INTERNATIONAL MONETARY FUND

IMF Country Report No. 18/240

PEOPLE'S REPUBLIC OF CHINA

July 2018

2018 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; STAFF STATEMENT AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE PEOPLE'S REPUBLIC OF CHINA

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 2018 Article IV consultation with the People's Republic of China, 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 July 18, 2017 consideration of the staff report that concluded the Article IV consultation with the People's Republic of China.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 18, 2018, following discussions that ended on May 30, 2018, with the officials of the People's Republic of China on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 28, 2018.
- 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.

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
E-mail: publications@imf.org Web: http://www.imf.org
Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

© 2018 International Monetary Fund

Press Release No. 18/310
FOR IMMEDIATE RELEASE
July 26, 2018

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2018 Article IV Consultation with the People's Republic of China

On July 18, 2018, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation1 with China.

The Chinese economy continues to perform strongly. GDP growth accelerated to 6.9 percent in 2017, driven by a cyclical rebound in global trade. Growth is projected to weaken slightly to 6.6 percent in 2018 owing to the lagged effect of financial regulatory tightening and the softening of external demand. Headline inflation has remained contained at around 2 percent and is expected to rise gradually to 2½ percent.

Reforms progressed in several key areas. A wide range of regulatory reforms reduced financial sector risks, overcapacity reduction progressed, anti-pollution efforts intensified and opening-up accelerated recently.

Credit growth slowed significantly, but remained strong. While the corporate debt to GDP ratio stabilized, total nonfinancial sector debt still rose faster than nominal GDP growth. The deficit of the general government sector (including estimated off-budget investment spending) was estimated to be around 11 percent of GDP in 2017.

The current account surplus fell by 0.4 percentage points to 1.4 percent of GDP in 2017. It is projected to narrow to 0.9 percent of GDP in 2018, driven by deteriorating terms of trade. Net capital outflows declined sharply from $646 billion in 2016 to $73 billion in 2017. The RMB was broadly stable against the basket of currencies in 2017 and was assessed to be broadly in line with fundamentals.

Executive Board Assessment[2]

Executive Directors welcomed the authorities' strategy to decisively shift the policy focus from high-speed to high-quality growth, and commended recent reform progress, in particular, financial de-

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

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

risking measures and continued opening-up of the economy. They noted that China's growth outlook remains strong and saw this as an opportunity to accelerate rebalancing and other reform efforts, building on the existing agenda.

Directors stressed the importance of staying the course on reining in credit growth. They underscored that the tightening of macro-financial policies should continue while de-emphasizing growth targets. They concurred that continuing financial regulatory reforms, curbing household borrowing, and reining in off-budget local government investment would help deliver a more sustainable growth path.

Directors welcomed the progress in rebalancing the current account, although they noted that some other aspects of rebalancing slowed. They emphasized that progress should be accelerated by more decisive structural reforms to support consumption and reduce income inequality and pollution. In this regard, they looked forward to the authorities' plans to increase social spending and reform pensions. They noted that a more holistic policy framework would help address the tensions across rebalancing dimensions.

Directors agreed that market forces should be allowed to play a more decisive role. In particular, they stressed the need to reduce the dominance of the public sector in some industries, continue to advance state-owned enterprise reforms, open up more markets to the private sector, and ensure fair competition.

Directors welcomed the authorities' strong commitment to free trade and multilateralism. They saw the recently announced package of opening-up policies as being in the right direction and urged the authorities to accelerate reforms in this area. They underscored that trade tensions should be resolved in ways that support and strengthen the international trading system and the global economy.

Directors agreed that further improvements in policy frameworks are needed to implement the authorities' high-quality growth agenda. They supported continuing financial regulatory reforms, a more price-based monetary policy framework, and addressing the misalignment of center-local fiscal responsibilities. In this connection, they welcomed the progress in implementing the FSAP recommendations. Directors also stressed the importance of addressing gaps in China's macroeconomic data. Directors concurred that the success of the Belt and Road Initiative would be enhanced by an overarching framework, better coordination and oversight, more open procurement, and due attention to debt sustainability in partner countries.

Directors took note of the staff's assessment that the renminbi remains broadly in line with fundamentals even as the external position in 2017 was moderately stronger than implied by fundamentals. They welcomed the increase in the flexibility of China's exchange rate, which should continue. Directors concurred that reforms to support the continued easing and removal of capital flow measures and further capital account liberalization should be expedited. >

China: Selected Economic Indicators

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						Projections					
NATIONAL ACCOUNTS											
Real GDP (base=2015)	7.8	7.3	6.9	6.7	6.9	6.6	6.4	6.3	6.0	5.7	5.5
Total domestic demand	8.1	7.2	7.2	7.6	6.4	6.8	6.6	6.5	6.3	6.0	5.8
Consumption	7.2	7.2	8.3	8.6	7.6	8.0	7.4	7.0	6.8	6.3	6.1
Investment	9.1	7.1	6.1	6.5	4.9	5.3	5.7	5.8	5.8	5.6	5.4
Fixed	9.3	6.8	6.7	6.8	4.3	5.3	5.9	6.0	6.0	5.8	5.6
Inventories (contribution)	0.1	0.2	-0.2	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0
Net exports (contribution)	0.1	0.4	-0.1	-0.6	0.6	0.0	0.0	-0.1	-0.2	-0.2	-0.2
Total capital formation (percent of GDP)	47.3	46.8	44.7	44.1	44.4	44.3	43.9	43.3	42.7	42.2	41.6
Gross national saving (percent of GDP) 1/	48.8	49.0	47.5	45.9	45.8	45.2	44.7	44.1	43.4	42.7	42.0
LABOR MARKET											
Unemployment rate (annual average) 2/	5.0	5.1	5.1	5.0	5.1	5.0	5.0	5.0	5.0	5.0	5.0
Employment	0.4	0.4	0.3	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1
PRICES											
Consumer prices (average)	2.6	2.0	1.4	2.0	1.6	2.3	2.5	2.7	2.8	2.9	3.0
GDP Deflator	2.4	1.0	1.1	-0.1	1.9	2.0	2.3	2.3	2.2	2.2	2.3
FINANCIAL											
7-day repo rate (percent)	5.4	5.1	2.5	2.6	3.1	...	...	...	...	...	...
10 year government bond rate (percent)	4.6	3.7	2.9	3.1	3.9	...	...	...	...	...	...
Real effective exchange rate (average)	6.3	3.1	10.1	-5.6	-2.6	...	...	...	...	...	...
Nominal effective exchange rate (average)	5.3	3.1	9.5	-6.5	-2.5	...	...	...	...	...	...
MACRO-FINANCIAL											
Total social financing 3/	17.5	14.3	12.4	12.9	12.0	10.5	11.5	10.9	10.1	9.5	9.2
In percent of GDP	180	190	198	209	215	219	224	228	232	235	238
Total nonfinancial sector debt	17.4	17.1	15.4	16.4	14.0	12.2	12.0	11.3	10.5	9.9	9.5
In percent of GDP	192	207	222	242	253	261	269	275	281	286	290
Domestic credit to the private sector	16.6	13.2	15.8	16.5	12.8	10.6	10.6	10.1	9.4	8.8	8.5
In percent of GDP	142	149	159	174	180	183	186	189	191	192	193
House price 4/	7.7	1.4	9.1	11.3	5.7	8.6	8.3	7.9	7.2	6.8	6.0
Household disposable income (percent of GDP)	59.8	60.4	60.5	61.0	60.6	61.0	61.2	61.4	61.5	61.6	61.5
Household savings (percent of disposable income)	38.5	38.0	37.1	35.5	35.5	34.7	34.0	33.3	32.3	31.4	30.5
Household debt (percent of GDP)	33.0	35.4	38.2	44.2	49.2	51.0	52.8	54.9	56.8	59.0	61.3
Non-financial corporate domestic debt (percent of GDP)	109	113	121	130	131	132	133	134	134	133	132
BIS credit-to-GDP gap (percent of GDP) 5/	18.9	21.5	27.2	24.7	12.6	...	...	...	...	...	...
GENERAL GOVERNMENT (Percent of GDP)											
Net lending/borrowing 6/	-0.8	-0.9	-2.8	-3.7	-3.9	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1
Revenue	27.7	28.1	28.5	28.2	28.4	28.8	28.9	28.6	28.3	28.2	28.0
Additional financing from land sales	2.7	2.7	1.9	2.0	2.6	2.3	2.0	1.7	1.4	1.2	1.0
Expenditure	31.2	31.6	33.2	33.9	34.9	35.2	35.0	34.4	33.8	33.5	33.1
Debt 7/	16.0	38.6	36.4	36.7	36.9	38.1	39.3	40.4	41.4	42.4	43.2
Structural balance	-0.5	-0.5	-2.5	-3.6	-4.0	-4.2	-4.2	-4.2	-4.2	-4.2	-4.1
BALANCE OF PAYMENTS (Percent of GDP)											
Current account balance	1.5	2.2	2.7	1.8	1.4	0.9	0.8	0.8	0.7	0.5	0.4
Trade balance	3.7	4.1	5.1	4.4	4.0	3.3	3.1	2.9	2.7	2.5	2.3
Services balance	-1.3	-2.0	-1.9	-2.1	-2.2	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9
Net international investment position	20.7	15.2	14.9	17.4	15.1	13.9	13.6	13.2	12.9	12.4	11.9
Gross official reserves (bn US$)	3,880	3,899	3,406	3,098	3,236	3,198	3,144	3,088	3,024	2,935	2,809
MEMORANDUM ITEMS											
Nominal GDP (bn RMB) 8/	59,696	64,718	69,911	74,563	81,204	88,282	96,107	104,434	113,132	122,194	131,915
Augmented debt (percent of GDP) 9/	48.1	52.3	56.6	62.0	67.5	72.4	77.1	81.3	85.0	88.5	91.6
Augmented net lending/borrowing (percent of GDP) 9/	-7.6	-7.2	-8.4	-10.4	-10.8	-10.7	-10.9	-10.8	-10.7	-10.4	-10.3

Sources: Bloomberg, CEIC, IMF International Financial Statistics database, and IMF staff estimates and projections.
1/ IMF staff estimates for 2016 and 2017.
2/ Surveyed unemployment rate.
3/ Not adjusted for local government debt swap.
4/ Average selling prices estimated by IMF staff based on housing price data (Commodity Building Residential Price) of 70 large and mid-sized cities published by National Bureau of Statistics (NBS).
5/ Latest observation is for Q3 2017.
6/ Adjustments are made to the authorities' fiscal budgetary balances to reflect consolidated general budgetary government balance, including government-managed funds, state-administered SOE funds, adjustment to the stabilization fund, and social security fund.
7/ Official government debt. Estimates of debt levels before 2015 include central government debt and explicit local government debt (identified by MoF and NPC in Sep 2015). The large increase in general government debt in 2014 reflects the authorities' recognition of the off-budget local government debt borrowed previously. The estimation of debt levels after 2015 assumes zero off-budget borrowing from 2015 to 2021.
8/ Expenditure side nominal GDP.
9/ Augmented fiscal data expand the perimeter of government to include local government financing vehicles and other off-budget activity.

INTERNATIONAL MONETARY FUND

PEOPLE'S REPUBLIC OF CHINA

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION

June 28, 2018

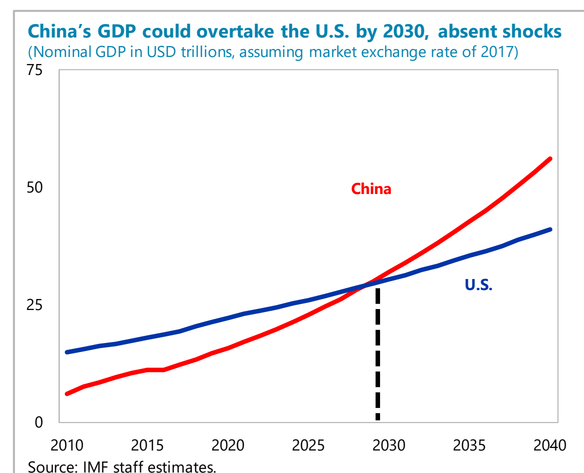
KEY ISSUES

Context. China is at an historic juncture. After decades of *high-speed* growth, the authorities are now focusing on *high-quality* growth. Whether and how this shift is carried through will determine China's development path for decades to come. Recent strong growth momentum and significant financial de-risking progress reduce the probability of a near-term abrupt adjustment. Rebalancing accelerated in some dimensions, especially as the current account surplus continued to fall and growth became less dependent on credit, but progress slowed in many other dimensions as exports drove the growth pick up, rather than consumption. And while credit growth has slowed, it remains excessive.

Policies. Staff sees tensions in the authorities' strategy between, on the one hand, the stated goals of stabilizing leverage, allowing market forces a decisive role, and greater innovation and opening-up, and, on the other, still-unsustainable debt growth, the pervasive role of the state in the economy, and the relatively restrictive trade and investment regime in some areas. To achieve the desired higher-quality development will require addressing these policy tensions by building on the existing reform agenda and taking advantage of the current growth momentum to "fix the roof while the sun is shining." Key elements:

- Continuing to rein in credit growth
- Accelerating rebalancing efforts
- Increasing the role of market forces
- Fostering openness
- Modernizing policy frameworks

China's GDP could overtake the U.S. by 2030, absent shocks
(Nominal GDP in USD trillions, assuming market exchange rate of 2017)



Source: IMF staff estimates.

Outlook. The near-term outlook remains robust due to strong domestic momentum, recovering global trade, and significant reform progress. External risks have risen, with tightening global financial market conditions and rising trade tensions. The longer-term outlook depends on the policies deployed to achieve the authorities' goals—determined market-based reforms could lead to sustained, stable, and still-strong growth, whereas continued state- and credit-driven policies would likely lead to continued resource misallocation and a further build-up of risks, raising the likelihood of an eventual abrupt adjustment and dimming long-term growth prospects.

Approved By
Markus Rodlauer and Petya Koeva Brooks

Discussions took place in Shenzhen and Beijing May 17–30, 2018. The team comprised J. Daniel (head), S. Das, D. Ding, S. Jain-Chandra, E. Jurzyk, R. Mano (all APD), M. Catalan (MCM), G. Li (FAD), C. Tovar (SPR), and A. Schipke, S. Chen and L. Zhang (Resident Representatives). M. Rodlauer (APD) joined the concluding meetings and FDMD D. Lipton the high-level meetings on May 28-29. Z. Jin, P. Sun and Y. Liu (all OED) joined the official meetings. D. Wong coordinated media activities. G. Alvim, K. Chow, L. Tolentino, J. Zhang, Q. Shan, and J. Li supported the mission.

CONTENTS

CONTEXT: AN HISTORIC JUNCTURE ____ 4

RECENT DEVELOPMENTS: STRONGER GROWTH, SLOWER REBALANCING ____ 6

POLICIES: RESOLVING POLICY TENSIONS TO DELIVER HIGH-QUALITY GROWTH ____ 13
A. Continuing to Rein in Credit Growth ____ 14
B. Accelerating Rebalancing Efforts ____ 17
C. Increasing the Role of Market Forces ____ 19
D. Fostering Openness ____ 22
E. Modernizing Policy Frameworks ____ 24

OUTLOOK AND RISKS ____ 30

STAFF APPRAISAL ____ 31

BOX
1. Credit Efficiency: Recent Development and Outlook ____ 11

FIGURES
1. Recent Developments and Outlook: Solid Growth Momentum ____ 34
2. Rebalancing: Uneven Progress ____ 35
3. Credit: Credit Gap Narrows but Remains Large ____ 36
4. Monetary: Money Market Rates Rose ____ 37
5. Fiscal: Continued Loosening in 2017 ____ 38
6: External: Outflow Pressure Abated ____ 39
7. Banking: Sharp Slowdown in Asset Growth ____ 40
8. Financial: Tighter Financial Conditions ____ 41
9. Cross-Country Comparison on FDI Regulatory Restrictiveness ____ 42

TABLES
1. Selected Economic Indicators ____ 43
2. Balance of Payments ____ 44
3. External Vulnerability Indicators ____ 45
4. Monetary and Credit Developments ____ 46

5. General Government Fiscal Data _____ 47
6. Non-financial Sector Debt _____ 48
7. Rebalancing Scorecard _____ 49
8. SOE Performance _____ 50

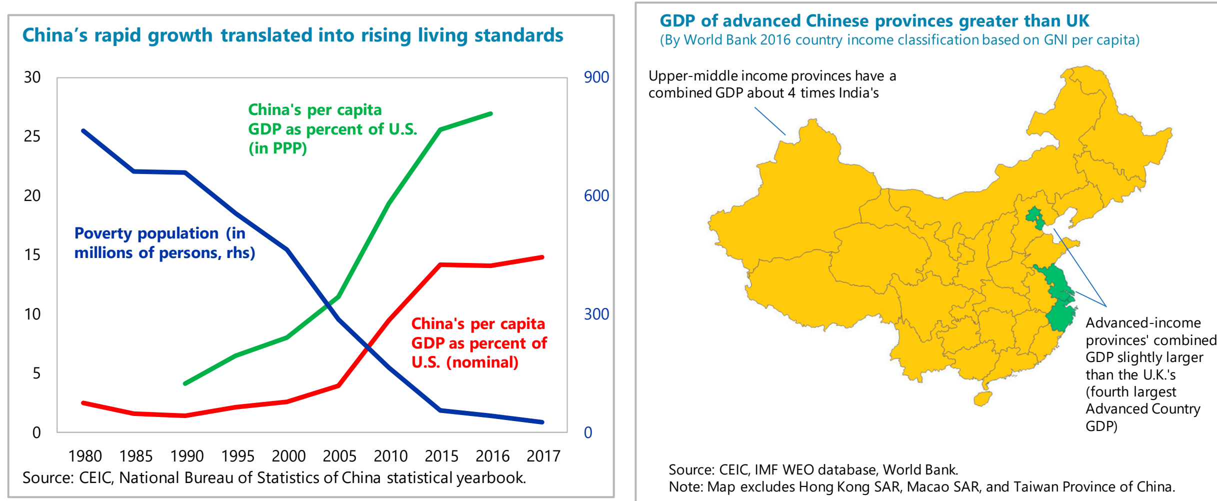
APPENDICES

I. External Sector Report _____ 51
II. Risk Assessment Matrix _____ 53
III. Implementation of Main Recommendations of the 2017 Article IV Consultation _____ 54
IV. Implementation of Main Recommendations from the 2017 FSAP _____ 59
V. Debt Sustainability Analysis _____ 81
VI. Assessment of the Authorities' Approach to Managing Capital Flows _____ 93

CONTEXT: AN HISTORIC JUNCTURE

"What we now face is the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life." (President Xi Jinping, 2017)

1. **2018 marks the 40th anniversary of China's "reform and opening-up" policy.** Four decades of reform have transformed China from one of the poorest countries in the world to now the second largest economy that accounts for one-third of global growth. Over 800 million people have been lifted out of poverty and the country has achieved upper-middle income status. China's per capita GDP continues to converge to that of the United States, albeit at a more moderate pace in the last few years. A few provinces have already achieved advanced-economy income levels, though in most of the country per capita income is still a fraction of that in advanced economies, and there remains considerable room for China to continue catching up.

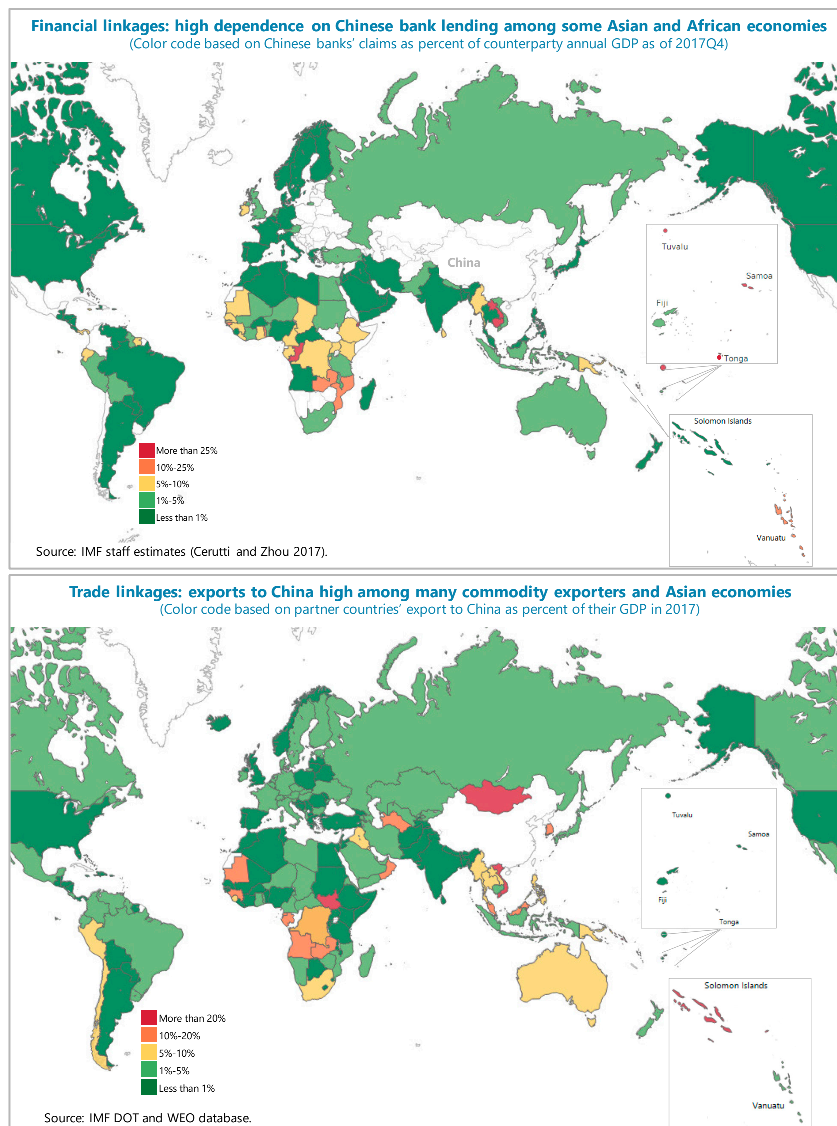


2. **The October Communist Party National Congress declared China's entry into a "new era" and laid out a strategic vision for a "great modern socialist country" by mid-century.** With the country's main development challenge evolving from "meeting people's basic needs" to their "ever-growing needs for a better life", the authorities aim to transform the economy from *high-speed* to *high-quality* growth. Two key policy packages to achieve this are: (1) "Supply-Side Structural Reforms"—a host of measures aimed at tackling structural weaknesses such as overcapacity, excess housing inventory and high leverage; and (2) the "Three Critical Battles" of addressing financial risks (with a goal of stabilizing the debt/GDP ratio in three years), eliminating absolute poverty, and tackling pollution. These intentions signal a departure, at least in intent, from demand-side stimulus that has been driving China's rapid GDP growth in the past. Also high on the government's agenda is to foster new growth engines and promote national competitiveness through innovation, industrial upgrading and further opening-up.

3. **Following the Party Congress, the authorities implemented major institutional restructuring to carry out the reform agenda.** This includes forming Party "central committees" in key areas (such as structural reforms) and giving them a formal role in policy making and oversight,

restructuring the financial regulatory framework with the newly established Financial Stability and Development Committee (FSDC) in charge of interagency coordination, merging the banking and insurance regulators, expanding the responsibility of the environment protection ministry, and setting up new government agencies for international aid and market regulation and supervision (including antitrust and intellectual property rights protection).

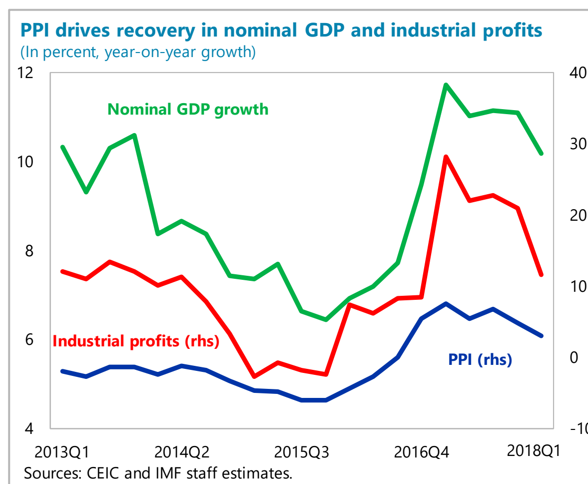
4. As the main contributor to global growth and trade, and an increasingly important and interconnected participant in global financial markets, China's transition to a new model of development will significantly affect the global economy. China's rising share in international trade and investment—as its fast-growing economy becomes more integrated with the rest of the world—underscores the importance of China in upholding the international trade system. China is also increasingly becoming a major international creditor, including through the Belt and Road Initiative (BRI), which could bring both opportunities for greater connectivity and growth, but also risks (e.g. debt sustainability).



RECENT DEVELOPMENTS: STRONGER GROWTH, SLOWER REBALANCING

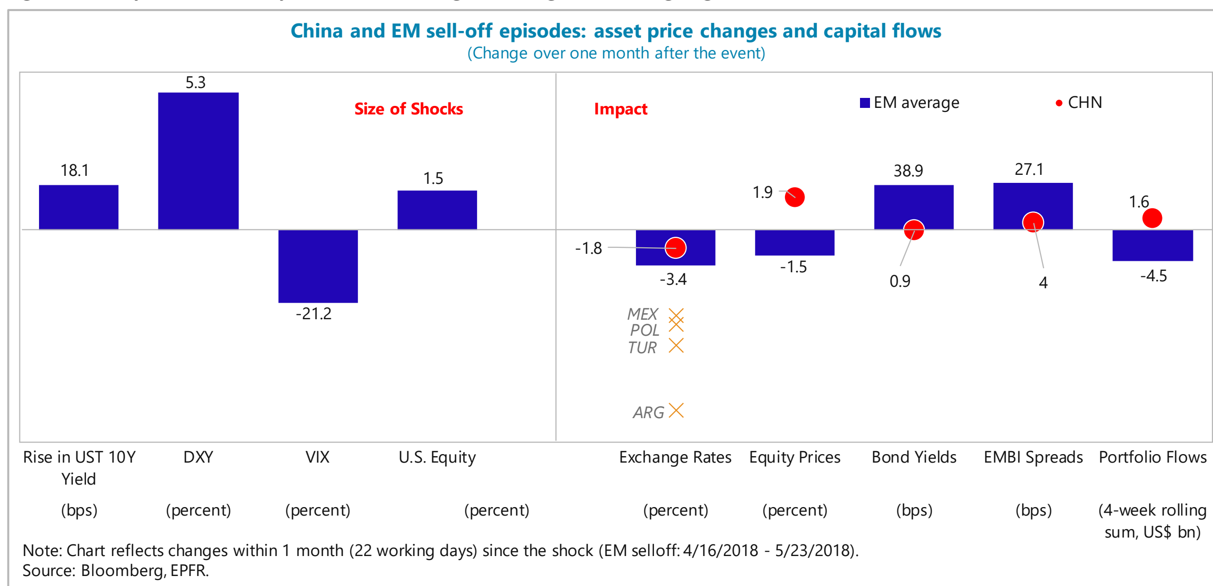
5. The momentum of the Chinese economy has remained strong. The year-on-year GDP growth rate has been in the range of 6.7-6.9 percent for eleven consecutive quarters. GDP growth reached 6.9 percent in 2017, the first annual acceleration since 2010, driven by a rebound in global trade, and the momentum continued into early 2018. Headline consumer price index (CPI) inflation remained contained at around 2 percent, while a strong pickup in the producer price index (PPI) since 2016 led to higher nominal GDP growth and corporate profits. The unemployment rate, as measured by the new survey-based indicator with expanded coverage, has fallen. China to date has not been significantly affected by the recent tightening in Emerging Market (EM) financial conditions.

PPI drives recovery in nominal GDP and industrial profits
(In percent, year-on-year growth)



Sources: CEIC and IMF staff estimates.

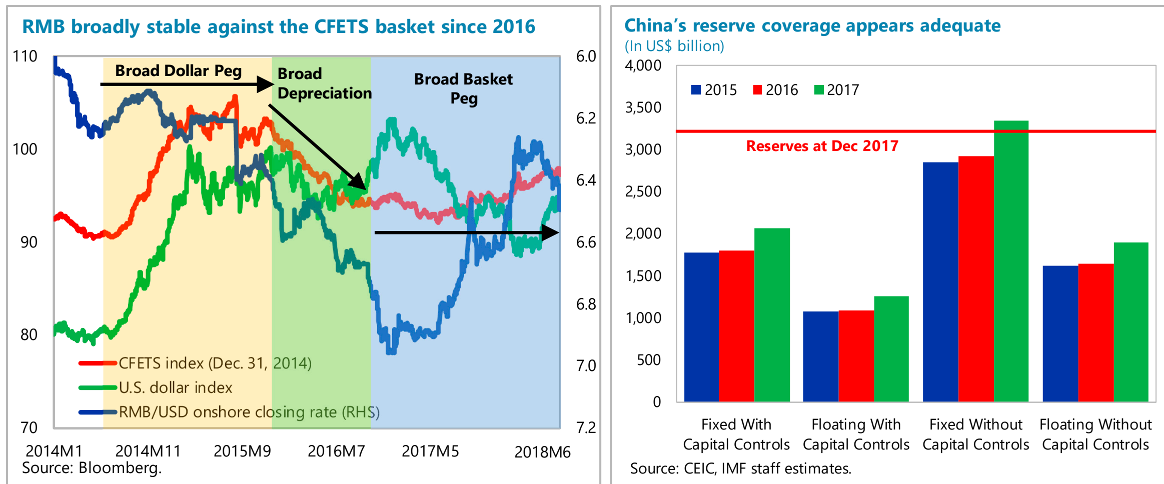
China and EM sell-off episodes: asset price changes and capital flows
(Change over one month after the event)



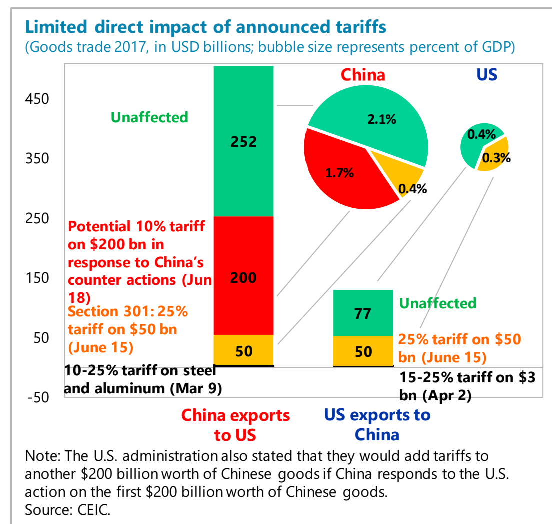
Note: Chart reflects changes within 1 month (22 working days) since the shock (EM selloff: 4/16/2018 - 5/23/2018).
Source: Bloomberg, EPFR.

6. Favorable domestic and external conditions reduced capital outflows and exchange rate pressure. The RMB was broadly stable against the basket published by the China Foreign Exchange Trade System (CFETS) in 2017, but with more fluctuation versus the dollar, and it has appreciated by about 2 percent in real effective terms in the first half of 2018. The current account surplus continued to decline but, reflecting distortions and policy gaps that encourage excessive savings, the external position for 2017 is assessed as moderately stronger than the level consistent with medium-term fundamentals and desirable policies, with the exchange rate broadly in line (Appendix I). Addressing the policy gaps requires continued structural reforms, including improving

the social safety net, further reducing entry barriers and accelerating state-owned enterprise (SOE) reforms, to avoid a resurgence of the current account surplus going forward. At US$3.1 trillion, China's foreign currency reserves are more than adequate to allow a continued gradual transition to a floating exchange rate. Assessing reserve adequacy, however, is not straightforward since China is in transition to greater capital account openness and its exchange rate is not fully flexible. The IMF's reserve adequacy metrics suggest that the level of reserves at the end of 2017 ranged between 100 percent and 260 percent. The authorities do not publish or provide intervention data, thus staff makes its own estimates. Based on staff estimates, there was minor net positive intervention (FX purchases) since the last Article IV; these estimates are subject to a margin of error which could include no intervention.



7. Capital flow management measures (CFMs) were generally eased and made more transparent since the last Article IV consultation. Reserve requirement ratios for banks' offshore RMB deposits and foreign exchange derivatives were lowered to zero, and restrictions on overseas direct investment were eased. The authorities introduced a new "macroprudential framework for capital flows." Compared to the previous case-by-case and quota allocation system, the new framework aims to address risks arising from excessive cross-border financing and composition mismatches (e.g. currency and maturity) through a formula-based approach that is more predictable and transparent. In addition, the ceiling on entities' cross-border financing (against their capital or net assets) is subject to a "macroprudential parameter" that can be adjusted under crisis or exceptional circumstances to address risks associated with capital flows.



8. Amid the trade tensions with the U.S., the Chinese authorities said they would respond to the U.S. tariffs with comprehensive measures, but they also announced new opening-up plans. These include lowering

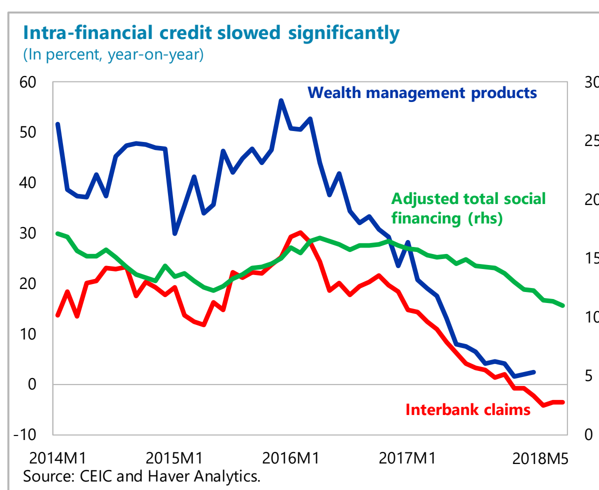
entry barriers on financial services and autos, reducing import tariffs for a wide range of consumer goods and autos, loosening sectoral restrictions on foreign investment through a shortened negative list, and seeking faster progress toward joining the WTO Government Procurement Agreement. The direct macro impact of tariffs announced to date appears limited, but could be amplified significantly through financial and investment channels, and further rounds of retaliation, raising downside risks (paragraph 61 and Appendix II).

9. Financial sector de-risking accelerated.

- In line with the recommendations of the 2017 Financial Sector Assessment Program (FSAP, Appendix IV), regulators adopted a wide range of decisive measures to tackle the excessive expansion of the riskier parts of the financial system, such as interbank borrowing, wealth management products (WMPs) and banks' off-balance sheet activities. Key measures included setting limits on the growth of WMPs and banks' reliance on negotiable certificate of deposits (NCDs, a type of wholesale funding), more strict enforcement of the "look-through" principle (whereby the quality of the underlying assets is considered), and adjustments to loan provisioning requirements to encourage NPL recognition and disposal.

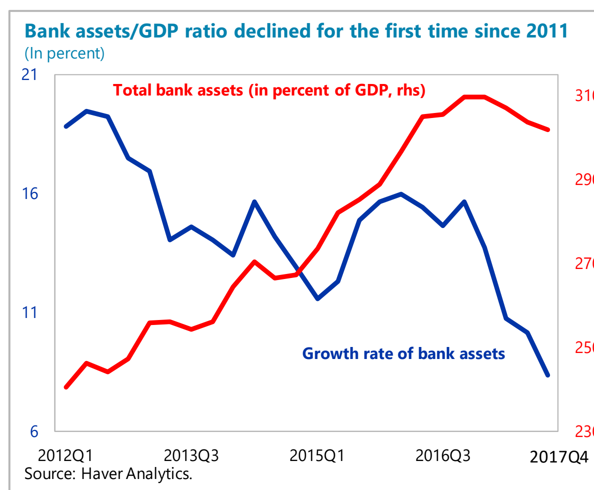
- These measures reduced not only the size of the shadow banking sector but also the interconnections between banks and nonbanks. Banking sector assets grew by 8 percent in 2017, half of the rate in 2016, and total bank assets fell as a ratio to GDP for the first time since 2011. Funding costs rose somewhat reflecting the more appropriate pricing of credit risks, while greater risk differentiation also led to an increased (but still relatively low) number of defaults in corporate bond markets. The PBC maintained sufficient liquidity in the wholesale market to prevent any systemic liquidity risks. Although there are signs of some lending activity migrating to sectors less affected by the regulatory tightening thus far (such as money market funds and trust loans), these sectors are expected to be affected too as the full impact of the reform is phased in.

Intra-financial credit slowed significantly
(In percent, year-on-year)



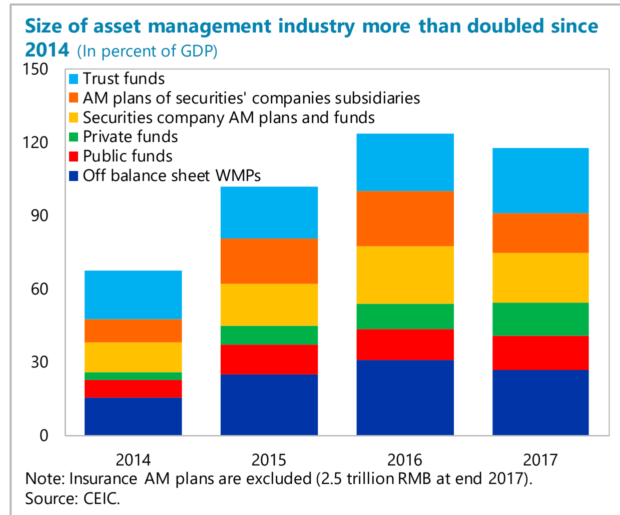
Source: CEIC and Haver Analytics.

Bank assets/GDP ratio declined for the first time since 2011
(In percent)



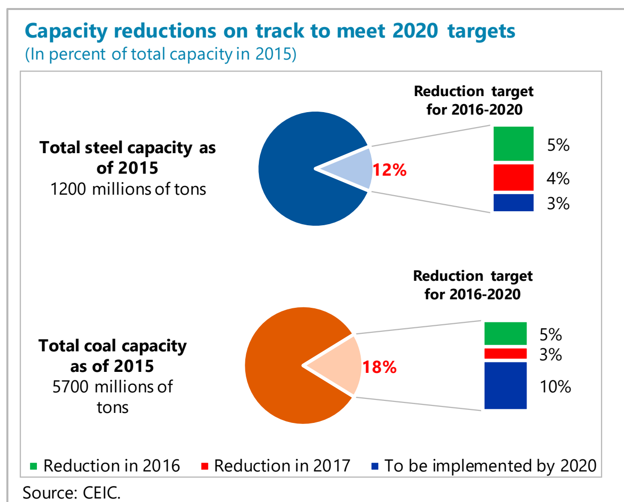
Source: Haver Analytics.

10. The authorities recently announced important guidelines for the large (120 percent of GDP) asset management business. The sector has grown rapidly in recent years in response to liberalization of financial markets and China's high savings rate, but the rapid expansion also reflects regulatory gaps that encouraged rampant arbitrage. In particular, banks relied on "channel" business to substitute bank lending with credit provision through off-balance sheet vehicles. Multiple layers of intermediation and products with complex and opaque structures were used to channel funds from investors to ultimate borrowers, causing significant maturity and liquidity mismatches. The new guidelines aim to harmonize regulations on all asset management products, irrespective of who issues them, by setting basic principles on product classification, investor suitability, conduct of business rules by managers/distributors, risk management, disclosure, valuation and reporting.

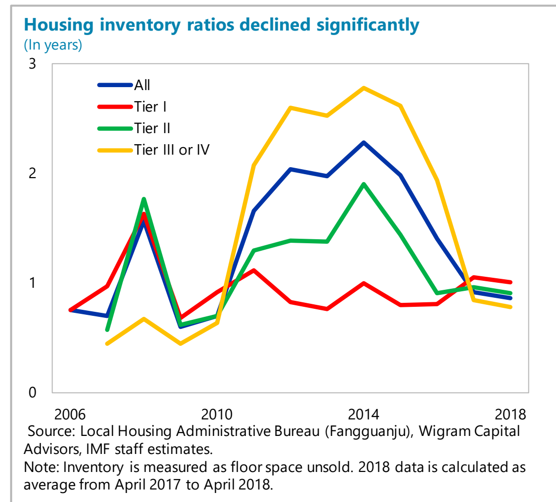


Note: Insurance AM plans are excluded (2.5 trillion RMB at end 2017).
Source: CEIC.

11. Reforms also progressed in other key areas. Steel and coal capacity reduction continued, on track to meet the 2020 targets. Housing inventories in smaller cities declined considerably, due in part to social housing programs. House price growth moderated following the tightening measures since late 2016. Production of heavily-polluting industries was restricted during the winter to meet air pollution targets. Plans were published for the central government to take on some local government social spending responsibilities. The government articulated plans to strengthen protection of intellectual property rights for both foreign and domestic companies.



Source: CEIC.

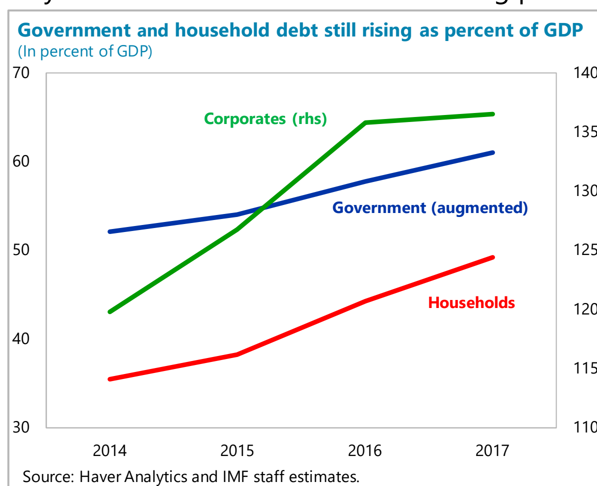


Source: Local Housing Administrative Bureau (Fangguanju), Wigram Capital Advisors, IMF staff estimates.
Note: Inventory is measured as floor space unsold. 2018 data is calculated as average from April 2017 to April 2018.

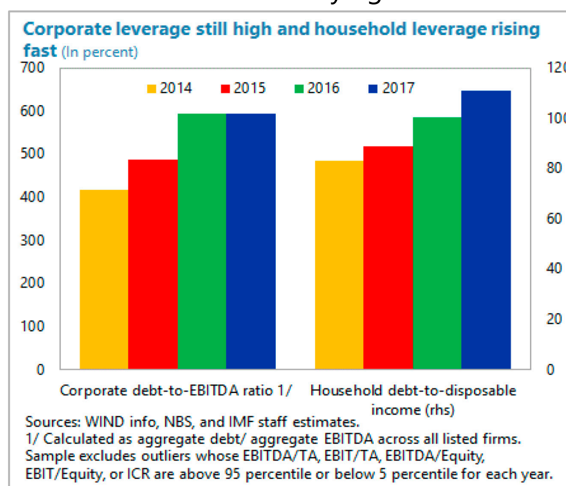
12. Restrictions on non-compliant local government borrowing were further tightened. In a series of documents, the government reinforced the ban on local government off-budget

borrowing through local government financing vehicles (LGFVs), public-private partnerships (PPPs), and government guided funds (GGFs). They also stressed that government officials are accountable for non-compliant borrowing over their lifetimes. At the same time, the authorities raised limits on local government general and special purpose bonds, the formal channel for local government borrowing.

13. Nonfinancial sector debt growth slowed, but continued to increase as a share of GDP. Despite the sharp rebound in nominal GDP and industrial profits, total nonfinancial sector debt still rose significantly faster than nominal GDP growth in 2017. While the corporate debt to GDP ratio has stabilized, government and, especially, household debt is rising, driven by continued strong off-budget investment spending and a rapid increase in mortgage and consumer loans. And despite the stabilization of total corporate debt as a share of GDP and the still-strong aggregate balance sheet of the household sector, the average debt servicing capacity of listed companies did not improve and that of the household sector deteriorated further. This illustrates the magnitude of reform challenge, and that it may take determined actions over a long period of time to address the underlying vulnerabilities.

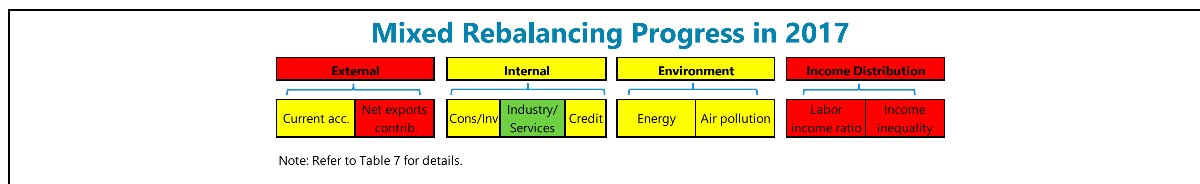


Source: Haver Analytics and IMF staff estimates.



Sources: WIND info, NBS, and IMF staff estimates.
1/ Calculated as aggregate debt/ aggregate EBITDA across all listed firms. Sample excludes outliers whose EBITDA/TA, EBIT/TA, EBITDA/Equity, EBIT/Equity, or ICR are above 95 percentile or below 5 percentile for each year.

14. Rebalancing continued in 2017, but slowed in several dimensions. Growth became less dependent on credit, investment growth moderated, the current account surplus continued to decline, and the environmental clean-up campaign led to some improvement in air quality and energy efficiency. But many of the drivers behind the growth acceleration in 2017—external demand, domestic policy support and the PPI reflation—slowed rebalancing. Credit intensity improved in 2017, but this could be partly temporary due to the cyclical PPI rebound, and the stock of credit is still high and rising (Box 1). The contribution of consumption to GDP declined for the first time since 2013, and services' share of GDP grew at a slower rate. Income inequality, one of the highest in the world, stopped falling.

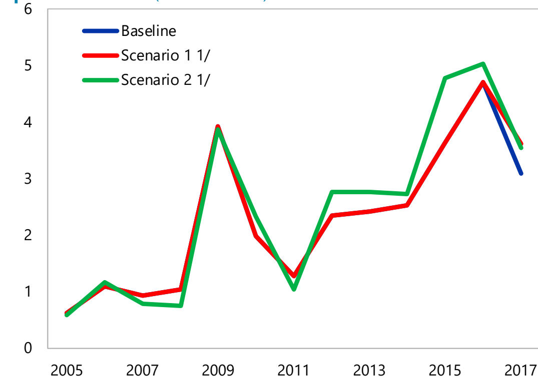


Note: Refer to Table 7 for details.

Box 1. Credit Efficiency: Recent Development and Outlook

In 2017, credit growth—measured as Total Social Financing (TSF) adjusted for local government bond swaps—slowed to 13 percent, down 3.1 percentage points from 2016. Contrary to staff expectations, credit tightening did not translate into slower GDP growth in 2017. Consequently, credit intensity—measured as the amount of credit needed to generate 1 trillion of nominal GDP— improved. Several factors may explain the improvement in credit intensity in 2017.

Credit intensity improved in 2017 but continues to exceed pre-crisis levels (In RMB trillions)



1/ Scenarios defined in text below.
Note: Credit intensity defined as credit to economy divided by nominal GDP.
Source: CEIC and IMF staff estimates.

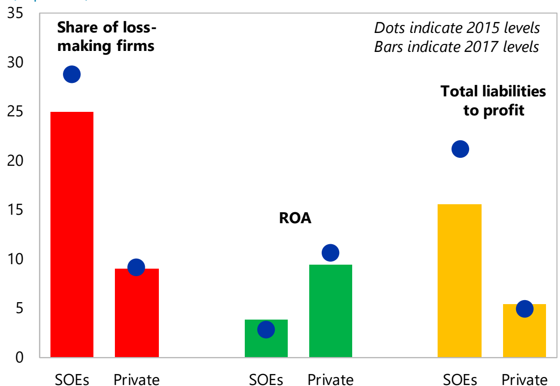
First, a strong pickup in nominal investment and producer price index (PPI) that helped boost nominal GDP seems to be the main factor behind the credit intensity improvement. After prolonged deflation, producer prices rebounded since mid-2016, growing 6.3 percent in 2017. The increase was potentially caused by: higher foreign demand, the government's stimulus package supporting infrastructure investment and the real estate market, and—to a limited extent—capacity cuts in coal and steel sectors (APD REO 2018). Higher PPI raised the value of nominal investment and nominal GDP, leading to an improvement in credit intensity. To assess that impact, we analyze two scenarios:

- **Scenario 1.** Remove the one-off surge in PPI from the 2017 investment deflator, substituting it with an average post-Global Financial Crisis investment deflator of 1.6 percent. That substitution lowers the 2017 nominal GDP growth by 1.4 percentage points. Credit efficiency still improves, but to a smaller extent than under the baseline scenario.
- **Scenario 2.** Calculate real credit intensity (i.e., the amount of real credit needed to produce one trillion of real GDP). Credit is deflated using the investment deflator, an appropriate measure given that the majority of credit was used to finance investment, including household credit, which financed housing rather than consumer spending. The results indicate that credit intensity deteriorated even more between 2011 and 2016 than suggested by the nominal measure. The intensity improved in 2017, but remains high compared to the post-Global Financial Crisis levels.

Second, improvement in credit allocation among the SOEs. While SOEs remain significantly less profitable than private firms and carry more debt, since 2015 the share of loss-making SOEs declined from 28 percent to 24 percent, the ratio of their liabilities to profits has improved, and so did their ROA.

Third, the shift towards the "new economy". Growth has been rebalancing towards service sectors that are less credit intensive (Chen and Kang, 2018). Credit intensity has additionally improved in the "new economy" sectors such as IT and health and pharma.

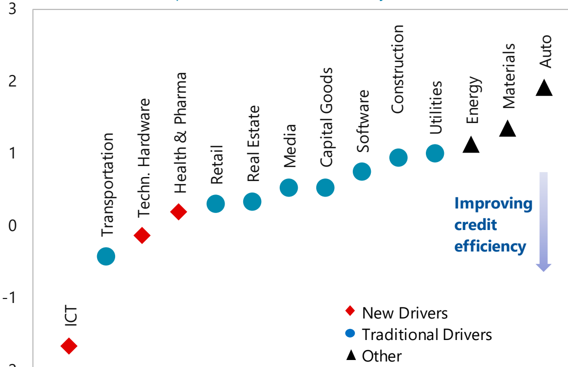
SOEs are performing better, but not as well as private firms (In percent)



Source: IMF staff estimates.

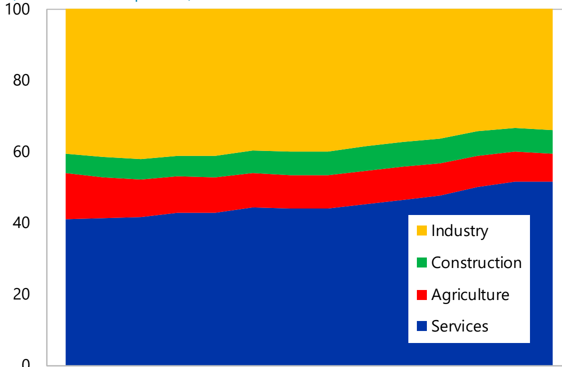
Box 1. Credit Efficiency: Recent Development and Outlook (Concluded)

Credit efficiency improved within new economy sectors
(Lower score means improvement in credit efficiency from 2007 to 2017)



Source: GFSR and Xie. P. (forthcoming).

The economy continues to shift towards services.
(Share in GDP, in percent)

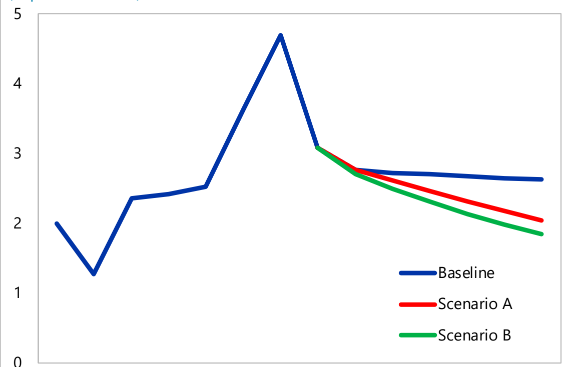


Source: CEIC and IMF staff estimates.

What does that mean for China's nonfinancial sector debt outlook in the medium-term?

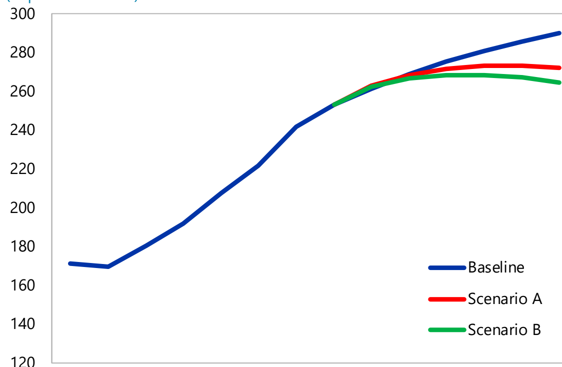
- While the rebalancing towards services is expected to continue, prospects for further improvements in credit efficiency at the firm level are uncertain. They will hinge on progress in SOE reforms and capacity cuts (both of which should result in an exit of the least efficient firms from the market), ensuring a level-playing field for private firms (both foreign and domestic), and allowing credit allocation to be more market-based.
- Under staff's baseline scenario, China's credit intensity is expected to improve from 3.1 (trillion of credit needed to generate 1 trillion of nominal GDP) in 2017 to 2.6 in 2023. That improvement, however, will not be enough to stabilize the credit-to-GDP ratio. To achieve stabilization, staff estimate that credit efficiency would need to improve by at least 5 percent per annum (Scenario A). Such a scenario would require progress on SOE reforms and market-based allocation of credit to most efficient firms. An even bigger improvement in credit efficiency of the worst-preforming industrial sector by 10 percent per annum could allow the debt ratio to stabilize around 2020 and fall thereafter, without jeopardizing growth (Scenario B).

Evolution of credit intensity under alternative scenarios
(In percent of GDP)



Source: CEIC and IMF staff estimates.

Evolution of nonfinancial sector debt under alternative scenarios
(In percent of GDP)



Source: CEIC and IMF staff estimates.

Authorities' Views

15. The authorities attributed the strong economic performance to strengthening fundamentals, supply-side structural reforms and recovering global trade. They noted that leverage had been brought under control, with growth of M2, bank loans and "TSF" (Total Social Financing—a measure of credit to the nonfinancial private sector) slowing significantly. A range of financial de-risking measures had been implemented to minimize regulatory gaps and contain systemic risks. These measures had effectively reduced the size and complexity of the shadow banking sector, and resulted in more appropriate pricing of credit risks. The recovery in industrial profitability reflected the authorities' "supply-side" structural reforms, in particular, overcapacity reduction and cuts in corporate taxes and fees.

16. The authorities noted that the exchange rate for RMB had been increasingly determined by market forces. They stated that the PBC had not intervened in the FX market for more than a year and that RMB exchange rate flexibility versus the US dollar had increased to that of other Asian emerging market economies. They noted that the RMB had strengthened significantly against the US dollar as well as the basket this year. They disagreed with staff's assessment of the current account norm, arguing that the norm should be positive given China's economic fundamentals (as reflected by the previous estimates of the norm). The authorities also indicated that as capital flows became more balanced, they had eased CFMs.

POLICIES: RESOLVING POLICY TENSIONS TO DELIVER HIGH-QUALITY GROWTH

17. The authorities' strategy to shift the policy focus more decisively from high-speed to high-quality growth is welcome. China has the potential to sustain safely strong growth over the long run by addressing the fundamental imbalances in the economy and making economic development more inclusive and greener. The government's reform agenda contains many of the policies to achieve these goals, especially the renewed commitment to financial regulatory reforms, market-based resource allocation, further opening-up and innovation, and strengthening pollution control.

18. Staff, however, see some tensions. In particular, between the government's stated development objectives and still-unsustainable debt growth, the pervasive role of the state in the economy, and the relatively restrictive trade and investment regime in some areas. If left unresolved, these tensions could threaten the authorities' objectives, and a reversion to credit-driven stimulus would further increase vulnerabilities that could eventually lead to an abrupt adjustment. To reduce these tensions and achieve the desired higher-quality growth, two policy imperatives stand out—strengthening underlying drivers for sustainable growth and staying the course of reforms even in the face of a growth slowdown. In particular, the authorities should build on the existing reform agenda and take advantage of the current growth momentum to "fix the roof while the sun is shining" by:

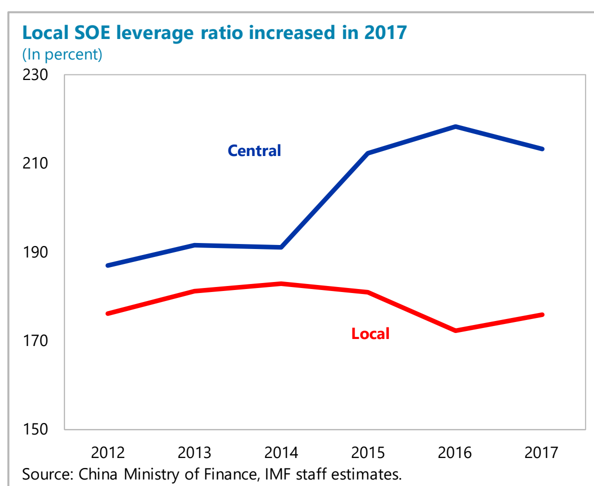
- Continuing to rein in credit growth
- Accelerating rebalancing efforts
- Increasing the role of market forces
- Fostering openness
- Modernizing policy frameworks

A. Continuing to Rein in Credit Growth

19. The authorities should stay the course on strengthening macro-financial settings and improving credit efficiency. Notwithstanding the improvement in credit efficiency in 2017, its current level implies that achieving the authorities' annual and medium-term growth objectives would still depend on further substantial, and unsustainable, increases in debt. This underscores the need to further rein in credit growth and to continue improving credit allocation to reduce the drag on growth from slowing credit expansion. In this context, it is also important to de-emphasize the quantitative annual growth targets given the inherent incentive to rely on pro-stimulus policies that are inconsistent with longer-term development and reform objectives. The indicators used to evaluate the performance of government officials should be revised to reflect the focus on the quality of growth, such as deleveraging, green development and reducing income inequality.

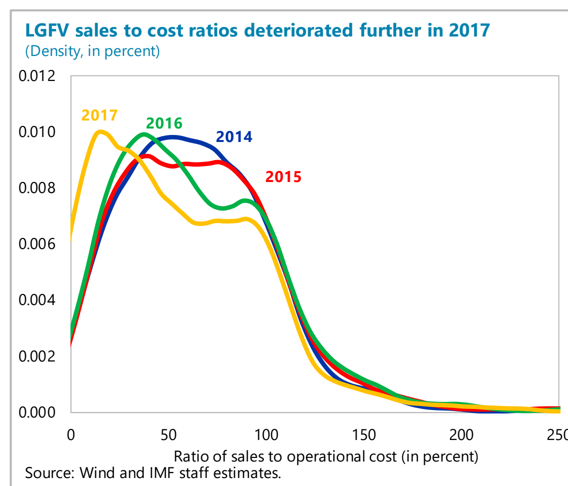
20. Both supply and demand side measures are needed to slow credit expansion and improve its efficiency. On the credit supply side, the authorities should stay the course on strengthening financial regulations. For example, as financial institutions are required to unwind non-compliant asset management products by end-2020, the reintermediation of credit from these products to regular bank loans (which typically require higher capital risk weightings and additional loan-loss provisioning), should gradually weigh on banks' capacity to extend credit and improve risk differentiation. To further improve the overall efficiency of credit allocation in the economy, harder budget constraints should be imposed on SOEs, especially local SOEs and LGFVs. Regulators should also consider tighter macroprudential settings to rein in the rapid increase in household debt, including more active use of debt service-to-income ratio caps, and widening them to include non-mortgage loans and borrowing via fintech channels.

Local SOE leverage ratio increased in 2017
(In percent)



Source: China Ministry of Finance, IMF staff estimates.

LGFV sales to cost ratios deteriorated further in 2017
(Density, in percent)



Source: Wind and IMF staff estimates.

21. Monitoring and formulating policy on deleveraging would be greatly helped by improving transparency on nonfinancial debt. An official series on debt by types of borrowers and creditors, channels of credit, and debt-servicing capacities would be useful in formulating more targeted deleveraging policies to avoid crowding out credit to the more productive parts of the economy. For example, private corporations may rely more on nonbank credit and could be more affected by the regulatory tightening. Care should also be taken to maintain the integrity of debt data as agents may seek to meet the government's deleveraging objectives in form rather than substance.

22. Fiscal policy should support deleveraging and ease the transition to a new growth model.

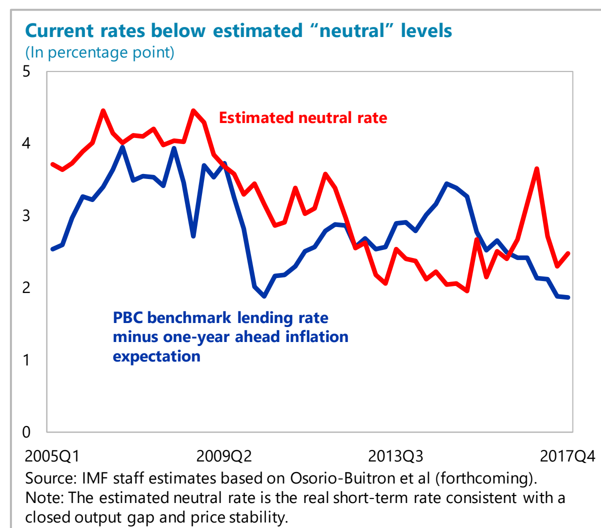
- Under the official, legal-based, definition of the government sector, the fiscal deficit stood at around 3 percent of GDP in 2017, and debt was relatively low (37 percent of GDP) and projected to increase only slightly. But under staff's, economic-based ("augmented") definition of the general government sector (including estimated off-budget investment spending), the deficit was around 11 percent of GDP in 2017, and debt was relatively high (68 percent of GDP) and projected to reach 92 percent by 2023.

- Given that China still has some fiscal space (high savings, favorable terms, rapid growth, strong public assets and positive net financial worth), deficit reduction can be gradual and vary with cyclical conditions. Staff recommend that the augmented deficit be consolidated on average by ½-1 percent of GDP a year to gradually bring the primary balance to the debt-stabilizing level. This consolidation should be via lower off-budget investment, while on-budget deficits should be redirected to support rebalancing.

- Resolving differences between official general government deficit and debt and staff estimates would boost transparency, policymaking and international comparability of fiscal data. Efforts to resolve these differences should be complemented by improved data on the government's balance sheet (including government assets), which staff estimate to remain relatively strong.

23. The PBC should expect to gradually tighten monetary policy. Despite some recent tightening, monetary policy remains accommodative. The PBC's 7-day repo rate has increased only slightly since mid-2017 and remains barely positive in real terms. CPI inflation is expected to pick up to around 2½ percent in 2018. The PBC should prepare to tighten gradually as inflationary pressures start to emerge, with the pace of tightening dependent on data as well as on the impact of other policy measures on inflation. Higher interest rates could also help reduce leverage and limit potential

Current rates below estimated "neutral" levels
(In percentage point)



Source: IMF staff estimates based on Osorio-Buitron et al (forthcoming).
Note: The estimated neutral rate is the real short-term rate consistent with a closed output gap and price stability.

pressure on the exchange rate, but these considerations are secondary as interest rates should not be the primary tool for tackling financial stability concerns or stabilizing the exchange rate.

Authorities' Views

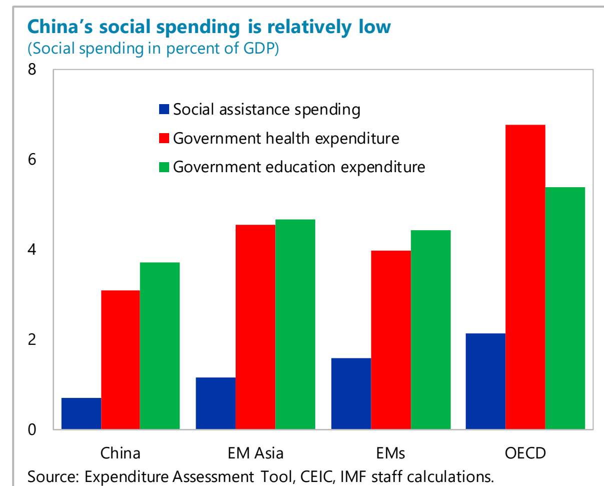
24. The authorities agreed with the need to de-emphasize growth targets. They viewed their growth targets as envisaged rather than binding, and agreed with the need to focus on the quality of development not the speed of growth. This focus would be reflected in public sector performance indicators. They also agreed with the need to stay the course on strengthening macro-financial settings, which was in line with their high priority on preventing major financial risks.

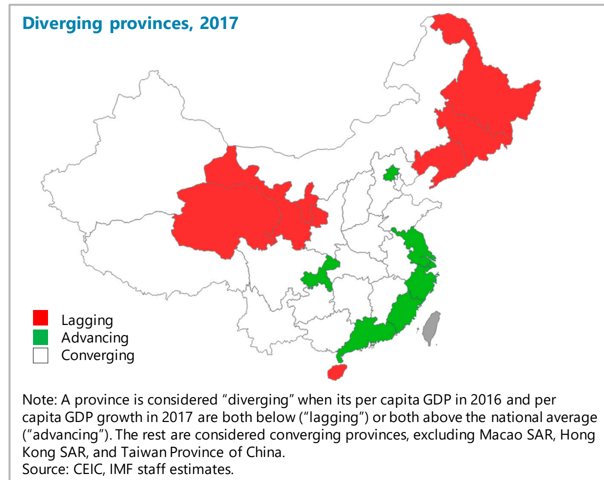
25. The authorities disagreed with staff's assessment that the monetary policy stance was accommodative. Rather, they saw the current policy stance as neutral given stable growth, inflation and unemployment, and slowing credit expansion. As financial regulatory measures would continue to be effective in reining in credit growth over time, additional monetary tightening was not warranted. The authorities also noted that increased funding costs for financial institutions reflected more appropriate pricing of credit risks, but it did not necessarily lead to higher interest rates for the real economy as the de-risking measures reduced the layers of financial intermediation and the associated cost. They also explained that differentiated policies, such as the targeted reserve requirement ratio (RRR) cuts for inclusive finance last September, aimed to strengthen support for the real economy (e.g. micro and small enterprises and the agricultural sector).

26. While agreeing with the need to continue reining in local government off-budget (noncompliant) spending, the authorities disagreed with staff's assessment of the fiscal position. They expected the fiscal deficit to fall slightly to 2.6 percent of GDP in 2018, despite cuts in taxes and fees for firms, as a result of continued strong economic growth coupled with greater expenditure control and efficiency. They continued to disagree with staff's definition of the general government perimeter, noting that under the 2014 Budget Law, local governments did not bear any responsibility for the financial obligations of LGFVs, government-guided funds, or special construction funds. They also noted that local governments' spending was bound by their revenue envelope and bond allocations while off budget investment was no longer allowed since 2011. They also pointed out that any illegally incurred debt would be borne by the firm and its investors, rather than the government. That said, they did see the need to continue strictly enforcing compliance with the law and preventing off-budget spending by local governments.

B. Accelerating Rebalancing Efforts

27. Slower rebalancing in 2017 underscores the need to accelerate structural reforms. While normalizing PPI inflation and external demand should support resumed rebalancing towards services and consumption, more decisive reforms would improve the quality of growth and prevent the external imbalance growing as investment slows.



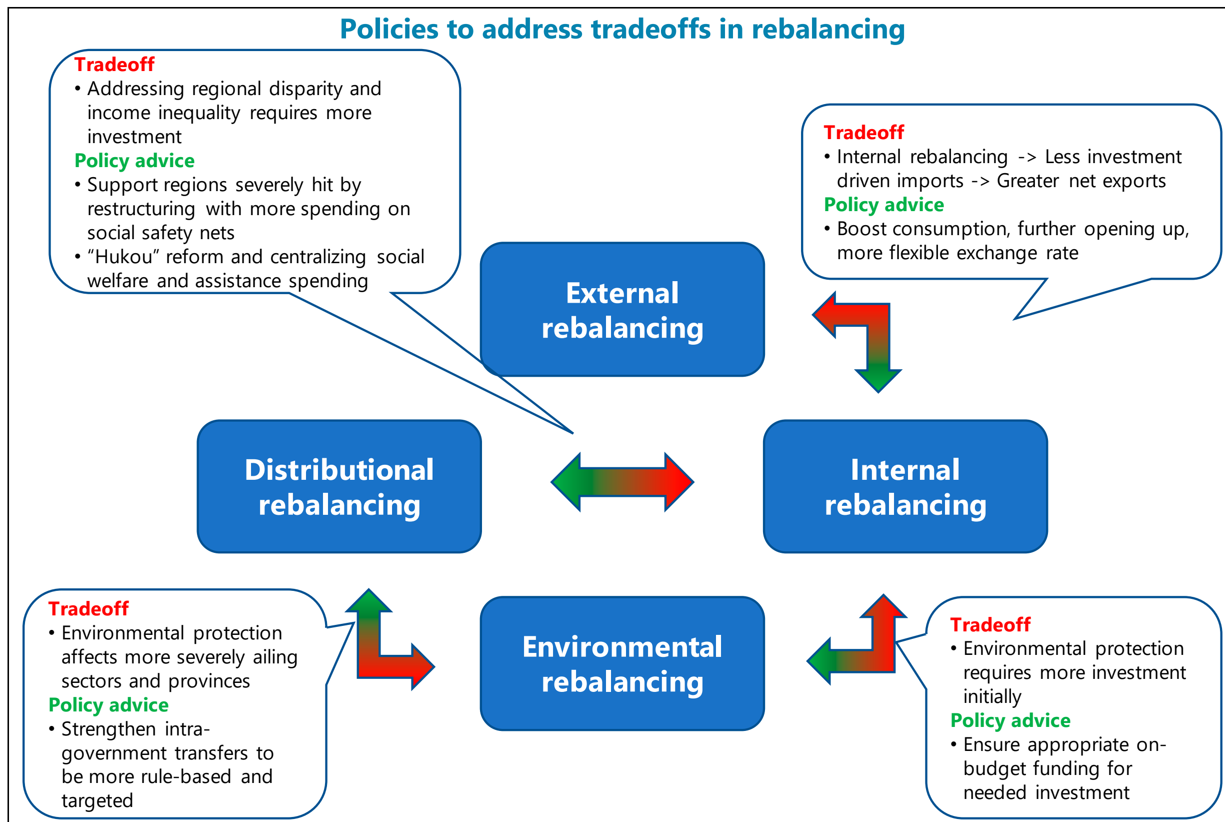


- Deepening fiscal structural reforms (e.g. making personal income tax (PIT) more progressive, increasing spending on health, education and social transfers, and reforming intergovernmental relations to increase the resources available to local governments) to further boost consumption and reduce income inequality. In particular, the PIT should be reformed by widening the tax base, reducing the personal basic exemption, and removing imputed minimum earnings for social contributions to lower the effective tax rates for the working poor. Recent proposals by the authorities, however, raise the basic exemption and narrow the base by allowing mortgage interest deduction.

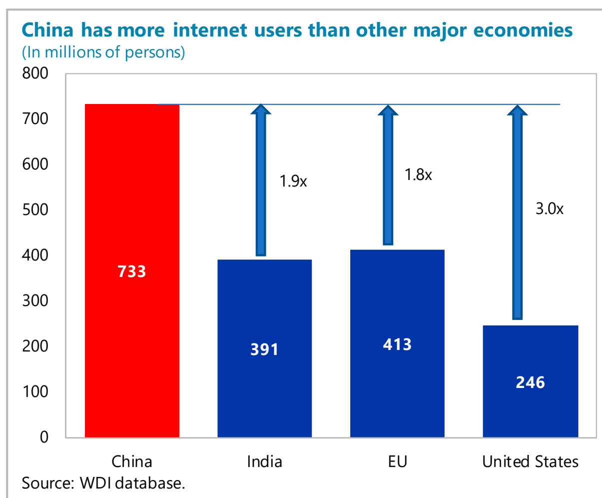
- Addressing the urban-rural and spatial income inequality by removing barriers to labor mobility and strengthening equalizing fiscal transfers across regions.

- Imposing a substantial carbon or coal tax to tackle air pollution and climate change. Although China launched a nationwide carbon emissions trading system in 2017 for large industrial users, combining it with a carbon or coal tax would substantially increase the environmental and revenue impact, for example, by including small-scale users.

28. Rebalancing efforts in general reinforce each other but there are also tensions across rebalancing dimensions that could usefully be addressed. For example, the government should increase targeted inter-government transfers to provinces most negatively affected by rebalancing policies such as overcapacity reduction and pollution control, and increase spending on social safety nets. A broader and more holistic approach to rebalancing and structural reforms would help address such tensions as well as the tradeoff between rebalancing and growth.



29. **Digitalization has the potential to become a long-run growth engine, but emerging risks need to be addressed.** The massive scale of the Chinese market and a supportive regulatory and supervisory environment in the early years of digitalization made China a global leader in frontier industries such as e-commerce and fintech. Leveraging existing social-media platforms, China's fintech services have developed to include services such as third-party payments by non-bank digital providers, internet-based banking and insurance, digital wealth management and credit-ratings, which lowered the costs and broadened the reach of financial services. Notably, large, dominant fintech players in China have branched beyond their traditional niche to other areas of the finance supply chain, building an integrated ecosystem of financial services that link customers with businesses, but also posing regulatory/supervisory challenges. To maximize the long-run benefit of digitalization, the government will need to strike a balance between allowing innovation to develop and flourish, and playing an active role in addressing emerging risks such as privacy infringement and cyber-crimes, promoting competition (including with foreign firms), strengthening protection of



Source: WDI database.

intellectual property rights and anti-money laundering, and improving labor training to mitigate potential labor disruption.

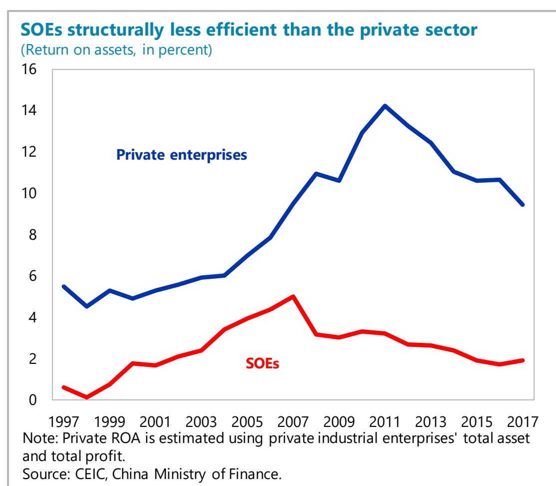
Authorities' Views

30. The authorities saw continued progress on rebalancing. The improvement in credit efficiency would be sustained, given continued financial de-risking and supply-side structural reform. Both the service sector and consumption contributed more than half of economic growth in 2017, household disposable income per capita accelerated, and the urban/rural income gap continued to narrow. The authorities would carry out more proactive policies to support consumption, employment and income growth, including accelerating personal income tax reform and improving the social security system. Recent reform initiatives on personal income tax, including higher income thresholds for PIT and tax deductions of household mortgage interest, had been submitted to the National People's Congress. The authorities highlighted the plan to establish a comprehensive, equitable and unified pension system covering both urban and rural residents. They also believed that a carbon market was a good option in controlling greenhouse gas emissions, given China's current development stage, and noted that the national carbon emissions trading system launched in 2017.

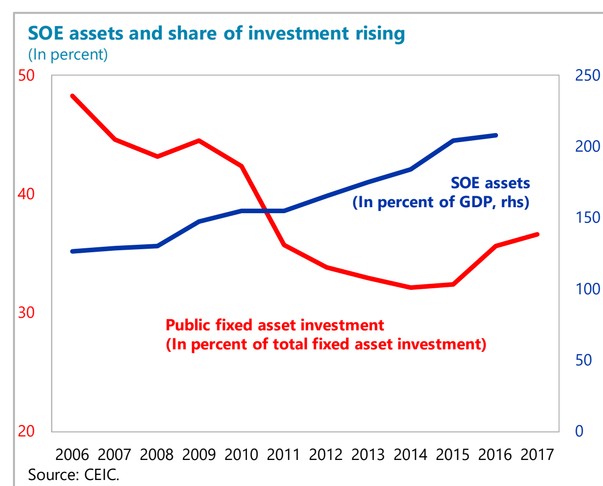
31. The authorities viewed digitalization as an opportunity to modernize China's economic system. Digitalization had permeated every part of the economy and become a hallmark of China's new innovation-driven development. To further support this development, policies would focus on expanding and deepening convergence of e-commerce and other areas of the economy, promoting online and offline synergies, developing smart cities, and consolidating resources for electronic government services.

C. Increasing the Role of Market Forces

32. Continued widespread, and from some perspectives increasing, state intervention threatens the goal of high-quality growth. Both direct intervention, via SOEs and government-backed investment funds, and indirect via administrative measures and moral suasion, can crowd



Note: Private ROA is estimated using private industrial enterprises' total asset and total profit.
Source: CEIC, China Ministry of Finance.



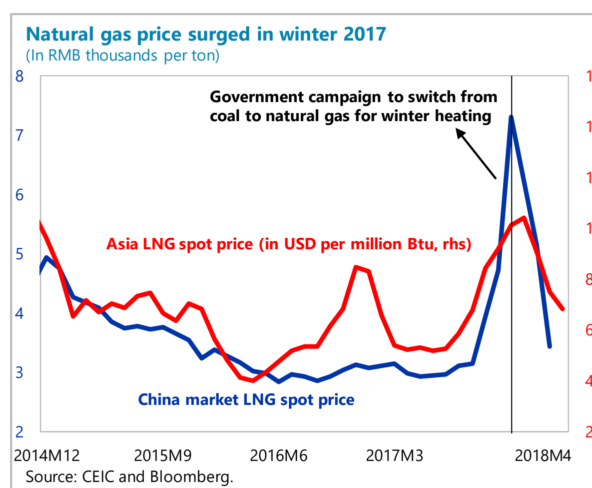
Source: CEIC.

out private investment, reduce allocative efficiency, reinforce the perception of implicit guarantees, and increase long-run policy uncertainty.

- SOE reforms have lagged. While the announced shift from managing SOE operations to managing state capital is welcome, recent measures seem more focused on supporting weak SOEs through debt restructuring, "mixed-ownership" reform (including some partial private sector ownership), and merging with stronger SOEs, rather than on operational restructuring. Despite the structurally weaker efficiency compared to private firms, SOEs' assets and share of investment have increased.

- Despite some measures to open healthcare and education to private investment and pilot land reforms to grant more property rights to rural residents, major distortions remain, especially in the services sector and in the markets for land, labor and capital.

- Structural reforms have often relied more on administrative rather than market-based mechanisms. For example, capacity reduction may have disproportionately affected private firms in some sectors, and the campaign to reduce air pollution caused by coal consumption led to a surge in natural gas prices internationally in the winter of 2017. And while the shantytown renovation program was effective in improving living conditions for low-income households, it may have restrained the needed market adjustments to absorb the excessive housing inventories.



33. Boosting the role of market forces requires:

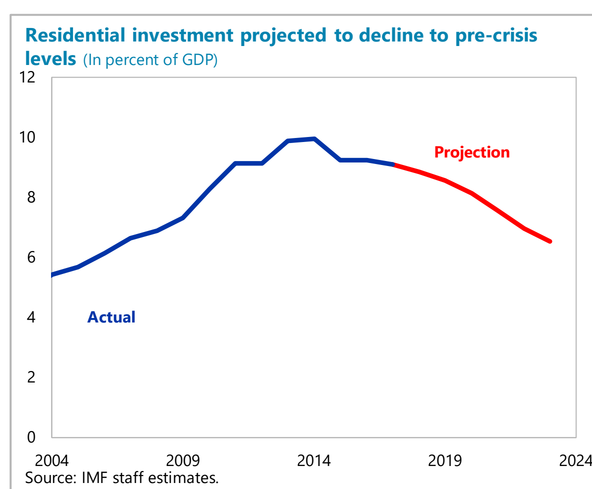
- **More decisive SOE reform.** The focus on managing state capital should be accompanied by measures to keep state shareholders at arm's length from SOE management, increase dividend payments to the budget, and complete the transfer of SOE social responsibilities to the government. Addressing the SOE debt overhang requires more decisive efforts to recognize underlying bad assets and force more "zombie" firms to exit, with the "flow" of SOE debt controlled by hardening budget constraints and phasing out preferential access to credit and implicit subsidies. Defaults of over-exposed SOEs should be allowed if market forces warrant. Reform of local SOEs could also be boosted by centralized data and monitoring.

- **Accelerating market liberalization.** The dominance of the public sector in some "strategically key industries" should be balanced by further market liberalization, particularly in services, and ensuring competition policy is applied equally to state- and privately-owned firms. As reinforced by staff's visit to the dynamic and prosperous city of Shenzhen, it is private, not public, firms that

have driven China's global leadership in frontier industries such as e-commerce, fintech and hi-tech consumer goods. Labor market flexibility should be improved by further intensifying "hukou" (household residency registration system) reform and enhancing access to social services. Advancing land use rights reform would help address the urban-rural development gap and the land demand-supply imbalance in the housing market.

- **More market-based overcapacity reduction.** Reduction in steel and coal capacities has made progress, with significantly higher utilization and profitability, and positive global externalities. However, progress has relied on administrative measures and a more lasting solution would be to rely more on requiring loss-making firms to exit. Care should be taken to ensure that private and smaller firms are not unduly penalized. Greater transparency on data and policies would also help analysis and global understanding and co-operation (e.g. how overcapacity is defined, and targets set and allocated to individual firms). A more market-based approach to developing new industries would also help prevent the creation of new overcapacity in those industries.

- **A more sustainable housing market.** The government's "long-term mechanism for housing" appropriately focuses on addressing fundamental supply-demand imbalances. Ensuring long-run sustainability of the housing market requires increasing land supply for residential housing, promoting rental markets, and reducing the reliance of local governments on land sales. De-emphasizing growth targets would allow housing investment to be driven by long-run fundamentals, rather than the need to manage economic cycles. Staff's projection indicates that residential investment, a key growth engine over the last decade, will decline as a share of GDP over the medium term as household income and consumption growth moderates.



Authorities' Views

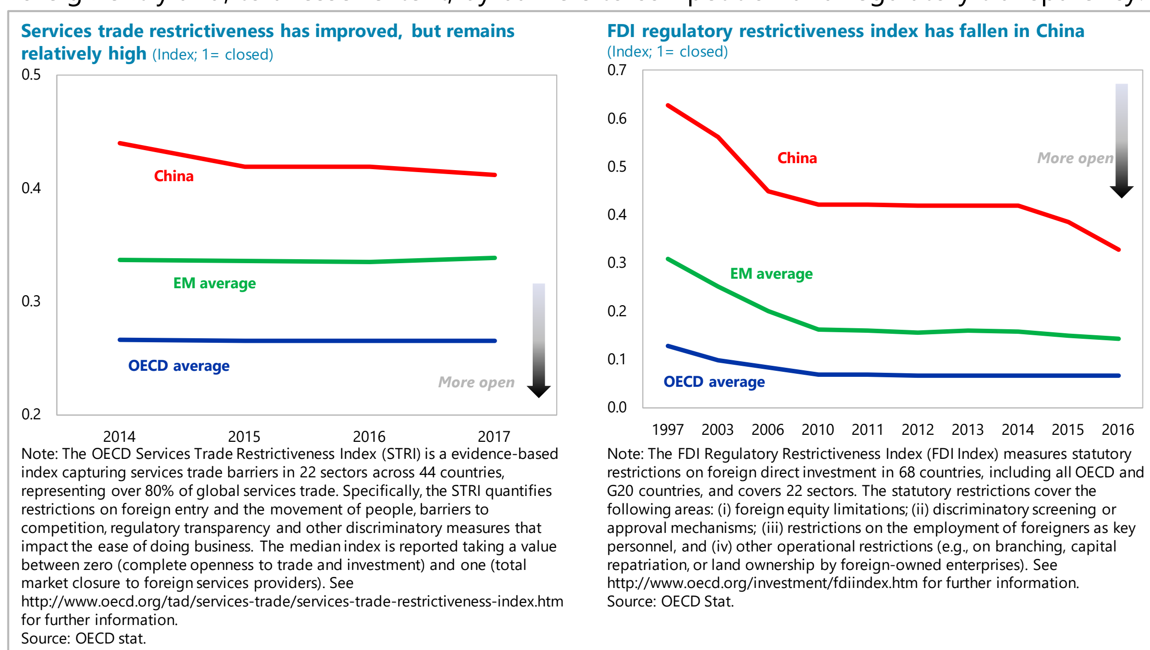
34. The authorities underscored their commitment to allowing market forces to play a decisive role in resource allocation, and saw more progress than staff. On SOE reforms, they pointed out that corporatization of SOEs had been basically completed. Profitability of SOEs had improved significantly and the number of zombie firm bankruptcies had also increased. The authorities noted that all central SOE zombie firms would exit by the end of 2018, central SOEs' social functions would be phased out by 2020, and overcapacity reduction was proceeding ahead of schedule. They pointed out that the Anti-Unfair Competition Law and the Anti-Monopoly Law applied equally to SOEs and POEs, and to Chinese and foreign companies. The Anti-Unfair Competition Law was recently revised to strengthen the protection of intellectual property, especially trade secrets.

35. The authorities stressed that their plan to develop strategic sectors would be market-based. They explained that the government's plan to strengthen support for industrial manufacturing resembled those undertaken by governments in advanced economies. The authorities clarified that the government did not set mandatory targets for domestic content. Rather, the goal for self-sufficiency on key basic components and materials was mainly to address potential supply chain disruptions due to some advanced economies' embargos and restrictions on certain exports to China. They emphasized that domestic and foreign companies would be treated equally in China's effort to update its industrial sector, noting that industrial policies needed to be market-oriented.

D. Fostering Openness

36. While China has made progress in improving its trade and foreign investment regime, and this progress has accelerated recently, it still appears relatively less open than other G20 EM countries on service sector trade and investment.[1]

- **Trade in services.** Service Trade Restrictiveness Indexes constructed by World Bank staff and by the OECD suggest that China's restrictions on trade services are relatively high. For instance, the OECD index— which is more up to date—indicates that restrictions are higher for digital networks and transport and distribution supply chains, and mainly driven by restrictions on foreign entry and, to a lesser extent, by barriers to competition and regulatory transparency.



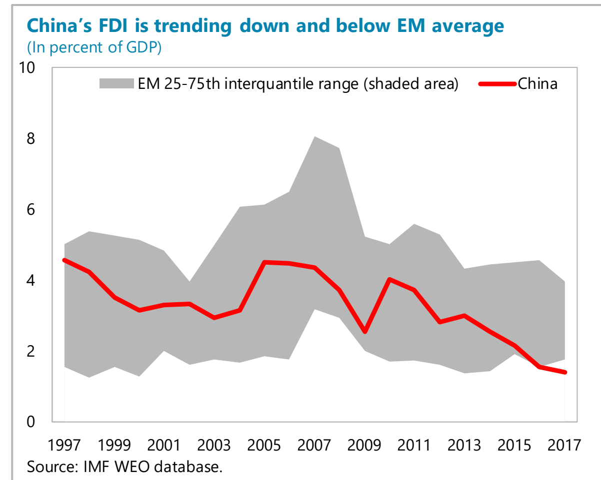
Note: The OECD Services Trade Restrictiveness Index (STRI) is a evidence-based index capturing services trade barriers in 22 sectors across 44 countries, representing over 80% of global services trade. Specifically, the STRI quantifies restrictions on foreign entry and the movement of people, barriers to competition, regulatory transparency and other discriminatory measures that impact the ease of doing business. The median index is reported taking a value between zero (complete openness to trade and investment) and one (total market closure to foreign services providers). See http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm for further information.
Source: OECD stat.

Note: The FDI Regulatory Restrictiveness Index (FDI Index) measures statutory restrictions on foreign direct investment in 68 countries, including all OECD and G20 countries, and covers 22 sectors. The statutory restrictions cover the following areas: (i) foreign equity limitations; (ii) discriminatory screening or approval mechanisms; (iii) restrictions on the employment of foreigners as key personnel, and (iv) other operational restrictions (e.g., on branching, capital repatriation, or land ownership by foreign-owned enterprises). See http://www.oecd.org/investment/fdiindex.htm for further information.
Source: OECD Stat.

[1] Based on findings of Cerdeiro and Nam (2018), A Multidimensional Approach to Trade Policy Indicators (IMF Working Paper 18/32). This is a factual analysis of openness and not an assessment of China's compliance under WTO rules or vis-à-vis any other forum or agreement.

- **Foreign direct investment (FDI).** Despite some improvement in recent years, China's FDI restrictions are higher than in other G20 EM countries according to the OECD FDI Regulatory Restrictiveness Index. The restrictions mainly affect the services sector (Figure 9). China's FDI as a share of GDP has also fallen in recent years. Recent announcements to lower entry barriers for foreign investment in the financial and automotive sectors and loosen the "negative list" of sectors that are off-limits to foreign investors are welcome, but more is needed.

China's FDI is trending down and below EM average
(In percent of GDP)



Source: IMF WEO database.

37. China, as one of the main beneficiaries of the global trading system, has a strategic interest in playing a leading role in defending it. Doing so also means accelerating China's opening-up, maintaining progress in reducing the current account surplus, and continuing to seek to resolve trade disputes through established mechanisms (e.g. World Trade Organization dispute settlement) or negotiation.

- **Accelerating opening-up.** Faster opening-up would support China's own high-quality growth agenda by increasing productivity via greater competition and foreign technology. This requires decisively addressing the distortions that still beset China's economy and affect trade and cross-border flows, and promptly implementing, and going beyond, announced opening-up measures. The focus should be on a level playing field for domestic and foreign companies, including by reducing entry barriers, greater protection of intellectual property, and equal access to resources and treatment in regulations, government procurement and administrative approvals.

- **Further reducing the external imbalance.** While the RMB in 2017 was broadly in line with economic fundamentals and desirable policies, the current account surplus was moderately stronger. This reflects structural distortions and policies that cause excessive savings, such as low social spending. Addressing these distortions and the resulting external imbalance would benefit both China and the global economy.

- **Mitigating trade tensions**. All parties should seek a resolution that supports and strengthens the international trading system and the global economy. In this regard, avoiding exceptional measures and ensuring trade actions are well-grounded in WTO rules would help reduce the risk of escalation and undermining established dispute settlement mechanisms.

Authorities' Views

38. The authorities reiterated China's commitment to free trade and multilateralism, despite the trade tensions with the U.S. They indicated that it was in China's own interests to

further open the economy and increase imports, and they saw the U.S. trade actions against China a violation of the basic principles and spirit of the World Trade Organization (WTO). They added that unilateral trade moves would also impede the efficient operation of global value chains and result in welfare losses for all countries and consumers involved.

39. The authorities underscored China's substantial and continuous opening-up, and disagreed that their trade and investment regime was relatively restrictive.

- As a major contributor to global trade, China accounted for 24 percent of global goods imports growth and 20 percent of global services import growth over the last ten years.
- China's overall tariff level had declined from 15.3 percent before joining the WTO to currently 9.8 percent, far lower than that of many developing countries.
- Trade facilitation had improved strongly, for example, with a "one-stop shop" for customs clearance and active implementation of the recent WTO Trade Facilitation Agreement.
- Out of 160 sub-sectors of 12 broad sectors of the WTO General Agreement on Trade in Services, China has committed to opening 100 sub-sectors of 9 broad sectors, close to the advanced country average of 108 sub-sectors.
- Recent measures included lowering many entry barriers for foreign investment, for example, in financial services, significant tariff reductions on autos and many consumer items, and pilot projects to develop services trade. Protection of intellectual property rights of foreign firms had been strengthened recently, for example, with concerted strikes against violators in Q4 2017. China's commitment to further opening-up had recently been reaffirmed by President Xi in April.

40. The authorities did not support staff's use of trade and investment restrictiveness indicators from the OECD. As China is not an OECD member, the authorities were not in a position to assess the methodology and source of such indicators, which they did not think reflected China's recent opening-up efforts. They were also of the view that countries had different characteristics in their opening-up, which simple indicators would not fully represent. The authorities noted that these indicators were only in an IMF Working Paper which had not been formally discussed by or broadly consulted with the Executive Board of the IMF, and argued against using such indicators for surveillance.

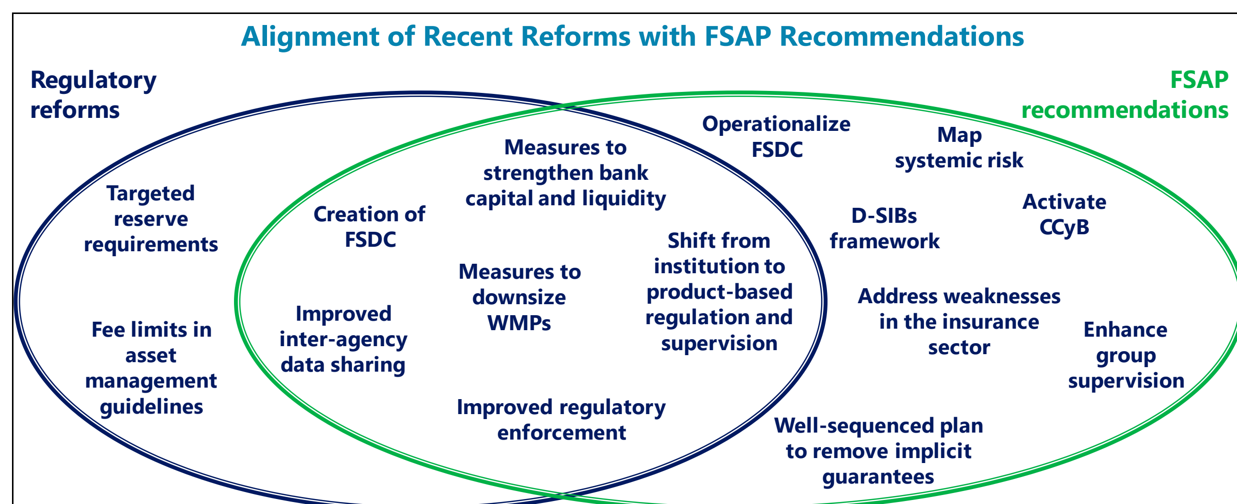
E. Modernizing Policy Frameworks

41. Implementing the high-quality growth agenda requires modernizing policy frameworks. While there has been some progress, for example by abolishing quantitative monetary targets, merging the local and central tax administrations, and instituting a high-level financial oversight committee, there is still much reliance on administrative measures. Policies would benefit from more holistic, market-based and transparent policy frameworks.

A More Holistic Approach to Financial Regulation

42. The newly established FSDC should develop an ambitious agenda aimed at strengthening regulatory and macroprudential policy framework. The key priority is to foster and coordinate inter-agency efforts to assess the evolution of systemic risks. This requires the development of frameworks to identify and measure underlying mechanisms of risk transmission within the financial sector and between the financial sector and the real economy. While the recent reorganization of regulatory agencies can enhance supervisory effectiveness, care should be taken to ensure continued rigorous supervision, and the PBC will need to build its capacity to formulate regulations. Implementing the new regulations over asset management products will need to be closely coordinated across regulators to ensure that no gaps emerge. Banking system capital should be enhanced—in particular, there should be no further delay in identifying domestic systemically important banks and imposing an additional capital requirement.

43. A roadmap clearly laying out the sequence of reforms (in line with the FSAP recommendations) could help guide market expectations and an orderly repricing of risks. In particular, the authorities should design and implement a well-sequenced action plan to remove implicit guarantees, without which financial risks will eventually re-emerge. Also important is a transparent macroprudential framework to clearly define the design and activation of individual policy instruments depending on the type of systemic risks that needs to be brought under control.



44. Fintech is developing rapidly and challenging financial regulators globally, with China at the forefront in many dimensions. The authorities have taken a range of actions to establish a comprehensive regulatory framework, including setting up a fintech committee to coordinate among regulators and industry, adopting a "substance over form" approach to close regulatory gaps, a centralized clearing house for third-party payments, and banning initial coin offerings. Given the transformative nature of fintech, regulators will need to stay nimble to head off emerging risks, for example, by strengthening data gathering/analysis and "know-your-customer" requirements for third-party payments.

Authorities' Views

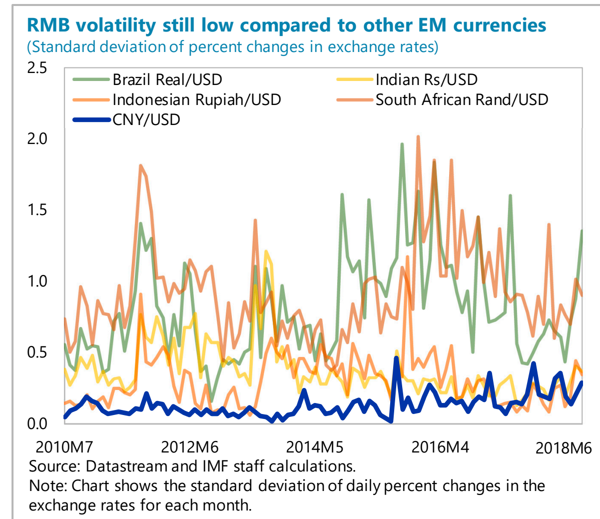
45. The authorities agreed with staff on the importance of staying the course on regulatory efforts. They were confident that the new institutional framework would ensure smooth coordination among the regulators. The guidelines to regulate the asset management businesses of financial institutions and the rules on liquidity risk management of commercial banks had been announced; phase-in periods were already locked-in and granted financial institutions the necessary time to adapt their business models to the new rules. In particular, banks would need to increase capital and change their funding modalities as they brought nonstandard credit assets previously channeled through asset management products back into their own balance sheets.

46. On fintech, the authorities saw the need to balance between regulation to prevent risk and promotion of innovation, but that currently their focus was on the former. Recognizing that China's uniquely dominant hybrid technology/financial companies could have large spillovers to the financial system and the real economy, the authorities had embarked on a set of regulatory initiatives to streamline data collection and strengthen regulatory oversight. The regulatory framework was guided by the need for a level playing field for all payment service providers, the recognition of substance over form to ensure financial service provision fell under regulatory purview, and the desire that these services supported financial inclusion and did not jeopardize financial stability. Also, large fintech companies that posed systemic risks (e.g. to the payments system) would be treated as Systemically Important Financial Institutions (SIFIs).

A More Market-Based Monetary and Exchange Rate Policy Framework

47. China's transition to a more market-based economy requires continued progress in modernizing the monetary policy framework. Recent progress, including dropping the quantitative M2 and TSF targets and further liberalization of bank deposit rates, should be built upon by giving the PBC operational independence and accountability around a clear inflation objective and an explicit policy rate and corridor, and dropping benchmark rates and window guidance. The framework would be strengthened by simplifying liquidity management so that policy actions are focused on the key policy rate—the seven-day interbank reverse repo rate—and policy rates for different tenors of open market operations and liquidity facilities are allowed to adjust automatically. The PBC's intention, summarized in its recent public statement, to further increase its information disclosure and make its policymaking process more transparent is welcome—actions should include holding regular press conferences, publishing macroeconomic forecasts, and making available more information in English.

48. Two-way exchange rate flexibility should continue to increase and be supported by more concrete steps to deepen the foreign exchange market.



- The central-parity mechanism for the daily trading band should be transparent and mechanical, with the exchange rate influenced by foreign exchange market intervention and public communication when necessary, rather than by administrative measures (e.g. the countercyclical adjustment factor introduced in May 2017).

- Similarly, capital flow management measures, including the "macroprudential framework for managing cross-border flows", should not be used to actively manage the capital flow cycle and substitute for exchange rate flexibility in line with the IMF's Institutional View on capital flows. Necessary supporting reforms (effective monetary policy framework, sound financial system, reduced fiscal dominance, and exchange rate flexibility) should be prioritized to support the removal of CFMs and further capital account liberalization. At the same time, further capital account opening, especially for portfolio flows, while desirable over the medium term, should be carefully sequenced and targeted. CFMs should be consistently and transparently enforced and clearly communicated. Publishing information on PBC's foreign exchange intervention (as is the practice in most other G20 countries) would improve market understanding and strengthen the credibility of the policy framework.

Authorities' Views

49. The PBC argued that price stability was a primary, but not the only, objective of monetary policy. As China remained an economy in transition, price stability was given high importance when making monetary policy decisions, but other objectives had to be considered, including growth, employment, balance of payments, and financial stability. On monetary policy, the authorities indicated that they were making progress in moving to a market-based system where interest rates played an increasingly important role relative to quantities. For instance, the 2018 "Government Work Report" did not set a quantitative target on M2 growth. They indicated that the market-based system needed time to develop and that the dropping of benchmark rates should be done in a gradual and orderly manner. They also indicated that they would further improve transparency and communication along with continued reforms.

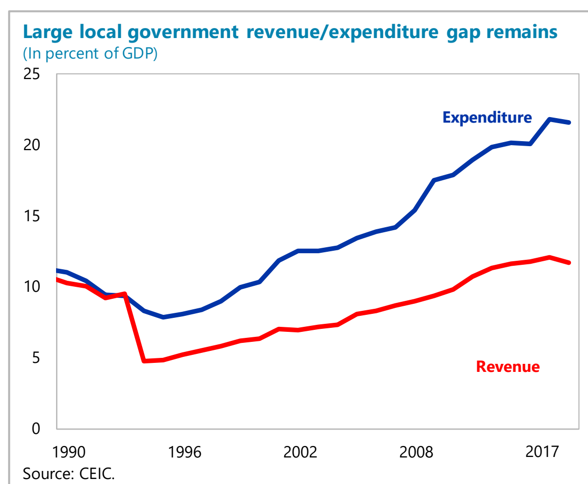
50. The PBC agreed that FX flexibility should continue to increase. They indicated that they would continue to improve the functioning of the FX market and further enhance exchange rate flexibility to keep the currency at a reasonable level consistent with equilibrium in the balance of payments. On the daily central parity mechanism, they explained that previously there were

irrational and self-fulfilling depreciation pressures on the currency and the countercyclical factor had helped to better reflect macroeconomic fundamentals. However, the factor did not have a decisive role in determining the value of the currency and had been set back to zero.

51. The authorities agreed with staff that CFMs should not substitute for exchange rate adjustment. They noted they had made the CFM policy framework more transparent and price-based, and they intended to use CFMs as an additional macroprudential policy tool to address the buildup of systemic risks arising from capital flows, which they considered to be highly pro-cyclical. They also noted that systemic risks should be addressed with macroeconomic adjustment as the first line of defense, including by allowing the exchange rate to adjust. The authorities stated that CFMs should only be used under exceptional circumstances, and be promptly reversed after the exceptional circumstances disappeared. Meanwhile, they underscored that market forces could create major distortions over financial cycles (e.g. due to herding behavior), contributing to the buildup of financial stability risks associated with capital flows. In their view, these circumstances resembled those of the Asian Crisis where standard policy tools could not fully address the systemic risks.

Fiscal Structural Reforms

52. The announced measures to address the misalignment of center-local fiscal responsibilities are welcome, though the gap remains large. Additional measures should be considered, including greater assignment of revenue raising to local governments (e.g. a recurrent property tax), further sharing/transfer of spending responsibilities to the central government (e.g. pensions/employment insurance), and expanding rules-based transfers from the central government to support the least-developed and vulnerable regions.



53. Reforms to strengthen fiscal discipline should be deepened through a careful sequencing of policies. These should include: (1) identifying non-commercial off-budget local government investment (for example, financed by LGFVs and government guided funds) (2) moving such investment on budget with correspondingly larger local government bond allocations and (3) carefully dismantling implicit guarantees on the remaining projects. This should be accompanied by greater coordination between agencies on investment projects to ensure all government spending is done on-budget.

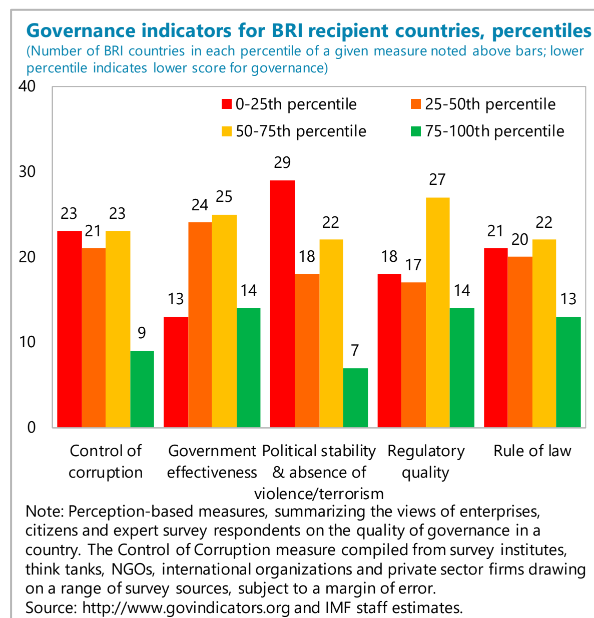
Authorities' Views

54. The authorities noted that the recent Party Congress had set a comprehensive plan to modernize the fiscal framework. The plan had three important aspects: a clearer central-local

fiscal relationship and responsibility that also fostered balanced regional development, a more transparent budget system (including a performance review system), and strengthening the tax system. Central-local fiscal relationship reforms were being carried through sequentially. Further sharing of fiscal and expenditure responsibilities between central and local governments and improving inter-government transfers were under discussion, and a property tax was also being considered.

The Belt and Road Initiative (BRI)

55. The BRI has great potential for both China and participating countries. It could fill large and long-standing infrastructure gaps in partner countries, boosting their growth prospects, strengthening global supply chains and trade, and increasing employment. In addition to more opening up by China, the success of the Initiative would be boosted by: a clearer overarching framework governing BRI investment, better coordination and oversight, more focus on debt sustainability of the partner countries, and a transparent mechanism for dealing with project disputes, non-performance and debt service problems, as well as more open procurement and greater transparency over contracts. Supporting capacity development in BRI participating countries (as is part of the agenda of the new China-IMF Capacity Development Center) would also help deliver the economic benefits of investment.



Note: Perception-based measures, summarizing the views of enterprises, citizens and expert survey respondents on the quality of governance in a country. The Control of Corruption measure compiled from survey institutes, think tanks, NGOs, international organizations and private sector firms drawing on a range of survey sources, subject to a margin of error.
Source: http://www.govindicators.org and IMF staff estimates.

Authorities' Views

56. The authorities agreed with staff on the potential benefits from the BRI and policies to maximize them while managing risks, but thought staff had overstated concerns. In their view, project selection and governance were decisions of market entities and were already strong, though they saw scope for further enhancing coordination among agencies and risk assessment.

Data

57. Data gaps should be urgently addressed. Recent efforts to improve data integrity, especially the plan to have the National Bureau of Statistics take over production of provincial economic data, are encouraging. However, major macroeconomic data gaps remain, including the lack of expenditure-side real GDP disaggregation, problematic deflation methods, and fiscal data that fall well short of international standards. These gaps undermine policymaking and credibility, IMF surveillance, and G20 commitments.

Authorities' Views

58. The authorities agreed with the need to further improve data, while noting the recent progress. Full implementation of the System of National Accounts (SNA) 2008 was progressing as was the rollout of the system to make local-level statistics consistent with those at the national level. Data deficiencies on expenditure-side GDP made publishing details impractical at this time and could confuse the public. Therefore, production-side GDP remained the key gauge of aggregate activity.

OUTLOOK AND RISKS

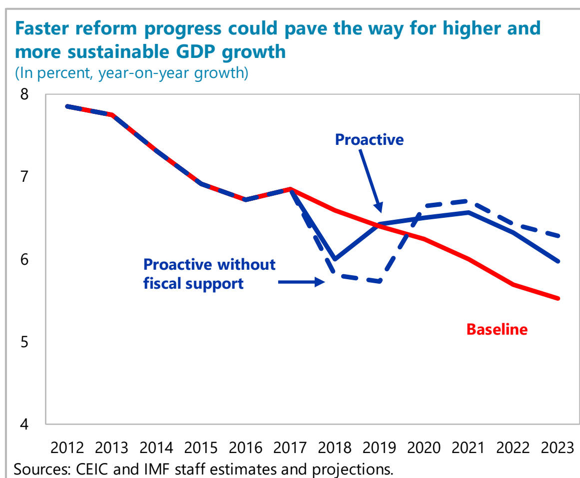
59. Growth is projected to moderate to 6.6 percent in 2018. The moderation reflects the lagged effect of regulatory tightening and the softening of external demand. Headline inflation is expected to rise gradually to around 2½ percent, while PPI inflation would moderate. The current account surplus is projected to narrow marginally to 0.9 percent of GDP in 2018, driven by deteriorating terms of trade.

60. Staff's baseline assumes that the authorities remain committed to their 2020 GDP target, but would allow faster growth deceleration thereafter.

- Reforms such as financial de-risking and environmental control will likely weigh on GDP, and productivity gains through structural reforms and digitalization will take time to materialize. The authorities will likely need to maintain strong credit growth to meet their growth targets, which would come at the cost of further increases in nonfinancial sector debt. Alternatively, if the authorities move more decisively to resolve the policy tensions now and focus on higher-quality growth and a greater role for the market, near-term growth would be weaker but longer-term growth would be stronger and more sustainable.

- The illustrative "proactive" scenario features faster reform progress, particularly SOE reform and resolving zombie firms. Under such a scenario, growth slows in the near-term due to labor displacement but rebounds in the medium-term on the back of faster TFP growth by about 1 percentage point. Rebalancing from investment to consumption also accelerates. A temporary fiscal stimulus package with resources to support rebalancing could help cushion the near-term adverse impact.

Faster reform progress could pave the way for higher and more sustainable GDP growth
(In percent, year-on-year growth)



Sources: CEIC and IMF staff estimates and projections.

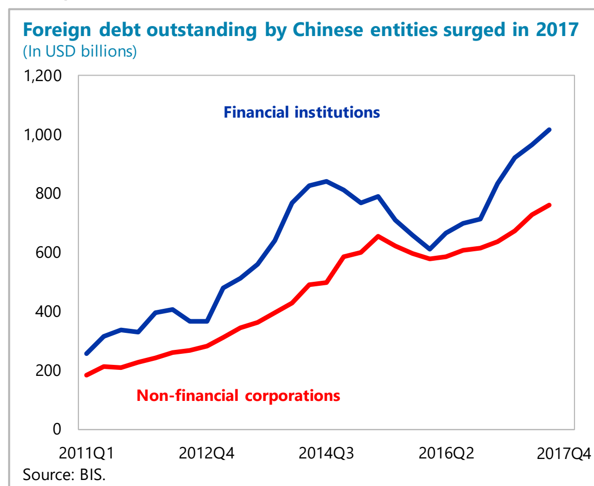
61. Risks are tilted to the downside. On the positive side, growth could be stronger if previous reforms gain greater traction in enhancing productivity and the private sector proves more dynamic than expected. But a lack of decisive reforms in deleveraging and rebalancing would add to the

already-high stock of vulnerabilities and worsen resource allocation, leading to more rapidly diminishing returns over the medium term. This scenario also raises the probability of a disruptive adjustment to Chinese demand which would result in a contractionary impulse to the global economy, as well as spillovers through commodity prices and financial markets. The major near-term risks are:

- **Financial.** Uncoordinated financial and local government regulatory action could have unintended consequences that trigger disorderly repricing of corporate/LGFV credit risks, losses for investors, and rollover risks for financial institutions.

- **Trade and foreign investment.** While the initial direct effects of tariff measures on Chinese exports announced by the U.S. seem limited, escalating tariffs and investment restrictions could disrupt supply chains, have knock-on effects on global financial markets, and weaken confidence and investment in China and the rest of the world. This could be coupled with a generalized rise of protectionism and an ensuing slowdown in global trade.

- **Capital flows.** Large outflows and pressure on the exchange rate could resume due to tighter and more volatile global financial conditions, especially a surging dollar. Investor sentiment towards emerging markets has recently weakened, and this could intensify, potentially spreading to China.



Authorities Views

62. The authorities broadly agreed on the outlook for growth, but were more sanguine on that for debt and associated risks. They were confident that the 2018 target of real GDP growth of around 6.5 percent was within reach, as was the target of doubling 2010 real GDP by 2020. CPI inflation would remain contained, despite the upward pressure due to rising commodity prices. They viewed downside risks in the near- to medium-term as mostly external in nature, especially heightened trade tensions with the U.S., a global rise in protectionism, and market volatility due to faster-than-expected monetary policy normalization in the U.S. and sharp dollar appreciation. Leverage had stabilized and should not pose major risks.

STAFF APPRAISAL

63. The economy continues to perform strongly and reforms progressed in several key areas. Output growth picked up, CPI inflation remained subdued, corporate profits improved, and unemployment fell. Financial sector de-risking accelerated, with a wide range of decisive measures

adopted; credit growth slowed; overcapacity reduction progressed; anti-pollution efforts intensified; and opening-up continued.

64. Rebalancing continued, but slowed in several dimensions. Growth became less dependent on credit and the current account surplus continued to fall, but exports rather than consumption drove the growth pick up. The external position is assessed as moderately stronger than the level consistent with medium-term fundamentals and desirable policies, due mainly to structural distortions, with the exchange rate broadly in line. Credit expansion remains excessive.

65. Risks are tilted to the downside. On the positive side, growth could be stronger if previous reforms gain greater traction in enhancing productivity and the private sector proves more dynamic than expected. On the negative side, key near-term risks include disorderly repricing of credit risks in the financial market, escalating trade tensions, and resumed pressure on capital outflows. The longer-term outlook depends on the policies deployed to achieve the authorities' goals—determined market-based reforms could lead to sustained, stable, and still-strong growth, whereas continued state- and credit-driven policies will likely further build up risks, raising the likelihood of an eventual abrupt adjustment and dimming long-term growth prospects.

66. The authorities' strategy to more decisively shift the policy focus from high-speed to high-quality growth is welcome. Its success requires addressing the policy tensions between, on the one hand, the stated goals of stabilizing leverage, allowing market forces a decisive role, and greater innovation and opening-up, and, on the other, still-unsustainable debt growth, the pervasive role of the state in the economy, and the relatively restrictive trade and investment regime in some areas.

67. The authorities should stay the course on tightening macro-financial settings to continue to rein in credit growth. Critically this includes following through on stated intentions to de-emphasize growth targets and not loosening credit if growth falls below target. Continuing financial regulatory reforms, curbing household borrowing and reining in off-budget local government investment would help deliver a more sustainable growth path.

68. Rebalancing efforts should be accelerated. Greater increases in health, education and social transfers, financed by taxes on income, property and carbon emissions, would support consumption, and reduce income inequality and pollution. A more comprehensive approach to structural reforms, such as increasing transfers to the regions most affected by overcapacity reduction or pollution control, could help address the tensions across rebalancing dimensions.

69. Market forces should be allowed to play a more decisive role. This means reducing the dominance of the public sector in many industries, opening up more markets to the private sector, and ensuring fair competition. Structural reforms should be more market based to increase their effectiveness.

70. To be an effective and credible leader of globalization, China should continue to address the distortions that still beset its economy and affect cross-border trade and

investment. China would benefit from exposing sheltered sectors and firms to more domestic and foreign competition, ensuring a level playing field, and better protecting intellectual property rights. All parties should seek a resolution to trade tensions that supports and strengthens the international trading system and the global economy. In this regard, avoiding exceptional measures and ensuring trade actions are well-grounded in WTO rules would help reduce the risk of escalation and undermining established dispute settlement mechanisms.

71. Implementing the high-quality development agenda requires modernizing policy frameworks. Financial sector reforms have made strong progress recently—this should be continued, for example, by letting the new institutional structure of financial supervisors take a more holistic, forceful and coordinated approach. Monetary policy should continue to become more price- rather than quantity-based, and the exchange rate should continue to become more flexible. The central government should share more of local governments' spending responsibilities while increasing their ability to raise their own revenues. Policymaking would also be improved by further strengthening China's still weak macroeconomic data.

72. The exchange rate should continue to become more flexible, and reforms to support the removal of CFMs and further capital account liberalization should be expedited. CFMs should not be used to actively manage the capital flow cycle and substitute for exchange rate flexibility, and should be phased out over time as supporting reforms increase the economy's ability to handle greater capital flow volatility. CFMs should be consistently and transparently enforced, and clearly communicated. Publishing foreign exchange intervention would improve market understanding and strengthen credibility of the policy framework.

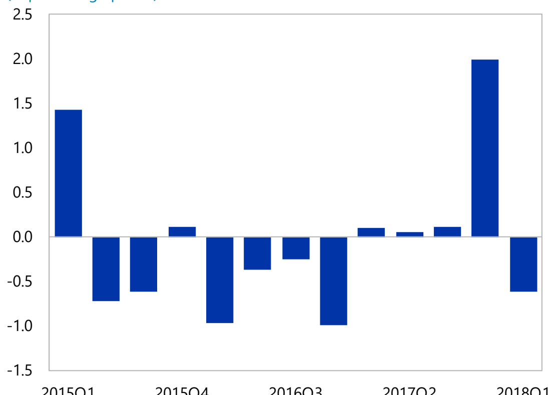
73. The Belt and Road Initiative is a welcome and potentially transformative initiative. Its success will be enhanced by having an overarching framework, with better coordination and oversight, more open procurement and due attention to debt sustainability in partner countries.

74. China should urgently address macroeconomic data gaps to further improve data credibility and policy making.

75. It is proposed that the next Article IV consultation with China take place on the standard 12-month cycle.

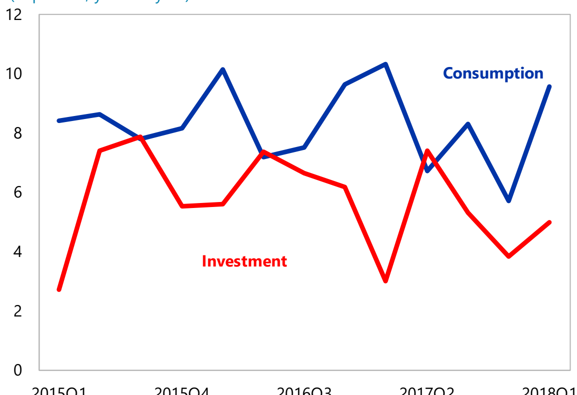
Figure 1. Recent Developments and Outlook: Solid Growth Momentum

The growth contribution of foreign demand turned negative in 2018Q1 after a boost in 2017...



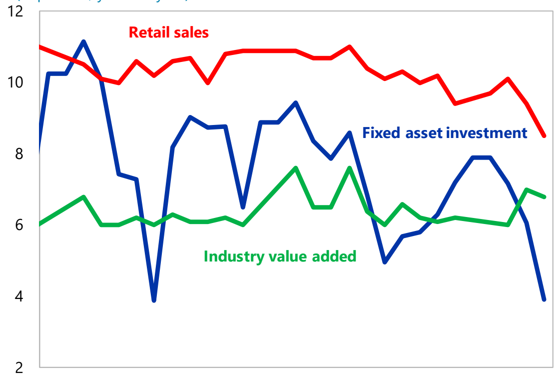
Source: CEIC and IMF staff estimates.

...while the growth of consumption and investment picked up.



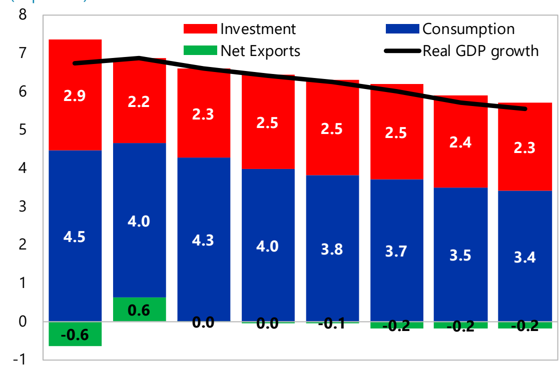
Source: IMF staff estimates.

High frequency indicators suggest that momentum is weakening into 2018Q2.



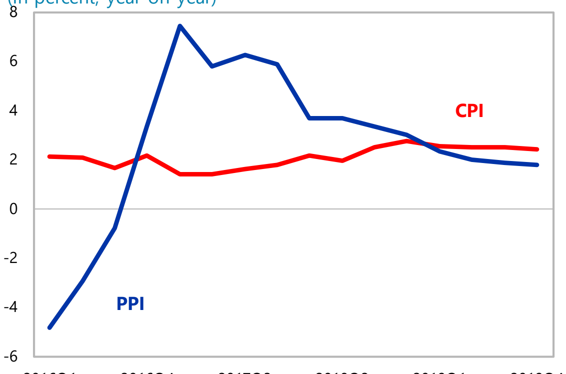
Source: CEIC.

Growth is projected to moderate with domestic demand as the main driver going forward.



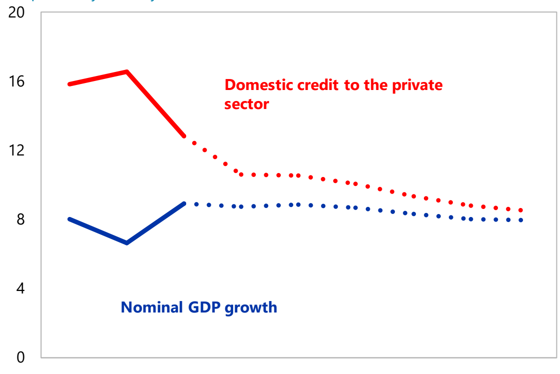
Source: CEIC.

CPI is expected to rise with higher food and energy prices but PPI inflation will retreat...



Source: CEIC.

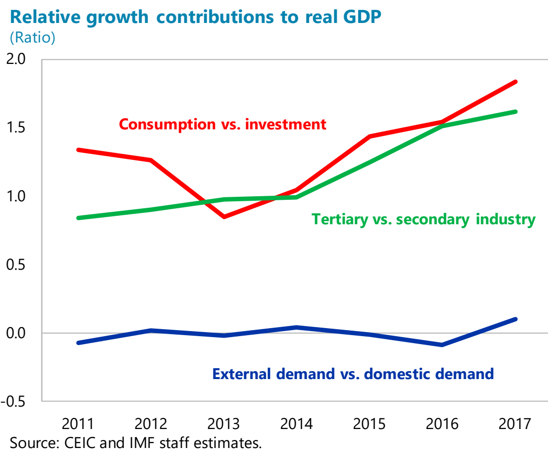
...which will make deleveraging more challenging.



Source: CEIC and IMF staff estimates.

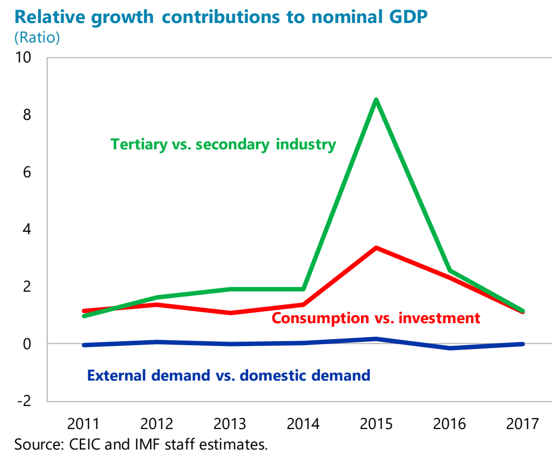
Figure 2. Rebalancing: Uneven Progress

In real terms internal rebalancing progressed while external rebalancing receded....



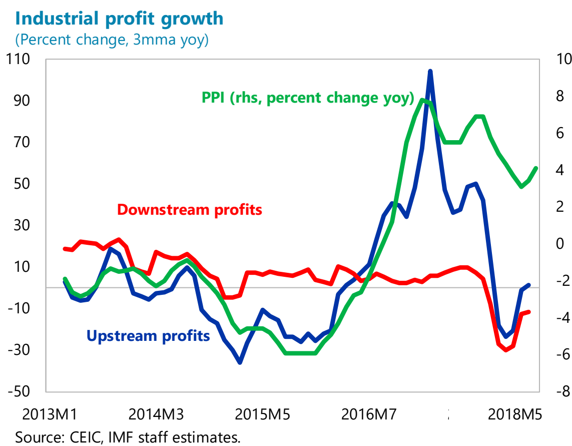
Source: CEIC and IMF staff estimates.

...but in nominal terms rebalancing slowed significantly.



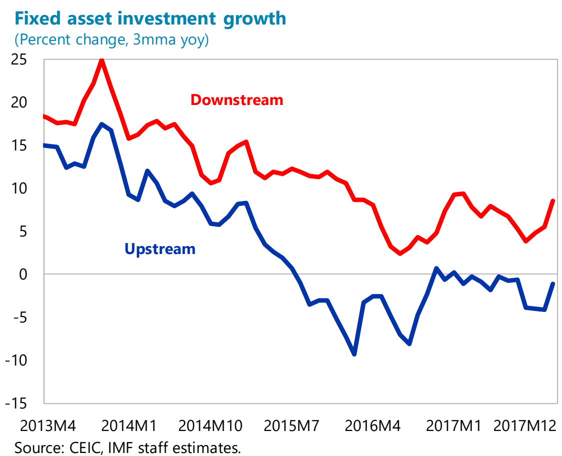
Source: CEIC and IMF staff estimates.

PPI reflation was key to nominal developments, representing a transfer of resources to upstream sectors ...



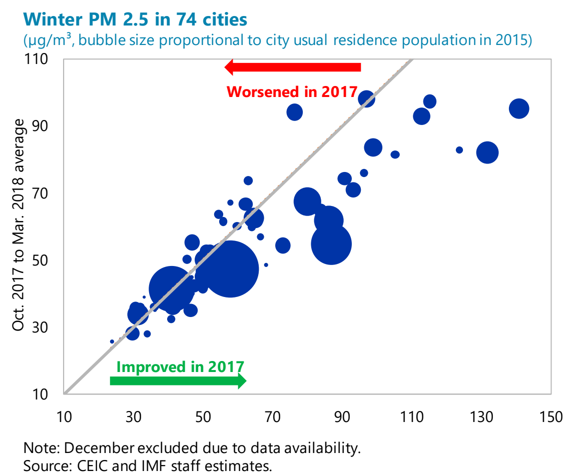
Source: CEIC, IMF staff estimates.

...whose gains were not re-invested, but used to repair stretched balance sheets.



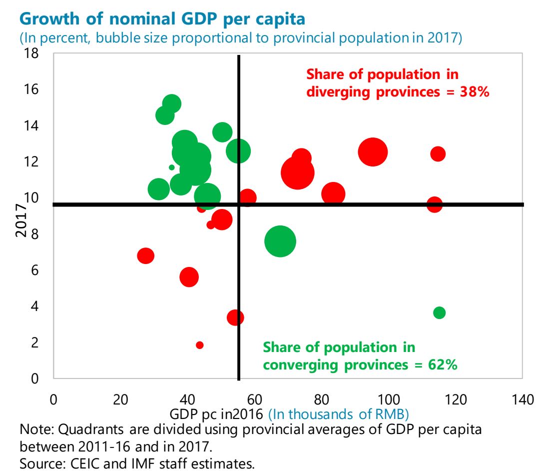
Source: CEIC, IMF staff estimates.

Air pollution declined due to a strong environmental protection campaign.



Note: December excluded due to data availability.
Source: CEIC and IMF staff estimates.

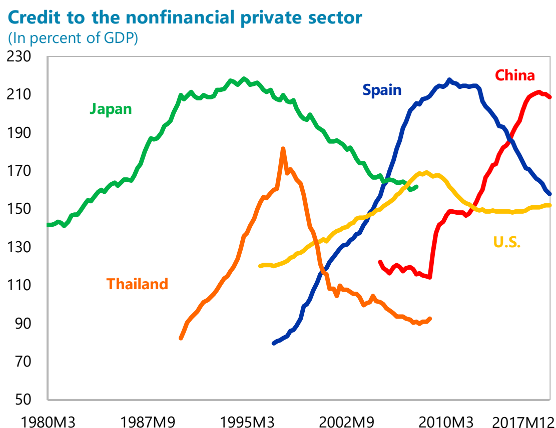
Income inequality remains a challenge with some provinces struggling to converge.



Note: Quadrants are divided using provincial averages of GDP per capita between 2011-16 and in 2017.
Source: CEIC and IMF staff estimates.

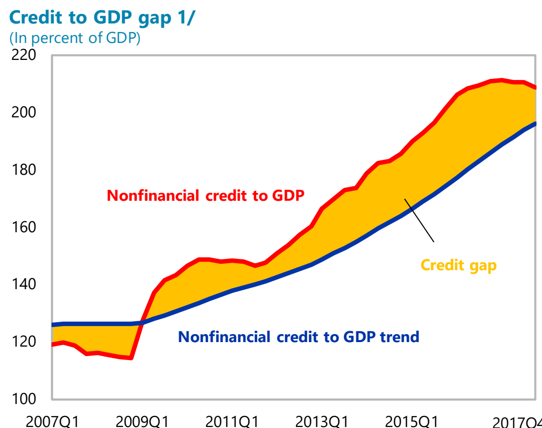
Figure 3. Credit: Credit Gap Narrows but Remains Large

After years of rapid growth, China's credit-to-GDP ratio reached over 210 percent of GDP...



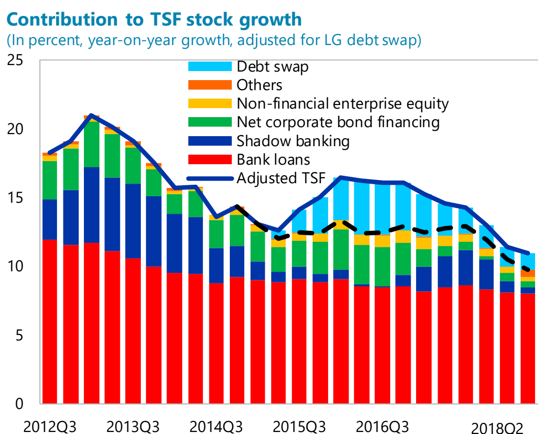
Note: BIS definition of credit to the nonfinancial sector differs from staff's.
Sources: BIS, and IMF staff calculations.

...which opened a significant gap between the credit-to-GDP ratio and its historical trend.



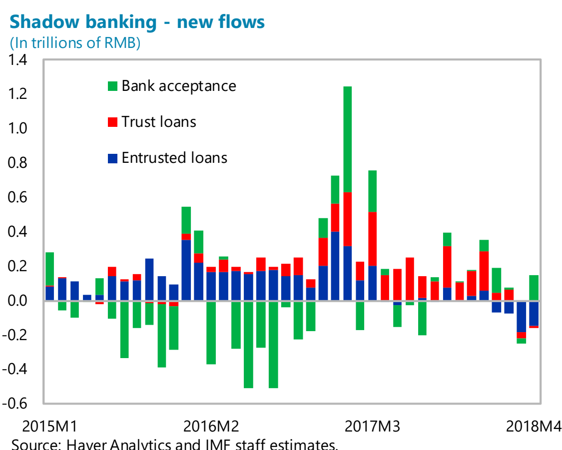
1/ BIS definition.
Source: BIS.

Credit growth has moderated recently...



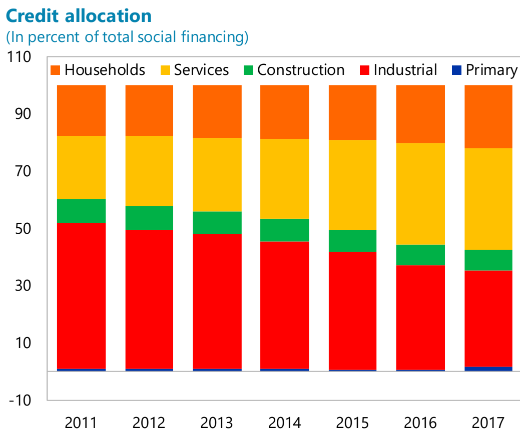
1/ TSF stands for total social financing.
Source: Haver Analytics and IMF staff estimates.

...as the flow of shadow banking products began to ebb.



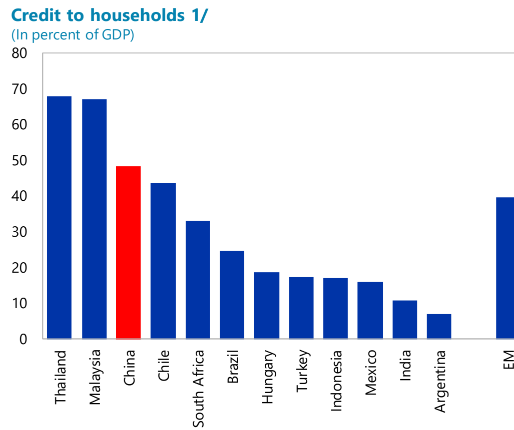
Source: Haver Analytics and IMF staff estimates.

An increasing share of credit is being allocated to households and services vs. the industrial sector...



Source: Haver Analytics and IMF staff estimates.

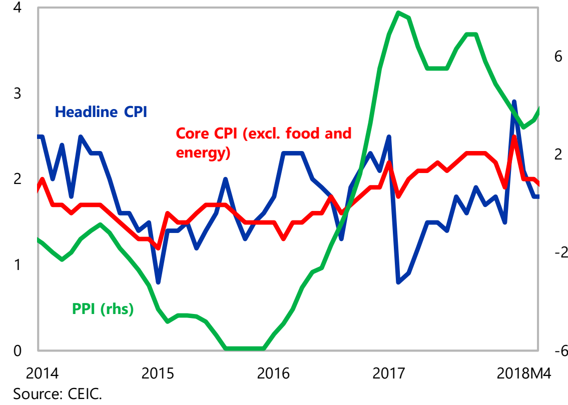
...and household debt-to-GDP now exceeds the EM average.



1/ Data as of December, 2017.
Source: BIS and IMF staff estimates.

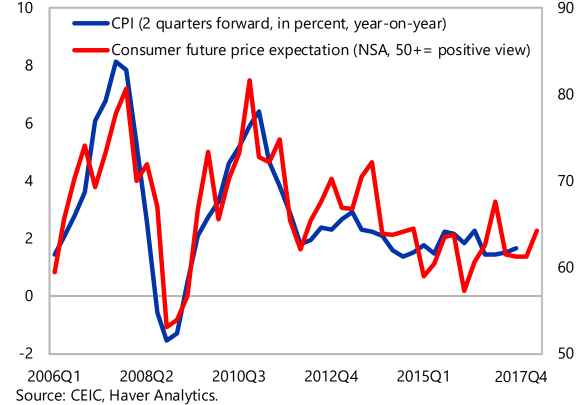
Figure 4. Monetary: Money Market Rates Rose

CPI inflation remained contained while PPI inflation moderated since late 2017.



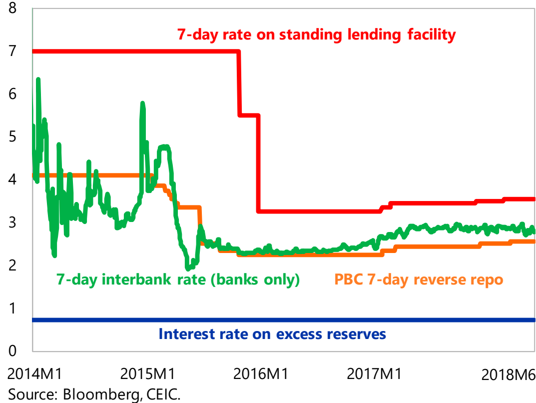
Source: CEIC.

Inflation expectations remained broadly anchored.



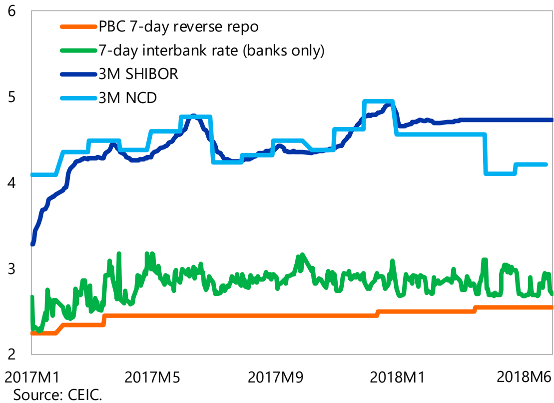
Source: CEIC, Haver Analytics.

Following the increases in early 2017, the 7-day reverse repo rate for deposit institutions remained broadly stable…



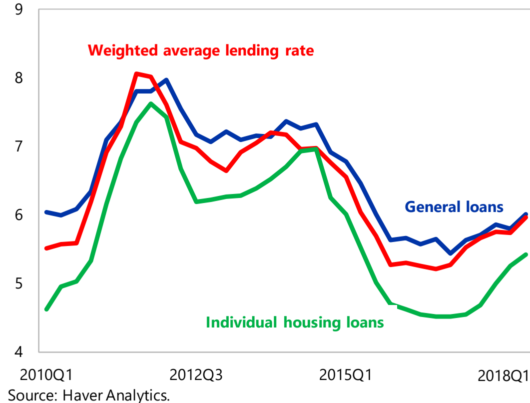
Source: Bloomberg, CEIC.

…and so did the wholesale market rates.



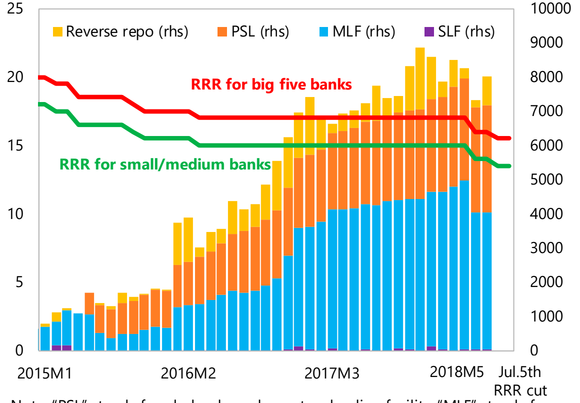
Source: CEIC.

Market lending rates have begun to rise from low levels.



Source: Haver Analytics.

Reserve requirement ratio are being reduced.

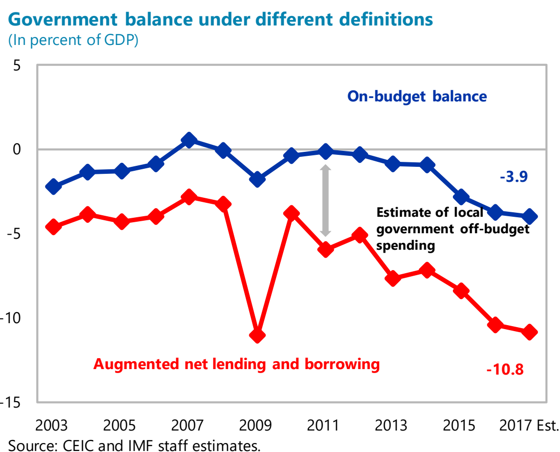


Note: "PSL" stands for pledged supplementary lending facility. "MLF" stands for medium-term lending facility. "SLF" stands for standing lending facility.
Source: CEIC, Haver Analytics, PBOC.

Figure 5. Fiscal: Continued Loosening in 2017

The augmented deficit further expanded in 2017...

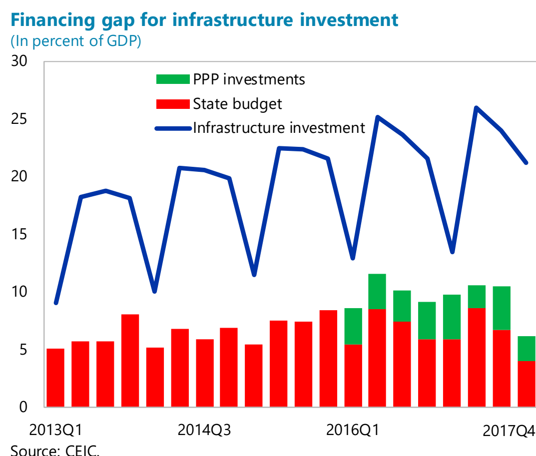
Government balance under different definitions
(In percent of GDP)



Source: CEIC and IMF staff estimates.

... driven in part by strong infrastructure investment.

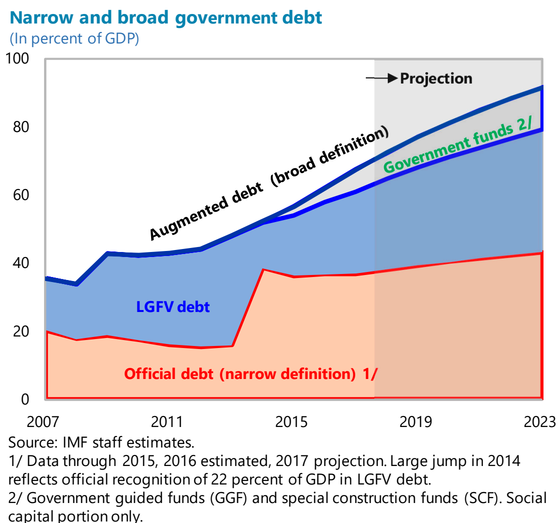
Financing gap for infrastructure investment
(In percent of GDP)



Source: CEIC.

Augmented debt is projected to rise quickly...

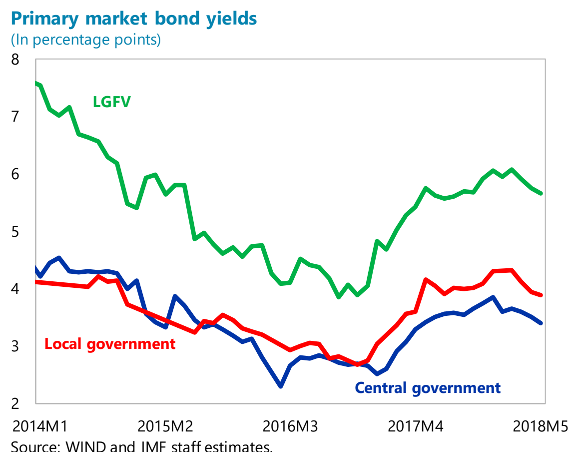
Narrow and broad government debt
(In percent of GDP)



Source: IMF staff estimates.
1/ Data through 2015, 2016 estimated, 2017 projection. Large jump in 2014 reflects official recognition of 22 percent of GDP in LGFV debt.
2/ Government guided funds (GGF) and special construction funds (SCF). Social capital portion only.

... and interest rates have risen, particularly for LGFVs.

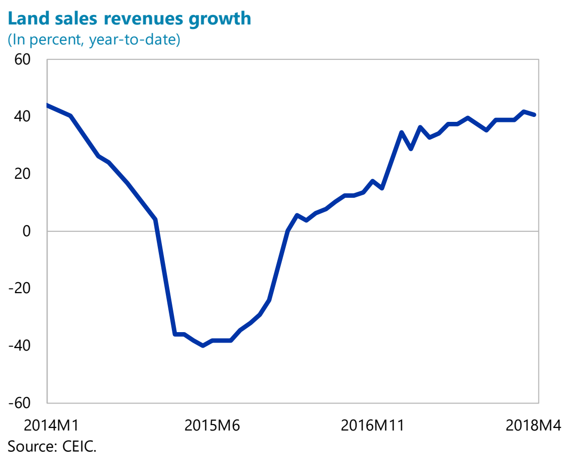
Primary market bond yields
(In percentage points)



Source: WIND and IMF staff estimates.

Land sale revenues remained strong...

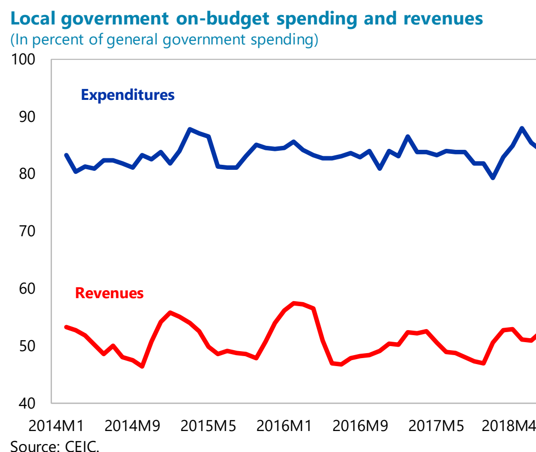
Land sales revenues growth
(In percent, year-to-date)



Source: CEIC.

... but the local government revenue-expenditure gap remains wide.

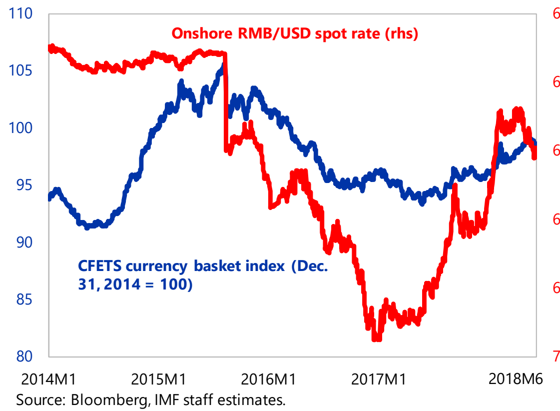
Local government on-budget spending and revenues
(In percent of general government spending)



Source: CEIC.

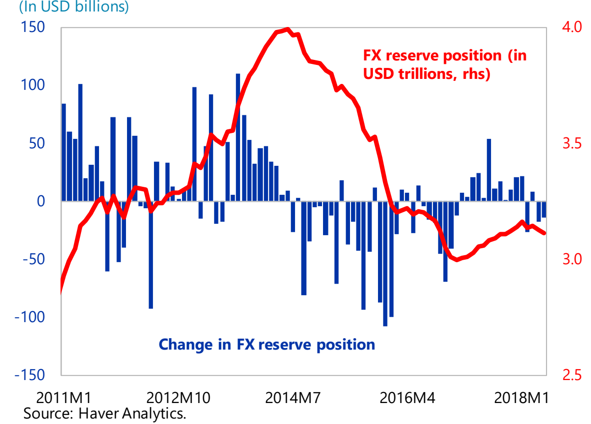
Figure 6. External: Outflow Pressure Abated

The RMB appreciated against the basket in 2018.



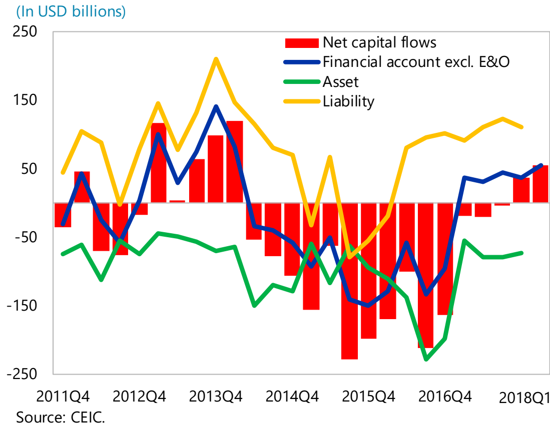
Source: Bloomberg, IMF staff estimates.

FX reserves picked up.



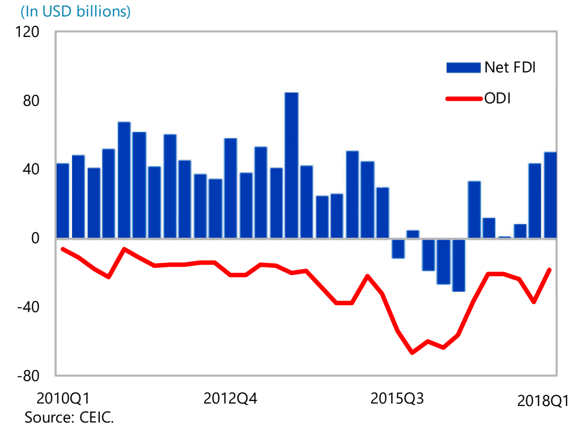
Source: Haver Analytics.

Capital outflows abated (and capital account excluding errors and omissions turned positive in 2017) …



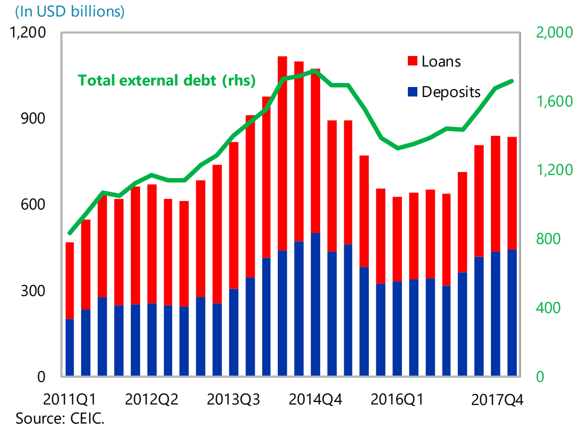
Source: CEIC.

… partly due tighter control over outbound direct investment…



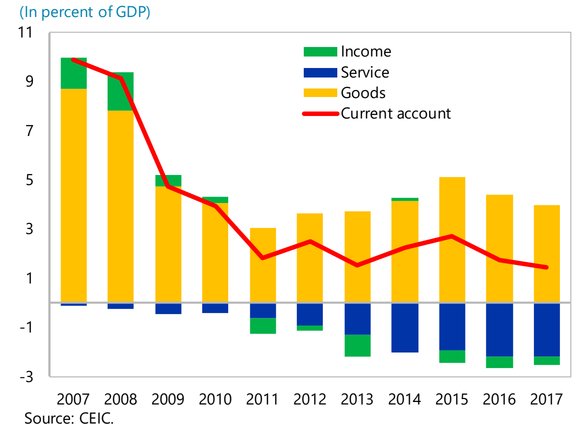
Source: CEIC.

… and a pickup in external borrowing.



Source: CEIC.

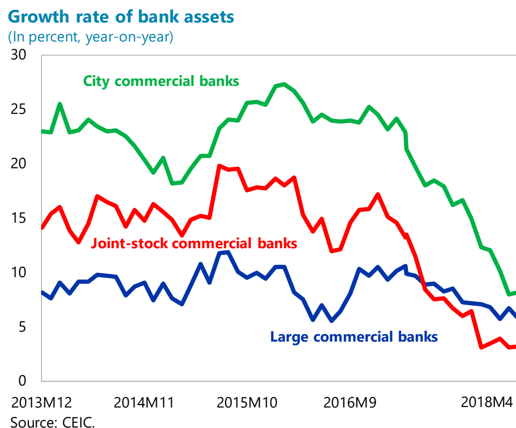
The current account balance declined further in 2017 as import growth remained robust.



Source: CEIC.

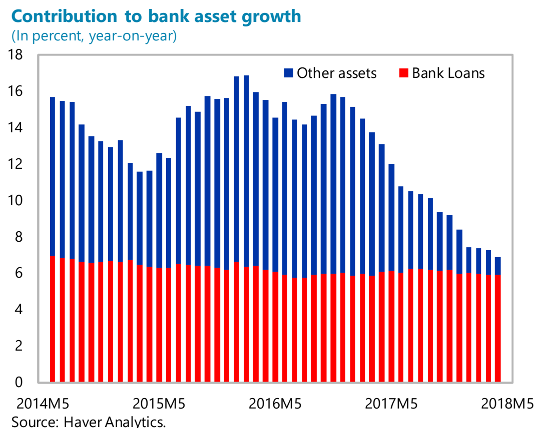
Figure 7. Banking: Sharp Slowdown in Asset Growth

Regulatory tightening has slowed bank asset growth especially for the city commercial and joint-stock banks due to their reliance on investment portfolios.



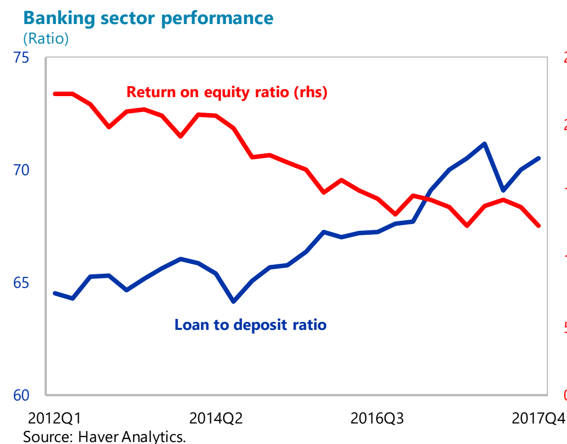
Source: CEIC.

Direct lending to the real economy remained strong while the growth of other bank assets moderated...



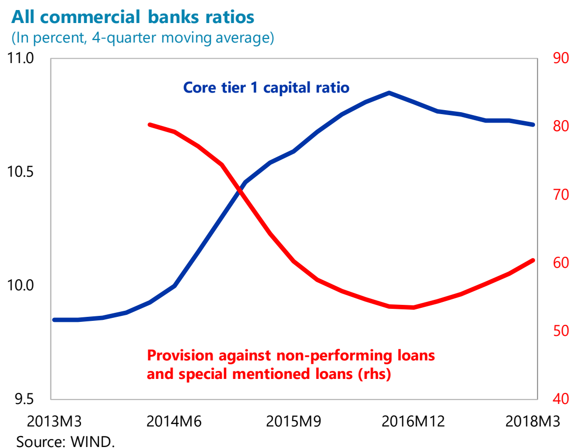
Source: Haver Analytics.

... and the loan to deposit ratio picked up.



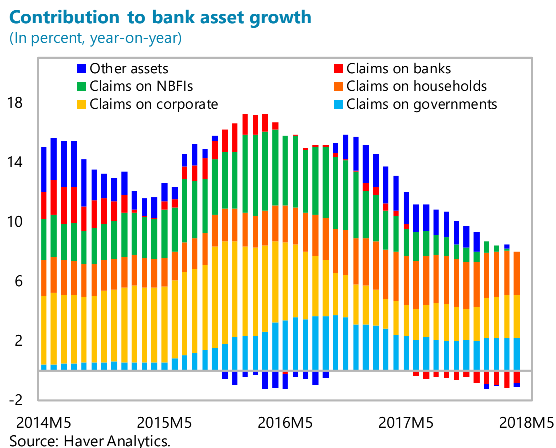
Source: Haver Analytics.

Bank core tier 1 capital ratio moderated as regular bank loans require higher risk capital risk weightings than investment products, while the provision ratio improved.



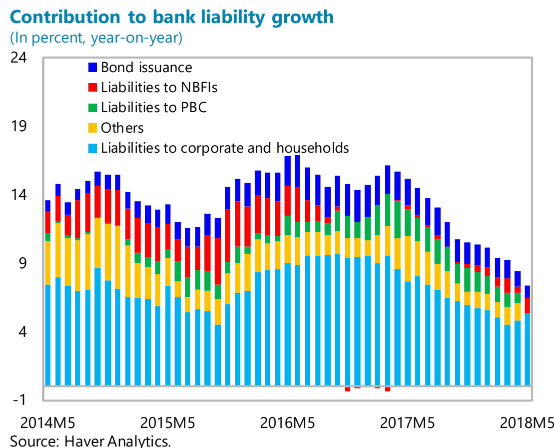
Source: WIND.

Growth in bank claims on NBFIs moderated and inter-bank claims contracted ...



Source: Haver Analytics.

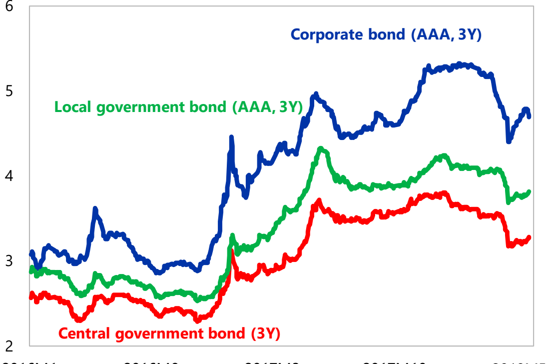
... while bank reintermediation was partly financed through expansion of NBFIs liabilities.



Source: Haver Analytics.

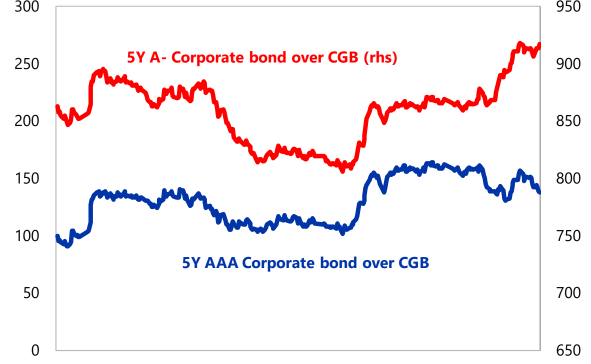
Figure 8. Financial: Tighter Financial Conditions

Rising short-term interest rates in 2017 pushed up corporate bond yields and borrowing costs.



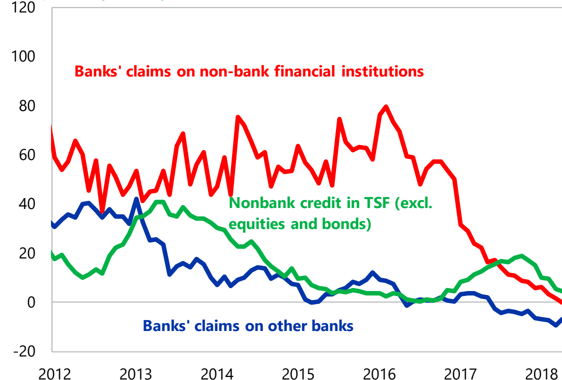
Source: WIND.

Corporate yield spread over government bonds widened on weaker demand for high-yield assets



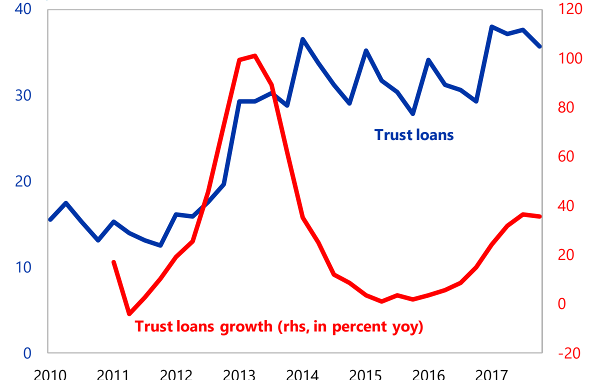
Source: WIND.

Financial deleveraging resulted in slower credit growth to NBFIs…



Source: CEIC and People's Bank of China.

… but trust loans continued to expand at a fast pace in 2017 as demand for shadow loans remained strong

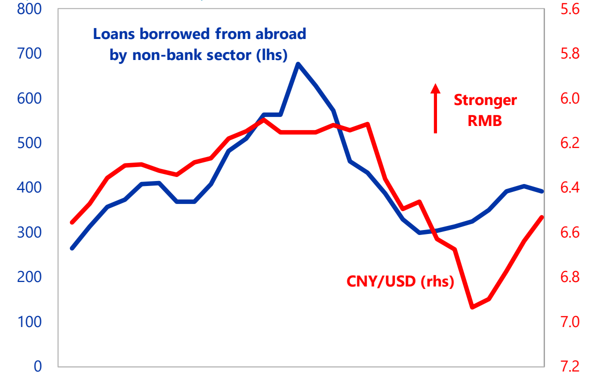


Source: China Trustee Association.

The stock market has weakened recently.

Source: Haver Analytics.

And RMB appreciation boosted external borrowing given tighter liquidity conditions in the onshore market.

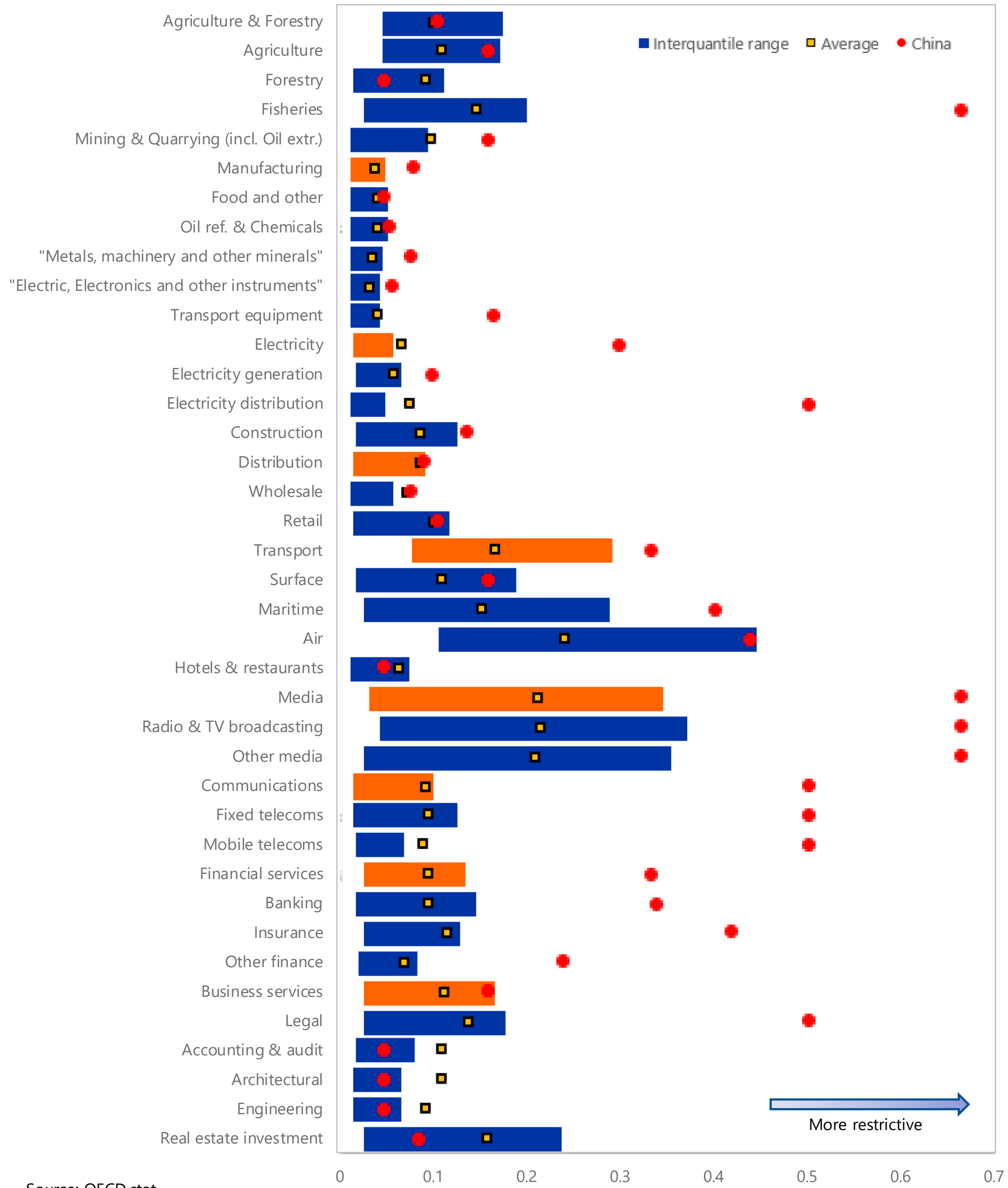


Source: SAFE.

Figure 9. Cross-Country Comparison on FDI Regulatory Restrictiveness

China is relatively more restrictive on FDI in most sectors

(FDI Regulatory Restrictiveness Index, 2017, 0= more open 1= most restrictive)



Source: OECD stat.
Note: The FDI Regulatory Restrictiveness Index (FDI Index) measures statutory restrictions on foreign direct investment across 22 economic sectors in 68 economies. It gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI: 1) Foreign equity limitations; 2) Discriminatory screening or approval mechanisms; 3) Restrictions on the employment of foreigners as key personnel and 4) Other operational restrictions, e.g. restrictions on branching and on capital repatriation or on land ownership by foreign-owned enterprises. Restrictions are evaluated on a 0 (open) to 1 (closed) scale. The overall restrictiveness index is the average of sectoral scores. The discriminatory nature of measures, i.e. when they apply to foreign investors only, is the central criterion for scoring a measure. State ownership and state monopolies, to the extent they are not discriminatory towards foreigners, are not scored. The FDI Index is not a full measure of a country's investment climate. A range of other factors come into play, including how FDI rules are implemented. Entry barriers can also arise for other reasons, including state ownership in key sectors. A country's ability to attract FDI will be affected by others factors such as the size of its market, the extent of its integration with neighbours and even geography among other. Nonetheless, FDI rules can be a critical determinant of a country's attractiveness to foreign investors. See http://www.oecd.org/investment/fdiindex.htm

Table 1. China: Selected Economic Indicators

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						Projections					
	(Annual percentage change, unless otherwise indicated)										
NATIONAL ACCOUNTS											
Real GDP (base=2015)	7.8	7.3	6.9	6.7	6.9	6.6	6.4	6.3	6.0	5.7	5.5
Total domestic demand	8.1	7.2	7.2	7.6	6.4	6.8	6.6	6.5	6.3	6.0	5.8
Consumption	7.2	7.2	8.3	8.6	7.6	8.0	7.4	7.0	6.8	6.3	6.1
Investment	9.1	7.1	6.1	6.5	4.9	5.3	5.7	5.8	5.8	5.6	5.4
Fixed	9.3	6.8	6.7	6.8	4.3	5.3	5.9	6.0	6.0	5.8	5.6
Inventories (contribution)	0.1	0.2	-0.2	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0
Net exports (contribution)	0.1	0.4	-0.1	-0.6	0.6	0.0	0.0	-0.1	-0.2	-0.2	-0.2
Total capital formation (percent of GDP)	47.3	46.8	44.7	44.1	44.4	44.3	43.9	43.3	42.7	42.2	41.6
Gross national saving (percent of GDP) 1/	48.8	49.0	47.5	45.9	45.8	45.2	44.7	44.1	43.4	42.7	42.0
LABOR MARKET											
Surveyed unemployment rate (annual average) 2/	5.0	5.1	5.1	5.0	5.1	5.0	5.0	5.0	5.0	5.0	5.0
Employment	0.4	0.4	0.3	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1
PRICES											
Consumer prices (average)	2.6	2.0	1.4	2.0	1.6	2.3	2.5	2.7	2.8	2.9	3.0
GDP Deflator	2.4	1.0	1.1	-0.1	1.9	2.0	2.3	2.3	2.2	2.2	2.3
FINANCIAL											
7-day repo rate (percent)	5.4	5.1	2.5	2.6	3.1	...	...	...	...	...	...
10 year government bond rate (percent)	4.6	3.7	2.9	3.1	3.9	...	...	...	...	...	...
Real effective exchange rate (average)	-5.3	-5.3	-3.3	-9.6	5.4	...	...	...	...	...	...
Nominal effective exchange rate (average)	5.3	3.1	9.5	-6.5	-2.5	...	...	...	...	...	...
MACRO-FINANCIAL											
Total social financing 3/	17.5	14.3	12.4	12.9	12.0	10.5	11.5	10.9	10.1	9.5	9.2
In percent of GDP	180	190	198	209	215	219	224	228	232	235	238
Total nonfinancial sector debt	17.4	17.1	15.4	16.4	14.0	12.2	12.0	11.3	10.5	9.9	9.5
In percent of GDP	192	207	222	242	253	261	269	275	281	286	290
Domestic credit to the private sector	16.6	13.2	15.8	16.5	12.8	10.6	10.6	10.1	9.4	8.8	8.5
In percent of GDP	142	149	159	174	180	183	186	189	191	192	193
House price 4/	7.7	1.4	9.1	11.3	5.7	8.6	8.3	7.9	7.2	6.8	6.0
Household disposable income (percent of GDP)	59.8	60.4	60.5	61.0	60.6	61.0	61.2	61.4	61.5	61.6	61.5
Household savings (percent of disposable income)	38.5	38.0	37.1	35.5	35.5	34.7	34.0	33.3	32.3	31.4	30.5
Household debt (percent of GDP)	33.0	35.4	38.2	44.2	49.2	51.0	52.8	54.9	56.8	59.0	61.3
Non-financial corporate domestic debt (percent of GDP)	109	113	121	130	131	132	133	134	134	133	132
BIS credit-to-GDP gap (percent of GDP) 5/	18.9	21.5	27.2	24.7	12.6	...	...	...	...	...	...
GENERAL BUDGETARY GOVERNMENT (Percent of GDP)											
Net lending/borrowing 6/	-0.8	-0.9	-2.8	-3.7	-3.9	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1
Revenue	27.7	28.1	28.5	28.2	28.4	28.8	28.9	28.6	28.3	28.2	28.0
Additional financing from land sales	2.7	2.7	1.9	2.0	2.6	2.3	2.0	1.7	1.4	1.2	1.0
Expenditure	31.2	31.6	33.2	33.9	34.9	35.2	35.0	34.4	33.8	33.5	33.1
Debt 7/	16.0	38.6	36.4	36.7	36.9	38.1	39.3	40.4	41.4	42.4	43.2
Structural balance	-0.5	-0.5	-2.5	-3.6	-4.0	-4.2	-4.2	-4.2	-4.2	-4.2	-4.1
BALANCE OF PAYMENTS (Percent of GDP)											
Current account balance	1.5	2.2	2.7	1.8	1.4	0.9	0.8	0.8	0.7	0.5	0.4
Trade balance	3.7	4.1	5.1	4.4	4.0	3.3	3.1	2.9	2.7	2.5	2.3
Services balance	-1.3	-2.0	-1.9	-2.1	-2.2	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9
Net international investment position	20.7	15.2	14.9	17.4	15.1	13.9	13.6	13.2	12.9	12.4	11.9
Gross official reserves (bn US$)	3,880	3,899	3,406	3,098	3,236	3,198	3,144	3,088	3,024	2,935	2,809
MEMORANDUM ITEMS											
Nominal GDP (bn RMB) 8/	59,696	64,718	69,911	74,563	81,204	88,282	96,107	104,434	113,132	122,194	131,915
Augmented debt (percent of GDP) 9/	48.1	52.3	56.6	62.0	67.5	72.4	77.1	81.3	85.0	88.5	91.6
Augmented net lending/borrowing (percent of GDP) 9/	-7.6	-7.2	-8.4	-10.4	-10.8	-10.7	-10.9	-10.8	-10.7	-10.4	-10.3

Sources: Bloomberg, CEIC, IMF Information Notice System database, and IMF staff estimates and projections.

1/ IMF staff estimates for 2016 and 2017.

2/ Surveyed unemployment rate.

3/ Not adjusted for local government debt swap.

4/ Average selling prices estimated by IMF staff based on housing price data (Commodity Building Residential Price) of 70 large and mid-sized cities published by National Bureau of Statistics (NBS).

5/ Latest observation is for Q3 2017.

6/ Adjustments are made to the authorities' fiscal budgetary balances to reflect consolidated general government balance, including government-managed funds, state-administered SOE funds, adjustment to the stabilization fund, and social security fund.

7/ Official government debt. Estimates of debt levels before 2015 include central government debt and explicit local government debt (identified by MoF and NPC in Sep 2015). The large increase in general government debt in 2014 reflects the authorities' recognition of the off-budget local government debt borrowed previously. The estimation of debt levels after 2015 assumes zero off-budget borrowing from 2015 to 2021.

8/ Expenditure side nominal GDP.

9/ Augmented fiscal data expand the perimeter of government to include local government financing vehicles and other off-budget activity.

Table 2. China: Balance of Payments

(In percent of GDP, unless otherwise noted)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						Projections					
Current account balance	1.5	2.2	2.7	1.8	1.4	0.9	0.8	0.8	0.7	0.5	0.4
Trade balance	3.7	4.1	5.1	4.4	4.0	3.3	3.1	2.9	2.7	2.5	2.3
Exports	22.3	21.3	19.1	17.7	18.4	17.5	17.0	16.4	15.7	14.9	14.2
Imports	18.6	17.2	14.0	13.4	14.5	14.3	13.9	13.5	13.0	12.5	11.9
Services balance	-1.3	-2.0	-1.9	-2.1	-2.2	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9
Income balance	-0.8	0.1	-0.4	-0.4	-0.3	-0.2	-0.1	-0.1	0.0	0.0	0.0
Current transfers	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Capital and financial account balance	3.6	-0.5	-3.8	-3.7	1.2	-1.2	-1.2	-1.1	-1.0	-1.0	-1.0
Capital account	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	3.6	-0.5	-3.9	-3.7	1.2	-1.2	-1.2	-1.1	-1.0	-1.0	-1.0
Net foreign direct investment	2.3	1.4	0.6	-0.4	0.6	0.4	0.3	0.3	0.2	0.2	0.1
Foreign Direct investment	3.0	2.5	2.2	1.6	1.4	1.2	1.1	1.2	1.2	1.2	1.2
Overseas Direct Investment	-0.8	-1.2	-1.6	-1.9	-0.8	-0.8	-0.9	-0.9	-1.0	-1.0	-1.1
Portfolio investment	0.5	0.8	-0.6	-0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Other investment	0.7	-2.6	-3.9	-2.8	0.6	-1.7	-1.5	-1.4	-1.3	-1.2	-1.1
Errors and omissions 1/	-0.7	-0.6	-1.9	-2.0	-1.8	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	4.5	1.1	-3.1	-4.0	0.8	-0.3	-0.4	-0.3	-0.4	-0.5	-0.6
Reserve assets	-4.5	-1.1	3.1	4.0	-0.8	0.3	0.4	0.3	0.4	0.5	0.6
International investment position:											
Asset	62.1	61.1	54.8	58.0	57.6	53.0	51.5	50.2	49.1	48.2	47.2
Direct investment	6.9	8.4	9.8	12.1	12.3	11.4	11.3	11.3	11.3	11.5	11.8
Securities investment	2.7	2.5	2.3	3.3	4.1	4.5	5.0	5.5	6.0	6.4	6.9
Other investment	12.3	13.2	12.4	15.0	14.3	14.1	14.5	14.8	15.0	15.2	15.2
Reserve assets	40.3	37.0	30.3	27.6	26.9	23.0	20.7	18.6	16.8	15.0	13.3
Liability	41.4	45.9	39.9	40.6	42.5	39.0	37.9	36.9	36.2	35.8	35.3
Direct investment	24.2	24.7	24.0	24.6	24.1	22.1	21.3	20.7	20.3	19.9	19.7
Securities investment	4.0	7.6	7.3	7.2	8.7	8.4	8.7	8.9	9.1	9.3	9.6
Other investment	13.2	13.7	8.6	8.8	9.7	8.5	7.9	7.4	6.9	6.5	6.1
Net international investment position	20.7	15.2	14.9	17.4	15.1	13.9	13.6	13.2	12.9	12.4	11.9
Memorandum items:											
Export growth (value terms, percentage change)	8.9	4.4	-4.5	-7.2	11.4	10.0	5.9	5.2	4.4	3.0	3.0
Import growth (value terms, percentage change)	7.7	1.1	-13.4	-4.2	16.0	13.9	6.8	5.6	5.0	3.7	3.4
FDI (inward, billion of US$)	291	268	242	175	168	170	172	194	217	240	264
External debt (billion of US$)	1,533	1,788	1,383	1,416	1,711	1,826	1,947	2,074	2,212	2,361	2,521
As a percent of GDP	15.9	17.0	12.3	12.6	14.2	13.1	12.8	12.5	12.3	12.1	11.9
Short-term external debt (remaining maturity, billion of US$)	1,202	1,311	887	871	1,099	1,167	1,239	1,310	1,387	1,470	1,560
Gross reserves (billion of US$) 2/	3,880	3,899	3,406	3,098	3,236	3,198	3,144	3,088	3,024	2,935	2,809
As a percent of ST debt by remaining maturity	323	297	384	356	294	274	254	236	218	200	180
Terms of trade (percentage change)	1.2	1.7	7.6	7.7	5.1	-2.7	0.2	0.9	0.7	0.3	0.5
Real effective exchange rate (2010 = 100)	115	119	131	124	121	...	...	...	...	...	...
Nominal GDP (billion of US$)	9,635	10,535	11,226	11,222	12,015	13,907	15,221	16,612	18,040	19,536	21,123

Sources: CEIC; IMF, Information Notice System; and IMF staff estimates and projections.

1/ Includes counterpart transaction to valuation changes.

2/ Includes foreign currency reserves and other reserve assets such as SDRs and gold.

Table 3. China: External Vulnerability Indicators

	2013	2014	2015	2016	2017
Monetary and financial					
General government debt (in percent of GDP, narrow definition) 1/	16.0	38.6	36.4	36.7	36.9
Broad money (M2: annual percentage change)	13.6	11.0	13.3	11.3	8.2
Foreign currency deposits to broad money (percent)	2.4	2.9	2.9	3.2	3.1
Local currency loans to the economy (annual percentage change)	14.1	13.6	14.3	13.5	12.7
Foreign currency loans to bank domestic credit (in percent)	5.1	4.7	4.0	3.4	3.1
Stock exchange index (end-of-period, December 19, 1990 = 100) 2/	2,214	3,389	3,704	3,250	3,463
Stock exchange capitalization (percent of GDP)	51.6	70.3	94.3	92.0	95.3
Number of listed companies (A-share)	2,468	2,592	2,808	3,034	3,467
Balance of payments					
Exports (annual percentage change, U.S. dollars)	8.9	4.4	-4.5	-7.2	11.4
Imports (annual percentage change, U.S. dollars)	7.7	1.1	-13.4	-4.2	16.0
Current account balance (percent of GDP)	1.5	2.2	2.7	1.8	1.4
Capital and financial account balance (percent of GDP)	3.6	-0.5	-3.8	-3.7	1.2
Of which: gross foreign direct investment inflows	3.0	2.5	2.2	1.6	1.4
Foreign Exchange Reserve					
In Billions of U.S. Dollars 3/	3,880	3,899	3,406	3,098	3,236
Coverage in terms of:					
Imports (in months)	24.0	22.1	18.2	18.6	20.0
Broad money (percent)	21.7	19.5	15.2	13.3	13.0
Short-term external debt by remaining maturity (percent)	323	297	384	356	294
ARA (range) 4/	154-383	137-331	119-316	106-284	96-253
External debt and balance sheet indicators					
Total external debt (percent of GDP)	15.9	17.0	12.3	12.6	14.2
Total external debt (billions of U.S. dollars)	1,533	1,788	1,383	1,416	1,711
Short-term external debt by original maturity (billions of U.S. dollars)	1,202	1,311	887	871	1,099
Net foreign assets of banking sector (billions of U.S. dollars)	177	189	444	540	500
Total debt to exports of goods & services (percent)	65.1	72.6	58.6	64.4	70.6
Total debt service to exports of goods & services (percent)	28.9	52.9	37.8	39.9	45.6
Of which: Interest payments to exports of goods & services (percent)	0.2	0.2	0.2	0.2	0.2
Foreign-currency long-term sovereign bond ratings (eop)					
Moody's	Aa3	Aa3	Aa3	Aa3	Aa3
Standard and Poor's	AA-	AA-	AA-	AA-	AA-

Sources: CEIC; Bloomberg; IMF, Information Notice System; and IMF staff estimates.

1/ Estimates of debt levels before 2015 include central government debt and explicit local government debt (identified by MoF and NPC in Sep 2015). The large increase in general government debt in 2014 reflects the authorities' recognition of the off-budget local government debt borrowed previously.

2/ Shanghai Stock Exchange, A-share.

3/ Includes foreign currency reserves and other reserve assets such as SDRs and gold.

4/ Range for the ARA metric under different assumptions of exchange rate regime and capital controls.

Table 4. China: Monetary and Credit Developments

	2011	2012	2013	2014	2015	2016	2017
MONETARY SURVEY							
			(Annual percentage change)				
Net foreign assets	11.3	2.9	8.6	2.6	-2.7	-5.9	-4.0
Monetary authority (contribution)	9.1	1.9	11.7	2.4	-8.6	-9.1	-2.4
Depository institutions (contribution)	2.3	1.0	-3.1	0.3	5.9	3.1	-1.6
Domestic credit	17.1	17.1	15.1	16.2	23.7	20.1	11.3
Claims on government, net (contribution)	1.3	1.2	-0.2	0.6	4.0	4.8	2.7
Claims on nonfinanical sectors (contribution)	13.4	13.6	12.7	11.4	13.8	8.6	7.7
Claims on other financial sectors (contribution)	2.4	2.3	2.6	4.1	5.9	6.6	0.9
Broad money (M2)	17.3	14.4	13.6	11.0	13.3	11.3	8.2
M1 (contribution)	3.2	2.2	2.9	1.0	4.3	6.1	3.7
Quasi-money (contribution)	14.1	12.2	10.7	10.0	9.0	5.2	4.5
Reserve money	21.2	12.3	7.4	8.5	-6.0	11.8	4.2
TOTAL SOCIAL FINANCING							
			(In percent)				
TSF 1/	18.1	19.1	17.5	14.3	15.0	16.1	13.0
Bank loans (contribution)	12.1	11.5	10.0	9.2	8.8	8.5	8.3
Shadow banking (contribution)	3.1	4.0	5.1	2.3	0.6	0.9	2.2
Net corporate bond financing (contribution)	2.1	3.0	2.0	2.2	2.4	2.3	0.3
Non-financial enterprise equity (contribution)	0.7	0.3	0.2	0.4	0.6	0.9	0.5
Others (contribution)	0.2	0.2	0.2	0.2	0.0	0.0	0.1
			(In percent of GDP)				
TSF 1/	157.9	169.0	180.0	189.8	202.2	220.1	228.4
Bank loans	117.3	121.8	125.7	131.2	137.0	144.6	149.6
Shadow banking	23.0	26.4	31.7	33.1	31.7	31.4	33.2
Net corporate bond financing	10.7	13.8	15.6	18.1	20.9	24.0	22.6
Non-financial enterprise equity	6.0	5.8	5.6	5.9	6.5	7.7	8.2
Others	0.9	1.1	1.4	1.6	1.5	1.4	1.4
MEMORANDUM ITEMS							
			(In percent)				
Nonperforming loans ratio	1.0	1.0	1.0	1.3	1.7	1.7	1.7
Provision coverage ratio (provisions/NPLs)	278.1	295.5	282.7	232.1	181.2	176.4	181.4
Liquidity ratio (liquid assets/liquid liabilities)	43.2	45.8	44.0	46.4	48.0	47.6	50.0
Loan to deposit ratio	64.9	65.3	66.1	65.1	67.2	67.6	70.6
Return on assets	1.3	1.3	1.3	1.2	1.1	1.0	0.9
Return on equity	20.4	19.9	19.2	17.6	15.0	13.4	12.6
Capital adequacy ratio	...	...	12.2	13.2	13.5	13.3	13.7
Tier 1 capital adequacy ratio	...	...	10.0	10.8	11.3	11.3	11.4
Core tier 1 capital adequacy ratio	...	...	10.0	10.6	10.9	10.8	10.8
Net open FX position (in percent of capital)	4.6	3.9	3.7	3.5	3.7	3.5	2.5

Sources: Haver Analytics; and IMF staff estimates.

1/ After adjusting for the local government debt swap.

Table 5. China: General Government Fiscal Data

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
							Projections					
							(In RMB billions)					
Balance: General Budgetary (official)												
(1)	**Revenue (incl. adjustments) (1a)+(1b)**	13036	14137	16032	16688	18271	18603	20638	22365	24186	26217	28299
(1a)	Headline revenue	12921	14037	15227	15960	17257	18318	20325	22020	23806	25800	27840
(1b)	Adjustments 1/	115	100	806	727	1014	285	314	345	380	418	459
(2)	**Expenditure (incl. adjustments) (2a)+(2b)**	14276	15497	17658	18854	20651	20983	23255	25230	27292	29543	31806
(2a)	Headline expenditure	14021	15179	17588	18776	20333	20983	23084	25042	27085	29316	31556
(2b)	Adjustments 2/	255	319	70	78	318	0	171	188	207	227	250
(3)	**Fiscal balance (official) (1)-(2)**	-1240	-1360	-1626	-2166	-2380	-2380	-2616	-2865	-3106	-3326	-3507
Balance: General Budgetary (Fund definition)												
(4)	**Revenue (1a)+(4a)+(4b)**	16538	18158	19949	21048	23053	25411	27786	29871	32067	34492	36987
(4a)	Social security revenue	3452	3919	4466	4827	5538	6809	7150	7507	7883	8277	8691
(4b)	SOE fund revenues 3/	165	202	256	260	258	284	312	343	378	415	457
(5)	**Expenditure (2a)+(5a)+(5b)+(5c)**	18651	20463	23199	25308	28341	31084	33650	35975	38232	40914	43676
(5a)	Social security expenses	2862	3367	3936	4392	4895	6454	6841	7252	7687	8148	8637
(5b)	SOE fund expenditures 3/	151	200	208	217	201	227	250	275	303	333	366
(5c)	Managed funds' expenditure financed by land sales, bond issuance or carryover 4/	1617	1717	1467	1923	2912	3419	3475	3406	3157	3117	3116
(5d)	of which: net expenditure financed by land sales	1617	1717	1302	1498	2082	2030	1922	1775	1527	1405	1319
(6)	**Net borrowing/lending (Fund definition) (4)-(5)+(5d)**	-497	-587	-1948	-2762	-3207	-3642	-3942	-4329	-4638	-5016	-5370
Balance: Augmented (staff estimates of general government)												
(7a)	Additional infrastructure spending financed by LGFV debt	4061	4072	3421	3417	3768	3955	4363	4501	4817	5010	5409
(7b)	Additional spending of special construction (SCF) and gov't guided funds (GGF)	0	-29	469	1566	1825	1813	2172	2485	2593	2651	2784
(8)	**Augmented net lending/borrowing (6)-(7a)-(7b) 5/**	-4558	-4630	-5838	-7744	-8799	-9411	-10477	-11315	-12049	-12678	-13562
Debt: General government												
(9)	**General budgetary debt (official) (10)+(11)**	9536	24966	25417	27362	29948	33621	37728	42155	46815	51770	56984
(10)	Central government debt 6/	8675	9566	10660	12007	13477	15251	17458	19984	22745	25800	29113
(11)	Explicit local government debt 7/	862	15400	14757	15356	16471	18370	20270	22170	24070	25970	27870
(11a)	Non-swap LG bonds	862	1162	1624	2550	3664	5564	7464	9364	11264	13164	15064
(11b)	Other recognized LG debt	0	14238	13133	12806	12806	12806	12806	12806	12806	12806	12806
(12)	Additional LGFV debt likely/possible to be recognized 8/	19155	8698	12331	15755	19606	23531	27728	32131	36926	41998	47562
(13)	Additional debt tied to SCF and GGFs 9/	0	174	1806	3118	5247	6767	8667	10567	12467	14367	16267
(14)	**Augmented debt (9)+(12)+(13)**	28691	33837	39554	46236	54801	63919	74123	84853	96208	108135	120813
Memorandum items:												
(16)	Augmented excluding "possible to be recognized" 10/	22086	25835	28710	32940	38094	44384	51291	58655	66513	74851	83776
							(In percent of GDP) 11/					
Balance: General Budgetary (official)												
(1)	**Revenue (incl. adjustments) (1a)+(1b)**	21.8	21.8	22.9	22.4	22.5	21.1	21.5	21.4	21.4	21.5	21.5
(1a)	Headline revenue	21.6	21.7	21.8	21.4	21.3	20.7	21.1	21.1	21.0	21.1	21.1
(1b)	Adjustments 1/	0.2	0.2	1.2	1.0	1.2	0.3	0.3	0.3	0.3	0.3	0.3
(2)	**Expenditure (incl. adjustments) (2a)+(2b)**	23.9	23.9	25.3	25.3	25.4	23.8	24.2	24.2	24.1	24.2	24.1
(2a)	Headline expenditure	23.5	23.5	25.2	25.2	25.0	23.8	24.0	24.0	23.9	24.0	23.9
(2b)	Adjustments 2/	0.4	0.5	0.1	0.1	0.4	0.0	0.2	0.2	0.2	0.2	0.2
(3)	**Fiscal balance (official) (1)-(2)**	-2.1	-2.1	-2.3	-2.9	-2.9	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7
Balance: General Budgetary (fund definition)												
(4)	**Revenue (1a)+(4a)+(4b)**	27.7	28.1	28.5	28.2	28.4	28.8	28.9	28.6	28.3	28.2	28.0
(4a)	Social security revenue	5.8	6.1	6.4	6.5	6.8	7.7	7.4	7.2	7.0	6.8	6.6
(4b)	SOE fund revenues 3/	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
(5)	**Expenditure (2a)+(5a)+(5b)+(5c)**	31.2	31.6	33.2	33.9	34.9	35.2	35.0	34.4	33.8	33.5	33.1
(5a)	Social security expenses	4.8	5.2	5.6	5.9	6.0	7.3	7.1	6.9	6.8	6.7	6.5
(5b)	SOE fund expenditures 3/	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
(5c)	Managed funds' expenditure financed by land sales, bond issuance or carryover 4/	2.7	2.7	2.1	2.6	3.6	3.9	3.6	3.3	2.8	2.6	2.4
(5d)	of which: net expenditure financed by land sales	2.7	2.7	1.9	2.0	2.6	2.3	2.0	1.7	1.4	1.2	1.0
(6)	**Net borrowing/lending (Fund definition) (4)-(5)+(5d)**	-0.8	-0.9	-2.8	-3.7	-3.9	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1
Balance: Augmented (staff estimates of general government)												
(7a)	Additional infrastructure spending financed by LGFV debt	6.8	6.3	4.9	4.6	4.6	4.5	4.5	4.3	4.3	4.1	4.1
(7b)	Additional spending of special construction (SCF) and gov't guided funds (GGF)	0.0	0.0	0.7	2.1	2.2	2.1	2.3	2.4	2.3	2.2	2.1
(8)	**Augmented net lending/borrowing (6)-(7a)-(7b) 5/**	-7.6	-7.2	-8.4	-10.4	-10.8	-10.7	-10.9	-10.8	-10.7	-10.4	-10.3
Debt: General government												
(9)	**General budgetary debt (official) (10)+(11)**	16.0	38.6	36.4	36.7	36.9	38.1	39.3	40.4	41.4	42.4	43.2
(10)	Central government debt 6/	14.5	14.8	15.2	16.1	16.6	17.3	18.2	19.1	20.1	21.1	22.1
(11)	Explicit local government debt 7/	1.4	23.8	21.1	20.6	20.3	20.8	21.1	21.2	21.3	21.3	21.1
(11a)	Non-swap LG bonds	1.4	1.8	2.3	3.4	4.5	6.3	7.8	9.0	10.0	10.8	11.4
(11b)	Other recognized LG debt	0.0	22.0	18.8	17.2	15.8	14.5	13.3	12.3	11.3	10.5	9.7
(12)	Additional LGFV debt likely/possible to be recognized 8/	32.1	13.4	17.6	21.1	24.1	26.7	28.9	30.8	32.6	34.4	36.1
(13)	Additional debt tied to SCF and GGFs 9/	0.0	0.3	2.6	4.2	6.5	7.7	9.0	10.1	11.0	11.8	12.3
(14)	**Augmented debt (9)+(12)+(13)**	48.1	52.3	56.6	62.0	67.5	72.4	77.1	81.3	85.0	88.5	91.6
Memorandum items:												
(16)	Augmented excluding "possible to be recognized" 10/	37.0	39.9	41.1	44.2	46.9	50.3	53.4	56.2	58.8	61.3	63.5

Sources: CEIC, Data Co. Ltd.; China Ministry of Finance; NAO; and IMF staff estimates and projections.

1/ Includes central and local governments' transfers to general budget from various funds, carry-over.

2/ Includes adjustments for local government balance carried forward, redemption of local government bonds prior to 2014 and government bond issued under government managed funds.

3/ Including only revenues/expenditures for the year, and excluding transfers to general budget and carry over.

4/ Includes carry over counted as revenue, adjustments to local government spending, proceeding from issuing special purpose bonds, and net expenditure financed by land sales estimated by subtracting the acquisition cost, compensation to farmers, and land development from the gross land sale proceeds.

5/ The overall net lending/borrowing includes net land sale proceeds as a decrease in nonfinancial assets recorded above the line.

6/ Ministry of Finance debt only, excludes bonds issued for bank recapitalization and asset management companies.

7/ Includes local government bonds and explicit debt.

8/ 10% of government contingent debt in 2014. Contingent debt in 2014 is estimated using LGFV total debt minus explicit LG debt of 15.4 Tr. Thereafter, 2/3 of new contingent debt are assumed likely to be recognized as general

9/ Total social capital constribution to SCF and GGFs.

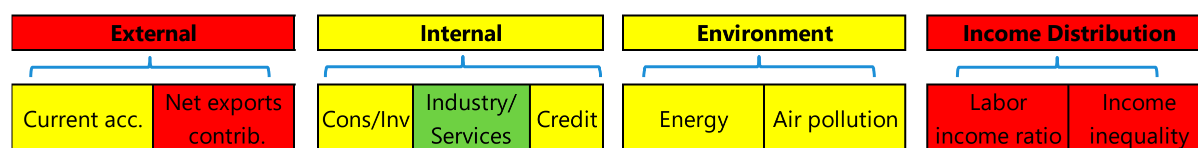
10/ Includes only 2/3 of LGFV debt, being categoried as government explicit debt according to NAO report (2013), and excludes the rest 1/3, being categorized as government guaranteed debt or "possible to be recognized" debt.

Table 6. China: Non-financial Sector Debt

	(In RMB trillions)				*(In percent of GDP)*				Coverage	
	2014	2015	2016	2017	2014	2015	2016	2017		
Total non-financial sector debt	134	155	180	206	207	222	242	253		
Central government	9.6	10.7	12.0	13.5	14.8	15.2	16.1	16.6	Official Government Debt	Staff Estimate of General Government Debt ("Augmented")
Local government										
Regular financing	1.2	1.6	2.5	3.7	1.8	2.3	3.4	4.5		
Former LGFV debt 1/	14.2	13.1	12.8	12.8	22.0	18.8	17.2	15.8		
Local government financing vehicles (LGFV)										
Debt left from 2014 audit	8.7	8.7	8.7	8.7	13.4	12.4	11.6	10.7		
New borrowing in 2015-17 (staff estimate) 2/	0.0	3.7	7.1	10.9	0.1	5.3	9.5	13.5		
Government funds 3/	0.2	1.8	3.1	5.2	0.3	2.6	4.2	6.5		
Households	23	27	33	40	35	38	44	49		Private Sector Debt
Corporates (excluding LGFV)	78	89	101	111	120	127	136	136		
Domestic	73	85	97	106	113	121	130	131		
External	4.3	4.0	4.4	4.4	6.7	5.7	5.9	5.4		
Memo items:										
Total domestic non-financial sector debt	130	151	176	201	201	216	236	248		
Corporates (including LGFVs)	86	101	117	130	133	144	157	161		
of which LGFVs	9	12	16	20	13	18	21	24		
Households	23	27	33	40	35	38	44	49		
General government (Official definition)	25	25	27	30	39	36	37	37		
Government funds 3/	0.2	1.8	3.1	5.2	0.3	2.6	4.2	6.5		
Nominal GDP	64.7	69.9	74.6	81.2						

Sources: CEIC Data Co., Ltd.; Ministry of Finance; and IMF staff estimates.
1/ LGFV debt recognized as LG debt as of 2014 (by the 2014 audit).
2/ New LGFV borrowing estimate for 2015-17 is based on infrastructure fixed asset investment data.
3/ Government guided funds (GGF) and special construction funds (SCF). Social capital portion only. Assumed to be included in corporate debt.

Table 7. China: Rebalancing Scorecard



Rebalancing Score Card Summary Indicators

	Unit	2014	2015	2016	2017
1. External rebalancing					
Contribution of net exports to GDP growth	%	0.4	-0.1	-0.6	0.6
Current account balance	% of GDP	2.2	2.7	1.8	1.4
FX reserve coverage	months of imports	22.1	18.2	18.6	20.0
National saving rate	% of GDP	49.0	47.5	45.9	45.8
2. Internal rebalancing					
Demand side					
Growth contribution of consumption vs investment	%	1.0	1.4	1.5	1.8
Share of private consumption (Nominal)	% of GDP	37.5	38.0	39.4	39.1
Share of investment (Nominal)	% of GDP	46.8	44.7	44.1	44.4
Supply side					
Growth contribution of Tertiary vs Secondary sector	%	1.0	1.3	1.5	1.6
Share of Tertiary sector (Nominal)	% of GDP	47.8	50.2	51.6	51.9
Share of Tertiary sector in total employment	%	40.6	42.4	44.2	45.9
Credit Side					
Private credit	% of GDP	149	159	174	180
Credit intensity		3.3	4.0	5.3	3.9
Return on asset: SOE - private	%	-7.1	-7.7	-7.7	-5.6
3. Environmental rebalancing					
Energy intensity of output	per unit of output	86.2	83.0	82.2	79.8
PM 2.5 (Weighted by usual residence)	mcg per cubic metre	...	56.0	49.8	48.0
4. Income distribution					
Gini	index number	0.47	0.46	0.47	0.47
Labor income	% of GDP	60.4	60.5	61.0	60.6
Urban/rural income gap	income ratio	2.75	2.73	2.72	2.71
Real disposable income growth: Median – Mean	%	4.4	2.3	2.0	0.0

Sources: CEIC and IMF staff estimates and projections.

Note: The color coding is based on the change in each indicator from 2016 to 2017. Color coding: red if the changes go in the opposite direction of rebalancing; yellow if some progress was observed; and green if there was substantial progress in rebalancing.
For indicators that are ratios, changes are measured in simple differences and are considered substantial if larger than 0.5 percentage points. For indicators that are indices and for the credit indicators, changes are measured in annual percent change and are considered substantial if larger than 5 percent

Table 8. China: SOE Performance

Dimention	Indicator	2012	2013	2014	2015	2016	2017
	(In percent unless otherwise indicated)						
Profitability	Return on assets SOEs	2.7	2.6	2.4	1.9	1.8	1.9
	Return on assets industrial SOEs	4.6	4.4	4.0	2.9	2.9	3.9
	Return on assets industrial private	13.2	12.4	11.1	10.6	10.6	9.5
	Share of loss-making industrial SOEs	24.5	25.5	27.4	29.8	26.8	24.7
	Share of loss-making industrial private	8.1	8.0	8.4	9.6	8.8	9.0
Efficiency	Cost per unit of income -SOE		96.6	97.1	97.9	98.0	97.1
Leverage	Debt to equity SOEs	181.9	186.6	187.1	197.0	194.8	191.8
	-Central	186.9	191.7	191.2	212.2	218.3	213.2
	-Local	176.2	181.1	182.8	181.0	172.3	176.0
	Debt to Equity -Industrial	137.2	137.0	131.7	128.2	126.2	124.6
	Debt to equity industrial SOEs	157.1	162.5	159.5	158.7	158.9	152.3
	Debt to equity industrial private	117.8	114.7	108.3	105.1	102.7	106.5
	Debt to asset SOE	64.3	64.5	64.7	65.7	66.1	65.7
	-Central	65.1	65.8	65.7	68.1	68.6	68.0
	-Local	63.4	63.3	63.8	63.7	63.3	63.8
	Debt to Asset -Industrial	57.8	57.8	56.8	56.2	55.8	55.5
	Debt to asset industrial SOEs	61.1	61.9	61.5	61.4	61.4	60.4
	Debt to asset industrial private	54.1	53.4	52.0	51.2	50.7	51.6
	Number of zombies 1/				2041	1621	421
	Number of Bankruptcies	1521	1929	2031	3568	5665	8984
Corporate governance	Central SOEs with board of directors		52	74	85	85	87
	Number of Central SOEs 2/	116	113	112	106	102	98
	Dividend payments to budget	6.8	7.1	8.1	11.1	11.3	
SOEs share in the economy	Employment	18.4	16.6	16.1	15.4	14.9	
	Industrial Sales	26.5	25.1	23.4	21.4	20.3	22.2
	Asset(industrial SOEs/total industrial)	41.1	40.3	38.2	38.3	37.9	37.8
	Liability(industrial SOEs/total industrial)	43.4	43.1	41.3	41.9	41.7	41.2

Sources: WIND, NBS, Ministry of Finance.

1/ Number of zombies refers to legal entities of central SOEs.

2/ There are 98 central SOEs and 44000 legal entities affilicated to these SOEs by 2017.

Appendix I. External Sector Report

	China
Foreign asset and liability position and trajectory	**Background**. The net international investment position (NIIP) remains positive, but has declined to 15 percent of GDP by end-2017 after peaking at 33 percent of GDP in 2007. This deterioration is driven by a reduction in the current account (CA) surplus, valuation changes, and sustained high GDP growth. Gross foreign assets (58 percent of GDP by end-2017) are dominated by foreign reserves, while gross liabilities (43 percent of GDP) mainly reflect inward FDI. Reserve assets reached US$3.2 trillion by end-2017 (about 27 percent of 2017 GDP), which is about US$138 billion higher than in 2016. **Assessment**. The NIIP-to-GDP ratio is expected to remain strong, with a modest decline over the medium term, in line with projected CA surpluses. The NIIP is not a major source of risk at this point, as assets remain high—reflecting large foreign reserves—and liabilities are mostly FDI-related. Capital outflow pressures have subsided, partially supported by capital flows management measures (CFMs), and there are currently no substantial net outflow pressures. Nonetheless, these pressures may resurface and trigger a fall in reserves as the private sector seeks to accumulate foreign assets faster than non-residents accumulate Chinese assets.
Current account	**Background**. The CA surplus continued to decline, reaching 1.4 percent of GDP in 2017 (1.4 percent of GDP cyclically adjusted), about 0.4 percentage points lower than in 2016. This mainly reflects a shrinking trade balance (driven by high import volume growth), notwithstanding REER depreciation. Viewed from a longer perspective, the CA surplus declined substantially relative to the peak of about 10 percent of GDP in 2007, reflecting strong investment growth, REER appreciation, weak demand in major advanced economies, and, more recently, a widening of the services deficit. **Assessment**. The EBA estimate of the current account norm for 2017 was -0.3 percent of GDP and the EBA-estimated CA gap about 1.7 percent of GDP.1/ The remaining total gap is mostly accounted for by the residual, which reflects factors other than policy gaps identified in the EBA model, including distortions that encourage excessive savings. The contribution of identified policy gaps is, on net, largely mutually offsetting: loose fiscal policy and excessive credit growth contribute to narrowing the CA gap, but this is largely offset by inadequate health spending, capital flow management measures (CFMs), and reserves (which widen the CA gap). Overall, staff assesses the CA to be 0.2 to 3.2 percent of GDP stronger than implied by medium-term fundamentals and desirable policies.
CA Assessment 2017	Actual CA: 1.4 | Cycl. Adj. CA: 1.4 | EBA CA Norm: -0.3 | EBA CA Gap: 1.7 | Staff Adj.: 0.0 | Staff CA Gap: 1.7
Real exchange rate	**Background**. In 2017, the average REER depreciated by about 2.5 percent relative to 2016, driven by the depreciation in the NEER (2.2 percent). Estimates through May 2018 show that the REER has appreciated by 3.4 percent relative to the 2017 average. **Assessment**. The 2017 EBA REER index regression estimates China's REER to be 5.3 percent lower than levels warranted by fundamentals and desirable policies—compared to 2.7 percent higher in 2016.2/ However, this assessment is subject to large uncertainties related to the outlook and shifts in portfolio allocation preferences.3/ Overall, staff assesses the REER to be broadly consistent with fundamentals and desirable policies, with the gap being in the range of -13 to +7 percent. The exchange rate is assessed as being in line with fundamentals, amid a moderately stronger CA, due to the low elasticity of China's CA to changes in the REER (0.23). This largely reflects distortions that encourage excessive savings. These savings, along with potential future capital account liberalization and residents' search for diversification, may lead to the resumption of capital outflow pressures and a weaker exchange rate over the medium term.
Capital and financial accounts: flows and policy measures	**Background**. Net capital outflows declined to US$82 billion in 2017, down from the record highs of US$647 billion in 2015 and US$646 billion in 2016. Net direct investment inflows turned positive in 2017, as FDI inflows remained stable while Overseas Direct Investment declined over 50 percent, reflecting a tightening of CFMs. Net portfolio and other investments also turned positive, but errors and omissions remained negative and persistently high (-1.8 percent of GDP) suggesting that unrecorded capital flows may have evaded the tightening of CFMs. China's capital account remains relatively closed in a *de jure* sense and the authorities have materially increased the enforcement of existing measures to help reduce outflow pressure. More recently, the authorities have loosened some CFMs (such as the reserve requirement on bank's offshore RMB deposits or on bank's FX derivatives positions, both set to zero) and tightened others (such as the limit on overseas RMB withdrawal by payment cards, which now applies on an individual basis and not per card) and have put in place a framework

Overall Assessment

Overall Assessment:
The external position in 2017 was moderately stronger compared with the level consistent with medium-term fundamentals and desirable policies. This reflects the remaining distortions and policy gaps that affect the saving-investment balance, such as inadequate social spending. While the external position was moderately stronger, the renminbi in 2017 was broadly in line with fundamentals and desirable policies. The difference in assessment is due to the distortions affecting the savings-investment balance, which render the CA less sensitive to REER fluctuations. That said, it is important that China address those distortions and the resulting current account gap decisively—doing so would benefit both China and the global economy.

Potential Policy Responses:
External imbalances have declined considerably since the global financial crisis. Achieving a lasting balance in the external position will require continued progress in closing the remaining domestic policy gaps and addressing distortions. Success will move the economy to a more sustainable growth path, with higher consumption and lower overall saving. This can be achieved through successful implementation of the authorities' reform agenda as well as consistent macroeconomic policies. Priorities include improving the social safety net; SOE reform and opening markets to more competition; creating a more market-based and robust financial system; taking steps to attract more inward FDI, including

	to regulate cross-border financing by financial and non-financial corporations to alter the volume and composition of capital flows. **Assessment**. Over the medium term, the sequence of capital control loosening that is consistent with exchange rate flexibility should carefully consider domestic financial stability. Specifically, the further opening of the capital account is likely to create substantially larger *two-way* gross flows. Hence, the associated balance sheet adjustments and the shifts in market sentiment calls for prioritizing the shift to an effective float (while using FX intervention to smooth excessive FX volatility) and strengthening domestic financial stability prior to a substantial further liberalization of the capital account. Efforts should be stepped up to encourage inward FDI, which would generate positive growth spillovers and improve corporate governance standards.	by ensuring that foreign investors receive the same treatment as domestic investors; and achieving a flexible, market-based exchange rate with a better communication strategy. Continuing the move toward a more market-based and transparent monetary policy framework is a key element in ensuring an orderly transition to an effective float, which may also require use of foreign exchange reserves to smooth excessive volatility. China should seek a negotiated settlement to trade disputes that supports and strengthens the international trading system and the global economy.
FX intervention and reserves level	**Background**. FX reserves rose by US$129 billion in 2017 after declining in 2015 and 2016 by US$513 billion and US$320 billion, respectively. Staff estimates suggest that this change mainly reflected valuation changes, return on reserves, and minor net FX purchases accompanying the unwinding of forward positions built in 2016; these estimates are subject to a margin of error which could include no intervention. **Assessment**. Reserves stood at 97 percent of the IMF's composite metric unadjusted for capital controls at end-2017 (down from 106 in 2016); relative to the metric adjusted for capital controls, reserves stood at 157 percent (down from 172 in 2016). The decline of the ratio is driven by higher broad money (M2) growth, external debt, and other liabilities which are driving up the metric. Given that the progress made in capital account liberalization over time was partly reversed by the recent capital account tightening measures, the capital account is considered partially open. Consequently, reserves would be considered adequate in the range indicated by the adjusted and unadjusted metrics. Overall, staff assesses the current level of reserves to be adequate. As the transition to greater flexibility advances, intervention should be limited to smooth excessive volatility.	
	(continued)	
Technical Background Notes	1/ The current account norm for 2017 (-0.3 percent) is lower than in 2016 (0.2 percent) reflecting methodological changes to the EBA framework, including those to better capture institutional quality and demographic effects. For China, the refined institutional quality measure indicates a lower perception of institutional risk—which could discourage excess savings and encourage investment—as captured by the lower contribution of the corresponding coefficient to the fitted current account (0.8 percent in 2017 vs 2.7 percent in 2016). With changes in the contribution of other variables mostly operating in the opposite direction (including demographics), taken together the refinements in methodology result in an overall reduction of China's CA norm by 0.5 percent of GDP relative to 2016. 2/ The EBA REER Level model estimates a total REER gap of 8.0 percent, with identified policy gaps of -6.9 percent. However, the model fit of the EBA REER Level model is very poor for China. 3/ Shifting expectations about monetary and exchange rate policy, re-assessments of the government's reform agenda, or a desire by residents to diversity into foreign assets can trigger large changes in capital flows and exchange rate pressures, even in the absence of significant changes in fundamentals as captured by EBA.	

Appendix II. Risk Assessment Matrix[1]

Likelihood	Impact	Policy Response
	Upside	
	High	
Medium	**1. In the short term, a more dynamic private sector.** China's booming fintech sector and digital economy could present an upside potential to growth as commercialization of digital business models could proceed rapidly, based on the large domestic market, enthusiastic consumers, entrepreneurs and investors eager to adopt new technologies, and strong government support.	
	Medium	
Medium	**2. A decisive shift in focus to sustainable, higher quality growth and a greater role for the market would improve medium term growth prospects.** This would allow for a faster pace of rebalancing, and an improvement in resource allocation and in long run productivity growth.	
	Downside	
	High	
Medium	**1. Uncoordinated tightening**. In the near term, uncoordinated financial and local government regulatory action could have unintended consequences that trigger disorderly repricing of corporate and local government financing vehicle credit risks. Reduced liquidity and higher rollover risk could lead to an excessively sharp acceleration in defaults, and a sharp tightening of local government spending.	• Stay the course on strengthening financial regulation, enhance crisis preparedness, and rein in excessive credit expansion.
	Medium	
Medium	**2. In the short to medium-term, a retreat from cross-border integration.** A fraying consensus about the benefits of globalization could lead to protectionism and economic isolationism, resulting in reduced global and regional policy collaboration with negative consequences for trade, capital and labor flows, sentiment, and growth.	• Mitigate trade tensions by seeking a negotiated settlement, and continue to support multilateralism and the global trading system.
High/Low	**3. In the short to medium-term, an abrupt change in global risk appetite leading to capital outflows.** Pressure on the exchange rate could resume because of an abrupt change in global risk appetite, given the backdrop of continued monetary policy normalization in advanced economies. Higher debt service and refinancing costs could stress leveraged borrowers. In an extreme scenario, the pressure could lead to renewed large reserve losses and eventually a potentially disruptive exchange rate depreciation.	• Move toward effectively floating exchange rate, and limit intervention to mitigate disorderly market conditions.
Medium	**4. In the medium-term, a stronger role of the state and high growth targets.** This would result in continued reliance on government and SOE investment, and slower rebalancing and productivity growth. The accompanying continued buildup of debt would erode policy buffers and raise the risk of a sharp slowdown or a financial crisis.	• Enhance reforms to switch growth engines from investment/state to consumption/private sector.

1/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 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 between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Appendix III. Implementation of Main Recommendations of the 2017 Article IV Consultation

Announced Reform Measures since June 2017	Date
Tackling financial sector risks	
Institutional reforms	
A high-level Financial Stability and Development Committee (FSDC) was established to coordinate financial regulation and supervision across agencies.	Jul 2017
Integration of CBRC and CIRC into the China Banking and Insurance Regulatory Commission (CBIRC). The responsibility of formulating important laws/regulations for banking and insurance sectors and the macroprudential policies was shifted from CBRC and CIRC to the PBC.	Mar 2018
Financial de-risking measures	
CBRC issued several documents to strengthen the regulation on bank-trust related business and entrusted loans to rein in their rapid growth.	Dec 2017, Jan 2018
CIRC tightened rules on insurers' private equity investment schemes to prevent insurers from turning private equity investment into lending.	Jan 2018
Financial regulators jointly released a guideline for the asset management business to address regulatory gaps across different types of asset management products	Apr 2018
Financial regulators jointly released a guideline to strengthen supervision on nonfinancial firms' investment in financial institutions	Apr 2018
CBIRC issued new rules to strengthen banks' liquidity management	May 2018
CBIRC released a document to cap banks' risk exposure to single clients.	Jun 2018
PBC and CSRC imposed limits on the same-day redemption (T+0) of money market funds to limit liquidity risks in the money market.	Jun 2018
Progress toward more market-based monetary and exchange rate policies	
Monetary policy: less reliance on quantitative targets and efforts to improve communication	
PBC improved communication on the short-term interbank rates to better guide market liquidity through an interest rate corridor.	Dec 2017
The quantitative targets for M2 and total social financing (TSF) were abolished.	Mar 2018

PBC pledged to improve its information disclosure as part of steps to make its policymaking process more transparent.	May 2018
Exchange rate policy: more market-determined mechanism for the fixing	
The counter-cyclical adjustment factor was phased out.	Dec 2017
Capital account liberalization	
Bond Connect between China and Hong Kong SAR was launched, which allowed foreign fund managers to trade in China's debt market without having to set up onshore accounts.	Jul 2017
Reserve requirements on bank's FX derivatives and offshore RMB deposits were set to zero.	Sep 2017
The *Qualified Domestic Limited Partnership (QDLP)* scheme was resumed after a two-year halt.	Dec 2017
The ceiling on the leverage ratio for non-financial enterprises' external borrowing was relaxed.	Jan 2018
Regulations related to *Overseas Direct Investment (ODI)* were relaxed, including by abolishing the approval requirement for ODI above US$1 billion in non-sensitive projects.	Mar 2018
Quotas under the *Qualified Domestic Institutional Investor (QDII)* scheme were increased for the first time since 2015.	Apr 2018
The daily quota for stock connect schemes linking mainland and Hong Kong markets was quadrupled.	Apr 2018
The dollar-denominated *Qualified Foreign Institutional Investor (QFII)* and the *RMB Qualified Foreign Institutional Investor (RFQII)*, were modified to ease restrictions on foreign institutional investors' outflow of funds from China.	Jun 2018
Fostering greater openness	
Opening-up measures	
The government announced plans to open financial services to foreign investment including raising the foreign ownership cap on futures firms, securities companies and fund managers to 51 percent, and removing the cap in three years.	Nov 2017
PBC allowed foreign-owned payment service providers to start business in China.	Mar 2018

The government announced plans to comprehensively open manufacturing sectors to foreign competitors, with better protection for intellectual property rights, and further widen market access to sectors including telecom, education, healthcare, elderly care, and financial services.	Mar 2018
The government announced plans to issue a new "negative list" to ease or cancel existing restrictions on foreign investment in sectors including energy and transportation.	Jun 2018
Tariff reductions	
Import tariffs were cut from an average of 17.3 percent to 7.7 percent on a selection of consumer goods such as food, health products, medicines, clothes and shoes.	Dec 2017
Tariffs on automotive vehicles were cut from 25 percent to 15 percent, and from 10 percent to 6 percent for auto parts.	May 2018
China will cut import tariffs on 1499 consumer goods items, including apparel, cosmetics, home appliances, and fitness products, with average tariff down from 15.7 to 6.9 percent, starting from July 1, 2018.	May 2018
Structural reforms to deliver higher quality growth	
Corporate deleveraging	
Central SOEs face more strict restrictions on leverage, and are required to reduce average asset liability ratio by 2 percentage points by 2020.	Aug 2017, Jan 2018
Plans to set up a special fund of 100 billion yuan ($15.19 billion) by 2018H1 to accelerate mixed ownership reform, and encourage M&A.	Nov 2017
The State Council announced a plan to set up a scheme to share zombie companies' bankruptcy loss among shareholders, banks and the government to speed up zombie exits.	Feb 2018
The State-owned Assets Supervision and Administration Commission (SASAC) tightened the debt ceiling for central SOEs by 5 percentage points to 60-70 percent.	Mar 2018
Reducing overcapacity	
The government announced coal and steel capacity reduction targets for 2018.	Mar 2018
Tackling pollution	

Production of heavily polluting industries was curbed during the winter to meet air quality targets.	2017-18
The government started collecting an environmental tax to better protect the environment and cut pollutant discharge.	Jan 2018
Making fiscal policies more sustainable and progressive	
Tackling local government debt	
The National Development and Reform Commission (NDRC) and the Ministry of Finance (MOF) announced a ban on local governments guarantees for enterprise bonds.	Feb 2018
MOF published a notice to regulate state-owned financial institutions' investment and fund-providing for local governments.	Mar 2018
MOF published a notice on further strengthening regulation and management of PPP projects.	Apr 2018
MOF published a notice on further strengthening regulation of local government bond issuance.	May 2018
Enhancing social protection	
The State Council published guidelines on supporting private sector to provide multi-tiered and diversified healthcare services.	May 2018
The government will establish a central pension fund adjustment mechanism to balance the payment burden of local governments, to be implemented beginning from July 1.	Jun 2018
Tax policy	
The government proposed to the National People's Congress to raise the personal income tax threshold and allow for special expense deductions, including spending on major diseases, child education, mortgage interest payment etc.	Jun 2018
The government unified the multiple VAT rates and VAT rates on the manufacturing, transportation, construction, telecommunication and agricultural sectors were lowered from May 1, 2018.	May 2018
Addressing central-local fiscal imbalance	

The government announced inter-government sharing plans to allow the central government to take some responsibility of local governments' social spending from 2019 and onwards.	Feb 2018
Some integration of the national and the local tax systems was announced.	Mar 2018
Enhancing transparency and communication	
NBS published a new quarterly series on survey-based unemployment rate.	2017-18
It was announced that the National Bureau of Statistics will take over data collection at the regional level from 2019.	Oct 2017

Appendix IV. Implementation of Main Recommendations from the 2017 FSAP

The authorities launched comprehensive regulatory and institutional reforms that are closely aligned with the recommendations of the recent 2017 Financial Sector Assessment Program (FSAP). The reforms are all-encompassing and affect the organization, management, and oversight of the financial sector. Their main objectives are to improve interagency coordination, close regulatory and supervisory gaps, and contain systemic risks.

The reforms can be grouped into two broad categories. First, the government initiated an institutional reorganization that merged the insurance and banking regulators and transferred some regulatory formulation powers to the People's Bank of China (PBC). The newly created financial stability and development commission (FSDC) will further enhance coordination, information sharing, and the monitoring of systemic risks. Second, significant new regulations on financial intermediaries and their activities are being phased in gradually, including the guideline on asset management business new bank liquidity requirements, and a new framework for the evaluation of insurance companies. Recent microprudential regulations are also aligned with FSAP recommendations and include measures to limit the growth of WMPs; measures aimed at reducing bank reliance on negotiable certificates of deposit; changes in loan loss provisioning rules and measures to facilitate disposal of NPLs; and other measures, such as those aimed at strengthening the management of entrusted loans.

Main FSAP Recommendations	Priority [1]	Time-frame[1]	Measures Adopted[2]
Macroeconomic recommendations			
De-emphasize high GDP growth projections in national plans that motivate setting high-growth targets at the local level.	H	NT	• The GDP growth target of China by its nature is an indicative target based on comprehensive consideration of domestic and international economic situations, instead of a binding target. The Chinese government has set its indicative target for GDP growth in 2018 at around 6.5%, which is lower than the actual growth rate of last year. This target not only takes into account the need for achieving final success in building a well-off society, but is also in line with the reality that the Chinese economy has advanced from high-speed growth to high-quality development.

[1] Highest, near-term action (H, NT); Highest, medium-term action (H, MT); Medium (M).

[2] Information as reported by the authorities, with IMF staff providing translation.

Systemic Risk, Macroprudential Policy, and Strengthening Oversight			
Create a new Financial Stability Sub-Committee (FSS-C) with the sole function of preserving financial stability.	H	NT	• The purpose of establishing the Financial Stability and Development Committee is to further strengthen the coordination of financial oversight, effectively prevent financial risks, promote the healthy development of the financial industry, and maintain the stability of the financial system. At present, since the Committee is still new, its operational apparatus is to be gradually improved. The General Office of the Committee has started holding regular meetings to conduct in-depth analysis of the risks in the financial system and formulate plans to resolve and address more prominent financial risks.
Establish robust mechanisms for cooperation, coordination, and exchange of information—including granular financial data—with domestic and foreign safety-net participants.	H	NT	• The People's Bank of China (PBC) and China Banking and Insurance Regulatory Commission (CBIRC) have established an information sharing mechanism and use this mechanism to obtain more off-site information for supervision. The PBC also informs the CBIRC in a timely manner of problems identified in on-site inspections of deposit insurance and in the process of risk monitoring. • The China Securities Regulatory Commission (CSRC) has established a mechanism for regular exchange of risk monitoring information with relevant authorities and regularly shares data on the securities fund industry with them. • The CBIRC is actively promoting cross-border information exchange and regulatory cooperation on global systemically important financial institutions (G-SIFIs). As for the banking sector, a joint meeting of the core regulators of four Global Systemically Important Banks (G-SIBs) was held in 2017 and there were also bilateral consultations with some foreign regulators. Information on corporate governance, financial conditions, risk profile, regulatory concerns and other issues concerning these banks was fully shared during the meeting. As for the insurance sector, a memorandum of understanding on insurance regulation was signed with Guernsey Financial Services Commission in 2017 and a framework agreement on equal effectiveness of solvency assessments was signed with Hong Kong Insurance Authority in the same year. The work on the equal effectiveness of solvency regulation has

			formally begun and four joint working meetings have been held so far.
Trigger the countercyclical capital buffer, and review banks' capital requirements with a view to a targeted—and in some cases substantial—increase in capital.	H	NT	• The macroprudential capital adequacy ratio adopted in the macroprudential assessment (MPA) is one of the core indicators in the assessment and mainly influenced by the growth rate of broad credit, target GDP and CPI increase. The indicator is a reflection of the concept of countercyclical capital buffer in Basel III and serves to guide financial institutions in aligning the growth rate of broad credit with the macroprudential capital requirements. The relevant government authorities are currently preparing countercyclical regulatory capital standards and have begun to continuously monitor the capital adequacy ratio of banks.
Amend primary laws to strengthen operational and budgetary autonomy of the People's Bank of China (PBC) and the regulatory agencies, and increase their resources.	H	MT	• The PBC is pushing forward the adoption and amendment of some major financial laws and regulations such as the People's Bank of China Law in accordance with the financial reform arrangements by the central government. • In July 2017, the Fifth National Financial Work Conference proposed to optimize the allocation of regulatory resources, strengthen the regulatory offices, especially the field-level regulatory capacity, and increase regulatory and law enforcement capabilities. At present, in the context of the reform and institutional development of the financial regulatory system, the CBIRC and the CSRC are working together to vigorously strengthen communication and coordination with relevant authorities and promote the implementation of the related requirements of the central government on strengthening the regulatory authorities. For example, as for human resources, the CBIRC is making great efforts to broaden the channels of recruitment to hire regulatory personnel with outstanding qualifications; and strengthen education, training and on-job training to enhance professional capabilities and build a team of highly competent regulatory professionals. • The CBIRC and CSRC are public institutions directly reporting to the State Council, subject to the Civil Servant Law and fully funded by the government budget with all of their expenditures covered by allocations from the Ministry of Finance. For example,

			as for financial resources, the 2017 budget of the CBIRC approved by the Ministry of Finance increased by 299 million yuan from 2016, representing a year-on-year increase of 5.7%.
Address data gaps that impede systemic risk monitoring and effective financial regulation and supervision.	H	MT	• In March 2018, the General Office of the State Council issued the Opinions on Comprehensively Promoting Integrated Statistics on the Financial Industry and requested the PBC to take the lead and work with relevant authorities to establish and continuously improve an integrated statistics system for the financial industry based on "uniform standards, simultaneous data collection, centralized check and verification and aggregating and sharing". The focuses include statistics on cross financial products, SIFIs, financial groups such as financial holding companies and other aspects with the aim of achieving full coverage of financial statistics. • The CBIRC will improve the framework and content of the off-site regulatory report, including strengthening the monitoring of off-balance sheet operations and other non-traditional operations. • The CSRC has further strengthened its information sharing with the PBC, CBIRC, State Administration of Foreign Exchange (SAFE), State Administration of Market Supervision (SAMS) and other ministries and commissions to obtain relevant information such as the types of ownership of institutional investors in the capital market and cross-border capital flows, and further deepen the monitoring and analysis of investors' trading behavior and capital flow.
Review purpose and structure of the PBC's macroprudential assessment (MPA) with a view to simplifying, and use it solely as an input to the deliberations of the FSS-C and its working-level sub-groups.	M		• China attaches great importance to constantly improving its macroprudential policy framework and has put forward a regulatory framework for improving the dual pillars, i.e., sound monetary and macroprudential policies. The Fifth National Financial Work Conference proposed to strengthen the responsibilities of the PBC for macroprudential management and systemic risk prevention. At present, a consensus has reached among various regulatory authorities to make the PBC the lead agency in the implementation of macroprudential policies. MPA is an important experiment and endeavor of the PBC in respect of macroprudential policies and plays an important role in preventing

			systemic financial risks and maintaining financial stability.
Regulation and Supervision: Banks			
Enhance group risk supervision and the ability to supervise banking and wider financial groups, as well as ownership structures, including the identification of ultimate beneficial owners.	H	MT	• The PBC has drafted the Trial Regulatory Measures for Financial Holding Companies by working together with other authorities and will follow established procedures to submit the draft to the State Council for approval. The trial measures emphasize comprehensive, continuous and look-through supervision of financial holding groups by looking at their capital, behavior and risks in accordance with the principle of "putting substance ahead of form". Shareholder qualifications and equity structure will be subject to strict supervision. The equity structure of financial holding companies will be examined by the look-through approach to identify the party in ultimate actual control and beneficial owners as well as their connection with other shareholders or parties acting in concert. The examination of the authenticity of capital sources and compliance with laws and regulations of the use of capital will be strengthened. Investments in financial holding companies are required to be financed using legal and proprietary capital and the capital of such companies will be supervised by the look-through approach to ensure compliance by tracing upwards to the original sources of the capital of such companies and downwards to the capital sources of the financial institutions they invest in. • In April 2018, the PBC worked together with the CBIRC and CSRC to issue the Guidance on Strengthening the Supervision and Regulation of Investment in Financial Institutions by Non-financial Enterprises, in order to strengthen the qualification requirements for controlling shareholders of financial institutions and emphasizing the examination and confirmation of ultimate beneficiaries. • In January 2018, the regulatory authorities issued the Interim Regulatory Measures Regarding Equity in Commercial Banks, in order to strengthen the supervision and regulation of equity in commercial banks and the behavior of commercial bank shareholders. The Measures established a regulatory system based on the look-through approach for commercial banks' major shareholders and their

			controlling shareholders, parties in actual control, related parties, parties acting in concert and ultimate beneficiaries.
Eliminate the use of collateral in loan classification, constrain banks' ability to roll-over credit to non-small and medium enterprise corporate borrowers, and classify all loans overdue by more than 90 days as nonperforming.	H	MT	• The CBIRC intends to further require banks to classify loan risks mainly based on an assessment of debtors' solvency and to regard loans as restructured when they are rolled over or other concessions are made for companies experiencing financial difficulties. Loans (not considering collateral) overdue by more than 90 days will be classified as nonperforming.
Strengthen enforcement of the "look-through" principle.	M		• The Guidance on Regulating the Asset Management Business of Financial Institutions issued in April 2018 established uniform regulatory standards for similar asset management products and adopted a look-through approach in the supervision and regulation of asset management business. Multi-layered nested asset management products should be traced upwards to identify the ultimate investor and downwards to identify the underlying assets. • The CBIRC has asked banks to measure risk-weighted assets in accordance with the look-through principle when determining regulatory capital charge. The principle is also adopted by supervisory policies concerning the credit risk. At the same time, the principle is strictly applied in on-site inspections. In special inspections on corporate governance, the look-through approach is emphasized in the examination of shareholders. In special inspections on shadow banking and cross financial products, the approach requires tracing upwards to identify qualified investors and downwards to underlying assets. In inspections on the effectiveness of risk management and internal control, when interbank wealth and asset management business is involved, the underlying assets should be identified.
Increase liquidity coverage ratio (LCR) coverage for	M		• The rules applied to interbank products in the LCR in China are consistent with the Basel international standards. In December 2017, regulatory authorities

interbank products and for off-balance sheet Wealth Management Products (WMPs).			publicly solicited opinions on the Regulatory Measures for Liquidity Risks of Commercial Banks (Revised Draft for Consultation). At present, the CBIRC is in the process of revising the Measures based on feedbacks and intends to increase the loss rate of off-balance sheet wealth management products from 2.5% to 5%. This change will be reflected in the Measures to be formally released later.
Enhance regulatory reporting requirements to collect more granular supervisory data on banks' investment holdings and provisioning.	M		• The CBIRC has revised the relevant off-site regulatory statements. In the investment operations statement, the revision improved the classification of investment operations, made the grouping of underlying assets more detailed and strengthened look-through information collection on underlying assets. In the asset quality and reserve requirement statement, banks are required to apply a five-level classification to their investment operations using the classification of loans as a reference and reflect reserve provisioning for investment operations.
The China Banking Regulatory Commission (CBRC) should enhance forward-looking integrated risk analysis to identify vulnerabilities, challenge banks, and facilitate ex ante intervention.	M		• The CBIRC is continuously upgrading and updating the Risk Early Warning Analysis Supporting System (REASS) to incorporate more indicators reflecting changes in banking operations and risks, so as to fully reflect banks' risk profile and vulnerability. • Comprehensive data on banking regulatory indicators, operations and management are collected through various information platforms such as the off-site supervision information system, on-site inspection and analysis system, REASS and customer risk early warning system. Various banking risks are identified from multiple dimensions such as routine analysis and advanced capital measurement. Regulatory evaluation is employed to constantly enhance forward-looking risk analysis and achieve "early detection, early warning and early resolution". • We are continuously strengthening off-site analysis and prepare monthly and quarterly analysis reports on bank operations and annual regulatory reports. Quarterly analysis meetings, regulatory interviews, prudential discussions, tripartite talks and other methods are adopted to clearly communicate regulatory intentions and risk warnings to banks. Four major offsite regulatory tools have begun to take shape which include risk assessment reports,

			regulatory rating, enhanced regulatory standards and a regulatory issue detection, rectification, tracking and evaluation system. The interaction between onsite and offsite actions has been strengthened and five regulatory communication mechanisms such as supervisory logs, regulatory talks and regulatory notifications have been developed, thus forming a complete regulatory closed-loop. • Stress testing and work under the internal capital adequacy assessment process (ICAAP) are regularly conducted to provide tailored and differentiated regulatory guidance to individual banks who are more vulnerable. • We will strengthen market analysis and trend research, study potential risks, provide risk alerts, promptly propose effective countermeasures and urge institutions to conduct financial market operations prudently.
Stress Testing			
Substantially enhance and systematize data and information sharing across the three regulatory agencies and the PBC for stress testing and systemic risk assessment purposes. Use more granular supervisory data in stress tests.	H	MT	• In 2018, the PBC will continue carrying out stress tests on banks, including tests on solvency macro scenarios, sensitivity, liquidity risks and contagion risks. The tests will use both internal data from banking institutions and regulatory data. • For the banking sector, the CBIRC plans to use more detailed data when designing banking stress testing programs. For example, detailed data on underlying assets and industries to invest in are used when analyzing the impact of individual investment items. For the insurance industry, the Plan for the Development of Phase II Project of the China Risk Oriented Solvency System (C-ROSS) issued in September 2017 clearly stated that in the phase II project, regulatory rules for stress tests will be further improved and implementation guidelines for the tests will be more detailed in order to further clarify relevant methods and make stress tests more scientific, practical and targeted. • In accordance to the monetary policy of the PBC and related regulatory policies of the CBIRC, the CSRC further refined the uniform hypothetical scenario indicators for stress testing on the securities industry, such as bond default rate assumptions and interest rate assumptions. As for the futures industry, the CSRC issued Measures for Regulatory Risk Indicators

			on Futures Companies in April 2017; organized system-wide trial of regulatory risk reporting and net capital stress testing; provided guidance to the China Futures Association to draft and release the Stress Testing Guidelines for Futures Companies (Trial Version); and required futures companies to establish a routine stress testing mechanism to improve their capability for self-risk management. The CSRC is currently guiding the futures exchanges and the China Futures Market Monitoring Center (CFMMC) in conducting periodic stress testing on the financial status of their members and clients.
Expand the coverage of nonbanks and interconnections significantly for systemic risk assessment, developing and integrating stress testing of collective investment schemes (CIS).	M		• When conducting stress tests on contagion risks, the PBC takes into account the operational interconnection and risk contagion between non-banking institutions and banks. • The CBIRC has taken a series of measures in this regard. Firstly, when designing a stress testing program, the CBIRC took into full consideration the influence of nonbanks, asset management products and off-balance sheet operations on the solvency and liquidity risks of banking institutions from the perspective of systemic risk analysis. Secondly, the CBIRC conducted stress testing on the liquidity and credit risks of trust companies. Thirdly, the Commission took the practicalities of the insurance asset management industry into account and conducted stress testing and quantitative assessment on its products and analyzed their possible impacts on major markets. • The CSRC has established a uniform scenario stress testing mechanism for collective investment schemes of securities fund industry.
Enhance inter-agency coordination and analytical capacity of the stress testing teams.	M		• The PBC, CBIRC and other authorities maintain close consultation and communication on the scope and technical methods of stress testing and other issues. When running stress tests, the PBC designs macro stress scenarios referring to the second-generation macroeconomic econometric model developed by its Research Bureau. As a member of the Stress Testing Working Group under the Basel Committee, the CBIRC regularly participates in the discussions and interactions in the group and organizes stress testing training and exchanges among testers to improve the

			technical and analytical capabilities of stress testing teams. • The CSRC conducted regular discussions on how to refine scenario indicators for stress testing, so as to design assumptions of declines of major stock market indicators and trading volumes in a timely manner based on market conditions, thus improving the relevance and effectiveness of the tests. In addition, the CSRC and CBIRC have established a mechanism for cooperation and sharing of relevant data.
Shadow Banking and Implicit Guarantees			
Make legal and regulatory changes to ensure the bankruptcy remoteness of CIS, including WMPs, in the event of insolvency of the manager or the custodian.	H	MT	• After the issuance of new regulations, such as the Guidance on Regulating the Asset Management Business of Financial Institutions, the CBIRC will actively cooperate with related authorities to develop or revise laws and regulations on related issues. • The Trust Law has made it clear that when a trustee ceases to exist because of dissolution or termination according to the law or declaring bankruptcy, trust assets are not a part of its estate or assets for liquidation. Trust assets of collective fund trusts are independent and bankruptcy remote and not a part of the assets for liquidation. • Article 5 of the Securities Investment Fund Law stipulates that the assets of such funds are inherent assets and independent of the fund manager and custodian. When a fund manager or custodian is being liquidated because of dissolution, termination or declaring bankruptcy under the law, fund assets are not part of its assets for liquidation. In order to ensure that the collective asset management schemes and other products of securities companies subject to the regulation of the CSRC satisfy above-mentioned requirements, the Commission is amending the relevant rules to further clarify that bankruptcy remoteness provisions of the Securities Investment Fund Law apply to collective asset management schemes of securities companies.
Move towards eliminating limits on lending to specific sectors, conditional on eliminating implicit guarantees.	M		• As for the size of a credit loan, there is no longer any restriction on commercial bank lending and these banks may independently adjust their asset structure in line with macroprudential requirements and under the premise that the broad credit growth matches the capital level.

			• As for the direction of credit lending, since 2017, the PBC has been strengthening macro-control, optimizing credit structure, guiding banking institutions in conducting credit loan business in accordance with the principle of keeping risks under control, and encouraging financial institutions to more vigorously support agriculture, farmers and rural areas as well as micro and small enterprises with credits and contribute to the development of the real economy. At the same time, the PBC is working vigorously to guard against and resolve banks' credit risk, provide differentiated treatment to enterprises in overcapacity industries, and satisfy reasonable capital requirements for industrial upgrading and transformation. • The CBIRC is working with the Ministry of Finance and other relevant authorities to take various measures to promote the transformation of local government financing platforms in order to make them market-based. Local governments will no longer assume any form of obligations for the debt of such platforms. The financing platform companies which have completed the transformation will be regarded as an ordinary business concern and access to financing accordingly.
Interventions in asset markets, including housing and the equity market, should be limited to episodes of systemic risk.	M		• The CBIRC attaches great importance to the prevention and control of real estate-related risks and urges banking institutions to strengthen compliance management and risk prevention and control, conduct relevant onsite inspections in due course, enhance monitoring, early warning and risk management, and remain steadfast in ensuring that systemic risks never occur. • The CSRC pays a lot of attention to the risks that may arise during the implementation of the Guidance on Regulating the Asset Management Business of Financial Institutions and has strengthened the monitoring of the regulation process of asset management products in the context of the compilation of comprehensive statistics on the financial industry. The Commission worked together with the PBC and CBIRC to establish a monitoring mechanism for the regulation of asset management products in the transitional period; called upon and guided relevant authorities to ensure the orderly

			regulation of the existing stock of products and avoid destabilizing impact on the market due to such actions as "marching in-step", concentrated disinvestment and large-scale redemptions. • The CSRC strengthened the monitoring and analysis of the risks associated with implicit guarantees, called upon and guided the Shanghai and Shenzhen Stock Exchanges to focus monitoring on the stocks and bonds issued by listed companies affected by debt risks, appoint dedicated personnel for real-time monitoring, promptly address and report any abnormality identified, and adhere to market-based and legal measures in the prevention and resolution of related risks.
Regulation and Supervision: Securities Markets			
Improve disclosure of CIS; prohibit specifying expected returns in the prospectus of WMPs.	H	NT	• In April 2018, the PBC issued the Guidance on Regulating the Asset Management Business of Financial Institutions jointly with other financial regulatory authorities. The Guidance targets at the entire asset management industry, follows the principles of combining functional regulation with institutional regulation and "putting substance ahead of form", and is based on types of asset management products instead of on types of financial institutions. It unifies regulatory standards for similar assets; insists on equitable market access and regulation; and attempts to minimize the room for regulatory arbitrage. The Guidance forbids financial institutions from promising principal protection and guaranteed yield for their products; guides financial institutions to shift from the model based on expected rate of return; strengthens the net value-based management of products; adheres to the principle of fair value measurement; encourages using market value for measurement while allowing the products satisfying specific conditions to be measured according to amortized costs; and clarifies the way to identify rigid redemption while penalizing and prohibiting such redemption. The CBIRC is currently pushing forward the formulation of regulatory measures for the wealth management business of banks, which will reflect relevant requirements of the Guidance on Regulating the Asset Management Business of Financial Institutions.

			• The Regulatory Measures for Collective Fund Trust Schemes prohibits trust companies from promising no-loss of the trust funds or minimum rate of return in any way when marketing a trust scheme. • According to Article 3 of the Interim Provisions on the Operations and Management of Private Equity Asset Management Business of Securities and Futures Companies issued by the CSRC in 2016, securities and futures companies and related sales companies are prohibited from selling asset management schemes in violation of regulations, engaging in inappropriate promotion of their products, misleading and cheating investors or promising no-loss of principal or minimum yield.
Introduce a functional overlay to supervision to ensure that similar products issued by differing financial firms are supervised and regulated similarly.	H	MT	• The Guidance on Regulating the Asset Management Business of Financial Institutions released in April 2018 established uniform regulatory standards and consistent rules for similar asset management products, thus minimizing the room for regulatory arbitrage and promoting equitable market access and regulation, creating a good institutional environment for future healthy development of the asset management industry. • The PBC is working with relevant authorities to formulate uniform regulations for asset securitization.
Tighten eligibility and enhance haircut methodology for repo collateral.	M		• In April 2017, the CSRC instructed the China Securities Depository and Clearing Corporation (CSDC) to revise and promulgate the Access Qualifications for Collateralized Repo and Guidelines for Ascertaining the Standard Bond Discount Coefficients. The revised version increased the repo standard for credit debts from AA to AAA in accordance with the principle of "delimitation between old and new". At the same time, CSDC will adjust the haircut of collateralized repo in a dynamic way. • At present, the repo transactions in the interbank market mostly use interest-bearing bonds such as treasury bonds and policy financial bonds as collateral for their high credit rating and good liquidity, resulting in high quality collaterals. As the next step, the PBC will actively promote the development of tripartite repo and further help raise the level of collateral management.

Strengthen systemic risk monitoring mechanisms to ensure a holistic view of the interconnectedness between securities markets and between them and other financial sectors.	M		• Since 2017, under the framework of inter-ministerial coordination mechanism for corporate credit bonds, the PBC has been vigorously taking a series of measures to improve the risk monitoring mechanism for the bond market. The first measure is to formulate an action plan to prevent and address the bond default risk. The second measure is to strengthen inter-ministerial information exchange by establishing an information exchange mechanism for bond defaults and joint mechanism to penalize breach of agreements. The third is to conduct risk monitoring and early warning properly with PBC branches dynamically tracking and monitoring bond-issuing companies within their respective jurisdiction, and self-discipline organizations and intermediaries performing front-line monitoring functions. As the next step, we will continue to act under the framework of the inter-ministerial coordination mechanism for corporate credit bonds to strengthen the systemic risk monitoring mechanism and promote regulated and coordinated development of the corporate credit bond market. • The CSRC continues pushing forward the development of the risk monitoring mechanism for capital markets. First, by resolutely following the overall coordination and leadership of the Financial Stability and Development Committee of the State Council and relying on the financial regulation and stability coordination mechanism led by the PBC, the CSRC is strengthening inter-ministerial information sharing and policy coordination; improving the cross-market risk monitoring system which covers stocks, bonds, futures, currencies and foreign exchange; and preventing cross-market, cross-industry and cross-border risk contagion. Secondly, the Commission faithfully follows the quarterly meeting arrangement for the Leading Group on Stock Market Risk Monitoring and Response in order to make timely analysis and judgement on the risk status of the entire stock market. Thirdly, it is effectively strengthening the frontline supervision of the securities exchanges, the monitoring and control of investors' trading behaviors and regulation of information disclosure by listed companies. Fourthly, the Commission is improving the risk monitoring, control and early warning system and speeding up

			the development of the centralized capital market monitoring system, in order to have a holistic view of how the market is functioning by looking at all the aspects, from capital flowing into the market to investor behavior, and making the risk monitoring and early warning more IT-based and smart.
Regulation and Supervision: Insurance			
Develop plans for risk-based supervision, bringing together all issues and actions of each insurer, including market conduct.	M		• The CBIRC bases its solvency supervision work on the China Risk Oriented Solvency System (C-ROSS) and conducts quarterly comprehensive risk rating which covers operational risks in four aspects (underwriting, claim payment, reinsurance and reserve) and liquidity risks. The Commission has been working to carry out assessment of the personal insurance liability supervision system; promote the development of the information platform for insurance policy registration management; strengthen the actuarial supervision system; continue promoting the revision of actuarial reporting rules; improve the market analysis and monitoring; and establish a risk monitoring mechanism targeted at high-risk and key companies.
Establish a plan to move valuation to a more market-consistent basis.	M		• At present, the GAAP+ valuation method used by the C-ROSS is in line with the market reality in China and is also one of the solvency assessment methods that ICP allows.
Supervision of Financial FMIs			
Adopt full delivery-versus-payment in the China Securities Depository and Clearing Corporation (CSDC).	H	NT	• At present, the CSDC adopts a non-standard DVP model of "T+0 delivery and T+1 payment", which means that the securities are delivered on the same day and the payment is made on the next day. The main reason for adopting this model is that China's securities are paperless and can be delivered and received on the same day, while funds transfer is constrained by the payment system and can only be completed on the following day. This is the optimal arrangement for market players under realistic circumstances. In order to effectively prevent and control the principal and spread risks which might arise from the time difference between delivery and payment, on one hand, the Securities Law and the Regulatory Measures for Securities Registration and Settlement stipulate that if a buyer fails to fulfill the obligation to deliver funds on time, the CSDC has the power to stop the delivery of related securities

			immediately to minimize the losses of the central counterparty. On the other hand, the CSDC has made a full set of risk prevention and control arrangements such as the systems of full security deposit and third party escrow of the security deposit and these systems have proved to be very effective. Judging from the practical results, over more than ten years since the establishment of the CSDC, settlement and clearing have been going on smoothly and withstood the severe tests of the 2008 global financial crisis and the abnormal stock market volatility in 2015. • The CSRC attaches great importance to the recommendation about improving the delivery-versus-payment (DVP) arrangements. It has included the "improvement of the registration and settlement system and start of the reform of the A-share DVP settlement model" into the key tasks for 2018. At present, the CSRC is making arrangements for the CSDC to prepare a reform plan based on the financial market infrastructure (FMI) principles and push forward the relevant work as soon as possible.
Strengthen resilience of financial market infrastructures (FMIs) through: full implementation of the CPSS-IOSCO Principles; and strengthening of the legal framework.	H	MT	• The China Securities and Futures Exchange overseen by the CSRC adopted a series of improvement measures to strengthen the legal framework and further implement the FMI principles. For futures exchanges, the CSRC is actively cooperating with the National People's Congress to push forward the legislation of the Futures Law to further improve the legal system for futures markets. The Futures Law (Draft) contains regulations on the legal nature, organizational form, scope of duties and other aspects of futures exchanges and has defined the legal status of the central counterparty. The draft has been reviewed and adopted by the Financial and Economic Committee of 12th Session of the National People's Congress at a plenary meeting and listed as one of the items to be reviewed under the 2018 legislative work plan of the Standing Committee of the National People's Congress. For the CSDC, first, the implementation of the system for front-end control of funds has been accelerated to prevent major settlement risks which might arise from excessively large purchases without verification of funding. The second measure is to continue pushing forward the revision of the Regulatory Measures for

			Securities Settlement Risk Funds to improve the matching of financial resources with market risks and to give full play to the risk prevention role of securities settlement risk funds. The third is to promote the improvement of credit support mechanisms for commercial banks and the CSDC has already officially signed the Agreement on Liquidity Support for Clearing Banks with the five largest state-owned commercial banks. The fourth measure is to strengthen the development of a unified risk monitoring system by further sorting out the purposes of the functional modules of the risk monitoring system and improving the functions of the system such as risk measurement, daily monitoring of the market and stress testing. The fifth is to continue daily risk monitoring and control such as risk monitoring and stress testing, focusing on the support for repo risk management. • The PBC is pushing forward the revision of the People's Bank of China Law to improve the provisions on payment, liquidation and settlement. In addition, the PBC is working with relevant authorities to formulate the Regulatory Measures for Financial Infrastructure, which will fully reflect the relevant provisions of the "Principles for Financial Market Infrastructure" (PFMI) and further clarify related legal issues.
Expand provision of central bank services to all systemically-important central counterparties (CCPs).	M		• No progress so far.
AML/CFT			
Mandate enhanced customer due diligence (CDD) for domestic politically-exposed persons on a risk sensitive basis.	M		• In January 2013, the PBC issued the Guidelines for Financial Institutions on Money Laundering and Terrorist Financing Risk Assessment and Control of Customers Based on Classification to guide financial institutions in taking appropriate measures to assess customer risks and require these institutions to assign customers to different risk classes based on their characteristics, occupation, geographical area and other factors. Political leaders of domestic and

			international organizations will be classified as high-risk customers due to their characteristics and occupational factors. At the same time, CDD and other risk control measures for high-risk customers have been strengthened by: (1) obtaining approval or authorization from senior management before establishing (or maintaining existing) business relationship; (2) seeking further in-depth knowledge of a customer's assets and funding sources; (3) increase the frequency and intensity of transaction monitoring during the entire business relationship. In practice, financial institutions often conduct prompt verification of high-risk customers, including political leaders of domestic and international organizations, by purchasing databases and other methods. In other cases, identification information such as photographs of political figures is obtained from official websites of governments or international organizations to determine whether a customer or beneficial owner is a political leader of a domestic or international organization.
Ensure that self-laundering is more effectively investigated and prosecuted as a stand-alone offense.	M		• Article 312 of China's Criminal Law stipulates that "[on the crime of concealing, transferring, purchasing or selling booty] Whoever conceals, transfers, purchases, or acts as an agent to sell something he clearly knows as booty which have been gained through committing a crime is to be sentenced to not more than three years of fixed-term imprisonment, detention or control and may in addition or exclusively be sentenced to a fine". By consulting the National People's Congress (the highest legislature), we learned that this clause does not exclude "self-laundering." • In judicial practice in China, there have been cases where self-money laundering is declared a crime. For example, in the case of Participation in Organized Crime and Money Laundering by Wei in Qingdao, Shandong" (2015), Wei was convicted of participation in organized crime and laundering his gains therefrom.
Crisis Management			
Triggers for activating a government-led	H	NT	• Relevant authorities are pushing forward the drafting of the Regulations on Addressing Bankruptcy Risks of Commercial Banks.

crisis response should be more clearly defined, and limited to systemic cases that may require public resources.			• The CSRC attaches great importance to the regulating role played by market mechanisms and does not directly intervene in the movement of stock indexes as long as there is no systemic risk of collapse. Since the causes of crises are complex and require different responses, it is very difficult to accurately define the trigger conditions for a crisis response. In practice, countries or regions around the world often only define some conditions in principle, such as emergence of large-scale liquidity crises among financial institutions, concentrated breakout of a large number of debt default risks and rapid cross-market and cross-industry spread of risks. The CSRC will strive to define the trigger conditions for crisis responses as clearly as possible in accordance with market developments and specific circumstances of China.
Develop a special resolution regime for banks and systemically important insurance companies.	H	MT	• The PBC is currently working with relevant authorities to draft a guidance on the regulation of systemically important financial institutions. • Relevant authorities are currently pushing forward the drafting of the Regulations on Addressing Bankruptcy Risks of Commercial Banks. • In 2017, a Cross-Border Crisis Management Working Group meeting was held separately for ICBC, ABC, BOC and CCB, in order to review the updated recovery and resolution plan of the four banks and the resolvability assessment report of the CCB. • The PBC is in the process of preparing draft regulatory measures for early correction and risk management of deposit insurance, and has established a working mechanism for risk resolution through "consultation and joint research" with relevant departments of the CBIRC. Under the mechanism, the two sides will promptly notify each other about key risk situations and the progress of risk resolution.
Develop a formal framework for emergency liquidity assistance by the PBC.	H	MT	• The PBC has worked with relevant authorities to prepare and continuously improve emergency plans for liquidity risks which systematically sorted out and arranged for risk identification, risk prevention, risk response and division of responsibilities.
Enhance the design of the protection	M		• As for deposit insurance funds, the PBC has conducted special studies on such topics as

funds to limit moral hazard.			differentiated deposit insurance premiums based on risks, early correction mechanism, trigger mechanism for resolution, acquisition and takeover and deposit repayment, focusing on preventing moral hazards, imposing rigorous financial market discipline and improving market-based exit mechanism for financial institutions. • As for trust protection funds, the CBIRC has started the ex post assessment and revision of the trust protection fund system. Based on in-depth research, the Commission will consider how to improve the fund-raising mechanism of the protection funds and further clarify under what conditions and through what methods should these funds be used, so as to let them play a better role in market-based mutual support under the premise of effectively preventing moral hazards. • As for insurance protection funds, the Regulatory Measures for Insurance Protection Funds are being revised and related consultation has been completed.
Financial Inclusion			
Enhance the legal, regulatory, and supervisory frameworks for fintech.	M		• The PBC organized research on the fintech industry to detect problems and deficiencies in its development in such areas as institutional mechanisms, human resources development, service channels, product innovation and regulatory policies and also identify successful experience and practices which can be drawn upon, replicated and promoted. On the basis of this research, a guidance on the integrated development of finance and the Internet is being prepared. • Since 2017, the PBC has been working together with 16 other authorities to steadily push forward special measures to address risks involved in the internet finance and actively and prudently resolve the risks in this sector while urging the relevant authorities to continue clarifying operational standards and regulatory rules for different types of internet finance, with the aim of providing institutional safeguard for its development. At present, a regulatory framework of "one approach and three guiding principles" for P2P online lending has taken initial shape; the regulatory system for non-bank payment and internet insurance is being gradually established and improved; in the field of Internet asset management,

			it has been made clear that when publicly issuing and distributing asset management products on the Internet, a related business license from the financial authority of the central government is required; and regarding virtual currency, the PBC and relevant authorities have issued an announcement to make it clear that initial coin offerings are essentially unauthorized and illegal public fund-raising activities. As for the "cash loan" business, the PBC and CBIRC introduced regulatory and rectifying measures in areas such as regulating the liability business of web-based small loan companies, the cooperation between licensed financial institutions and third parties and combatting unlicensed loan institutions, and made arrangements for these measures to be carried out nationwide. As the next step, the PBC will continue working together with relevant authorities to steadily push forward special measures for regulation and rectification, while actively studying the applicability of fintech laws and regulations to explore the ways to establish an institutionalized fintech regulatory framework and promote the long-term and healthy development of this industry. • The CBIRC established an institutional framework for the regulation of online loans and successively issued "one approach and three guiding principles", specifying the regulatory mechanism and business rules for online loans. The revision of the Interim Measures for the Regulation of Internet Insurance Business has begun, with the aim of further improving the system of regulatory rules to take into account of the new reality and new issues arising from the rapid development of internet insurance business. The Commission directed more than 100 financial institutions nationwide in setting up a working group for fintech research and promotion, in order to explore ways to use fintech in providing better support to small and micro enterprises and better service to the real economy. Special rectification actions were taken to guide the online loan industry to effectively reduce inventory risks, leading to a beneficial reduction of the number of institutions, continuous improvement of the orderliness of business operations and consistent increase of the standardization of the industry. The approval process for online small loans has been

			made more stringent and the business of providing such loans has been regularized. Institutions which engage in online small loan business illegally are cracked down and banned in an effort to effectively prevent and resolve related risks. • The CSRC attaches great importance to the fintech in the securities and futures industry and has prepared the Guidance on Promoting the Healthy Development of Fintech and Compliance Technology in the Securities and Futures Industry (draft). As follow-up, the Commission will endeavor to revise and improve the draft on the basis of full solicitation of inputs and have it issued and implemented as early as possible to promote and standardize the healthy and orderly development of the fintech and compliance technology of the securities industry.

Appendix V. Debt Sustainability Analysis

Because of uncertainty about the perimeter of general government, the debt sustainability analysis assesses government debt under both official "budgetary" and staff's estimated general government "augmented" definitions. While official budgetary government debt remains low and sustainable, "augmented" debt is high and on an upward trajectory. The results reflect a slight improvement of debt dynamics compared to last year's DSA, but still suggest risks of debt stress at the augmented level. The risk of debt stress depends fundamentally on public investment via off-budget spending of local governments and LGFVs.

China's public debt sustainability analysis (DSA) is based on the following assumptions:

- **Public debt coverage**. Two definitions of debt are used. The main difference is the coverage of local government debt.

  - The budgetary coverage scenario includes central government debt and "on-budget" local government debt identified by the authorities. For 2004–13, general government debt includes central government debt and local government bonds (issued by the central government). From 2014, general government debt includes central government debt and explicit local government debt (which consists of local government bonds and other recognized off-budget liabilities incurred by end-2014). The change of definition in 2014 is mainly a result of the change of official data coverage when 2/3 of LGFV debt was explicitly recognized as government liability.

  - "Augmented" debt is used in the broad coverage scenario. It adds other types of local government borrowing, including off-budget liabilities borrowed by Local Government Financing Vehicles (LGFVs) via bank loans, bonds, trust loans and other funding sources, estimated by staff. It also covers debt of government-guided funds and special construction funds, whose activities are considered quasi-fiscal. The augmented deficit is the flow counterpart of augmented debt. Augmented data are staff's best estimate of general government data. Data limitations mean some nongovernment activity is likely included, and some LGFV and funds may end up having substantial revenues. It is also possible that some general government activity takes place outside of staff's augmented definition (e.g. PPPs).

- **Macroeconomic assumptions:** The projection reflects a gradual slowdown of real GDP growth to 5.5 percent y/y by 2023 and GDP deflator growth of about 2.3 percent. The fiscal assumptions differ in the scenarios with budgetary government debt or augmented debt.

  - *Fiscal balance in the budgetary coverage scenario.* This scenario assumes all spending is done within the confines of the budget, and thus that the new budget law is strictly implemented and off-budget public investment is sharply reduced. Under this scenario, primary fiscal deficits are assumed to decline from 3.0 percent of GDP in 2017 to 2.8 percent of GDP in 2023, driven chiefly by the assumption of a gradual decline in managed funds' spending financed by land sales while the remaining on-budget primary balance remains flat.

  - *Fiscal balance in the augmented scenario.* Off-budget local government spending is assumed to decline only marginally. The augmented primary deficit, which includes the on-budget fiscal

deficit and off-budget spending financed by LGFV debt and government funds, is projected to decline from around 7.9 percent of GDP in 2017 to around 5.7 percent of GDP by 2023. Augmented expenditure to GDP ratio is projected to decline owing to: (i) lower expenditure financed by net land sales; and (ii) the authorities' reforms to limit local government borrowing.

- *Local government financing*. While many local governments relied on net revenue from land sales and LGFV borrowing to finance their investment in the past, the DSA assumes that future financing needs will be increasingly met by bond issuance, in line with the authorities' plan to replace all local government debt with bonds within three years.

- *Interest rates and amortization.* The interest rates for central government and local government bonds are assumed to be about 3–4 percent (in line with historical average). The interest rates of off-budget borrowing (only in the augmented scenario) are assumed to be about 6-7 percent (based on the yield differential between sovereign bond and LGFV bank loans and other short-term instruments). Staff assume all maturing debt will be rolled over, although we note a front loading of refinancing due to the ongoing swap[3] of legacy LGFV loans for LG bonds.

In the narrow-coverage scenario, budgetary government debt is on a slightly increasing path.

- Government debt under narrow coverage at 37 percent of GDP in end-2017 is on a slightly increasing path to 43 percent of GDP in 2023, to which a favorable growth-interest rate differential contributes. Off-budget local government spending is assumed to stop immediately after the implementation of the new budget law in 2015.

In the broad-coverage scenario, augmented debt continues to rise rapidly and consolidation would be needed to prevent it from stabilizing at a very high level.

- Augmented debt rises to about 92 percent of GDP in 2023 from around 68 percent of GDP in 2017. This is because the broad-coverage scenario assumes that local-government off-budget spending continues after 2015 (although expected to decline gradually in the medium term).

China faces relatively low risks to debt sustainability for the budgetary government; however, off-budget activities pose large risks to debt sustainability in augmented debt.

[3] In 2014, around RMB 14 trillion of LGFV borrowing was recognized as explicit LG debt. And the government embarked on a three-year debt-to-bond swap program for LG to exchange the LGFV loans into LG bonds from 2015. By the end of 2017, RMB 10.9 trillion LG borrowing was exchanged, which saved RMB 1.2 trillion in interest payments and mitigated debt refinancing risks, according to the authorities. Another RMB 1.73 trillion of debt needs to be swapped by August 2018.

- In the narrow-coverage scenario, budgetary government debt remains relatively low at a still reasonable level in all standard stress tests except for the scenario with contingent liability shocks. A contingent liability shock in 2019 will result in a sharp increase from about 37 percent of GDP in 2017 to above 60 percent of GDP in 2019.[4] While the budgetary debt level is still manageable, the authorities would potentially have to deal with an increase in gross financing needs that could be sensitive to market financing conditions and may entail rollover risks

- In the broad-coverage scenario, the augmented debt level is also sensitive to macro-fiscal shocks. Combined macro-fiscal shocks would push debt to above 100 percent of GDP in 2023.

China's debt profile will largely depend on the implementation of the new budget law and, more fundamentally, on efforts to reduce public investment.

- Based on the projected debt dynamics under the narrow coverage, China's debt profile is still manageable, especially given that it is mostly domestically financed.

- However, the debt profile crucially depends on the off-budget activities. Implementation of the new budget law is crucial, as it determines whether debt dynamics will be closer to the narrow-coverage scenario or broad-coverage scenario. If the new budget law is strictly implemented and future LGFV borrowing will be completely on a commercial basis, debt-to-GDP will rise only gradually and stabilize. If local governments continue to incur off-budget liabilities, the debt profile will move closer to that in the broad-coverage scenario and the debt-to-GDP ratio will continue to rise in the medium term and only stabilize at very high levels. Fiscal risks may also arise from new financing avenues that have emerged, such as PPPs.

[4] Mechanically, the standard contingent liability shock in the IMF's DSA toolkit assumes that 10 percent of non-government banking system assets would turn into government liabilities. Non-government banking system assets were about 220 percent of GDP in 2016. It also assumes that the real GDP growth in 2018 and 2019 would be 2–2.5 percent lower (a one standard deviation shock).

Figure 1. China: Public Sector Debt Sustainability Analysis (Budgetary Government Debt)

(In percent of GDP, unless otherwise indicated)

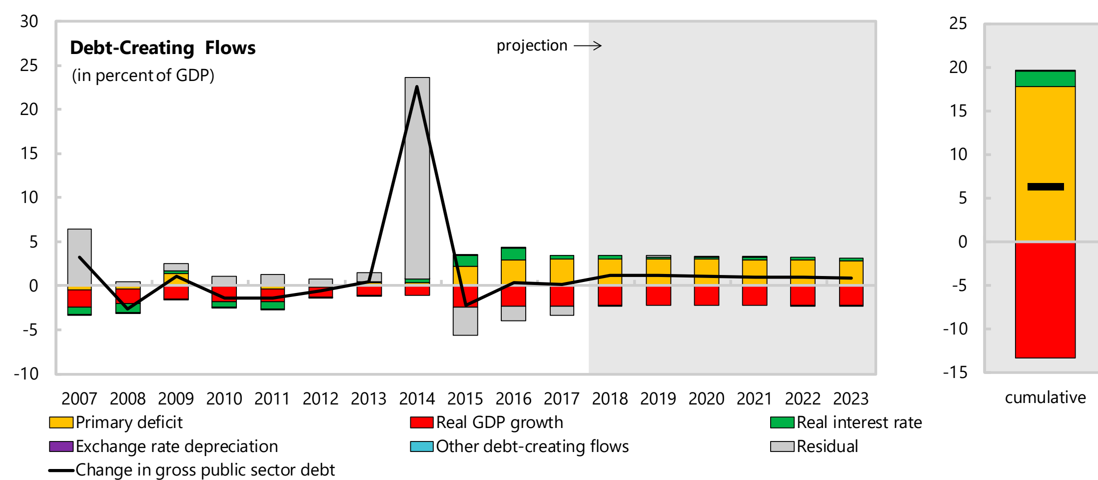
Debt, Economic and Market Indicators [1]

	Actual			Projections					
	2007-2015 [2]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	21.9	36.7	36.9	38.1	39.3	40.4	41.4	42.4	43.2
Public gross financing needs	6.2	13.3	10.3	9.5	7.6	8.1	9.3	8.3	8.4
Real GDP growth (in percent)	9.2	6.7	6.9	6.6	6.4	6.3	6.0	5.7	5.5
Inflation (GDP deflator, in percent)	4.1	-0.1	1.9	2.0	2.3	2.3	2.2	2.2	2.3
Nominal GDP growth (in percent)	13.8	6.7	8.9	8.7	8.9	8.7	8.3	8.0	8.0
Effective interest rate (in percent) [4]	3.2	3.9	3.5	3.2	3.1	3.1	3.1	3.1	3.1

As of April 11, 2018		
Sovereign Spreads		
EMBIG (bp) 3/		107
5Y CDS (bp)		61
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+	A+
Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	2.1	0.3	0.2	1.2	1.2	1.1	1.0	1.0	0.8	6.3	
Identified debt-creating flows	-1.4	2.0	1.2	1.2	1.0	1.0	1.0	1.0	0.9	6.2	
Primary deficit	0.3	2.9	3.0	3.1	3.0	3.0	2.9	2.9	2.8	17.8	-1.9
Primary (noninterest) revenue and gra	25.3	28.2	28.4	28.8	28.9	28.6	28.3	28.2	28.0	170.9	
Primary (noninterest) expenditure	25.6	31.2	31.4	31.9	31.9	31.6	31.3	31.1	30.9	188.7	
Automatic debt dynamics [5]	-1.7	-0.9	-1.8	-1.9	-2.0	-2.0	-1.9	-1.9	-1.9	-11.6	
Interest rate/growth differential [6]	-1.7	-0.9	-1.8	-1.9	-2.0	-2.0	-1.9	-1.9	-1.9	-11.6	
Of which: real interest rate	-0.1	1.4	0.5	0.4	0.2	0.3	0.3	0.3	0.3	1.8	
Of which: real GDP growth	-1.6	-2.3	-2.3	-2.2	-2.2	-2.3	-2.2	-2.2	-2.2	-13.3	
Exchange rate depreciation [7]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Fiscal: General Government: Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Expansion of the swap beyond initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8]	3.5	-1.7	-1.0	0.0	0.2	0.1	0.0	0.0	-0.1	0.1	



Source: IMF staff.

1/ Public sector is defined as general government as per authorities definition.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

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

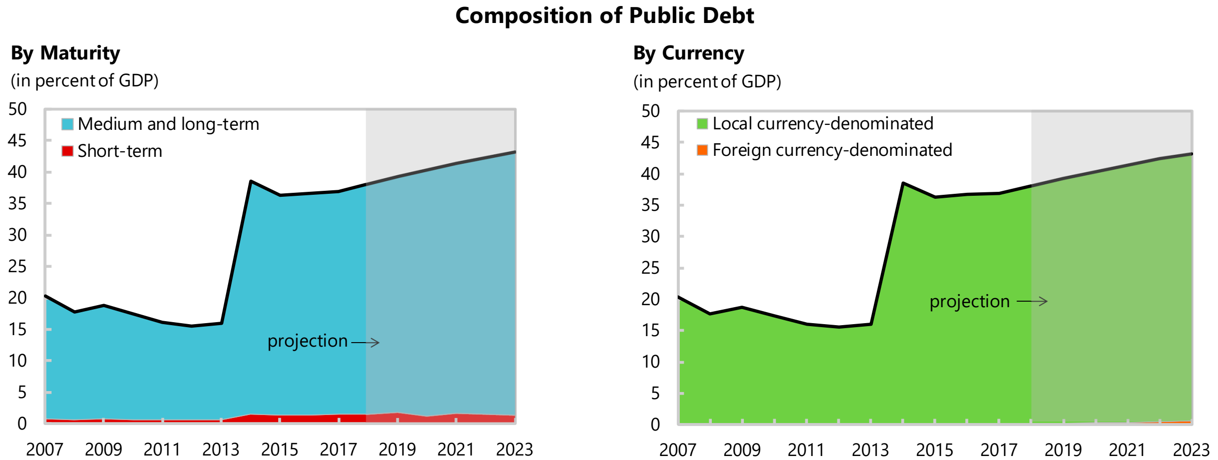
6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as -g.

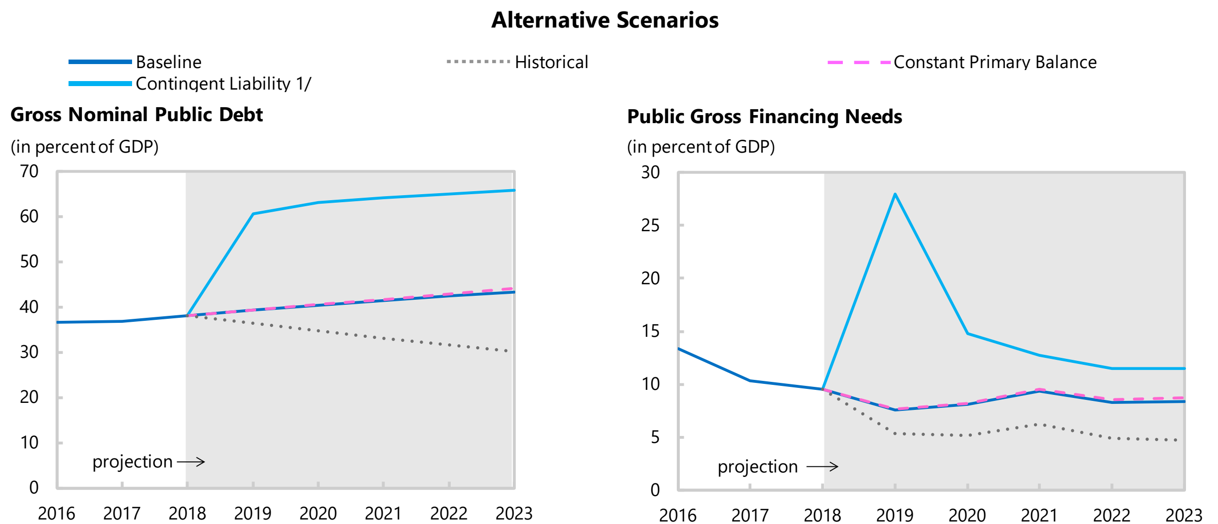
7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

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.

Figure 2. China: Public DSA—Composition of Budgetary Government Debt and Alternative Scenarios





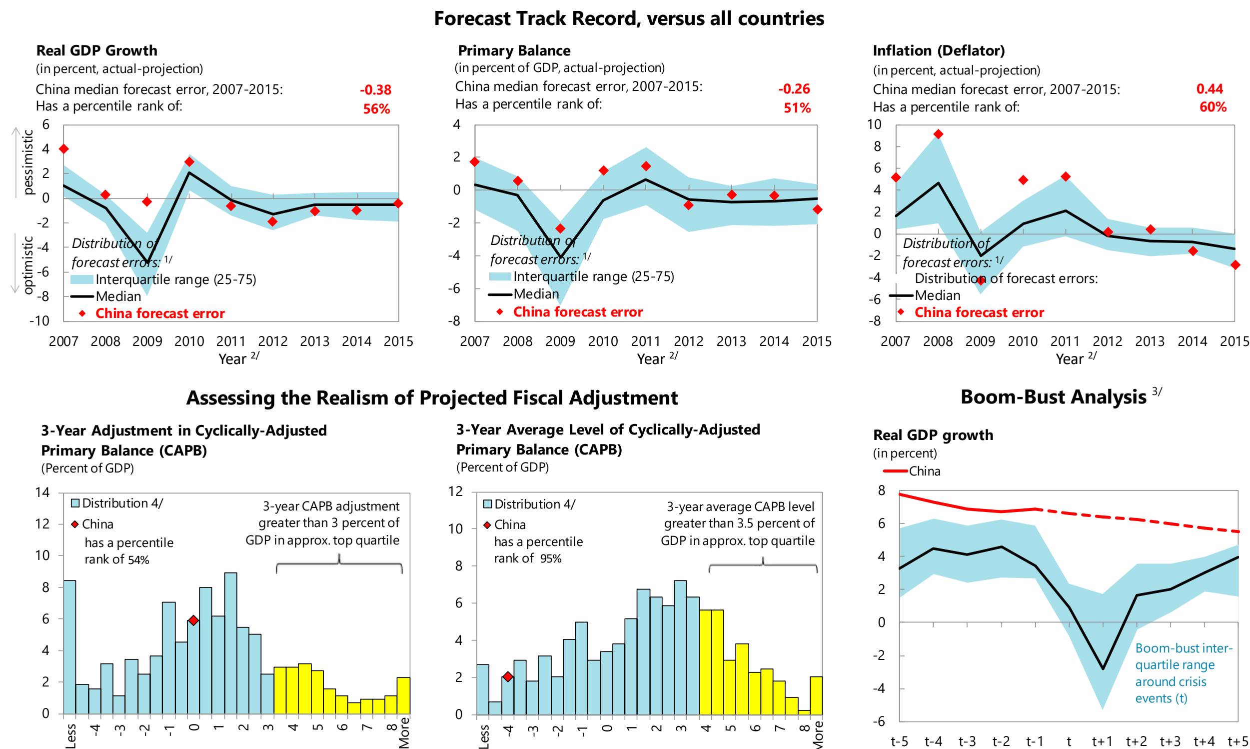
Underlying Assumptions
(in percent)

Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-3.1	-3.0	-3.0	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.1	3.1	3.1	3.1
Constant Primary Balance Scenario						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1
Effective interest rate	3.2	3.1	3.1	3.1	3.1	3.1

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	8.2	8.2	8.2	8.2	8.2
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-3.1	-0.8	-0.8	-0.8	-0.8	-0.8
Effective interest rate	3.2	3.1	3.0	2.9	2.8	2.7

1/ The contingent liability shock scenario also assumes that 10 percent of banking assets would turn into government liabilities.

Figure 3. China: Public DSA (Budgetary Government) – Realism of Baseline Assumptions



Source : IMF Staff.

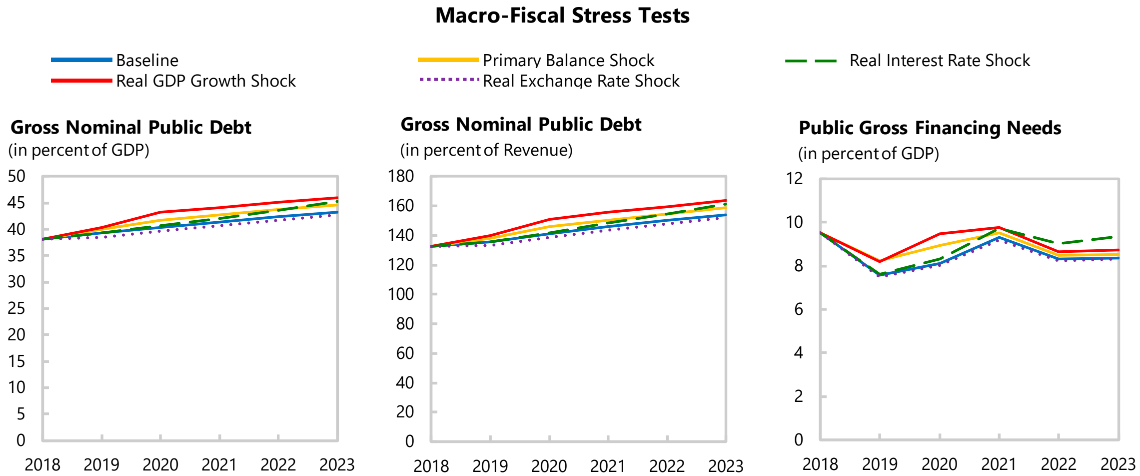
1/ Plotted distribution includes all countries, percentile rank refers to all countries.

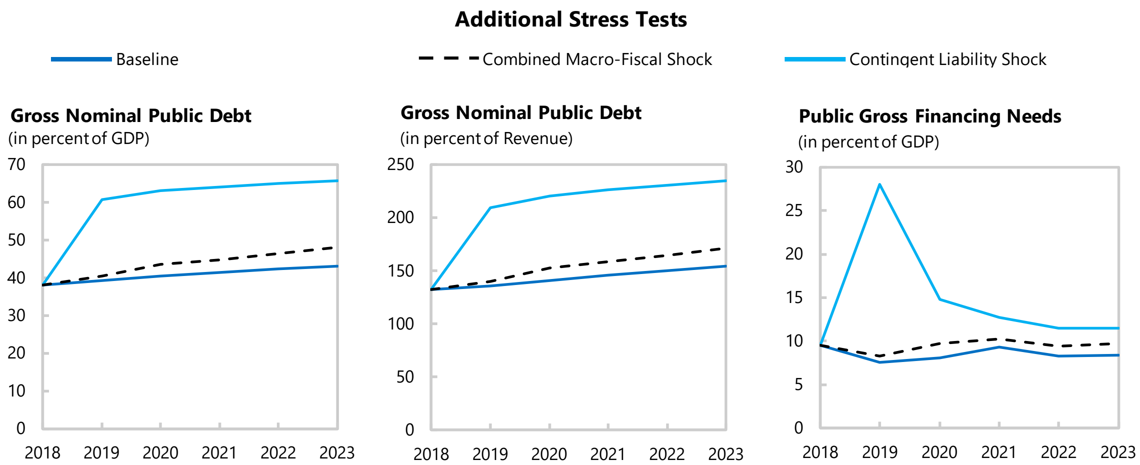
2/ Projections made in the spring WEO vintage of the preceding year.

3/ China has had a cumulative increase in private sector credit of 41 percent of GDP, 2014-2017. For China, t corresponds to 2018; for the distribution, t corresponds to the first year of the crisis.

4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure 4. China: Public DSA (Budgetary Government) – Stress Tests





Underlying Assumptions

(in percent)

Primary Balance Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary balance	-3.1	-3.6	-3.7	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.2	3.2	3.2	3.2
Real Interest Rate Shock						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary balance	-3.1	-3.0	-3.0	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.7	4.2	4.7	5.0
Combined Shock						
Real GDP growth	6.6	5.0	4.9	6.0	5.7	5.5
Inflation	2.0	2.0	1.9	2.2	2.2	2.3
Primary balance	-3.1	-3.6	-4.1	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.8	4.3	4.8	5.0

Real GDP Growth Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	5.0	4.9	6.0	5.7	5.5
Inflation	2.0	2.0	1.9	2.2	2.2	2.3
Primary balance	-3.1	-3.5	-4.1	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.2	3.2	3.2	3.2
Real Exchange Rate Shock						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	4.7	2.3	2.2	2.2	2.3
Primary balance	-3.1	-3.0	-3.0	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.1	3.1	3.1	3.1	3.1
Contingent Liability Shock						
Real GDP growth	6.6	5.0	4.9	6.0	5.7	5.5
Inflation	2.0	2.0	1.9	2.2	2.2	2.3
Primary balance	-3.1	-23.2	-3.0	-2.9	-2.9	-2.8
Effective interest rate	3.2	3.6	5.6	4.9	4.7	4.5

Source: IMF staff.

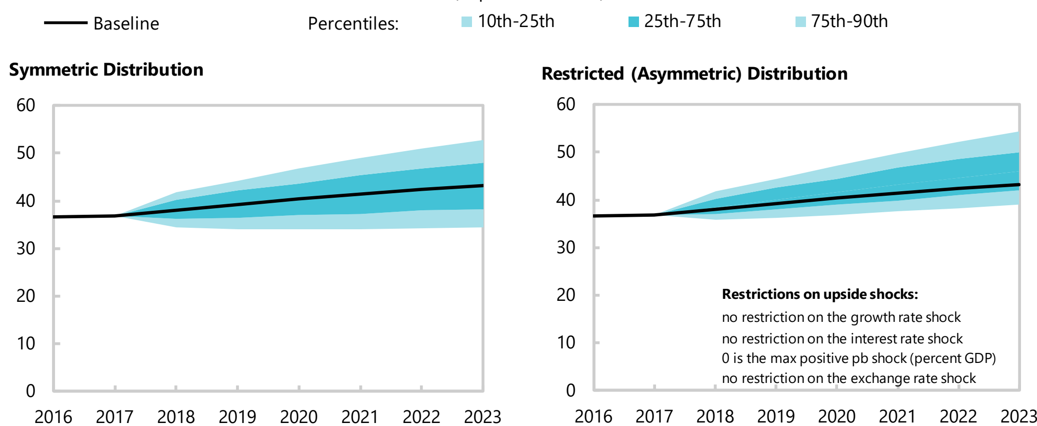
Figure 5. China: Public DSA (Budgetary Government) – Risk Assessment

Heat Map

Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

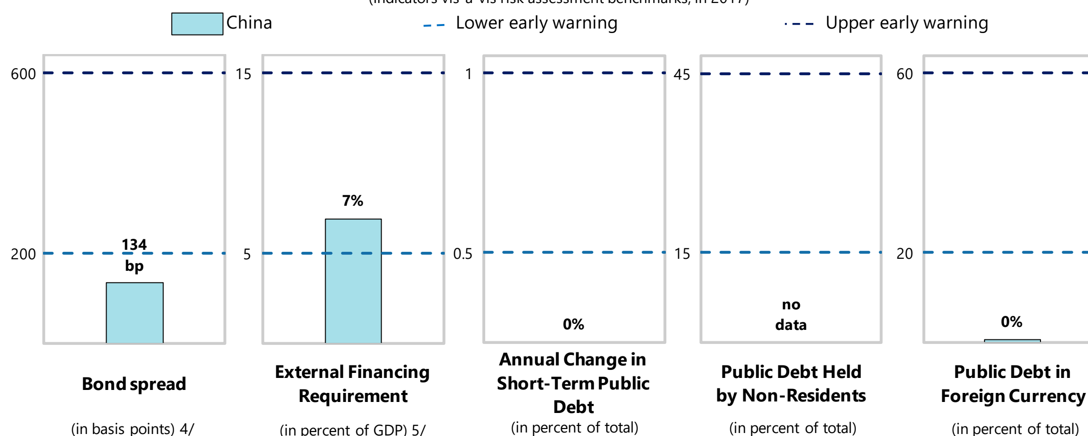
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2017)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 11-Jan-18 through 11-Apr-18.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Figure 6. China: Public Sector Debt Sustainability Analysis (Augmented Debt: Broad Coverage)

(In percent of GDP unless otherwise indicated)

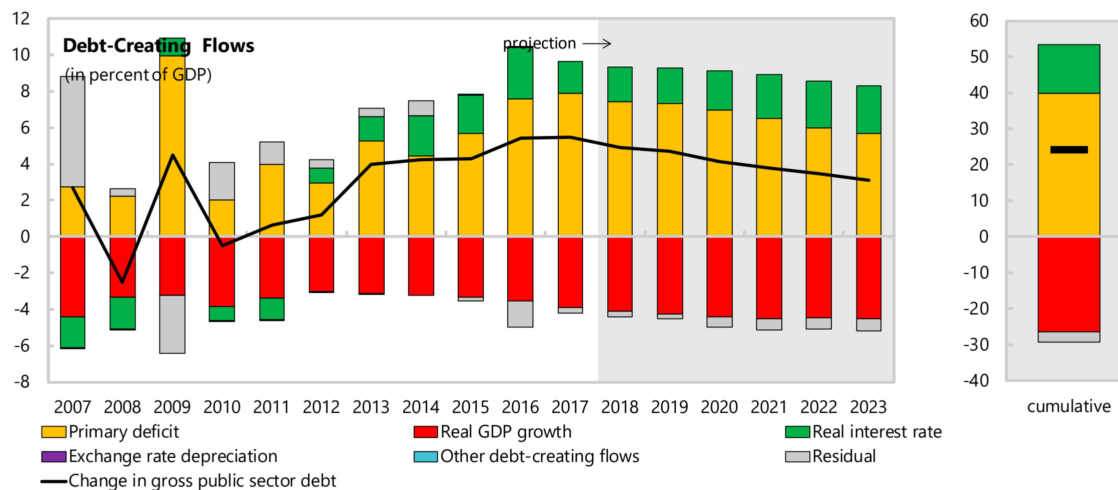
Debt, Economic and Market Indicators [1]

	Actual			Projections					
	2007-2015 [2]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	45.3	62.0	67.5	72.4	77.1	81.3	85.0	88.5	91.6
Public gross financing needs	16.5	23.2	21.6	21.6	20.7	21.8	23.4	22.7	23.1
Real GDP growth (in percent)	9.2	6.7	6.9	6.6	6.4	6.3	6.0	5.7	5.5
Inflation (GDP deflator, in percent)	4.1	-0.1	1.9	2.0	2.3	2.3	2.2	2.2	2.3
Nominal GDP growth (in percent)	13.8	6.7	8.9	8.7	8.9	8.7	8.3	8.0	8.0
Effective interest rate (in percent) [4]	4.7	5.2	5.2	5.2	5.3	5.5	5.5	5.6	5.6

As of April 11, 2018		
Sovereign Spreads		
EMBIG (bp) 3/		107
5Y CDS (bp)		61
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+	A+
Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	2.1	5.4	5.5	4.9	4.7	4.1	3.8	3.5	3.1	24.1	
Identified debt-creating flows	1.2	6.9	5.8	5.2	5.0	4.7	4.4	4.1	3.8	27.2	
Primary deficit	4.4	7.6	7.9	7.4	7.4	7.0	6.5	6.0	5.7	39.9	-1.9
Primary (noninterest) revenue and gra	25.3	28.2	28.4	28.8	28.9	28.6	28.3	28.2	28.0	170.9	
Primary (noninterest) expenditure	29.7	35.8	36.3	36.2	36.3	35.6	34.8	34.2	33.7	210.8	
Automatic debt dynamics [5]	-3.2	-0.7	-2.1	-2.2	-2.3	-2.3	-2.1	-1.9	-1.9	-12.7	
Interest rate/growth differential [6]	-3.2	-0.8	-2.1	-2.2	-2.3	-2.3	-2.1	-1.9	-1.9	-12.7	
Of which: real interest rate	0.2	2.8	1.8	1.9	1.9	2.2	2.4	2.6	2.6	13.6	
Of which: real GDP growth	-3.4	-3.6	-3.9	-4.1	-4.3	-4.4	-4.5	-4.5	-4.5	-26.3	
Exchange rate depreciation [7]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Fiscal: General Government: Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Expansion of the swap beyond initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8]	0.9	-1.4	-0.3	-0.3	-0.3	-0.6	-0.6	-0.6	-0.7	-3.1	



Source: IMF staff.

1/ Public sector is defined as the Augmented public sector.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

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

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; 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 - π (1+g) and the real growth contribution as -g.

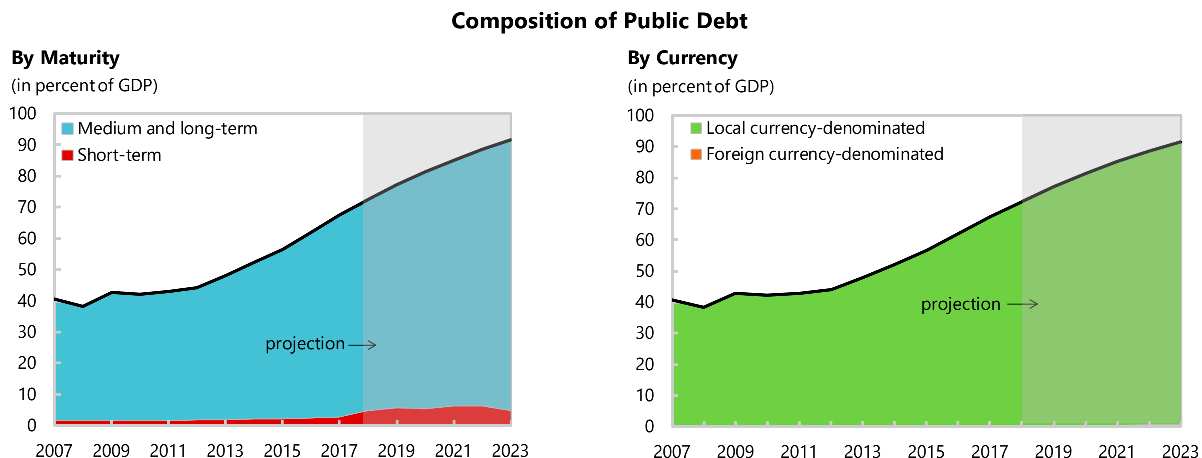
7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

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

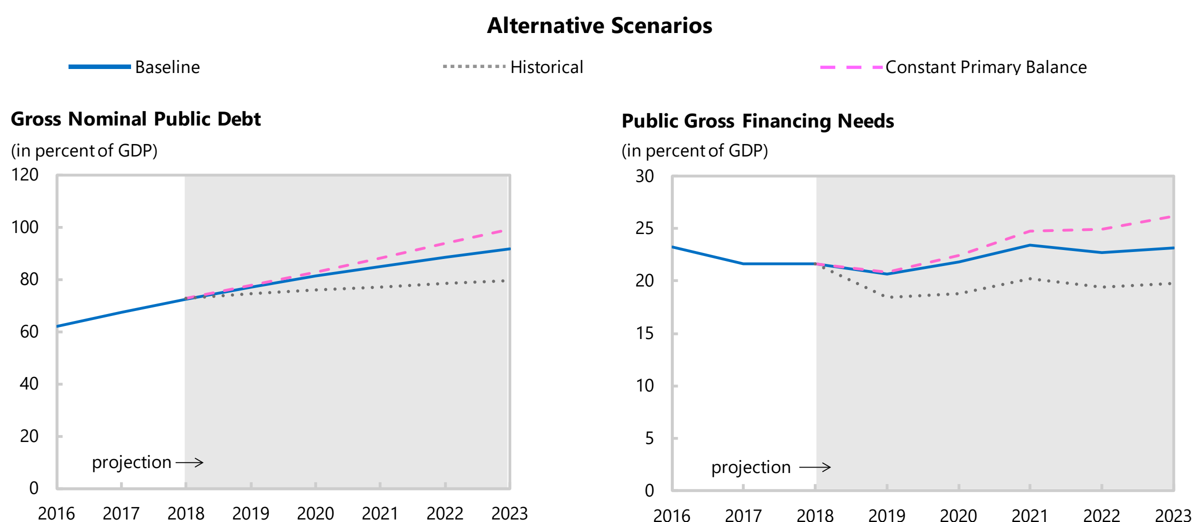
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 7. China: Public DSA — Composition of Augmented Debt (Broad Coverage) and Alternative Scenarios

Composition of Public Debt



Alternative Scenarios



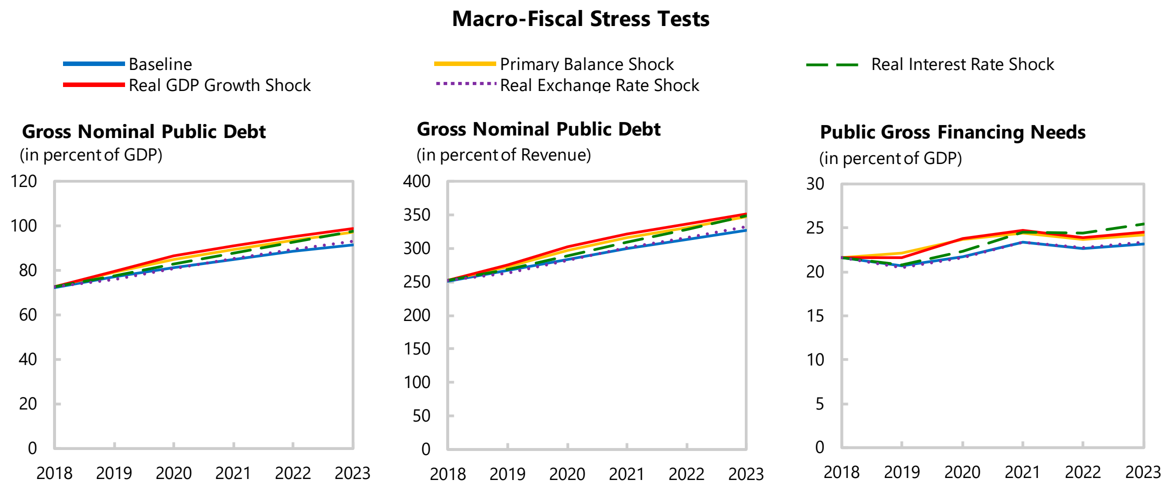
Underlying Assumptions

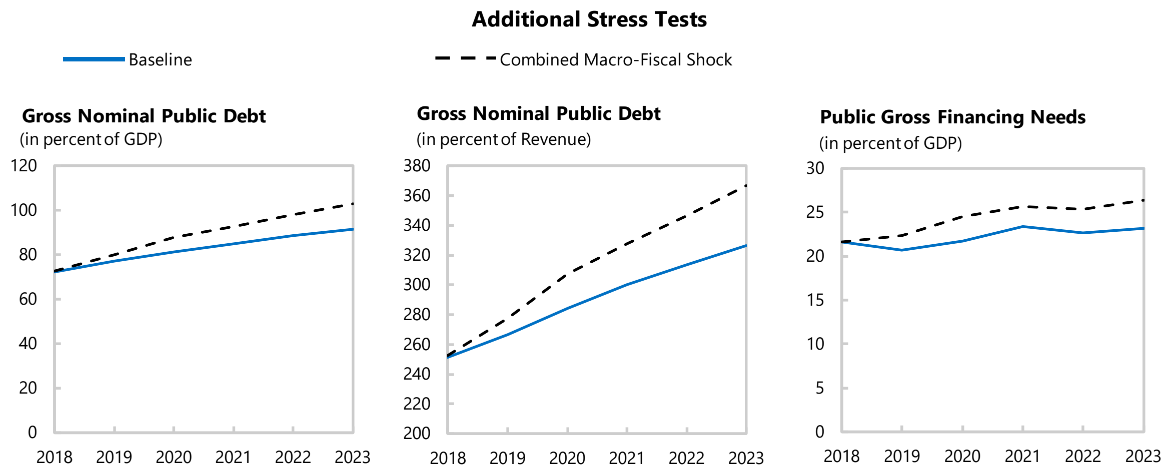
(in percent)

Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-7.4	-7.4	-7.0	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	5.5	5.5	5.6	5.6
Constant Primary Balance Scenario						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-7.4	-7.4	-7.4	-7.4	-7.4	-7.4
Effective interest rate	5.2	5.3	5.5	5.5	5.6	5.6

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	8.2	8.2	8.2	8.2	8.2
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary Balance	-7.4	-5.2	-5.2	-5.2	-5.2	-5.2
Effective interest rate	5.2	5.3	5.1	5.0	4.9	4.8

Figure 8. China: Public DSA (Augmented Debt: Broad Coverage) – Stress Tests





Underlying Assumptions
(in percent)

Primary Balance Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary balance	-7.4	-8.7	-8.3	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	5.6	5.7	5.7	5.7
Real Interest Rate Shock						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	2.3	2.3	2.2	2.2	2.3
Primary balance	-7.4	-7.4	-7.0	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	6.0	6.5	6.8	7.1
Combined Shock						
Real GDP growth	6.6	5.0	4.9	6.0	5.7	5.5
Inflation	2.0	2.0	1.9	2.2	2.2	2.3
Primary balance	-7.4	-8.7	-8.3	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	6.1	6.5	6.9	7.1

Real GDP Growth Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	6.6	5.0	4.9	6.0	5.7	5.5
Inflation	2.0	2.0	1.9	2.2	2.2	2.3
Primary balance	-7.4	-8.0	-8.2	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	5.5	5.7	5.7	5.7
Real Exchange Rate Shock						
Real GDP growth	6.6	6.4	6.3	6.0	5.7	5.5
Inflation	2.0	4.7	2.3	2.2	2.2	2.3
Primary balance	-7.4	-7.4	-7.0	-6.5	-6.0	-5.7
Effective interest rate	5.2	5.3	5.5	5.5	5.6	5.6

Source: IMF staff.

Figure 9. China: Public DSA (Augmented Debt: Broad Coverage) – Risk Assessment

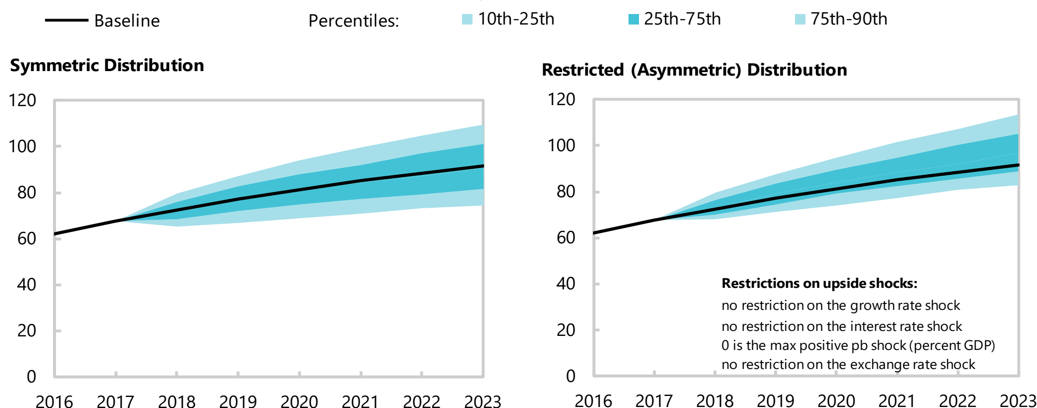
Heat Map

Debt level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)

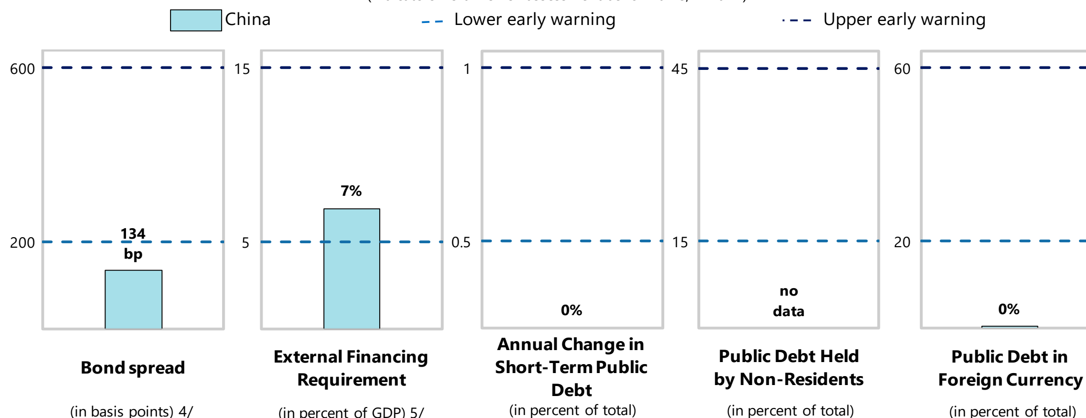
Baseline   Percentiles: 10th-25th   25th-75th   75th-90th



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2017)

China   Lower early warning   Upper early warning



Bond spread (in basis points) 4/

External Financing Requirement (in percent of GDP) 5/

Annual Change in Short-Term Public Debt (in percent of total)

Public Debt Held by Non-Residents (in percent of total)

Public Debt in Foreign Currency (in percent of total)

Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 11-Jan-18 through 11-Apr-18.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Appendix VI. Assessment of the Authorities' Approach to Managing Capital Flows

Capital outflows moderated in 2017 following a surge in 2015-16. Capital flows management measures (CFMs) adopted to manage the surge have generally been eased. The authorities have also adopted a more transparent 'macroprudential assessment' framework to help deal with capital flows. The easing of CFMs since the last Article IV Consultation was broadly in line with the Fund's Institutional View (IV) on capital flows given the progress made in the underlying supporting reforms. Implementing reforms that support the liberalization process remains a priority, but liberalization should be done gradually and cautiously. Capital flow pressures should be primarily dealt with by macroeconomic policies, including an effectively floating exchange rate. Standard micro/macro-prudential frameworks should continue to be strengthened to mitigate the procyclical build-up of systemic risk over the financial cycle, in line with FSAP recommendations. Transparent and consistent enforcement of CFMs, together with clear communication, is important to strengthen market participants' confidence in the regulatory framework. CFMs should not be used to fine-tune capital flows, and should be phased out over time as the supporting reforms increase the economy's ability to handle greater capital flow volatility.

Context

1. **Capital outflows have abated since early 2017 after reaching record highs during 2015-16.** Net capital outflows reached $640 billion a year in 2015 and 2016. These were driven by external debt repayments and a surge of overseas direct investments (ODI). Since then outflows slowed down, amounting to $73 billion in 2017, a trend that has continued into 2018. Most components in the financial account have contributed to this outcome. Errors and omissions—which mostly represent unrecorded capital flight—is the only item that remains persistently high.

2. **The authorities' response to capital outflows in 2015-16 included a mix of conventional policies as well as capital flow management measures (CFMs).** The authorities intervened in the foreign exchange (FX) market, but also allowed the exchange rate to depreciate somewhat. In addition, they introduced CFMs and tightened the enforcement of existing ones as necessary supporting reforms had not kept pace with the capital account liberalization. The policy mix helped ease capital outflow pressures. Stronger domestic growth and external factors including a weaker dollar also contributed to this outcome. More broadly, interest and growth differentials, and relative policy uncertainties continued to remain key drivers of capital outflows.

Recent Developments

3. **Since the last Article IV consultation, the authorities have mainly eased CFMs, and have introduced a *macroprudential assessment framework for cross-border financing*.** The new framework is designed to manage risks associated with capital flows by influencing the overall volume and composition of capital flows in a counter-cyclical manner. The framework aims at mitigating currency and maturity risks, risks associated with off-balances sheet exposures and excess leverage. Prudential parameters address these risks—e.g., on exposures on currency, maturity, category risk, and excess leverage; and the so-called *macroprudential adjustment parameter*—by

targeting single, multiple, or all financial or non-financial institutions. These parameters will be adjusted under crisis or exceptional circumstances (e.g. a surge of capital inflows). In addition, the authorities generally eased CFMs since the last Article IV consultation. Specifically, the authorities have taken the following actions:

- The *macroprudential assessment framework's leverage ratio for non-financial enterprises' cross-border borrowing* was relaxed to align the framework with the overall volume of capital flows allowed under the previous administrative framework.
- *Reserve requirement ratios (RRR) for banks' offshore RMB deposits* and the *RRR for foreign exchange derivatives* were set to zero (September 2017).
- *Limits on overseas RMB withdrawal by payment cards* were lowered from 100,000 yuan per card per year (individuals can hold multiple cards) to 100,000 yuan per year per person (December 2017).
- *Overseas direct investment* (ODI) measure were overall eased: (i) the approval requirement for ODI above US$1 billion was abolished; ODI in non-sensitive projects is subject only to record-filing and, if above US$300 million, to submission of Non-sensitive Project Status Report; (ii) the coverage of sensitive industries was modified; and (iii) indirect investments by individuals through offshore entities was included in ODI coverage.
- *Financial institutions' limit of overseas RMB lending was increased to 3 percent from 1 percent of the previous year's end-year balance on all RMB deposits*. A countercyclical factor was added to the framework, albeit without making changes to the limits.
- The *Qualified Domestic Limited Partnership* (QDLP) scheme was resumed after a two-year halt. This allows foreign fund managers to raise money in China for investment abroad within the awarded quotas. Quotas were further increased to US$5 billion in April 2018.
- The *Qualified Domestic Investment Enterprises* (QDIE) program in Shanghai and Shenzhen, which support domestic institutions carrying out outbound investments, was expanded for the first time since 2015. Its quotas increased to US$5 billion, up from US$1.3bn, in April 2018.
- The *Qualified Domestic Institutional Investor* (QDII) scheme, which provides financial institutions with quotas for outbound investment, was also expanded in April 2018 for the first time since 2015.
- The *RMB Qualified Domestic Institutional Investor* (RQDII) scheme, which provides financial institutions with quotas for outbound investment, was resumed, but saw a tightening of its reporting and enforcement requirements (May 2018). The authorities also indicated that the scheme is linked to "macroprudential" measures for overseas investment on cross-border capital flows, off-shore RMB market liquidity, and RMB product development.
- The *dollar-denominated Qualified foreign institutional investor* (QFII) and the *RMB Qualified Foreign Institutional Investor* (RFQII), were modified to ease restrictions on foreign institutional investors' outflow of funds from China. Specifically, the three-month capital lock-up period and the 20 percent monthly repatriation limit for the QFII and the RQFII were eliminated, and FX hedging on onshore investment was allowed (June 2018).

Assessment

4. **Staff assesses that recent easing of CFMs is in line with the Fund's IV.** Following past advice, staff supports a cautious approach for further liberalization, including through the removal of some targeted measures. Therefore, setting the RRR on FX derivatives to zero, is appropriate as it supports the development of the derivatives market by improving hedging operations to manage currency-related risks. Setting the RRR on bank's off-shore renminbi deposits to zero also removes a discriminatory practice. Moreover, measures that gradually ease constraints on outbound investment, such as the measures on ODI, or the quota schemes such as QDLP, QDIE, QDII and RQDII are appropriate and in line with the gradual and cautious liberalization process. This is also the case of measures affecting quota schemes such as QFII and RQFII, which eliminate a discriminatory restriction on capital outflows by foreign investors. The adjustment to the leverage ratio was also appropriate as it aligned the new framework with the overall level of capital flows allowed under the previous administrative framework (January 2018). The change in limits of overseas RMB withdrawals by payment cards, which was a CFM tightening, may be appropriate on AML grounds, although further analysis will be conducted in the context of the next AML/CFT Review on China.[1]

5. **The new framework is an improvement over the previous ad-hoc system of case-by-case approval and quota allocations, but using it to actively manage the capital flow cycle would be inconsistent with the Fund's IV.** The framework is more predictable and transparent, and addresses risks arising from excessive cross-border financing and mismatches (e.g., currency, maturity, on/off balance sheet). The framework also includes a macroprudential adjustment parameter. The framework could be in line with the Fund's IV if the parameter is adjusted only in crisis or exceptional episodes to address potential risks associated with capital flows and the measure does not substitute for warranted macroeconomic adjustment. Nonetheless, adjusting the parameter to actively manage cross-border financing in the absence of well identified risks would deem the measure inconsistent with the Fund's IV.

6. **In line with previous Fund advice, consistent and transparent enforcement remains a challenge.** Regulations remain "confidential" or are not always readily available to the market. Transparent and consistent enforcement of CFMs' together with a clear communication is important to strengthen market participants' confidence in the regulatory framework.

7. **The authorities should thus prioritize the implementation of reforms that support the liberalization process, while primarily relying on macroeconomic policies to deal with risks associated with capital flows. Some CFMs may be appropriate as reforms** are being phased in, which is consistent with the liberalization of the capital account being gradual, carefully sequenced, and paced with supporting reforms.

[1] For example, there were reports of a surge of ATM withdrawals in Hong Kong SAR by $HK 20 billion per month as Macau SAR introduced a facial recognition technology in its ATMs (South China Morning Post – January 26, 2018).

INTERNATIONAL MONETARY FUND

PEOPLE'S REPUBLIC OF CHINA

June 28, 2018

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

Asia and Pacific Department
(In consultation with other departments)

CONTENTS

FUND RELATIONS 2

WORLD BANK-IMF COLLABORATION 4

RELATIONS WITH THE ASIAN DEVELOPMENT BANK 8

STATISTICAL ISSUES 10

CAPACITY DEVELOPMENT AND TECHNICAL ASSISTANCE 13

FUND RELATIONS

(As of May 31st, 2018)

Membership Status: Joined 12/27/45; Article VIII (December 1, 1996)

General Resources Account:

	SDR Million	% Quota
Quota	30,482.9	100.0
Fund holdings of currency	26,851.5	88.1
Reserve position in Fund	3,631.4	11.9
Lending to the Fund		
New Arrangements to Borrow	1,649.0	

SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	6,989.7	100.0
Holdings	7,680.2	109.9

Outstanding Purchases and Loans: None

Financial Arrangements:

Type	Approval Date	Expiration Date	Amount Approved (SDR million)	Amount Drawn (SDR million)
Stand-by	11/12/86	11/11/87	597.73	597.73
Stand-by	03/02/81	12/31/81	450.00	450.00

Projected Payments to Fund (SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2016	2017	2018	2019	2020
Principal		0.00	0.00	0.00	0.00
Charges/interest		0.21	0.21	0.21	0.21
Total		0.21	0.21	0.21	0.21

Exchange Arrangements:

China's de facto exchange rate regime has been classified as crawl-like against the basket of currencies in the CFETS index since June 1, 2017. The previous classification was stablized. The de jure exchange rate arrangement is managed floating with a view to keeping the RMB exchange rate stable at an adaptive and equilibrium level based on market supply and demand with reference to a

basket of currencies to preserve the stability of the Chinese economy and financial markets. The floating band of the RMB's trading prices is 2% against the U.S. dollar in the interbank foreign exchange market: on each business day, the trading prices of the RMB against the U.S. dollar in the market may fluctuate within a band of ±2% around the midrate released that day by China's Foreign Exchange Trading System (CFETS). The People's Bank of China (PBC) indicated that the RMB's floating range would be changed in an orderly manner, based on the developments of the foreign exchange market and economic and financial situation. Within the trading band, banks may determine their RMB exchange rates to the U.S. dollar with their clients without any limit on the spread, based on market supply and demand (PBC No. 2014/188). On August 11, 2015, the PBC decided to further increase the flexibility of the RMB-to-USD exchange rate midrate quoting mechanism, thereby enhancing the market determination of RMB exchange rates, and giving market supply and demand an even greater role in exchange rate formation.

The CFETS publishes its exchange rate index (composed of 24 currencies since January 1, 2017, previously, 13 currencies), and other RMB indices based on the Bank for International Settlements (BIS) currency basket and the SDR currency basket.

China accepted the obligations of Article VIII, Sections 2, 3, and 4 of the Fund's Articles of Agreement on December 1, 1996. China maintains an exchange system free of multiple currency practices and restrictions on payments and transfers for current international transactions. However, China has notified measures to the Fund, pursuant to procedures under the Executive Board Decision 144 (52/51), which apply to measures imposed solely for national or international security reasons.

While exchange controls continue to apply to most capital transactions, the use of renminbi in international transactions has expanded over time. Effective October 1, 2016, the RMB was determined to be a freely usable currency and was included in the SDR basket as a fifth currency, along with the U.S. dollar, the euro, Japanese yen, and the British pound.

Article IV Consultation:

China is on the standard 12-month consultation cycle. The 2017 Article IV mission was concluded onJune 14, 2017 and the staff report was published on August 15, 2017.

Technical Assistance:

Technical assistance provided from 2001 through June 2018 is summarized in Annex V.

Resident Representative:

The resident representative office in Beijing was opened in October 1991. Mr. Alfred Schipke is the Senior Resident Representative and Ms. Longmei Zhang is the Deputy Resident Representative.

WORLD BANK-IMF COLLABORATION

(As of June 1, 2018)

1. The IMF China Resident Representatives held discussions with the World Bank team inMay 2018 to exchange views on key areas of reform to ensure sustainable medium-term growth in China, minimize risks, and improve the inclusiveness of growth. The teams discussed their agendas for 2018-2019. The last such meeting was held during June 2017 in Beijing.

2. The teams agreed the focus of reform in China should be on shifting from quantity to quality of growth, along the line of the 19th Party Congress report. Reforms should aim at unwinding past buildup of risks stemming from rapid credit growth, complex intra-financial sector claims, and quasi-fiscal spending, and move the economy to a more inclusive, environment-friendly, and sustainable growth path. Giving the market a more decisive role, eliminating distortions, and modernizing policy frameworks will result in a more efficient use of resources, faster productivity growth, and rising living standards across the income spectrum.

3. Based on this assessment, teams identified the following reform areas as macro-critical:

- ***Financial sector reforms.*** Further progress in financial sector reform is central to containing risks and boosting growth by facilitating better allocation of resources. Widespread implicit guarantees distort the pricing of risk, resulting in misallocation of credit and inefficient investment. Intra-financial sector credits have become large and complex, posing risks to financial stability. Key measures in this area include tightening regulation, including the recently issued asset management product rules and liquidity rules, hardening budget constraint, enhanced debt restructuring to facility the resolution of underperforming loans, as well as better cooperation and coordination among different regulators under the guidance of the newly established Financial Stability and Development Committee. of the financial system.

- ***Fiscal reforms.*** *Off-budge*t spending, in infrastructure but also in other areas, undertaken by local government-owned entities have led to a significant buildup of debt. The new budget law aims to bring these projects on-budget and strengthen control over public financial management. Implementation has been difficult, but the government has been renewing efforts since late 2016. The central government needs to provide consistent signals on the importance of budget reform implementation, which should moderate growth in public investment financed at the local level. Improving the fiscal framework is a priority for the medium term, including strengthening budget processes, data transparency, local government finances, and medium-term fiscal planning. Tax reforms should continue to modernize the current tax system and make it more progressive (e.g., relying more on direct taxes). Aligning central and local government finances—establishing a regime that matches revenues to spending responsibilities—will be key.

- ***Reform of the social security system***. Further strengthening the pension and health insurance systems—including by improving adequacy and expanding coverage—would have macro-benefits such as reducing precautionary household savings, but would need to be done with a careful eye to

fiscal sustainability. It is crucial to improve benefit portabilit*y within and across provin*ces and economic sectors. Reforms should be done in a way that ensures the sustainability of the social security system, including through parametric changes (such as increasing retirement age, indexation, and so on), transferring a portion of state-owned capital into the social security fund, and structural reforms to the pension system (such as introducing the NDC approach, deepening the alignment of civil service and PSU pension schemes with the urban worker scheme, upgrading the pooling level, developing the medium and long term financing strategy, including for financing legacy costs outside the pension system), and strengthening the budget processes and administration for social security funds. .

- ***SOE reform.*** Reforms include advancing on debt restructuring given the central role of SOEs in corporate debt vulnerabilities and in overcapacity sectors. Hardening budget constraints would help properly price finance and other factor inputs, which could be facilitated by adequate dividend payments to the budget and phasing out the social functions of SOEs. Opening up the service sector to full and fair competition activities currently reserved to SOEs will also be critical for generating the productivity gains necessary to fuel growth.

- ***Governance and regulatory reforms.*** This includes additional measures to align the coordination and incentives of governing and regulatory bodies toward empowering markets to support sustainable growth, including entry/exit of firms, competition policy, resolution of insolvencies, intellectual property rights (IPR), and adjustments in public sector cadre evaluation systems.

- ***Green growth.*** Air pollution, water quality and supply, soil contamination, and issues such as desertification, and degradation of grasslands, and dependence on coal and energy intensive economic options have social, health, and economic effects. Underpricing of energy and inadequate consequences for pollution has worsened these effects while contributing to China's dependence on industry. Raising these factor costs to capture the cost of externalities, such as investing in green development including in renewable energy will make growth more sustainable and inclusive. This will also require mobilization of private capital and utilize the capital markets to support green investments.

- ***Infrastructure.*** Investment in infrastructure has been a key driver of the Chinese economy, particularly during the slowdown around the Global Financial Crisis. However, the rapid pace of investment has in some cases left communities behind, and in other cases has led to excessive investment in projects with relatively low social or financial returns. Filling in the gaps of investment in social projects will make growth more inclusive while improving the overall social and financial efficiency of infrastructure investment. Measures to improve the process of approving new infrastructure projects will ensure that investments are focused in areas of the highest social return.

4. The teams agreed to the following division of labor.

- ***Financial sector reforms.*** The Bank and the Fund has jointly conducted the 2017 FSAP; assess financial sector risks and provide recommendations on the needed reforms. The Fund will follow up to provide technical assistance to the Chinese authorities as needed.

- ***Fiscal reforms.*** The Bank will continue to work with the Ministry of Finance (MOF) to help in implementing key reforms in public finance through analytical work, continued cooperation at the local government level, and an ongoing fiscal technical assistance investment project. The Fund will continue its technical cooperation on the fiscal framework and budgetary preparation, including strengthening the medium-term macro and fiscal framework, enhancing local government borrowing monitoring, and modernizing accounting and treasury management. The Fund will also continue to discuss the fiscal space in China and policy choices on the broader economy as well as implications for global spillovers.

- ***Social Security System.*** The Bank will continue to work with the Chinese authorities on reforms to improve the equity, sustainability, and portability of the social security system. This includes helping provincial governments in developing more integrated social security information systems. The Bank will also work with MOF to provide technical support on the overall reform and the pooling and financing strategies, and optimize fiscal risk management associated with social security liabilities through policy dialogue and engagement. The Fund will look at issues related to the how different social insurance schemes (including pensions and health care) fit into the medium-term fiscal and macroeconomic policy framework. The Fund will also review the balance between benefits and financing from different revenue sources, including social contributions and other revenue. Both the Bank and the Fund will continue to encourage the authorities to undertake regular and robust actuarial modeling of social insurance liabilities.

- ***Green growth.*** The Bank's focus on climate change and renewable energy as well as pollution reduction and prevention in China will continue to emphasize cutting-edge green technologies, scale-up of energy conservation and investments in energy efficiency, green transport and green building policies (for heat and energy efficiency). Engagements with a climate change focus will extend to expansion of distribution of electricity from natural gas generation, analysis of carbon capture and storage potential, and development of green finance, including carbon markets.

- ***New Drivers of Growth.*** The Bank is cooperating with Development Research Center (DRC) of the State Council on a flagship report that focuses on identifying and nurturing new sources of growth to sustain China's development into high income status. The focus is on policies and reforms to accelerate productivity growth by removing **d**istortions, accelerating **d**iffusion, and fostering **d**iscovery and innovation (the three 'D's). Separate draft thematic reports have been prepared in relevant areas, which will feed into a single integrated document under preparation.

5. Teams have the following requests for information from their counterparts:

- The Fund team requests to be kept informed of progress in the above macroeconomic structural reform areas, as milestones are reached and at least on a semiannual basis.

- The Bank team requests to be kept informed of the Fund's assessments of macroeconomic policies and prospects in the context of the Article IV consultation and staff visits, and at least semiannually.

The following table lists the teams' separate and joint work programs for June 2017 to June 2018.

China: Bank and Fund Planned Activities in Macro-Critical Structural Reform Areas

	Products	Expected Delivery Date
Bank Work Program	• Building a Modern Fiscal System Technical Assistance Project to support implementation of central government's public finance reforms.	• Ongoing
	• China Economic Reform Implementation Project (umbrella TA project, including various subprojects with MOF, PBC, and provincial finance bureaus).	• Ongoing
	• New Drivers of Growth Report	• Ongoing
	• Mid-term Assessment of 13th Five Year Plan Implementation	• Ongoing
	• China Economic Update	• Ongoing
	• "Just-in-time" Policy Notes for MOF	• Delivered on demand
	• Subnational Intergovernmental Fiscal Relationship	• Ongoing
	• Municipal Financing and Local Debt Management	• Ongoing
	• Financial Sector Development and Inclusion	• Ongoing
	• Deepening health reform in China-building high quality and value-based service delivery	• Ongoing
	• Strengthening China's social protection and labor systems	• Ongoing
	• Analytical work and projects on pollution control and innovative green financing in several provinces	• Ongoing
	• Projects and work on food safety	• Ongoing
	• Province-level projects on poverty reduction	• Ongoing
Fund Work Program	• 2017 Article IV Consultation	• May / June 2017
	• January Staff Visit	• Jan 2018
	• Cooperation Program for Fiscal Reforms (FAD)	• Ongoing
	• Cooperation Program for Financial Reforms (MCM)	• Ongoing
	• 2018 Staff Visit	• Jan 2018
	• 2018 Article IV	• May 2018
Joint Work Program	• Financial Sector Assessment Program	• Nov 2017

RELATIONS WITH THE ASIAN DEVELOPMENT BANK[1]

1. **The Asian Development Bank's (AsDB) partnership with the People's Republic of China (PRC) has grown in many ways since the PRC became a member of AsDB in March 1986**. The PRC is AsDB's second largest shareholder among regional members and the third largest overall, as well as an important middle-income country client. By the end of 2017, the PRC's cumulative borrowing from AsDB reached $34.84 billion with 249 loans for public sector projects. Of the total public sector loans, 48.76 percent was allocated to the transport and ICT sector, followed by energy (16.25 percent), water and other municipal infrastructure services (14.21 percent), agriculture and natural resources (13.35 percent), industry and trade (2.22 percent), finance (2.01 percent), education (1.52 percent), multisector (1.41 percent) and health (0.28 percent). Over the past 30 years, AsDB has helped finance private sector projects in the PRC totaling $7.5 billion. This comprised direct loans of $3.55 billion, equity investments of $444 million, one partial credit guarantee facility of $107 million, and B loans and complementary loans of $3.4 billion. AsDB also funds technical assistance for the PRC. By the end of 2017, AsDB had provided a total of $500.9 million for 859 technical assistance projects, consisting of $161.9 million for preparing projects and $339 million for policy advice and capacity development.

2. **Overall, the PRC has demonstrated strong capabilities in implementing projects**. The good performance shows the strong sense of project ownership among agencies involved in the design, implementation, and management of projects, as well as the rigorous screening process for development projects, particularly those proposed for external financing. Loan disbursement and contract award performance is good.

3. **The PRC has demonstrated its strong partnership with AsDB by substantially increase PRC's financial contribution to ADB** by contributing to the Asian Development Fund, and by establishing the PRC Poverty Reduction and Regional Cooperation Fund (the PRC Fund), the first fund established in AsDB by a developing member country. The PRC Fund –of $90 million- provides technical assistance projects to support subregional cooperation initiatives, particularly Central Asia Regional Economic Cooperation (CAREC) and Greater Mekong Subregion (GMS) programs.

4. **The Asian Development Bank's Country Partnership Strategy (CPS) 2016–2020 was endorsed by AsDB Board of Directors in February 2016.** The CPS 2016–2020 is aligned with the priorities of the PRC's 13th Five-Year Plan 2016–2020, the Midterm Review of AsDB's long-term Strategy 2020, and AsDB's approach to supporting upper middle-income countries. The CPS will support the government's reform agenda by focusing on the following strategic priorities: managing the environment and climate change, promoting regional cooperation and integration, supporting inclusive development , fostering knowledge cooperation, and supporting institution building. AsDB's sovereign and nonsovereign operations will support activities within these strategic priorities. The latter will focus on on new business models and new technology solutions.

[1] Prepared by Asian Development Bank staff.

5. **Projected public sector lending in 2018–2020 consists of 32 firm lending projects totalling $6.15 billion and eight standby lending projects for 2020 totalling $1.66 billion.** The indicative 2018–2020 lending and nonlending pipelines are organized around the above-mentioned core themes to address the complex development issues of the PRC in a strategic way with high-value multisector programs. Over 90 percent of the projects are located in the western, central and north-eastern regions in line with the country's priorities.

6. **The nonlending program for 2018-2020 will enhance the design, preparation and readiness of the lending program and support knowledge creation, management and sharing, both within the PRC and with other developing economies.** The TA program has a strong thematic focus, in line with the lending program and in response to the government's priorities.

China: AsDB's Commitments and Disbursements (Public Sector Loans), 1993–2017

(In millions of U.S. dollars)

Year	Commitments 1/	Disbursements 2/
1993	1,031	371
1994	1,618	492
1995	2,304	558
1996	3,282	707
1997	4,033	715
1998	4,518	818
1999	5,337	792
2000	6,159	832
2001	6,748	1,313
2002	7,563	782
2003	8,075	705
2004	8,733	636
2005	11,060	892
2006	11,794	988
2007	13,214	1,190
2008	14,519	1,234
2009	15,623	1,342
2010	16,964	1,342
2011	18,244	1,580
2012	19,476	1,343
2013	20,416	1,063
2014	21,748	1,303
2015	23,096	1,152
2017	26,600	1,367

1/ Refers to cumulative contract awards.
2/ Refers to disbursements for the year.

STATISTICAL ISSUES

(As of June 1, 2018)

I. Assessment of Data Adequacy for Surveillance
General: While data are broadly adequate for surveillance, they are only barely so. Efforts at strengthening the statistical system and enhancing data transparency led to China's subscription to the SDDS in October 2015. Nevertheless, China's statistics continue to have gaps that hamper surveillance. The areas of concern relate mainly to national accounts data and government finance statistics. China has endorsed and is in the process of implementing the recommendations of the Data Gaps Initiative of the G-20.
National Accounts: The National Bureau of Statistics (NBS) compiles and disseminates annual GDP by activity and by expenditure in current prices, by activity at constant prices (2015), and quarterly estimates of GDP by activity at current and constant prices. The NBS is in a transition period from 1993 SNA to 2008 SNA. The 2008 SNA has been implemented in the calculation of financial intermediation services indirectly measured and in the capitalization of research and development. The techniques for deriving volume measures of some GDP components are not sound and need to be improved. Annual GDP by expenditure is compiled at constant prices but is not published. Expenditure components of GDP are not available on a quarterly basis. The NBS has made several improvements to the range and quality of national accounts data, the most important being improving the exhaustiveness of the GDP estimates by activity. Further improvements are intended for both the annual and quarterly accounts; however, no target dates have been set. As in other countries, rapid economic change, including the expansion of the private sector, presents new problems for data collection and compilation. The ability to change the data collection systems is restricted by the decentralized nature of the statistical system. Monthly industrial production, retail sales, and fixed investment indices are disseminated as ratios with respect to the corresponding month of the previous year, but no chain-linked indices are produced. Data revisions tend to be made without publishing the entire revised series.
Price Statistics: The CPI covers approximately 500 areas throughout the country, including around 200 counties and around 300 cities. The current CPI is a chained Laspeyres price index, which is compiled and disseminated since 2001. Weights are derived from urban and rural households' surveys every five years. Current weights are for 2008-2010. The weights from the base period are price-updated every month. However, the weights are not published. PPI survey covers 40 percent of the total industry turnover including 60,000 enterprises in 31 provinces and over 430 cities. Prices cover 1702 product groups (basic sub-categories). The current base year is 2010. The PPI definitions are consistent with international standards defined in the PPI manual (2010). The PPI is not seasonally adjusted.
Government Finance Statistics: Serious data shortcomings continue to hamper fiscal analysis. Data on the social security and extra budgetary funds are only provided annually and with a long lag. China currently reports GFS for general government with no breakdown of expenditure by economic type except interest, but including data under the Classification of Functions of Government for the GFS yearbook. Expenditure classification remains in need of improvement, mainly because expenditures by economic type are not published. The authorities have indicated an intention to begin collecting these data and to develop accrual based measures of fiscal performance over the medium term while also strengthening the compilation of cash based GFS. China has made a commitment under the G20 Data Gaps Initiative to develop quarterly general government data, although no specific timeframe has been communicated. General Government coverage excludes the operations of the local government financing vehicles (LGFVs) which are substantial.

Monetary and Financial Statistics:
In recent years, improvements have been made in monetary and financial statistics. However, the monetary and banking surveys lack sufficient detail with regard to bank claims on the government, hampering the estimation of the fiscal deficit from the financing side. The reported net foreign assets position of PBC does not include exchange rate valuation effects and interest earnings on foreign reserves. The PBC has also ceased to report separate data on central government deposits in its balance sheet since April 2005 because the MOF no longer distinguishes between central and other government deposit accounts. This change has led to breaks in data series of monetary base and monetary aggregates. The monetary and financial statistics missions in March 2015 made several recommendations for improvements in monetary data compilation with a view to accelerating PBC's implementation of the standardized report forms (SRFs). The PBC is currently technically capable of compiling and reporting monetary statistics in the IMF-recommended format of SRFs at least for the central bank and other depository corporations. Nonetheless, reporting of SRFs has not yet begun pending internal review and approval processes.

Financial sector surveillance: China reports financial soundness indicators (FSIs) to the Fund for dissemination on the IMF's website. In addition to the 12 core FSIs, the authorities included in early 2015 two encouraged FSIs for deposit takers in their regular reporting to the Fund. The periodicity of data was also improved in May 2015 from annual to semi-annual frequency.

External sector statistics: The historic data series (balance of payments starting with data for 2005:Q1 and international investment position (IIP) starting with data for 2011:Q1) are compiled and adjusted (in U.S. dollars) largely in accordance with the sixth edition of the *Balance of Payments and International Investment Position Manual* (*BPM6*) and are disseminated in the IFS. The authorities continue their efforts to improve the coverage of balance of payments (BOP) and IIP statistics, and progress is being made in developing these statistics. With the transition to BPM6, data gaps have appeared in the BOP pertaining to the series of workers remittances, merchanting, and primary income data (portfolio investment income). Since the International Transactions Reporting System is the major data source for BOP statistics, in order to ensure its smooth operation, regular training programs for staff in the provincial offices of SAFE have been recommended.
China made considerable efforts for improving the coverage of external sector statistics, including by (i) commencing participation in the Coordinated Direct Investment Survey (CDIS) in 2011, although only inward direct investment positions are currently recorded; (ii) initiating reporting data for the Coordinated Portfolio Investment Survey (CPIS) at the end of 2015; (iii) reporting data to the Currency Composition of Foreign Exchange Reserves (COFER) since 2015; and (iv) compiling and disseminating the International Reserves and Foreign Currency Liquidity Template starting September 2015.
Despite an ostensibly modest level of external vulnerability, there remains a need to strengthen external debt monitoring and compilation. In 2010, China started submitting total and public external debt data for the Quarterly External Debt Statistics (QEDS) database, a notable step forward.

II. Data Standards and Quality

China began subscription to the Special Data Dissemination Standard in October 2015.	No data ROSC has been conducted.

China: Table of Common Indicators Required for Surveillance
(As of June 2018)

	Date of Latest Observation	Date Received	Frequency of Data[9]	Frequency of Reporting[9]	Frequency of Publication[9]
Exchange rates	05/18	06/18	D	M[9]	D
International reserve assets and reserve liabilities of the monetary authorities[1]	05/18	06/18	M	M	M
Reserve/base money	05/18	06/18	Q, M	Q, M	Q, M
Broad money	05/18	06/18	M	M	M
Central bank balance sheet	05/18	06/18	M	M	M
Consolidated balance sheet of the banking system	04/18	05/18	M	M	M
Interest rates[2]	04/18	05/18	[10]	[10]	[10]
Consumer price index[3]	05/18	06/18	M	M	M
Revenue, expenditure, balance and composition of financing[4]—general government[5]	2016	07/17	A	A	A
Revenue, expenditure, balance and composition of financing[4]—central government	04/18	05/18	M	M	M
Stocks of central government and central government-guaranteed debt[6]	Q4/17	03/18	Q	Q	Q
External current account balance	Q4/17	04/18	Q	A, Q	A, Q
Exports and imports of goods and services[7]	04/18	06/18	M	M	M
GDP/GNP[8]	Q1/18	04/18	A, Q (cumulative)	A, Q (cumulative)	A, Q (cumulative)
Gross external debt	Q4/17	03/18	A, Q	A, Q	A, Q
International investment position	Q4/17	04/18	A, Q	A, Q	A, Q

[1] Any reserve assets that are pledged of 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.
[2] Both market based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Only 12-month growth rates are reported (price indices are not available).
[4] Data on financing (foreign, domestic bank and domestic nonbank financing) is not available.
[5] The general government consists of the central (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[6] Including currency and maturity composition.
[7] Goods trade data are provided monthly. Services trade data are released with the current account statistics.
[8] For real GDP, level data are available only on an annual basis (growth rates are available on a quarterly, cumulative basis).
[9] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).
[10] Interest rates change only infrequently; these changes are publicly announced.

CAPACITY DEVELOPMENT AND TECHNICAL ASSISTANCE

China: Summary of Capacity Development and Technical Assistance, 2011–18 1/

Department	Purpose	Date
Tax System Reform		
FAD	Mission on Tax Gap Analysis	September 2011
FAD	Micro-Simulation Models	December 2013
FAD	Analysis of the Macroeconomic Impact of Tax Policy	March 2015
FAD	Reforming the Personal Income Tax	October 2015
FAD	The Future Design of Value-added Tax	September 2016
FAD	Mission on tax policy and employment creation	September 2017
FAD	Mission on social security reform	March 2018
Tax Administration Reform		
FAD	Tax Policy And Administration	September 2011
FAD	Tax Administration (Peripatetic Expert Visit 4 Of 5)	October 2011
FAD	Tax Administration (Peripatetic Expert Visit 5 Of 5)	October 2011
FAD	Large Taxpayer Compliance	October 2011
FAD	Workshop on Practical Tax Analysis For Tax Officials	December 2012
FAD	Large Taxpayer Administration	January 2013
FAD	Tax Administration Follow-Up	April 2014
FAD	Tax Collection Law Revision	May 2014
FAD	Tax Collection Law Revision	July 2015
LEG	Mission on Reforming Tax Collection Law	July 2015
FAD	Reforming the Personal Income Tax	October 2015
FAD	Improving Tax Compliance on ODI by Chinese Enterprises	October 2016
FAD	Mission on tax administration	September 2017
FAD	Mission on tax administration	March 2018
Public Financial Management		
FAD	High-level Dialogue on PFM Institutions	June 2011
FAD	Medium-Term Expenditure Framework Seminar	November 2011
FAD	Medium-Term Revenue Administration Program And Policies Discussion	June 2012
FAD	High-Level Dialogue on PFM Institutions	November 2012
FAD	Mission on Introducing Advanced Treasury Reforms	February 2013
FAD	High-level Seminar on Fiscal Reforms	January 2014
FAD	Mission on Modernization of Government Accounting	April 2014
FAD	Mission on Medium Term Expenditure Frameworks	July 2014
FAD	Expert visit on Treasury management (accounting)	September 2014
FAD	Expert visit on Chart of Accounts Improvements	March 2015
FAD	Expert visit on Treasury Management (cash management)	March 2015
FAD	Mission on Strengthening Local Government Borrowing Reform	April 2015
FAD	Mission on Accounting Modernization	November 2015
FAD	Workshop on Medium-Term Expenditure Frameworks	April 2016
FAD	Seminar and Case Study on Local Government Borrowing and Bond	April 2016

	Market Development	
FAD	Expert visit on Treasury – Central Bank Coordination	June 2016
FAD	Workshop on Medium-term Expenditure Frameworks	April 2017
FAD	Mission on government accounting reforms	April 2018
Statistics		
STA	Workshop On Special Data Dissemination Standard	April 2011
STA	Government Finance Statistics	May 2011
STA	Data Work: SRFS Data Development for OFCs/ FSI Data Reporting	April 2012
STA	Quarterly National Accounts	November 2013
STA	Total Social Financing(TSF) Indicators/Monetary and Financial Statistics	March 2014
STA	SDDS Assessment	August 2014
STA	Data Work: Monetary Data Reported in SRF	September 2014
STA	SDDS Assessment	December 2014
STA	TSF/Monetary Data Reported in SRFs	March 2015
STA	Multi-sector Mission: SDDS Metadata Development and Topical TA	June 2015
Monetary Policy, Bank and financial Supervision, and AML/CFT		
LEG	AML/CFT Legislative Drafting	March 2011
LEG	Bank Resolution	May 2012
MCM	Mission on securities market supervision	March 2018
Training		
LEG	AML/CFT Legislative Drafting Mission	March 2011
INS	Course on Macroeconomic Management and Financial Sector Issues	March 2011
INS	Course on Macroeconomic Forecasting	April 2011
INS	Government Finance Statistics Course at CTP	May 2011
STA	Course on Government Finance Statistics	May 2011
STA	Course on Government Finance Statistics	June 2011
INS	BOP and IIP Course at CTP	June 2011
STA	Course on Balance of Payments Statistics	October 2011
INS	Monetary and Financial Statistics Course at CTP	November 2011
STA	Participate in OECD-NBS Workshop on National Accounts	March 2012
INS	FSI Course at CTP	September 2012
MCM	Medium Term Debt Management Workshop	November 2012
INS	BOP/IIP Course at CTP	April 2013
MCM	Workshop on Capital Account Convertibility and Exchange Rate Policy	June 2013
STA	SDDS Seminar	July 2013
INS	Introductory Course on Monetary and Financial Statistics in CTP	September 2013
STA	Quarterly National Accounts Seminar organized by NBS	November 2013
ICD	Macroeconomic Management & Financial Sector Issues	January 2014
MCM	Financial Statistics	March 2014
MCM	Workshop on Financial Regulation and Supervision	March 2014
ICD	Macroeconomic Management & Financial Sector Issues	March 2014
ICD	Macroeconomic Diagnostics	September 2014
INS	Financial Soundness Indications in CTP	September 2014
STA	Seminar at Fund HQ for SAFE Officials on Experiences and Challenges in the Implementation of BPM6	September 2014

ICD	Macroeconomic Forecasting	October 2014
STA	OECD/NBS Workshop on Sectoral Accounts (with STA participation)	December 2014
ICD	Macroeconomic Management and Financial Sector Issues	March 2015
MCM/STA	Total Social Financing Indicator	March 2015
STA	Meeting: ECB Meeting with Delegation from China on Debt Securities & Data Issues	April 2015
STA	Meeting: BIS Meeting with Delegation from China on Debt Securities & Data Issues	April 2015
MCM	SDR Review/Operational Issues	June 2015
ICD	Macroeconomic Forecasting	June/July 2015
INS	Advanced Course on Monetary and Financial Statistics in CTP	August 2015
STA	SAFE-Course on Compilation of Balance of Payments Statistics	September 2015
ICD	Macroeconomic Diagnostics	September 2015
STA	Balance of Payments Statistics	September 2015
ICD/FAD	Fiscal Analysis and Forecasting	November 2015
FAD/ICD	Course on Fiscal Analysis and Forecasting	December 2015
STA	Debt Securities Statistics	March 2016
STA	OECD/NBS China Workshop on National Accounts (with STA participation)	March 2016
MCM	Sub-national Debt Market Development	April 2016
MCM	Workshop on Securities Supervision	April 2016
STA	Seminar on Cross-border Position Statistics and Challenges in the Implementation of New Data Initiatives	June 2016
ICD	Macroeconomic Forecasting	June/July 2016
ICD	Macroeconomic Forecasting – Advanced	July 2016
ICD	Financial Sector Surveillance	June/July 2016
MCM	Workshop on Enforcement and Market Surveillance	September 2016
ICD	Dynamic Stochastic General Equilibrium Modeling	November 2016
ICD	Dynamic Stochastic General Equilibrium Modeling - China	November 2016
ICD	Financial Sector Surveillance	June 2017
ICD	Macroeconomic Forecasting –advanced course	June 2017
ICD	Monetary and Fiscal Policy Analysis with DSGE Models	August - September 2017
ICD	Dynamic Stochastic General Equilibrium Modeling – China	September 2017
ICD	Cross-border Position Statistics	September 2017
ICD	Managing capital flows	March 2018
ICD	Macro-Econometric Forecasting and Analysis	May-June 2018
ICD	Fiscal Policy Analysis	June 2018
ICD	Financial Sector Surveillance	June 2018
ICD	Financial Development and Financial Inclusion	June-July 2018

1/ The new Institute for Capacity Development (ICD) was formed from the merger of the former IMF Institute (INS) and Office of Technical Assistance Management (OTM) on May 1, 2012.

Statement by the IMF Staff Representative
July 16, 2018

1. This statement contains information that has become available since the staff report was circulated. This information does not alter the thrust of the staff appraisal.

2. The US began implementing an additional tariff of 25 percent on US$34 billion of Chinese imports on July 6, with a further US$16 billion identified. China responded by imposing an additional tariff of 25 percent on US$34 billion of imports from the US, with a further US$16 billion identified. On July 10, President Trump ordered the US Trade Representative to begin the process of imposing tariffs of 10 percent on an additional US$200 billion of Chinese imports.

3. Recent data releases are broadly in line with staff projections:

- Q2 GDP growth was 6.7 percent (y/y), only marginally lower than 6.8 percent in Q1. Growth was driven by rebalancing: services contributed more to growth than industry (4.0 percentage points vs industry's 2.5), and consumption more than investment (5.3 percentage points vs investment's 2.1); net exports remained a slight drag. Nominal GDP growth slowed to 9.8 percent (y/y) in Q2 from 10.2 percent in Q1

- High-frequency indicators suggest some weakening in activity in May/June. Industrial value-added slowed to 6.0 percent (y/y) in June from 6.8 percent in May. Infrastructure fixed asset investment growth slowed to around zero. Total social financing growth continued to slow, falling to 9.8 percent in June, driven by shrinking shadow banking. Adjusting for the local government bond swap, total social financing moderated to 10.7 percent (y/y) in June and bank asset growth fell further to 6.8 percent (y/y).

- The trade surplus widened in June compared to May, with export growth (in US$ terms) easing moderately to 10 percent (y/y) and import growth falling to 14 percent (y/y). FX reserves increased slightly to US$3,111 billion.

- Headline CPI inflation ticked up slightly to 1.9 percent (y/y) in June, with core CPI also stable at 1.9 percent (y/y); PPI inflation picked up to 4.7 percent (y/y).

4. Since the Staff Report was finalized on June 28 the RMB has depreciated 0.6 percent against the CFETS basket and 0.9 percent against the US dollar; the equity market fell 1 percent; the 5-year central government bond yield fell 12bps to 3.3 percent while the 3-month yield fell 64bps to 2.5 percent.

Statement by Executive Director for the People's Republic of China
July 18, 2018

The Chinese authorities would like to thank the mission team for the candid and constructive policy discussions and professional analysis in the staff report. To avoid repeating the authorities' views that have already been reflected in the staff report, we would like to offer the following additional comments.

Recent developments

The Chinese economy has maintained a steady growth momentum, while facing some internal and external challenges, including trade friction. The authorities have focused on the quality of growth and have made notable progress in rebalancing. Following a 6.9 percent growth rate in 2017, GDP grew by 6.8 percent in the first half of 2018 and is projected to grow at around 6.5 percent for the year as a whole. Inflation has remained stable, with CPI increasing by 2.0 percent y-o-y in the first half of this year. Employment has continued to improve with the surveyed urban unemployment rate at 4.8 percent in June. Supported by successful policy adjustments in recent years, domestic demand has become the most important driving force for growth. Consumption contributed to 58.8 percent of growth in 2017, and further reached 78.5 percent in the first half of 2018.

In the first half of this year, in dollar terms, China's trade in goods went up 16 percent to about 2.2 trillion U.S. dollars, with exports rising by 12.8 percent and imports by 19.9 percent. The trade surplus was narrowed by 24.5 percent and FDI rose by 4.1 percent. In the first five months of 2018, profits of industrial enterprises grew by 16.5 percent. With the support of strong economic fundamentals and a versatile policy toolkit, the authorities are confident that the economy can withstand external shocks and avoid systemic risks. The authorities will continue to carry out prudent macroeconomic and financial policies in a consistent and forward-looking manner, and stay firm on the course of deepening reforms and further opening-up.

Monetary policy

The monetary policy remains prudent and neutral. Recently, to neutralize the tightening effect of the financial regulation, the People's Bank of China (PBC) cut the reserve requirement ratio (RRR) by 50 basis points for banks with the aim of further promoting legal and market-based debt-for-equity swaps and enhancing the support to SMEs.

Fiscal policy

China continues to adopt a proactive fiscal policy. Following the across-the-board implementation of the business tax as part of the VAT reform since last year, and new measures were announced to lower the VAT rate from 17 to 16 percent for the manufacturing

sector and from 11 to 10 percent for the transportation sector. Combined with other measures, this will reduce taxes for businesses and individuals by more than 120 billion U.S. dollars this year.

Local government debt

The authorities welcome staff's recognition of the country's strong public assets and positive net financial worth held by the government. Staff should be able to make a more objective and accurate assessment of the government's fiscal position by looking at both assets and liabilities of the balance sheets, rather than sticking to the so-called "augmented debt" that only focuses on the liability side of the government. The assets of the sampled LGFVs far exceed their liabilities, suggesting that staff might have over-estimated the current public debt risks and under-estimated future growth potential. In his work, *The Wealth of Nations*, Adam Smith emphasized that infrastructure and resource flows could reduce inequality, and government should take responsibility of building and maintaining infrastructure and public works. As the provider of public goods, the government has channeled most of its debts to infrastructure investments to promote convergence of regional developments, reduce transaction costs, and boost potential growth in the medium and long term. Many assets are either profitable by themselves or being able to generate externalities to the economy. The rapid development of Fintech, mobile payment and e-commerce, the formation of a highly integrated domestic market, the great reduction of travel time, and the increased supply of effective working hours have all benefited from the improvement of telecommunication and transportation networks.

Financial regulation and deleveraging

The authorities attach great importance to safeguarding the financial system. The Financial Stability and Development Committee (FSDC) has become fully operational with its first meeting in early July, announcing its leadership structure and composition of its members from key institutions. This will further enhance coordination and push forward regulatory reforms as well as the implementation of the work programs to prevent systemic risks.

The deleveraging efforts have delivered positive results. China's overall leverage ratio was 250.3 percent in 2017 and tended to stabilize. Credit to the nonfinancial corporate sector saw a decline of a 0.7 percentage point to 159 percent for the first time since 2011, reflecting a rapid increase of corporate profits and fiscal revenue. The leverage ratio of the government sector was 36.2 percent, down by 0.5 percentage point. Meanwhile, the leverage ratio of the household sector increased by 4 percentage points to 55.1 percent, slightly below the average growth rate between 2012 and 2016. In addition, the average debt-to-asset ratio for central SOEs stood at 66 percent as of end June, down 0.3 percentage point since this year.

Rebalancing progress

The rebalancing progress should be assessed by its long-term trend. China's current account surplus has declined from its peak of about 10 percent of GDP in 2007 to 1.3 percent in 2017. In the first quarter of this year, the current account registered a deficit of 34.1 billion U.S. dollars. The government has also made arduous efforts to strengthen environmental protection, and various environmental indicators have been steadily improved. In the first quarter of 2018, the consumption of energy per unit GDP declined by 3.2 percent y-o-y.

SOEs reforms

Significant progress has been made in SOE reforms, particularly in tackling zombie firms while transferring their social responsibilities to the government. Measures taken by the authorities include M&A, restructuring, strengthening corporate governance, and allowing non-viable zombie firms to exit from the market by the end of this year. By the end of 2017, the authorities have dealt with 1,200 zombie firms through these measures, cutting losses by 25.1 billion U.S. dollars equivalent. This year, the authorities will tackle another 800 zombie firms. With improved efficiency, the combined profits of central SOEs went up by 23 percent in the first half of this year. Meanwhile, the share of SOEs in total employment fell to 15 percent. In the highly competitive export sector, the privately-owned firms have outperformed that of the SOEs' since 2007. The share of both privately-owned and foreign-owned firms in total export is almost 90 percent.

Trade

China firmly supports free trade and the multilateral trade system. After President Xi announced a package of opening-up policies in April this year, China has taken an array of significant steps to further open-up its financial sector by removing most of the limits on foreign ownership and substantially expanding the business scope for foreign banks. China has accelerated its opening-up by lowering import tariffs in automobile and agriculture products as well as in various consumer goods. Foreign investors are also allowed to set up wholly-owned automobile companies. Recently, China further shortened the negative list on foreign investment from 63 to 48 items. In particular, the negative list that applies to China's free trade zones has been shortened to 45 items.

Like many other countries, China has also experienced difficulties and challenges associated with globalization, such as increased unemployment, income inequality and regional disparity. We have done our homework by deepening reforms and strengthening international cooperation. In China's response to WTO accession, thousands of SOEs were restructured and bankrupted, more than 30 million employees lost their jobs and got re-employed. China has fulfilled its commitment to the WTO by cutting its overall nominal tariff rate from 15 percent to 9.8 percent. In practice, China has even gone beyond its WTO commitment by lowering its effective tariff rate to 2.4 percent, which is lower than that of EMDCs, and close

to the level of AEs.

Thanks to the government's efforts to protect intellectual property rights, China's indigenous innovation has mushroomed and is now ranked number one in total patent applications, and number two in international patent applications, according to the WIPO. In 2017, China paid US$28.6 billion for intellectual property rights. Technology is a tradeable commodity, and a foreign company has the freedom to choose whether or not to enter into a contract that can fairly compensate the technology transfer. In case there is any dispute on technology transfer, it should be resolved through legal procedures under the WTO framework. In science and technology, China still has a long way to go to catch up with AEs. The visible progress up to date can mainly be attributed to a deep-rooted culture of respecting education and acquiring of knowledge, steady increase in R&D, as well as a large pool of educated labor force (8.2 million new graduates in 2018 alone).

Very recently, China and the European Union have agreed to jointly improve the rules-based international trade system, promoting multilateralism and support free trade. This is highly consistent with China's road map and timetable on reform and opening-up. Regardless of the outcome of China's bilateral trade disputes, China's economy is resilient enough to absorb shocks associated with the trade dispute. China will continue to firmly support free trade and the multilateral trade system and fully commit to deepening reforms, further opening-up, protecting intellectual property rights, and developing an open and competitive business environment for both domestic and foreign firms.

The authorities have made tremendous efforts in poverty alleviation. In the past five years alone, more than 68 million people have been lifted out of poverty, more than 8 million have been relocated from inhospitable areas. National pension schemes have been significantly expanded to cover more than 900 million people, and the basic health insurance plans have covered 1.35 billion people. Due to the large-scale infrastructure development sponsored by the government, 99 percent of the villages are now accessible to modern paved roads. Over 26 million housing units have been rebuilt in the rundown urban areas, and more than 17 million dilapidated houses have been renovated in rural areas, and more than one hundred million ordinary people have benefited from these efforts. The Gini Coefficient has declined from 0.491 in 2008 to 0.469 in 2017.

Many EDs have shown their interest in the Belt and Road Initiative and kindly reminded the authorities of the need to manage various risks. We appreciate the wide recognition of the great potential benefits of the initiative, and in China we are willing to listen to constructive advices and feedback. Also, we welcome broad participation and a joint sharing of risks and benefits. In his recent meeting with the World Bank President, Jim Yong Kim, President Xi made it very clear that China will promote the Belt and Road Initiative based on relevant

international standards and rules.

Last but not least, we will continue to make serious efforts to fill data gaps.