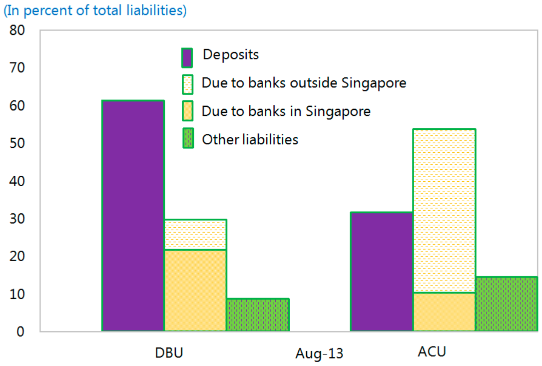
(In percent)



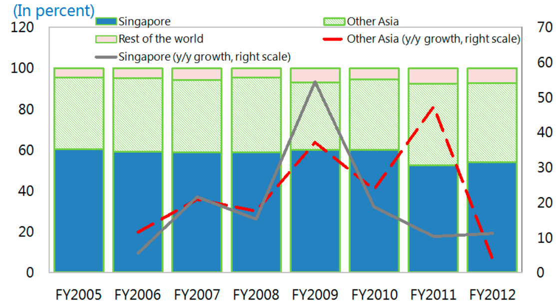
Sources: Monetary Authority of Singapore; CEIC Data Company; and Department of Statistics, Singapore.

Figure 2. Singapore: Banking Sector (Concluded) 1/

Funding Structure of the Banking System
(In percent of total liabilities)

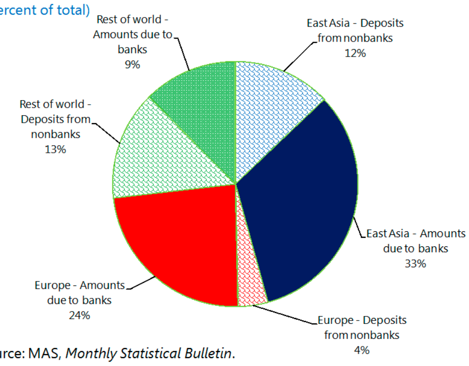


Big 3 Singapore Incorporated Banks: Geographic Distribution of Customer Loans 1/
(In percent)



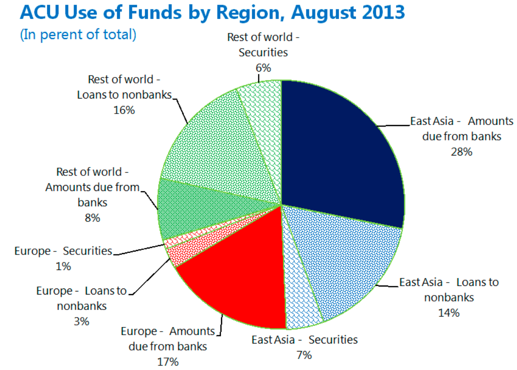
Sources: Banks' financial reports and annual reports; and IMF staff estimates.
1/ Classification varies by bank. OCBC, location of credit risk; DBS, location of borrower incorporation; and UOB, booking location.

ACU Funding Sources by Region, August 2013
(In percent of total)



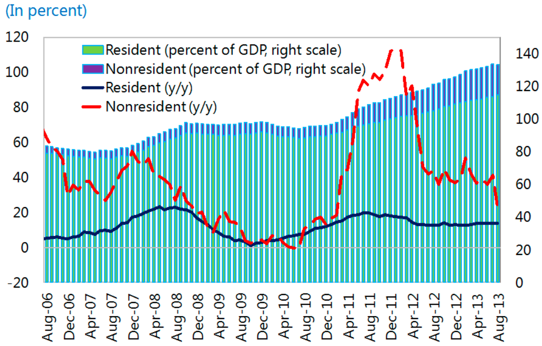
Source: MAS, *Monthly Statistical Bulletin*.

ACU Use of Funds by Region, August 2013
(In perent of total)



Source: MAS, *Monthly Statistical Bulletin*.

DBU Loans and Advances by Borrowers' Residence
(In percent)

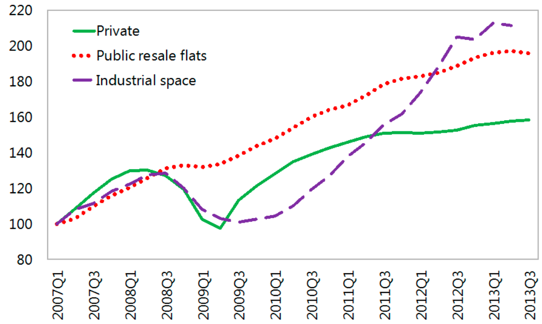


Sources: CEIC Data Co. Ltd; and IMF staff estimates.

1/ Asian currency unit (ACU) banking books are for non-Singapore dollar transactions, while domestic banking unit (DBU) books may include transactions in Singapore dollars and other currencies. Historically, ACU and DBU were analogous to foreign and domestic banks, respectively. More recently, banks with full banking licenses may maintain both DBU and ACU books, and DBU books are not restricted to Singapore dollar activities. Thus, while the ACU-DBU distinction has become blurred, data under an alternative classification that would be more economically relevant is not available.

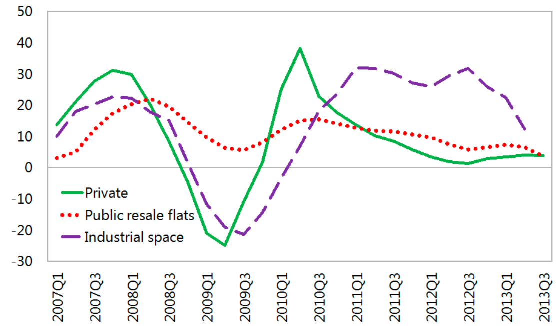
Figure 3. Singapore: Property Market

Property Price Index
(2007:Q1=100)



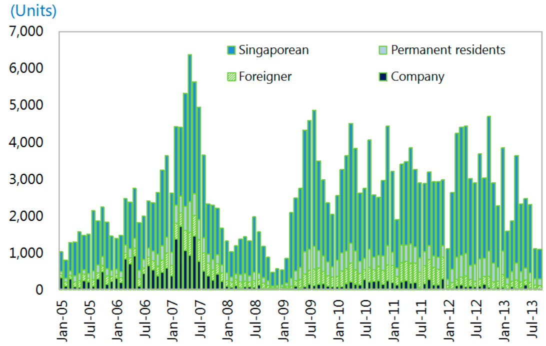
Source: CEIC Data Company Ltd.

Property Price Index
(Year-on-year percent change)



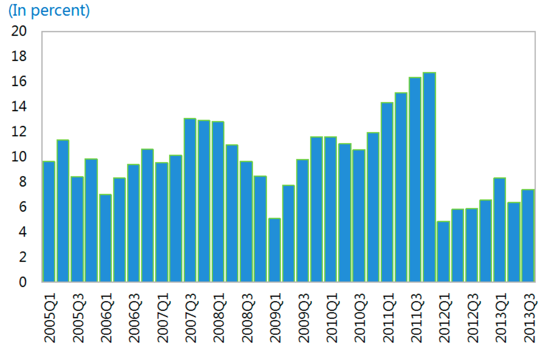
Source: CEIC Data Company Ltd.

Private Property Transactions
(Units)



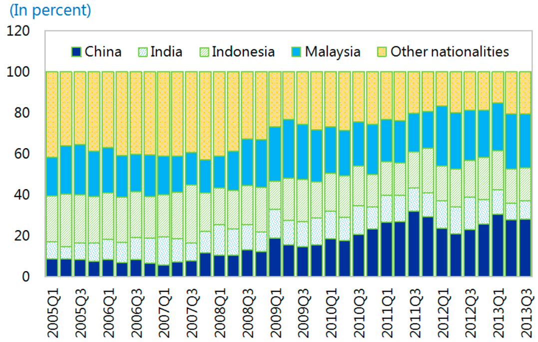
Source: URA, *Realis Transaction Database*.

Foreign Buyers' Share of Private Property Transactions
(In percent)



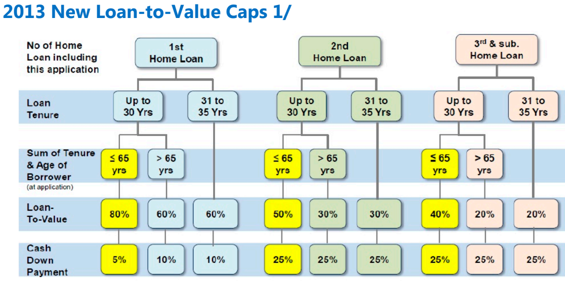
Source: URA, *Realis Transaction Database*.

Private Property Transactions by Nationality of Foreigners
(In percent)



Source: URA, *Realis Transaction Database*.

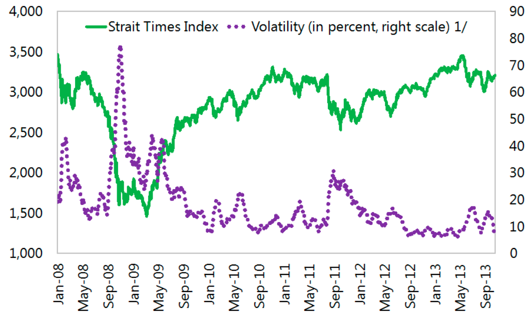
2013 New Loan-to-Value Caps 1/



Source: http://mysgrealty.com/2013-cooling-measures/
1/ For new purchase of residential property by individuals, as of January 2013. LTVs for corporate entities are 20 percent.

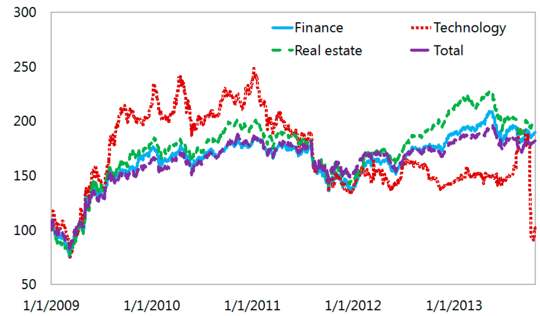
Figure 4. Singapore: Financial Markets

Stock Market Index with Volatility



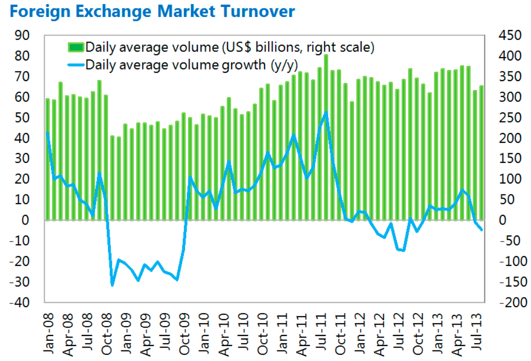
Source: Bloomberg LP.
1/ Standard deviation of 1 year moving average of daily equity price change in log levels.

Stock Market Index
(1/1/2009=100)



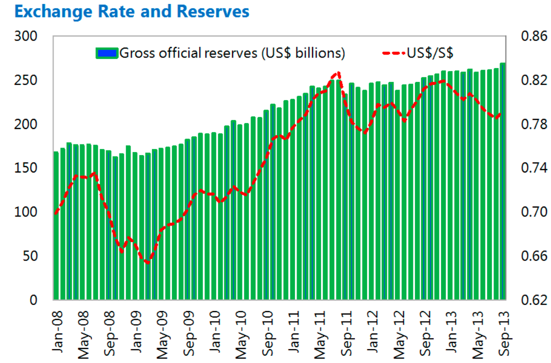
Source: Bloomberg LP.

Foreign Exchange Market Turnover



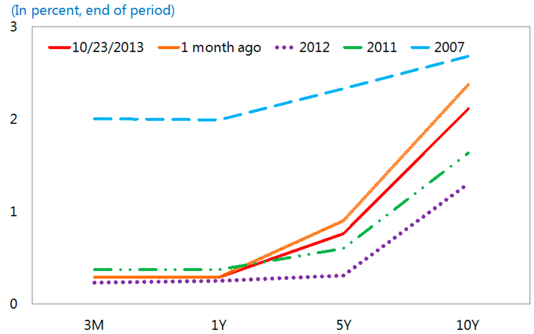
Source: CEIC Data Co. Ltd.

Exchange Rate and Reserves



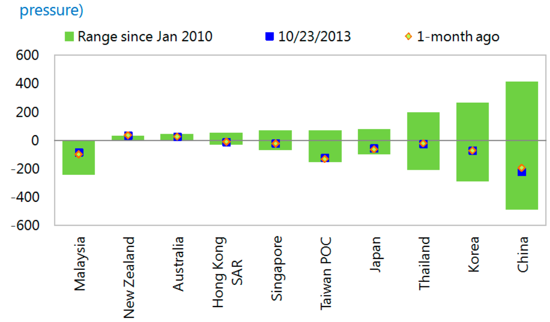
Source: CEIC Data Company Ltd.

Government Bond Yields
(In percent, end of period)



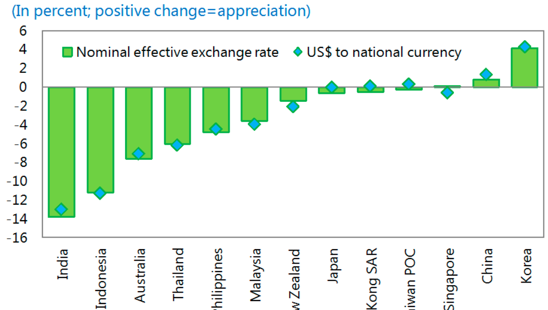
Source: Bloomberg L.P.

U.S. Dollar - Local Currency Basis Swap Spreads (5-year)
(Levels in basis points; higher negative level = increased dollar funding pressure)



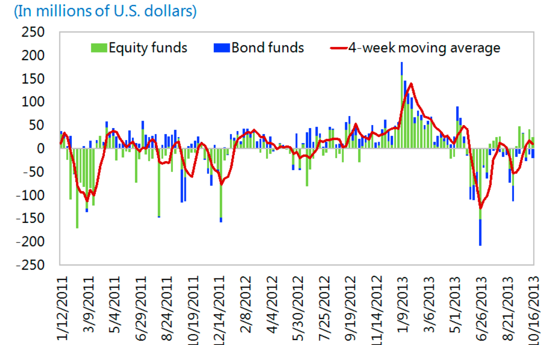
Source: Thomson Reuters Datastream.

Asia: Change in Exchange Rates Since End-April, 2013 1/
(In percent; positive change=appreciation)



Source: Bloomberg L.P.
1/ As of October 23, 2013.

Singapore: Equity and Bond Funds—Weekly Net Flows
(In millions of U.S. dollars)

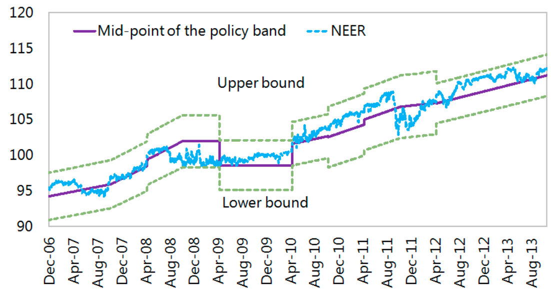


Source: EPFR.

Figure 5. Singapore: Monetary Policy

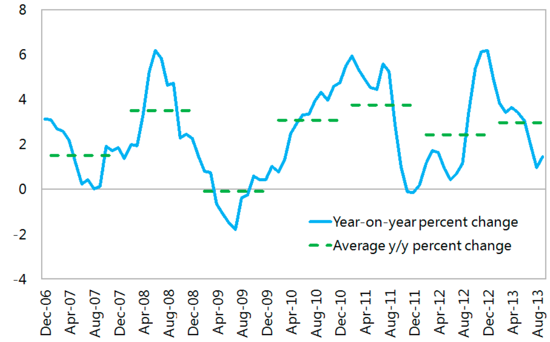
Nominal Effective Exchange Rate and Policy Band 1/

(Jan 1, 2010=100)



Source: IMF, *Information Notice System*; and staff estimates.
1/ Mid-point, lower and upper bounds of the policy band are staff estimates.

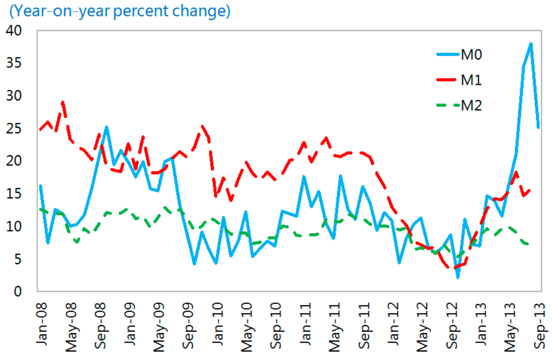
Nominal Effective Exchange Rate



Source: IMF, *Information Notice System*; and staff calculations.

Monetary Aggregates

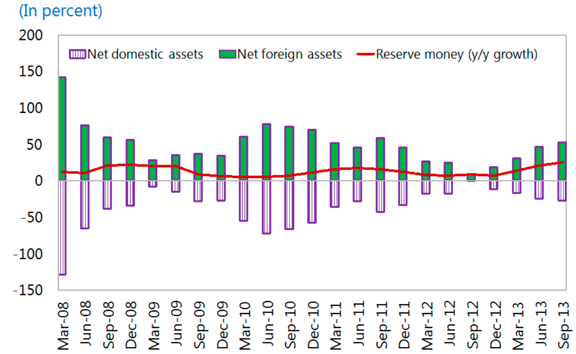
(Year-on-year percent change)



Source: CEIC Data Company Ltd.

Contribution to Reserve Money Growth

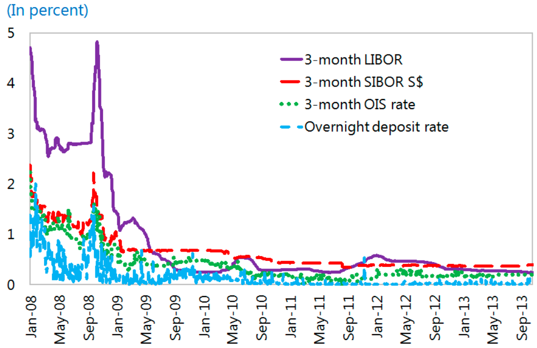
(In percent)



Source: CEIC Data Company Ltd.

Interest Rates

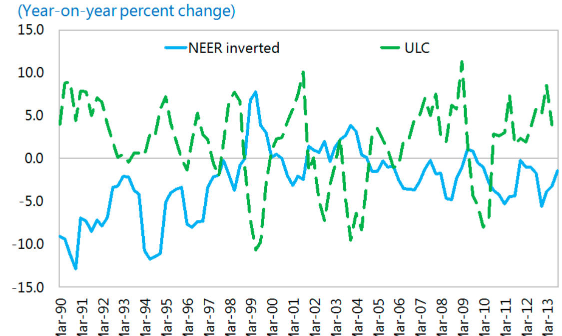
(In percent)



Source: Bloomberg L.P.

NEER and ULC Indices

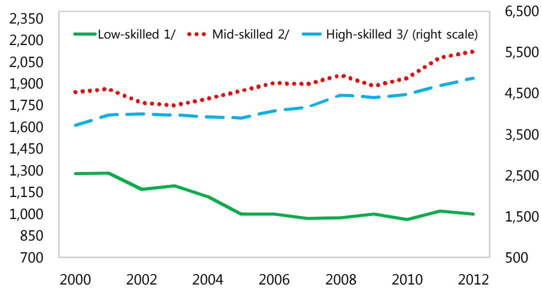
(Year-on-year percent change)



Sources: CEIC Data Co. Ltd.; and IMF, *Information Notice System*, and staff estimates.

Figure 6. Singapore: Social and Equality Indicators

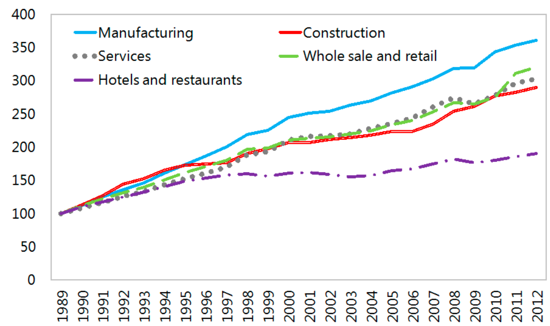
Weighted Gross Monthly Median Wages



Sources: Singapore Department of Statistics; and Ministry of ManPower.
1/ Low-skilled comprises cleaners, labourers and related workers.
2/ Mid-skilled comprises clerical & service workers, shop sales workers, production & craftsmen, plant/machine operators & assemblers.
3/ High-skilled comprises managers, professionals, technicians.

Average Nominal Monthly Earnings

(1989 = 100)



Source: Haver Analytics.

Average Monthly Real Household Income by Decile 1/

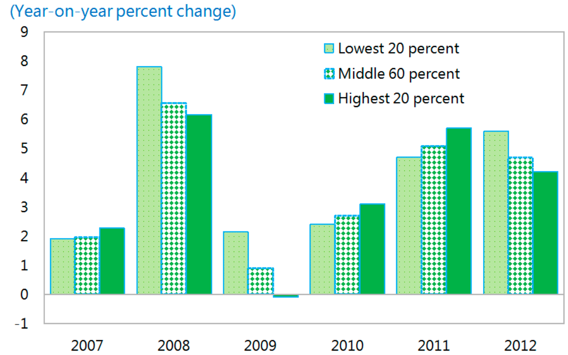
(1995 total = 100)

Decile	1995	2012	Cumulative Change (in percent) 1995–2012	2000–2012	2000–2006	2006–2012
Total	100.0	2,226.3	82.5	41.8	19.1	19.1
1st-10th	21.3	308.6	18.7	6.4	-3.4	10.2
11th-20th	34.4	578.2	37.7	18.0	2.0	15.6
21st-30th	45.1	852.6	55.0	29.2	9.1	18.4
31st-40th	56.6	1,091.1	58.1	31.5	10.8	18.6
41st-50th	68.9	1,352.4	61.0	33.9	12.9	18.6
51st-60th	82.8	1,647.8	63.1	34.0	13.8	17.7
61st-70th	99.2	2,028.7	67.7	35.2	15.3	17.3
71st-80th	123.0	2,576.9	71.8	37.1	18.1	16.1
81st-90th	155.7	3,730.1	96.3	47.4	26.9	16.2
91st-100th	304.1	8,812.3	137.5	66.9	33.3	25.2
Memo:						
Top dec/bottom dec	14.3	28.6				

1/ Income from work per household member in employed households. For 1995–2006, deflated by CPI for the respective income group (lowest 20 percent, middle 60 percent, top 20 percent). Thereafter, all incomes are deflated by headline inflation.

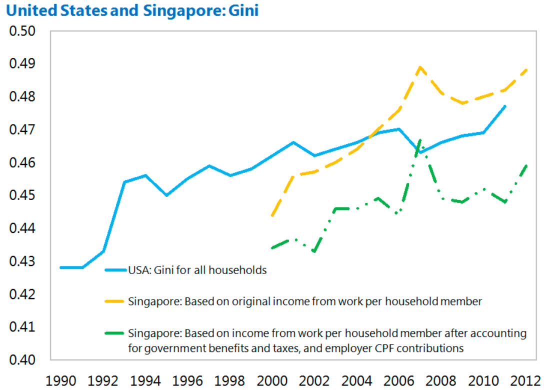
Inflation by Income Group

(Year-on-year percent change)



Source: *Yearbook of Statistics of Singapore*.

United States and Singapore: Gini



United States and Singapore: Mean and Median Household Income

(2000=100)

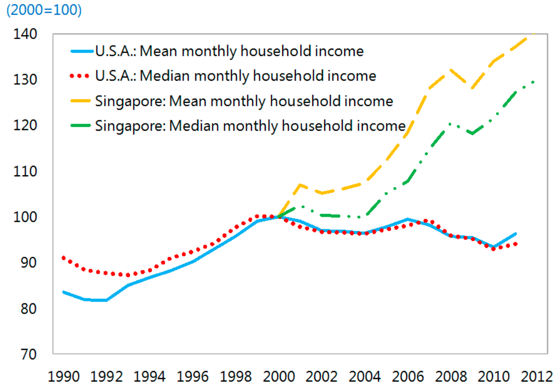
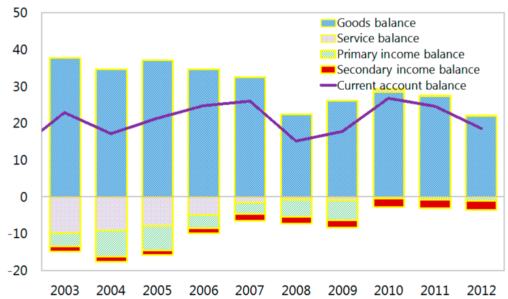


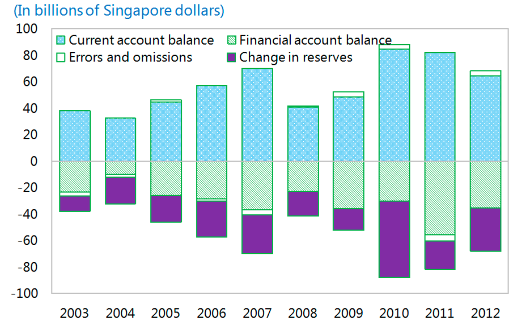
Figure 7. Singapore: External Sector

Current Account Balance
(In percent of GDP)



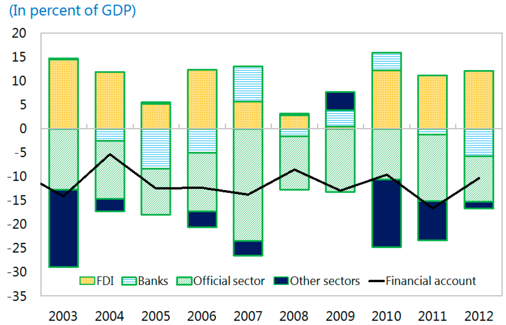
Source: Haver Analytics.

Balance of Payments
(In billions of Singapore dollars)



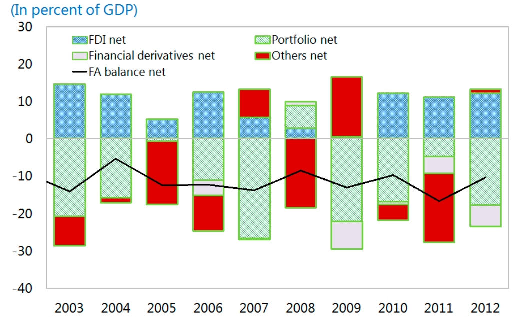
Source: CEIC Data Company Ltd.

Financial Account by Sector: Net
(In percent of GDP)



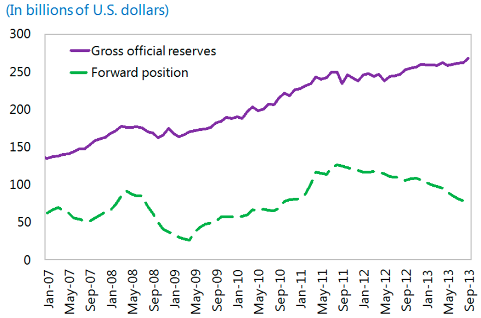
Source: CEIC Data Company Ltd.

Financial Account Balance by Type of Investment
(In percent of GDP)



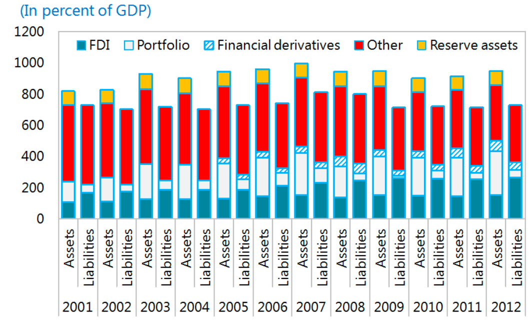
Source: CEIC Data Company Ltd.

Gross Official Reserves and Forward Position
(In billions of U.S. dollars)



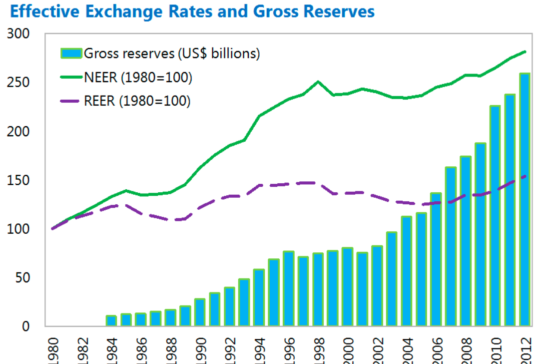
Sources: CEIC Data Co. Ltd; and IMF, *International Financial Statistics* database.

International Investment Position
(In percent of GDP)



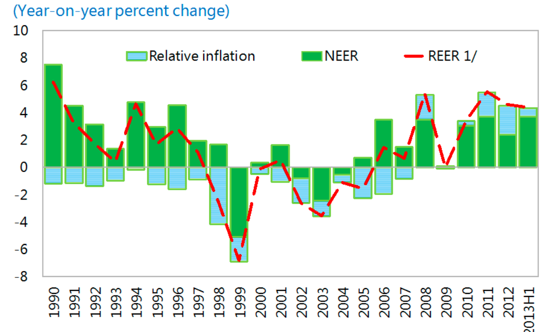
Sources: Singapore, Department of Statistics; CEIC Data Company Ltd.; and Fund staff calculations.

Effective Exchange Rates and Gross Reserves



Sources: IMF, *Information Notice System;* and CEIC Data Company Ltd.

Contribution to REER Growth
(Year-on-year percent change)



Sources: IMF, *Information Notice System*; and staff calculations.
1/ Sum of contributions of relative inflation and NEER.

Table 1. Singapore: Selected Economic and Financial Indicators, 2008–14

Nominal GDP (2012): US$277 billion
Main exports (percent of total domestic exports): Electronic products (21%); chemical products (18%)
GDP per capita (2012): US$52,052
Population (June 2012): 5.3 million
Unemployment rate (2012): 2.0 percent

						Proj.	
	2008	2009	2010	2011	2012	2013	2014
Growth (percentage change)							
Real GDP	1.7	-0.8	14.8	5.2	1.3	3.5	3.5
Total domestic demand	11.8	-7.6	6.6	6.5	9.7	4.1	3.4
Consumption	3.6	0.5	7.2	3.7	0.9	3.9	2.6
Private consumption	2.9	-0.5	6.2	4.6	2.2	2.5	2.8
Gross capital formation	28.5	-21.0	5.4	12.7	26.8	4.5	4.7
Saving and investment (percent of GDP)							
Gross national saving	44.5	42.7	48.2	46.8	45.6	45.3	45.0
Gross domestic investment	29.3	25.0	21.4	22.2	27.0	27.1	27.5
Inflation and unemployment (period average, percent)							
CPI inflation	6.6	0.6	2.8	5.2	4.6	2.5	3.1
Core CPI inflation	5.7	0.0	1.5	2.2	2.5	1.9	2.8
Unemployment rate	2.2	3.0	2.2	2.0	2.0	2.1	2.3
Central government budget (percent of GDP) 1/							
Revenue	24.2	19.3	20.6	23.5	22.9	22.3	22.4
Expenditure	16.3	18.0	15.2	14.5	14.9	16.1	17.2
Overall balance	7.9	1.3	5.4	9.0	8.0	6.3	5.2
Primary balance 2/	-1.0	-3.8	-1.1	0.5	0.8	-0.5	-1.7
Money and credit (end of period, percentage change)							
Broad money (M2)	10.4	8.7	7.6	11.8	6.8	...	...
Credit to private sector	12.4	3.1	13.2	18.9	11.3	...	...
Three-month interbank rate(percent)	1.0	0.7	0.4	0.4	0.4	...	...
Balance of payments 3/ (US$ billions)							
Current account balance	28.8	33.5	62.0	65.3	51.4	52.4	53.9
(In percent of GDP)	(15.1)	(17.7)	(26.8)	(24.6)	(18.6)	(18.3)	(17.5)
Trade balance	42.8	49.3	66.0	72.7	60.9	63.1	67.4
Exports, f.o.b.	354.6	288.5	371.0	434.1	435.8	433.2	457.1
Imports, f.o.b.	-311.7	-239.2	-305.0	-361.5	-374.9	-370.1	-389.7
Financial account balance	-16.2	-24.6	-22.4	-44.2	-28.5	-28.6	-37.7
Overall balance	13.1	11.3	42.2	17.1	26.1	23.8	16.2
Gross official reserves (US$ billions)	174.2	187.8	225.8	237.7	259.3	283.1	299.4
(Months of imports) 4/	(6.5)	(5.6)	(5.7)	(5.8)	(6.3)	(6.6)	(6.6)
Singapore dollar/U.S. dollar exchange rate (period average)	1.41	1.45	1.36	1.26	1.25	...	...
Nominal effective exchange rate (percentage change) 5/	3.51	-0.11	3.07	3.73	2.40	...	...

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

1/ On a calendar year basis.
2/ Overall balance excluding investment income, capital revenue, and interest payments.
3/ The authorities recently migrated to the *Balance of Payments Manual 6* (BPM6), which resulted in some balance of payments data revisions.
4/ In months of following year's imports of goods and services.
5/ Increase is an appreciation.

Table 2. Singapore: Balance of Payments, 2008–14 1/

(In billions of U.S. dollars)

	2008	2009	2010	2011	2012	Proj. 2013	Proj. 2014
Current account balance	28.8	33.5	62.0	65.3	51.4	52.4	53.9
Trade balance	42.8	49.3	66.0	72.7	60.9	63.1	67.4
Exports, f.o.b.	354.6	288.5	371.0	434.1	435.8	433.2	457.1
Imports, f.o.b.	-311.7	-239.2	-305.0	-361.5	-374.9	-370.1	-389.7
Services balance	-1.6	-1.7	2.3	0.7	0.4	0.0	-0.6
Exports	89.3	81.6	100.7	116.1	119.1	120.0	125.2
Imports	-90.9	-83.3	-98.4	-115.5	-118.7	-120.0	-125.8
Primary income balance	-8.7	-10.1	-1.1	-2.2	-3.1	-3.5	-5.8
Receipts	47.8	48.9	61.3	66.8	69.5	74.2	80.8
Payments	-56.4	-59.0	-62.5	-69.0	-72.7	-77.6	-86.7
Secondary income balance	-3.7	-4.0	-5.2	-5.9	-6.7	-7.3	-7.1
Capital and financial account balance	-16.2	-24.6	-22.4	-44.2	-28.5	-28.6	-37.7
Capital account (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account (net)	-16.2	-24.6	-22.4	-44.2	-28.5	-28.6	-37.7
Direct investment	5.4	0.9	28.3	29.7	33.6	34.8	37.2
Assets	-6.8	-24.1	-25.3	-26.2	-23.1	-25.1	-28.1
Liabilities	12.2	24.9	53.6	55.9	56.7	59.9	65.3
Portfolio investment	11.6	-41.7	-39.0	-12.8	-49.2	-49.4	-65.3
Assets	26.2	-42.9	-40.6	-7.9	-51.2	-51.5	-68.0
Liabilities	-14.6	1.2	1.6	-4.9	2.1	2.1	2.7
Other investment	-35.2	30.4	-9.9	-49.2	3.1	-13.9	-9.6
Net errors and omissions	0.5	2.4	2.5	-4.0	3.1	0.0	0.0
Overall balance	13.1	11.3	42.2	17.1	26.1	23.8	16.2
Memorandum items:							
Current account as percent of GDP	15.1	17.7	26.8	24.6	18.6	18.3	17.5
Trade balance as percent of GDP	22.5	26.1	28.5	27.4	22.0	22.0	21.9
Re-exports as percent of GDP	85.0	69.6	72.9	69.9	65.2		
Net international investment position							
In billions of U.S. dollars	276.1	380.2	445.0	519.4	631.5	...	...
In percent of GDP	147.4	194.3	181.3	202.2	223.3	...	...

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 rates. The authorities recently migrated to the *Balance of Payments Manual 6* (BPM6), which resulted in some balance of payments data revisions.

Table 3. Singapore: Monetary Survey, 2010–13 1/

	2010				2011				2012				2013	
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.
	(In billions of Singapore dollars, end of period)													
Net foreign assets	365.6	367.0	387.4	367.8	387.7	377.2	364.1	379.6	382.5	388.7	392.5	405.2	401.6	415.2
Monetary authorities	273.3	277.3	279.7	286.6	292.0	294.2	301.9	305.1	303.0	305.0	306.1	313.7	317.2	326.5
Banks	92.3	89.7	107.8	81.1	95.7	83.0	62.1	74.5	79.4	83.7	86.4	91.5	84.5	88.8
Domestic credit	473.3	488.4	497.8	511.1	530.6	562.0	588.1	596.2	618.5	628.4	644.5	659.7	696.7	710.0
Claims on private sector	379.6	396.1	407.8	418.8	438.3	461.6	489.4	498.0	518.1	527.0	537.7	554.3	582.9	601.7
Claims on central government	93.6	92.3	90.0	92.3	92.4	100.4	98.7	98.2	100.4	101.4	106.8	105.4	113.8	108.3
Other items (net)	-342.1	-354.2	-377.8	-357.8	-375.2	-386.3	-382.1	-393.5	-403.4	-417.7	-428.0	-442.8	-449.3	-472.2
M2	496.8	501.2	507.5	521.1	543.1	553.0	570.1	582.4	597.5	599.3	609.0	622.2	649.1	653.0
M1	147.0	152.2	158.9	166.0	174.8	182.3	190.2	191.7	194.8	196.4	201.5	212.5	225.1	237.3
Quasi-money	349.8	349.0	348.6	355.1	368.3	370.6	379.9	390.7	402.7	402.9	407.5	409.6	424.0	415.7
	(Annual percentage change)													
Domestic credit	6.8	8.3	9.0	11.5	12.1	15.1	18.1	16.7	16.5	11.8	9.6	10.6	12.7	13.0
Claims on private sector	4.7	8.6	11.1	13.2	15.5	16.5	20.0	18.9	18.2	14.2	9.9	11.3	12.5	14.2
M2	7.2	6.5	6.1	7.6	9.3	10.3	12.3	11.8	10.0	8.4	6.8	6.8	8.6	9.0
	(Contribution to M2 growth, in percent)													
Net foreign assets	4.1	3.0	4.3	-1.1	4.5	2.0	-4.6	2.3	-1.0	2.1	5.0	4.4	3.2	4.4
Domestic credit (net)	6.5	8.0	8.6	10.8	11.6	14.7	17.8	16.3	16.2	12.0	9.9	10.9	13.1	13.6
Claims on private sector	3.7	6.7	8.5	10.1	11.8	13.1	16.1	15.2	14.7	11.8	8.5	9.7	10.9	12.5
Claims on central government (net)	2.9	1.3	0.1	0.8	-0.3	1.6	1.7	1.1	1.5	0.2	1.4	1.2	2.2	1.1
Other items (net)	-3.4	-4.5	-6.7	-2.2	-6.7	-6.4	-0.8	-6.8	-5.2	-5.7	-8.1	-8.5	-7.7	-9.1
Memorandum items:														
Nonbank lending	605.3	641.8	644.5	667.9	702.1	735.7	808.5	827.3	835.5	864.5	879.9	907.3	963.7	994.8
To residents 2/	360.4	375.6	385.0	398.0	417.1	440.8	465.7	473.9	489.2	499.3	510.8	526.9	553.4	569.9
Annual percentage change	4.1	11.1	11.4	13.3	16.0	14.6	25.4	23.9	19.0	17.5	8.8	9.7	15.3	15.1
To residents (annual percentage change)	4.7	8.2	10.1	12.7	15.7	17.4	20.9	19.1	17.3	13.3	9.7	11.2	13.1	14.1

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

1/ Based on DBUs and ACUs.
2/ For ACUs, data are converted to $S using end-of-period exchange rate.

Table 4. Singapore: Indicators of Vulnerability, 2008–13

	2008	2009	2010	2011	2012	2013
Financial sector indicators						
Broad money (M2, percent change, y/y) 6/	10.4	8.7	7.6	11.8	6.8	9.0
Private sector credit (percent change, y/y) 6/	12.4	3.1	13.2	18.9	11.3	14.2
Credit to the property sector (percent change, y/y) 6/	17.1	8.3	18.2	19.5	16.3	16.1
Share of property sector credit in total nonbank credit (percent) 1/ 6/	47.6	49.9	51.4	47.2	47.0	46.2
Credit rating of local banks (S&P) 2/ 6/	A+/AA-	A+/AA-	A+/AA-	A+/AA-	AA-	AA-
Three-month interbank rate (percent, end-year) 6/	1.0	0.7	0.4	0.4	0.4	0.4
NPL ratio (local banks, percent) 3/ 4/	1.7	2.4	1.6	1.2	1.3	...
Capital adequacy ratio of local banks (percent) 4/	14.7	17.3	18.6	16.0	17.4	...
Asset market indicators						
Stock prices (percent change, y/y) 6/	-49.2	64.5	10.1	-17.0	19.7	9.4
P/E ratio 6/	6.2	19.3	19.0	10.3	13.4	13.3
Stock prices of the finance sector (percent change, y/y) 6/	-51.4	75.1	2.4	-23.4	36.8	13.1
Real estate prices (percent change, y/y) 5/ 6/						
Private residential	12.3	-14.1	25.4	9.5	2.3	2.9
Office space	10.3	-20.0	8.6	18.8	3.8	3.2
Industrial space	13.7	-16.7	11.2	30.2	28.3	22.6
External indicators						
Current account balance (US$ billion)	28.8	33.5	62.0	65.3	51.4	...
(In percent of GDP)	15.1	17.7	26.8	24.6	18.6	...
Gross official reserves (US$ billion) 6/	174.2	187.8	225.8	237.7	259.3	259.8
(In month of next year's imports of goods and services)	6.5	5.6	5.7	5.8	6.3	6.0
Real exchange rate (end of period, 2005=100) 6/	109.1	107.4	114.4	117.1	126.8	126.8

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

1/ For domestic banking units (DBU).
2/ Ratings of the three major local banks.
3/ In percent of global nonbank loans.
4/ The number for 2012 is as of September.
5/ The underlying price indices are computed based on the Laspeyres method and are 4-quarter moving averages.
6/ The number for 2013 is as of June.

Table 5. Singapore: Summary of Central Government Operations and Stock Positions, 2008/09–2013/14 1/

	2008/09	2009/10	2010/11	2011/12	2012/13		2013/14	
					Budget	Prel.	Budget	Proj.
I. Statement of government operations								
	(In millions of Singapore dollars)							
Revenue	64,306	50,807	69,794	81,320	73,948	77,790	78,329	79,561
Taxes	37,709	36,617	41,848	46,076	48,222	49,488	49,574	50,646
Social contributions	0	0	0	0	0	0	0	0
Grants	0	0	0	0	0	0	0	0
Other revenue 2/	26,598	14,190	27,946	35,244	25,726	28,302	28,755	28,915
Of which: interest income	6,362	3,289	1,956	1,717	2,741	2,404	2,427	2,202
Expenditure	47,052	52,141	45,978	49,074	54,485	52,070	58,778	60,181
Expense	35,976	38,088	32,268	36,145	40,025	37,520	41,945	43,299
Compensation of employees	4,677	4,765	5,857	5,668	6,039	6,286	6,660	6,599
Use of goods and services	16,949	15,584	15,400	15,307	17,534	16,351	17,351	17,286
Interest	25	25	0	0	0	0	0	0
Expense not elsewhere classified	14,325	17,714	11,012	15,170	16,452	14,882	17,934	19,414
Grants, subventions & capital injections to organisations	4,868	5,493	5,986	6,747	6,974	6,742	7,115	7,193
Transfers	10,350	10,749	8,865	11,326	10,103	10,556	12,045	12,221
Other expense	-894	1,473	-3,840	-2,903	-625	-2,416	-1,226	0
Net acquisition of nonfinancial assets	11,075	14,053	13,710	12,929	14,460	14,551	16,834	16,882
Development expenditure	9,357	10,982	12,068	11,413	12,828	12,899	12,783	13,652
Land-related expenditure	1,718	3,071	1,643	1,516	1,631	1,652	4,051	3,230
Gross operating balance	28,330	12,718	37,525	45,176	33,923	40,270	36,385	36,262
Net lending/borrowing	17,255	-1,334	23,815	32,246	19,464	25,720	19,551	19,380
Net acquisition of financial assets	...	...	...	...	...	...	...	...
Net incurrence of liabilities	...	...	...	...	...	...	...	...
	(In percent of GDP)							
Revenue	24.2	17.7	21.6	24.2	21.3	22.4	21.3	21.7
Taxes	14.2	12.7	12.9	13.7	13.9	14.3	13.5	13.8
Other revenue 2/	10.0	4.9	8.6	10.5	7.4	8.2	7.8	7.9
Expenditure	17.7	18.2	14.2	14.6	15.7	15.0	16.0	16.4
Expense	13.6	13.3	10.0	10.7	11.5	10.8	11.4	11.8
Net acquisition of nonfinancial assets	4.2	4.9	4.2	3.8	4.2	4.2	4.6	4.6
Gross operating balance	10.7	4.4	11.6	13.4	9.8	11.6	9.9	9.9
Net lending/borrowing	6.5	-0.5	7.4	9.6	5.6	7.4	5.3	5.3
Memorandum items:	(In percent of GDP)							
Primary balance 3/	-2.2	-4.4	0.0	0.6	-0.4	0.9	-1.0	-0.9
Cyclically adjusted primary balance	-2.0	-3.8	-0.5	0.1	-0.6	0.7	-1.1	-1.1
Authorities' overall balance	0.1	-6.1	-5.3	4.0	1.3	3.9	2.4	...
Expenditures on social development 4/	7.0	7.5	7.3	7.5	7.5	...	7.7	...
Land sales (in millions of Singapore dollars)	7,675	4,013	14,496	19,088	12,851	14,226	15,587	...
II. Stock positions	2008	2009	2010	2011	2012			
Gross debt 5/								
In millions of Singapore dollars	255,465	291,502	321,182	354,023	384,998			
In percent of GDP	95	106	102	106	111			

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

1/ Fiscal year runs from April 1 through March 31. The presentation of the table is based on GFSM 2001.
2/ Includes revenue from land sales and investment income.
3/ Overall balance excluding investment income, capital revenue, interest payments and net lending.
4/ Includes expenditure on education, health, national development, environment, culture, and family and community development. Includes development and operational expenditure and spending from government endowment funds.
5/ Gross debt stock figures are as at the end of the calendar year. Government debt is issued to develop domestic capital markets and to provide an investment vehicle for the mandatory saving scheme. Gross government assets are larger than gross debt.

Table 6. Singapore: Medium-Term Scenario, 2008–18

						Proj.					
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real growth (percent change)											
GDP	1.7	-0.8	14.8	5.2	1.3	3.5	3.5	3.6	3.6	3.7	3.8
Total domestic demand	11.8	-7.6	6.6	6.5	9.7	4.1	3.4	4.1	4.7	4.4	4.1
Final domestic demand	7.0	-0.8	6.8	4.6	2.9	4.5	4.0	4.2	4.9	4.5	4.2
Consumption	3.6	0.5	7.2	3.7	0.9	3.9	2.6	3.1	3.4	3.5	3.4
Private	2.9	-0.5	6.2	4.6	2.2	2.5	2.8	3.1	3.4	3.6	3.8
Public	6.4	4.2	11.2	0.5	-3.6	9.1	1.9	2.9	3.3	3.2	1.8
Gross capital formation	28.5	-21.0	5.4	12.7	26.8	4.5	4.7	5.6	6.7	5.6	5.1
Private	28.1	-23.5	3.8	11.5	27.1	3.8	4.2	5.5	7.0	6.1	5.7
Public	31.5	-1.9	14.6	19.0	25.2	8.3	7.1	6.1	5.5	3.1	2.5
Gross fixed investment	13.7	-3.2	6.1	6.3	6.6	5.6	6.4	6.1	7.3	6.1	5.5
Change in inventories 1/	3.3	-5.3	-0.3	1.2	4.5	-0.1	-0.3	0.0	0.0	0.0	0.0
Net exports /1	-7.8	6.0	10.8	1.0	-5.6	0.3	0.9	0.6	0.1	0.5	0.7
Saving and investment (percent of GDP)											
Gross national savings	44.5	42.7	48.2	46.8	45.6	45.3	45.0	44.9	44.8	44.8	44.8
Central government 2/	11.7	6.0	9.8	13.0	12.1	9.9	9.6	9.5	9.4	9.4	9.4
Private and other	32.8	36.7	38.4	33.8	33.5	35.4	35.4	35.4	35.3	35.4	35.4
Gross capital formation	29.3	25.0	21.4	22.2	27.0	27.1	27.5	28.0	28.9	29.4	29.8
Central government 3/	3.5	4.3	4.0	3.9	4.1	3.7	4.4	4.7	4.8	4.8	4.8
Private and other	25.8	20.6	17.4	18.2	22.9	23.4	23.1	23.3	24.1	24.6	25.0
Inflation and unemployment											
(period average, percent)											
CPI inflation	6.6	0.6	2.8	5.2	4.6	2.5	3.1	2.6	2.5	2.4	2.3
Core CPI inflation	5.7	0.0	1.5	2.2	2.5	1.9	2.8	2.4	2.3	2.2	2.1
Unemployment rate	2.2	3.0	2.2	2.0	2.0	2.1	2.3	2.6	2.5	2.4	2.3
Output gap	-0.2	-5.7	3.5	4.2	1.3	0.8	0.6	0.5	0.4	0.3	0.1
Central government (percent of GDP) 4/											
Revenue	24.2	19.3	20.6	23.5	22.9	22.3	22.4	22.5	22.4	22.2	22.2
Expenditure	16.3	18.0	15.2	14.5	14.9	16.1	17.2	17.7	17.8	17.7	17.5
Overall balance	7.9	1.3	5.4	9.0	8.0	6.3	5.2	4.8	4.6	4.5	4.7
Primary balance 5/	-1.0	-3.8	-1.1	0.5	0.8	-0.5	-1.7	-1.9	-2.3	-2.4	-2.3
Merchandise trade (percent change)											
Export volume	3.6	-10.0	19.7	3.8	-0.2	-0.7	6.0	6.1	6.2	6.6	6.6
Import volume	10.3	-15.2	18.3	4.0	3.4	-1.1	6.2	6.5	7.0	7.1	7.1
Terms of trade	-1.1	1.0	-0.9	-2.8	-0.5	0.2	0.4	0.5	0.4	0.3	0.3
Balance of payments 6/ (percent of GDP)											
Current account balance	15.1	17.7	26.8	24.6	18.6	18.3	17.5	16.8	15.9	15.4	15.0
Balance on goods and services	21.6	25.2	29.5	27.6	22.2	22.0	21.7	21.2	20.3	19.8	19.4
Balance on primary and secondary income	-6.5	-7.5	-2.7	-3.0	-3.6	-3.7	-4.2	-4.4	-4.4	-4.4	-4.4
Gross official reserves (US$ billions)	174.2	187.8	225.8	237.7	259.3	283.1	299.4	307.7	316.2	324.8	333.7
(In months of imports) 7/	(6.5)	(5.6)	(5.7)	(5.8)	(6.3)	(6.6)	(6.6)	(6.4)	(6.2)	(6.0)	(5.9)

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

1/ Contribution to GDP growth.
2/ Based on budget data.
3/ Based on national accounts data.
4/ On a calendar year basis.
5/ Overall balance excluding investment income, capital revenue, and interest payments.
6/ The authorities recently migrated to the *Balance of Payments Manual 6* (BPM6), which resulted in some balance of payments data revisions.
7/ In months of next year's imports of goods and services.

Table 7. Singapore: Financial Soundness Indicators—Local Banking Sector, 2008–12 1/

	2008	2009	2010	2011	2012		
					Mar.	Jun.	Sep.
			(In percent)				
Capital adequacy ratio							
Regulatory capital to risk-weighted assets	14.7	17.3	18.6	16.0	16.5	15.8	17.4
Regulatory tier I capital to risk-weighted assets	11.5	14.1	15.5	13.5	13.6	13.4	14.3
Shareholders' equity to assets	8.3	9.9	9.5	8.7	8.9	8.8	8.9
Asset quality							
NPLs to nonbank loans	1.7	2.4	1.6	1.2	1.3	1.2	1.3
Total provisions to NPLs	108.5	90.8	110.9	125.5	123.1	127.1	122.5
Specific provisions to NPLs	43.4	40.0	40.5	39.3	38.9	40.7	38.5
Loan concentrations (in percent of total loans)							
Bank loans	13.8	14.1	12.2	13.3	14.8	14.8	15.1
Nonbank loans	86.2	85.9	87.8	86.7	85.2	85.2	84.9
Of which:							
Manufacturing loans	9.2	8.3	8.1	8.1	8.1	8.1	7.9
Building and construction loans	13.2	12.4	12.0	12.1	11.9	12.0	12.1
Housing loans	20.3	22.2	23.2	20.7	20.7	20.8	21.3
Loans to professionals and private individuals	8.5	8.7	8.6	8.3	8.2	8.3	8.5
Loans to nonbank financial institutions	11.7	11.2	11.7	10.7	10.9	10.6	10.6
Profitability							
After tax return on assets	1.0	1.1	1.2	1.0	1.2	1.1	1.1
After tax return on equity	10.7	10.8	12.2	11.1	13.2	11.9	12.0
Net interest margin	2.2	2.2	2.0	1.9	1.9	1.8	1.8
Non-interest income to total income	32.2	34.9	40.6	37.3	41.1	38.8	39.1
Liquidity 2/							
Liquid DBU assets to total DBU assets	9.9	10.3	9.3	9.9	9.6	9.3	9.8
Liquid DBU assets to total DBU liabilities	10.8	11.2	10.1	10.7	10.4	10.1	10.6

Source: Monetary Authority of Singapore.

1/ The data is for local banks' consolidated operations. Local banks include five Singaporean banks.
2/ Liquidity data reflect all commercial banks operating in Singapore, including branches and subsidiaries.

Appendix 1: Singapore—Risk Assessment Matrix 1/

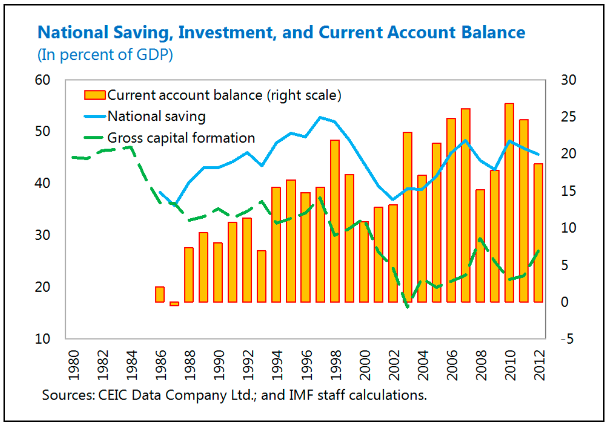
Sources of Risk	Time Horizon	Likelihood	Transmission Channels	Expected Impact of Risk	Recommended Policy Response
Volatility due to prospective exit from unconventional monetary policies/ Reemergence of euro area financial stress	Short Term	High/ Medium	Disruptive exit from UMPs or correction of overvalued risk assets, leading to sharply higher interest rates, large capital flow reversals, and sudden unwinding of positions. Further pullback of funding by European banks.	**Medium to high** Financial activity generates 12 percent of GDP. The banking sector exceeds 6 times GDP, and Singapore hosts large currency and interest rate OTC derivative markets. Equities and gross capital flows are very sensitive to global risk sentiment. Real estate prices may have become overstretched by spillovers of lax monetary policies abroad, and private sector indebtedness has risen sharply. Sudden retrenchment of interbank—including intra-group—funding of offshore banks may create liquidity pressures and valuation losses across a broad range of financial and real assets, with contagion to domestic banks. Exposure to Europe is limited for domestic banks; but significant for offshore banks (about 21 percent of assets and 28 percent of liabilities).	Ensure financial institutions maintain prudent risk management practices and have adequate liquidity buffers (and capital buffers in the case of domestic banks). Maintain close links with home country supervisors. In an extreme event, the strong official reserve position provides an additional cushion, possibly complemented by swap lines with other major central banks.
Protracted period of slow European growth/ Sharp China growth decline	Medium Term	High/ Medium	Direct and intraregional trade linkages. Also, tourism and financial channels (China growth decline.)	**Medium to high** Very high degree of trade openness, with exports around 200 percent of GDP and trade-related sectors accounting for more than 50 percent of GDP. While direct exports to the EU (U.S.) comprise only 10 (5) percent of total, indirect exports through regional supply chains are likely considerably larger. China is a key link in the regional supply chain, but Singapore's exports are not very sensitive to Chinese domestic demand. China is the second largest source of tourists. Domestic banks' lending to corporates and banks in China and Hong Kong SAR has grown to above 20 percent of Singapore's GDP.	Provide adequate social safety nets while re-orienting the economy to cater to demand from faster-growing regions, including Asia.
Singapore's policy-induced tight labor market fails to generate significant productivity gains	Medium Term	Medium	Rising wages without compensating productivity gains sharply increases unit labor costs.	**High** Profit margins of labor-intensive firms are squeezed, leading to erosion of competitiveness, widespread SME closures and worker layoffs. External and domestic demand contract. NPLs rise on SME defaults and deterioration in mortgage quality on elevated unemployment.	Achieving productivity improvements is unpredictable in terms of timing and amount. Avoid overtightening the labor market to prevent long-term economic repercussions.
Reputational risk from opaque ownership structures in the offshore wealth management sector	Short-Medium Term	Low	Attractiveness as wealth management destination reduced. Assets under management have grown rapidly, and are now over US$1.3 trillion. The financial and business service sectors comprise a combined 25 percent of GDP.	**Medium** If risks are not adequately addressed, changing perceptions about Singapore's good reputation could lead to closing of accounts, with adverse effects on the viability of the industry, and knock-on effects to related tax revenue and employment.	Effective implementation of international AML standards, particularly relating to transparency of companies and trusts, and pursuing tax evasion as a predicate crime. Ensure service providers report suspicious transactions and close accounts where supporting evidence of beneficial ownership is incomplete.

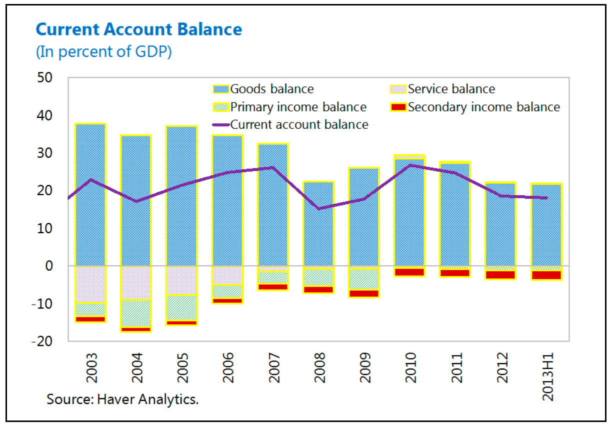
1/ The RAM shows events that could materially alter the baseline path—the scenario most likely to materialize in the view of the staff. The relative likelihood of risks reflects staff's subjective assessment at the time of discussions with the authorities of risks surrounding this baseline.

Appendix 2. Singapore—External Sector Developments and Assessment

Current Account (CA)

Singapore's current account surplus narrowed by over 8 percentage points since 2010 to 18.6 percent of GDP in 2012, primarily due to a decline in the goods balance. This reflects both a pickup in private investment relative to GDP and a weakening of the national saving ratio. Based on EBA 2.0 methodology, the current account narrowing is structural, rather than driven by cyclical output and terms of trade gaps in Singapore and the rest of the world.[1] While rebalancing by the rest of the world is likely to have contributed significantly to the decline in the structural balance, Singapore's efforts to reduce labor intensity, and the resulting increase in the REER, probably also played a role.





Singapore has run a current account surplus since 1988, which widened as the saving rate increased steadily. After the Asian financial crisis, the investment share shifted lower while the saving rate resumed its upward trend and the current account surplus peaked at 26.8 percent of GDP in 2010. Developments in the current account have been dominated by the trade surplus which has exceeded 20 percent of GDP since 2001. The service and incomes account deficits have declined over the last 10 years and the income account is broadly balanced despite Singapore's large NFA position, consisting of large net FDI liabilities (115 percent of GDP) that are exceeded by (non-FDI) assets of 338 percent of GDP.

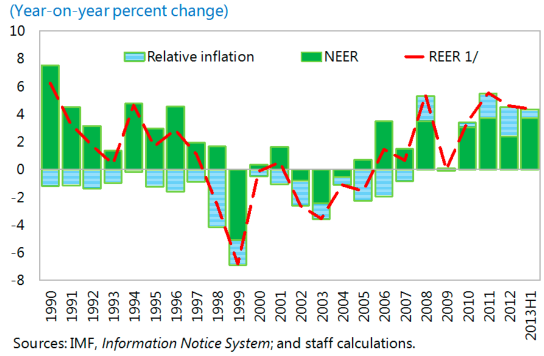
Real Effective Exchange Rate (REER)

The CPI-based REER appreciated by 10 percent between 2010 and 2012, driven by nominal appreciation and a higher inflation rate than in trading partners. This latter development differs from

[1] Although Singapore is not in the EBA 2.0 estimation group, the relevant EBA coefficients were applied to the Singapore data to derive the multilaterally consistent structural balance, which is estimated to have declined by over 8 percentage points since 2010.

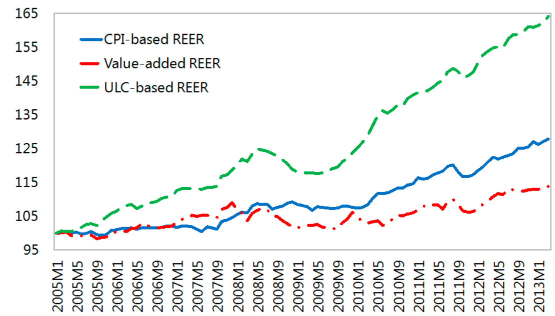
the historical experience when Singapore consistently maintained lower inflation than its trading partners, with the exception of Japan (see Box 1, IMF Country Report No. 12/248). As a result, while previously relative inflation dampened the effect of nominal appreciation on the REER, since 2010, these effects have been reinforcing. In all, the CPI-based REER has risen by a cumulative 28 percent since 2005, above levels just prior to the Asian crisis in the late 1990s.The ULC-based REER suggests a much sharper real appreciation (totaling 64 percent since 2005), reflecting both sluggish productivity growth and tight domestic labor market conditions. In contrast, value-added REERs, which take account of global supply chains, suggest a more muted real appreciation (14 percent cumulative since 2005).

Contribution to REER Growth
(Year-on-year percent change)



Sources: IMF, *Information Notice System*; and staff calculations.
1/ Sum of contributions of relative inflation and NEER.

Singapore: Real Effective Exchange Rates
(Index, 2005:M1=100)

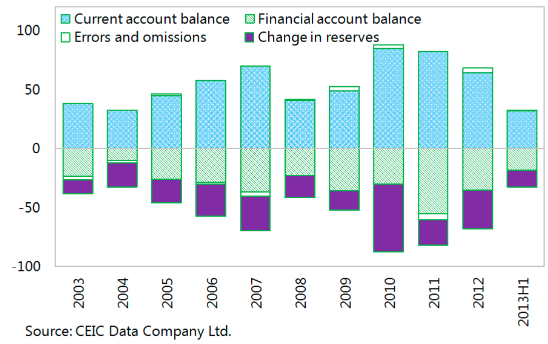


Sources: IMF, *International Financial Statistics*; and Bayoumi, T., M. Saito, and J. Turunen, 2013, "Measuring Competitiveness: Trade in Goods or Tasks?," IMF Working Paper No. 13/100.

Reserve Accumulation and the Financial Account

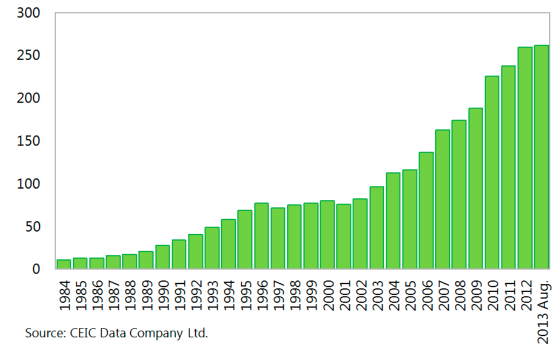
The financial account deficit and reserve accumulation are the complement to the current account surplus. The volume of gross financial flows moves with the global financial cycle, reflecting Singapore's role as a financial center. On a net basis, the deficit tends to be larger when global financial activity is strong, reflecting in part reinvestment abroad of income from foreign assets of the official sector (the largest contributor by sector to net financial flows). Financial flows also encompass sizable net inward FDI and smaller—but more volatile—net bank-related flows. However, gross bank flows are sizeable, reflecting Singapore's role as a financial center and have also exhibited large swings. The nonbank corporate sector (which includes some SWF-related activities) is generally associated with net outflows.

Balance of Payments
(In billions of Singapore dollars)



Source: CEIC Data Company Ltd.

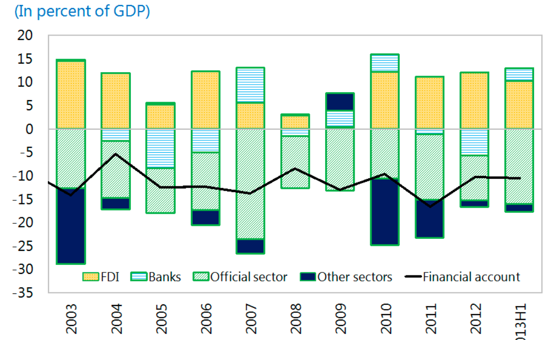
Gross Reserves
(In billions of U.S. dollars)



Source: CEIC Data Company Ltd.

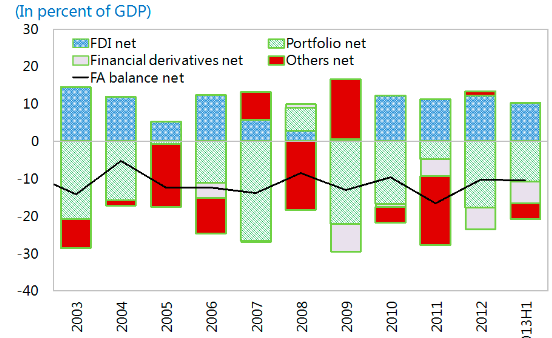
As a financial center, prudential motives call for a large net IIP buffer, including in the form of liquid official reserves, to safeguard against financial shocks. Also, because Singapore is not a reserve currency issuer, reserves buffers may need to be larger than in most other financial centers. At US$262 billion (94.7 percent of GDP), current reserve levels appear adequate, and there is no clear case for further accumulation for precautionary purposes.

Financial Account by Sector: Net
(In percent of GDP)



Source: CEIC Data Company Ltd.

Financial Account Balance by Investment
(In percent of GDP)



Source: CEIC Data Company Ltd.

Standard Benchmarks[1]

Standard indicators suggest that the external sector remains stronger than what is consistent with medium-term fundamentals. Based on the CGER equilibrium real exchange rate method, the real exchange rate appears around 15 percent stronger than warranted by medium-term fundamentals (including rapid population aging) and desirable policies.[2] The CGER CA methodologies (external sustainability and macrobalance approach) imply a CA surplus of 8–10 percent of GDP as the norm, reflecting

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[1] Singapore is not included in the country sample used to estimate the Fund's External Balance Assessment or CGER methodologies. In this section, estimated parameters from these approaches are applied to Singapore data.

[2] CGER-like and EBA-like equilibrium real exchange rate approaches find the REER is overvalued. This result likely reflects the inclusion of a fixed effect together with the U-shaped pattern of the actual REER since the mid-1990s, leading to a fitted series that—for methodological reasons rather than fundamental economic considerations—is flatter than the actual REER series.

Singapore's large NFA and lagged current account, respectively.[1] Despite the recent narrowing of the CA, CGER methods suggest the CA remains 4½–8 percentage points of GDP above its norm in the medium term.

In addition to large fiscal deficits in major advanced economies, Singapore's current account surplus is elevated on account of policies and structural factors that boost the private and public saving rate. From a multilateral perspective, and consistent with the authorities' intentions, increased public spending, a more-even distribution of consumption across generations, and recourse to slower foreign worker inflows would help to further moderate the current account and slow accumulation of foreign assets.

Singapore: Quantitative Exchange Rate Assessment

In Percent	Norm	Projection 2018 1/	Gap
Exchange rate misalignment			
Equilibrium real exchange rate approach 2/	…	…	15.5
	(In percent of GDP)		
Current acccount			
Macroeconomic balance approach 3/	6.9	15.1	8.2
External sustainability approach 4/	10.6	15.1	4.5
Exchange rate assessments in special cases 5/			
Conventional approach	8.8	15.1	6.3
Including dummy variables for financial centers	9.9	15.1	5.2
Including all special cases dummies	8.5	15.1	6.6

1/ Staff's projection for 2018.
2/ Misalignment based on CGER-like methods using October 2013 WEO data and August 2013 REER.
3/ Norm based on CGER-like methods using October 2013 WEO data.
4/ Using actual 2012 NFA/GDP as benchmark.
5/ Norms taken from *Exchange Rate Assessments in Special Cases*, SPR Departmental paper (forthcoming), and computed using October 2012 WEO data.

[1] In the CGER macrobalance approach, the lagged current account surplus is itself the main contributor to the current account norm (although no judgment is made as to whether past surpluses were themselves appropriate).

Additional Considerations

Several of Singapore's characteristics may not be fully accounted for in—or beyond the scope of—standard empirical approaches, and these factors may help account for part of the deviation of the current account from its estimated norm and add to associated uncertainty. While the CGER macrobalance approach includes explicitly a dummy for financial centers and captures omitted factors indirectly via the lagged CA, because Singapore is an outlier in these dimensions, it is reasonable to conclude that their contributions to the current account are understated.[1] Implications of the following factors are considered below: (i) Singapore's role as a hub for international finance; (ii) additional structural drivers of saving; and (iii) the presence of multinational corporations that could give rise to measurement and other issues.

The Impact of Financial Centers

Countries with large financial centers tend to have current account balances that average about 3½ percent of GDP higher than in other countries.[2] Precautionary motives may drive this result in order to build up large private and public balances as self-insurance against volatility in gross liabilities.[3] Additionally, because the current account does not reflect valuation changes, it may not provide an accurate measure of changes in national wealth. This is especially relevant in the case of financial centers, which tend to have very large gross foreign assets and liabilities, making the current account a less accurate indicator of the saving-investment balance than in countries with smaller external stocks. Also, higher per capita income that is typically associated with financial centers may imply a higher private sector saving rate.[4]

Structural Drivers of Saving

Structural characteristics beyond demographics and high mandatory provident fund contribution rates may have also increased the private sector saving rate. Singapore's low labor share of GDP relative to other countries implies a larger share accruing to the corporate sector (see text figure). National accounts data on corporate saving is not available. If proxied by profit minus dividends,

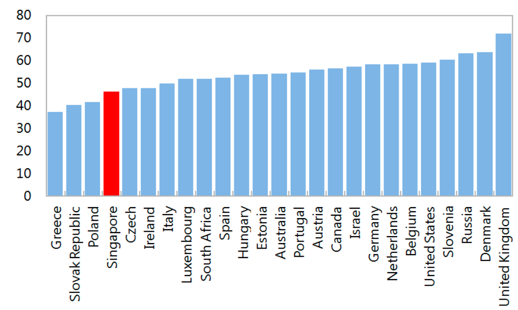
[1] In addition, the coefficient on the lagged CA in CGER is less than unity, and therefore would not fully account for persistent omitted structural factors that elevate the current account.

[2] Financial centers were estimated to add 3 percentage points of GDP to current accounts in CGER (2006) and 3½ percentage points in the External Balance Assessment (see IMF, 2013, *External Balance Assessment Methodology: Technical Background*). This effect is in addition to the contribution from the lagged current account (in CGER) and the NFA position (EBA).

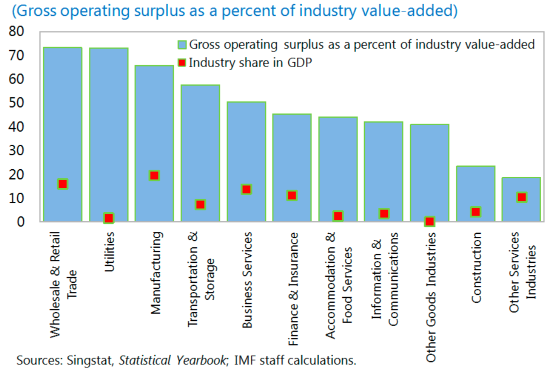
[3] Liquidity stress tests undertaken in the context of the 2013 FSAP update indicate that under a severe but short-lived V-shaped shock banks could face a U.S. dollar funding gap of US$50 billion (about one-fifth of official reserves) over a one-year period.

[4] See *Exchange Rate Assessments in Special Cases*, SPR Departmental paper (forthcoming), which finds that the coefficient on relative per capita income is higher for countries with large financial sectors implying a larger current account balance.

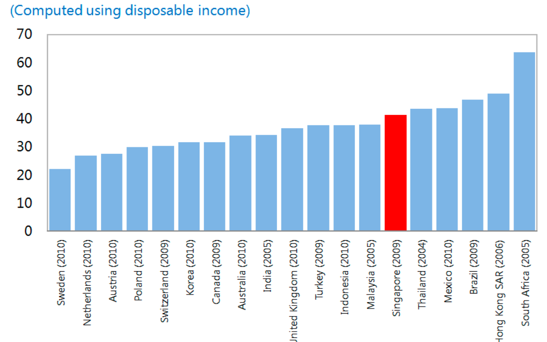
corporate saving is estimated to account for just over half of national saving in 2011.[1] The high corporate saving rate may reflect the significant presence of foreign multinationals that—on a global basis—have tended to retain a large part of earnings in recent years.[2] Moreover, corporate profit rates are very high, with the gross operating surplus averaging more than 50 percent of industry value-added (over 65 percent in manufacturing). Studies have found that elsewhere in Asia, high corporate saving can be partly attributed to weak corporate governance and limited access to finance; however these factors are unlikely to be relevant for Singapore and, moreover, would not explain the globally synchronized increase in corporate saving over the past two decades. In addition, aggregate household saving may be elevated relative to other countries on account of greater income inequality and the higher saving propensity of wealthier households. Inequality, as measured by the Gini coefficient, is higher in Singapore than in many other advanced or emerging market countries (text figure).[3]



Labor Share of Income
(Compensation of employees as percent of GDP minus taxes + subsidies)
Sources: OECD National Accounts Statistics; and IMF staff calculations.



Singapore: Corporate Profitability, 2012
(Gross operating surplus as a percent of industry value-added)
Sources: Singstat, *Statistical Yearbook*; IMF staff calculations.



Gini Coefficients
(Computed using disposable income)
Source: Standardized World Income Inequality Database, Version 3.1.

[1] Corporate saving is estimated using data on profit before tax minus dividends paid (Table 15 in "*Singapore's Corporate Sector," 2011)* and therefore may overstate corporate saving somewhat because taxes are not deducted.

[2] From a theoretical perspective, high corporate profits should not boost national savings since, in the absence of tax distortions and liquidity constraints, household saving would decline to offset any increase in corporate saving. This is consistent with the Modigliani-Miller view of firms as a veil. Empirically, however, households are not found to fully 'pierce the veil' (see Poterba, J., 1992, "Dividends, Capital Gains, and the Corporate Veil: Evidence from Britain, Canada, and the United States," NBER Working Paper No. 2975; and Auerbach, A.J. and K.A. Hassett, 1991, "Corporate Savings and Shareholder Consumption," NBER Working Paper No. 2994). The evidence for Asia suggests a smaller household offset of corporate saving than in other regions (see IMF October 2009, *Asia and Pacific Regional Economic Outlook*).

[3] More than 13 percent of annual income was received by the top 1 percent of households in 2010, compared with 17.5 percent in the United States but less than 10 percent in Japan (Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, *The World Top Incomes Database*, 22/08/2013, available via the Internet: http://topincomes.g-mond.parisschoolofeconomics.eu/).

MNCs and the Measurement of Current Account Balances

For countries with a large multinational corporation (MNC) presence, recent analysis has shown that the measured current account balance may be a misleading indicator of national wealth accumulation.[1] One factor relates to the balance of payments treatment of retained earnings in the current (and financial) account, which differs depending on whether the domestic firm has at least one single foreign investor with an equity stake of 10 percent or more (FDI) or whether no single foreign owner reaches the 10 percent threshold (portfolio investment). Switzerland is a case where FDI assets and portfolio investment liabilities coexist.[2] As a result, the current account is biased upward because retained profits of foreign subsidiaries of domestic MNCs are reported as income of domestic residents (Swiss MNCs), rather than attributed to the largely foreign portfolio investors in the Swiss-based companies. In Ireland, the current account is pushed up by the presence of "redomiciled publicly-listed companies (plcs)," that is, companies with major investments elsewhere in the world that have established a legal presence in Ireland.[3] As a result, MNC profits are paid to Ireland, and if they are not paid out as dividends, the measured current account is raised.

Foreign MNCs have a significant presence in the Singapore economy, and many locate their regional or international headquarters there. This is consistent with Singapore's large stock of FDI liabilities (262 percent of GDP). Moreover, there is some evidence that the substantial presence of MNCs tends to elevate the current account (which is compiled according to BPM6 principles) relative to the underlying wealth accumulation by Singaporeans. While Singapore has a large positive net portfolio asset position (about half of which is equities), cumulating net portfolio investment flows since 2000 indicates a large negative "stock"—consistent with the Swiss case— and suggests the current account surplus could be overstated.[4] However, relevant data is not available to determine whether, as in the Irish case, MNC profits earned abroad and not paid out as dividends are attributed to Singapore from a BoP perspective.

Overall Assessment

Additional considerations beyond the scope of—or not fully accounted for by—standard quantitative benchmarks are likely to make a non-trivial contribution to Singapore's current account surplus. While data limitations preclude quantifying contributions, their magnitude is unlikely to overturn the assessment that the external sector is overly strong.

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[1] This "distortion" is distinct from possible differences in the underlying saving behavior of MNCs compared with other residents.

[2] Mancini-Griffoli, Tommaso, and Nicolas Stoffels, "Adjusting the Current Account to Better Capture Wealth Accumulation," Swiss National Bank Working Paper (forthcoming).

[3] FitzGerald, J., (2013), "The Effect of Re-domiciled PLCs on Irish Output Measures and the Balance of Payments," Quarterly Economic Commentary, Research Notes 2-13/1/2. Economic and Social Research Institute, Dublin.

[4] The discrepancy between stock and flow portfolio data may reflect large valuation gains on portfolio assets abroad.

INTERNATIONAL MONETARY FUND

SINGAPORE

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

October 25, 2013

Prepared By	Asia and Pacific Department

CONTENTS

SINGAPORE—FUND RELATIONS

(As of September 30, 2013)

Membership Status: Joined August 3, 1966; Article VIII

General Resources Account

	SDR Millions	Percent of Quota
Quota	1,408.00	100.00
Fund holdings of currency (exchange rate)	915.47	65.02
Reserve tranche position	492.73	34.99
Lending to the Fund:		
New Arrangements to Borrow	164.40	

SDR Department

	SDR Millions	Percent of Allocation
Net cumulative allocation	744.21	100.00
Holdings	873.13	117.32

Outstanding Purchases and Loans: None

Financial Arrangements: None

Projected Payments to the Fund: None.

Exchange Arrangement

Singapore's exchange rate is classified as "other managed." 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 free of restrictions on the making of payments and transfers for current international transactions, except for restrictions maintained solely for the preservation of national or international security, which have been notified to the Fund in accordance with the procedures set forth in Executive Board decision 144-(52/51). 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 must 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. In a bid to contain a real estate price bubble, Singapore imposed additional stamp duties on purchases by foreigners and corporate entities of residential properties in Singapore.

Article IV Consultation

Singapore is on the 12-month consultation cycle. The 2012 Article IV consultation discussions were held during May 18−25, 2012; the Executive Board concluded the consultation on July 30, 2012 (IMF Country Report No. 12/248).

FSAP Participation

The last FSAP Update involved two missions: April 3–17, 2013 and July 25-August 7, 2013. The main findings are presented in the accompanying Financial System Stability Assessment.

Technical Assistance: None

Resident Representative: Mr. Geoffrey Heenan will replace Mr. Ravi Balakrishnan and Ms. Jeanne Gobat.

SINGAPORE—STATISTICAL ISSUES

Assessment of Data Adequacy for Surveillance	
General: Data provision is broadly adequate for surveillance. While the authorities have continued to expand the range of publicly available data, dissemination of more disaggregated data would enhance the basis for macroeconomic policy analysis, particularly in the external and fiscal areas.	
National accounts: The Singapore Department of Statistics (DOS) has made improvements in data sources and methodology. The reconciliation of various national accounts estimates was conducted in 2006, resulting in lower statistical discrepancies. (DOS) has completed the rebasing of Singapore's national accounts to reference year 2005. **Price statistics**: DOS has completed the rebasing of the Consumer Price Index (CPI) to base year 2009. The CPI is rebased once every five years to reflect the latest consumption pattern and composition of goods and services consumed by resident households.	
Government finance statistics: Information on government assets held abroad is neither published nor provided to the Fund. The government publishes annually partial information on the interest and dividends on these assets. 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.	
Monetary statistics: 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.	
Balance of payments: In February 2012, the DOS concluded the migration of the balance of payments accounts to the 6th edition of the Balance of Payments Manual. The main changes relative to the 5th edition include: reclassification of repairs on goods and goods for processing to services (from goods); reclassification of merchanting to goods (from services); and treating banks' Asian Currency Units (ACUs) as residents (previously they were regarded as nonresidents, and hence their transactions were excluded from the balance of payments). Data on Singapore's international investment position (IIP) is not provided on a disaggregated sectoral basis as suggested by the *Balance of Payments Manual*. Also, the IIP does not include all net foreign assets held by Singapore's Government Investment Corporation, although all associated flows are included in the balance of payments data. The authorities reconfirmed their commitment to fully report the IIP data to the Fund by mid-2014.	
Data Standards and Quality	
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.	No data ROSC is available.

Singapore—Table of Common Indicators Required for Surveillance

(As of October 15, 2013)

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange rates	10/15/13	10/15/13	D	D	D
International reserve assets and reserve liabilities of the Monetary Authorities[1]	9/2013	10/2013	M	M	M
Reserve/base money	9/2013	10/2013	M	M	M
Broad money	8/2013	9/2013	M	M	M
Central bank balance sheet	9/2013	10/2013	M	M	M
Consolidated balance sheet of the banking system	8/2013	9/2013	M	M	M
Interest rates[2]	10/15/13	10/15/13	D	D	D
Consumer price index	8/2013	9/2013	M	M	M
Revenue, expenditure, balance and composition of financing[3]—general government[4]	3/2013	9/2013	A	A	A
Revenue, expenditure, balance and composition of financing[3]—central government	8/2013	10/2013	M	M	M
Stocks of central government and central government-guaranteed debt[5]	2013:Q2	9/2013	Q	Q	Q
External current account balance	2013:Q2	8/2013	Q	Q	Q
Exports and imports of goods and services	8/2013	9/2013	M	M	M
GDP/GNP	2013:Q2	8/2013	Q	Q	Q
Gross external debt[7]	2013:Q2	9/2013	Q	Q	Q
Net international investment position[8]	2012	2013	A	A	A

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).
[7] Official external debt is zero.
[8] The reported number does not include the net foreign asset position of the Government of Singapore's Investment Corporation.

INTERNATIONAL MONETARY FUND

COMMUNICATIONS DEPARTMENT

Press Release No. 13/448
FOR IMMEDIATE RELEASE
November 13, 2013

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Concludes 2013 Article IV Consultation with Singapore

On November 8, 2013, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Singapore.

Since the robust recovery from the global financial crisis, Singapore's growth momentum has eased and become more erratic. Growth decelerated to 1¼ percent in 2012 before picking up sharply in the first half of 2013. This reflects shifts in G3 (U.S., Europe and Japan) demand and global risk appetite. At the same time, the current account surplus narrowed sharply to a still-high 18½ percent of GDP in 2012, and previously elevated inflation subsided to 2 percent as house and car price appreciation eased in response to restrictive macroprudential policies.

Leverage rose strongly in recent years, with real estate a major beneficiary. Bank loans expanded briskly, reaching more than 170 percent of GDP in mid 2013. Real estate-related loans grew especially fast, and housing and construction accounts for 46 percent of bank loans while household indebtedness is more than double household income. Nonetheless, the increase in credit appears to have provided only a muted impetus to real activity.

After rising some 55 percent since 2009, house prices recently stabilized on intensive application of macroprudential policies. Appetite for real estate by both residents and nonresidents has been fuelled by very low interest rates, ample global liquidity, provisions in the pension scheme that encourage house purchases, and the rise in the number of permanent residents. Nearly half of household wealth is held in the form of real estate. An escalating series of broad-based macroprudential policies has contained residential property prices.

Singapore's large and highly-developed international financial center has continued to expand despite volatile global conditions. Local financial markets absorbed expectations of future tapering by the Federal Reserve and the accompanying turbulence in emerging

[1] 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.

markets with limited volatility so far. Currency and equity prices weakened only modestly, but long-term interest rates have risen by around 1 percentage point.

To address the dual challenges of shifting from labor-intensive growth and impending labor force aging, the authorities have embarked on policies to enhance labor productivity. Foreign worker inflows have been slowed and fiscal support for skills and technology upgrading and higher wages have been offered. These ongoing structural changes will slow the pace of growth, make inflation more responsive to an increase in demand, and permanently raise the real exchange rate. Rising life expectancy will sharply raise the old-age dependency ratio and increase the need for aging-related social spending.

The near-term outlook is for GDP to grow by 3½ percent in 2013−14, supported by stronger demand from major advanced economies, despite some softening in regional economies. Improved external demand will slow the adjustment in the current account, which is expected to narrow modestly to around 17½ percent of GDP by 2014. A positive output gap and rising labor costs are projected to raise core inflation, but headline inflation is forecast to stabilize at 2½ percent on smaller increases in housing rents and car permit costs.

Executive Board Assessment[2]

Executive Directors welcomed the authorities' sound policies and skillful macroeconomic management that have spurred the rebound in economic activity and kept inflation in check. Looking ahead, Directors counseled vigilance against a reemergence of inflationary pressures and risks in the financial and housing sectors, and stressed the importance of further efforts to promote external rebalancing and address demographic challenges.

Directors concurred that cyclical conditions call for a moderately restrictive policy mix. A tight monetary stance, reflected in the current targeted nominal exchange rate appreciation, will help avoid overheating and anchor inflation expectations. Macroprudential policies should continue to be deployed as needed to contain asset prices and promote prudent lending. At the same time, Directors agreed that the modest fiscal stimulus in the budget is warranted to enhance productivity and relieve future supply constraints.

Directors welcomed the 2013 finding under the Fund's Financial Stability Assessment Program that Singapore's financial regulation and supervision frameworks are among the best globally. They noted, however, that the rapid growth of credit and real estate prices in recent years could exacerbate aggregate sensitivity to macroeconomic shocks and interest rate cycles. Directors agreed that banks' large capital and liquidity cushions, together with appropriate macroprudential actions, will help mitigate risks. They recommended a

[2] 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. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

countercyclical capital buffer, stepped-up onsite inspections of banks' credit risk, and strengthened foreign currency liquidity practices by banks. They noted important legal changes adopted by the authorities related to the regime against money laundering and the financing of terrorism and called for vigorous enforcement of their international commitments in this area.

Directors took note of the staff's assessment that Singapore's external position appears to be stronger than warranted by fundamentals, suggesting the importance of further efforts to narrow the current account surplus over the medium term. Directors accordingly supported the authorities' plans to raise public expenditure in infrastructure and targeted social spending. The latter, together with measures to boost labor productivity, will also help address the challenges from population aging and prospective workforce decline. A few Directors considered that a faster pace of nominal exchange rate appreciation might aid external rebalancing.

Singapore: Selected Economic and Financial Indicators, 2008–14

	2008	2009	2010	2011	2012	Proj. 2013	Proj. 2014
Growth (percentage change)							
Real GDP	1.7	-0.8	14.8	5.2	1.3	3.5	3.5
Total domestic demand	11.8	-7.6	6.6	6.5	9.7	4.1	3.4
Consumption	3.6	0.5	7.2	3.7	0.9	3.9	2.7
Private consumption	2.9	-0.5	6.2	4.6	2.2	2.5	2.8
Gross capital formation	28.5	-21.0	5.4	12.7	26.8	4.5	4.4
Saving and investment (percent of GDP)							
Gross national saving	44.5	42.7	48.2	46.8	45.6	45.3	45.0
Gross domestic investment	29.3	25.0	21.4	22.2	27.0	27.1	27.4
Inflation and unemployment (period average, percent)							
CPI inflation	6.6	0.6	2.8	5.2	4.6	2.5	3.1
Core CPI inflation	5.7	0.0	1.5	2.2	2.5	1.9	2.8
Unemployment rate	2.2	3.0	2.2	2.0	2.0	2.1	2.3
Central government budget (percent of GDP) 1/							
Revenue	24.2	19.3	20.6	23.5	22.9	21.9	22.3
Expenditure	16.3	18.0	15.2	14.5	14.9	16.1	17.1
Overall balance	7.9	1.3	5.4	9.0	8.0	5.8	5.2
Primary balance 2/	-1.0	-3.8	-1.1	0.5	0.8	-0.5	-1.5
Money and credit (end of period, percentage change)							
Broad money (M2)	10.4	8.7	7.6	11.8	6.8	...	...
Credit to private sector	12.4	3.1	13.2	18.9	11.3	...	...
Three-month interbank rate(percent)	1.0	0.7	0.4	0.4	0.4	...	...
Balance of payments 3/ (US$ billions)							
Current account balance	28.8	33.5	62.0	65.3	51.4	52.4	53.9
(In percent of GDP)	(15.1)	(17.7)	(26.8)	(24.6)	(18.6)	(18.3)	(17.5)
Trade balance	42.8	49.3	66.0	72.7	60.9	63.1	67.4
Exports, f.o.b.	354.6	288.5	371.0	434.1	435.8	433.2	457.1
Imports, f.o.b.	-311.7	-239.2	-305.0	-361.5	-374.9	-370.1	-389.7
Financial account balance	-16.2	-24.6	-22.4	-44.2	-28.5	-28.6	-37.7
Overall balance	13.1	11.3	42.2	17.1	26.1	23.8	16.2
Gross official reserves (US$ billions)	174.2	187.8	225.8	237.7	259.3	283.1	299.4
(Months of imports) 4/	(6.5)	(5.6)	(5.7)	(5.8)	(6.3)	(6.6)	(6.6)
Singapore dollar/U.S. dollar exchange rate (period average)	1.41	1.45	1.36	1.26	1.25	...	...
Nominal effective exchange rate (percentage change) 5/	3.51	-0.11	3.07	3.73	2.40	...	...

Sources: Data provided by the Singapore authorities; and IMF staff estimates and projections.
1/ On a calendar year basis.
2/ Overall balance excluding investment income, capital revenue, and interest payments.
3/ The authorities recently migrated to the *Balance of Payments Manual 6* (BPM6), which resulted in some balance of payments data revisions.
4/ In months of following year's imports of goods and services.
5/ Increase is an appreciation.

Statement by Wimboh Santoso, Executive Director for Singapore
and Kenneth Koh, Senior Advisor to Executive Director
November 8, 2013

1 Introduction

1.1 The Singapore authorities would like to thank the IMF team for the 2013 Article IV Consultation. The authorities would also like to express their appreciation to the Financial Sector Assessment Program (FSAP) team for a rigorous and comprehensive assessment of Singapore's financial system. The discussions in both instances were constructive.

2 Recent Economic Developments and Outlook

2.1 The Singapore economy expanded through H1 this year, supported by the strengthening pace of activity in developed countries. Growth slackened in Q3 2013, however, with preliminary estimates indicating that GDP may have contracted by 1.0% in on a quarter-on-quarter, seasonally-adjusted annualised basis. This reflected both a broad-based cyclical pullback following the strong Q2 performance, as well as fresh external uncertainties—particularly over the timing of US Fed tapering and the challenges faced in some emerging market economies in the transition to less accommodative global monetary conditions.

2.2 Singapore's near-term outlook will be mainly influenced by the divergent growth momentum in the advanced and emerging market economies. On balance, the external environment should be supportive of a pick-up in the Singapore economy. However, the authorities remain alert to the downside risks, as several legacies from the crisis remain unresolved globally even as new pressure points have emerged. The global recovery could be jettisoned by events such as a disorderly market response to the unwinding of unconventional monetary policies and/or a sharper than expected deceleration in real activity in China. On the domestic front, supply-side constraints could translate into larger-than-expected increases in business costs and constrain the upturn.

2.3 All in, Singapore's GDP growth is projected at 2.5–3.5% for the whole of 2013, and is unlikely to be significantly different next year. This does not, however, rule out intermittent volatility in view of the uneven and still-fragile external demand conditions.

2.4 Inflation was modest in recent quarters due to benign cyclical factors. External price pressures were largely muted while domestic cost pass-through to consumer prices was generally contained. As a result, MAS Core Inflation, which excludes the costs of accommodation and private road transport, moderated for five consecutive quarters and averaged 1.6% in H1 2013. CPI-All Items inflation fell to 1.6% in Q2 2013 from 4.0% in the preceding two quarters as car prices also corrected sharply. More recently, however, businesses have passed on more of their cumulative cost increases to consumers alongside an improvement in economic conditions. As a result, MAS Core Inflation and CPI-All Items inflation rose to 1.7% and 1.8% respectively in Q3, with the latter being driven also by a recovery in car prices.

2.5 Over the next few quarters, while imported inflation is expected to remain subdued, the pass-through of higher domestic business costs to consumer prices could intensify as the economy gradually improves. MAS Core Inflation is thus expected to rise into 2014, and average 1.5–2% in 2013 and 2–3% in 2014. CPI-All Items inflation should also come in higher, and will be susceptible to swings as car prices adjust to vehicle-related policies. CPI-All Items inflation is projected at 2.5–3% for the whole of 2013, and 2–3% in 2014.

3 Monetary and Fiscal Policies

3.1 Singapore's overall macroeconomic policy setting has been formulated to balance cyclical considerations with regard to growth and inflation, while facilitating the ongoing longer-term restructuring of the economy. MAS has maintained its current monetary policy stance of a modest and gradual appreciation of the S$NEER (Singapore dollar nominal effective exchange rate) policy band since April 2012, including in its latest policy announcement in October 2013. While short-term external demand uncertainties have emerged recently, domestic inflationary pressures remain at the fore given the tight labour market. The slight tightening bias of the prevailing policy is appropriate for anchoring inflation expectations and guarding against a wage-price spiral.

3.2 Singapore's monetary policy framework is sufficiently flexible to accommodate short-term financial market volatility and external shocks to the economy, by allowing the S$NEER to adjust within its policy band. At the same time, the use of targeted macroprudential measures have been an important complement to monetary policy in responding to the unique circumstances presented by the extended period of low global interest rates, and to ensure sustainable credit practices and financial prudence in the economy (see section on Financial Sector Policies).

3.3 On the fiscal front, the FY2013 Budget announced in February continued to focus on supporting the economy's ongoing restructuring process and fostering a more inclusive society. These included measures to incentivise businesses to improve productivity, and to mitigate the strains on cash flows during the transitional period. Further initiatives were introduced to promote social mobility and enhance progressivity. Pre-school subsidies for lower- and middle-income households were enhanced and more support was provided at school for disadvantaged students. In addition, there was an increase in the coverage and payouts of the Workfare Income Supplement Scheme which was introduced in 2007 to supplement the wages and retirement savings of low-wage workers and to encourage them to stay employed. The tax structure for properties and cars was also made more progressive, while one-off transfers were provided to households to alleviate the cost of living. These measures have resulted in a slightly expansionary fiscal stance in 2013.

3.4 The authorities would like to highlight the importance placed on both equity and financial sustainability, in the forward planning for increased budgetary expenditures such as in social spending. Singapore adopts a targeted approach to helping lower income groups through a range of government subsidies. For instance, while aggregate healthcare spending is largely privately financed, the government funds up to 80% of the bills of Singaporeans who are admitted to the subsidised wards in our public hospitals. This ensures that healthcare expenses remain affordable for all Singaporeans on a sustainable basis.

4 Financial Sector Policies

4.1 Singapore's financial system was assessed in the FSAP to be well regulated and supervised. The locally-incorporated banks are in a strong financial position. Stress tests performed by both MAS and the FSAP team reaffirm that banks in Singapore remain resilient under adverse macroeconomic scenarios.

4.2 Over the last three years, Singapore saw an increase in credit growth but this has moderated more recently. The growth of non-bank loans given by Singapore banks was in line with economic growth in Asia and reflected Singapore's role as a regional financial centre. Domestic credit growth was broad–based, spanning both household and corporate sectors. Singapore's corporate and household balance sheets remain strong[1], in particular with aggregate household cash and deposits alone exceeding household debt. While corporates in Singapore have increased leverage to finance business expansion amidst the low interest rate environment, the median debt-to-equity ratio is broadly comparable to those in similar economies and the median interest coverage ratio is amongst the highest in Asia.[2]

4.3 Nonetheless, the authorities have been concerned about pockets of vulnerability in the system. They have implemented various measures to encourage financial prudence by borrowers and strengthen credit underwriting practices by banks. These include restrictions on loan tenures and debt servicing ratios for property and motor vehicle loans, and restrictions on unsecured credit.

4.4 In particular, property-related measures have been calibrated to address the distinct sources of risk, and to minimise spillover effects of excessive property price cycles. The measures have been imposed on all banks, regardless of country of incorporation, as foreign bank branches account for a sizeable share of total housing loans. MAS complements these measures with rigorous supervision, including onsite credit inspections[3] of the major banks in Singapore on a regular basis. The authorities remain vigilant and will implement additional measures where needed, while concurrently raising public awareness of the risks of imprudent borrowing.

4.5 Banks in Singapore are cognisant of the risks posed by their exposure to mortgages and conduct regular stress tests using severe property downturn scenarios. The mortgage risk weights applied by the locally-incorporated banks are appropriate to the asset quality in their portfolios. The overall non-performing loan (NPL) ratio on mortgages has historically been

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[1] The household debt-to-income ratio was 2.1 times in 2012, comparable to the ratio in most advanced economies despite Singapore's high home ownership rates. This was significantly lower than the peak of 2.6 times seen about ten years ago.

[2] The median interest coverage ratio for the Singapore corporate sector remains healthy at close to 6 times.

[3] Recognizing the potential risks in the credit environment, MAS conducted thematic inspections of banks' underwriting standards on residential mortgages in late 2012.

low, even during stress periods, and was 0.3% as at Q3 2013.[4] This is partly because the bulk of these mortgages are for owner-occupied properties, for which the default experience has been low. The FSAP stress tests found the banks to be resilient even under severe property market stresses. In addition, Singapore-incorporated banks hold more capital for their mortgage portfolios as they are required to comply with total capital requirements that are 2% points higher than the Basel III minimum.[5]

4.6 As part of their macroprudential surveillance efforts, the authorities monitor the potential risks and impact that developments in global and domestic financial systems may have on macroeconomic and financial stability. This takes into account Singapore's role as host to a large number of financial institutions with significant cross-border activities. In order to mitigate liquidity risks arising from the financial flows intermediated in Singapore, the authorities are looking to enhance the current risk-based Minimum Liquid Assets framework[6] by adopting the Basel III Liquidity Coverage Ratio rules, with enhancements to suit domestic conditions.

4.7 Regarding cross-border issues, the authorities engage in a high level of cooperation with the home regulators of the foreign banks in Singapore so as to enhance their understanding of the banks' overall risks. The authorities also participate actively in FSB-led initiatives on resolution and recovery planning for globally systemically important banks which aim to promote coordinated responses in crisis management.

4.8 Singapore's resilience in the face of several financial crises is the best evidence of a track record of independent and effective supervision of financial institutions. MAS enjoys autonomy in financial supervision and its legal and institutional safeguards have worked well. As thinking on the appropriate institutional structures for effective supervision continues to evolve in various jurisdictions, the authorities will continue to review current arrangements to sustain a track record of supervisory resilience.

5 Medium-term Economic Restructuring

5.1 Beyond the short-term economic and financial developments, the ongoing restructuring drive is imperative for laying the foundations for a productivity-led growth model. The shift into higher value-added activities will help Singapore to stay relevant in an increasingly competitive global landscape.

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[4] In addition, the average loan-to-value ratio of all outstanding mortgages is 47.5%. On an overall basis (i.e. combining both retail and wholesale exposures), the average risk weights of the locally-incorporated banks are around 45%, as at Q2 2013, on the higher end of average risk weights among banks globally.

[5] Singapore has fully implemented the Basel III capital requirements, two years ahead of the timeline prescribed by the Basel Committee.

[6] The risk-based Minimum Liquid Assets framework requires every bank to hold a minimum percentage of its qualifying liabilities in liquid assets.

5.2 The authorities have adopted a multi-pronged approach to facilitate the transition of the economy. First, measures to incentivise businesses to raise their productivity through process improvements and technological innovation have been put in place. Second, significant investments are being made in continuous education and training to upgrade the skills of workers. These efforts, alongside the higher education attainments of younger cohorts, will allow Singapore to reap a human capital dividend in future years that will offset the slowdown in labour force growth, as well as lift incomes.

5.3 Third, the authorities have taken steps to avoid an excessive reliance by businesses on low-skilled foreign manpower. Notably, foreign worker policies are being tightened in steps so as to raise the relative price of low-skilled foreign labour, and to provide firms the incentives to make necessary investments in physical and human capital. The approach is a calibrated one which considers the circumstances of each sector and each category of workers. It also ensures that Singapore remains open to foreigners with the requisite skills to complement the Singaporean core in its workforce. Companies are also given time to adjust as the measures are announced in advance and progressively implemented. In addition, a three-year support package, which includes the Wage Credit Scheme, was introduced to ease the transition costs for businesses.

5.4 As the economy restructures over time, the productivity improvements from a more efficient use of factor resources will help relieve supply constraints, support potential output and real wages. The initiatives to promote social mobility and reduce income inequality will enable all segments of the population to benefit from growth.

6 Final Remarks

6.1 The external environment has improved, but the authorities remain vigilant to continuing external risks. They have the wherewithal to respond in a timely and appropriate manner to secure macroeconomic and financial stability. The authorities welcome the positive assessment of the financial system, and will review the FSAP assessment recommendations and follow-up as appropriate.

6.2 Over the longer term, the focus is on a progressive restructuring of the economy, with policies being subject to frequent review and feedback to take into account the pace of adjustments among firms and workers. Indeed, because of the openness of the economy and its limited resources, Singapore has always had to continually upgrade its industries and exports to more capital- and technology-intensive production to secure its competitiveness in world markets.

6.3 Finally, the authorities are pleased to inform the Executive Board that they agree to the publication of the full suite of reports, covering the 2013 Singapore Article IV Consultation Report, Selected Issues Papers, Financial System Stability Assessment report, the Report on Observance of Standards and Codes and the Detailed Assessment Reports.