

# INTERNATIONAL MONETARY FUND

**IMF Country Report No. 16/17** 

# PEOPLE'S REPUBLIC OF CHINA— HONG KONG SPECIAL ADMINISTRATIVE REGION

January 2016

2015 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR PEOPLE'S REPUBLIC OF CHINA— HONG KONG SPECIAL ADMINISTRATIVE REGION

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 2015 Article IV consultation with the People's Republic of China—Hong Kong Special Administrative Region, the following documents have been released and are included in this package:

- A Press Release summarizing the views of the Executive Board as expressed during its
  January 11, 2016 consideration of the staff report that concluded the Article IV
  consultation with the People's Republic of China—Hong Kong Special Administrative
  Region.
- The Staff Report prepared by a staff team of the IMF for the Executive Board's consideration on January 11, 2016, following discussions that ended on November 12, 2015 with the officials of the People's Republic of China—Hong Kong Special Administrative Region on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on December 15, 2015.
- An Informational Annex prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A Statement by the Executive Director for the People's Republic of China— Hong Kong Special Administrative Region.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

## Copies of this report are available to the public from

International Monetary Fund • Publication Services PO Box 92780 • Washington, D.C. 20090 Telephone: (202) 623-7430 • Fax: (202) 623-7201

 $\hbox{E-mail: $\underline{\text{publications@imf.org}}$ Web: $\underline{\text{http://www.imf.org}}$ }$ 

Price: \$18.00 per printed copy

# International Monetary Fund Washington, D.C.

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

Press Release No. 16/15 FOR IMMEDIATE RELEASE January 19, 2016

# IMF Executive Board Concludes 2015 Article IV Consultation with People's Republic of China—Hong Kong Special Administrative Region

On January 11, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation discussions<sup>1</sup> with Hong Kong Special Administrative Region (SAR).

Hong Kong SAR's growth is expected at 2.25 percent in 2015, with domestic demand acting as the principal source of momentum. Growth is likely to pick up modestly to  $2\frac{1}{2}$  percent in 2016, with a smaller drag from external demand reinforcing resilient domestic demand. Inflation has declined and is expected to remain below 3 percent in 2015/16 on softer commodity prices. The current account has dropped to around 2.50 percent of GDP, but is projected to improve to around  $3\frac{1}{2}$  percent over the medium term as the global economy recovers.

The economy has operated with low interest rates for seven years and is now likely to see rates increase with the Fed liftoff. Generally, favorable spillovers from Mainland China thus far may also turn more challenging going forward with the ongoing transition to slower, but more sustainable, growth in the Mainland. The domestic property sector has experienced a renewed run-up in prices since mid-2014, but there are some signs evident now of a pause in momentum.

Considering the fiscal and financial buffers in place in Hong Kong SAR, these risks are likely to have limited impact on the economy and financial system provided the increase in interest rates is gradual (and in line with the path envisaged in the U.S. Federal Reserve's FOMC median forecasts for the Federal Funds rate), and Mainland China's growth slows in orderly fashion.

Nevertheless, if growth slows more than expected in early 2016, fiscal policy will need to provide additional support in the February budget with an emphasis on expanded relief measures

<sup>&</sup>lt;sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

for vulnerable households, small businesses, and accelerated urban renewal and infrastructure spending where possible.

While property prices are showing some early signs of leveling off, the propensity for further increases remains because of the underlying shortfall in supply. Sustained efforts to ensure that the targets of the 2014 Long-Term Housing Strategy are met will be important for managing public expectations regarding supply and affordability.

Hong Kong SAR has a strong track record of filling regulatory and data gaps, and assessing systemic risks in the financial system. Essential infrastructure support for healthy market development has been provided, for instance in offshore RMB services. The resilience of the economy and financial system was displayed during the past summer when markets functioned in orderly fashion even as volatility in equity and currency markets increased substantially after the correction in the Mainland indices. Further strengthening aspects of the defenses will require completing the process underway for enacting legislation on a comprehensive recovery and resolution framework; continuing to strengthen the oversight regime for securities markets, broker dealers and asset managers as their business model evolves with new channels connecting Hong Kong SAR and Mainland markets; and fully implementing a risk-based capital regime for insurance companies.

#### Executive Board Assessment<sup>2</sup>

Executive Directors commended the authorities for their sound policy management which has supported steady growth of the economy and its resilience, and low unemployment despite elevated global financial market volatility. Directors agreed that Hong Kong SAR's small open economy faces multiple challenges related to the Fed liftoff, structural change in Mainland China, and the domestic property sector. However, the strong fiscal and financial buffers will help mitigate potential negative impacts arising from these risks. Directors welcomed the authorities' commitment to stay vigilant and implement a prudent mix of policies to secure healthy growth in the medium term.

Directors observed that fiscal policy should strike a balance between supporting the economy in the near term and addressing the future needs of an aging population and a shrinking workforce. They encouraged proactive use of the fiscal space to cushion the economy if economic activity weakens significantly in early 2016, by expanding relief measures for vulnerable households and small businesses, and accelerating urban renewal and infrastructure spending where possible. They commended the recent progress in a number of areas to address the long-term fiscal challenges, including the planned Low-Income Working Family Allowance Scheme to

<sup>&</sup>lt;sup>2</sup> 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.

incentivize labor force participation and the Future Fund to raise investment returns of the fiscal reserves.

Directors agreed that restoring demand-supply balance in housing markets should continue to be a policy priority. They encouraged the authorities to implement the 2014 Long-Term Housing Strategy effectively to ensure that additional housing supply targets are met and that public expectations about supply and affordability improve in a durable manner. Directors agreed that adjustments to stamp duties could be considered if there is a sustained decline in transaction volumes with the potential to generate adverse spillovers to the broader economy. Property-related macroprudential measures should also continue to remain in place and any adjustments should be made based on evolving financial stability risks and not in response to aggregate demand developments. They recommended monitoring the level of floating rate mortgages.

Directors noted that Hong Kong SAR has a strong track record of filling regulatory and data gaps, assessing systemic risks, and strengthening financial institutions' loss absorption buffers in a preemptive manner. They encouraged the authorities to complete the legislation on a comprehensive recovery and resolution framework, to continue to strengthen the oversight regime for securities markets, broker dealers, and asset managers as their business model evolves with new channels connecting Hong Kong SAR and Mainland markets, and to fully implement a risk-based capital regime for insurance companies.

Directors agreed that the Linked Exchange Rate System remains the best arrangement for Hong Kong SAR and serves as an anchor of stability for this small open economy with a globally integrated financial services industry.

**Hong Kong SAR: Selected Economic and Financial Indicators, 2010–16** 

							Proj.
	2010	2011	2012	2013	2014	2015	2016
Real GDP (percent change)	6.8	4.8	1.7	3.1	2.5	2.2	2.5
Contribution							
Domestic demand	6.7	6.0	3.7	3.9	2.8	1.4	2.3
Private consumption	3.8	5.2	2.6	3.0	2.1	3.1	2.0
Government consumption	0.3	0.2	0.3	0.3	0.3	0.3	0.3
Gross fixed capital formation	1.7	2.2	1.6	0.6	0.0	-0.9	-0.3
Inventories	0.9	-1.7	-0.8	0.0	0.5	-1.0	0.3
Net exports	0.2	-1.3	-2.0	-0.9	-0.3	0.8	0.2
Inflation (percent change)							
Consumer prices	2.4	5.3	4.1	4.3	4.4	2.7	2.9
GDP deflator	0.3	3.9	3.5	1.9	2.9	3.7	2.3
Employment (percent change)	0.2	2.9	2.4	1.8	0.6	0.7	0.7
Unemployment rate (percent, period average)	4.3	3.4	3.3	3.4	3.3	3.2	3.1
Real wages (percent change)	-0.4	2.7	1.6	0.1	-2.4		
Government budget (percent of fiscal year GDP)							
Revenue	21.2	22.6	21.7	21.3	21.2	22.0	22.1
Expenditure	17.0	18.8	18.5	20.3	17.6	18.5	19.4
Consolidated budget balance	4.2	3.8	3.2	1.0	3.7	3.5	2.7
Fiscal reserves as of March 31	33.5	34.6	36.0	35.3	36.7	38.3	39.2
Money and credit (percent change, end-period)							
Narrow money (M1)	12.8	10.8	22.2	9.7	13.1		
Broad money (M3)	8.0	12.9	11.0	12.4	9.6	•••	
Loans for use in Hong Kong SAR (not including trade financing)	20.9	12.5	7.0	10.6	13.5	•••	•••
Interest rates (percent, end-period)							
Best lending rate	5.0	5.0	5.0	5.0	5.0	•••	
Three-month HIBOR	0.3	0.5	0.3	0.3	0.3	•••	
Asset prices							
Hang Seng stock index (end of period, 1964=100)	23,035	18,434	22,657	23,306	23,605		
Hang Seng stock index (percent change)	5.3	-20.0	22.9	2.9	1.3	•••	
Residential property prices (end of period, percent change)	21.0	11.1	25.7	7.7	13.5		
Merchandise trade (percent change)							
Export volume	17.3	3.5	1.9	6.5	0.8	-2.6	0.2
Domestic exports	-0.1	-0.6	10.1	-1.6	2.3	-0.9	0.2
Re-exports	17.9	3.6	1.7	6.8	0.8	-2.7	0.2
Import volume	18.1	4.7	3.0	7.2	0.9	-3.4	-0.6
Current account balance (percent of GDP) 1/	7.0	5.6	1.6	1.5	1.9	2.5	2.7
Foreign exchange reserves 1/							
In billions of U.S. dollars, end-of-period	257.1	269.9	300.5	311.1	328.5		
In months of retained imports	27.5	24.6	26.5	26.3	26.3		
In percent of broad money (M3)	27.9	26.0	26.0	23.9	23.1		•••
Exchange rate							•••
Linked rate (fixed)							
Market rate (HK\$/US\$1, period average)	7.769	7.783	7.755	7.756	7.754	•••	
Real effective rate (period average, 2010=100)	100.0	96.6	98.7	102.2	105.7		

Sources: CEIC; and IMF staff estimates.

<sup>1/</sup> Data published using the Balance of Payments Statistics Manual 6 (BPM6) format.



# INTERNATIONAL MONETARY FUND

# PEOPLE'S REPUBLIC OF CHINA— HONG KONG SPECIAL ADMINISTRATIVE REGION

STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION DISCUSSIONS

December 15, 2015

# **KEY ISSUES**

**Overview.** Growth has been steady, albeit slightly below potential, and the unemployment rate is low. Nevertheless, the economy faces multiple challenges related to the Fed liftoff, structural change in Mainland China, and the domestic property sector.

Policies. Addressing these challenges and securing healthy growth into the medium term require

- proactive use of the fiscal space to cushion the economy against near-term shocks;
- maintaining the Linked Exchange Rate System (LERS), an anchor of expectations and cornerstone
  of stability for over three decades;
- implementing the 2014 Long-Term Housing Strategy effectively to ensure targets are met and public expectations about supply and affordability improve in a durable manner;
- adjusting the property-related macroprudential measures based on evolving financial stability
  risks and not in response to aggregate demand developments (unless the measures are deemed
  to impair credit intermediation and disrupt the banking system's ability to support the real
  economy); and
- further fortifying the defenses of the financial system by enacting a comprehensive recovery and resolution framework; continuing to strengthen the oversight regime for securities markets; and implementing a risk-based capital regime for insurance companies.

# Approved By

Markus Rodlauer and Alfred Kammer

Discussions took place in Hong Kong SAR during November 3–12, 2015. The team comprised Malhar Nabar (head), Joong Shik Kang, Si Guo (all APD), Hui Miao (MCM) and Daniel Law (Resident Representative Office). Sun Ping and Michael Cheng (OED) participated in the official meetings. Markus Rodlauer (APD) joined the team for the concluding meetings with Financial Secretary John Tsang and HKMA Chief Executive Norman Chan. Roberto Guimarães-Filho, Gee Hee Hong, Anh Le, Lesa Yee (all APD), Daisy Wong (COM), and Atis Lee (Resident Representative Office) provided support to the mission.

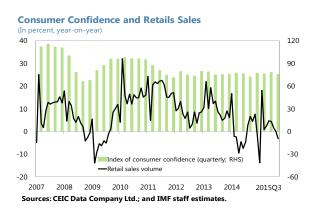
# **CONTENTS**

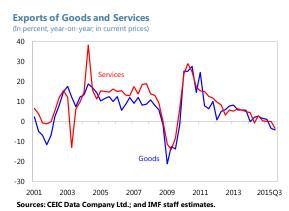
CONTEXT AND RECENT DEVELOPMENTS		
MACRO OUTLOOK	8	
RISKS AND SPILLOVERS	10	
A. Interest Rates: A Bumpy Ascent?	10	
B. Exposures to Economic and Financial Stress on the Mainland	12	
C. Property Prices: Ripe for a Correction?	20	
D. Perfect Storm	23	
POLICY MIX TO BUILD RESILIENCE	25	
A. Fiscal	25	
B. Linked Exchange Rate System (LERS)	27	
C. Financial Sector	27	
D. Property Sector	28	
E. Labor	30	
F. Contingencies for a Perfect Storm	30	
STAFF APPRAISAL	31	
BOXES		
1. Potential Output Growth in Hong Kong		
<ul><li>2. The Impact of Rising Interest Rates on Domestic Demand in Hong Kong SAR</li><li>3. Determinants of Dim Sum Bond Issuance</li></ul>		
Determinants of Dim Sum Bond Issuance      Financial Connectedness between Hong Kong SAR and Mainland: Evidence from Equity Markets	10	
FIGURES		
1. Snapshot of Credit and Asset Price Developments		
2. Impact of Rising Interest Rates	11	

3. Exposures to the Mainland: Financial Channels	
4. Developments in the Offshore RMB Market	
5. The Property Market	21
6. Fiscal Policy: Striking a Balance between Intergenerational Needs and Supporting the	
Economy in the Near Term	26
TABLES	
1. Selected Economic and Financial Indicators, 2010–16	33
2. Balance of Payments, 2010–16	34
3. Consolidated Government Account, 2011/12–2020/21	
4. Monetary Survey, 2010–16	
5. Medium-Term Macroeconomic Framework, 2010–20	37
6. Vulnerability Indicators, 2010–15	38
APPENDICES	
I. Summary of Macroprudential Measures Introduced Since 2009	
II.Risk Assessment Matrix	43
III. Debt Sustainability Analysis	44
IV. External Sector Report	46
V. FSAP Recommendations	48

# CONTEXT AND RECENT DEVELOPMENTS

- 1. Context. Hong Kong SAR's economy has operated with short-term interest rates near zero and long yields at near-historic lows for the past seven years. During this time, the economy has also experienced generally favorable spillovers from Mainland China. These tailwinds may become less powerful going forward. Interest rates in Hong Kong SAR are poised to increase with the Fed liftoff, through their direct link to U.S. rates via the currency board. The spillovers to Hong Kong SAR from Mainland China could also prove more challenging than in the past as the Mainland transitions to slower, but more sustainable growth.
- 2. **Recent developments.** Heading into a potentially testing period ahead, activity momentum has remained steady while credit and asset prices present a mixed picture (Figure 1).
- Activity. Growth in the first three quarters has been just over 2½ percent, similar to 2014. Domestic demand has been the mainstay of activity (particularly private consumption on the back of a tight labor market, although there are some signs of a moderation in retail sales in recent months). External demand has weakened gradually over the year, reflecting the global trade slowdown. The unemployment rate has remained low, at 3.3 percent. CPI inflation has drifted down to 2.4 percent y/y in October, on lower imported inflation and favorable effects of property rates waivers on the cost of living.



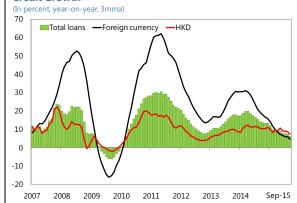


- Credit. Overall credit growth has moderated since mid-2014, with a deceleration in foreign currency-denominated loans. Growth of loans for use in Hong Kong SAR has moderated somewhat, but remains robust, including to the property sector. The stock of outstanding debt securities where the ultimate domicile of risk is in Hong Kong SAR also appears to be leveling off, with about 75 percent of bonds maturing within 1–3 years.
- Equity market. The Hang Seng index (HSI) experienced a correction in the wake of the Mainland equity crash, currently down 20 percent from its peak. The China Enterprises Index "H Share" is down 28 percent (compared to the 30 percent decline in Shanghai Composite since June 11).

## Figure 1. Snapshot of Credit and Asset Price Developments

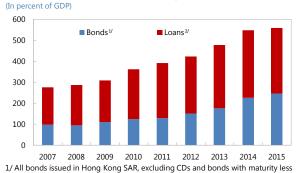
Credit growth has moderated since mid-2014, largely driven by foreign currency loans...

#### **Credit Growth**



Bonds now comprise an important share of intermediation...

#### **Total Loans and Bonds Outstanding**

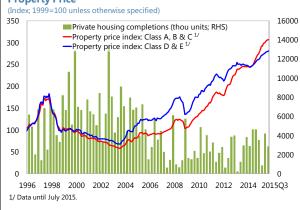


than 1 year, regardless of domicile of risk. 2/ All loans originated in Hong Kong SAR, including HKD and foreign currency

loans.

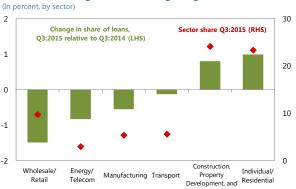
Asset price dynamics have been mixed, with property prices rising...

#### **Property Price**



...but lending related to real estate has increased over the past year on the back of the active property market.

#### **Loans Outstanding for Use in Hong Kong SAR**

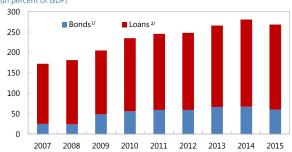


Investment

...but their volume outstanding where domicile of risk is located in Hong Kong SAR appears to be leveling off.

# Loans and Bonds Outstanding, domicile of risk in Hong Kong SAR





1/ Bonds issued by entities incorporated in Hong Kong SAR with domicile of risk in Hong Kong SAR.

2/ Loans for use in Hong Kong SAR.

...while equities have adjusted in light of the correction on the Mainland.

#### **Stock Price Index**

(Index, January 2008=100)



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

- segments have tripled relative to their level at end-2008, while those in luxury segments have almost doubled. These increases reflect strong local end-user demand colliding against tight housing supply. Completion of private housing units has slowed this year and vacancy rates have declined. A similar dynamic appears to be at work in the nonresidential property segment as well. There are now some early signs of a pause in momentum, especially in the secondary market for residential property and the retail component of the nonresidential sector.
- 3. **External position.** The real exchange rate has appreciated 10 percent relative to the 2014 average, and 17 percent since 2012, a product of the link to the U.S. dollar and relatively higher inflation in Hong Kong SAR compared to trading partners. The current account balance has stabilized in the range of 1½–2 percent of GDP over this time (and is projected to increase to around 3½ percent over the medium term as global demand recovers).
- 4. **Buffers.** The economy has augmented its buffers even with the robust credit growth of recent years and the build-up of leverage in an era of low interest rates.
- Banks. The regulatory framework is geared toward limiting the build-up of systemic vulnerabilities, ensuring that banks maintain healthy liquidity profiles and ample capital buffers. Multiple rounds of counter-cyclical macroprudential measures since 2009 (tighter ceilings on loan-to-value (LTV) and debt-service-to-income (DSR) ratios, risk-weight floors on property loans) have helped contain the growth in bank exposure to the run-up in property prices (Appendix I). In 2014, a bank-specific stable-funding requirement was

# Asset Quality of Retail Banks 1/ 2/ (In percent of total loans) ---Classified loans (gross) ---Overdue and rescheduled loans

**Sources: CEIC Data Company Ltd; and IMF staff estimates.**1/ Classified loans are those loans graded as "sub-standard," "doubtful" or "loss."
2/ Figures related to retail banks' Hong Kong office(s) and overseas branches.

2007

2009

2011

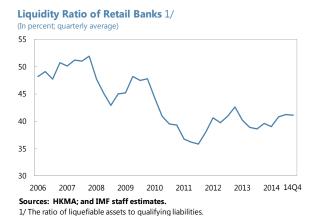
2013 201502

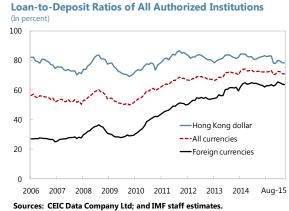
introduced to ensure that banks with especially rapid credit growth had adequate stable sources of funding to support their loan book. A countercyclical capital buffer (0.625 percent of risk-weighted assets) will be introduced in Q1:2016 and domestic systemically important banks will be subject to additional loss absorbency capital surcharges of 0.250–0.625 percent. These measures will provide further protection to a banking system already capitalized in excess of Basel III levels: as of September 2015, the total capital adequacy ratio (CAR) for locally incorporated authorized institutions is 18.1 percent, Tier 1 CAR is 14.9 percent, and the common equity tier 1 (CET-1) ratio is 14.3 percent.

2001

2003

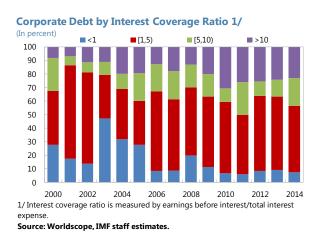
2005





- Fiscal. Budget over-performance in recent years has lifted fiscal reserves to 35 percent of GDP, or about 24 months of total government expenditure. Gross government debt is minimal (around 0.1 percent of GDP).
- Households. Although the stock of household debt has risen to historic highs close to 70 percent of GDP (around two-thirds of which is residential mortgage debt), the Hong Kong Monetary Authority's (HKMA's) mandatory debt service stress tests on mortgage applicants has contained the debt service burden among new borrowers. New borrowers' debt service relative to disposable income has declined from 41 percent in August 2010 to 35 percent in 2014. Furthermore, the number of owner-occupied households with mortgages or loans has contracted by nearly one-fourth since the global financial crisis with only one-third of owner-occupied households currently carrying mortgages or loans.
- has increased rapidly in recent years, listed company data suggest that the leverage ratio of corporates in Hong Kong SAR is relatively low in the region (Regional Economic Outlook; Asia and Pacific, 2014). In terms of corporate debt concentration, less than 10 percent of the total debt stock among listed firms is owed by firms with leverage ratios greater than 2. The maturity structure of the debt is generally favorable: the median ratio of short- to long-term debt among listed firms is among

by "stressed" companies (with interest coverage ratios below 1).

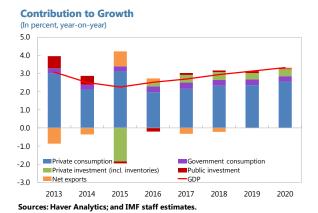


the lowest in the region. Furthermore, less than 10 percent of total debt among listed firms is owed

External. Vulnerabilities in the international investment position are low—net foreign assets are
close to 330 percent of GDP; foreign exchange reserves, at 120 percent of GDP, are adequate for
precautionary purposes.

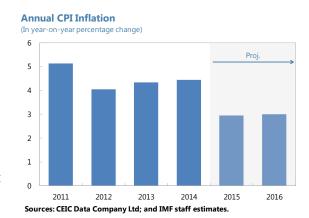
# **MACRO OUTLOOK**

- 5. **Growth.** Growth in 2015 is expected at 2½ percent, picking up slightly to 2½ percent in 2016. Staff estimates indicate this pace of expansion is below potential growth of 3–3½ percent (Box 1). The baseline projection assumes
- interest rates in Hong Kong SAR increase in line with the FOMC's median target range forecast for the U.S. Federal Funds rate: staff analysis suggests that this pace of increase in



interest rates will have a modest negative impact on domestic demand; furthermore, in light of the prudential measures deployed by the regulators, Hong Kong SAR's financial system appears well placed to handle portfolio adjustments along this path of rising interest rates;

- a slight moderation in credit for use in Hong Kong SAR: tighter macroprudential measures (additional capital surcharges from Q1:2016) will restrain supply, while higher borrowing costs will weaken demand;
- Mainland China's growth slows moderately to a range of 6–6½ percent: tourism spending in Hong Kong SAR and other activity in Hong Kong SAR with direct links to Mainland China's economy (trade, financial sector) stabilize accordingly; bank buffers are adequate for absorbing associated asset quality deterioration on Mainland exposures; and
- support from fiscal policy: based on the government's budget projections, adjusted for revenue overperformance in line with historical outturns, the fiscal stance for FY2016/17 delivers an expansionary impulse of around 1 percent of GDP.
- 6. **Inflation.** Inflation is expected to remain below 3 percent in 2015 and 2016, compared to an average of 4 percent over the last five years. The softer pressure reflects weaker global commodity prices and the modest pick-up in real activity projected over 2015/16. In line with the developments over the last three years, nominal wages are expected to continue growing at a moderate rate despite the tight labor market. Unit labor costs are therefore likely to remain contained.



## **Box 1. Potential Output Growth in Hong Kong** 1/

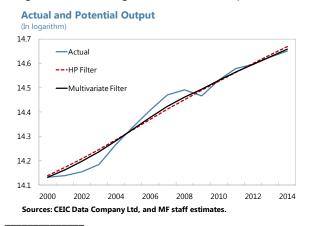
The Hong Kong SAR economy has been growing moderately since 2012, after a strong recovery in 2010–2011 following the global financial crisis. A key question is whether this slowdown is cyclical or structural. Various estimation methods suggest that the annual growth rate of potential output has been around 3–3.5 percent in recent years, slower than the pace prior to the global financial crisis. The slowdown in actual output growth is in line with slower potential output growth.

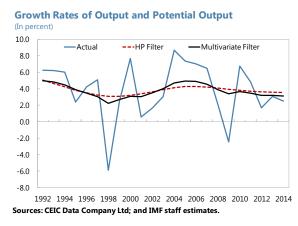
There has been a growth deceleration since 2012. The average growth rate since 2012 is about 2.5 percent per year, about 2 percentage points lower than 2000–2007. Although some slowdown might be a natural consequence as the economy becomes more advanced, the pace of adjustment seems to be less gradual than expected. A critical question for policy makers is whether the slowdown is reflecting weaker potential output growth or just a cyclical phenomenon.

The Hodrick-Prescott filter method implies that the pace of potential output growth is still at about 3½ percent per year. The sample period is from 1961 to 2014. Except for the years during the Asian financial crisis, there has been a clear long-run pattern of gradual deceleration in trend output. The average growth of trend GDP from 2012 to 2014 is about 3.6 percent. The level of actual real GDP has been lower than the HP trend since 2012.

The multivariate approach suggests slower potential growth in recent years, although it is still above 3 percent per year. One of the drawback of the HP filter approach is that it is a pure statistical method without relying on any economic theory. A multivariate approach, which includes some underlying relationship among output, inflation and unemployment rate through the Philips curve and Okun's law, would provide an estimate of potential output that does not create an upward or downward inflation bias. Thus, the moderate inflation and relatively tight labor market conditions in recent years would suggest a stronger cyclical position than that implied by HP filter method. As a result, relative to the trend growth estimated by HP filter method, the average growth rate of potential output estimated by multivariate approach is lower in recent years.

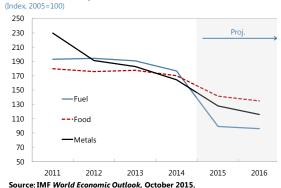
The production function approach also points to average potential growth above 3 percent per year. Based on the recent research by HKMA, average TFP growth has dropped from 4.0 percent per year (2000–2008) to about 2.6 percent (2009–2013). The estimation is based on a sectoral growth accounting exercise, covering several key sectors accounting for over 90 percent of GDP in Hong Kong. Since part of the TFP drop is likely to be a cyclical phenomenon (TFP is pro-cyclical), a moderate contribution from physical capital deepening and human capital growth (at least in the medium term) would bring annual real GDP growth rate back to 3 percent or above.



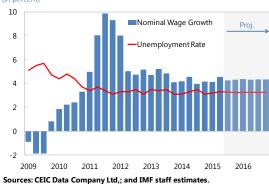


1/ IMF working paper, forthcoming, by Si Guo.

#### **Global Commodity Prices**



# **Nominal Wage Growth and Unemployment Rate**



#### **Authorities' Views**

- 7. **Outlook**. The authorities noted that weaker tourism inflows and subdued global trade throughput are weighing on activity, even as domestic demand remains resilient. Labor shortages in many sectors, rising wages, and improvements in job security have supported consumer sentiment. High infrastructure spending has provided additional momentum. However, external headwinds are likely to remain strong into next year and, as such, Hong Kong SAR's GDP growth is expected to remain subpar, similar to recent outturns. The authorities further noted that inflation is easing and likely to remain contained owing to lower commodity prices, weaker pressure from property rental rates, and the tentative outlook for real activity.
- 8. **External position.** The authorities expected a gradual improvement in the current account as the global economy recovers. However, they did not see the external balance returning to the relatively high levels of the precrisis years, in part because of the rebalancing that has occurred in the Mainland since then. In addition, they noted a solid increase in Hong Kong SAR's domestic demand with the sustained rise in property prices, which has had the effect of compressing the current account surplus.

# **RISKS AND SPILLOVERS**

9. **Risks are tilted to the downside** (Appendix II) and arise from four main sources. High household and corporate leverage leave the private sector exposed to rising debt service costs in the event of a sharper-than-anticipated increase in interest rates. Spillovers from the Mainland have been strong and may intensify. The run-up in property prices over the past year raises the probability of a correction. Finally, there is a low probability-high impact risk of sharper-than-anticipated increases in interest rates coinciding with a faster-than-expected slowdown in Mainland China.

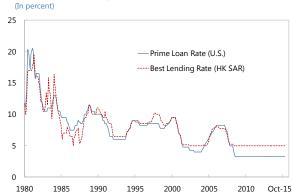
# A. Interest Rates: A Bumpy Ascent?

10. A principal near-term risk is higher volatility in global financial markets in the aftermath of the Fed liftoff, with interest rates rising more sharply than anticipated in the baseline (Figure 2). The highly compressed term premium (the yield on Hong Kong SAR 10y government bonds is currently some 50 basis points below that on U.S. 10y treasury bonds) also raises the possibility of a strong snap back at longer

## **Figure 2. Impact of Rising Interest Rates**

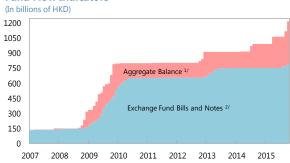
Interest rates in Hong Kong SAR are expected to rise for the first time in about a decade...

#### **Benchmark Lending Rates**



...but the pace may be slower than in previous episodes on account of the abundant liquidity in the system.

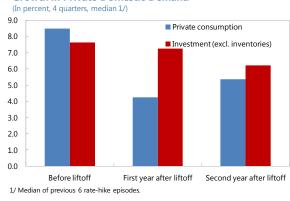
#### **Fund Flow Indicators**



1/ Aggregate Balance: Sum of clearing account balances of banks with HKMA and payments between banks and HKMA, representing the level of interbank liquidity. 2/ Exchange Fund Bills and Notes: Debt instruments issued by the HKMA when there is an inflow of funds.

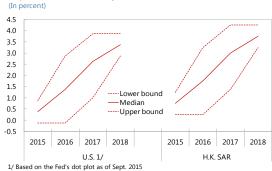
...with private domestic demand generally growing at a slower pace in the aftermath of US rate hikes.

#### **Growth in Private Domestic Demand**



...in tandem with the U.S. Fed's rate hike...

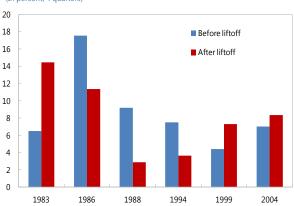
#### **Expected Pace of Policy Rates**



Changes in Hong Kong SAR GDP growth around Fed tightening cycles present a mixed record...

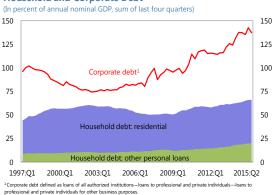
#### **GDP Growth**

(In percent, 4 quarters)



The high stock of debt suggests that a faster-thanexpected rise in rates in the upcoming episode could increase debt service ratios and hurt private spending.

#### **Household and Corporate Debt**



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

maturities. Long yields could rise faster than expected if the target range for the Fed Funds rate follows a path closer to the upper bound of FOMC forecasts rather than the median (with short rates in Hong Kong SAR and the entire yield curve shifting up in response). A second possibility is that the Fed Funds target range follows the median path, but aggressive portfolio rebalancing back toward U.S. dollar assets leads to a rapid decompression of spreads globally and, as a result, long yields in Hong Kong SAR rise faster than expected.

11. If such a shock were to materialize, domestic demand in Hong Kong SAR could be adversely affected (Box 2). Private consumption would be disrupted if interest rates were to spike (with the debt service ratio for new mortgage borrowers rising from its current relatively low level of around 35 percent to between 50–60 percent, depending on the magnitude of the rate increase). Rising costs of refinancing and rolling over corporate debt could inhibit investment, although staff analysis suggests that for a given rate increase the impact is likely to be less severe than in the case of private consumption. The overall slowdown in domestic demand could impair asset quality and hurt banking sector profitability, while higher interest rates would affect the value of banks' securities holdings, thereby constraining their ability to lend.

#### **Authorities' Views**

- 12. **Repricing of the yield curve.** The authorities considered the possibility of asset price corrections and a repricing of the yield curve in Hong Kong SAR a tangible risk as part of a generalized regional sell-off. They noted that parts of Emerging Asia, where U.S. dollar-denominated debt is high, could be vulnerable to tighter external financial conditions and a potentially stronger dollar in the aftermath of the Fed liftoff. Any resulting financial instability in the region could generate contagion effects in Hong Kong SAR and, depending on the severity of the shock, could also hurt domestic demand.
- 13. **Financial system resilience.** The authorities highlighted that the prudential measures, taken ever since liquidity began flooding into Hong Kong SAR with the onset of unconventional monetary policy elsewhere, have strengthened buffers in the financial system and prepared it for the eventual normalization of interest rates. The financial system is therefore expected to remain resilient in the face of rising interest rates even if real activity slows. Furthermore, an overall favorable international investment position would distinguish Hong Kong SAR from economies with weaker fundamentals once investors become more discerning as the era of ultra-cheap money ends.

# B. Exposures to Economic and Financial Stress on the Mainland

14. Closer integration with the economy of Mainland China has brought several benefits to Hong Kong SAR, but also leaves it vulnerable to inward spillovers. The real sector linkages, especially in tourism, have grown rapidly after the easing of entry visa restrictions on Mainland visitors. Financial linkages have also deepened in recent years with the increase in cross-border bank lending, securities issuance in Hong Kong SAR by Mainland entities, and the internationalization of the RMB. Vulnerabilities from the various channels appear manageable provided the ongoing adjustment to slower and more sustainable growth in the Mainland remains orderly.

#### Box 2. The Impact of Rising Interest Rates on Domestic Demand in Hong Kong SAR 1/

Since the Linked Exchange Rate System (LERS) was adopted in 1983, the Fed has had six rate hike cycles. Interest rates in Hong Kong SAR have risen in tandem with U.S. rates over these cycles. Comparing pre- and post-rate hike years, growth in Hong Kong SAR has slowed in three instances of these six Fed tightening episodes. Private domestic demand in Hong Kong SAR—particularly household consumption—has generally grown at a slower pace in the aftermath of U.S. rate hikes, but has remained resilient. A key difference this time is that private sector debt is much larger compared to past tightening phases, raising the possibility of a significant retrenchment in spending if interest rates increase more steeply than expected.

Provided interest rates in Hong Kong SAR rise in line with the projected median path of the FOMC's target forecast range for the Fed Funds rate, domestic demand will not be adversely affected. It is likely that the pace of interest rate increases will be gradual especially since the monetary base has expanded considerably since 2009. This will allow households and corporates to adjust spending patterns smoothly. If household income and corporate profitability grow at a steady pace in line with Staff's baseline scenario for the economy, the increase in debt service burdens will be manageable.

To quantify the potential impact of higher interest rates on private sector activity, Staff estimate private consumption and corporate investment functions for Hong Kong SAR. Aggregate consumption is modeled as a function of income (proxied by real payrolls), wealth (real property and stock price), and the debt service burden (ratio of mortgage payments relative to household income, as reported by the Centaline Agency in Hong Kong SAR). Two specifications are estimated – ordinary least squares (OLS) and an error-correction model (ECM)—over 1994:Q1–2015:Q2. Private investment is modeled as a function of lagged investment and cash flow, both scaled by capital stock; leverage ratio (debt / equity); and a variant of Tobin's Q (sum of market capitalization and total debt, relative to total assets). The model is estimated using annual data from Worldscope, covering about 1000 firms in Hong Kong SAR's manufacturing and service sectors over 1995–2014.

The relationships estimated over the past two decades suggest that private consumption would be affected more severely than investment for a given interest rate shock. A shock of 300bps increase in mortage rates is considered. Households' mortgage payment-to-income ratio would rise by about 16 percentage points, assuming that there is no income growth at all. The OLS and ECM model coefficients indicate that the elasticity of consumption with respect to debt service burden is around 0.5, suggesting that household consumption would decline by about 7-8 percent if mortgage rates rise by 300 bps. This estimate is potentially a lower bound since the effect on household consumption of a large increase in interest rates will most likely be nonlinear (reflecting an accelerating retrenchment in spending as interest rates rise).

In the case of private investment, estimation results show that the direct effect of a 300 bps increase in interest rates is to reduce corporate investment by ½ to 1 percent (assuming that there is no change in other factors including expected future profitability, as captured by the Q ratio, and leverage). As of 2014, the median effective interest rate in the sample of 1000 firms studied was about 4½ percent and the median cash flow-to-capital stock ratio was 0.214. The 300 bps increase in interest rates would reduce the cash flow-to-capital stock to 0.179. In the presence of credit constraints that prevent smoothing of the shock to cash flows, investment declines as reported above. This modest impact based on the response of corporate investment to previous rate tightening cycles is likely to be a lower bound for the overall effect of higher interest rates. Additional indirect effects are likely to be expressed through lower expected profitability.

1/ IMF working paper, forthcoming, by Joong Shik Kang.

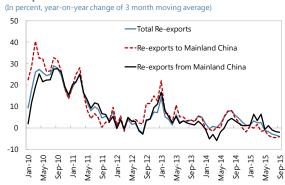
#### Trade and tourism

A sharper-than-anticipated slowdown in the Mainland would hit trade and wholesale warehousing in Hong Kong SAR, with large employment losses (13 percent of the labor force is occupied in these activities). Mainland visitors accounted for around 40 percent of overall retail sales in 2014, up from almost 25 percent in 2009. A downturn on the Mainland would therefore also hurt tourism and retail sales in Hong Kong SAR. This year, with growth in the Mainland slowing, tourist arrivals in Hong Kong SAR have already seen declines, as have re-exports to and from the Mainland. The contraction on both fronts has affected the aggregate amounts of tourist inflows and re-exports noticeably, reflecting the importance of the Mainland components for both categories.





#### **Re-exports Growth**



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

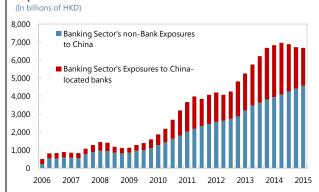
#### Financial channels

- Banking system claims on Mainland banks. Hong Kong SAR-based banks have gross claims on
  onshore Chinese banks amounting to HK\$2.1 trillion (around 90 percent of GDP). These include surplus
  RMB funds parked at Chinese correspondent banks or the People's Bank of China, trade settlement
  claims, and debt securities issued by the Chinese banks.
- Banking system claims on nonbank Mainland entities are now at HK\$4.6 trillion (195 percent of GDP), nearly four times as large as in 2010 (Figure 3). So far, asset quality on these exposures has remained broadly in line with overall asset quality in the Hong Kong SAR banking system. However, the ultimate risk exposure remains unclear due to possible on-lending in some instances by immediate borrowers. If Mainland growth and financial stresses emerge in some key sectors such as export-oriented manufacturing or real estate, these risks could come to the fore. Local Hong Kong SAR banks—including Mainland subsidiaries of locally incorporated banks—account for close to sixty percent of these claims, with branches of foreign banks in Hong Kong SAR accounting for the rest. Since forty percent of the exposure is accounted for by foreign banks, the direct impact on the financial system in Hong Kong SAR may not be as large as the size of the headline claims suggests. However, depending on the severity of the downturn, the unfolding of events in the Mainland could lead to a sharp deterioration in asset quality in the Hong Kong SAR banking system, leading banks to slow their lending more broadly.
- Offshore U.S. dollar securities issuance by Chinese firms. In recent years, Chinese corporations have
  increasingly issued U.S. dollar bonds with relatively short maturities in Hong Kong SAR to take advantage
  of the low interest rates on offer. The outstanding amount of such bonds with the Mainland listed as the

## Figure 3. Exposures to the Mainland: Financial Channels

Hong Kong SAR banks' claims on Mainland entities particularly nonbanks—have grown rapidly in recent years.

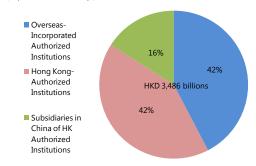
**Exposure to China** 



Locally incorporated banks and their subsidiaries operating in the Mainland account for close to two-thirds of the loans.

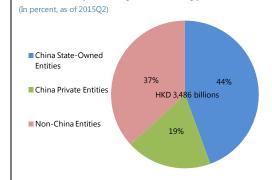
#### **Non-bank Exposure by Lenders**

(In percent as of 2015Q2)



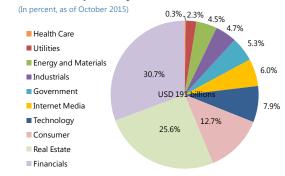
On the borrower side, Mainland SOEs and foreign companies operating in China account for 80 percent of the borrowing.

Non-bank Exposure by Borrower Type



Corporations' issuance of U.S. dollar securities in Hong Kong SAR with ultimate risk domiciled in Mainland China spans a wide range of sectors.

**USD Bond Exposure by Sector** 

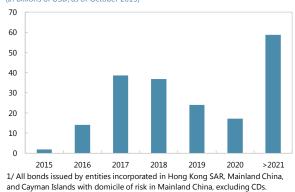


One-half of these bonds (amounting to 35 percent of Hong Kong SAR GDP) mature in the next three years and may face rollover risks in a higher interest rate environment...

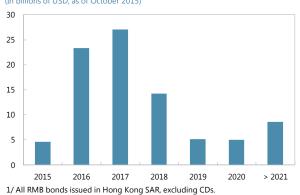
...as may be the case with Mainland entities' RMB bonds issued in Hong Kong SAR, although magnitudes are smaller.

Maturity Profile of Offshore USD Bond 1/

(In billions of USD, as of October 2015)



Maturity Profile of Dim Sum Bond <sup>1/</sup> (In billions of USD, as of October 2015)



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

ultimate domicile of risk reached US\$191 billion (around 70 percent of GDP) as of October 2015. The investor base includes Hong Kong SAR banks, global bond funds, and private banking clients. The issuers, some with relatively weak credit profiles, span a range of sectors. B- or BB-rated property developers account for 26 percent of the total amount outstanding. However, the recent opening of cheap funding options via the onshore bond market appears to have lowered the financing risks of these borrowers.

- Offshore RMB market. The international appeal and use of RMB has grown rapidly since 2010. Measures introduced by the Hong Kong SAR authorities—setting up a RMB Real Time Gross Settlement System, streamlining liquidity facilities, facilitating a CNH Hibor fixing—have consolidated Hong Kong SAR's position as the premier offshore RMB center during this time. As the Mainland capital account opens further, the volume of RMB transactions in Hong Kong SAR and prospects for revenues (including securities issuance fees, fx option premia, and interest income) from this business are expected to continue on an upward path. While RMB activity in other financial centers (Singapore, London) has picked up in the last 2-3 years, the spread of offshore liquidity pools will complement Hong Kong SAR's first-mover advantages in this area by increasing the demand for wholesale RMB services. However, as seen in recent months, when markets worry about Mainland growth prospects and RMB depreciation pressures intensify, this temporarily slows the growth of the offshore RMB business in Hong Kong SAR. RMB deposits declined and the CNY/CNH spread widened significantly in the summer as the Mainland authorities tightened their monitoring of arbitrage flows (Figure 4). Staff analysis suggests that dim sum (offshore RMB-denominated) bond issuance is negatively affected when markets expect the CNH to depreciate (Box 3). Going forward, if RMB depreciation pressures re-emerge, this may hurt revenue streams for financial institutions. Pressures in the spot CNH market could also test the derivatives market (the U.S. dollar/CNH cross-currency swap has grown to become one of the most liquid fx options in Asia) and expose financial intermediaries to bunched redemption requests at particular thresholds for the exchange rate.
- Shanghai-Hong Kong Stock Connect and Mainland-Hong Kong Mutual Recognition of Funds. New channels for two-way flows between the Mainland and Hong Kong SAR have been opened over the past year. The Connect scheme (launched in November 2014) permits individuals and institutions with brokerage accounts in either Shanghai or Hong Kong SAR to trade stocks in the other market, subject to daily and aggregate quotas, while the Mutual Recognition of Funds (inaugurated in July 2015, with the first batch of funds currently going through the approval process) permits mutual funds in either location to mobilize investments from the other jurisdiction, subject to regulatory approval and also within an overall quota. The closer integration of the stock markets facilitates greater trading volumes and enhances market liquidity, but also creates new channels for volatility and financial stress in one location to be transmitted to the other. Staff analysis shows that correlations between Hong Kong SAR stock indices and the Mainland indices have grown in recent months, with particular sectors (construction, financials) more sensitive to spillovers (Box 4). The schemes are in their early stages of rollout at this point but, going forward, should extended periods of high volatility occur, this may hurt real activity in Hong Kong SAR and affect financial intermediation services (including lower appetite for initial public offerings; outflows from mutual funds; losses and debt service difficulties by leveraged investors in the equity market).

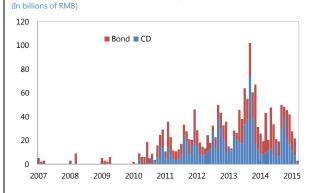
## Figure 4. Developments in the Offshore RMB Market

Following the change to the CNY central parity fixing in August, the CNH/CNY spread widened dramatically initially.



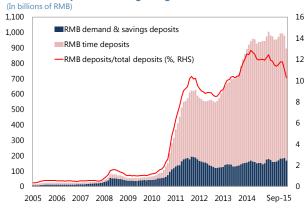
After a strong start to the year, dim sum securities issuance began dropping over the summer...

**Dim Sum Bonds: Gross Issuance by Bond Type** 

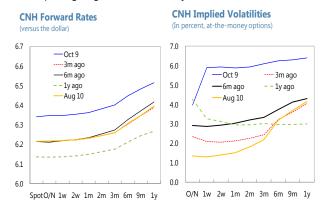


With the shifts in exchange rate expectations, RMB deposits declined as a share of the Hong Kong SAR deposit base...

**Renminbi Deposits in Hong Kong SAR** 

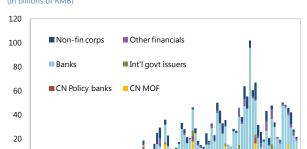


Forward markets pointed to further CNH depreciation ahead while pricing in greater uncertainty about the future level.



...and the fall accelerated in August, most noticeably for issuances by Mainland banks.

**Dim Sum Bonds: Gross Issuance by Sector** (In billions of RMB)



2011

2012

2013

...although the slowdown in trade settlement volumes may have contributed as well.

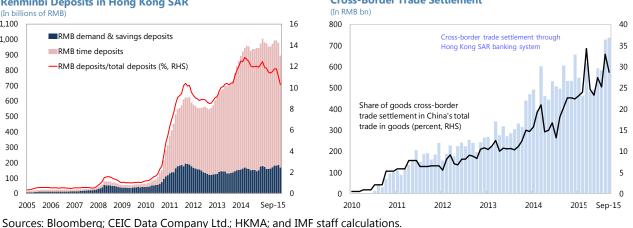
2010

#### **Cross-Border Trade Settlement**

2009

2008

2007



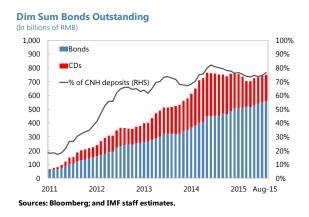
2015

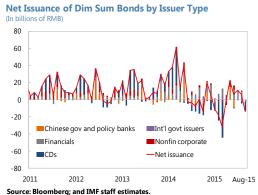
2014

#### **Box 3. Determinants of Dim Sum Bond Issuance** 1/

Since the first issuance in 2007, dim sum bonds have served as a key asset class for offshore renminbi and an alternative source of funding. Among factors that have determined dim sum bond issuance, exchange rate expectations are important but not the only driving influence.

A diverse range of issuers has tapped the dim sum bond market. The Chinese government has issued dim sum bonds every year since 2009. Other issuers include financial institutions and corporates from China and elsewhere. In terms of sectoral breakdown, real estate accounts for about 23 percent. Although nonresident issuers are accounting for an increasing share over time, Chinese issuers continue to dominate the issuance.





**Possible factors that influence dim sum bond issuance include** monetary conditions in China and global markets, expectations of exchange rate movements, interest rate differentials between onshore and offshore markets, effective funding cost if bond proceeds are swapped into dollars, excess demand for RMB assets offshore, and policy changes in China and other offshore RMB centers.

**Regression analysis** shows that the net issuance of dim sum bonds has been driven mainly by expectations of the renminbi appreciation. However, in some sub-samples of bonds, other factors are important as well. In a separate regression for nonfinancial corporate bonds, the interest differential between onshore and offshore markets has a statistically significant association with net issuance, but the exchange rate expectation does not. The CNH-CNY basis spread, which reflects in part a measure of excess demand for RMB assets by offshore investors, decreased with net issuance.

1/ IMF working paper, forthcoming, by Tak Yan Daniel Law.

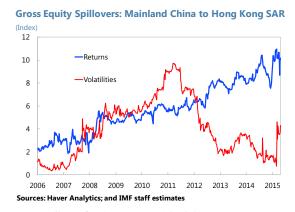
# Box 4. Financial Connectedness between Hong Kong SAR and Mainland: Evidence from Equity Markets 1/

Hong Kong SAR's ties to Mainland China have increased significantly during the last decade or so, especially as the Mainland started liberalizing its financial markets and opening its capital account. Developments in Mainland equity markets inevitably have increasingly spilled over into Hong Kong SAR's equity market.

To understand how the interdependence of financial markets across the Mainland and Hong Kong SAR has evolved over time, this box applies the connectedness index (CI) proposed by Diebold and Yilmaz (2009, 2012). The CI allows one to quantify the contribution of shocks from the Mainland (and other markets) to Hong Kong SAR's equity returns and volatilities at different points in time.

The results suggest that financial interlinkages between the Mainland and Hong Kong equity markets are strong and growing over time. Given the size of China's economy, it is not surprising that developments in China's financial markets have become increasingly more important for Hong Kong SAR (as well as the rest of the global economy).

- First, average connectedness (which measures the gross spillovers from China to other economies) shows
  that China's equity markets explain a larger share of Hong Kong SAR's equity returns (and volatility) than
  other economies.
- Second, financial connectedness between China and Hong Kong SAR has increased sharply over the last decade or so, consistent with continuing trade integration and rapidly rising financial integration (evidenced by, inter alia, the volume of cross-border loans and equity listings). In terms of the CI, equity market spillovers from China to Hong Kong have risen sharply (both returns and volatilities). The return spillover has been on the rise (with a spike in late 2014, which may be due to increased market connectedness in November), while the volatility spillover reached a peak in 2011.
- China's stock market spillover effects to Hong Kong SAR's stock market appear to be broad based, affecting several key sectors. However, there is considerable sectoral heterogeneity, possibly reflecting differences in the real/operational linkages with Mainland China. Financials, properties and construction, consumer goods, and information technology have seen a sharper rise in their connectedness with the Mainland.





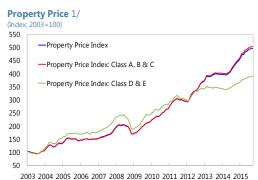
1/ IMF working paper, forthcoming, by Roberto Guimarães and Gee Hee Hong.

#### **Authorities' views**

- 15. **Credit risks.** The authorities viewed the credit risks on Mainland exposures as manageable despite the concerns about Mainland growth prospects and the health of key sectors such as property, steel, and export-oriented manufacturing. They noted that the NPL ratio for Mainland subsidiaries of Hong Kong SAR banks has risen in recent months. But since Mainland exposures incurred by these subsidiaries account for less than 20 percent of the banking sector's total, the impact on the overall asset quality of Mainland exposures is not significant. In fact, the NPL ratio of the banking sector's total Mainland exposures has remained low and is only slightly above the overall NPL of the banking sector's total credit exposures (0.49 percent as of end-June 2015). Furthermore, they noted that under close monitoring by the regulators, Hong Kong SAR banks and their Mainland subsidiaries have maintained high origination and underwriting standards: large Mainland SOEs and other nonprivate entities account for around half of the total borrowing, international corporations and Hong Kong SAR-based conglomerates with operations in the Mainland constitute a third of the borrowing, and the rest is accounted for by private entities backed by Mainland bank letters of credit or secured by collateral.
- 16. Offshore RMB business. The authorities viewed the recent stall in activity as a temporary interlude while markets adjust exchange rate expectations. The decline in RMB deposits in Hong Kong SAR was attributed in part to an unwinding of the carry trade converting RMB deposits into Hong Kong dollar or U.S. dollar. The drop in dim sum bond issuance was also viewed as a cyclical phenomenon since onshore funding costs had fallen sharply, making it more attractive to raise funds on the Mainland instead. The authorities also observed that global risk appetite was a significant contributor to the CNH/CNY spread, especially during the summer months. However, they noted they did not see any systemic risks related to activity in the CNH derivatives markets, as speculation on one-way RMB appreciation had eased following some weakening of the currency in the first half of 2014, well ahead of the August 2015 changes to the CNY central parity fixing mechanism. The Shanghai-Hong Kong Stock Connect scheme was also viewed as functioning in orderly fashion even during and after the Mainland equity markets correction during the summer. Looking ahead, the authorities expected that further opening of the Mainland capital account with the extension of the stock connect scheme to Shenzhen, the 'One Belt, One Road' initiative, expansion of inward RMB Qualified Foreign Institutional Investor (R-QFII) and outward RMB Qualified Domestic Institutional Investor (R-QDII) schemes, and greater take up of RMB cash-pooling programs by firms to facilitate regional corporate treasury operations, would increase the volume of RMB flows through Hong Kong SAR and maintain the steadily expanding international use of the currency.

# C. Property Prices: Ripe for a Correction?

17. The propensity for property price run-ups in Hong Kong SAR is rooted in a fundamental demand-supply imbalance at work for some time (Figure 5). Nevertheless, around the rising trend, there have been times when prices have slowed or hit a plateau before accelerating again. Prices have also declined around periods of heightened financial volatility (2008–09 and 2011–12). At present, the market appears to be experiencing the onset of relative calm after having gathered steam over the past 18 months.

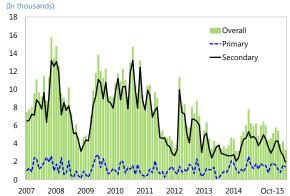


Source: CEIC Data Company Ltd.
1/ Data until Sep. 2015

## **Figure 5. The Property Market**

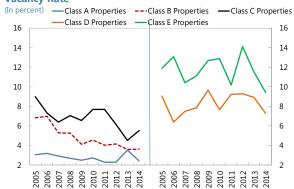
Transactions have picked up since mid-2014, but are now showing signs of a moderation.

#### **Domestic Residential Property Sales Transactions**



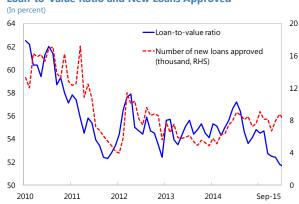
Nevertheless, strong end-user demand pressure is seen in declining vacancy rates...

**Vacancy Rate** 



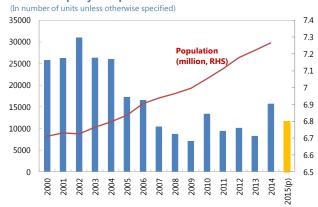
Demand has stayed firm in the face of tighter ceilings on loan-to-value ratios...

Loan-to-Value Ratio and New Loans Approved



Completion rates of new private units appear to be slowing again this year.

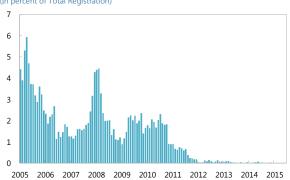
#### **Private Property Completions**



...and near-absence of confirmor transactions (properties resold before the original sale is completed).

#### **Confirmor Registration**





...and down payments have remained high relative to annual income across all locations.

#### **Minimum Down Payment-to-Income**

(In multiple of median annual household disposable income, by area)

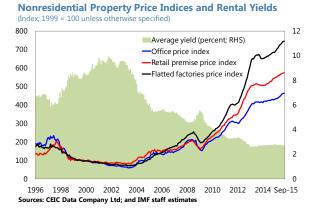


Sources: CEIC Data Company Ltd.; Haver Analytics; Transport and Housing Bureau, Government of Hong Kong SAR; HKMA; and IMF staff estimates.

- 18. In the recent run-up, despite the well telegraphed increases in U.S. interest rates, households have continued to opt for floating rate mortgages which will reset in the aftermath of the Fed liftoff. Over 80 percent of new mortgages have been priced off HIBOR in recent months, up from close to zero in 2012. A turbulent and faster-than-expected increase in interest rates could therefore sharply slow property price growth if demand softens in response to the higher cost of borrowing.
- 19. Nonresidential property price growth has also accelerated, with particularly sharp increases seen in the category of flatted factories (that is, vacant former manufacturing sites acquired for commercial redevelopment). Prices have run far ahead of rents and average yields are currently around half their levels pre-2009. With early signs now evident of a slowdown, particularly in the retail segment, there is the risk that a price reversal would reduce collateral values and make it difficult for corporates to rollover credit, thus exposing banks to losses in their corporate loan book.

**Proportion of New Mortgage Loans Priced with Reference to HIBOR** 100 90 80 70 60 50 40 30 20 10 0 Sep-2015 2012 2013 2014 2015

Source: Haver Analytics.

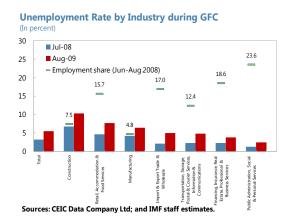


Authorities' Views

- 20. **Residential property, domestic demand and the banking sector.** The authorities noted that the property market may lose some momentum with the interest rate upcycle, but the overall impact was hard to predict. Much will also depend on how the demand-supply imbalance evolves. With wages and job security likely to remain firm, household demand was expected to stay solid. Adverse turns in price dynamics were unlikely to have a major impact on banks' asset quality, provisioning, or capital positions since the macroprudential measures have been effective in increasing buffers. History provides reassurance as well—the 70 percent property price correction over 1997–2003, when starting buffers were smaller than at present, had not severely dented bank balance sheets.
- 21. **Exposures to nonresidential property.** The authorities did not view the nonresidential segment as posing a systemic risk to the banking system since banks' exposure to business loans backed by nonresidential property collateral was regarded as limited. Furthermore, the macroprudential measures apply to commercial property loans as well. Together with the double ad valorem stamp duty on purchases, the measures have made leveraged purchases of nonresidential property an expensive proposition. Corporates would rather use their cash to expand their core business than engage in property investment activities.

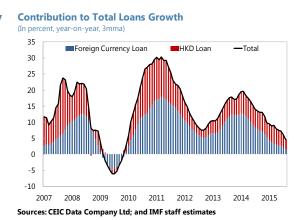
#### D. Perfect Storm

- 22. In the low probability event of heightened global financial volatility post-Fed liftoff coinciding with a sharp deterioration in Mainland growth, Hong Kong SAR's small open economy would suffer a sharp falloff in growth.
- While the headline trade balance may not register a large impact (since imports and re-exports decline proportionately), tourism and other support services such as logistics, insurance, warehousing, and trade finance will inevitably contract. Staff analysis suggests the contribution to growth from external demand would decline by 1–2 percentage points relative to the baseline, similar to previous episodes of a severe worsening of the external environment.
- on top of this, the contribution of domestic demand to growth will fall by 3–5 percentage points compared to the baseline. The scenario assumes the Mainland's growth rate is lower by 1½–2 percentage points than in the baseline, stock and house prices decline by 20–30 percent—generating significant negative wealth effects on consumption—and interest rates rise by 200 basis points. As was the case during extreme downturns such as in 1998–99 and 2008–09, the unemployment rate could increase by



as much 2–3 percentage points (although the integration with the Mainland has increased since these previous episodes and they may therefore underestimate the extent of the negative impact). Job losses will be widespread, with construction and retail likely to take the biggest hit. The direct negative impact on private spending may be further compounded by banks reining in credit and provisioning for souring loans.

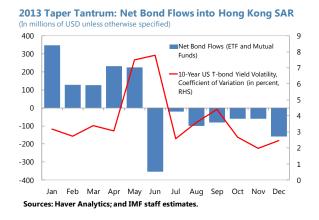
- In sum, without factoring in a policy response, overall growth will likely fall by 4–7 percentage points relative to baseline. This is along the lines of the calibrated model-based analysis of N'Diaye and Ahuja (2012).
- 23. Additional risks arise from the presence of **globally** active banks and the prominence of foreign currency loans in the overall loan book of the banking system in recent years. Funding strains at the bank group level could restrain the ability of local branches of foreign banks to expand credit while, conversely, impaired assets in their Hong Kong SAR loan book could transmit to weaker overall group profitability and retrenchment in other locations. At the same time, if credit risks on overseas exposures of locally-incorporated banks materialize, this could hurt their ability to lend domestically. In particular, fx



mismatches (U.S. dollar-denominated corporate and sovereign securities funded by Hong Kong dollar or

CNH liabilities; dollar loans to emerging markets) leave Hong Kong SAR banks vulnerable in the event of sustained dollar appreciation against the currencies of the EMs where the lending is concentrated, or a slowdown of these economies. Either outcome would create difficulties for the borrowers to service their debt to Hong Kong SAR creditors.

24. Cross-border contagion could also be catalyzed via the **asset management industry**, which has grown rapidly in Hong Kong SAR, on average 10 percent y/y since the global financial crisis, to over HK\$17 trillion (US\$2.2 trillion) across close to 600 domiciled funds. Centralized investment mandates, strategic asset allocation imperatives, and position limits could force globally-active fund managers to sell Hong Kong SAR assets based on events elsewhere (and not directly in response to local developments), while, equally, poor returns on Hong



Kong SAR exposures could trigger sales in other markets. As an illustration, during the Fed taper tantrum episode in 2013, bond exchange traded funds (ETFs) and mutual funds flows rapidly turned negative once the U.S. Treasury 10y yield volatility spiked and markets reassessed prospects of the Fed tapering its purchases of longer maturity securities. These flows are only a subset of the overall flows into Hong Kong SAR. Furthermore, since 2013, liquidity has become more of a concern in global markets, particularly in high yield corporate and EM bonds, suggesting that price sensitivity to shifts in sentiment has likely increased over the intervening period (see the April and October 2015 Global Financial Stability Reports for more discussion).

#### **Authorities' Views**

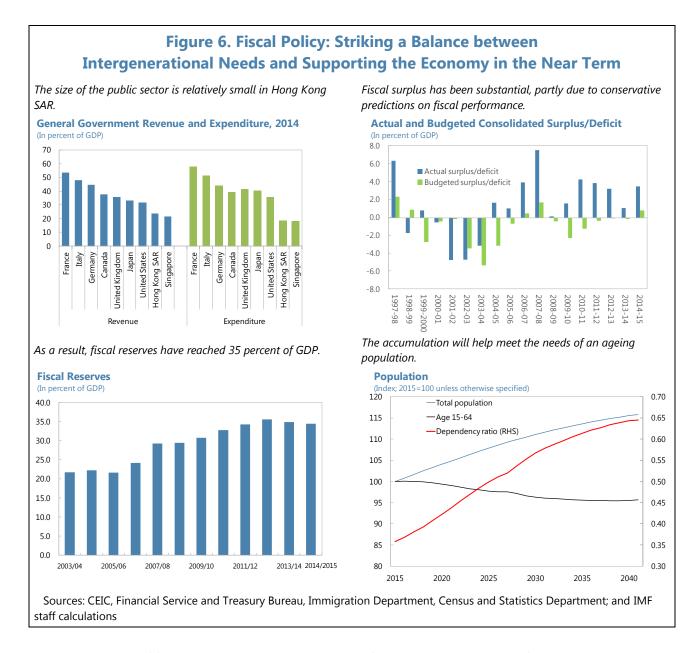
- 25. **Perfect storm.** The authorities viewed the adverse scenario as a very low-probability event, but were nevertheless prepared via internal contingency planning since Hong Kong SAR as a small open economy will inevitably experience inward spillovers from global stress. The several rounds of prudential measures were seen as essential preparation for an eventual return to more normal funding conditions. The authorities felt that bank and household buffers provided substantial padding against adverse outcomes, and the track record of bouncing back quickly after large global shocks suggested that the risk of a protracted downturn in Hong Kong SAR is low.
- 26. **Banks.** The HKMA has been particularly watchful of how banks (including branches of globally active institutions) have managed liquidity through tenor matching of assets and liabilities and compliance with stable funding requirements. The authorities noted that the introduction of the stable funding requirement in 2014 had induced branches of foreign banks to rely more on head office funding. Local banks have limited exposure to foreign bank branches through the interbank market, thereby containing potential contagion from global developments to the banking system in Hong Kong SAR. Furthermore, the authorities observed that banks in general had been prudent in managing fx risk exposures.

27. **Asset managers.** The authorities noted that on account of the long-term institutional investor base in Hong Kong SAR, daily redemptions tended to be relatively low even during periods of stress such as the Mainland equity market correction in the summer. Furthermore, they emphasized that fund managers are required to demonstrate at the product approval stage that they have a robust liquidity risk management program in place to reduce their vulnerabilities to bunched redemption requests. They also considered that fund managers had tools to minimize the risk of large withdrawals—for instance, through passing on trading costs to exiting shareholders so as to protect the remaining shareholders from dilution of net asset value. Nevertheless, they agreed the situation bears close watching, including, if needed, via daily reporting of redemptions relative to assets under management, as they had introduced over the summer. This may become more relevant as global fund managers domicile in Hong Kong SAR and redirect internationally mobilized funding to access the Mainland stock markets through the Mutual Recognition of Funds program.

# POLICY MIX TO BUILD RESILIENCE

#### A. Fiscal

- 28. Casting fiscal policy in a medium-term framework as laid out in the 2014 Report on Long-Term Fiscal Planning is appropriate and warranted, considering the future needs of an aging population. However, since growth has been subpotential in recent years and inflation is moderating, there is merit in privileging the short-term stabilization needs of the economy should activity disappoint in the months ahead. Favorable debt dynamics provide latitude to flexibly implement the medium-term strategy (Appendix III).
- 29. The fiscal stance for FY 2016/17 implied by this year's budget strikes a balance between providing near-term support to the economy while maintaining fiscal reserve accumulation consistent with the long-term needs of an aging society (Figure 6). In the event that growth underperforms in the Q4 outturn and momentum heading into 2016 appears to be severely weakened (for example, in retail sales, tourism, retained imports, and credit growth for use in Hong Kong SAR), an additional expansionary bias in the 2016/17 fiscal stance would be appropriate, with an emphasis on
- expanded relief measures for vulnerable households (extra allowances for the elderly and physically challenged; lower thresholds for providing rental relief to families in public housing; additional property rates waivers);
- small businesses (tax relief, subsidized / concessionary access to funding through credit guarantee schemes); and
- accelerated urban renewal and development in Kowloon and the New Territories.
- 30. Looking beyond near-term considerations, demographic change will place additional demands on public finances. The labor force is projected to decline from 2019, accompanied by the rise of total population and the elderly dependency ratio. With the aging population, GDP and government revenue may grow at a slower pace than expenditure and the fiscal balance would eventually weaken on a structural basis.



The current pace of fiscal reserve accumulation is therefore broadly appropriate from an intergenerational perspective. The initiative to invest a portion of the fiscal reserves in higher-return assets via the proposed Future Fund will provide a useful mechanism to generate additional resources for an aging population. Once the Fund is operative, the investment strategy should be regularly monitored to ensure that the government's liquidity needs are adequately safeguarded even as the portfolio allocation strives to achieve higher returns.

31. **Authorities' views.** The authorities noted that ever since the Global Financial Crisis the budget has incorporated relief measures for the vulnerable and small businesses, which they assess to have been effective in protecting jobs. They further noted that the fiscal reserves provided them policy headroom to respond based on the needs of the business cycle, as they had done so during the SARS epidemic and the Global Financial Crisis, and they would take steps as required to support the economy, while remaining mindful of looming fiscal challenges over the long run.

# **B.** Linked Exchange Rate System (LERS)

- 32. The LERS is the best arrangement for Hong Kong SAR, particularly at a time when the outlook for the global economy and financial markets is turning more tentative.
- The currency board remains an anchor of stability for this small open economy with a large, globally integrated financial services industry highly exposed to cross-border portfolio adjustments. The supporting policy and institutional apparatus that guarantees the smooth functioning of the currency board remains firmly in place and is viewed as credible and robust—ample fiscal reserves that can be rapidly deployed to cushion macro shocks, strong regulatory and supervisory frameworks, and a healthy financial system. The most recent evidence of the credibility markets attach to the system was seen during the heightened regional financial stress in August-September 2015: the LERS anchored expectations and the Hong Kong dollar traded close to the strong side of the convertibility undertaking even as other currencies in the region depreciated sharply.
- The possibility of further U.S. dollar appreciation (and therefore Hong Kong dollar against other
  currencies as well) in the near-term raises concerns of diminishing competitiveness, amplified at times
  such as the present conjuncture where the RMB faces depreciation pressures. Nevertheless, Hong Kong
  SAR's flexible markets allow rapid adjustment and help ensure that departures from the equilibrium REER
  do not persist.
- The July 2015 External Sector Report concluded that Hong Kong SAR's external positions in 2014 and 2015 (through May) were broadly consistent with medium-term fundamentals and desirable policy settings. The large total gaps implied by EBA-type regressions (about 10½ percent of GDP in 2014) mainly came from regression residuals while the contributions from policy gaps were neutral. An updated EBA-type regression, which reflects the developments through September 2015, delivers essentially the same results (Appendix IV). The overall assessment remains that the external position is broadly consistent with medium-term fundamentals and desirable policy settings.
- 33. **Authorities' views.** The authorities noted that the currency board has continued to function smoothly through repeated episodes of stress in global financial markets in recent years. They did not see the LERS as compromising Hong Kong SAR's competitiveness and viewed the real effective exchange rate as in line with fundamentals. Domestic wage and price flexibility, together with smooth reallocation of resources across sectors, have allowed the economy to adjust without costly disruptions to activity. The authorities noted that the minimum wage (introduced in 2011 and subsequently raised in 2013 and 2015), has not reduced flexibility in the labor market. As another example of flexibility, the authorities pointed to recent reductions in unit prices in the retail sector as evidence of the domestic adjustment mechanism at work.

#### C. Financial Sector

34. In its capacity to assess systemic risks, and its track record of closing regulatory and data gaps, Hong Kong SAR's regulatory and supervisory framework is a global standard setter. With regard to banks, the emphasis is on preserving ample loss absorption buffers, limiting leveraged exposures to asset prices, and containing vulnerabilities to sudden stops in short-term funding. Specifically on Mainland exposures, onsite examination of banks' credit underwriting has been intensified, asset quality is closely monitored and, where

necessary, additional provisioning for losses is required. Nevertheless, there is room to further strengthen aspects of the defenses. The main areas that warrant continued attention are

- completing the process underway for enacting legislation on a comprehensive recovery and resolution framework;
- further strengthening the oversight regime for securities markets, broker dealers and asset managers as their business model evolves with new channels connecting Hong Kong SAR and Mainland markets; and
- fully implementing a risk-based capital regime for insurance companies.
- 35. In addition, the emerging risk from new channels connecting Hong Kong SAR with the Mainland may call for stricter eligibility criteria for participation in stock connect schemes and, if needed, steps to contain risks to the broader financial system (prudential measures including greater provisioning and tighter risk weights on banks' securities exposures via the new connect schemes). Continued strict implementation of anti-money laundering controls (building on measures already taken last July, when the HKMA issued its first sanction for breach of compliance with the 2012 AML/CFT Ordinance), together with steps to additionally strengthen transparency of legal persons and trusts, would help further protect Hong Kong SAR's hard-earned reputation as a premier global financial center.
- 36. Authorities' views. The authorities reported significant progress in implementing the recommendations of the 2014 Financial Sector Assessment Program (FSAP). The legislation for establishment of the independent Insurance Authority (IIA) was enacted in July 2015. The IIA is expected to be set up by end-2016. Components of a risk-based capital regime for insurance companies are being put in place, and the authorities expect to complete the preparation work for the new regime in 2–3 years mainly because determining the capital requirements for each company based on its risk exposure (Pillar I) will take time on account of the diverse insurance landscape in Hong Kong SAR. The other pillars of the regime—corporate governance standards, enterprise risk management, and self-assessment of risks and solvency position (Pillar 2) as well as disclosure standards and enhancing transparency (Pillar 3)—may be instituted sooner. For life insurance companies, the regulators have required weekly reporting of solvency ratios (the ratio of total assets at fair value minus total liabilities, normally adjusted with prevailing interest rates, to the required margin of solvency should be at least 150 percent). General insurance companies are required to maintain at least 200 percent solvency ratio. The authorities further noted that periodic stress testing on assets is also performed. Risks from the new channels connecting the Mainland and Hong Kong SAR were seen as manageable so far. The regulators are attuned to preventing funds from engaging in regulatory arbitrage (for instance, Mainland funds listing in Hong Kong SAR to principally invest back in the Mainland, rather than listing directly in the Mainland itself). More broadly, they view asset management as a potential high growth area and have streamlined taxes, stamp duties, and the legal framework governing fund structures to attract asset managers to domicile in Hong Kong SAR.

# D. Property Sector

37. While there are some early signs that the property sector is beginning to slow, the potential for a renewed pick up remains high considering the underlying demand pressures and tight supply. Therefore, the

<sup>&</sup>lt;sup>1</sup> See Appendix V.

three-pronged approach deployed to limit risks—efforts to boost supply; stamp duties on transactions; macroprudential measures to protect banks—should continue to remain in place.

the government to boost supply, made through the 2014 Long-Term Housing Strategy, is welcome, as is the concerted cross-agency cooperative effort to project demand and identify the land needed to support the construction activity. Of the 480,000 units projected to be supplied over the next 10 years from 2015–16 to 2024–25, 290,000 are public sector units (rental and for sale). Over the next decade, this entails producing an annual average number of units that is nearly twice the yearly average produced in



Hong Kong SAR Public Housing Supply: Planned and

2006/07/08 Source: Housing Authority

recent years. There is merit in expediting the process for identifying the land and building sites, together with conducting the relevant environmental, transport, and community facility assessments so as to cement public expectations that the target will be met. This will help alleviate affordability concerns, particularly for low-income households, although the full impact will necessarily be felt only with a lag once the actual construction nears completion.

- Stamp duties. The three stamp duties currently in place—Special Stamp Duty on resale of residential
  properties within 36 months of purchase; Buyer's Stamp Duty on purchases by nonresidents; and double
  ad valorem stamp duty on nonresidential and multiple residential property purchases—have helped curb
  excess demand by limiting speculative transactions. Barring a precipitous fall in transactions, the stamp
  duties should not be rolled back.
- On counter-cyclical macroprudential policies, staff sees a case for holding firm on the tight ceilings on LTV and DSR ratios and the floor on risk weights tied to property loans as a way of continuing to limit banks' exposure to property sector. These policies have strengthened banks' mortgage loan origination standards without getting in their way of intermediating credit to the real economy. Adjustments to the property-related macroprudential measures should be made based on evolving financial stability risks and not in response to aggregate demand developments (unless the measures are deemed to impair credit intermediation and disrupt the banking system's ability to support the real economy).
- 38. Authorities' views. The authorities emphasized that boosting supply is a priority. Land for constructing 254,000 of the 290,000 public housing units, which is the target set by the Long-Term Housing Strategy over the next decade, has already been identified. As for private housing land supply, the authorities aimed to maintain land supply from various sources for about 190,000 units over the next decade. With regard to stamp duties, the authorities considered these as effective tools for restraining excess speculative demand, but agreed they would consider adjustments in the event of a sustained decline in transaction volumes with the potential to generate adverse spillovers to the broader economy. On counter-cyclical macroprudential measures imposed on banks, the authorities observed they will continue to monitor the property market closely and introduce appropriate measures as and when necessary to safeguard banking

stability. In considering financial stability risks, it is inevitable that broader macro factors would need to be taken into account.

#### E. Labor

- 39. With the labor force expected to peak within the next 10 years, there is a need to ensure that dependency burdens remain in check. The proposed Low-income Working Family Allowance is a useful mechanism to incentivize labor force participation while providing supplementary income to employed individuals and families with incomes and assets under a certain threshold. The minimum wage, introduced in 2011 and raised twice since then (latest in May 2015), has placed a floor under hourly wages while also helping to raise participation among segments more distanced from the mainstream labor force. Labor force participation at the lower end of the income and skills distribution will be further incentivized by regulating working hours and mandating over-time pay for low-income workers with minimal bargaining power. Sustained efforts should therefore be made to move forward with legislation on standardizing working hours.
- 40. **Authorities' views.** The authorities viewed the minimum wage as an important policy tool for alleviating working poverty. They also regarded it as helping to bring into employment those who might otherwise be discouraged by the very low wages on offer and not have participated in the labor force. Increases in employment for female workers have been particularly significant, especially those aged 50 and above and those in the lower-skilled segment. Income growth in the lowest decile has substantially outpaced that in other segments ever since the minimum wage was introduced. Together with the Low-Income Working Family Allowance, a major employment-focused initiative to encourage self-reliance and ease intergenerational poverty that will take effect from 2016, investment in retraining and retooling early retirees, and means-tested work transport subsidy, they saw these policies as important levers for encouraging labor force participation as well as for mitigating the impact of an aging population and shrinking labor force in the near future.

# F. Contingencies for a Perfect Storm

- 41. In the low probability event of the perfect storm described above, a comprehensive and coordinated policy approach involving elements of the 2008/9 response—large and proactive fiscal stimulus; expanded credit guarantees for SME loans through the Hong Kong Mortgage Corporation—together with loosening of macroprudential policies would need to be implemented quickly to stem the collapse in confidence, tightening of liquidity conditions, and steep decline in private sector activity that will likely transpire in such a scenario. Continued strong collaboration between Hong Kong SAR regulators and counterparts in other jurisdictions will ensure close monitoring of evolving cross-border risks, and enable the appropriate liquidity support and backstopping of liabilities needed to limit two-way transmission of financial stress via globally active intermediaries.
- 42. **Authorities' views.** The authorities emphasized that protecting jobs is key. A large, pre-emptive fiscal stimulus together with expansion of SME credit guarantees would be considered to forestall bankruptcies and safeguard employment. Counter-cyclical macroprudential measures as well as property stamp duties could be scaled back to ease the pressure on the property market. The authorities also noted that they are actively participating in supervisory colleges for cross-border banking groups, including G-SIFIs, and cooperating

closely with securities regulators in other jurisdictions to stay abreast of globally active financial institutions' risk profiles and business strategies.

# STAFF APPRAISAL

- 43. **Growth and resilience.** Despite being repeatedly buffeted by powerful global cross-currents, Hong Kong SAR's economy has grown steadily in recent years. Real GDP is about 25 percent higher than the global financial crisis trough in early 2009; employment has expanded close to 9 percent since then, with net job creation over 300,000; and the unemployment rate has declined to 3.3 percent. The resilience of the economy and financial system was displayed most recently during the summer months, when markets continued to function in orderly fashion despite higher volatility in equity prices and currencies after the correction in the Mainland indices. However, with the external outlook still tentative, growth in Hong Kong SAR will likely remain subdued below potential in 2015/16.
- 44. The main challenges ahead are three-fold. Interest rates—tracking the U.S. Federal fund's rate—are set to increase for the first time in seven years. Financial and real activity spillovers from Mainland China may re-emerge. The run-up in property prices over the past year raises the probability of a correction (with some signs now evident of a pause in momentum). Overall, considering the strong fiscal and financial buffers in place in Hong Kong SAR, these risks will likely have limited impact provided (i) interest rates rise at the modest anticipated pace based on the U.S. Federal Reserve's FOMC median forecasts for the Federal Funds rate; and (ii) the ongoing adjustment in Mainland China's growth remains orderly.
- 45. **Fiscal policy.** If high-frequency indicators in early 2016 point to a significant weakening of activity, the FY2016/17 budget should proactively provide additional support than currently envisaged, with an emphasis on expanded relief measures for vulnerable households, small businesses, and accelerated urban renewal and infrastructure spending where possible.
- 46. **Long-term fiscal challenges.** Beyond cyclical considerations, there is a need to address the long-term fiscal challenges presented by an aging population and shrinking workforce in the future, as laid out in the 2014 report by the Working Group on Long-Term Fiscal Planning. Planned initiatives such as the Low-income Working Family Allowance Scheme will incentivize labor force participation and help mitigate rising dependency burdens, while the proposed Future Fund will create a mechanism for raising long-term investment returns of the fiscal reserves, thereby generating additional resources to cope with demographic change.
- 47. **Property sector.** The government's reaffirmation through the 2014 Long-Term Housing Strategy to identify additional housing sites and expand supply will provide respite to affordability concerns over the medium-term. Sustained efforts should be made to ensure implementation stays on track and the targets are met. In the interim, the Buyer's Stamp Duty, Special Stamp Duty and doubled ad valorem stamp duty will help filter out speculative transactions and restrain excess demand. Adjustments to these duties could be considered if there is a sustained decline in transactions volumes with the potential to generate adverse spillovers to the broader economy. Mortgage loan origination standards have been appropriately strengthened through multiple rounds of macroprudential measures since 2009, encompassing tighter loan-to-value and debt service-to-income ceilings and risk-weight floors on property loans. These measures

have limited leveraged exposures to the property price run up without impairing the banking system's key function of expanding credit commensurate to the needs of the real economy. The property-related macroprudential measures should continue to remain in place; any adjustments should be made based on evolving financial stability risks and not in response to aggregate demand developments (unless the measures are deemed to impair credit intermediation and disrupt the banking system's ability to support the real economy).

- 48. **Financial sector policies.** Hong Kong SAR has a strong track record of filling regulatory and data gaps, assessing systemic risks, and strengthening financial institutions' loss absorption buffers in a preemptive manner. The authorities have also provided infrastructure support for healthy market development, for instance in offshore RMB services. In line with the recommendations of the 2014 FSAP, important progress has been made with regard to establishing an independent authority for the insurance sector; crisis management and recovery plans for financial market infrastructures; and cross-border cooperation across the banking, insurance, and securities regulators. Areas that warrant further attention include completing the process underway for enacting legislation on a comprehensive recovery and resolution framework; continuing to strengthen the oversight regime for securities markets, broker dealers and asset managers as their business model evolves with new channels connecting Hong Kong SAR and Mainland markets; and fully implementing a risk-based capital regime for insurance companies.
- 49. **Exchange rate regime and external position.** The LERS remains the best arrangement for Hong Kong SAR and serves as an anchor of stability for this small open economy with a globally integrated financial services industry. The smooth functioning of the LERS derives from the robust institutional, legal and policy framework in place in Hong Kong SAR; the ample fiscal reserves available to cushion the economy from adverse shocks; the healthy financial system that can accommodate large portfolio adjustments; and, more generally, flexible asset, goods, and labor markets that can adjust quickly to ensure misalignments in the real effective exchange rate (REER) do not persist. The external position is broadly consistent with medium term fundamentals and desirable policies.
- 50. **Contingencies.** The attributes from which Hong Kong SAR's small open economy derives its dynamism—an international trading and tourism hub and a premier financial center—also leave it exposed to global economic forces beyond its control and place a premium on contingency planning. In the low probability event that a sharper-than-expected slowdown on the Mainland coincides with a turbulent turn in global financial markets following the Fed liftoff, a range of measures may need to be deployed to forestall a deep slide in activity in Hong Kong SAR—large and proactive fiscal stimulus; expanded credit guarantees for SME loans; together with loosening of macroprudential policies. The experience of 2008/09 suggests that a comprehensive policy response can contain the domestic fallout of a large global shock and quickly set the economy back on track.
- 51. It is recommended that the next Article IV consultation discussions take place on the standard 12-month cycle.

**Table 1. Hong Kong SAR: Selected Economic and Financial Indicators, 2010–16** 

						Proj	
	2010	2011	2012	2013	2014	2015	2016
Real GDP (percent change) Contribution	6.8	4.8	1.7	3.1	2.5	2.2	2.5
Domestic demand	6.7	6.0	3.7	3.9	2.8	1.4	2.3
Private consumption	3.8	5.2	2.6	3.9	2.5	3.1	2.0
Government consumption	0.3	0.2	0.3	0.3	0.3	0.3	0.3
Gross fixed capital formation	1.7	2.2	1.6	0.6	0.0	-0.9	-0.3
Inventories	0.9	-1.7	-0.8	0.0	0.5	-1.0	0.3
Net exports	0.2	-1.3	-2.0	-0.9	-0.3	0.8	0.2
Inflation (percent change)							
Consumer prices	2.4	5.3	4.1	4.3	4.4	2.7	2.9
GDP deflator	0.3	3.9	3.5	1.9	2.9	3.7	2.3
Employment (percent change)	0.2	2.9	2.4	1.8	0.6	0.7	0.7
Unemployment rate (percent, period average)	4.3	3.4	3.3	3.4	3.3	3.2	3.1
Real wages (percent change)	-0.4	2.7	1.6	0.1	-2.4		
Government budget (percent of fiscal year GDP)							
Revenue	21.2	22.6	21.7	21.3	21.2	22.0	22.1
Expenditure	17.0	18.8	18.5	20.3	17.6	18.5	19.4
Consolidated budget balance	4.2	3.8	3.2	1.0	3.7	3.5	2.7
Fiscal reserves as of March 31	33.5	34.6	36.0	35.3	36.7	38.3	39.2
Money and credit (percent change, end-period)							
Narrow money (M1)	12.8	10.8	22.2	9.7	13.1		
Broad money (M3)	8.0	12.9	11.0	12.4	9.6		
Loans for use in Hong Kong SAR (not including trade financing)	20.9	12.5	7.0	10.6	13.5		
Interest rates (percent, end-period)							
Best lending rate	5.0	5.0	5.0	5.0	5.0		
Three-month HIBOR	0.3	0.5	0.3	0.3	0.3		
Asset prices							
Hang Seng stock index (end of period, 1964=100)	23,035	18,434	22,657	23,306	23,605		
Hang Seng stock index (percent change)	5.3	-20.0	22.9	2.9	1.3		
Residential property prices (end of period, percent change)	21.0	11.1	25.7	7.7	13.5		
Merchandise trade (percent change)							
Export volume	17.3	3.5	1.9	6.5	0.8	-2.6	0.2
Domestic exports Reexports	-0.1 17.9	-0.6 3.6	10.1 1.7	-1.6 6.8	2.3 0.8	-0.9 -2.7	0.2 0.2
Import volume	18.1	4.7	3.0	7.2	0.8	-3.4	-0.6
Current account balance (percent of GDP) 1/	7.0	5.6	1.6	1.5	1.9	2.5	2.7
·	7.0	5.0	1.0	1.5	1.5	2.3	2.7
Foreign exchange reserves 1/ In billions of U.S. dollars, end-of-period	257.1	269.9	300.5	211 1	328.5		
In months of retained imports	257.1 27.5	269.9	26.5	311.1 26.3	26.3	•••	
In months of retained imports  In percent of broad money (M3)	27.5 27.9	24.6 26.0	26.5	26.3	26.3		•••
, , ,	21.9	20.0	20.0	25.9	23.1		
Exchange rate Linked rate (fixed)							
Linked rate (fixed)  Market rate (HK\$/US\$1, period average)	7.769	7.783	7.755	7.756	7.754		
Real effective rate (period average, 2010=100)	100.0	96.6	98.7	102.2	105.7		

Sources: CEIC; and IMF staff estimates.

1/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format

						Proj.	
	2010	2011	2012	2013	2014	2015	2016
	(In bil	lions of U.S.	dollars)				
Current account	16.0	13.8	4.1	4.1	5.4	7.7	8.7
Goods balance	3.3	-7.5	-18.9	-27.9	-30.1	-24.2	-23.8
Services balance	10.1	17.0	21.9	29.5	30.3	26.1	26.2
Income balance	2.6	4.2	1.2	2.5	5.3	5.9	6.3
Primary income balance	4.8	6.8	3.8	5.2	7.8	8.6	9.
Secondary income balance	-2.3	-2.5	-2.6	-2.7	-2.5	-2.7	-2.
Capital and financial account	-11.4	-14.5	-8.7	-11.1	-12.4	-7.7	-8.
Capital account	-0.6	-0.3	-0.2	-0.2	-0.1	0.0	0.
Financial account	-10.9	-14.3	-8.5	-10.9	-12.3	-7.7	-8.
Net direct investment	-15.7	0.2	-13.2	-6.5	-39.4	-40.5	-40.
Assets	-98.4	-95.9	-88.1	-83.3	-155.4	-163.5	-169.
Liabilities	82.7	96.1	74.9	76.9	116.0	123.0	128.
Portfolio investment	-57.0	-1.4	-4.1	-49.8	20.3	21.5	22.
Assets	-80.6	-20.0	-40.1	-66.4	-4.9	-5.2	-5.
Liabilities	23.7	18.6	36.0	16.6	25.1	26.6	27.
Financial derivatives	2.4	2.7	2.0	7.0	13.4	14.6	15.
Assets	35.9	46.2	39.7	54.8	58.0	63.0	67.
Liabilities	-33.5	-43.5	-37.8	-47.7	-44.6	-48.4	-51.
Other investment	67.0	-4.7	31.2	45.8	11.4	10.7	11.
Assets	-69.5	-100.3	-17.1	-82.4	-112.6	-106.2	-109.
Liabilities	136.5	95.7	48.2	128.2	124.0	116.9	121.
Reserve assets (net change)	-7.6	-11.1	-24.4	-7.5	-17.9	-13.9	-17.
Net errors and omissions	-4.6	0.7	4.6	7.0	7.0	0.0	0.
Memorandum item:							
Nominal GDP	229.2	249.0	261.7	275.7	290.8	308.4	323.
	(In	percent of G	iDP)				
Current account	7.0	5.5	1.6	1.5	1.9	2.5	2.
Goods balance	1.4	-3.0	-7.2	-10.1	-10.4	-7.9	-7.
Services balance	4.4	6.8	8.4	10.7	10.4	8.5	8.
Income balance	1.1	1.7	0.4	0.9	1.8	1.9	2.
Capital and financial account	-5.0	-5.8	-3.3	-4.0	-4.3	-2.5	-2.
Capital account	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.
Financial account	-4.7	-5.7	-3.3	-4.0	-4.2	-2.5	-2.
Net direct investment	-6.9	0.1	-5.1	-2.3	-13.6	-13.1	-12.
Portfolio investment	-24.9	-0.6	-1.6	-18.1	7.0	7.0	7.
Financial derivatives	1.0	1.1	0.7	2.6	4.6	4.7	4.
Other investment	29.2	-1.9	11.9	16.6	3.9	3.5	3.
Reserve assets (net change)	-3.3	-4.5	-9.3	-2.7	-6.2	-4.5	-5.
Net errors and omissions	-2.0	0.3	1.7	2.5	2.4	0.0	0.

Sources: CEIC and Census and Statistics Bureau.

1/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format

**Table 3. Hong Kong SAR: Consolidated Government Account, 2011/12–2020/21** 1/ (In percent of fiscal year GDP)

							Proj	j.		
	2011/12 2	012/13 2	013/14 2	014/15 2	015/16 20	016/17 2	017/18 2	018/19 2	019/20 2	020/21
Consolidated revenue	22.4	21.4	21.0	20.9	21.8	21.9	21.3	21.7	21.6	21.6
Operating revenue	17.4	16.7	16.4	17.2	17.3	17.9	17.4	17.8	17.7	17.7
Capital revenue	5.0	4.7	4.7	3.8	4.6	4.0	4.0	4.0	3.9	3.9
Taxes	14.1	13.6	13.3	15.3	13.8	13.8	13.5	13.8	13.7	13.7
Direct taxes  Of which:	9.0	8.8	8.5							
Salaries tax	2.6	2.4	2.6							
Profits tax	6.1	6.1	5.6							
Indirect taxes	5.0	4.7	4.8							
Nontax	8.3	7.9	7.7	5.5	8.0	8.0	7.8	8.0	7.9	7.9
Of which:										
Land premium	4.3	3.4	3.9	3.4	4.2	3.7	3.6	3.6	3.6	3.6
Investment income	1.9	1.8	1.7	0.2	2.2	2.0	1.9	2.0	2.0	2.0
Conslidated expenditure	18.6	18.3	20.0	17.3	18.3	19.2	19.2	18.9	17.9	17.9
Operating expenditure  Of which:	15.2	14.7	15.6	13.8	14.7	15.0	15.0	14.8	14.0	14.0
Personnel related (including pensions)	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2	4.2
Capital expenditure	3.5	3.6	4.4	3.5	3.6	4.2	4.2	4.2	3.9	3.9
Of which:	5.2	5.0	•••	5.5	5.0				0.5	0
Interest expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	3.8	3.1	1.0	3.6	3.5	2.7	2.1	2.8	3.7	3.7
Memorandum items:										
Operating balance 2/	2.2	2.0	0.8	3.4	2.6	2.8	2.4	3.0	3.7	3.7
Primary balance 3/	1.9	1.3	-0.7	3.5	1.4	0.7	0.2	0.8	1.8	1.8
Structural balance	0.4	0.4	-1.2	2.7	1.1	0.0	-0.5	0.1	1.0	1.0
Cyclically adjusted balance	3.3	3.1	1.0	3.7	3.8	3.0	2.4	3.0	4.0	3.9
Fiscal reserves	34.2	35.6	34.9	36.1	37.9	38.8	39.2	40.1	41.8	43.4
(Months of spending)	22.1	23.3	20.9	25.1	24.9	24.3	24.5	25.4	28.0	29.1

Sources: CEIC; and IMF staff estimates.

<sup>1/</sup> Staff projections assume government spending targets in the latest medium-term budget document and staff revenue forecasts, including stamp duties from demand-management measures on property. Fiscal year begins on April 1.

<sup>2/</sup> Operating balance, as defined by the authorities, is akin to the current balance.

<sup>3/</sup> Balance excluding investment income.

Table 4. Hong Kong SAR: Monetary Survey, 2010–16											
						Pro	 oj.				
	2010	2011	2012	2013	2014	2015	2016				
		(In	billions o	f Hong Ko	ng dollars	5)					
Net foreign assets	3784.5	3974.8	4447.0	4866.0	5064.3	5306.9	5519.0				
Monetary authorities	2035.5	2177.8	2431.5	2581.5	2792.4	3056.9	3319.0				
Banks	1749.0	1797.1	2015.6	2284.5	2271.9	2250.0	2200.0				
Domestic credit	3470.2	4007.0	4096.6	4759.8	5333.5	5935.3	6555.8				
Claims on private sector	3296.6	3913.2	4044.2	4664.9	5270.6	5850.3	6458.8				
Claims on government	173.7	93.8	52.4	94.9	62.9	85.0	97.0				
Other items (net)	-118	76	406	431	614	650	650.0				
M2	7136.3	8057.5	8950.0	10056.4	11011.4	11892.3	12724.7				
Of which:											
Deposits in HKD 1/	3648.0	3797.9	4255.5	4481.3	4895.7						
Deposits in foreign currencies 1/	3269.5	4011.3	4412.6	5261.3	5785.6						
Notes and coins in circulation: held by the public	218.8	248.3	281.9	313.9	330.1						
		(	(Annual pe	ercentage	change)						
Domestic credit	27.5	15.5	2.2	16.2	12.1	11.3	10.5				
Claims on private sector	27.8	18.7	3.3	15.3	13.0	11.0	10.4				
M2	8.1	12.9	11.1	12.4	9.5	8.0	7.0				
		(Contr	ribution to	M2 grov	th, in perd	cent)					
Net foreign assets	-0.9	2.7	5.9	4.7	2.0	2.2	1.8				
Domestic credit	11.3	7.5	1.1	7.4	5.7	5.5	5.2				
Claims on private sector	10.9	8.6	1.6	6.9	6.0	5.3	5.1				
Claims on government	0.5	-1.1	-0.5	0.5	-0.3	0.2	0.1				
Other items (net)	-2.3	2.7	4.1	0.3	1.8	0.3	0.0				
			(In pe	ercent of C	GDP)						
Net foreign assets	213.0	205.5	218.3	227.5	224.5	221.9	220.1				
Domestic credit	195.4	207.1	201.1	222.6	236.5	248.2	261.5				
Other items (net)	-6.7	3.9	19.9	20.1	27.2	27.2	25.9				
M2	401.7	416.5	439.4	470.2	488.2	497.3	507.5				

1/ Includes savings, time, demand, and negotiable certificates of deposits.

Sources: IMF, International Financial Statistics; Haver Analytics, and staff calculation.

								Pro	ni		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	202
Real GDP (percent change)	6.8	4.8	1.7	3.1	2.5	2.2	2.5	2.7	2.9	3.1	3
Contribution											
Real domestic demand	6.7	6.0	3.7	3.9	2.8	1.4	2.3	3.0	3.2	3.1	3
Private consumption	3.8	5.2	2.6	3.0	2.1	3.1	2.0	2.2	2.3	2.4	2
Government consumption	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	C
Gross fixed capital formation	1.7	2.2	1.6	0.6	0.0	-0.9	-0.3	0.6	0.5	0.5	C
Inventories	0.9	-1.7	-0.8	0.0	0.5	-1.0	0.3	0.0	0.0	0.0	C
Net exports	0.2	-1.3	-2.0	-0.9	-0.3	0.8	0.2	-0.3	-0.2	0.0	C
Output gap (in percent of potential)	0.3	1.7	0.2	0.2	-0.2	-0.6	-0.6	-0.6	-0.3	-0.1	0
Growth rates											
Real domestic demand	7.1	6.3	3.8	4.0	2.8	1.4	2.3	3.1	3.2	3.2	3
Private consumption	6.1	8.4	4.1	4.6	3.2	4.7	2.9	3.2	3.4	3.4	3
Government consumption	3.4	2.5	3.6	3.0	3.0	3.0	3.3	3.5	3.2	3.2	3
Gross fixed capital formation	7.7	10.2	6.8	2.6	-0.2	-4.0	-1.4	2.6	2.5	2.2	2
Saving and investment (percent of GDP)											
Gross national saving	30.9	29.7	26.8	25.5	25.9	23.7	23.3	23.2	23.2	23.2	23
Gross investment	23.9	24.1	25.2	24.0	24.0	21.2	20.6	20.3	20.1	19.8	19
Saving-investment balance	7.0	5.6	1.6	1.5	1.9	2.5	2.7	2.9	3.1	3.3	3
Inflation (percent change)											
Consumer prices	2.4	5.3	4.1	4.3	4.4	2.7	2.9	3.1	3.2	3.4	
GDP deflator	0.3	3.9	3.5	1.9	2.9	3.7	2.3	2.1	2.1	2.1	
Domestic credit (percent change)	27.5	15.5	2.2	16.2	12.1	11.3	10.5	10.0	9.7	9.3	
Claims on private sector	27.8	18.7	3.3	15.3	13.0	11.0	10.4	9.8	9.5	9.1	
Employment (percent change)	0.2	2.9	2.4	1.8	0.6	0.7	0.7	0.6	0.5	0.4	
Unemployment rate (percent, period average)	4.3	3.4	3.3	3.4	3.3	3.2	3.1	3.0	2.9	2.8	
Merchandise trade (percent change)											
Export volume	17.3	3.5	1.9	6.5	8.0	-2.6	0.2	0.4	0.7	1.1	
Of which: re-exports	17.9	3.6	1.7	6.8	8.0	-2.7	0.2	0.4	0.7	1.1	
Import volume	18.1	4.7	3.0	7.2	0.9	-3.4	-0.6	8.0	1.0	1.2	:
Retained import volume	14.3	6.5	-2.5	5.6	4.6	5.0	2.6	3.0	3.3	3.2	
Export of goods (value)	23.1	12.8	6.6	8.1	2.6	-7.2	0.1	1.1	1.5	1.5	:
Import of goods (value)	27.4	15.7	9.1	9.6	2.8	-7.9	0.0	1.9	1.9	1.9	
External balances (in billions of U.S. dollar) 1/											
Balance of goods and services 1/	13.4	9.6	3.0	1.6	0.1	1.8	2.4	3.0	3.6	4.4	
In percent of GDP	5.9	3.9	1.1	0.6	0.0	0.6	0.7	0.9	1.0	1.2	:
Exports of goods and services	469	529	567	611	625	588	592	611	632	653	6
Imports of goods and services	-456	-519	-564	-609	-625	-586	-589	-608	-628	-649	-6
Current account 1/	16.0	13.8	4.1	4.1	5.4	7.7	8.7	9.9	11.1	12.6	1
In percent of GDP	7.0	5.6	1.6	1.5	1.9	2.5	2.7	2.9	3.1	3.3	-
Foreign exchange reserves (end-year) 1/	257.1	269.9	300.5	311.1	328.5	342.5	359.1	382.0	409.2	438.7	474
In percent of GDP		108.4	114.8	112.8	113.0			112.8			11

Sources: CEIC; and IMF staff estimates.

1/ External balances expressed in Balance of Payments Manual 6 (BPM6) format.

Table 6. Hong Kong SAR: Vu	lnerabilit	y Indic	ators, 2	2010-1	5	
	2010	2011	2012	2013	2014	Q2 2015
Banking sector						
Regulatory capital to risk-weighted assets	15.9	15.8	15.7	15.9	16.8	17.5
Regulatory tier 1 capital to risk-weighted assets	12.3	12.4	13.3	13.3	13.9	14.4
Nonperforming loans net of provisions to capital	1.9	1.6	1.4	1.5	1.3	1.6
Nonperforming loans to total gross loans	0.8	0.7	0.6	0.5	0.5	0.5
Sectoral distribution of total loans: residents	78.5	73.2	71.5	70.1	69.8	69.2
Sectoral distribution of total loans: other financial corporations	6.2	5.8	5.3	5.5	6.1	6.6
Sectoral distribution of total loans: nonfinancial corporations	64.9	60.8	59.4	57.9	56.9	55.9
Sectoral distribution of total loans: other domestic sectors	7.3	6.6	6.8	6.7	6.8	6.8
Sectoral distribution of total loans: : nonresidents	21.6	26.8	28.5	29.9	30.2	30.8
Return on assets	0.9	0.8	0.9	1.1	1.0	1.2
Return on equity	16.7	17.2	15.5	14.4	13.1	16.0
Interest margin to gross income	44.0	45.3	48.0	46.7	51.2	43.1
Noninterest expenses to gross income	56.9	54.8	53.9	48.5	48.9	43.2
Liquid assets to total assets (liquid asset ratio)	24.2	22.3	23.8	21.6	22.3	18.9
Liquid assets to short-term liabilities	43.1	44.0	47.0	44.9	47.0	142.5
Net open position in foreign exchange to capital		2.8	7.3	3.7	5.3	3.4
Public sector						
Fiscal surplus (in percent of fiscal year GDP)	4.2	3.8	3.2	1.0	3.7	
Accumulated fiscal surplus (in percent of GDP)	33.5	34.6	36.0	35.3	36.7	
External sector						
Gross official reserves (in billions of U.S. dollar)	268.7	285.4	317.4	311.2	328.5	
In percent of GDP	117.3	114.6	121.3	112.9	113.0	
In months of retained imports	27.0	24.8	25.6	24.3	23.8	
In percent of monetary base	200.9	206.5	201.8	192.2	189.2	
In percent of broad money 1/	29.3	27.6	27.5	24.0	23.1	
In percent of Hong Kong dollar M3	53.8	54.8	54.2	50.2	48.6	
Short-term debt (in billions of U.S. dollar)	649.4	718.1	752.3	861.8	932.9	
In percent of gross reserves	241.6	251.6	237.0	276.9	284.0	
Financial sector						
Hang Seng index (percent change, end-year)	5.3	-20.0	22.9	2.9	1.3	
Residential property prices (percent change, end-year)	21.0	11.1	25.7	7.7	13.5	

Sources: CEIC; Hong Kong SAR authorities; Bank for International Settlements; Bloomberg; IFS; and IMF staff estimates. 1/ Broad Money refers to total M2.

# **Appendix I. Summary of Macroprudential Measures Introduced Since 2009**

Date	Price Range	LTV CAP	Max Loan Amount	Other
Oct 2009	Greater than or equal to HK\$20mn	60 percent (previously 70 percent)	2 3	
	Less than HK\$20mn	Remains 70 percent	HK\$12mn	
Aug 2010	Greater than or equal to HK\$12mn	60 percent (previously 70 percent for properties valued between HK\$12mn and HK\$20mn)		Debt-service-to-income ratio (DSR) capped at 50 percent for all income groups; previously was
	Less than HK\$12mn Remains 70 percent		HK\$7.2mn	60 percent for high income groups; also must
	Not owner-occupied, any price range	60 percent (previously 70 percent)		be set such that were mortgage rates to go up by 2 percentage points, the stressed DSR would not exceed 60 percent
Nov 2010	Greater than or equal to HK\$12mn	50 percent (previously 60 percent)		Special Stamp Duty set at 15 percent for residential properties resold within
	Greater than or equal to HK\$8mn and less than HK\$12mn	60 percent (previously 70 percent)	HK\$6mn	first 6 months of purchase, 10 percent if resold between 6 and 12 months, 5 percent if resold between 12 and 24 months
				LTV cap for industrial and commercial properties mortgage loans at 50 percent
	Less than HK\$8mn	Remains at 70 percent	HK\$4.8mn	
	Not owner-occupied, any price range	50 percent (previously 60 percent)		
June 2011	Greater than or equal to HK\$10mn	50 percent		LTV cap lowered by further 10 percentage
	Greater than or equal to HK\$7mn and less than HK\$10mn	60 percent (previously 70 percent for properties valued between HK\$7mn and HK\$8mn)	HK\$5mn	points for borrowers with main income from outside Hong Kong SAR; LTV cap for net-worth based mortgage loans
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	lowered from 50 percent to 40 percent, irrespective of property value

# **Appendix I. Summary of Macroprudential Measures Introduced Since 2009** (continued)

Date	Price Range	LTV CAP	Max Loan	Other
			Amount	
Sep 2012	Greater than or equal to HK\$10mn  Greater than or equal to HK\$7mn and less than	Remains at 50 percent  Remains at 60 percent	HK\$5mn	LTV cap lowered by further 20 percentage points for borrowers with main income from outside Hong Kong SAR; LTV cap for net-worth based mortgage loans lowered from 40 percent to 30 percent, irrespective of property value
	HK\$10mn			DSR ratio capped at 40 percent for all income groups; previously was 50 percent; also must be set such that were mortgage rates to go up by 2 percentage points, the DSR would not exceed
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	50 percent; previously was 60 percent; mortgage applicants without outstanding mortgages were not subject to the DSR limits reduction
	Not owner- occupied, any price range	Remains at 50 percent		Maximum tenor of all new property mortgage loans capped at 30 years
Oct 2012				Buyer's Stamp Duty set at 15percent for all residential property transactions except Hong Kong SAR permanent resident
				Special Stamp Duty raised to 20 percent for residential properties resold within first six months of purchase, 15 percent if resold between 6 and 12 months, 10 percent if resold between 12 and 36 months

# **Appendix I. Summary of Macroprudential Measures Introduced** Since 2009 (continued)

Date	Price Range	LTV CAP	Max Loan Amount	Other
Feb 2013	Greater than or equal to HK\$10mn	Remains at 50 percent	Amount	LTV cap for standalone car park spaces set at 40 percent with maximum tenor at
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	15 years; LTV cap for industrial and commercial properties mortgage loans at 40 percent; previous was 50 percent
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	DSR ratio capped at 40 percent for all income groups; the stressed DSR would not exceed 50 percent were
	Not owner-occupied, any price range	Remains at 50 percent		mortgage rates to go up by 3 percentage points; previously was by 2 percentage points; mortgage applicants without outstanding mortgage were not subject to the DSR limits reduction
				Risk weight floor of 15 percent introduced on new residential mortgages for banks using IRB approach
				Ad valorem Stamp Duty raised to 1.5 percent to 8.5 percent except first-time buyers and replacement of one-home owner

# **Appendix I. Summary of Macroprudential Measures Introduced** Since 2009 (concluded)

Date	Price Range	LTV CAP	Max Loan Amount	Other
Feb 2015	Greater than or equal to HK\$10mn	Remains at 50 percent		DSR ratio capped at 40 percent for all income groups, irrespective of loan purpose; the stressed DSR would not exceed
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	50 percent were mortgage rates to go up by 3 percentage points; self-occupied or replacement and without outstanding
	Less than HK\$7mn	60 percent (previously 70 percent)	HK\$4.2mn	mortgage were exempted
	Not owner- occupied, any price range	Remains at 50 percent		Risk weight floor of 15 percent introduced on all new and existing residential mortgages for banks using IRB approach by Jun 2016; 10 percent for existing mortgage by Jun 2015; previously risk weight
				only introduced on new mortgages

# **Appendix II. Risk Assessment Matrix**<sup>1</sup>

	Ov	erall Level of Concern
	Likelihood (Over next 1–3 years)	Impact and Policy Response
> Sharp asset price adjustment and decompression of credit spreads	High Reassessment of growth prospects in regions that Hong Kong SAR financial center is exposed to combined with uncertainties surrounding Fed policy rate path.	High  The associated volatility surge prompts globally-active institutions to reduce leverage, maturity transformation, and holdings of risky assets, resulting in a general tightening of global financing conditions, amplified by lower market liquidity.  Policy response: Safeguard financial stability through macroprudential measures and provide liquidity through existing facilities.
> Disorderly correction of housing prices	Medium Higher global market volatility and financing cost resulting from Fed liftoff lead to an abrupt downturn in property prices.	Medium  Falling collateral values and negative wealth effect could trigger an adverse feedback loop between economic activity, bank lending, household indebtedness, and housing market.  Policy response: Adjust macroprudential measures while safeguarding financial stability. Ensure adequate supply of land and public housing in the medium term. Deploy fiscal measures, if needed, to support domestic demand.
> Sharp China slowdown in 2015-16	Low Growth falls significantly below target, possibly due to a severe housing downturn or a shock in the shadow banking sector, which triggers financial stress in Mainland markets and outward spillovers.	High  Economic activity could weaken significantly with falling trade with the Mainland. Accompanying financial instability in the Mainland could result in financial volatility in Hong Kong SAR.  Policy response: Deploy fiscal measures to stimulate domestic demand with emphasis on low-income and vulnerable household while safeguarding financial stability through macroprudential measures and liquidity provision. In addition, work closely with Mainland counterparts to facilitate an orderly resolution of distressed assets and address any weaknesses in banks' balance sheets.
> Structurally weak growth in emerging markets	Medium  Maturing of the cycle, misallocation of investment and excess corporate leverage, and insufficient progress with reforms lead to significant MT growth slowdown	Medium  Hong Kong SAR's high degree of openness and position as a financial center and a trading hub would imply large spillovers from weak growth in emerging economies' lower growth. High household leverage and potential asset price corrections could exacerbate a slowdown in economic activity.  Policy response: Should domestic demand weaken substantially, temporary and targeted fiscal stimulus needs to be provided with continued efforts on medium-term structural reforms.
> Steadfast implementation of reforms in China	Medium Steadfast implementation of the third plenum reform blueprint will lead to higher-quality and more sustainable growth in China over the medium term.	High Growth potential for Hong Kong SAR would improve through close trade and financial links, although growth may slow in the near term.  Policy response: Continue to undertake reforms and investment to enhance domestic competitiveness, and upgrade public infrastructure that would provide further synergy to benefit from China's higherquality growth over the medium term.

<sup>&</sup>lt;sup>1</sup> The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability of 30 percent or more). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Nonmutually exclusive risks may interact and materialize jointly.

# **Appendix III. Debt Sustainability Analysis**

#### Hong Kong SAR Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

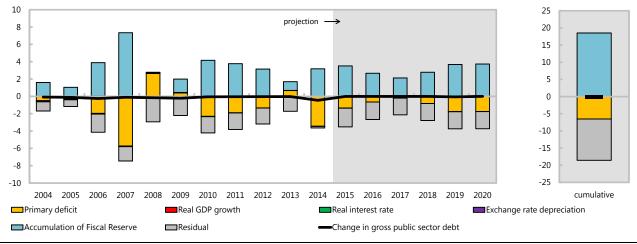
(In percent of GDP unless otherwise indicated)

	Debt, Economic and Market Indicators <sup>1/</sup>												
	Actual				Projections								
	2004-2012 2/	2013	2014		2015	2016	2017	2018	2019	2020			
Nominal gross public debt	0.9	0.5	0.1		0.1	0.1	0.1	0.1	0.0	0.0			
Public gross financing needs	-2.9	-1.0	-3.2		-3.5	-2.7	-2.1	-2.8	-3.7	-3.7			
Real GDP growth (in percent)	4.6	2.9	2.4		1.8	2.5	2.7	2.9	3.1	3.3			
Inflation (GDP deflator, in percent)	1.0	2.0	3.3		3.7	1.7	2.1	2.1	2.1	2.0			
Nominal GDP growth (in percent)	5.6	5.0	5.9		5.0	4.8	4.8	5.1	5.3	5.4			
Effective interest rate (in percent) 4/	4.1	5.1	5.1		5.3	5.1	5.1	5.1	5.1	5.1			

As of September 09, 2015							
Sovereign :	Spreads						
EMBIG (bp) 3/							
5Y CDS (bp)							
Ratings	Foreign	Local					
Moody's	Aa1	Aa1					
S&Ps AAA AAA							
Fitch	AA+	AA+					

#### **Contribution to Changes in Public Debt**

	Actual				Projections						
	2004-2012	2013	2014	2015	2016	2017	2018	2019	2020	Cumulative	Debt-stabilizing Primary Balance <sup>9/</sup>
Primary deficit	-1.2	0.7	-3.5	-1.4	-0.7	-0.2	-0.8	-1.8	-1.8	-6.5	3.7
Primary (noninterest) revenue and gra	nts 18.2	19.3	20.7	19.7	19.9	19.4	19.8	19.7	19.7	118.0	
Primary (noninterest) expenditure	17.0	20.0	17.3	18.3	19.2	19.2	18.9	17.9	17.9	111.5	
Automatic debt dynamics 5/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Interest rate/growth differential 6/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Of which: real interest rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Of which: real GDP growth	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exchange rate depreciation 7/	0.0	0.0	0.0								
Residual, including asset changes <sup>8/</sup>	-1.8	-1.7	-0.2	-2.2	-2.0	-1.9	-2.0	-2.0	-2.0	-12.0	
Change in gross public sector debt	-0.1	0.0	-0.5	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	
Change of fiscal reserves	2.9	1.0	3.2	3.5	2.7	2.1	2.8	3.7	3.7	18.5	



Source: IMF staff.

1/ Public sector is defined as consolidated public sector.

2/ Based on available data. Public debt includes debt identified identified in the consolidated financial statement. It excludes debt issued through the bond fund.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

 $5/ \ \ Derived \ as \ [(r-\pi(1+g)-g+ae(1+r)]/(1+g+\pi+g\pi)) \ times \ previous \ period \ debt \ ratio, \ with \ r=interest \ rate; \ \pi=growth \ rate \ of \ GDP \ deflator; \ g=real \ GDP \ growth \ rate; \ f=growth \ rate \ f=gro$ 

a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi$  (1+q) and the real growth contribution as -q.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

# Hong Kong SAR Public DSA - Composition of Public Debt and Alternative Scenarios

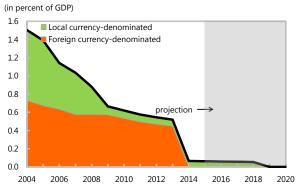
#### **Composition of Public Debt**

# By Maturity (in percent of GDP) 1.6 1.4 1.2 1.0 0.8 0.6

proje

2012

#### By Currency



#### **Alternative Scenarios**

2020

2018

#### **Gross Nominal Public Debt**

2006

2008

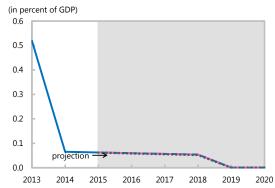
2010

0.4

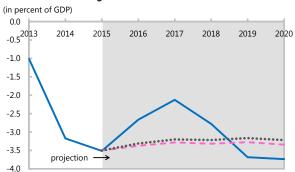
0.2

0.0

2004



## **Public Gross Financing Needs**



#### **Underlying Assumptions**

(In percent)

Baseline Scenario	2015	2016	2017	2018	2019	2020
Real GDP growth	1.8	2.5	2.7	2.9	3.1	3.3
Inflation	3.7	1.7	2.1	2.1	2.1	2.0
Primary balance	1.4	0.7	0.2	0.8	1.8	1.8
Effective interest rate	5.3	5.1	5.1	5.1	5.1	5.1
Constant Primary Balance S	cenario					
Real GDP growth	1.8	2.5	2.7	2.9	3.1	3.3
Inflation	3.7	1.7	2.1	2.1	2.1	2.0
Primary balance	1.4	1.4	1.4	1.4	1.4	1.4
Effective interest rate	5.3	5.1	5.1	5.1	5.1	5.1

2015	2016	2017	2018	2019	2020
1.8	3.8	3.8	3.8	3.8	3.8
3.7	1.7	2.1	2.1	2.1	2.0
1.4	1.3	1.3	1.3	1.3	1.3
5.3	5.1	5.1	5.1	5.1	5.1
	1.8 3.7 1.4	1.8 3.8 3.7 1.7 1.4 1.3	1.8 3.8 3.8 3.7 1.7 2.1 1.4 1.3 1.3	1.8 3.8 3.8 3.8 3.7 1.7 2.1 2.1 1.4 1.3 1.3 1.3	1.8     3.8     3.8     3.8     3.8       3.7     1.7     2.1     2.1     2.1       1.4     1.3     1.3     1.3     1.3

Source: IMF staff.

INTERNATIONAL MONETARY FUND

# **Appendix IV. External Sector Report**

#### Foreign asset Background. Hong Kong SAR has significant net foreign assets of around 330 percent of GDP as of Q2:2015. Both external financial assets (about 1500 percent of GDP) and liabilities (about 1170 percent of GDP) are and liability position and high, reflecting Hong Kong SAR's status as a major international financial center with considerable trajectory cross-territory investment. The GDP share of net foreign assets is projected to follow a trend that gradually converges to levels broadly in line with the average prior to the global financial crisis, driven by expected returns and valuation changes. The trend decline mainly reflects the interest-growth differential—as nominal GDP is expected to grow faster than the effective returns on NFA (net investment income as a share of NFA). Given the large gross assets and liabilities, annual fluctuations in NFA due to valuation changes have been sizable. **Assessment.** The external position is sustainable and expected to follow a path that converges the NFA to levels broadly in line with the average before the global financial crisis around 200 percent of GDP. Current **Background.** The current account surplus is estimated to be 2.5 percent of GDP in 2015. Although it is substantially lower than in 2010 (7.0 percent of GDP), it is higher than in 2012 and 2013 (about 1.5 percent of account Assessment. The current account is consistent with medium-term fundamentals and desirable policies. Staff quantitative assessment suggests that the difference between the cyclically-adjusted current account in 2015 and that consistent with fundamentals and desirable policies is between -3 to 3 percent of GDP (EBA-type results indicate a larger deviation, but are in this case subject to uncertainty and potential biases). 1/ Real Background. The REER appreciated by about 10 percent by October 2015 relative to the average REER in 2014. The Hong Kong SAR system possesses strong self-equilibrating tendencies, thanks to flexible goods, exchange rate factor, and asset markets. Real median monthly earnings have barely increased in the last two years. **Assessment.** The real exchange rate is broadly consistent with medium-term fundamentals and desirable policies. Based on empirical EBA-type estimates and factoring in the uncertainties and variability of an offshore trading and financial center, the exchange rate is assessed by staff to be from -10 to 10 percent different from the level consistent with medium-term fundamentals and desirable policies. Background. As a financial center, Hong Kong SAR has a fully open capital account without capital controls. **Capital and** financial The amounts of gross capital inflows and outflows have been large. Hong Kong SAR has experienced net private inflows in the first half of 2015. accounts: flows and Assessment. Large financial resources and proactive financial supervision and regulation limit the risks from policy potential volatile capital flows. measures **Background.** Hong Kong SAR has a currency board arrangement. International reserves have been built up in a nondiscretionary way as a result of a long-standing commitment to the Linked Exchange Rate System. intervention and reserves The stock of reserves is equivalent to around US\$345.8 billion (about 119 percent of 2014 GDP) at Q3:2015. level **Assessment.** Currently reserves are adequate for precautionary purposes and should continue to evolve in line with the automatic adjustment inherent in the currency board system. Hong Kong SAR also holds significant fiscal reserves built up through a track record of strong fiscal discipline.

#### **Overall Assessment:**

The external position in 2015 is broadly consistent with medium-term fundamentals and desirable policy settings. The current account surplus has declined relative to its pre-2010 level on account of structural factors, including opening of the Mainland capital account and changes in offshore merchandise trade activities. The impact of recent REER appreciation is expected to be offset by Hong Kong SAR's strong self-equilibrating tendencies resulting from flexible goods, factor, and asset markets.

#### **Potential policy responses:**

Macroeconomic policies are broadly appropriate. Robust and proactive financial supervision and regulation, prudent fiscal management, flexible markets, and the Linked Exchange Rate System have worked well to keep the external position broadly in balance. Continuation of these policies, therefore, will help keep the external position broadly in line with medium-term fundamentals.

# **External Sector Report** (concluded)

#### Technical Background Notes

1/ Hong Kong SAR is not in the EBA sample as it is an outlier along many dimensions of EBA analysis. Taking into consideration variability of the current account in an international trading and financial center, application of EBA methodology to Hong Kong SAR's current account provides a poor fit. The difference between the current account consistent with fundamentals and desirable policies, and the cyclically-adjusted current account is estimated to be about 10½ percent of GDP, with EBA regression residual of a similar magnitude and a nearly neutral impact of combined contributions of policy gaps. The large residual likely reflects a combination of structural factors which are not captured by EBA and potential bias in point estimates. These structural factors include the ongoing and expected future opening of the Mainland capital account (which will create more demand for office and residential space and hence the imports related to construction), the change of offshore merchandise trade activities and the surge of Mainland tourist spending (which will reduce measured current account surplus if the measured increase of service credits cannot fully offset the increase of goods imports). The point estimate could also be affected by the contribution of three variables: aging-related interaction term, NFA position (both sample outliers, which could bias the results given potential model nonlinearities at extreme values), and financial center dummy (subject to uncertainty given the small number of financial centers in the sample). Moreover, EBA estimates do not account for the cyclical impact of low interest rates on investment income, which is sizable given the large share of interestbearing foreign assets.

PEOPLE'S REPUBLIC OF CHINA—HONG KONG SAR

#### Area Recommendation **Progress** The Financial Services and the Treasury Bureau ("FSTB"), the Hong Kong Monetary Authority Crisis Establish a fully comprehensive framework ("HKMA"), the Securities and Futures Commission ("SFC") and the Insurance Authority ("IA") have management and resolution for recovery and resolution, in reached an advance stage in the development of the draft legislation for the establishment of a line with emerging single cross-sector resolution framework in Hong Kong SAR with a view to meeting the standards international best practices. set by the Financial Stability Board (FSB)'s Key Attributes of Effective Resolution Regimes for Establish recovery and Financial Institutions (Key Attributes). resolution plans for all The first stage of public consultation was conducted in Q1:2014 followed by a second stage of systemic financial institutions, public consultation in Q2:2015. Respondents were generally content with the proposed including financial market establishment of the resolution framework. infrastructures (FMIs). The consultation response (with refined policy positions on certain aspects) was published on October 9, 2015. The authorities intend to introduce the Financial Institutions (Resolution) Bill into the legislature in December 2015. FMIs under the purview of SFC It has been agreed that three of the four existing recognized clearing houses (RCH) namely, Hong Kong Securities Clearing Company Limited, HKFE Clearing Corporation Limited, The SEHK Options Clearing House Limited, will each develop a recovery plan within the year 2015 for discussion with the SFC. The recovery plan will take into consideration the guidance on development of recovery plans for FMIs published by CPMI-IOSCO in October 2014. The fourth RCH, OTC Clearing Hong Kong Limited, already has a recovery plan. When the new legislation of the resolution regime comes into effect, SFC will work with the four RCHs in developing their respective resolution plans. FMIs under the purview of HKMA The settlement institutions of the various foreign-currency Real Time Gross Settlement ("RTGS") systems in Hong Kong SAR (i.e., U.S. dollar, euro and RMB CHATS), which are commercial banks in Hong Kong, have developed their recovery plans. The system operator of the various RTGS systems in Hong Kong SAR, the Hong Kong Interbank Clearing Limited ("HKICL"), is developing its recovery plan based on the PFMI requirements and aims to finalize it before end-2015 in accordance with the HKMA's requirement.

Area	Recommendation	Progress
		According to a note issued by CPMI-IOSCO on application of the PFMIs to central bank FMIs, the requirements to prepare recovery and orderly wind-down plans do not apply to central bank-operated FMIs. Therefore, the requirement to develop a recovery and resolution plan is not applicable to the Central Moneymarkets Unit ("CMU"), Hong Kong Dollar Clearing House Automated Transfer System ("CHATS") and the Trade Repository ("TR").
Insurance sector	The authorities should ensure implementation of the independent Insurance Agency (IA) as scheduled in 2015.	The Insurance Companies (Amendment) Ordinance 2015 ("Amendment Ordinance"), the enabling legislation for the establishment of IIA, was enacted on 10 July 2015. It provides that, among other things, IIA should be independent of the Government and the industry. A Provisional Insurance Authority will be set up by the end of 2015 to undertake essential preparatory work for taking over the regulatory functions of the existing IA in about a year.
	In addition, the legal and regulatory framework should be strengthened	Under the Amendment Ordinance, the appointment of certain individuals by an insurer, including controllers, directors, key persons in control functions and appointed actuaries, is subject to the prior approval of IIA. Control functions currently include risk management; financial control; compliance; internal audit; actuarial and intermediary management functions. To provide flexibility to update the regulatory regime in light of future developments, the Financial Secretary may specify other control functions through subsidiary legislation. IIA is also empowered under the Amendment Ordinance to revoke the appointment of such person on fitness and propriety grounds.
		Besides, shareholder controllers will be required to report the disposal of their shareholding interests. IA is updating the existing Guidance Note ("GN") on Corporate Governance which, among other things, includes enhancing requirements for insurers to implement contingency plans in their risk management process.
	(i) establish a regulatory regime for insurance groups	<ul> <li>Apart from the current role of IA in (i) leading the supervisory college of a Hong Kong SAR incorporated insurance group; (ii) co-leading a regional supervisory college of a Globally Systematic Important Insurer with the home regulator; and (iii) actively participating in supervisory colleges of other insurance groups, IA proposes a regulatory regime for insurance groups and subgroups in the context of developing a risk-based capital ("RBC") regime. Consultation with the stakeholders was conducted at the end of 2014. Depending on the structure and size of insurance groups, a three-tier approach for supervisory measures for group wide supervision was proposed.</li> </ul>

Area	Recommendation	Progress
	(ii) implement a risk-based capital regime and	A consultation on the proposed RBC framework was conducted at the end of 2014. The implementation of the RBC regime will be rolled out in phases. On quantitative requirements (i.e., Pillar 1 under the RBC), IA, after taking into account feedback from stakeholders, is developing detailed rules and carrying out quantitative impact studies. Subject to consultation with stakeholders, legislative amendments will be introduced. The whole process is expected to take about two to three years from now. As regards the qualitative and disclosure requirements (i.e., Pillars 2 and 3 under RBC), IA will review the relevant GNs and make revisions ahead of the legislative process as necessary.
	(iii) strengthen supervision of intermediaries.	• The Amendment Ordinance sets up a statutory licensing regime for insurance intermediaries and provides IIA with express powers to conduct inspection, initiate investigation, and impose a range of disciplinary sanctions (including revocation of license, issuance of reprimand and imposition of pecuniary penalty of up to HK\$10 million) on licensed insurance intermediaries. The broad principles of conduct requirements on the part of a licensed insurance intermediary are stipulated in the Amendment Ordinance. IIA will also be empowered to make rules for insurance intermediaries to comply with practices and standards relating to conduct requirements, and issue codes or guidelines to facilitate their compliance with the conduct requirements.
		As regards conduct of business requirements for insurers, IA has issued two GNs for insurers on the underwriting of unit-linked policies and life insurance policies respectively, which are based on Insurance Core Principle 19 on Conduct of Business promulgated by the International Association of Insurance Supervisors. Both GNs adopts a "cradle-to-grave" approach by requiring insurers to meet regulatory requirements on product design, disclosure of key product features, suitability assessment as well as sales and post-sale control measures to ensuring that the products being recommended to clients do suit their needs.
Securities market	Strengthen the oversight regime of the Hong Kong Exchanges and Clearing Limited ("HKEx").	<ul> <li>SFC enhanced its supervisory approach in early 2014 following the announcement by HKEx in 2013 of its strategic plan which would change its business model as it expands into new markets, asset classes and infrastructures. Supervision focused on HKEx's capability to adequately identify, assess, and manage conflicts, business and regulatory compliance risks across the markets in which HKEx operates, and on conducting on-site inspections of the non-listing operations of HKEx. In this regard—         <ul> <li>(i) SFC has imposed a gearing ratio requirement and financial resources requirement on HKEx and its subsidiary recognized exchanges ("REC") and recognized clearing houses ("RCH").</li> </ul> </li> </ul>

Area	Recommendation	Progress
		- The financial resources requirement for RCH was first introduced in the fourth quarter of 2013, when OTC Clearing Hong Kong Limited was recognized as an RCH. This was followed by the other three recognized clearing houses in 2014: the Hong Kong Securities Clearing Company Limited ("HKSCC"), HKFE Clearing Corporation Limited ("HKFE") and The SEHK Options Clearing House Limited ("SEOCH").
		(ii) HKEx agrees on the need to strengthen its compliance function and has set up a Regulatory Compliance Unit.
		The Risk Management Committee ("RMC") was established to focus on cross-market risks relating to HKEx in the aftermath of the Asian Financial Crisis in light of the interface between the securities market and the money market. It is essential for SFC and HKMA to continue to stay on RMC to provide inputs from the macroprudential and financial stability angles.
	Further develop clear and transparent requirements for the recognition of exchanges and the authorization of automated trading services.	SFC is updating its Guidelines for the Regulation of Automated Trading Services ("ATS Guidelines", first published in 2003) to incorporate requirements for the upcoming authorization of overseas CCPs under the Over-the-Counter ("OTC") derivatives regulatory regime. The revised ATS Guidelines include guidelines that explain the differences between the regulatory regime for the recognition of exchanges and the authorization of ATS. The explanation will facilitate understanding of the regulatory differences (which are reflected in SFO) and guide potential applicants when choosing between recognition as a recognized exchange company ("REC") or an authorization as a Part III ATS. SFC intends to consult the market on the proposed changes by end-2015.
	Improve the oversight of auditors of listed entities.	<ul> <li>FSTB launched a public consultation to solicit views on proposals to introduce an independent oversight regime for the regulation of listed entity auditors in June 2014. The consultation conclusions were issued in June 2015 (http://www.fstb.gov.hk/fsb/ppr/consult/doc/conclu rpirrlea e.pdf).</li> <li>With general support from the audit profession and the relevant stakeholders, the Government is preparing an amendment bill to implement the reform. The reform will bring Hong Kong SAR in line with the international standards that auditor regulatory regimes should be independent of the profession itself and be subject to independent oversight by bodies acting in the public interest. The Government's target is to introduce the amendment bill into the Legislative Council in the 2016–17 legislative session.</li> </ul>

Area	Recommendation	Progress
		Under the reform proposals, the Financial Reporting Council ("FRC") will become the independent auditor oversight body vested with direct inspection, investigation and disciplinary powers with regard to listed entity auditors. The enforcement powers to be vested with FRC will also be stronger as compared with the present regime. Without compromising the independence of the new auditor regulatory regime, the authorities will leverage of the experience of the Hong Kong Institute of Certified Public Accountants ("HKICPA") in handling registration, standard setting and continuing professional development-related matters by entrusting the Institute with these statutory functions but subject to the oversight by FRC.
	Strengthen enforcement	<ul> <li>Since the Securities and Futures Ordinance came into operation in 2003, the enforcement approach (including imposition of punitive, deterrent sanctions and remediation to victims) of SFC has been proven to be effective in ensuring that the markets SFC regulates are safe, fair and efficient. In view of the ever-evolving market situation, FSTB will continue to work with SFC for continual improvement to minimize financial crimes and market misconduct, uphold market integrity and inspire confidence of investors.</li> <li>SFC is continuing its discussion with the Department of Justice ("DoJ") on a new protocol for the exercise of prosecution powers.</li> </ul>
Financial market infrastructure	Develop a clear timetable for each FMI for compliance with the PFMIs.	<ul> <li>SFC and HKEx have agreed on a timetable for the recognized clearing houses in the HKEx Group to comply with the PFMIs in respect of areas where improvements are required. Most of the areas identified will be addressed by the end of 2015, while a few will require legislative amendments or further study for implementation.</li> <li>HKMA revised its Policy Statement on oversight of financial market infrastructures (FMIs) on January 9, 2014. The revised Statement requires, among other things, that FMIs under the purview of the HKMA (including the Hong Kong dollar, U.S. dollar, euro and RMB CHATS, CMU and HKTR) should have made changes to conform with relevant requirements in the PFMIs, and be generally observant of the PFMIs by December 31, 2015. The CMU, Hong Kong dollar CHATS and TR have all completed a self-assessment on their compliance with the PFMIs, and the disclosure framework for them was first published in October 2014, July 2014 and September 2015 respectively.</li> </ul>

Area	Recommendation	Progress
Systemic risk analysis	Strengthening the capacity for systemic risk analysis at the SFC and the IA would help ensure that cross-sectoral interconnections are adequately captured and brought to the attention of the Financial Stability Committee ("FSC").	SFC has commenced a review of its long-term risk data strategy focusing on identifying data that can be collected in a methodological fashion and that may contribute to the early identification of systemic risk, as well as to the setting of strategic, policy and supervisory priorities.
		To enhance existing macroprudential surveillance and support policymaking, IA is taking steps to improve its data infrastructure by requiring insurers to provide IA with additional information on risk exposures and interconnections, which will facilitate the assessment of the build-up of risks/vulnerabilities to the industry. For example, with the G20/FSB recommendations and initiatives on macroprudential oversight on shadow banking, IA has been working towards the development of more robust quantitative indicators for assessing the systemic risk of insurers. In this annual exercise, IA collects from insurers data about their financial assets by categories and their shadow banking activities. This is also conducted by HKMA, SFC and Mandatory Provident Fund Authority at the same time, with specific shadow banking indicators pertinent to their respective businesses.
		Life insurers are required to conduct periodic industry-wide standardized scenario testing as and when required, to enable IA to assess the existence of any vulnerabilities within the industry. On a regular basis, insurers are required to submit the results of Dynamic Solvency Testing under adverse scenarios to IA which uses the information to perform industry-wide resilience tests on a quarterly basis. IA also performs analysis of the asset mix of life insurers to assess their concentration risks and the exposure to different sectors. On the information exchange front, IA provides HKMA with statistics of insurers associated with banking groups to enable the latter to perform its role in macroprudential surveillance.
		Besides, IA has been collecting business statistics from insurers and calculating industry-wide claims ratios for specified lines of business. IA also collects burning cost data from the industry. Such information would be used as the reference to test the adequacy of technical provisions for specific lines of business of individual insurers.
		As for the macroprudential surveillance from a cross-sectoral perspective, IA liaises with other local financial regulators (such as HKMA and SFC) regularly via the Council of Financial Regulators ("CFR") and FSC on supervisory and regulatory issues with cross-market implications. CFR and FSC deliberate on events, issues and developments with possible cross-market and systemic implications. A review would be taken by the financial regulators if any significant risk area of the financial markets is identified.

Area	Recommendation		Progress
Cross-border regulatory coordination	Continued active participation in the supervisory colleges and crisis management groups of Globally Systemically Important Financial Institutions ("GSIFIs").	•	HKMA continues its active participation in the supervisory colleges for cross-border banking groups including a number of GSIFIs to discuss the risk profiles, business strategies, and developments of banking groups, as well as other supervisory concerns and priorities. It also continues to participate in the Crisis Management Groups of GSIFIs to discuss and oversee the development of recovery and resolution plans for each banking group in accordance with the Key Attributes established by FSB.
	Strong cooperation with regulatory counterparts in Mainland China.	•	HKMA has been maintaining close dialogues with the China Banking Regulatory Commission ("CBRC") on supervisory matters relating to the Mainland bank subsidiaries and branches of Hong Kong banks. In addition to the bilateral meetings held twice a year between HKMA and CBRC, the number of working-level meetings has increased either through scheduled meetings or whenever the two sides meet as part of the on-site examinations arranged by either regulator. The secondment-out program established with CBRC is currently in place to enhance understanding of banking issues on the Mainland.
		•	SFC has been maintaining constant dialogues with various Mainland authorities including the China Securities Regulatory Commission ("CSRC") on different regulatory matters. For example, SFC worked closely with different Mainland authorities to prepare for the November 2014 pilot launch of Shanghai-Hong Kong Stock Connect. SFC signed a Memorandum of Understanding ("MOU") with CSRC on strengthening cross-boundary regulatory and enforcement co-operation, and concluded co-operation arrangements and procedures for handling contingency situations and investor complaints.
		•	IA has been maintaining close dialogues with the China Insurance Regulatory Commission ("CIRC") on supervisory matters relating to Mainland insurers' subsidiaries and branches operating in Hong Kong SAR, as well as Mainland shareholders and business partners (e.g., reinsurers) of Hong Kong SAR insurers. IA has entered two MOUs with CIRC on cooperation of insurance supervision and anti-insurance fraud. There are regular meetings between IA and CIRC to enhance understanding on the insurance market of the other side and to enhance regulatory cooperation on cross-border insurance business activities.
	Continued active participation in international regulatory fora is also needed to mitigate potential effects from global regulatory developments.	•	The relevant regulators continue to participate actively in international regulatory fora including G20 and FSB to ensure that financial regulation in Hong Kong SAR is on par with the international standards, taking into account the unique background and needs of the financial sectors.

Area	Recommendation	Progress
		• To meet the G20 commitments on over-the-counter ("OTC") derivatives regulatory reform, Hong Kong SAR implemented the first phase of its regulatory regime on July 10, 2015, mandating the reporting of certain interest rate swaps and nondeliverable forwards to the Hong Kong Trade Repository. The authorities are currently working on the subsidiary legislation required for the next phase of the regime, which will be on mandatory clearing of certain standardized interest rate swaps entered into between major dealers ("phase 1 clearing") and expanded mandatory reporting so that it covers all OTC derivative transactions ("phase 2 reporting"). The authorities' target is to commence phase 1 clearing by mid-2016 and phase 2 reporting by early 2017, subject to legislative process.
		<ul> <li>The status of Hong Kong SAR in meeting the requirements of the U.S. and EU OTC regulatory reforms relating to OTC derivatives that are applicable to CCPs is as follows:</li> </ul>
		(i) The U.S. Commodity Futures Trading Commission ("CFTC") extended the no action relief granted to OTC Clearing Hong Kong Limited ("OTC Clear") from the derivatives clearing organization ("DCO") registration requirement under Section 5b(a) of the Commodity Exchange Act ("CEA") for a year until December 31, 2015. The no-action relief permits OTC Clear to provide clearing services to U.S. clearing members for their proprietary trades in certain products. On June 18, 2015 OTC Clear filed with the CFTC a petition for an exemption from registration as DCO ("Exempt DCO"). The application is progressing, including discussions between the SFC and the CFTC on a Memorandum of Understanding ("MOU") in relation to OTC Clear's Exempt DCO application.
		(ii) On October 30, 2014, the European Commission adopted an equivalence decision for the regulatory regime of central counterparties ("CCPs") in Hong Kong SAR. SFC then worked with the European Securities and Markets Authority ("ESMA") on an MOU to establish cooperation arrangements, as it was a pre-condition for the recognition of a non-EU CCP. The MOU was signed and took effect on December 19, 2014. These steps culminated in ESMA recognizing the four CCPs in Hong Kong SAR (HKSCC, HKFE, OTC Clear and SEOCH) as third country CCPs to offer services and activities to entities established in the EU in accordance with the European Market Infrastructure Regulation on April 29, 2015. The recognition was granted without conditions.
		(iii) There are no other requirements of any other overseas regulator that the four CCPs have to meet in order to continue providing clearing services.



# INTERNATIONAL MONETARY FUND

# PEOPLE'S REPUBLIC OF CHINA— HONG KONG SPECIAL ADMINISTRATIVE REGION

December 15, 2015

STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION DISCUSSIONS—INFORMATIONAL ANNEX

Prepared By

Asia and Pacific Department (in consultation with other departments)

# **CONTENTS**

FUND RELATIONS	2
STATISTICAL ISSUES	2

# **FUND RELATIONS**

### **Membership Status**

As a Special Administrative Region of the People's Republic of China, Hong Kong SAR is not a member of the Fund. However, annual consultation discussions have been held with the Hong Kong SAR authorities since October 1990, and the staff also holds discussions with the authorities in connection with the Fund's *Global Financial Stability* reports. STA has provided Hong Kong SAR with technical assistance in the area of balance of payments statistics and Hong Kong SAR officials have attended IMF Institute courses on balance of payments and monetary statistics, and financial programming. The latest FSAP was undertaken in 2014 at the request of the authorities.

#### **Exchange Rate Arrangement**

The Hong Kong dollar has been linked to the U.S. dollar under a currency board arrangement, the Linked Exchange Rate System (LERS), since October 1983 at a rate of HK\$7.8/US\$1. The Hong Kong Monetary Authority (HKMA) refined the operations of the LERS in May 2005—the first changes since September 1998. For the first time since the introduction of the LERS in 1983, the HKMA explicitly committed to sell Hong Kong dollar at a preannounced price (set at HK\$7.75/US\$), which is referred to as the strong-side convertibility undertaking. Previously, the HKMA had only committed to buy Hong Kong dollar at a preannounced rate (the weak-side convertibility undertaking introduced in October 1998) and could sell Hong Kong dollar at any price. Along with this two-way convertibility undertaking, the HKMA also introduced a symmetric trading band of 0.6 percent around a central parity of HK\$7.8/US\$. There are no restrictions on current or capital account transactions in Hong Kong SAR, and the Hong Kong dollar is freely convertible. The People's Republic of China accepted the obligations under Article VIII, Sections 2, 3, and 4 of the Articles of Agreement on December 1, 1996.

#### **Resident Representative**

The Hong Kong SAR sub-office of the Beijing Resident Representative's office was opened on September 23, 2000. Sally Chen is the current Resident Representative.

# STATISTICAL ISSUES

Data provision is adequate for surveillance purposes. Hong Kong SAR provides statistics to the Fund on a timely basis for surveillance and publication in the International Financial Statistics (IFS). Hong Kong SAR subscribes to the Fund's Special Data Dissemination Standard and is fully compliant with its requirements.

Hong Kong SAR publishes comprehensive balance of payments data and international investment position statistics for 2000 onwards, and also publishes quarterly external debt statistics according to the recommendations given in the External Debt Statistics: Guide for Compilers and Users.

Hong Kong SAR reports both cash and accrual-based annual data for the general government according to the Fund's Government Finance Statistics Manual (GFSM 1986 and GFSM 2001, respectively). No subannual data are provided for publication in the IFS.

Hong Kong SAR participates in regular reporting of Financial Soundness Indicators (FSIs) to the IMF for dissemination. The reported data are quarterly and cover all core FSIs and 12 additional FSIs for the deposit takers sector.

In late 2009, the HKMA began reporting quarterly monetary data using Standardized Report Forms (SRFs) that present data consistent with the Monetary and Financial Statistics Manual. However, the SRF data for Hong Kong SAR have not been published in IFS, which uses monthly data periodicity.

# HONG KONG SAR—TABLE OF COMMON INDICATORS REQUIRED FOR SURVEILLANCE (As of November 30, 2015)

	As of Movernic	Jei 30, 2013)			
	Date of Latest Observation	Date Received	Frequency of Data <sup>5</sup>	Frequency of Reporting <sup>5</sup>	Frequency of Publication <sup>5</sup>
Exchange rates	Nov. 2015	Nov. 2015	D	D	D
International reserve assets and reserve liabilities of the monetary authorities <sup>1</sup>	Aug 2015	Nov 2015	М	М	М
Reserve/base money	Aug. 2015	Nov. 2015	М	М	М
Broad money	Aug. 2015	Nov. 2015	М	М	М
Central bank balance sheet	Aug. 2015	Nov. 2015	М	М	М
Consolidated balance sheet of the banking system	Aug. 2015	Nov. 2015	М	М	М
Interest rates <sup>2</sup>	Nov. 2015	Nov. 2015	D	D	D
Consumer price index	Sept 2015	Nov. 2015	М	М	М
Revenue, expenditure, balance and composition of financing <sup>3</sup> -central government	Aug. 2015	Nov. 2015	М	М	М
Stocks of central government and central government-guaranteed debt <sup>4</sup>	Aug. 2015	Nov. 2015	М	М	М
External current account balance	Q3/15	Nov. 2015	Q	Q	Q
Exports and imports of goods and services	Q3/15	Nov. 2015	Q	Q	Q
GDP/GNP	Q3/15	Nov. 2015	Q	Q	Q
Gross external debt	Q3/15	Nov. 2015	Q	Q	Q
International investment position	Q3/15	Nov. 2015	Q	Q	Q

<sup>&</sup>lt;sup>1</sup> Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

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

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

<sup>&</sup>lt;sup>4</sup> Including currency and maturity composition.

<sup>&</sup>lt;sup>5</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

# Statement by the Staff Representative on People's Republic of China—Hong Kong Special Administrative Region January 11, 2016

- 1. This statement contains information that has become available since the staff report was circulated to the Executive Board on December 16, 2015. It does not alter the staff's broad assessment of policy issues and recommendations contained in the report nor does it alter the staff appraisal.
- 2. **Data releases for November continue to be in line with staff projections.** The labor market continued to hold up (employment rose 0.2 percent m/m; the unemployment rate remained at 3.3 percent; real wages rose 2.3 percent y/y in the third quarter) even as retail sales softened (down 3.1 percent m/m) on the back of slower tourist traffic (declined 3.9 percent m/m). CPI inflation remained at 2.4 percent (y/y). Bank credit outstanding increased slightly by 0.1 percent m/m, while RMB deposits rose by 1.2 percent (m/m).
- 3. On December 17, the HKMA raised its Base Rate. The interest rate—which is an input used for calculating the Discount Rates for repurchase transactions through the Discount Window—was adjusted upward by 25 basis points to 0.75 percent following the U.S. Fed's decision to raise the target range for the Federal Funds rate by a quarter percentage point on December 16.
- 4. On December 18, the Government announced the establishment of the Future Fund with effect from January 1, 2016. It aims to secure higher investment returns for the fiscal reserves. The initial endowment of HK\$219.7 billion amounts to about 25 percent of the overall fiscal reserves (or about 9 percent of GDP) and the Government may provide periodic top-ups in the future. About 50 percent of the Future Fund will be set aside for incremental placement with the HKMA's Exchange Fund's Long-Term Growth Portfolio, which includes private equities and investments in properties outside Hong Kong SAR. The rest will be placed with the Exchange Fund's investment portfolio or other investment assets. The Future Fund will be subject to oversight by the Exchange Fund Advisory Committee. Separately, the HKMA should consult the Financial Secretary and the Secretary for Financial Services and the Treasury once a year on the asset allocation for the Future Fund. Withdrawal of the Future Fund before December 31, 2025, is not allowed except in emergencies. Expenditure from the Future Fund would require approval of the Legislative Council under the existing legislation.

# Statement by Mr. Zhongxia Jin, Executive Director, Mr. Ping Sun, Alternate Executive Director, and Mr. Raymond Yuen, Advisor to the Executive Director January 11, 2016

On behalf of the Hong Kong SAR authorities, we would like to thank staff for the candid and constructive discussions held during the mission, which focused on the economic outlook, risks and opportunities, and the appropriate policy response to these developments. There is broad agreement between staff and the authorities on these issues, and we welcome staff's recognition of the authorities' efforts in enhancing the economic and financial resilience of Hong Kong SAR.

### Latest economic development and outlook

The Hong Kong SAR economy continued to grow at a moderate pace. Overall, the real GDP growth rate remained stable at 2.5 percent year-on-year in the first three quarters of 2015—about the same as in 2014. Domestic demand held up well on the back of steady job and income conditions, while external demand weakened alongside the global trade slowdown and weaker tourism inflows. Nevertheless, there are indications that real activity has moderated in recent months amidst the continued drag of the external headwinds. Given the outturn in the first three quarters, the authorities expect the full-year real GDP growth rate to be 2.4 percent in 2015, slightly higher than staff's forecast of 2.25 percent.

Inflation stayed on an easing trend, with the year-on-year underlying consumer price inflation rate softening to 2.5 percent in the first three quarters of 2015, as compared to 3.5 percent in 2014. This largely reflected weaker international commodity prices and more moderate increases in domestic wages and rentals. With the ongoing slowdown in inflation momentum, the authorities agree with staff that consumer price inflation is likely to remain benign in the near term.

We note staff's projection for Hong Kong SAR's economic growth to pick up slightly to 2.5 percent in 2016. While downside risks are also identified, including rising interest rates in the United States, possible price correction in the domestic property market, and exposure to stress in Mainland China, staff's assessment suggests that they would be manageable, considering the strong buffers already in place in Hong Kong SAR and the authorities' proactive efforts to contain such risks from developing or their spillovers. The authorities will nevertheless stay vigilant to these developments and, in case such risks materialize, will take all necessary actions in a timely manner to safeguard the macroeconomic and financial stability of Hong Kong SAR.

# **Linked Exchange Rate System**

The authorities welcome staff's continued support for the Linked Exchange Rate System

(LERS) and their balanced assessment of Hong Kong SAR's external position. The LERS has served Hong Kong SAR well as an anchor of monetary and financial stability and has proved to be highly resilient in a series of severe domestic and global strains, including the heightened regional financial stress last summer. The authorities are fully committed to the LERS, which remains the most appropriate exchange rate arrangement given the small and open nature of the Hong Kong SAR economy and its role as an international financial center. The preconditions for smooth functioning of the LERS—robust institutional, legal, and policy framework, prudent fiscal management, a healthy financial system, and the requisite economic flexibility—are all fully in place.

# **Property market**

After a prolonged period of buoyancy, the residential property market showed signs of consolidation in recent months, with house prices moving downward modestly and transaction volume staying subdued. The adjustment has been gradual and orderly, contributing to a more healthy development of the property market. However, it is worth noting that households' pent-up demand remains strong relative to new supply, and mortgage rates continue to stay low in Hong Kong SAR even after the Fed liftoff in December. With that, it remains appropriate for the authorities to uphold the stamp duty measures to cool off speculative transactions and restrain excess demand. On the countercyclical macroprudential measures, the authorities agree with staff that bank and household leverage exposures have been by and large limited, while substantial buffers are in place to guard against adverse outcomes. The authorities will continue to keep a close eye on developments in the property market and deploy appropriate measures based on evolving macroeconomic and financial stability risks facing Hong Kong SAR.

The authorities remain determined to alleviate housing affordability concerns by raising flat supply, which is important for the healthy and stable development of the property market over the medium to longer term. The Long Term Housing Strategy laid out the target of producing an annual average of about 48,000 units in the coming ten years from FY2015/16 to FY2024/25, or about double the annual average produced in recent years. To this end, the authorities will continue to expedite the process of identifying new housing sites and increase residential land supply. On public housing, the authorities have recently set aside a Housing Reserve fund to ensure adequate funding to meet the long-term supply target.

# Fiscal policy

Hong Kong SAR's fiscal position is strong, with the fiscal balance already in surplus for twelve straight years, lifting the fiscal reserves to 36 percent of GDP at the end of FY2014/15. As also noted in the staff report, this provides sufficient space for the authorities to roll out counter-cyclical macro relief when needed. It should be stressed that this fiscal space is built upon prudent fiscal management. With that, the authorities will continue to

uphold fiscal discipline to ensure sustainability of public finance, and fiscal strategies will be formulated with due consideration of the economic environment and the needs of Hong Kong SAR.

To help address the long-term fiscal challenges of an aging population and shrinking workforce, the authorities have earmarked part of the fiscal reserves and a portion of future budget surpluses to establish a Future Fund. This Future Fund, with an initial endowment of HK\$219.7 billion, will be placed in long-term investments to achieve higher returns within acceptable risk levels, thereby generating additional resources to cope with demographic change.

#### **Financial sector**

The authorities are glad to see staff's assessment that Hong Kong SAR's regulatory and supervisory framework is a global standard setter. Local banks are found well capitalized with no liquidity shortage, and asset quality is sound by international standards. Indeed, the authorities have taken multiple steps over the past few years to enhance banks' credit and liquidity risk management, strengthen their shock absorbent buffers, and limit their leverage exposures. After the last Article IV consultation in May 2014, the authorities refined the Stable Funding Requirement to further strengthen banks' liquidity management and help mitigate the potential impact of financial market fluctuations. Another round of property-related macroprudential tightening measures was introduced. The implementation of the second phase of the Basel III standards also commenced, with the rules on capital buffers and liquidity coverage ratio taking effect from 2015, followed by a loss absorbency capital surcharge for domestically systematic important banks and the phasing in of a countercyclical capital buffer in 2016.

Growth in Mainland-related lending of the Hong Kong SAR banking sector is a natural consequence of the growth of the Mainland economy and development of Mainland corporates. The authorities are fully aware of this trend and have proactively stepped up the monitoring of banks' business in this area, including more frequent regular and thematic on-site examinations, and more comprehensive and granular reviews and analyses. Based on the outcome of these on-site examinations and off-site reviews, the credit risks of the banking sector in Hong Kong SAR are found properly managed. Banks and their Mainland subsidiaries have maintained high underwriting standards and properly managed the concentration risk. Asset quality remains healthy, with the classified loan ratio of Mainland-related lending portfolio staying low at 0.49 percent as of end-June 2015. The authorities however recognize that there is no room for complacency, and they will continue with their supervisory efforts to ensure that banks will uphold their credit underwriting standards and prudently manage their liquidity risks.

The authorities also strive to make important progress in enhancing the regulatory and supervisory framework along the recommendations of the 2014 Financial Sector Assessment Program (FSAP). In particular, the legislation for establishing an independent Insurance Authority was enacted in July 2015, bringing significant changes to insurance regulation in Hong Kong SAR, including paving the way for a risk-based capital regime. Meanwhile, the legislative process on an effective recovery and resolution framework for financial institutions in Hong Kong SAR has been under way, with the first reading of the Financial Institutions (Resolution) Bill in the Legislative Council in December 2015.

#### Offshore renminbi business

The expanding use of renminbi globally and the progressive financial liberalization undertaken by Mainland China have provided further impetus for the development of Hong Kong SAR's offshore renminbi business. Since late 2014, the Mainland authorities have implemented a number of important financial liberalization measures, including the Shanghai-Hong Kong Stock Connect and Mainland-Hong Kong Mutual Recognition of Funds schemes. The authorities also relaxed the rules on cross-border renminbi cash pooling by multinational corporates, introduced measures to allow offshore banks to conduct repos in the Mainland interbank bond market, and gave foreign central banks, sovereign wealth funds, and supranational organizations more access to the Mainland interbank bond and foreign exchange markets. These moves have led to further development of cross-border and offshore renminbi businesses. During the year, the offshore renminbi market in Hong Kong SAR continued to function in an orderly manner, and some business areas such as trade settlement and bank lending saw steady growth. Hong Kong SAR also remained as a premier global renminbi payment and settlement hub, with the average daily turnover of its renminbi Real Time Gross Settlement system reaching above RMB900 billion.

Looking ahead, the Chinese government's firm commitment to economic reforms should take the Mainland economy on a robust and sustainable growth path in the medium and longer term, to the benefit of Hong Kong SAR and the global economy. The authorities expect that offshore renminbi business in Hong Kong SAR will continue to grow, supported by the expanding use of renminbi globally and the progressive financial liberalization by the Mainland authorities.