INTERNATIONAL MONETARY FUND

IMF Country Report No. 21/6

PEOPLE'S REPUBLIC OF CHINA

2020 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE PEOPLE'S REPUBLIC OF CHINA

January 2021

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 2020 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 December 17, 2020 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 December 17, 2020, following discussions that ended on November 4, 2020, 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 December 3, 2020.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for the People's Republic of China.

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PRESS RELEASE

PR21/1

IMF Executive Board Concludes 2020 Article IV Consultation with the People's Republic of China

FOR IMMEDIATE RELEASE

Washington, DC – **January 8, 2021:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the People's Republic of China.

The Chinese economy continues its fast recovery from the pandemic, helped by a strong containment effort and swift policy actions to mitigate the impact of the crisis. GDP growth is projected at 1.9 percent in 2020 and 7.9 percent in 2021, as economic activity continues to normalize and domestic outbreaks remain under control. Core inflation is expected to remain subdued, leaving CPI inflation in 2020-21 below the pre-crisis target of about 3 percent. Corporate leverage is expected to rise by about 10 percentage points of GDP in 2020. The current account surplus is projected to widen to 1.9 percent of GDP in 2020 from 1.0 percent in 2019, before narrowing to below 1 percent in 2021. The projected temporary increase this year reflects lower commodity prices, the collapse in outbound tourism, and a surge in exports of pandemic-related and other goods supported by China's early recovery of production and higher export prices.

Macroeconomic and financial policies have supported the recovery. Policymakers have provided financial relief and fiscal support to protect the most-affected firms while safeguarding financial stability, including by providing liquidity to the banking system, expanding re-lending facilities to smaller enterprises, and introducing a repayment moratorium until Q1 2021. The authorities have also increased the disbursement and coverage of unemployment insurance to help vulnerable households and provided tax relief and waived social security contributions by employers. Against this backdrop, the general government deficit (including estimated off-budget investment spending) is projected to rise to 18.2 percent of GDP in 2020 from 12.6 percent in 2019.

Structural reforms have progressed despite the pandemic, but not evenly across key areas. The opening of the financial sector has advanced with a further shortening of the negative lists for foreign investment and the removal of restrictions on the investment quota for foreign institutional investors. Labor market reforms, such as *hukou* reforms, have improved labor mobility, and the patent law was amended to strengthen intellectual property protection and foster innovation. At the same time, progress in real-sector reform has been slow, especially in the area of state-owned enterprises and competitive neutrality between private and state-owned firms.

[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.

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Executive Board Assessment[2]

Executive Directors noted that the COVID-19 crisis has inflicted significant human and economic costs on China and commended the authorities for the effective containment measures and swift macroeconomic and financial policy support to mitigate the economic impact of the pandemic. Directors noted, however, that growth was still unbalanced and that fiscal, monetary, and structural policies should aim at strengthening private demand to allow for more balanced medium-term growth.

Directors called for a continuation of the moderately supportive fiscal and monetary policies until the recovery is on solid ground, while noting that, in the medium term, fiscal consolidation was necessary to ensure debt sustainability. To maximize the policy space, they saw benefits in further improving the macro-fiscal framework, including intergovernmental coordination and macroeconomic data, and called for a modernization of the monetary policy framework to strengthen the transmission of conventional interest rate policies and enhance financial intermediation. Some Directors encouraged the authorities to focus on broader concepts of the fiscal deficit. Directors also called for enhancements to the social safety net to reduce precautionary savings, which combined with greater progressivity in the tax system would help address income inequality.

Directors stressed the importance of addressing financial vulnerabilities proactively to safeguard financial stability. As the recovery takes hold, the temporary measures supporting the financial sector should be replaced with policies to address problem loans and strengthen regulatory and supervisory frameworks. Directors noted the need for a comprehensive bank restructuring framework in line with international best practices to allow for the orderly exit of weaker banks. While agreeing with the authorities on the potential benefits from digital currencies, Directors considered that more work was needed to assess risks. They also encouraged the authorities to continue improving their AML/CFT framework.

Directors welcomed continued progress on structural reforms, particularly in further opening up of the financial sector and improving labor mobility through *hukou* reforms. They stressed the need for further reforms of SOEs, including ensuring competitive neutrality between SOEs and private enterprises, and some Directors called for the need to remove remaining implicit guarantees. Structural reform will be key to boosting potential growth, reduce external imbalances, and build a more resilient, green, and inclusive economy.

Directors noted that while the current account surplus in 2020 should widen temporarily, it is expected to narrow over the medium term, reflecting an unwinding of the temporary impact of the pandemic and a rebalancing of economic growth. Directors also stressed that greater exchange rate flexibility would help the economy adjust to the changing external environment. Some Directors called for further improvement in the transparency of foreign exchange interventions and phasing out of capital flow management measures.

Directors welcomed the authorities' commitment to global cooperation, and noted that China, together with its partners, had an important role to play in supporting an open and rules-based international trade system. Directors also welcomed China's intention to play an important role in multilateral efforts to address pressing global challenges, including making any approved

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[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.

vaccine developed in China widely available to other countries and in mitigating climate change. They noted that China has a key role to play in the G-20 DSSI and Common Framework to provide debt relief to low-income countries, but noted that further improvements in data transparency were needed for the success of the global debt relief efforts. They welcomed China's ambitious plans for emissions abatement and increased green investment.

China: Selected Economic Indicators

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
								Projections			
	(Annual percentage change, unless otherwise indicated)										
NATIONAL ACCOUNTS											
Real GDP (base=2015)	6.9	6.8	6.9	6.7	6.1	1.9	7.9	5.7	5.6	5.5	5.4
Total domestic demand	7.3	7.9	6.8	7.4	5.5	1.5	8.7	5.8	5.6	5.6	5.4
Consumption	8.3	8.5	7.3	8.1	6.4	-0.8	11.3	6.4	6.5	6.2	6.1
Investment	6.1	7.2	6.1	6.5	4.5	4.6	5.4	5.1	4.6	4.8	4.5
Fixed	7.9	7.3	5.9	7.1	5.1	4.3	6.3	4.9	4.6	4.8	4.5
Inventories (contribution)	-0.6	0.0	0.1	-0.2	-0.2	0.2	-0.3	0.1	0.0	0.0	0.0
Net exports (contribution)	-0.1	-0.8	0.3	-0.5	0.7	0.4	-0.5	0.0	0.0	0.0	0.0
Total capital formation (percent of GDP)	43.0	42.7	43.2	44.0	43.1	43.1	41.8	41.2	40.4	39.6	38.8
Gross national saving (percent of GDP) 1/	45.8	44.5	44.8	44.1	44.1	45.0	42.7	42.0	41.1	40.2	39.4
LABOR MARKET											
Unemployment rate (annual average) 2/	5.0	5.0	5.0	4.9	5.2	5.4	...	...	...	...	...
Employment	0.3	0.2	0.0	-0.1	-0.1	-0.3	0.2	0.1	0.1	0.1	0.1
PRICES											
Consumer prices (average)	1.4	2.0	1.6	2.1	2.9	2.4	0.5	1.9	1.9	2.0	2.0
GDP Deflator	0.1	0.9	3.9	3.5	2.4	2.1	1.6	2.1	2.1	2.2	2.2
FINANCIAL											
7-day repo rate (percent)	2.4	2.7	5.4	3.1	3.1	...	...	...	...	...	...
10 year government bond rate (percent)	3.7	3.0	3.9	3.3	3.2	...	...	...	...	...	...
Real effective exchange rate (average)	9.8	-4.9	-2.9	1.4	-0.8	...	...	...	...	...	...
Nominal effective exchange rate (average)	9.7	-5.4	-2.5	1.5	-1.8	...	...	...	...	...	...
MACRO-FINANCIAL											
Total social financing	12.5	30.5	14.1	10.3	10.7	13.8	12.2	9.4	8.8	8.4	7.9
In percent of GDP	200	242	248	248	253	276	283	287	290	291	292
Total nonfinancial sector debt 3/	14.5	16.8	14.3	10.8	10.7	13.9	12.4	9.8	9.2	8.7	8.2
In percent of GDP	222	241	248	248	253	277	284	289	293	295	297
Domestic credit to the private sector	15.9	12.6	11.6	8.3	9.2	12.0	11.0	7.9	7.5	7.1	6.5
In percent of GDP	161	168	169	166	167	179	182	182	181	180	178
House price 4/	9.1	11.3	5.7	12.3	8.6	7.0	6.5	6.2	5.9	5.8	5.7
Household disposable income (percent of GDP)	61.1	61.6	60.1	59.3	59.1	57.6	59.2	59.1	58.9	58.6	58.3
Household savings (percent of disposable income)	38.4	37.2	35.7	34.8	34.4	37.1	33.7	31.8	29.9	27.9	25.9
Household debt (percent of GDP)	39.1	44.7	48.9	52.3	55.6	58.3	61.3	62.4	64.0	64.9	66.0
Non-financial corporate domestic debt (percent of GDP)	122	124	120	113	111	121	120	119	117	115	112
BIS credit-to-GDP gap (percent of GDP)	25.4	20.8	11.8	0.3	-2.2	...	...	...	...	...	...
GENERAL BUDGETARY GOVERNMENT (Percent of GDP)											
Net lending/borrowing 5/	-2.8	-3.7	-3.8	-4.7	-6.3	-11.9	-11.0	-10.1	-9.1	-8.3	-7.5
Revenue	28.8	28.2	27.8	28.3	27.7	24.5	25.0	25.3	25.8	26.5	27.1
Additional financing from land sales	1.9	2.0	2.5	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Expenditure	33.5	33.9	34.2	35.8	36.9	39.3	38.9	38.3	37.9	37.8	37.6
Debt 6/	36.7	36.7	36.2	36.5	38.1	44.7	47.2	49.5	51.2	52.6	53.8
Structural balance	-2.5	-3.4	-3.6	-4.5	-6.0	-10.6	-10.3	-9.6	-8.8	-8.1	-7.5
BALANCE OF PAYMENTS (Percent of GDP)											
Current account balance	2.7	1.8	1.6	0.2	1.0	1.9	0.9	0.8	0.8	0.6	0.5
Trade balance	5.2	4.4	3.9	2.9	3.0	3.5	2.6	2.8	2.6	2.5	2.4
Services balance	-2.0	-2.1	-2.1	-2.1	-1.8	-1.1	-1.3	-1.7	-1.7	-1.7	-1.7
Net international investment position	15.1	17.4	17.1	15.5	14.7	16.1	15.2	14.8	14.4	13.9	13.4
Gross official reserves (billions of U.S. dollars)	3,406	3,098	3,236	3,168	3,223	3,579	3,842	4,127	4,427	4,734	5,056
MEMORANDUM ITEMS											
Nominal GDP (billions of RMB) 7/	69,209	74,598	82,898	91,577	99,493	103,462	113,377	122,286	131,750	142,072	153,020
Augmented debt (percent of GDP) 8/	55.2	66.4	72.8	76.4	80.5	91.7	96.4	101.4	105.6	109.3	112.7
Augmented net lending/borrowing (percent of GDP) 8/	-8.7	-15.9	-13.5	-11.8	-12.6	-18.2	-17.2	-16.3	-15.4	-14.6	-13.8

Sources: Bloomberg, CEIC, IMF International Financial Statistics database, and IMF staff estimates and projections.

1/ IMF staff estimates for 2019.

2/ Surveyed unemployment rate.

3/ Includes government funds.

4/ Average selling prices estimated by IMF staff based on the data of national housing sale values and volumes published by the National Bureau of Statistics

5/ 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.

6/ The estimation of debt levels after 2015 assumes zero off-budget borrowing from 2015 to 2025.

7/ Expenditure side nominal GDP.

8/ The augmented balance expands the perimeter of government to include government-managed funds and the activity of local government financing vehicles (LGFVs).

INTERNATIONAL MONETARY FUND

PEOPLE'S REPUBLIC OF CHINA

STAFF REPORT FOR THE 2020 ARTICLE IV CONSULTATION

December 2, 2020

KEY ISSUES

Context. The Chinese economy continues its fast recovery from the health and economic crisis as a strong containment effort and macroeconomic and financial policy support have mitigated the crisis impact and helped the economy rebound. However, growth is still unbalanced as the recovery has relied heavily on public support while private consumption is lagging. Rising financial vulnerabilities and the increasingly challenging external environment pose risks to the outlook. Important reforms have progressed despite the crisis, but unevenly across key areas.

Policies. Key policies to secure the recovery and return to balanced growth include:

- *Adjusting policy support to the recovery.* As private demand improves, macro policy support should remain moderately expansionary in 2021. Fiscal policy should shift its focus towards strengthening social safety nets and promoting green investment. Given low inflation, monetary policy should remain accommodative while phasing out potentially distortionary measures such as lending targets and lending rate guidance as the recovery takes hold.

- *Making policy support more effective to maximize policy space.* With public debt high and rising, improving the macro-fiscal framework and intergovernmental coordination while leveraging digital technologies to deliver support to vulnerable groups will make fiscal policy more effective. Further modernization of the monetary policy framework to strengthen the transmission of conventional interest rate policies would help improve credit intermediation.

- *Containing rising financial risks proactively.* As the recovery takes hold, exceptional policy support measures should be replaced with proactive efforts to address problem loans and strengthen regulatory and supervisory frameworks. Resuming financial regulatory strengthening will help reduce shadow-banking risks. A comprehensive bank restructuring framework is needed to lower systemic risks and continue de-risking.

- *Structural reforms to enhance the role of the private sector.* Simultaneous implementation of key reforms—a further opening up of domestic markets, reforming SOEs, and ensuring competitive neutrality with private firms while promoting green investment and strengthening social safety nets—will support a job-rich and balanced recovery and help boost potential growth, reduce external imbalances, and build a more resilient, green, and inclusive economy.

- *Leading global solutions.* China should continue to lead multilateral efforts to address global challenges. This includes supporting global efforts to expand vaccine access, providing debt relief to low-income countries and sustainable financing for global infrastructure investment, and tackling climate change. China and its trading partners should work together to build a more open, stable, and transparent rules-based international trade system.

Approved By
Kenneth Kang and Sanjaya Panth

Discussions took place by video conference October 26-November 4, 2020. The team comprised H. Berger (head), D. Cerdeiro, W. Chen, F. Han, S. Jahan, J. Kang, C. Ruane (all APD), J. Ralyea (FAD), H. Hoyle (MCM), F. Zhang (RES), H. Lin (SPR), and S. Barnett, P. Jeasakul, and X. Li (Resident Representatives). K. Kang (APD) joined the concluding meetings. Z. Jin, Z. Zhang, and Y. Liu (all OED) joined the official meetings. A. Balestieri, J. Li, Q. Shan, and C. Zhou supported the mission.

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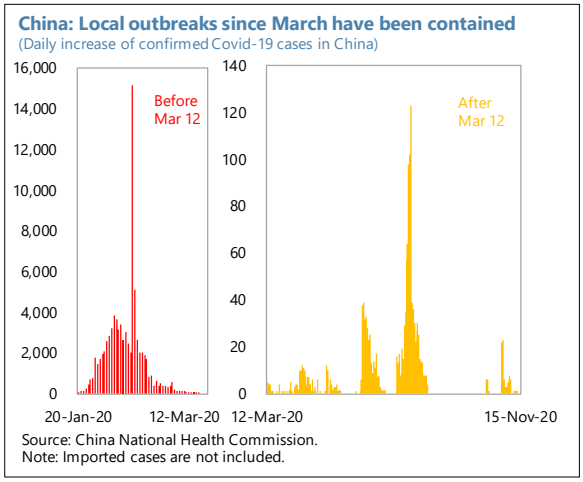
COVID-19 CRISIS AND RISING EXTERNAL TENSIONS

1. The COVID-19 crisis has inflicted significant human and economic costs on China, but a strong containment effort has kept the outbreak under control.

- *Human and economic costs were the highest in the first quarter*. China was the first country to suffer a COVID-19 outbreak, which took the lives of more than 4,600 people. But the extension of the national Lunar New Year holiday, travel restrictions, and the lockdown of Hubei province (the epicenter of the outbreak), along with other measures, have helped contain the spread of the virus in China even as it has spread globally. Economic activity came to a sudden halt, with GDP contracting by 6.8 percent (y/y) in the first quarter for the first time in more than 40 years.



- *Effective and well-targeted containment efforts have helped the economy go back to work*. Containment measures have been calibrated across regions based on specific risk assessments, and the resumption of economic activity has prioritized low-risk regions and essential sectors. With the virus retreating at the national level, the government has successfully adopted a granular and targeted approach in response to localized outbreaks, by combining intensive testing, effective contact tracing, and localized mobility restrictions (Box 1). At the same time, policy support has helped rapidly expand testing capacity and increase production of medical and protective supplies, while digital technologies such as big data and artificial intelligence have been leveraged to facilitate contact tracing and, where still necessary, travel and other restrictions.

2. The pandemic has taken place as the external environment has become more challenging. The tensions with the U.S. have escalated beyond trade to technology access and

financial markets.[1] While China and the U.S. remain committed to the "Phase 1" deal, trade data for the first ten months of the year suggest China's purchases of goods would have to accelerate significantly to meet the purchase commitments. Trade disputes have also emerged elsewhere and concerns about the reliability of global supply chains have prompted some countries to bring production home or reduce reliance on any single trading partner such as China, while rules on inward foreign direct investment (FDI) have been tightened. The European Union is considering whether foreign subsidies distort its internal market, and the resulting regulatory amendments could have consequences for Chinese firms operating abroad.

3. Reforms have continued, but there is still significant room to improve economic resilience. Despite the crisis, important progress has been made, for example, in financial sector opening up. However, reform progress on state-owned enterprises (SOEs) and competitive neutrality has been lagging, contributing to lower productivity and growth. China's reliance on external demand has declined significantly, but, lacking a strong social safety net, household saving remains excessively high. Financial regulatory strengthening has advanced, but financial vulnerabilities remain elevated. While not closing these reform gaps ahead of the crisis has left China's economy less resilient than it could have been, pressing ahead with reforms will help secure the recovery, accelerate the return to more balanced growth, and contribute to lowering global imbalances.

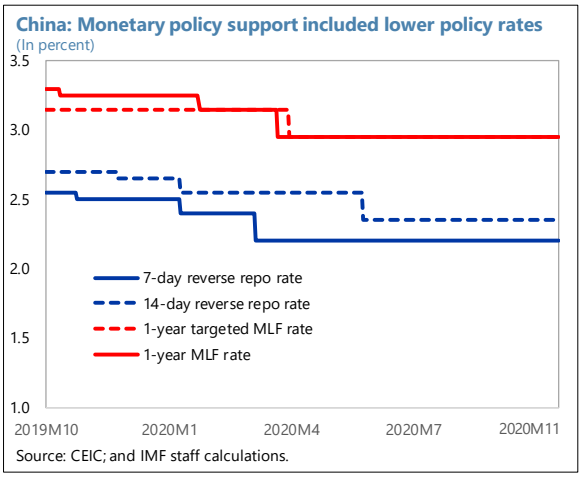
UNBALANCED RECOVERY SO FAR

4. Strong and swift policy actions helped mitigate the economic impact of the crisis and prepare the recovery. Policymakers provided financial relief and fiscal support to protect the most-affected firms while safeguarding financial market stability through liquidity provision to the banking system. The People's Bank of China (PBC) expanded its re-lending facilities to provide targeted support to manufacturers of medical supplies and daily necessities as well as micro-, small- and medium-sized enterprises (MSMEs). The authorities have allowed banks to avoid classifying troubled loans to epidemic-hit MSMEs as non-performing loans (NPLs), tolerated rising NPLs in heavily impacted regions and sectors, and introduced a repayment moratorium for most MSMEs and other eligible firms until early 2021. For households, the authorities accelerated disbursement of unemployment insurance while extending its coverage to some migrant workers and lengthening the application and benefit period by six months to 18-30 months. The authorities also provided various tax relief measures and waived part of social security contributions by employers to protect employment. Moreover, the government has increased spending on epidemic prevention and control and the national public health emergency management system.

[1] Among other actions, the U.S. has tightened export restrictions to selected Chinese technology companies, enacted a law that can lead to sanctions on foreign financial institutions operating in Hong Kong SAR, and taken steps to delist Chinese firms from U.S. stock exchanges that fail to comply with U.S. accounting standards and to force sales of Chinese firms to the U.S.

5. With the successful reopening of the economy, fiscal policy has shifted to demand support. Staff estimates that discretionary fiscal measures amount to about 4.7 percent of GDP in 2020, centered on an increase in infrastructure investment, providing an estimated boost of 2.2 percentage points to GDP growth. With automatic stabilizers further increasing spending and lowering revenue, the augmented general government deficit is projected to rise by 5.6 percentage points of GDP to 18.2 percent in 2020.[2] Augmented debt is expected to reach 92 percent of GDP—much higher than the EM average of about 64 percent—and continue to rise over the medium term. While debt is high, the public finances benefit from a very advantageous growth-interest rate differential and a high national savings at around 43 percent of GDP, bound to be invested domestically.

6. Monetary policy has been supportive, leaning heavily on non-interest rate instruments.



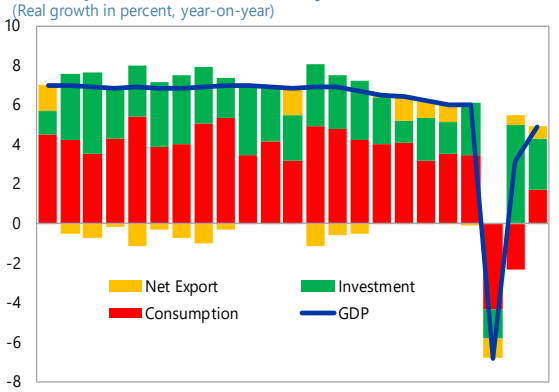
- *The PBC has lowered various policy rates*—in particular, the 7- and 14-day short-term reverse repo rates by 30 basis points and 1-year medium-term lending facility (MLF) rate by 30 basis points—reducing loan rates especially to corporates. However, slow adjustment of deposit rates and capital shortages in smaller banks have constrained some banks' ability to provide new financing to the private sector (SIP 1).
- *To provide additional support especially to smaller firms, the PBC, in collaboration with other authorities, has deployed a wide range of non-interest rate instruments*, including further expanding its re-lending facilities with guidance on lending rates, reducing targeted reserve requirement ratios (RRRs), increasing bank lending targets, expanding credit support by policy banks, subsidizing local banks' loan repayment moratoria, and introducing a new zero-interest "funding-for-lending" scheme for uncollateralized lending to micro- and small-sized enterprises. These measures, combined with window guidance to steer credit to hard-hit sectors, had a significant positive impact on bank lending as well as corporate and government bond issuance, leading to a rapid credit expansion with total social financing (TSF) growth accelerating to 13.7 percent (y/y) as of October, up from 10.7 percent at end-2019 (Box 2).

7. Following the fast rebound in the second quarter, the economy continued its fast recovery in the third quarter, but growth remains unbalanced.

[2] The general budgetary deficit and debt would rise to 3.7 and 44.7 percent of GDP, respectively, in 2020.

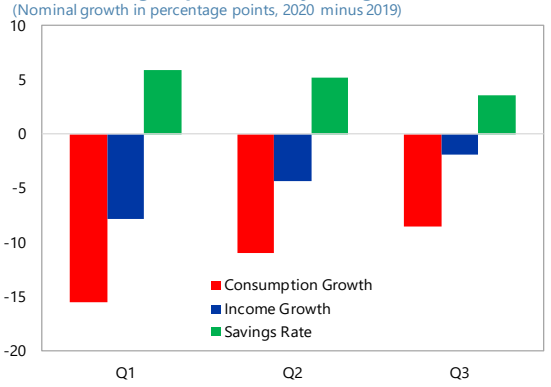
- *The recovery so far has relied heavily on public support, while private consumption remained weak*. Real GDP grew by 4.9 percent (y/y) in the third quarter, following the rebound of 3.2 percent in the second quarter (Box 3). The rapid recovery was driven by the combination of a large increase in government spending, heavy on investment, and the decision to prioritize opening production facilities in the exit from the lockdown. Real estate investment returned to positive growth by the summer, with housing starts outpacing sales. Following the recovery in manufacturing, private investment strengthened around the same time. In contrast, the recovery of private consumption has been much more gradual, reflecting continued social distancing in person-to-person services, a significant drop in the growth of average household income amid still-weak labor market conditions, and the increase in precautionary savings owed, in part, to the still very limited social safety net. Real retail sales are still below their pre-crisis levels and unemployment remains elevated.[3]

China: "V"-shaped recovery driven by investment while consumption recovers more slowly
(Real growth in percent, year-on-year)



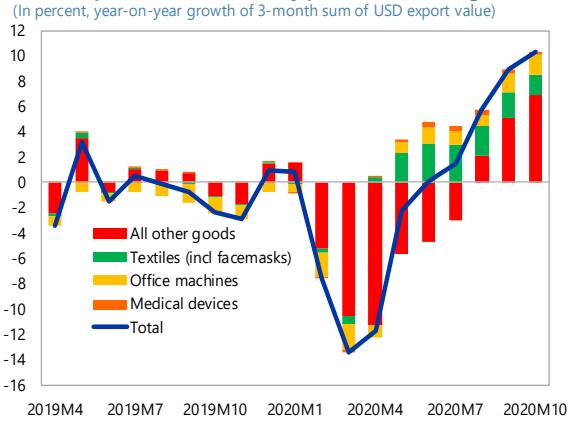
Source: CEIC; and IMF staff calculations.

China: Private consumption impacted by falling household income and higher precautionary savings
(Nominal growth in percentage points, 2020 minus 2019)



Source: CEIC; NBS Household Survey; and IMF staff calculations.
Note: Savings Rate calculated as (1 - household consumption per capita / household disposable income per capita).

China: Export rebound driven by pandemic-related goods
(In percent, year-on-year growth of 3-month sum of USD export value)



Source: CEIC; and IMF staff calculations.

- *Exports have held up well despite the more difficult external environment*. While the pandemic and lockdowns significantly compressed global trade overall (Box 4), Chinese firms—supported by an earlier recovery of production—have seen strong demand for medical and protective equipment and work-from-home-related electronics, with demand broadening beyond pandemic-related goods more recently. The value of merchandise exports increased by 0.5 percent (y/y, in USD) in the first 10 months of 2020, despite an

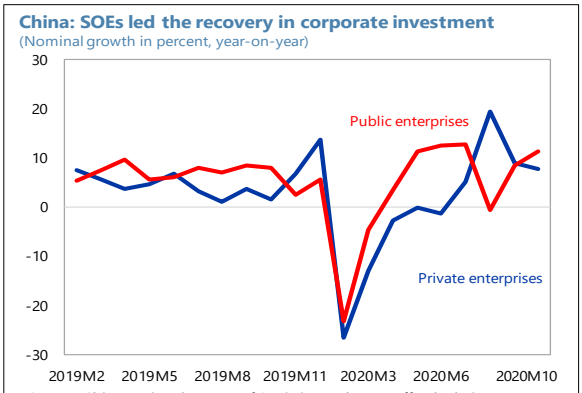
[3] The official survey-based urban unemployment rate has improved to 5.3 percent in October, down from 6.2 percent in February. However, this statistic likely underestimates the remaining impact of the crisis as it does not fully capture job losses among migrant workers. New urban jobs that have been created this year until October remained about 15 percent below new urban job creation during the same period in 2019.

estimated decline in volume of 3 percent. On the other hand, the value of merchandise imports declined by 2.3 percent (y/y, in USD) during the same period, reflecting mostly lower commodity prices as import volume increased by an estimated 4 percent. The relatively strong domestic recovery, improved global risk sentiment, and continued financial opening-up have attracted large portfolio inflows since the second quarter.[4]

8. Core inflation has been subdued, while food price inflation has stabilized. Reflecting a still-large output gap—estimated at around -3½ percent of potential GDP on average for 2020—core CPI inflation, which tends to reflect demand conditions with a lag, remained at 0.5 percent (y/y) in October. Food price inflation, which stayed high due to the lingering effects of the African swine fever and heavy rains and floods in the summer, has recently stabilized, leading to the decline of headline inflation to 0.5 percent in October, below the PBC's target of 3.5 percent for this year. Producer price inflation has risen gradually in line with the rebound in economic activity but remained in deflationary territory at -2.1 percent (y/y).

9. The credit-driven and investment-heavy recovery could reverse recent progress on rebalancing.

- *Public investment has been the main driver of domestic growth.* The pandemic has weakened aggregate private consumption as income dropped especially for the more vulnerable households while the better-to-do increased precautionary savings.[5] At the same time, public investment increased significantly, threatening to reverse the progress towards more balanced growth achieved over the last five years. This comes despite the fact that China's public capital stock of more than 150 percent of GDP—excluding SOEs—is already very large in comparison to both emerging and advanced economies, suggesting diminishing returns from further traditional infrastructure investment.[6] Also, SOEs increased their fixed-asset investment strongly in the second quarter, leading the more recent investment recovery by privately-owned enterprises (POEs).



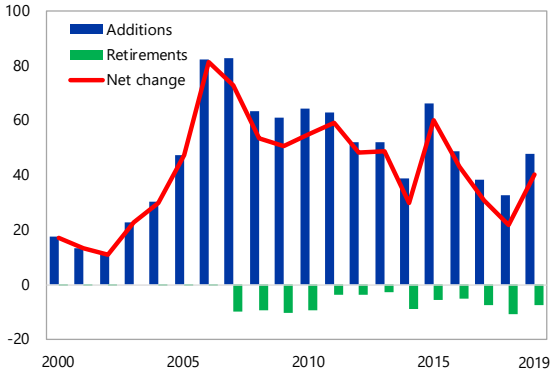
[4] Amid capital outflow pressures in the first quarter, restraints were softened on financial institutions' and firms' external borrowing by raising the ceiling on cross-border financing under the macroprudential assessment framework by 25 percent; and in September 2019, restrictions on the investment quota of foreign institutional investors were removed (both are capital flow management measures, (CFMs)).

[5] While no data is available on the entire distribution of incomes in 2020 so far, the ratio of mean to median household disposable income increased markedly as of Q3, reaching its highest level since 2013, at 1.16.

[6] While there are many evident benefits from traditional public infrastructure investment, its marginal long-term growth impact is likely to diminish as the public capital stock increases. The academic evidence on the long-term growth benefits of very large, long-lasting scaling-up of public investment is mixed ("From Global Savings Glut to Financing Infrastructure," Arezki and others, 2017, "Public Investment as an Engine of Growth," Warner, 2014).

- *Progress toward "greener" growth has been mixed.* China remains a world leader in renewable power and electric vehicle deployment. Air quality has also continued to improve, although this was partly due to the lockdowns. However, coal-fired energy capacity, which had declined for several years, began to expand again in 2019, as the opening of several new large-scale plants outpaced the retirement of old and inefficient plants.

China: Coal-fired power generation capacity on the rise again
(In gigawatt)



Source: Global Coal Plan Tracker; and IMF staff calculations.

- *The pandemic appears to have temporarily stalled external rebalancing* (¶7). While the current account surplus is expected to increase this year, the widening largely reflects the surge in pandemic-related exports, declines in commodity prices, and other effects of the global crisis.

10. The pandemic has added to the many interconnected financial vulnerabilities already present before the crisis. While exceptional financial support measures have helped avoid a potential credit crunch (¶4), they also contributed to a further increase in already very high corporate debt and exacerbated existing structural problems by prolonging the economic life of non-viable and low-productivity firms, including SOEs, particularly in capital-intensive sectors with overcapacity. At the same time, while temporarily masked by eased NPL recognition standards, the pandemic has added to vulnerabilities in the banking sector by reducing the debt-servicing capacity of highly leveraged corporates and households.[7] Rising leverage also added to vulnerabilities in parts of the asset management sector as the implementation of the asset management reform was postponed by one year to end-2021. These developments create significant financial risks going forward (see below).

11. Structural reforms have progressed, but not evenly across all key areas (Box 5).

- *The opening of the financial sector has advanced.* The negative lists for foreign investment access were shortened further, both nationwide and in Pilot Free Trade Zones; foreign ownership caps on securities, fund management, futures and life insurance companies were removed; and a network clearing license for RMB transaction was approved for a foreign company. Restrictions on the investment quota of foreign institutional investors were also removed. Foreign ownership caps on the commercial vehicle industry were lifted and the ownership limit on some agricultural industries was raised. New overseas investment quotas for domestic institutional investors were granted.

- *Labor market reforms have improved resource allocation*. The share of migrant workers in aggregate employment is rising, as reforms have made it easier for migrants to obtain *hukou* in many large cities. Migrant access to public services, however, remains limited, especially to

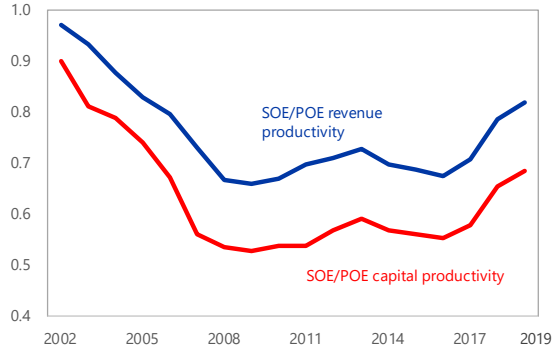
[7] See "Assessing Macro-Financial Risks of Household Debt in China," Han and others, 2019.

close-by public schools. In addition, migrant workers who settle in urban areas may be at risk of losing (or may need to give up) their rural land rights, while the lack of efficient land markets in rural areas means that they may not be adequately compensated. These factors make many migrant workers reluctant to acquire urban residency, depriving them of access to social safety nets provided in urban areas.

- *Progress has been made in improving market competition.* The patent law was amended to strengthen intellectual property protection and foster innovation. The government has also stepped up its efforts to further regulate monopolistic practices and promote fair competition, including in online business platforms.

- *However, progress in real-sector reform has been slow, especially in the areas of SOEs and competitive neutrality.* Progress in SOE deleveraging has reversed as leverage ratios in percent of GDP have further increased during the crisis, while profitability has declined—in part reflecting SOE contributions to economic stabilization efforts. In addition, there was little tangible progress toward much-needed SOE reform. For example, listed SOEs continue to enjoy privileged access to credit and other resources, despite their significantly lower productivity than POEs in the same sector—by about 20 percent as of 2019, measured by total factor revenue productivity (that is, value-added per unit of capital and labor)—driven, in large part, by low capital productivity. Given the overall size of the SOE sector, this comes at a significant cost to aggregate total factor productivity (SIP 2).

China: Productivity gaps between SOEs and POEs remain large (Productivity gap (POE = 1))



Source: Listed firms from Wind, authors' calculations, see Jurzyk and Ruane (2020) for more details.

12. The pandemic has also brought China's inequality challenges to the fore. Rapid economic growth over the last decades has lifted millions out of poverty. At the same time, income inequality has increased sharply, leaving China more unequal than other countries in the region. Household savings are high but heavily concentrated in high- and middle-income households with little buffers for low-income families.[8] Despite the structural shift towards service employment, gender gaps in labor force participation and wages have increased.[9] While it is difficult to fully gauge the impact of the crisis, income and wealth inequalities have likely widened as low-income households have faced job losses and wage cuts, with less flexibility to work from home. This dynamic likely contributes to the sluggish recovery in private consumption as low-income households have a higher propensity to consume. This points to a number of institutional weaknesses:

[8] A survey by the PBC in 2019 shows that the top 10 percent of households hold 48 and 58 percent of total and financial assets, respectively, compared to 9 and 5 percent by the bottom 40 percent of households.

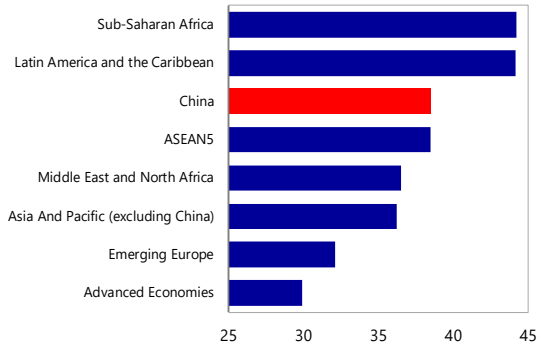
[9] See "China Rebalancing: A Gender Perspective"(Brussevich, Dabla-Norris, and Li, IMF Working Paper *forthcoming*) for more details.

- *Social safety nets remain woefully inadequate despite recent adjustments.* In particular, the coverage of the unemployment insurance system is still very limited, providing coverage for only one in three people in the urban labor force and for fewer than one in five migrant workers, with even thinner coverage in rural areas. In the first quarter, only 10 percent of 23 million unemployed workers received benefits.

- *Spending on social assistance and public health care is low.* Even taking into account the budgeted increase in spending of RMB 147 billion (0.14 percent of GDP) on the national public health emergency management system, China's aggregate welfare and health expenditures are only about 3.5 percent of GDP, much less than the average of more than 6 percent of GDP for other emerging market economies.

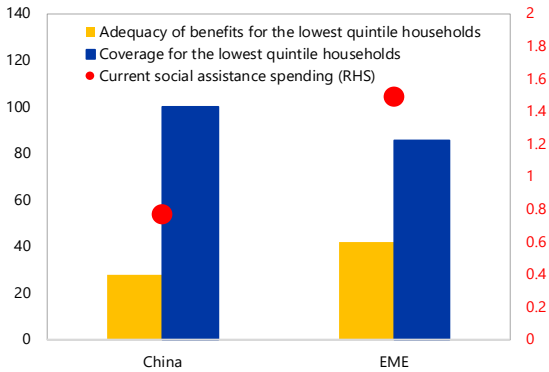
- *The tax system is less progressive than in many other countries.* The value added tax (VAT) and other taxes on goods and services account for about 65 percent of tax revenues in China, compared to about 50 percent in emerging market economies. In contrast, revenues from personal income tax (PIT) contribute only around 5 percent of total revenues, about half the emerging market average of 10 percent. In addition, the labor tax wedge for the lowest earners is very high due to a high minimum social security contribution.[10] The 2018 PIT reform raised the taxable income threshold and introduced a wide range of deductions, further narrowing the tax base and reducing the progressivity of the tax system. The absence of a recurrent property tax also contributes to the lack of progressivity.

China: Inequality remains an issue
(Net Gini Index; in Gini points; latest year available; average across the region)



Source: IMF Income Inequality Database (Gini), and IMF staff calculations.
Note: ASEAN = Association of Southeast Asian nations. ASEAN 5 countries are Indonesia, Malaysia, Philippines, Singapore, and Thailand.

China: Social assistance remains inadequate
(In percent, left scale; percent of GDP, right scale)

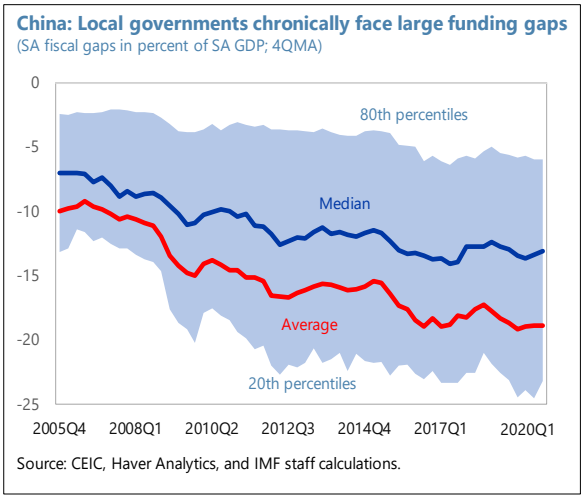


Source: World Bank ASPIRE, PovcalNet databases, and IMF staff estimates.
Note: Adequacy of benefits is the total transfers received by beneficiaries as a share of the pre-transfer total income in the lowest income quintile of individuals. Coverage is the share of the lowest quintile individuals that receive a social protection benefits. EME=Emerging market economies.

13. Large fiscal imbalances limited the response of local governments to address the pandemic. Local governments in China have a higher share of expenditure responsibilities than in many other countries, and already faced large and growing funding gaps between their own revenue and expenditure even before the pandemic, which were filled through transfers from the

[10] A nominal flat rate is applied to wages for employees' contributions, but in practice, a minimum contribution is required based on an imputed value of earnings. As about 30 percent of the urban labor force earns below this value ("Overview of China's Labor Market," Cai, Du, and Wang, 2011, Institute of Population and Labor Economics, China Academy of Social Sciences), the average effective tax rate is prohibitively high for the lowest earners.

central government and other financing sources.[11] With the crisis, weaker economic activity and various temporary tax and fee relief measures have added to these funding pressures and constrained many local governments' ability to cope, limiting the effectiveness of the aggregate fiscal response.



Authorities' Views

14. The authorities concurred that strong policy actions have helped mitigate the impact of the health crisis and supported the recovery. They noted that successful control of local outbreaks was critical for the economic recovery. They stressed the significance of fiscal support, including through transfers to local governments to help vulnerable businesses and households, cuts in taxes and fees, as well as an increase in public investment—partly financed by additional local governments' bond issuance as well as the first issuance of central government special bonds since the 2009 global financial crisis. They calculated the overall amount of fiscal support as being greater than staff's estimate of discretionary fiscal support. The authorities saw non-interest rate monetary and financial policy measures such as the PBC-subsidized loan repayment moratoria and zero-interest funding-for-lending scheme for local banks as particularly effective in supporting the most vulnerable MSEs and employment while avoiding potential policy leakages.

15. The authorities pointed out that the recovery has been swift but somewhat uneven. They noted that growth has been gaining speed since late first quarter. Investment and exports have been the main drivers, both posting positive year-on-year growth over the first three quarters. The authorities emphasized that private consumption, which is recovering slowly mostly due to the gradual removal of necessary containment measures, began to pick up notably in August, with the first positive year-on-year growth. Travel, sports, and entertainment activities rebounded strongly during the national holiday in October.

GRADUAL HANDOFF TO PRIVATE DEMAND

16. GDP is projected to grow 1.9 percent in 2020 and 7.9 percent in 2021. Under the baseline, normalization of economic activity is expected to continue, with private consumption and business investment gradually gathering momentum along with a continued recovery in income. Real estate investment, which supported the recovery this year, is expected to moderate going forward, partly due to the planned introduction of prudential measures. At the same time, the global recovery lifts external demand, with the composition of exports broadening further beyond pandemic-related goods. Fiscal policy is expected to remain broadly neutral while

[11] See "Intergovernmental Fiscal Reform in China" (Wingender, 2018).

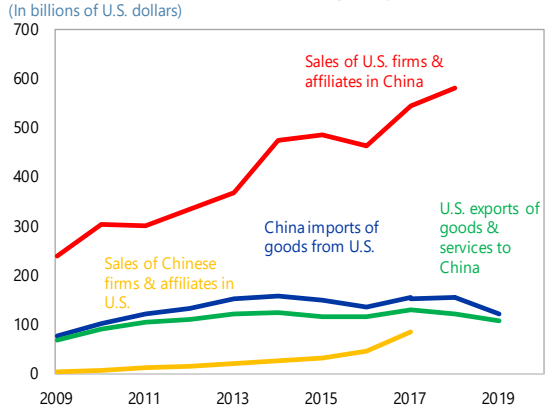
monetary policy remains supportive in 2021 though less than in 2020, with TSF growth slowing down to 12.2 percent (y/y) by end-2021 from 13.7 percent in October 2020. Following a strong rebound in the second quarter in 2020, sequential growth would slow from the second half of 2020 before recovering toward its pre-pandemic trend in the second half of 2021.

17. The baseline is built on the strong assumption that risks remain contained.

- *The pandemic lingers but does not hold back the recovery.* The forecast assumes no resurgence of nationwide outbreaks and lockdowns in China and a gradual rollout of effective vaccines and therapies throughout 2021. Until end-2021, some restrictions and voluntary social distancing will continue to dampen person-to-person services activity.

- *External tensions do not escalate.* While U.S.-China tensions are expected to continue—including maintaining high bilateral tariffs and some restrictions on technology access—the baseline treats a further escalation as a risk.

China: The U.S.-China economic ties go beyond trade
(In billions of U.S. dollars)

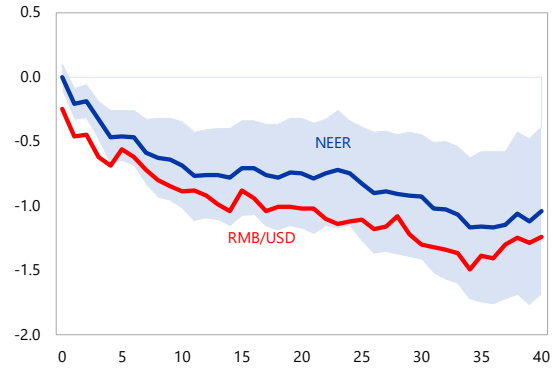


Source: Haver, CEIC, and IMF staff calculations.

18. The current account surplus is expected to widen further this year, mostly reflecting the effects of the pandemic.

- *The external position in 2019 was assessed to have remained broadly in line with the level implied by medium-term fundamentals and desirable policies* (Appendix I). The current account surplus widened to one percent of GDP in 2019 from 0.2 percent in 2018, driven by weak domestic demand and the shift in trade flows, especially the inventory cycle, in response to expected and realized U.S. tariff hikes. Exchange rate flexibility increased, with much of the RMB depreciation in 2018-19 reflecting the escalation of trade tensions with the U.S.

China: 2018-2019 RMB depreciation in response to escalating trade tensions (In percent)



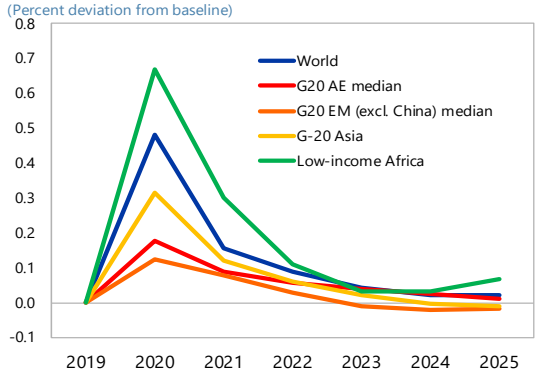
Source: Bloomberg; and IMF staff calculations (reproduced from IMF External Sector Report (2020) Figure 1.2.2.).
Note: Day 0 marked the shock. Responses to an impulse of 3 (representing a major tightening) in the measure of trade-barrier related news and 90 percent confidence bands based on Jordà (2005).

- *The current account surplus is projected to widen to 1.9 percent of GDP in 2020 before narrowing to below one percent in 2021.* The projected temporary increase this year reflects lower commodity prices, the collapse in outbound tourism flows as well as a temporary surge in exports of pandemic-related goods and other products, supported by China's early

recovery of production and significant increases in export prices (¶7).[12] This comes in the context of a stronger RMB both in real effective terms and against the U.S. dollar (+3.9 and +3 percent as of October, compared to their 2019 averages), reflecting China's early recovery and strong portfolio inflows and export performance. FX reserves remained broadly stable, up by $20 billion for the first ten months of 2020 while FX intervention appears limited. On a preliminary basis and adjusting for transitory factors, recent developments suggest a broadly unchanged overall external position in 2020 compared to 2019. However, this assessment is highly uncertain given the lack of full-year data for 2020 and the COVID-19 crisis.[13]

19. Overall, the expected domestic recovery will generate positive spillovers for the global economy by boosting trade flows and commodity prices. Staff simulation analysis using the IMF's G20 model suggests that China's fiscal stimulus in 2020 will boost global GDP by about 0.6 percentage points cumulatively in 2020 and 2021, of which around one-quarter (0.15 percentage points) is due to outward spillovers. Given the high degree of regional integration, the spillovers are particularly large in Asia but low-income African countries, especially commodity exporters, would benefit as well.

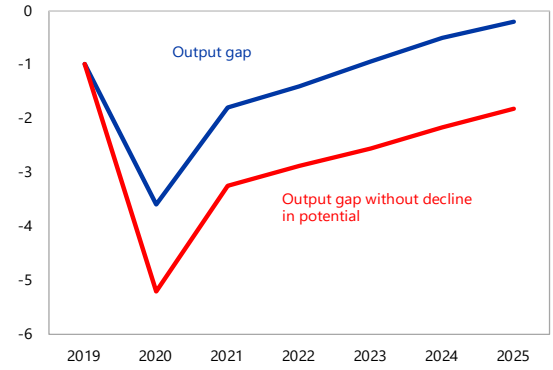
China: Illustrative simulation of 2020 fiscal stimulus
(Percent deviation from baseline)



Note: GIMF simulations of the effects of China's fiscal policy response to the crisis as detailed in the IMF's Policy Tracker. The simulation does not take into account other policies and developments in China or elsewhere. AE=advanced economies, EM=emerging markets.

20. The economy is adjusting to the "pandemic normal," but activity is expected to remain below capacity over the medium term. Technology and the digitalization of services are playing an important role in helping the economy adjust to the pandemic, in particular, in the retail and food services, healthcare, education, and entertainment sectors. Nevertheless, labor market scarring from employment losses, an imbalance of investment towards lower productivity public investment, lower productivity growth associated with the cost of workplace safety and hygiene practices, and the time needed for reallocation of resources across sectors are likely to have a permanent *level effect* on potential GDP, which will remain below its pre-crisis path. At the same time, the medium- and long-term *growth rates* of potential output will continue to slow due to

China: Gradually closing output gap at lower level of potential (In percent)



Source: IMF staff calculations.
Note: The output gap without decline in potential captures what the output gap would be if potential output were to have stayed at its pre-crisis levels.

[12] Outbound tourism flows declined by $92 billion in the first nine months in 2020 and the terms of trade are projected to improve by 8 percent in 2020.

[13] A complete analysis will be provided in the 2021 External Sector Report.

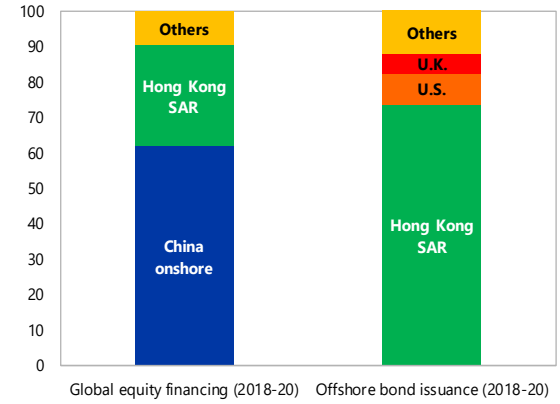
population aging and slowing aggregate productivity growth. However, even with a lower level of potential GDP, a significant negative output gap of around -1.8 percent of potential GDP is expected in 2021 before closing gradually over the medium term, mostly reflecting the slow recovery of domestic private demand. Against this backdrop, core inflation is expected to remain subdued, leaving CPI inflation in 2021 below the pre-crisis target of about 3 percent.

21. The balance of risks to the growth outlook is still on the downside (Appendix II). Medical advances—for example, a faster-than-expected discovery and distribution of effective vaccines and therapies—would help lift confidence and accelerate the recovery relative to the baseline forecast both domestically and globally. However, there are a number of significant downside risks, including:

- *In the near term, the handoff from public to private demand could falter—for example because of a COVID-19 resurgence or a sudden tightening of financial conditions*. There are overlapping scenarios, including: (*i*) another large domestic outbreak leads to the re-imposition of large-scale mobility restrictions; *(ii)* consumer and business confidence fails to improve given the lingering threat of the pandemic against the backdrop of still-weak labor market conditions and a perception of stalling SOE and other reforms limiting private business opportunities going forward; and (*iii*) a sudden tightening of financing conditions—for example because of a disorderly exit from exceptional financial support—which, combined with high private leverage, would further depress household and corporate spending.

- *The external environment could become less supportive along multiple dimensions*. This would, for example, be the case, if a further deterioration in economic relations with the U.S. leads to further increases in bilateral tariffs and other obstacles to trade. Over the medium term, binding limitations to China's access to the international technology frontier—be it because of new trade, FDI, or other restrictions—and resulting decline in knowledge diffusion across borders could lead to technology decoupling and lower productivity growth (Box 6). At the same time, restrictions on financial flows through Chinese financial institutions operating in Hong Kong SAR could adversely affect China as Hong Kong SAR is an important funding and investment platform for Chinese corporates, accounting for about one-third of their total equity financing, two-thirds of offshore bond issuance, and 60 percent of inward and outward direct investment.

China: Hong Kong SAR is an important financing platform for Mainland China (In percent of total)



Source: Bloomberg; and IMF staff calculations.

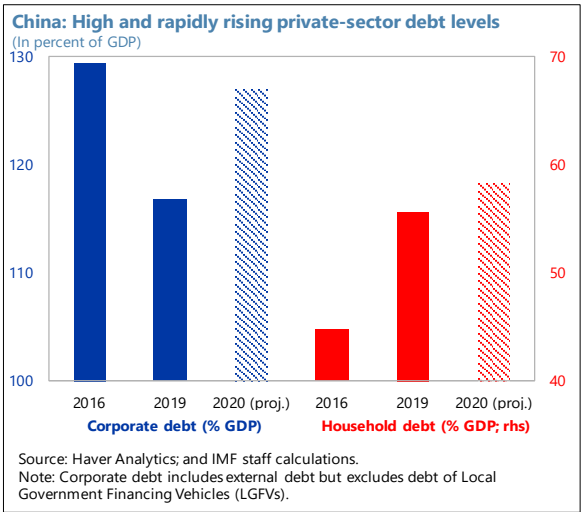
- *Climate change could lead to more extreme weather events*. Floods, already among the most frequent natural disasters in China, could increase significantly in frequency and severity due to changes in precipitation and temperature caused by climate change. If emissions continue

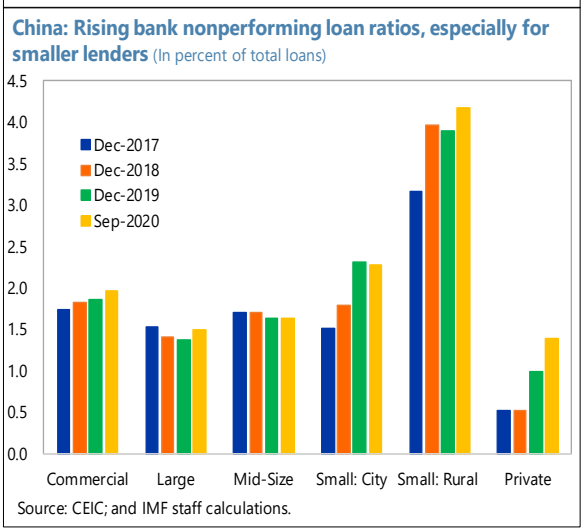
to rise at the current rate, the average share of outdoor working hours lost each year to extreme heat and humidity would increase, negatively affecting GDP growth. Local air pollution, though moderating in recent years, has detrimental effects on human health and weighs on GDP growth through negative impacts on labor productivity.

22. In addition, financial stability risks have increased during the crisis. This reflects rising financial vulnerabilities in nonfinancial corporate, housing, and banking sectors as well as the delay of further progress on financial de-risking.

- *Private sector debt has increased significantly, in particular among corporates*. Corporate debt is expected to rise by about 10 percentage points to 127 percent of GDP in 2020, following a decline of roughly the same magnitude over the last three years. Household debt is expected to increase by a more moderate 2 percentage points.

- *Credit quality has likely deteriorated under the repayment moratorium and eased NPL recognition, especially at smaller banks*. Reported NPLs and credit provisions of Chinese banks increased by about 18 and 34 percent (y/y), respectively, for the first half of this year while profits declined by about 9 percent.[14] Banks' equity valuations have reached all-time lows despite otherwise elevated stock prices, reflecting market concern about asset quality deterioration. Concerns are especially pronounced for lending to consumers and small businesses, especially once the financial support measures expire. Rising defaults among some financially weaker SOEs could also add to pressure on bank balance sheets.





- *The pressure on small banks has intensified, potentially affecting lending to the corporates they serve*. Even before the crisis, weaknesses among small banks had become evident and funding conditions were tightening, with the government intervening in three banks that

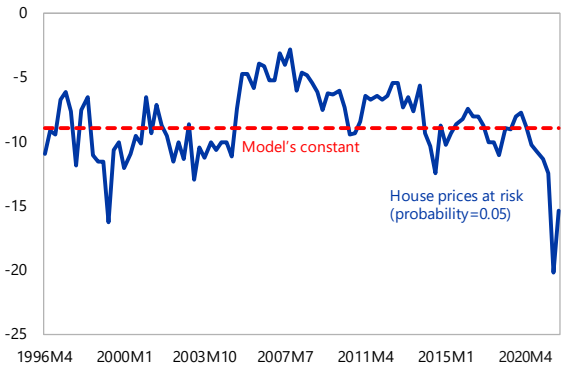
[14] The PBC's stress test indicates that the NPL ratio in 30 large- and medium-sized banks could increase from 1.5 percent in 2020Q1 to 4.9 and 5.5 percent by 2020Q4 and 2021Q4, respectively, when the economy grows by 1.6 and 7.8 percent in 2020 and 2021, respectively. See more details in the PBC's 2020 China Financial Stability Report.

faced severe solvency problems since mid-2019.[15] The pandemic crisis has added further pressures given the small banks' elevated exposure to the most vulnerable corporate sectors and MSMEs. This, in turn, threatens a downward-spiral where vulnerable banks reduce their lending to already weak non-financial corporates.

- *Financial pressures at some local governments are spilling over to the corporate and banking sector*. Official local government debt is rising rapidly, projected to reach 25 percent of GDP by end-2020, while revenues are slowing. These debt burdens appear to be affecting financing conditions for local firms and local government financing vehicles with weak-debt servicing capacity, which may be reliant on backstops from the local authorities. Credit spreads for firms in provinces with financially weaker local governments have widened notably relative to firms in other provinces. Local governments have been authorized to inject RMB 200 billion into local banks funded with new debt, which would deepen financial linkages between local governments, banks, and corporations.

- *A housing market correction or funding pressure in the highly leveraged property sector could pose financial stability risks.* A shortfall in private demand could lead to an adjustment in house prices, potentially accelerating a downward spiral. Property developers already entered the COVID-19 crisis with significant leverage, accounting for 12 percent of total corporate debt and significant foreign currency debt through offshore USD bond issuance at end-2019. Funding strains in some highly leveraged developers due to weakening operating conditions or a sudden tightening of financing conditions could lead to a further housing market correction, weighing on the economic recovery and impairing banks' balance sheet.

China: Sudden housing market correction a tail risk but on the rise (In percent, 1-year out, 5 percent probability)



Source: Deghi et al (2020); and IMF staff calculations.
Note: With 5 percent probability, house price growth one year out is projected to be at or below the level shown in the chart.

Authorities' Views

23. The authorities broadly agreed on the outlook for growth. They expected the gradual pickup in private consumption to continue as consumer confidence and employment strengthen further, while private investment expands strongly. They expected the output gap to close in 2021, supporting underlying inflation while headline inflation would remain low driven by food prices. The authorities saw the widening current account in 2020 as being affected by certain temporary factors, including the positive results achieved in domestic epidemic prevention and control as well as resumption of economic activities, strong external demand for pandemic-

[15] In May 2019, for the first time in 20 years, the PBC and China Banking and Insurance Regulatory Commission took over Baoshang Bank, a middle-sized commercial bank with total assets of RMB 550 billion. Baoshang Bank started restructuring in October 2019 and received approval to enter bankruptcy in November 2020.

related goods and a significant reduction in outbound travel. They expected that the external position would continue to remain broadly in line with the level implied by medium-term fundamentals and desirable policies in 2021.

24. The authorities were mostly concerned with external risks. They regarded the pandemic as the most prominent risk to the growth outlook in 2021, underscoring the need for global cooperation. They agreed that technological decoupling could harm global supply chains and high-tech industries, with a potential negative impact on productivity. They expected leverage to stabilize in 2021 after a temporary increase in 2020 and saw financial risks as manageable despite an expected modest increase in nonperforming assets in the banking system once exceptional financial support measures are phased out. They agreed on the need to address excessive real estate company debt and noted their proactive approach to curbing risks associated with developers.

POLICIES TO SECURE THE RECOVERY AND RETURN TO BALANCED GROWTH

25. Continued policy support is needed to secure the recovery, with the policy mix calibrated to strengthen private demand and address financial vulnerabilities. The key elements of this strategy are:

- *Supporting private demand and rebalancing*. Fiscal policy should shift from infrastructure spending towards household support and strengthening social safety nets, while the monetary policy stance should remain accommodative to bring inflation back to target on a sustainable basis and prevent excessive tightening of financial conditions.

- *Making policy support more effective*. The transmission of macroeconomic policies would benefit from further modernizing the monetary policy framework toward more market-based interest rates, improving the macro-fiscal framework, and strengthening intergovernmental fiscal coordination.

- *Containing financial stability risk*. With the recovery on track, exceptional financial and monetary measures should be replaced with proactive efforts to address problem loans and manage financial vulnerabilities by strengthening regulatory and supervisory frameworks.

A. Supporting Growth and Ensuring Financial Stability

26. With continued slack in the economy, fiscal policy should remain moderately expansionary in 2021 before turning to consolidation to preserve fiscal space.

- *Supporting the handover to private demand*. A moderately expansionary fiscal stance in 2021, which would require somewhat more fiscal support than currently factored into staff's forecast, would smooth the transition from the strong support provided in 2020. Specifically,

the authorities could aim for a moderate stimulus to offset the gradual improvement in cyclical revenues and keep the headline augmented deficit unchanged.[16] Such a policy is consistent with staff's assessment that China has some fiscal space and would provide insurance against downside risks by helping close the output gap faster and secure the handover from public to private demand.

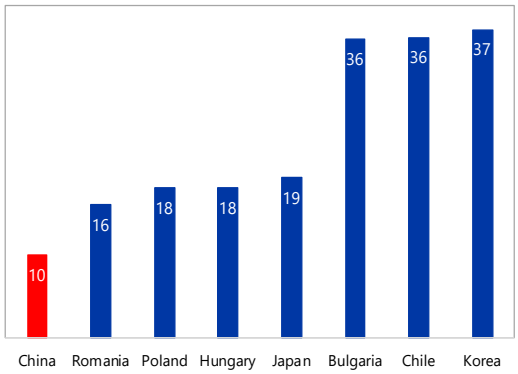
- *Switching to consolidation once the recovery is complete*. Starting in 2022, fiscal policy should turn to consolidation. This is also what is currently assumed in staff's forecast, resulting in a reduction of the headline augmented deficit from 18.2 percent of GDP in 2020 to about 13¾ percent of GDP by 2025.[17] A reduction in off-budget local government investment and tax reforms to broaden the tax base could form the basis for the adjustment. This would help stabilize debt in the longer term while protecting the recovery in the short term (Box 7, Appendix III).

27. Shifting from infrastructure investment towards household support will make fiscal policy more effective and facilitate economic rebalancing. While the long-term growth returns from adding to China's already large stock of traditional public infrastructure are likely to be significantly lower than in the past, establishing a reliable and effective social safety system that sends transfers to low-income households during economic downturns would provide high-impact support to the recovery. It would also make growth more resilient by reducing the high household savings rate and reinvigorating economic rebalancing towards private consumption over the medium term.

28. A combination of a permanent strengthening of the social safety net with reforms to broaden the tax base and increase progressivity would provide effective household support. This would include:

- *Expanding significantly the coverage of unemployment insurance, particularly for migrant workers*. The temporary pandemic-related measures to extend greater financial security to unemployed migrant workers could continue beyond 2020. In addition, the rules governing the portability of unemployment benefits could be significantly simplified to support greater labor market mobility. These efforts would be more effective if complemented with hiring subsidies and programs to reskill workers affected by unemployment.

China: Unemployment insurance coverage remains narrow
(In percent of unemployed as of 2016)



Source: Authorities; and Organization for Economic Co-operation and Development (OECD).

[16] In staff's calculation, this would require that the cyclically adjusted augmented primary deficit (CAAPD) increase by ¾ percentage points of potential GDP in 2021 compared to a roughly unchanged CAAPD currently forecasted. All else equal, this could lift 2021 GDP growth by about 0.3 percentage points.

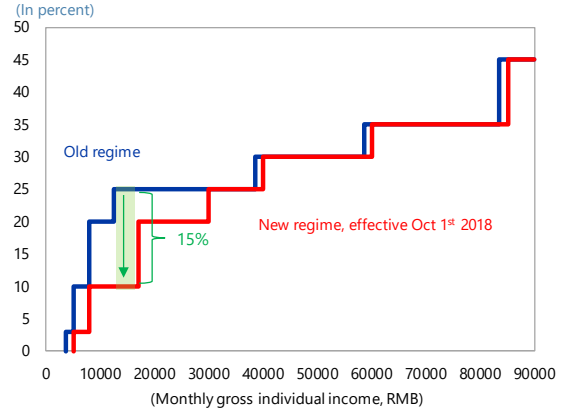
[17] This would require the CAAPD to decline annually by an average of ¾ percentage points over 2022-25.

- *Increasing targeted transfers to low-income households*. Local governments have improved the coverage and benefits of the *Dibao* program which aims to guarantee minimum living standards, extended social assistance programs to cover families affected by the crisis and falling into poverty, and temporarily increased monthly unemployment assistance payments. However, there remains ample scope to further increase transfers to vulnerable low-income households. Means-tested (or, to a lesser extent, categorically targeted) transfers could be provided to the unemployed who do not have unemployment insurance benefits. The benefits and coverage of *Dibao* program could be expanded, especially in the lower-income regions in line with the authorities' medium-term objective to strengthen the social assistance program.

- *Further enhancing the public healthcare system*. Continued scaling up of healthcare capacity, especially in primary care, will add resiliency in potential future outbreaks.

- *Increasing the progressivity and efficiency of the tax system.* Tax reforms could help improve the progressivity of the tax system as well as meet additional financing needs to permanently expand the social safety net. Social security contribution rates and the minimum contribution for low-paid workers should be lowered as those result in very high effective tax rates for the lowest earners. At the same time, the tax-free threshold can be reduced to broaden the tax base.[18] In addition, reducing inefficient production taxes (e.g. fees on businesses) and full refunding of VAT excess credits would reduce tax distortions. Current reforms to allocate state equity of SOEs to social security funds should be accelerated to address the shortfalls in some local social security funds.

China: 2018 reforms made the tax system less progressive
(In percent)



Source: China Ministry of Finance; and IMF staff calculations.

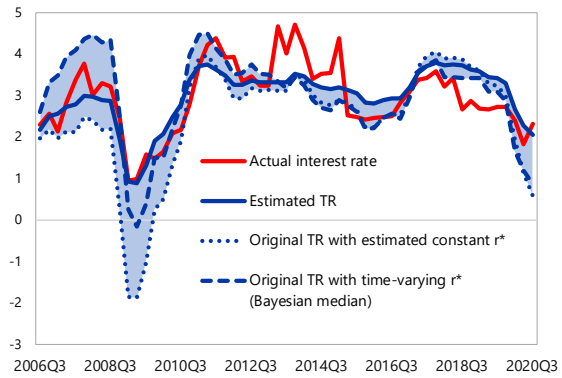
29. Accommodative monetary policy focusing on conventional interest rate-based measures will support the recovery and fiscal policy. (SIP3)**.** It will be important to keep a supportive monetary stance until there are clear signs that private demand has strengthened and CPI inflation has risen to its target on a sustainable basis. To that end, the PBC should focus on conventional interest rate instruments (7-day reverse repo and 1-year MLF) and ensure that short-term interbank rates remain near policy rate levels, including by ensuring sufficient liquidity injections or RRR cuts.[19] Use of non-interest rate instruments, such as the large expansion of re-lending facilities and increased targets for bank lending to certain sectors, have helped provide

[18] For low-paid workers, any additional tax burden from the reduction of the tax-free threshold would be more than offset by lower social security contributions, implying the increase in the progressivity.

[19] The 7-day reverse repo and 1-year MLF rates, two main policy rates, remain unchanged since May at 2.2 and 2.95 percent, respectively, while short-term interbank rates rose by about 100 basis points during May-October. RRRs for large, medium, and small-sized banks are at 11, 9, and 6 percent, respectively.

much-needed credit to vulnerable sectors when the normal functioning of financial markets was under threat. However, as the recovery is underway and financial markets have stabilized, potentially distortionary measures such as lending targets and window guidance should be phased out carefully as they could, if in place for a prolonged period, exacerbate credit misallocation and mispricing problems.

China: Accommodative monetary policy broadly in line with Taylor rule-implied rates (In percent)



Source: IMF staff calculations.
Note: The 7-day interbank repo rate is used as the interest rate, and the economic activity gap (see Box 3) is used as the output gap in the Taylor rule (TR) estimation. Three TRs are used in the calibration: an estimated TR with interest rate smoothing (estimated over 2006Q1-2020Q3), a standard TR with interest rate smoothing and an estimated constant neutral rate r*, and a standard TR with interest rate smoothing and a time-varying neutral rate (estimated based on the model by Pescatori and Turunen (2016)).

30. Exchange rate flexibility continues to be important to facilitate adjustment to the changing external environment. In a set of welcome recent measures, the reserve requirement on FX forward (a CFM[20]) was reduced to zero from 20 percent and the use of the counter-cyclical adjustment factor in the daily trading band's central parity formation was phased out. Going forward, further liberalization of portfolio flows for both inflows and outflows would strengthen the role of markets in determining the exchange rate. CFMs should not be used to actively manage the capital flow cycle and substitute for warranted macroeconomic adjustment and exchange rate flexibility. Over the medium term, the CFMs should be gradually phased out in a sequence consistent with greater exchange rate flexibility and other supporting reforms. Publishing information on FX intervention would improve the transparency, credibility and communication of the policy framework.

31. Steps to contain financial stability risks are urgently needed.

- *Exceptional financial support measures can be phased out as the recovery takes hold*. Relaxed NPL recognition standards and repayment moratoria have provided relief to corporates and banks and helped avoid a potential credit crunch. As the recovery gains traction, those measures should be gradually phased out as they run the risk of increasing moral hazard and undoing recent progress in strengthening bank transparency and governance. Banks should be required to disclose information on how loans are being reclassified and restructured to maintain confidence in their financial statements. This can be complemented by quickly adopting the proposed regulation to strengthen NPL recognition, which extends the scope of covered financial assets and expands the classification of nonperforming assets.

- *Regulatory and supervisory frameworks need to be strengthened*. A number of areas deserve attention: *(i)* the proposed amendments to the Central Bank Law usefully aim to strengthen the macroprudential policy framework and coordinate supervision of systemically important financial institutions; *(ii)* the recent efforts to strengthen regulations for online lending and

[20] See 2019 IMF CFM Taxonomy for a list of China's existing CFMs.

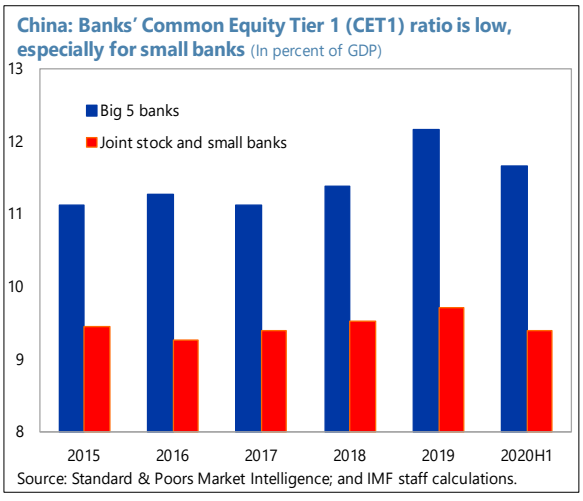
financial holding companies can help contain stability risks amid rapid shifts in business models driven by the fintech sector; *(iii)* implementing without further delay the planned asset management reform, improving supervisory capacity to monitor risks across the financial system, and strengthening prudential policies to address governance and related-party exposure risks at financial institutions would help safeguard financial stability. In that context, the recently announced prudential measures targeting excessive growth in developers' interest-bearing liabilities can help contain macro-financial risks from the real estate market; and *(iv)* there is also room to further increase use of equity financing while curbing excessive speculation particularly in small capitalization stocks, including by strengthening and expanding the registration-based IPO system. Progress along these lines would also help guard against potential risks arising from further liberalization of the financial sector and capital account.

- *The authorities should continue their efforts to address weaknesses in the anti-money laundering and countering-financing of terrorism (AML/CFT) framework*. The Financial Action Task Force (FATF) noted progress in technical compliance in its first enhanced follow-up report (October 2020). Further efforts are needed to increase the transparency of beneficial owners of legal entities operating in China (also an anti-corruption measure), introduce a comprehensive legal framework to implement UN-based targeted financial sanctions requirements, and improve financial sector supervision and preventive measures (e.g., customer due diligence and politically exposed persons).

32. A comprehensive bank restructuring approach is needed to strengthen the banking system and improve its capacity to support the recovery. A comprehensive solution to clean up weak banks while addressing moral hazard is critical to address vulnerabilities in the banking sector as exceptional policy support is phased out. The introduction of aspects of a bank resolution framework in the proposed amendments to the Commercial Banking Law is a welcome step. Key considerations for a bank restructuring agenda include:

- *Ensuring adequate capital and liquidity buffers.* Supervisors should ensure that banks properly recognize both legacy and emerging problem loans after the expiration of the repayment moratoria and hold adequate capital and liquidity buffers; those that cannot do so should be required to submit credible recovery plans. Efforts to improve bank governance and risk management would also help enable banks to raise capital from markets.

- *Prioritizing common equity in bank capital.* The authorities should promptly address low levels of Common Equity Tier 1 (CET1) capital in small banks, which are constraining their capacity to provide credit.



Such efforts, including recapitalization (see below), could be complemented by providing tax incentives ("Allowance for Corporate Equity") and addressing governance constraints that discourage banks from issuing equity below book value. This approach is preferable to alternative plans that emphasize other types of capital that absorb losses only in severe stress scenarios. For example, the planned use of the proceeds of local government bond issuance for bank recapitalization may be precluded from directly investing in CET1. Increasing bank capital via perpetual bonds typically held by institutional investors (e.g. insurers and asset management products) would increase financial interconnectedness and contagion risk during periods of stress. The same concerns apply to other forms of cross-bank capital support such as forced mergers.

- *Establishing a nationwide bank resolution regime in line with international standards*. This would help enhance the authorities' capacity to require recognition of losses and quickly wind down failing banks, while protecting insured depositors and minimizing financial stability risks by preserving banks' critical functions and transferring good assets to bridge banks or healthy institutions. Non-viable banks should exit with shareholders and creditors bearing losses in accordance with a clearly established hierarchy of claims. Depositors should be protected up to the coverage limit using deposit insurance.

- *Establishing a temporary resolution fund.* The closure of failing banks and the timely imposition of losses on shareholders and creditors as part of a resolution regime should be a precondition for continued reliance on the use of public funds. Once a resolution regime is in place, a temporary and fiscally backed centralized resolution fund could be established to complement the deposit insurance mechanism and support the orderly exit of non-viable banks as implicit guarantees for bank creditors are phased out. With appropriate safeguards to minimize moral hazard and avoid the continuation of non-viable operations as well as a mechanism to recover any losses from the industry over time, the fund would support orderly resolution, including by contributing resources to asset and liability transfers and injecting capital into bridge banks.

- *The use of public funds for recapitalization purposes should be a last resort*, only used if financial stability is severely threatened, and subject to strict conditions and restructuring requirements that reinforce market discipline and protect taxpayers.

- *Developing a well-functioning distressed debt market*. Given that corporate stresses and non-performing assets in the banking system are on the rise, encouraging banks to recognize and dispose bad assets in a timely manner would help expand further a market for distressed debt. Active markets to unload converted equity will help incentivize banks to increase use of debt-equity swaps.

33. Corporate support measures should be gradually replaced by policies to help corporate restructuring and the reallocation of labor and capital to viable firms.

- *A market-based corporate restructuring framework would facilitate deleveraging and exit of non-viable firms*. The framework should be comprehensive and include triage of insolvent firms and loss recognition and burden sharing within the general corporate insolvency framework. Improving the legal insolvency and debt enforcement framework in tandem would help address problems of creditor coordination, incomplete contracts, and asymmetric information, helping reduce excessive indebtedness in an orderly fashion. Public credit guarantees could help refinance working capital of viable firms and improve credit supply for POEs more generally.

- *Financing support to SMEs could be provided in a market-friendly manner*. Fiscal funding for the recently expanded national credit guarantee fund or for SME loan securitization could provide credit to SMEs while minimizing distortions to credit allocation and risk pricing. To support viable SMEs while maintaining upside gains for using public funds, the government could, for example, provide grants in return for a temporarily higher future corporate tax rate. Facilitating access to risk capital for existing firms and startups by eliminating the tax bias against equity and simplifying regulations of launching startups, would also help speed up the reallocation of resources into growth sectors.[21]

Authorities' Views

34. The authorities stressed the importance of sustainable fiscal policies, balancing the fiscal risk from higher public debt against the need to support growth. Public investment and policy support will continue for employment and new businesses in 2021, while the expiration of tax and fee reduction measures will improve overall revenues. They agreed on the need to further improve the public healthcare system and enhance the social safety net to discourage excessive precautionary savings and stimulate greater private consumption. In particular, they plan to reform the unemployment system, which was established in 1999, to better meet the needs of the evolving Chinese economy, including through greater coordination between central and provincial governments, benefit portability, simple application procedures, and skill training. The authorities continued to disagree with staff's augmented concept, noting that under the 2014 Budget Law, local governments did not bear legal responsibility for the financial obligations of market entities such as SOEs. The authorities stressed that the fiscal risks still remained low as general budgetary debt is well below the average for emerging market economies and that local governments' debt carrying capacity remains above globally accepted thresholds. They saw economic growth as the key to mitigating risks from debt.

35. The authorities remained committed to prudent monetary policy which balances support for the recovery with concerns for financial stability risks. Monetary policy will use conventional instruments, keep a normal, upward-sloping yield curve, as well as create an appropriate liquidity environment for government bond issuance. Some non-interest rate policies will be phased out, while support for smaller firms will be maintained and improved to

[21] See more details "Flattening the Insolvency Curve: Promoting Corporate Restructuring in Asia and the Pacific in the Post-C19 Recovery," (Bauer and others, IMF Working Paper *forthcoming*).

provide targeted support for viable firms and employment. The authorities saw the lower lending rate as important to help bring down corporate borrowing costs while keeping banks' profit margins within a range seen as reasonable. The authorities viewed that more provisioning supported by capital replenishment and reduced dividend payouts would help banks dispose expected higher nonperforming assets next year. They agreed with the importance of continued efforts to improve financial sector governance and shadow banking supervision. They also reiterated their commitment to increasing exchange rate flexibility. The authorities considered the reserve requirement on FX forwards a macroprudential measure to prevent exchange rate overshooting and emphasized that the PBC has stopped regular FX interventions. They also noted that China's disclosure of FX data is in accordance with the IMF's Special Data Dissemination Standard as indicated by IMF's annual observance reports.

36. The authorities are seeking to build on their initial achievements in dealing with weak financial institutions. The authorities emphasized that they have addressed problems in several high-risk institutions in recent years and will continue to follow an approach based on market principles and the rule of law to address weak banks. They expressed concerns that establishing a temporary fiscal backstop for resolution funding may amplify moral hazard. They noted that capital replenishment efforts will be prioritized for financial institutions capable of sustaining market-oriented operations after shareholders bear losses, while unsustainable institutions will be subject to market exit.

B. Maximizing Policy Space by Improving Policy Transmission

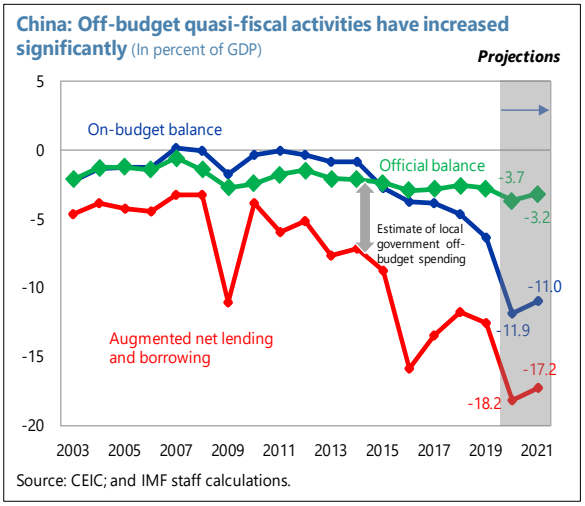
37. The monetary policy framework can be further modernized to strengthen the effectiveness of interest-rate transmission. The PBC has reformed the loan prime rate (LPR) framework to make bank loan rates more responsive to policy rate changes by re-benchmarking the LPR on the one-year MLF rate and making all new and existing loan rates linked to the LPR. Additional reforms, such as phasing out interest rate guidance for deposits and inclusive lending, would ease regulatory distortions and strengthen market-based pricing. This would increase the pass-through of policy rate cuts to bank funding costs, supporting banks' ability to provide new financing. These reforms would also expand credit supply to riskier borrowers such as smaller POEs, reduce the need for potentially distortive directed lending policies, and lower financial stability risks. In addition, the bond and FX derivatives markets can be further developed to increase policy transmission to longer-term bond yields and facilitate a more flexible exchange rate with appropriate FX risk hedging instruments.[22]

38. Establishing a macro-fiscal framework can further improve fiscal policy transmission. Such a framework would help assess the effectiveness of fiscal policy given the state of the recovery in the short term and anchor market confidence that public finances are sustainable over the medium term.

[22] See "The Future of China's Bond Market" (Schipke, 2019).

- *A medium-term macro-fiscal framework should be comprehensive*. It should include: *(i)* fiscal policy targets consistent with fiscal sustainability and macroeconomic stability; *(ii)* top-down medium-term macroeconomic and fiscal forecasting; *(iii)* a bottom-up "baseline" expenditure forecasting methodology; and *(iv)* a strategic decision-making phase in the budget process to decide on the use of the available fiscal space. A fiscal framework should consider the entire general government and publish reports on general government operations (covering revenues, expenditure, and financing) on a monthly basis. The new requirement that provinces and ministries submit three-year budget plans and the development of a framework for the preparation of government financial reports and its implementation through a pilot exercise in 2020 are positive steps. Moreover, efforts need to continue strengthening macro-fiscal coordination including through the fiscal policy unit in the Ministry of Finance.

- *Further enhancing transparency around fiscal actions will bolster market confidence, increase the efficiency of public investment, and support anti-corruption efforts*. This requires controlling, tracking, and auditing the implementation of policy measures, providing sufficient information to the public by publishing general government accounts and balance sheets, providing information on quasi-fiscal operations of the SOEs and extrabudgetary funds, preparing a fiscal risk statement, and improving the framework for non-tax revenues, especially for revenue related to land sales.[23] Moving in that direction, the new regulation governing the implementation of the Budget Law adds more discipline to the budgeting and financial reporting process. The coverage should be further expanded to include quasi-fiscal activities to ensure the effective use of valuable public resources.



39. The intergovernmental coordination framework could be strengthened to increase the effectiveness of fiscal policy and enhance fiscal risk sharing across provinces. Providing more fiscal support to the most affected regions helps spread the burden of economic shocks and maximizes the growth impact of fiscal policy at the national level, as multipliers tend to be higher where output gaps are the largest. Key reform considerations include: *(i)* establishing an automatic and non-regressive fiscal transfer mechanism for the total transfers to each province; *(ii)* reducing the long-standing misalignment of central-local fiscal responsibilities; and *(iii)* removing local protectionism—particularly in the form of prohibition of interregional circulation of certain goods and services and designation of service providers—and the remaining *hukou* restrictions to help firms and households adjust to future idiosyncratic shocks (SIP 4).

[23] See the 2019 Article IV Staff Report, Box 4, for more detailed discussion of this issue.

40. Digital technologies can help further improve the transmission of policy support to vulnerable households and firms.

- *The authorities can further leverage digital technologies to deliver government support more effectively*. Recent efforts to distribute consumption vouchers through Fintech platforms (RMB 60 billion by end-June) and allow online applications for unemployment benefits have shown potential to improve the effectiveness of consumption support and social assistance programs. Digital technologies can also enhance transparency of delivery.

- *Fintech could be more actively used to provide targeted support for small firms and foster an inclusive recovery*. Support policies using Fintech lending platforms and online banks promise better targeting as these platforms have unique access to small- and micro-sized borrowers. Behavioral big data could allow Fintech firms to adjust lending terms more smoothly in response to the business cycle, potentially better protecting both lenders and borrowers from collateral deterioration against an unexpected negative shock.[24] There is evidence that Fintech has contributed to more inclusive income growth across regions and income groups, suggesting that policy support using Fintech platforms might also help address income inequality in the wake of the pandemic.[25] Strengthening regulatory and supervisory frameworks can help address potential risks from Fintech, including risks to financial stability and integrity, and challenges for data governance.

- *The PBC's central bank digital currency, named e-CNY, can promote financial inclusion and payment efficiency*. The e-CNY is currently being tested across several regions and electronic payment platforms (Box 8). Its use could potentially strengthen monetary policy transmission by increasing financial inclusion, help the targeted delivery of fiscal support, and increase transparency in public finances. The PBC needs to carefully monitor and assess operational risks from potential disruptions and cyberattacks.

Authorities' Views

41. The authorities stressed that policy transmission has strengthened since the LPR reform and broadly agreed on the potential benefits and risks of the e-CNY. They highlighted that the LPR reform has not only ensured more immediate pass-through from policy rate to lending rates, increasing available credit for smaller firms, but also led to lower deposit rates by some large banks. The authorities did not see the self-regulatory mechanism of deposit rates as preventing banks from cutting deposit rates and noted that the benchmark deposit rate prevents disorderly competition for deposits. The authorities emphasized the domestic purpose of the e-CNY, noting that international coordination is important before potential cross-border use in the future.

[24] See "Fintech Credit Risk Assessment for SMEs: Evidence from China" (Huang and others, 2020).

[25] See "Digital Finance and Income Convergence in China" (Han and others., IMF Working Paper *forthcoming*).

42. The authorities noted that recent reforms have improved the effectiveness of fiscal policy and clarified that the existing intergovernmental fiscal transfer system already has some automatic and non-regressive features. They noted that the substantial shortening of transfer disbursement periods from the central governments to city governments as well as the introduction of applications for unemployment benefits and employment subsidies through online service platforms have helped provide more timely financial support to vulnerable households and enterprises during the pandemic. The authorities highlighted that part of the existing transfers from the central to local governments automatically move resources to fiscally weaker regions. They also saw local governments' expenditure responsibilities as broadly matching their fiscal capacity once local governments' portion in shared taxes, tax refunds and fiscal transfers are included. The authorities agreed that local protectionism should be further removed, including by strengthening the enforcement of the Anti-Monopoly Law and existing regulations, to promote a unified domestic product market.

C. Adjusting Macroeconomic Policy to the Pace of the Recovery

43. Macroeconomic policy will have to step up should the recovery fall short of the current baseline forecast. A deeper and prolonged economic downturn would take a more significant toll on low-income households, suggesting that additional support should primarily focus on increasing social assistance spending and other measures to protect the most vulnerable. Accelerating certain structural reforms that strengthen the role of markets, increase competition, and foster openness would further support growth and make the macroeconomic policy actions more effective (see next section).

- *Any additional fiscal expansion should be on-budget, centrally financed, and focused on low-income households, public health, and social safety nets*. Revenue measures could include: (*i*) removal of minimum social security contribution for low-paid workers; (*ii*) additional fee cuts; and (*iii*) an extension of tax relief and waived social security contributions. Contributions to the housing fund could be temporarily waived. On the expenditure side, (*i*) unemployment insurance benefits could be temporarily increased and (*ii*) wage subsidies could be considered for migrant workers, who fall outside social protection schemes.[26]

- *More forceful monetary easing should focus on policy rate cuts*. Rapid implementation of the deposit and lending rate reform and addressing weak banks would amplify the impact of further rate cuts. In a severe scenario, if the recovery is delayed and inflation falls significantly below the baseline while financial conditions tighten amidst large fiscal deficits, the PBC could consider deploying a well-communicated market-based policy combining multiple non-distortionary measures (e.g. interest rate cuts, open market operations, or forward guidance). If further exceptional financial support measures were necessary, banks should be encouraged to expand bilateral restructuring efforts with viable borrowers and make use of

[26] These suggestions are broadly consistent with policies identified in the October 2020 IMF Fiscal Monitor (IMF, 2020) as having prevented worse outcomes during the initial lockdown phases that accompanied outbreaks of the Covid-19 pandemic.

capital and liquidity buffers, while SME credit support should be provided in a market-friendly manner (¶33). Contingency plans should be prepared to limit the repercussions from potential external sanctions against financial institutions operating in Hong Kong SAR.

- *The exchange rate should remain flexible.* In the case of persistent foreign exchange market pressures leading to herding and financial system stress, foreign exchange intervention should be used to counter disorderly market conditions if necessary, while tightening existing CFMs (in line with the IMF's Institutional View) in a transparent and temporary manner could be appropriate as part of a broader policy package to stabilize the economy and markets.

44. On the other hand, policy support could be scaled back should economic activity recover faster than expected. This would include accelerating fiscal consolidation—for example, additional consolidation measures that lower the augmented deficit by an annual average of one percentage point of GDP starting in 2022 would stabilize the augmented debt-to-GDP ratio by around 2025. This could be achieved by decreasing off-budget local government infrastructure spending and accelerating tax reform such as the reduction of tax-free thresholds for PIT and the implementation of a nationwide recurrent property tax. Monetary policy would need to stay put or tighten moderately in line with the pace of recovery and inflation development, while avoiding an abrupt tightening of financial conditions. Financial regulatory reform should resume more quickly, including by accelerating the asset management reform, to support deleveraging and financial de-risking.

Authorities' Views

45. The authorities concurred that macroeconomic policy should be adjusted to the pace of the recovery. Should the recovery fall short, monetary support would keep liquidity at an appropriate and adequate level and ensure supportive financial conditions. Meanwhile, fiscal policy would be conditioned on economic situations, enhance the countercyclical adjustment, and play a key role in stabilizing the economy. A stronger-than-expected recovery would call for accelerating fiscal consolidation and a quicker resumption of financial regulatory reforms, with monetary policy adjusting based on inflation and financial stability considerations.

INCLUSIVE, GREEN, AND HIGH-QUALITY GROWTH

A. Re-Accelerating Reforms to Support Balanced Growth

46. Simultaneous implementation of key reforms would complement macro stimulus and help promote a job-rich and balanced recovery.

- *Simultaneous implementation of key reforms—such as further opening up domestic markets, strengthening social safety nets, and SOE reform while ensuring competitive neutrality and promoting green investment—can support a job-rich and balanced recovery in the near term.* Many of these reforms are mutually reinforcing, suggesting simultaneous implementation

would maximize their impact and limit short-term adverse effects. Given the current pressures on the labor market, accelerating the opening up of domestic product markets (in particular in the service sector) while strengthening social safety nets would help protect workers while providing new employment opportunities. Such reforms can help absorb possible employment losses arising from corporate restructuring and SOE reform—measures that, in turn, will raise productivity and anchor growth going forward. This will also help reduce external imbalances and enhance the effectiveness of policies to address shocks. Additional revenues from carbon pricing policies or other climate change mitigation measures (see below) can be used to finance a permanent expansion of the social safety nets.

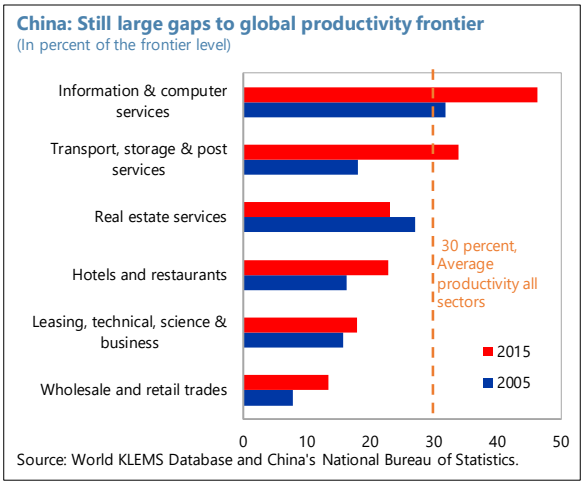
- *Longer term, these reforms will anchor domestic growth and help build a more resilient, green, and inclusive economy*, in line with the authorities' development goal of strengthening "dual circulation" (Box 9).[27]

Strengthening Social Safety Nets and Hukou Reform

47. Strengthening social safety nets and accelerating *hukou* and land reforms will improve labor market mobility and adjustment to the pandemic and its aftermath. Urbanization has helped rural workers to find work in economically active regions, where household incomes are twice as high as in rural areas. A more holistic reform to further improve the *hukou* system, preserve migrant worker land ownership rights, improve the efficiency of rural land markets, and increase spending on public services and social safety nets, would facilitate labor market mobility and raise growth.

Market and SOE Reform

48. A larger role of markets and easing market entry by new firms would help further narrow productivity gaps from the global frontier. China has seen remarkable growth over the last decades, but with average sectoral productivity at about one third of the global frontier, there is ample opportunity for more. Productivity gaps are especially large in the services sector—for example, business services productivity stands at only 17 percent of the frontier level, owing in part to high entry barriers.[28] Reforms addressing these gaps include further opening up non-strategic sectors such as services to the entry of new private firms—both domestic and foreign. Removing regional regulatory barriers will also



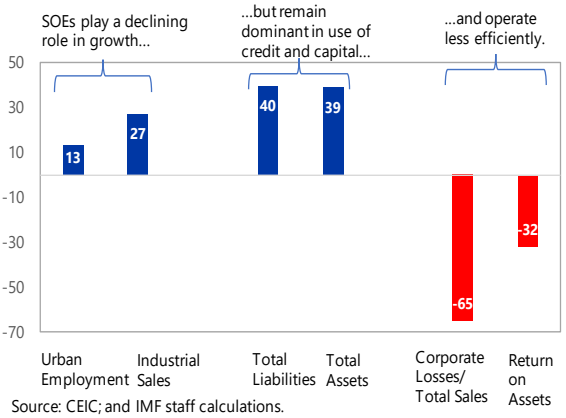
[27] The strategy is to strengthen domestic private demand for self-sustainable growth (internal circulation) while enhancing its competitiveness to benefit from a durable global recovery after the pandemic (external circulation).

[28] OECD Services Trade Restrictiveness Index (2019).

help increase competition and improve factor allocation by facilitating firm entry and mobility across regions in all sectors. Such reforms would have dynamic gains, boosting domestic innovation and technological upgrading in response to economic changes brought about by the pandemic.

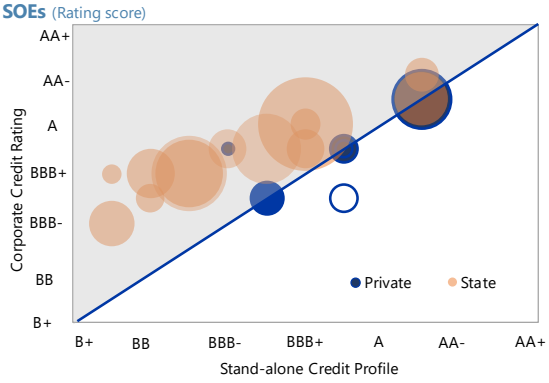
49. SOE reforms would significantly lift productivity and growth. Firm-level performance varies across many characteristics, but one important factor is ownership. Although many SOEs are performing well, private firms are generally more productive than SOEs and, even among listed firms, the average productivity gap between SOEs and private enterprises across sectors in China is about 20 percent. These productivity gaps have significant implications for the level of GDP considering the SOE sector's dominance in the use of resources. Staff analysis suggests that reforms closing productivity gaps between SOEs and POEs across sectors could raise output by around 4 percent over the medium to long term. Key elements of SOE reforms include:

China: SOEs dominate resource use and operate less efficiently than private firms (In percent of total)



Source: CEIC; and IMF staff calculations.
Note: Urban employment is the SOE percentage share of total urban employment in 2018. Industrial sales, total liabilities and total assets are the SOE percentage shares of the respective totals for all industrial enterprises in 2019. Corporate losses / total sales and return on assets are the percent gap between the values for SOEs and the corresponding values for all industrial firms in 2019.

China: Implicit guarantees provide credit advantages to SOEs (Rating score)



Source: Jahan et al (2019); Standard & Poors; and Bloomberg.
Note: Size of the bubble denotes the entity's total debt. Shaded area shows corporates that have a higher credit rating than their stand-alone credit profile.

- *Implicit guarantees should be removed to ensure competitive neutrality in financing between SOEs and POEs*. This will require a comprehensive and well-sequenced approach, including more defaults of SOE and LGFV bonds if market forces warrant, in line with the plan of the National Development Reform Committee (July 2019).[29]

- *SOE governance should be further improved*. SOE reforms should be accelerated to ensure that the potential economic and fiscal costs arising from weak governance and mismanagement, such as contingent liabilities, resource misallocation, and distorted market competition, do not outweigh social, political and strategic benefits. SOE governance and transparency should be improved in line with the 2015 OECD guidelines on corporate governance of SOEs.

[29] See Selected Issues Paper "Improving the Allocation of Corporate Credit in China" (Jahan and others, 2019) accompanying IMF Country Report No. 19/266.

Personal Insolvency Regime Reform

50. Establishing a personal insolvency regime would help address over-indebtedness of small entrepreneurs and households, supporting adjustment in the aftermath of the pandemic. If carefully designed to minimize moral hazard, a personal insolvency regime would provide a second chance to honest but unfortunate debtors, including those unable to repay due to external circumstances beyond their control such as the COVID-19 shock. Discharge of debt under certain conditions will facilitate the return of overly indebted individuals to the economy and promote entrepreneurship.

Fostering Innovation and Green Investment

51. Government support for basic R&D and innovation, if prudently deployed to limit interfering with markets, can help foster innovation and boost productivity. While market forces in general are more effective in promoting technological advances and growth, in some cases, subsidies and other forms of government support for basic R&D and technological innovation can address market failures which lead to underinvestment in R&D—for example, the presence of very large knowledge spillovers. To minimize distortionary effects of government support, the authorities should look to foster competition, maintain a level playing field among firms, and provide room for young and productive firms to grow. Such policies should be transparent (including how they add to existing subsidy schemes), incorporate strong governance, and be timebound to avoid excess capacity and "zombie" firms. In contrast, industrial policies such as providing subsidies for utilities and land acquisitions should be avoided as they are generally distortionary and could amplify productivity gaps vis-à-vis the private sector when they favor SOEs.

52. Green investment and well-sequenced climate change mitigation strategies would not only boost the recovery but also carry large environmental, health, and economic benefits.

- *Green investment would support the recovery.* Public investment in climate-resilient infrastructure and the transition to a lower-carbon future (e.g., clean transport) can support job creation while increasing economic and environmental resiliency. Public works during the recovery—including in those provinces adversely affected by flooding this summer—could facilitate poverty reduction through green jobs, such as reforestation, soil and water conservation, and flood protection. Tax relief and fiscal incentives for low emissions vehicles should continue.

- *Strong policy measures are needed to achieve China's ambitious goals in the longer term.* President Xi's recent announcement that China will strive for CO2 emissions to peak before 2030 and achieve carbon neutrality by 2060 is a big step towards slowing global warming, but at the same time requires a significant transformation and strengthening of existing green policies. The authorities have started working on detailed plans, including through setting carbon intensity targets, active advocacy and promotion of green consumption, the

rollout of carbon capture and sequestration programs, and the construction of a modern environmental governance system. Low oil prices also present a good opportunity to further improve carbon pricing to incentivize firms and households to switch to low-carbon activities and energy sources. The national emission trading system for the power sector should be implemented as soon as possible—preferably by the end of this year as currently scheduled—and further strengthened by making energy efficiency standards more stringent and increasing carbon prices gradually.[30] New carbon pricing policies for non-covered sectors should also be developed. The majority of carbon revenues can go towards funding social safety nets and cuts in distortive taxes. This should be done in an equitable way to offset the negative macroeconomic and distributional effects of higher energy prices.

Authorities' Views

53. The authorities agreed that further SOE and market reforms could boost productivity and stressed advances in *hukou* reform. They highlighted that their pre-crisis target of reducing SOE leverage (liability-to-asset ratio) by 2 percentage points will be achieved by the end of 2020 despite the pandemic. They attributed differences in profitability and productivity between SOEs and POEs to market outcomes and residual SOE social and legacy responsibilities, seeing a level playing field between them. They remained committed to further pursuing mixed ownership reforms and improving SOE governance through corporate boards. The authorities noted that *hukou* reform has to a large extent already been completed, though there remains room to further reduce barriers and expand the set of benefits accessible to migrant workers.

54. The authorities reaffirmed the climate goals announced by President Xi but stressed the need for global cooperation. While acknowledging the immense challenge in achieving CO2 emissions peaking before 2030 and carbon neutrality before 2060, the authorities have started working on detailed plans to effectively reduce CO2 emissions. They are in the process of developing a national carbon emissions trading market and will expand the coverage. At the same time, the authorities stressed the need for international cooperation in achieving the commonly shared goal of slowing global warming.

B. Helping Solve the Global Crisis

55. China can lead on global solutions to overcome the global health and economic crisis. China can greatly help the global community to overcome the health crisis, by ensuring rapid production and equitable distribution of COVID-19 vaccines. China's participation in the G20 efforts to bring relief to low-income countries is welcome, including the participation of Chinese official creditors in the extension of Debt Service Suspension Initiative (DSSI) as well as the common framework for debt treatments beyond DSSI. This common framework is expected

[30] Recent staff simulations suggest that the carbon price, which is currently RMB 34 (about US$5) across the eight pilots, needs to grow between 5 to 7 percent annually in order to achieve 80 percent CO2 emission reduction by 2050. See more details in Chapter 3 of the October 2020 IMF World Economic Outlook (IMF, 2020).

to facilitate timely and comprehensive debt resolution with fair burden sharing including for private creditors. At the same time, strengthening the external lending frameworks by enhancing debt sustainability monitoring and transparency, can maximize the benefits to partner countries from infrastructure investment.

56. China and the global economy would benefit from a more open, stable, and transparent rules-based international trade system. A durable solution to the economic issues underlying trade and technology tensions would reduce uncertainty and boost global trade. China and its trading partners should work constructively together to adjust the global trading and investment systems to the changing global economy, including in the digital sphere, services trade, and investment facilitation. Efforts should continue to reach an agreement on China's joining the WTO's Government Procurement Agreement. The Regional Comprehensive Economic Partnership (RCEP) agreement was recently completed and its successful implementation would provide a boost to regional trade.

Authorities' Views

57. The authorities stressed their commitment for global cooperation, including to accelerate the end of the crisis. With the pandemic clouding the global outlook, the authorities noted the pressing need for global cooperation and reiterated its commitment to make any approved vaccine developed in China widely available to all countries. They agreed that data transparency helps debt sustainability assessments and, as a result, also potentially helps attract foreign investors and noted their intention to further upgrade environmental criteria in overseas lending projects. The authorities agreed that a more open, stable, and transparent rules-based international trade investment environment is particularly important amid the rising geopolitical tensions and economic and trade frictions, to which a well-functioning multilateral system would provide better solutions. They saw technological decoupling as costly for all parties, while removing trade restrictions on high-tech products helps promote trade and reduce external imbalances.

STAFF APPRAISAL

58. The Chinese economy continues its fast recovery from the health and economic crisis. A strong containment effort and macroeconomic and financial policy support have mitigated the crisis' impact and helped the economy to rebound. However, growth is still unbalanced as the recovery has relied heavily on public support while private consumption is lagging. The pandemic has brought China's inequality challenges to the fore and added to the many interconnected financial vulnerabilities already present before the crisis.

59. Important structural reforms have advanced despite the pandemic. *Hukou* reforms and the opening of the financial sector have advanced—for example, the negative lists for foreign investment were shortened further, foreign ownership caps on securities, fund management, futures and life insurance companies were removed, and restrictions on the

investment quota of foreign institutional investors were removed. The patent law was amended to improve intellectual property right. However, progress in real-sector reforms has been slow, especially in the area of SOEs and competitive neutrality.

60. The balance of risks to the outlook is still on the downside. Faster-than-expected widespread availability of effective vaccines and therapies with proven success in treating COVID-19 could help lift confidence and accelerate the recovery relative to the baseline forecast both domestically and globally. But there are a number of significant downside risks. These include: *(i)* a failure of the handoff from public to private demand, for example because of a COVID-19 resurgence or a sudden tightening of financial conditions; and *(ii)* a further escalation of external pressure along multiple dimensions, such as binding limitations to China's access to the international technology frontier and restrictions on financial flows through Chinese financial institutions operating in Hong Kong SAR.

61. Macro policy should remain moderately expansionary in 2021, with the policy mix reoriented to support more balanced growth. A moderately expansionary fiscal stance, shifting from infrastructure spending towards strengthening social safety nets and promoting green investment, will help secure a balanced recovery. Given low inflation, monetary policy should remain accommodative—which will also support the fiscal effort—while phasing out potentially distortionary measures such as lending targets and lending rate guidance as the recovery takes hold. Exchange rate flexibility will remain essential to facilitate adjustment to the new external environment.

62. Improving the effectiveness of fiscal and monetary policy will maximize policy space. With public debt already high and rising, fiscal policy should be made more effective by improving the macro-fiscal framework and intergovernmental coordination while leveraging digital technologies to deliver support to vulnerable groups. Further modernization of the monetary policy framework to strengthen the transmission of conventional interest rate policies would help improve credit intermediation.

63. Financial risks need to be addressed proactively. As the recovery takes hold, exceptional financial support measures which have helped avoid a credit squeeze, such as relaxed NPL recognition standards and repayment moratoria, can be replaced with proactive efforts to address problem loans and strengthen regulatory and supervisory frameworks. Resuming financial regulatory strengthening will help contain corporate leverage and reduce shadow-banking risks. A comprehensive bank restructuring framework is needed to lower systemic risks and continue de-risking.

64. There is significant scope to enhance resilience of the economy and the role of the private sector. Simultaneous implementation of key reforms—a further opening up of domestic markets, reforming SOEs and ensuring competitive neutrality with private firms while promoting green investment and strengthening social safety nets—will support a job-rich and balanced recovery. These reforms will also help boost potential growth, reduce external imbalances, and build a more resilient, green, and inclusive economy.

65. China should continue to lead multilateral efforts to address global challenges. This includes supporting international efforts to expand access to a vaccine, providing debt relief to low-income countries and sustainable financing for global infrastructure investment, and tackling climate change. China and its trading partners should work together to build a more open, stable, and transparent rules-based international trade system.

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

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

Box 1. China's Exit Strategy From COVID-19[1]

China has successfully contained the outbreak and reopened the economy. This reflects a combination of swift and targeted lockdown measures, well-sequenced reopening policies, expanded testing, and enhanced tracing capacity leveraging technology and big data.

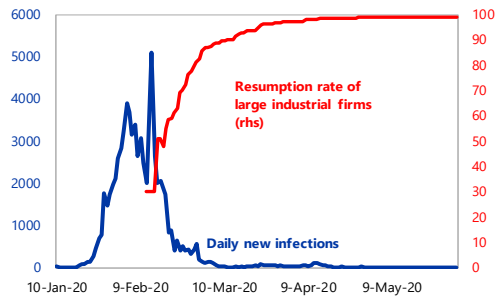
Targeted outbreak control is helping to contain the virus. Since the nationwide lockdown in February brought the virus under control, sporadic regional outbreaks have been contained with the help of highly targeted lockdown measures at the subdistrict level based on enhanced testing and tracing capacities and central government support. The targeted approach has minimized disruptions to economic activity while containing the virus' spread.

Policymakers have been balancing economic normalization and virus containment by differentiating activity resumption across regions and sectors, with low-risk areas and critical sectors opening first. Regional lockdown measures have been gradually eased based on regularly updated risk assessments, with the epicenter Wuhan reopening last. Within regions, essential sectors such as industrial and transportation were prioritized while the reopening of schools and public places proceeded more gradually.[2]

China has significantly ramped up its testing capacity, with the weekly production capacity of nucleic acid testing kits reaching 46 million per week by August. Online testing reservation is widely available on WeChat and e-commerce platforms. The scope of testing has also expanded over time, from symptomatic cases to asymptomatic cases. To facilitate reopening, mandatory testing was conducted for high-risk groups, such as medics, teachers and students, public service workers. More recently, to contain regional outbreaks, city-wide testing has been undertaken in Wuhan, Beijing, Dalian, and Xinjiang. In addition, mandatory testing is conducted for international inbound travelers to prevent imported cases.

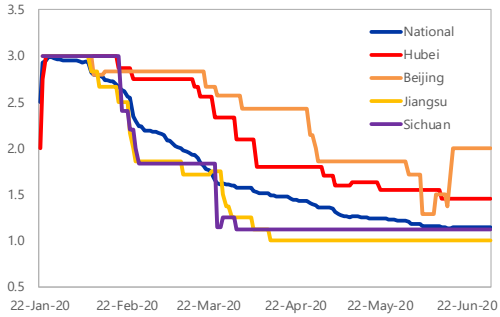
The government has leveraged digital infrastructure and big data. A mobile health QR code is widely used to assess individual infection risk, manage mobility restrictions, and regulate entry into public places. Contact-tracing apps using big data on public transportation have also improved the efficiency of epidemic control measures. In addition, digitalization has facilitated business resumption during the pandemic, especially in healthcare, education, retail and food services, entertainment, and logistics.

Production resumed as epidemic moderated
(Cases; in percent, rhs)



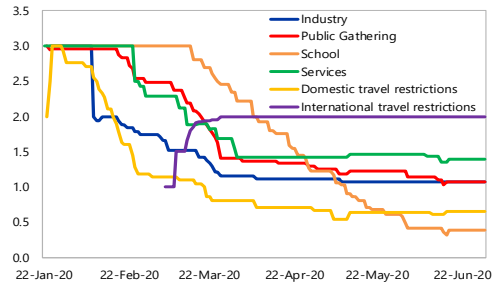
Source: National Health Commission; National Development and Reform Commission.
Note: Daily new infections on Feburary 20 not shown due to statistical changes.

Regional containment stringency
(Index)



Source: Announcements by local governemnts and health authorities.

Sectoral reopening of containment measures
(Index)



Source: Announcements from local governemnts and health authorities.

[1] Prepared by Longmei Zhang and Fan Zhang.

[2] The stringency indices track policy announcements in response to COVID-19 by local authorities. The policies were classified into 12 sectors, with ratings from "no restriction" (0) to "full closure" (3) for each sector at the time they took effect. The sectoral and provincial ratings were then aggregated to their respective national indices.

Box 2. Impact of China's Monetary and Credit Policies Amid COVID-19[1]

Simulations using a DSGE model of conventional interest rate policy and non-interest rate credit policy illustrate that the PBC's credit policy played an important role in supporting credit growth during the COVID-19 outbreak, including by preventing a marked increase in credit spreads.

Credit to the Chinese private sector has accelerated rapidly since the COVID-19 outbreak, helping cushion the crisis' impact. Indeed, countercyclical credit dynamics have been one of the salient characteristics of recent crisis episodes (Figure 1.1). During the COVID-19 pandemic, this likely reflects increased liquidity needs in many sectors due to cash flow disruptions caused by mobility restrictions.

It is less obvious what role the credit policy has played in supporting credit supply and financial conditions. On the one hand, the PBC's "conventional" monetary policy (i.e., policy rate cuts) has lowered lending rates and expanded non-interest rate credit policy (i.e., re-lending facilities) has provided banks with low-cost funding for targeted lending to certain sectors (micro and small businesses, manufacturing firms, and agricultural sector). On the other hand, standard empirical models, which focuses only on conventional monetary policy (for example, Chen and Kang (2018)), struggle to account for the strength of credit growth in China during crisis episodes (Figure 1.2).[2]

The Gertler and Karadi (2011) model (GK subsequently)—tailored to capture relevant characteristics of the Chinese economy and the pandemic—provides a convenient framework for quantifying the impact of the PBC's policy rate cuts and expanded credit policy. The simulations model the COVID-19 crisis as a combination of a negative capital quality and a negative demand shock countered by conventional interest rate cuts and a credit policy governed by reaction rules calibrated to qualitatively match the pattern of post-COVID-19 WEO forecast revisions for output and investment (Figure 1.3). The policy rate response is constrained to match the observed declines in Chinese short-term interest rates and, following the original GK analysis, credit policy is allowed to vary in its responsiveness to spreads (aggressively, moderately or not at all). Importantly, since the model assumes that all credit is used for investment purposes, the results relied on estimates of the investment-related component of credit in China, which were lower than baseline forecasts in the January 2020 WEO in 2020H1 (Figure 1.3).

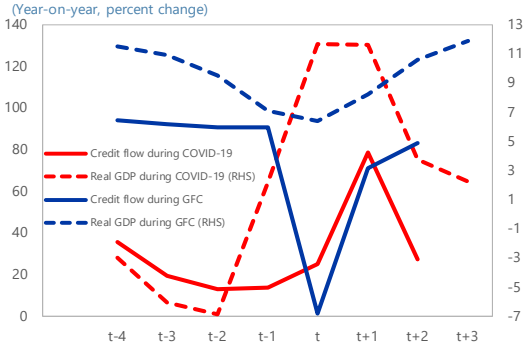
Model simulations suggest that the PBC's credit policy has been an effective tool to contain risk premium increases and promote credit growth. The results indicate that moderate interventions can limit the fall in credit by around 1 ppt, with aggressive policy twice as effective. Depending on the scenario, the central bank facilitates the additional intermediation of up to 5 percent of GDP of investment-related credit, with the credit policy further augmented by lower interest rates. The finding that lift-off occurs faster with credit intervention is testament to the effectiveness of such policies (Figure 1.4). Credit policy is also helpful in limiting the fall in asset prices, preventing increases in fiver-year credit spreads (Figure 1.5) and boosting credit by around 1-2 ppt (Figure 1.6).[3]

However, policy makers should bear in mind the possible efficiency costs and financial stability risks associated with credit policies. It is important to ensure that loans funded by the PBC's re-lending facilities continue to remain on banks' balance sheets, because central bank-intermediated credit could contribute to moral hazard as banks neglect risk control and monitoring. In addition, the lending rate guidance and lending growth targets associated with the re-lending facilities may lead to credit misallocation risk not captured in the model simulations. Finally, the simulations suggest that credit policies lead to a more persistent build-up in private credit, which could add to China's already high private sector leverage and exacerbate financial stability risks not captured fully in the GK setup.

[1] Prepared by Fei Han and Pawel Zabczyk, with helpful input from Roland Meeks.
[2] Although not the focus here, eased financial policies such as lending targets and forbearance may have also contributed to the large residuals.
[3] Arguably, such policies are unlikely to be withdrawn overnight, so could end up being even more powerful than in our baseline simulations, i.e., higher expected persistence could translate into greater effects on contemporaneous demand.

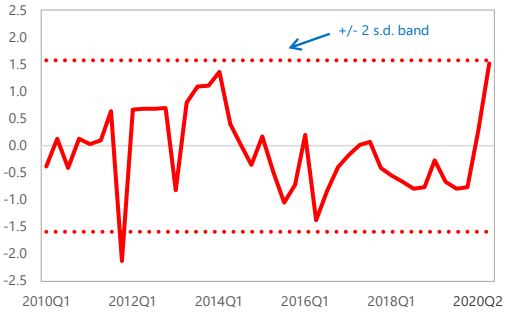
Box 2. Impact of China's Monetary and Credit Policies Amid COVID-19 (concluded)

Figure 1.1. Credit Flow and Real GDP
(Year-on-year, percent change)



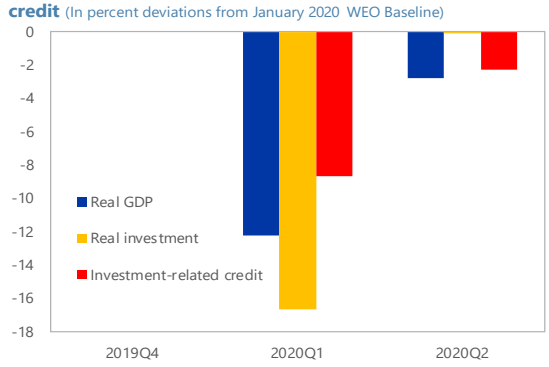
Source: CEIC; Haver Analytics; and IMF staff calculations.
Note: t = 2009Q1 for GFC and 2020Q1 for COVID-19. Credit flow is the flow of total social financing (TSF) adjusted to exclude government bonds, equity financing, and loan write-offs.

Figure 1.2. Difference Between Actual and Model-Predicted Credit Growth (In percentage points; seasonally adjusted quarter-on-quarter growth)



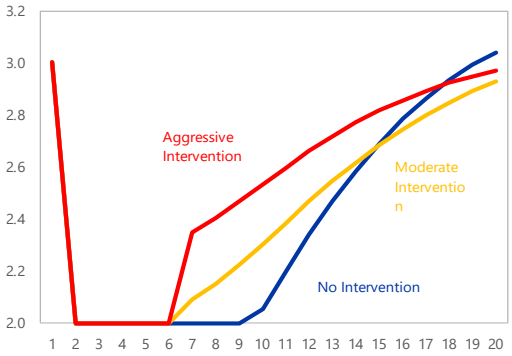
Source: CEIC; Haver Analytics; and IMF staff calculations.
Note: The credit growth model is based on Chen and Kang (2018) with the adjusted TSF as the dependent variable. The average of the model-predicted values across different model specifications is used.

Figure 1.3. China: GDP, investment and investment-related credit (In percent deviations from January 2020 WEO Baseline)



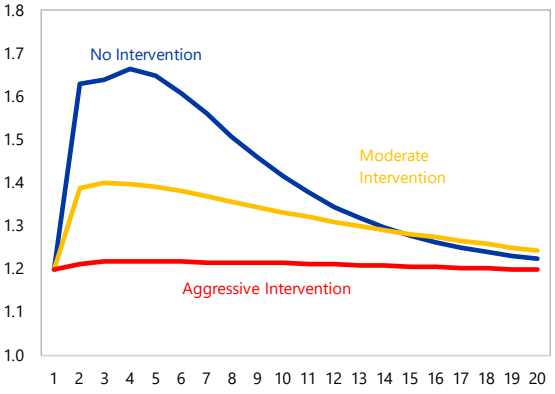
Source: CEIC; Haver Analytics; WEO database, IMF; and IMF staff calculations.
Note: Investment-related credit is estimated by a simple regression model between credit growth and real investment growth rates.

Figure 1.4. Response of interest rate
(Levels; in percent)



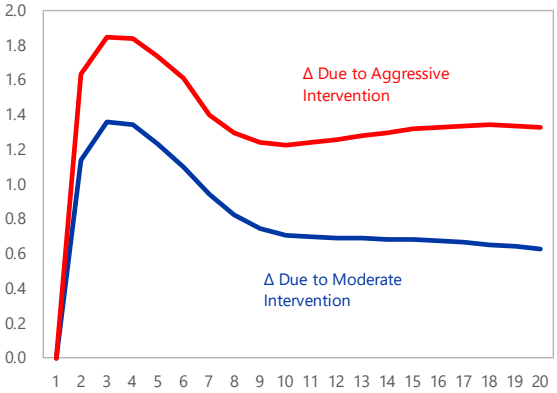
Source: IMF staff calculations.
Note: The nominal rate path is adjusted to account for the difference between the steady state inflation in the model and the historical long-run inflation in China.

Figure 1.5. Response of five-year credit spreads
(Levels; in percent)



Source: IMF staff calculations.

Figure 1.6. Impact of central bank credit policy on credit
(In percent; deviations from no intervention)

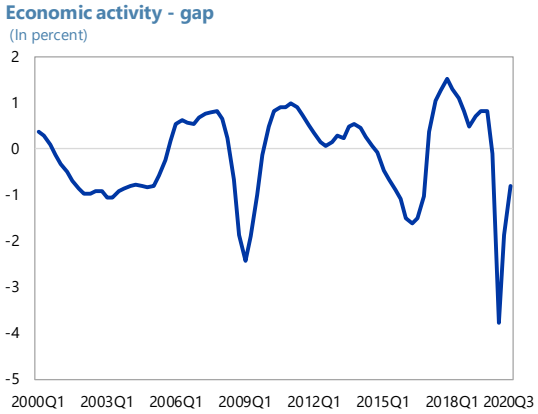


Source: IMF staff calculations.

Box 3. Tracking Economic Activity in China[1]

This box presents updated estimates of economic activity relative to trend based on high-frequency data. While constructed with less extreme changes in economic activity in mind, the tracker of economic activity for China (C-TEA) suggests that the pandemic crisis left a deeper impact than the Great Financial Crisis.

Underlying the tracker is a factor model that relates an unobserved measure of economic activity at monthly or quarterly frequency to available indicators.[2] Economic activity is composed of a time-varying trend and a cyclical component: $U_t = UT_t + UC_t$. All other observable economic indicators, $X_{i,t}$, and their trend, cyclical, and high-frequency components, are used to extract the signal about the economic activity, U_t. For many available variables, there is a strong and stable co-movement at cyclical frequencies, reflecting the unobserved aggregate economic activity.



Source: IMF staff calculations.

Real imports are the key variable among the economic indicators. While not being the timeliest indicator, one of its benefits is the strong and stable co-movement between the cyclical components of output and imports across many countries. The parameter α_M linking the activity and import cycles, $\widehat{M}_t = \alpha_M \times \widehat{UC}_t + \varepsilon_{M,t}$, is calibrated using a median estimate of the link between imports and GDP in advanced economies. Another benefit of the imports data is their conceptual link to exports-to-China statistics from China's trading partners. The latter variable is also included as a noisy measure of true imports.

Other macroeconomic indicator helps to pin estimate and now-cast economic activity in real time. They include electricity production, industrial value added, PMI indicators, capacity utilization, and business climate surveys. Their role is to provide timelier estimate of the activity and lowering the uncertainty about the estimate.

The estimates illustrate the size of the slack in economic activity during the COVID-19 crisis. Despite a strong rebound in activity after the shock hit in 2020Q1, the gap remains deeply negative in 2020Q2 as activity has yet to fully recover to its pre-Covid level. These estimates need to be interpreted with caution: C-TEA-based estimates of activity in the first half of 2020 likely understate the extent of the contraction and the subsequent recovery as the tracker was not designed to capture very sharp and sudden swings in activity. Going forward, C-TEA-based estimates of activity will likely change as more data is made available and as the model structure is refined.

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[1] Prepared by Michal Andrle, Rafael Antonio Portillo and Fan Zhang.
[2] Please refer to the forthcoming IMF working paper "Tracking Economic Activity in China" for more details.

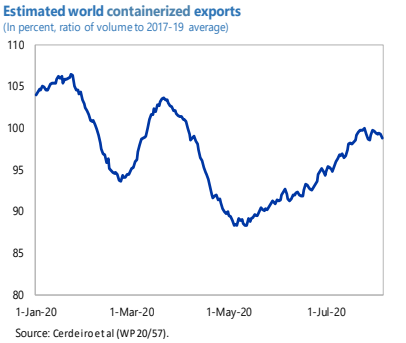
Box 4. Lockdowns' Spillovers Through Trade[1]

Empirical estimates of spillovers based on global daily trade data imply that supply disruptions due to lockdowns reduced global seaborne imports in February-March 2020 by about 10 percent, with China's lockdowns contributing about 4 percentage points. While large, the spillovers are also found to be short-lived.

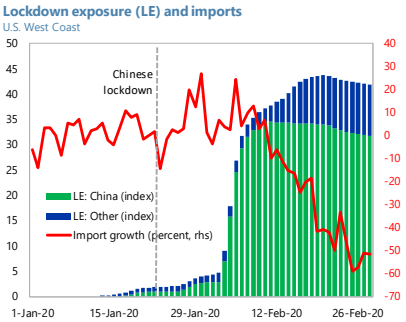
Maritime transport is at the core of world trade and it can be tracked in real time. Cargo ships are equipped with a device that periodically emits a radio signal. Different machine-learning techniques can be used to transform these data into estimates of trade volume, achieving a good fit to official statistics (WP 20/57).

Daily bilateral seaborne trade estimates can be used to trace the supply spillovers of lockdown measures. A country's imports during the pandemic can be affected by the stringency of lockdown policies adopted by the partner countries that supply these goods. Because it takes time for ships to transport these goods, lockdowns can only have such an effect with a geography-induced lag. For example, the lockdown measures imposed in Asia in January and February impacted U.S. West Coast ports around two weeks later. As the ripple effects of these lockdowns reached its shores, U.S. West Coast import growth fell significantly.

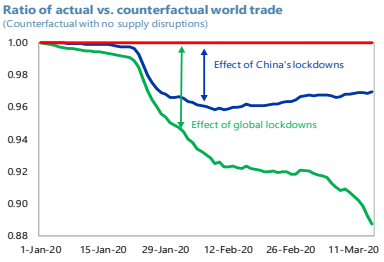
The evidence points to large but short-lived supply disruptions driven by lockdowns. A model of daily seaborne import growth based on foreign lockdown exposures points to strong spillovers from lockdowns. Based countries' trade exposures and the large estimated effect of lockdowns in the early stages of the crisis, the model implies that world seaborne trade volumes in February-March were around 4 percent lower due to lockdown restrictions in China, and around 10 percent lower due to lockdowns in other countries. The effect of countries' lockdowns on their trading partners' imports, however, becomes insignificant in the later stages of the crisis. Such short-lived nature of disruptions – despite the shock being unprecedented in scale – adds to existing arguments in support of globalized production on the grounds of efficiency and diversification benefits (see e.g. Bonadio and others., 2020).



Source: Cerdeiro et al (WP 20/57).



Source: Cerdeiro and Komaromi (forthcoming).



Source: Cerdeiro and Komaromi (forthcoming).
Note: Lockdown exposure coefficient becomes insignificant in April.

[1] Prepared by D. Cerdeiro and A. Komaromi based on IMF WP 20/57, and a forthcoming working paper "Supply Spillovers During the Pandemic: Evidence from High-Frequency Shipping Data."

Box 5. Progress on Structural Reforms[1]

Reforms have been advancing, but there is significant scope to enhance resilience and the role of the private sector. There was continued progress in the opening up of the financial sector, hukou reform, and intellectual property protection. At the same time, there is still significant scope for SOE reform and strengthening the role of markets. Further reforms along these lines would help anchor domestic growth, reduce external imbalances, and build a more resilient, green, and inclusive economy.

Opening up: significant progress. Reforms have continued despite the crisis, with the government adopting a new foreign investment law, streamlining the negative list for foreign investment, accelerating financial opening up, lifting foreign ownership restrictions in selected areas, and implementing multiple rounds of tariff cuts. Nonetheless, market entry into China's service sector remains restricted, and the effectiveness of the foreign investment law will depend on its proper implementation. Together with its trading partners, China can work to reform the WTO to reflect changes in the global economy, including in e-commerce and the service sector.

Labor and product markets: some progress. The government has made commendable efforts in streamlining business administration, relaxing *hukou* restrictions, and developing capital markets. However, there is scope for further reforms to unify product markets by removing local protections, improving labor market flexibility through more comprehensive *hukou* reforms that allow for greater labor mobility. Market reforms will also encourage foreign investors to take advantage of the progressive opening up of financial markets.

SOEs: limited progress. The government has adopted several measures, but there remains significant room for further reforms. The treatment of zombie central SOEs is largely complete but came mainly from mergers and acquisitions by other SOEs, resulting in fewer but larger SOEs. More fundamental reforms would include removing implicit guarantees and tightening budget constraints of SOEs. SOE deleveraging has paused, reflecting, in part, the pandemic crisis and the sectors' effort to support growth. New rules to reduce government intervention in SOEs were drafted, but the role of the state in SOE governance has strengthened.

Rebalancing: some progress. The pandemic interrupted rebalancing, as households increased savings, social distancing affected the services sector, and government support emphasized investment. Efforts to tackle pollution have been strong but climate policies remain a challenge. The government has made significant effort in alleviating poverty, but income inequality remains high, with the pandemic crisis emphasizing the urgency of further strengthening the social safety net.

Financial sector: limited progress. Financial supervision broadly strengthened despite the unprecedented crisis, but there remains significant scope for further financial sector reforms. The authorities provided exceptional financial support measures during the COVID-19 shock by loosening NPL recognition standards, requiring banks to increase low-cost lending to risky borrowers, and delaying the implementation of the asset management reforms. These measures can be phased out as the recovery takes hold as they run the risk of undoing recent progress in strengthening bank transparency and governance. The recent proposed revision to the Commercial Banking Law promises to strengthen authorities' bank restructuring tools, but a fully functioning resolution framework is still urgently needed to support the orderly exit of non-viable banks.

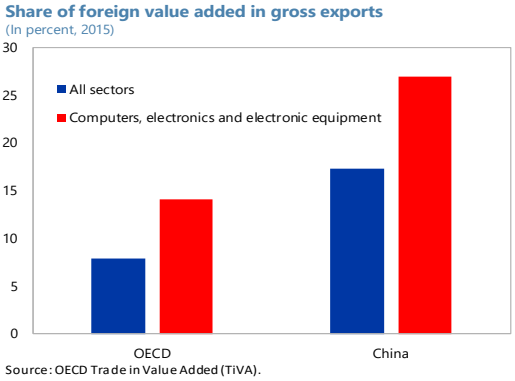
Policy frameworks: some progress. The authorities have made good progress in capital market reforms and reformed the loan prime rate, with the success of these measures hinging on implementation and continued modernization of frameworks. Monetary policy transmission could be enhanced by further moving towards an interest rate-based framework and phasing out deposit rate guidance policies. Fiscal policy would benefit from accelerated efforts to develop a comprehensive medium-term fiscal framework.

[1] Prepared by Sarwat Jahan and Longmei Zhang.

Box 6. The Effects of Technological Decoupling[1]

An approach that accounts for the effects of sectoral misallocation, lower knowledge diffusion, and macroeconomic adjustment costs, finds significant potential losses—including for global technology hubs. The losses are even larger if third countries align themselves with the hub they trade most with.

Global high-tech production is heavily diversified across borders. Technological decoupling can be especially harmful to the global economy as high-tech production is heavily based on cross-border trade. For example, the share of foreign vale added in gross exports in the electronics sector is significantly higher than for all sectors in aggregate, both for China and for OECD countries.

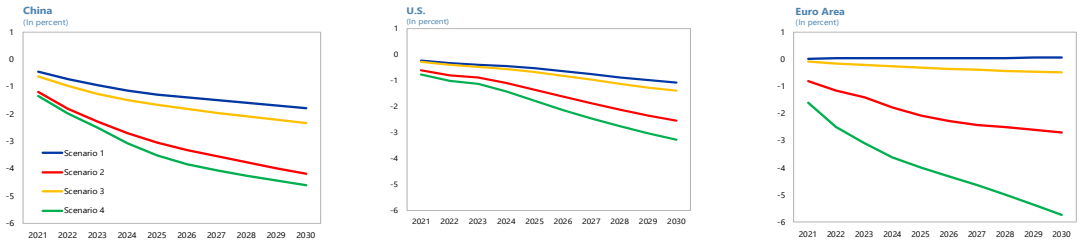


Source: OECD Trade in Value Added (TiVA).

Decoupling is assessed using a model with multiple layers. The first layer, capturing sectoral misallocation, is based on results from a general equilibrium trade model with intermediates where non-tariff barriers in high-tech sectors are raised high enough to eliminate trade between countries that decouple from each other. The second layer reflects the effects of disrupting global knowledge sharing on labor productivity, as existing trade and investment relationships are severed and countries can no longer build on the advances of each other. Both layers are then incorporated into the Fund's macroeconomic model, which, in addition, accounts for transitional unemployment and other short- to medium-term costs linked to nominal and real rigidities (see Cerdeiro, Eugster, Mano, Muir and Peiris, forthcoming, for further details).

Multiple decoupling scenarios are considered. We explore a bipolar China-U.S. decoupling, as well as the possibility of a tripolar technological world. For illustrative purposes only, we investigate the implications if China, the U.S., and Germany (as an example for a European country) were to seek to decouple from each other. Third countries either freely trade with each hub or align themselves exclusively with the hub with which they trade the most (labeled as 'preferential attachment').

Most countries lose from decoupling, including the global technology hubs. In a scenario where China and the U.S. decouple but other countries avoid preferential attachment, the level of China's real GDP is 1.8 percent lower in the longer term, with losses accumulating over time. The U.S. also loses under this scenario, with its real GDP decreasing by 1.1 percent in the longer term. Potential losses are significantly larger in a multipolar tech world because most countries trade with more than one of the technology hubs. And, in both cases, losses are amplified if third countries preferentially attach themselves.



Notes: Scenario 1: U.S.-China decoupling without preferential attachment. Scenario 2: U.S.-China decoupling with preferential attachment. Scenario 3: U.S.-China-Germany decoupling without preferential attachment. Scenario 4: U.S.-China-Germany decoupling with preferential attachment.

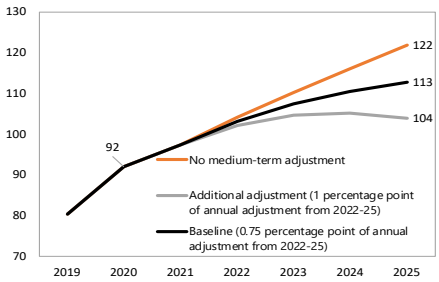
[1] Prepared by Diego Cerdeiro and Huidan Lin.

Box 7. China's Fiscal Policy: A Medium-Term Rebuilding[1]

China has fiscal space, but it has narrowed—augmented debt is more than 90 percent of GDP, the population is aging, reaching carbon neutrality by 2060 will likely have fiscal implications, and off-budget government liabilities continue to grow. This adds importance to following through with fiscal adjustment over the medium term that puts the augmented deficit on a stable path. A fiscal policy that focuses on high-multiplier spending and making the tax system more progressive would limit the adjustment drag on growth.

China has some fiscal space for temporary stimulus but not for a permanent rise in the deficit. Augmented general government debt is high and rising.[2] Fiscal support during the pandemic will push augmented debt to 92 percent of GDP in 2020, up from an estimated 81 percent of GDP in 2019 and 34 percent of GDP in 2008. Gross financing needs in 2020 are projected to be 30 percent of GDP. At these levels, public debt and financing needs place a large burden on the domestic financing system. However, in the short term, the general government's positive net financial worth—estimated to be 10.5 percent of GDP in 2017—low real borrowing cost, and a closed capital account provide some fiscal breathing room.[3]

Augmented debt path under different adjustment scenarios (In percent of GDP)



Source: IMF staff calculations.

Debt does not fully stabilize in the projection period and financing needs remain large. The baseline assumes a neutral fiscal stance in 2021 followed by annual fiscal adjustments, which, along with the recovery in growth, lower the deficit to 13.8 percent of GDP in 2025 from 17.2 percent of GDP in 2021. The baseline projects the output gap to essentially close by 2025 even with fiscal adjustment starting int 2022. Fiscal consolidation will slow the rate of increase of government debt and annual gross financing falls, but augmented debt still rises to 113 percent of GDP in 2025. A more ambitious path which would more than double the assumed average annual consolidation effort after 2021 and leave the headline deficit at 10 percent in 2025 would fully stabilize the debt-to-GDP ratio by 2025.[4] If there is no adjustment, the debt burden would continue to rise sharply and exceed 120 percent of GDP in 2025.

China's debt dynamics underline the urgency of delivering the assumed baseline consolidation. It strikes a balance between the need to protect the post-pandemic recovery while ending a 10-year period of increasing deficits and stabilizing debt as a percentage of GDP by the end of the decade. This would provide the government some additional fiscal space to accommodate pension and health spending pressures as the population ages. It also would provide insurance against the realization of fiscal risk, for example from absorption of off-budget government liabilities.

A more effective fiscal policy could limit the impact of fiscal adjustment on growth. Improvements in the tax-benefit system that transfers resources to less well-off individuals, who have a relatively higher consumption propensity, could limit the drag from adjustment on growth. Reprioritization of social safety net spending over infrastructure investment would also make growth more resilient by incentivizing households to reduce their high savings rate—reinvigorating economic rebalancing towards private consumption. In addition, development of a comprehensive medium-term fiscal framework would reduce uncertainty on the direction of fiscal policy possibly stimulating private investment.

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[1] Prepared by John Ralyea.

[2] General government debt plus off-budget liabilities of local government financing vehicles, government-guided funds and special construction funds.

[3] The baseline assumes an effective average interest rate of 3.3 percent over the projection horizon. This implies real borrowing costs of 1 percent or less.

[4] The baseline envisages an average annual adjustment in the cyclically adjusted primary balance (CAPB) of ¾ percentage point of GDP. The ambitious scenario has an adjustment of 1 ¾ percentage points of GDP in the CAPB.

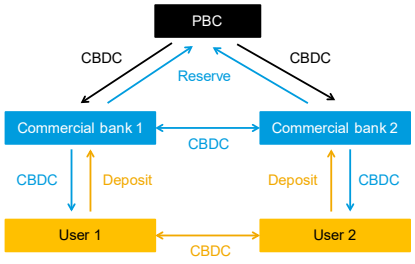
Box 8. China's Development of a Central Bank Digital Currency[1]

China is developing a central bank digital currency (CBDC) named e-CNY and has begun large-scale testing. The e-CNY, designed for domestic use only at this stage, will be a non-interest-bearing cash substitute issued by the PBC and distributed in a two-tier system via the banking system. It will likely increase payment efficiency and financial inclusion, while operational risks in case of a large-scale issuance should be closely monitored.

The development of the e-CNY has accelerated in recent months. In 2014, China became one of the first major countries to start exploring a CBDC. Compared to private third-party payment providers (such as Alipay and WeChat Pay), the e-CNY could potentially achieve a higher degree of anonymity, higher compatibility across payment platforms, and offline usage, broadening the reach to people with limited access to financial services. The e-CNY will be used for domestic transactions initially, but could be broadened to cross-border payments in the future. Recently, PBC has partnered with more than 20 companies to test the e-CNY in four cities, including selected banks and e-commerce platforms, and is planning a test at the 2022 Beijing Winter Olympics with a tourist/player usage scenario.

The CBDC is designed to be a cash substitute distributed in a two-tier system. The e-CNY will be a legal tender combining digital currency and electronic payment characteristics. It will be a cash substitute (M0) and distributed in a two-tier system through commercial banks (text figure). Small transactions would be anonymous at the user level, but the PBC could retrieve the transaction history for regulatory purpose and implement "managed anonymity." The centralized management and a "loosely coupled" design will allow payments and transfers without a bank account.

Flow of Funds with CBDC



Source: Yao (2018).

The CBDC could promote financial inclusion and improve payment efficiency.

- *Financial inclusion.* The e-CNY could expand the coverage of payment services to the unbanked residents and lower transaction costs for households and small firms, increasing efficiency. This could improve their access to finance and further promote financial inclusion.
- *Monetary policy.* The e-CNY is unlikely to challenge the existing monetary policy framework as the two-tier system will likely keep the money supply system unchanged and the non-interest-bearing feature will help limit the competition between e-CNY and bank deposits. Meanwhile, higher financial inclusion may strengthen monetary policy transmission. Moreover, the easier conversion between e-CNY and interest-bearing assets compared with cash could increase household and corporate holdings of interest-bearing assets and hence their interest rate sensitivities.
- *Financial stability.* The e-CNY as a legal tender has less counterparty risk than third-party payment providers. Some disintermediation may be envisaged, but such risks could be mitigated by the non-interest-bearing feature and by introducing limits on daily transfers between bank deposits and e-CNY. Provided the required AML/CFT measures are in place, "managed anonymity" may help streamline certain compliance processes while providing some privacy protection.

Financial risks from the e-CNY should be carefully monitored and assessed. In case of a large-scale issuance, the PBC may have to contend with operational risks from disruptions and cyberattacks, as well as challenges to privacy protection from the centralized collection and storage of user data. Although the e-CNY could facilitate the PBC's liquidity distribution process compared to cash, it may also increase funding costs for banks and could add to bank run risk during periods of distress, particularly for smaller banks.[2] When considering a possible future cross-border usage, the efficiency gains should be weighed against the potential impact on the existing exchange rate policy and capital account framework.

[1] Prepared by Fei Han, Alfred Schipke, and Longmei Zhang.

[2] See the IMF Staff Discussion Note "Casting Light on Central Bank Digital Currency" (2018).

Box 9. Summary of the Proposal on China's 14th 5-Year Plan[1]

A proposal released at the conclusion of China's fifth plenum offered broad outlines of China's 14th Five-Year Plan (2021-25). The plan vows to promote technological self-reliance, implement the strategy of sustainable development, and develop a robust domestic market, reinforcing existing commitments. While not suggesting specific GDP growth targets, the communique laid out a 15-year goal to raise per capita output levels to that of a moderately developed country by 2035, while strengthening China's technological capacities. A more detailed report on the 14th Five-Year Plan will be released after approval by the National People's Congress in March 2021.

Self-reliance in technology is a major theme, highlighting China's focus on home-grown technological innovation to drive sustainable growth amidst a complex international environment. The "2035 vision" aims to achieve major breakthroughs in key core technology by 2035.

The implementation of a "dual circulation" strategy does not mean a retreat from China's opening up. It is rather a long-term strategy to enhance the resilience of China's economic development by strengthening its domestic economy. China will continue to promote international trade, broaden access to Chinese markets, and invest overseas. The communique also emphasizes that a complete "decoupling" between China and the U.S. is unrealistic and would hurt both countries and the world.

China will aim to achieve "sustained and healthy" economic development in 2021-2025, with a focus on higher quality growth. Plans include steps to strengthen China's employment by improving employment support for key groups, building a high-quality education system, and improving care for the elderly and the social security system.

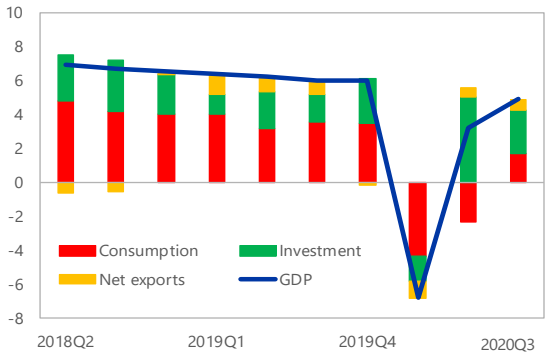
The communique reaffirmed the climate goals introduced by President Xi. The Five-Year plan calls for a significant green transformation of production and lifestyles. It would seek to improve energy and resource efficiency, while steadily reducing total volumes of major pollutants. Moreover, it vows to speed up modernization of agriculture and rural areas, ensure national food security and improve agricultural quality and competitiveness.

[1] Prepared by Wenjie Chen and Xin Li.

Figure 1. China: Recent Developments—The "V"-Shaped Recovery

The Q2 growth rebound continued in Q3…

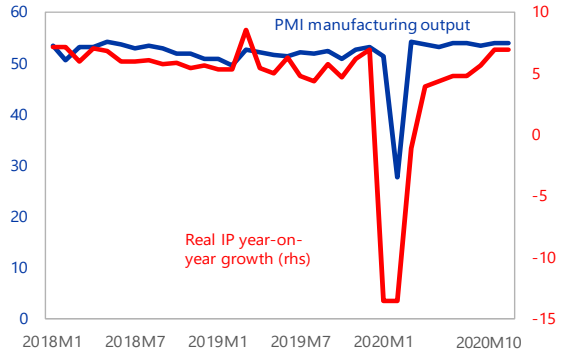
Contribution share to real GDP: demand side
(Real growth in percent, year-on-year)



Source: CEIC; and IMF staff calculations.

… with a quick turnaround in industrial production…

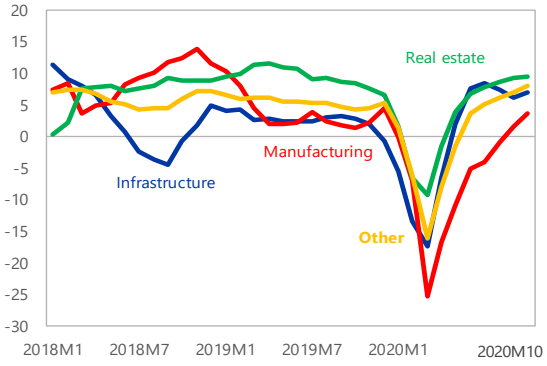
PMI manufacturing and real industrial production
(In percent, year-on-year)



Source: Haver; and IMF staff calculations.

… and a recovery in investment led by infrastructure and real estate.

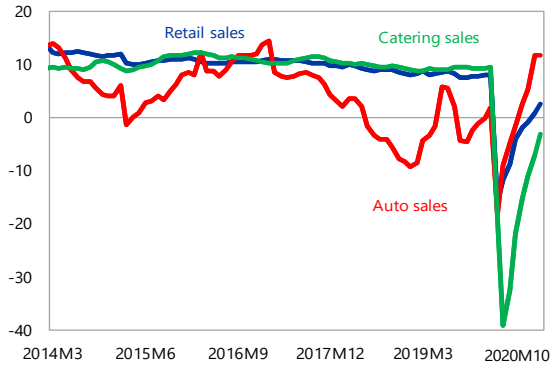
FAI growth by industry
(Nominal growth in percent, year-on-year, 3mma)



Source: CEIC; and IMF staff calculations.

Meanwhile, consumption remains soft, especially in contact-intensive sectors, …

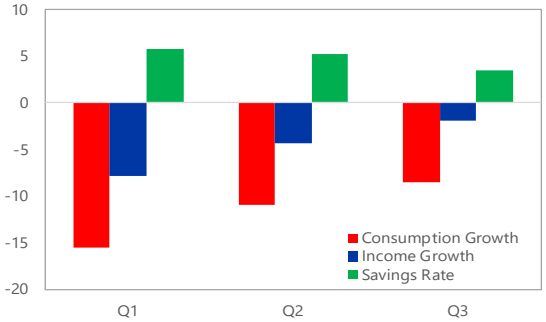
Retail sales, auto sales and urban disposable income
(In percent, year-on-year, 3mma)



Source: CEIC and IMF staff calculations.

… as the recovery in overall household consumption is lagging…

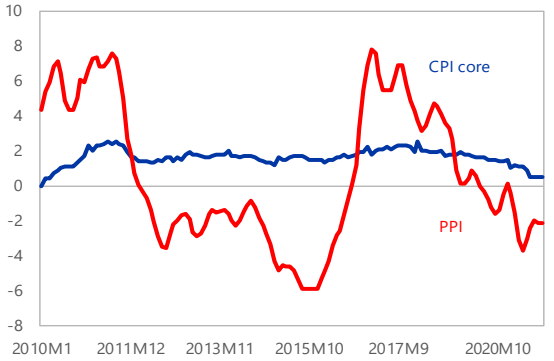
Change in household consumption growth, disposable income growth and savings, 2020 vs. 2019
(Nominal growth in percentage points, 2020 minus 2019)



Source: CEIC; NBS Household Survey; and IMF Staff Calculations.
Note: Savings Rate calculated as (1 - household consumption per capita / household disposable income per capita).

… with the relative weakness in demand also reflected in low consumer and producer price inflation.

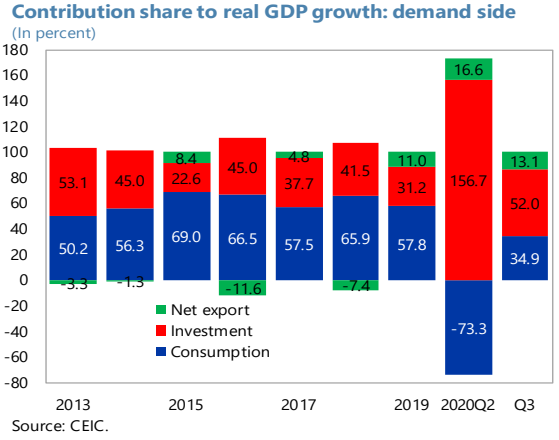
CPI and PPI inflation
(In percent, year-on-year)



Source: CEIC; and IMF staff calculations.

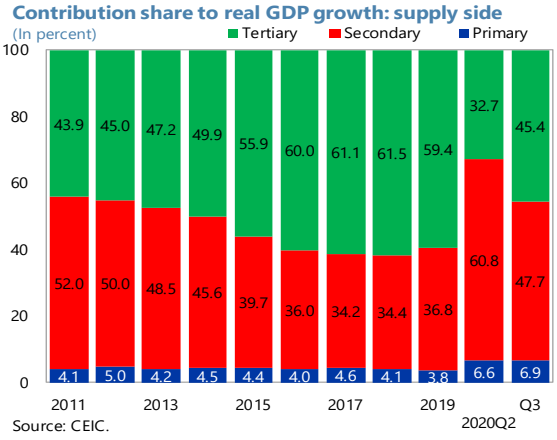
Figure 2. China: Rebalancing—Regression in Wake of the Crisis

Rebalancing towards consumption regressed as public investment drove the 2020 recovery…



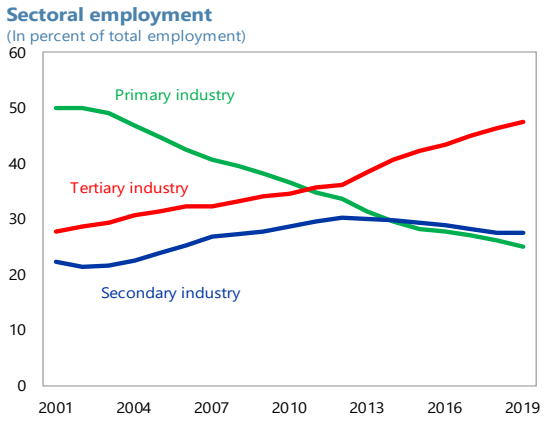
Source: CEIC.

and the re-opening after the Q1 lockdown favored industrial activity.



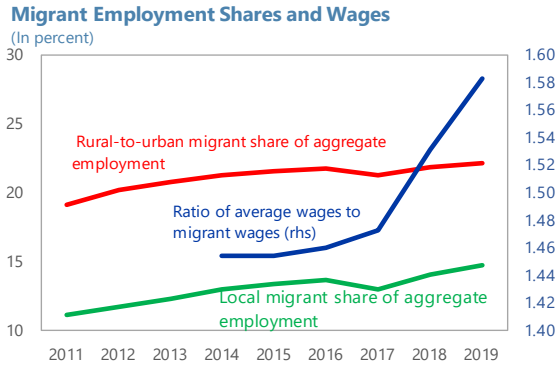
Source: CEIC.

Labor reallocation from agriculture and industry to services continued through 2019…



Source: CEIC and IMF staff calculations.

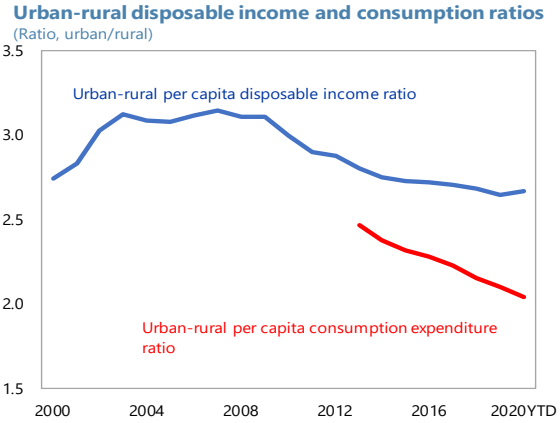
…but a rising share of migrant workers and falling relative migrant wages reinforce the need for hukou reform.



Source: CEIC.

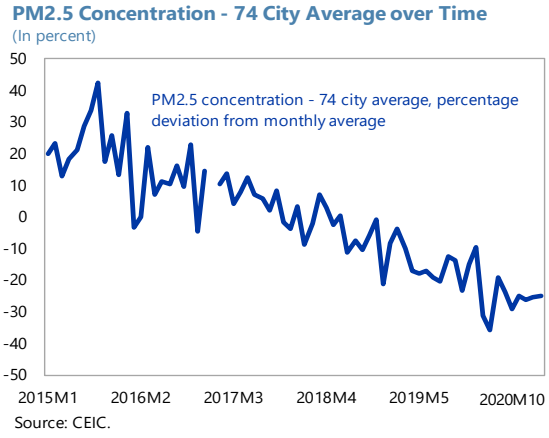
Note: Rural-to-urban migrants are migrant workers with rural household registrations who have moved to work in urban areas. Local migrant workers are workers with a rural household registrations who remain in their locality but work in non-agricultural jobs.

Rural-urban income inequality remained broadly unchanged in 2020, though consumption inequality continued to fall.



Source: Haver Analytics.

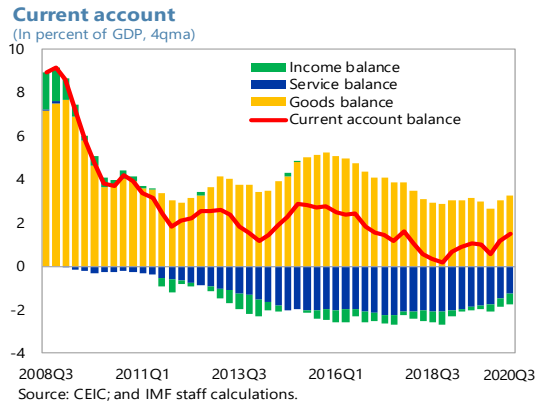
Air pollution continued to decline, though in 2020 this was partly due to the lockdowns.



Source: CEIC.

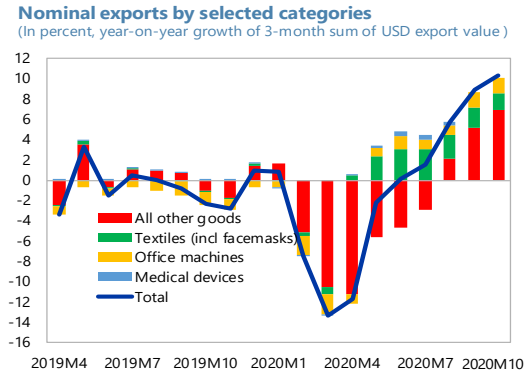
Figure 3. China: External—Increasing Current Account Surplus and Volatile Capital Flows

Following a tentative narrowing in Q1, China's CA surplus widened again to 1.5 percent of GDP over four quarters ending in Q3, reflecting a stronger trade balance and a collapse in outbound tourism.



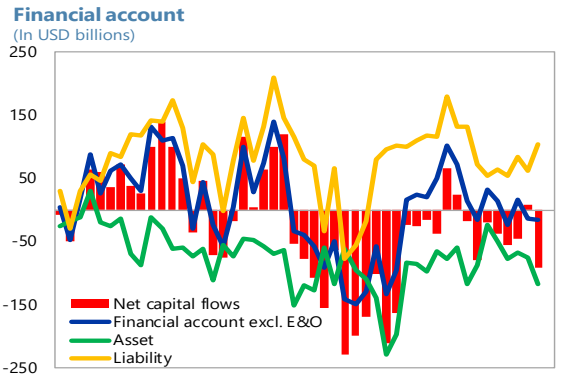
Source: CEIC; and IMF staff calculations.

Exports have been surprisingly strong, led by a surge in demand for personal protection equipment and consumer electronics, and favorable prices.



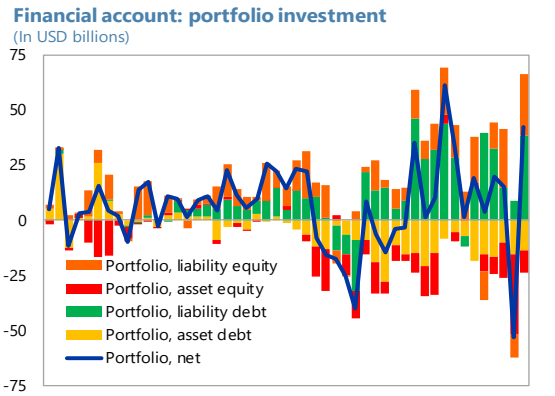
Source: CEIC; and IMF staff calculations.

Capital outflows accelerated in Q2, driven by residents' stronger accumulation of other investment assets abroad and net errors and omissions…



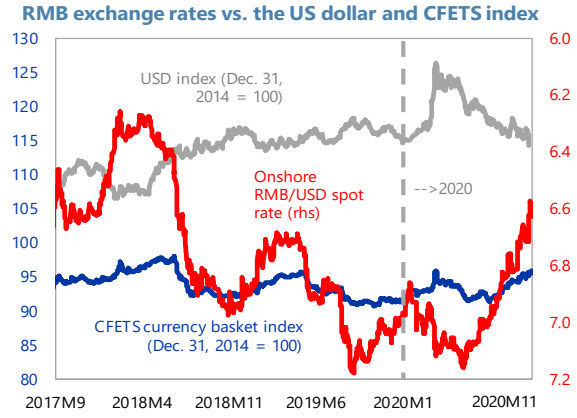
Source: CEIC; and IMF staff calculations.

…while portfolio investment swung back to inflows on net, led by strong debt inflows.



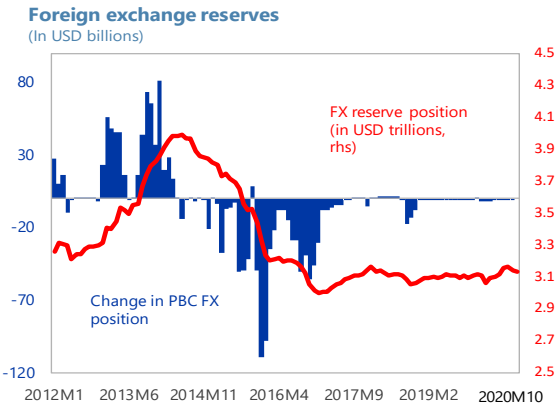
Source: CEIC; and IMF staff calculations.

Exchange rate appreciation since last summer mainly reflects China's stronger recovery and export performance, interest rate differentials, and continued financial opening.



Source: Bloomberg; and IMF staff calculations.

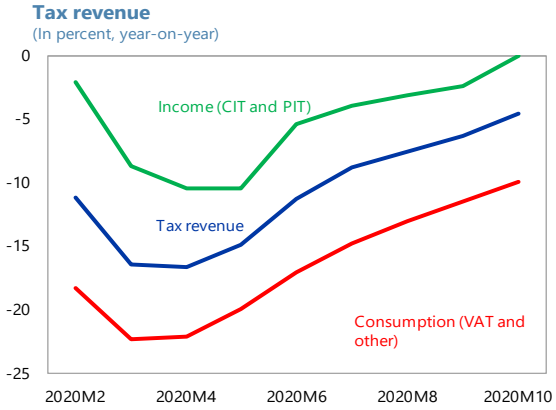
FX reserves remain adequate and stable, with no indications of large scale FXI since early 2017.



Source: Haver; and IMF staff calculations.

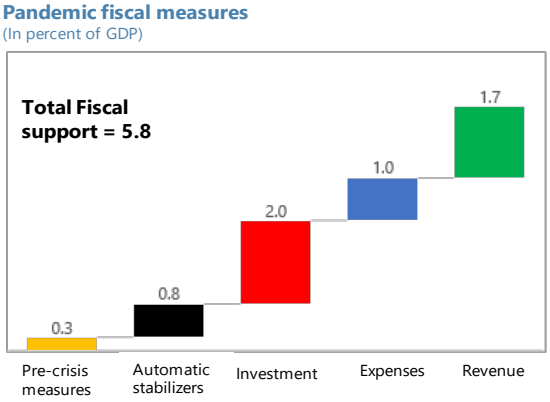
Figure 4. China: Fiscal—Pandemic Response Accentuated Existing Trends

Tax revenues fell sharply during the Q1, but have picked up with the recovery…



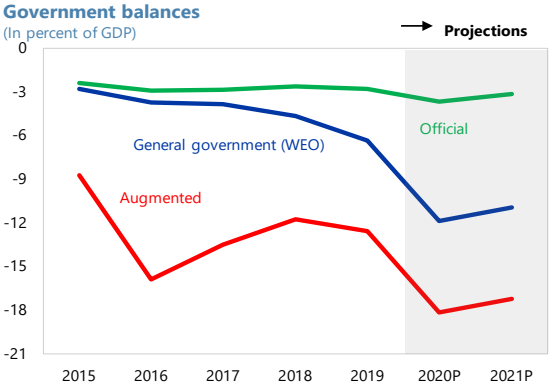
Source: CEIC; and IMF staff estimates.

… while pandemic-driven measures have emphasized government investment.



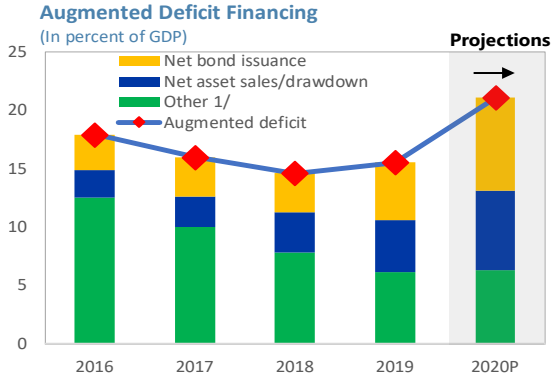
Source: Authorities; and IMF staff calculations.

Revenue and expenditure developments will further widen the budget deficit in 2020 …



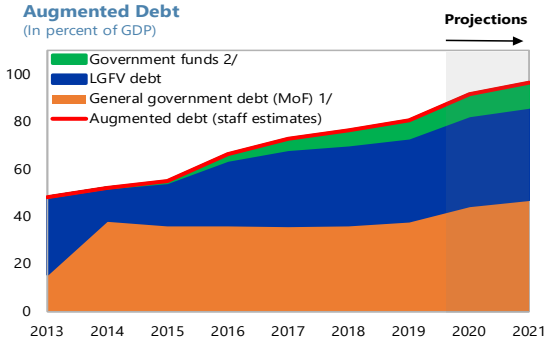
Source: Authorities; and IMF staff calculations.
Note: See Table 5 in staff report for definitions of balances.

…with a third of the deficit projected to be financed by asset drawdowns.



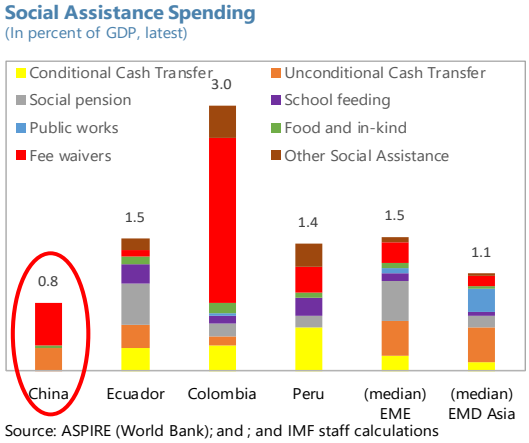
Source: Authorities; CEIC; and IMF staff calculations.
1/ LGFV and other government funds.

Nonetheless the upward trend in government debt is projected to accelerate this year …



Source: Ministry of Finance; and IMF staff calculations.
1/ Data through 2019, 2020 estimated, 2021 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.

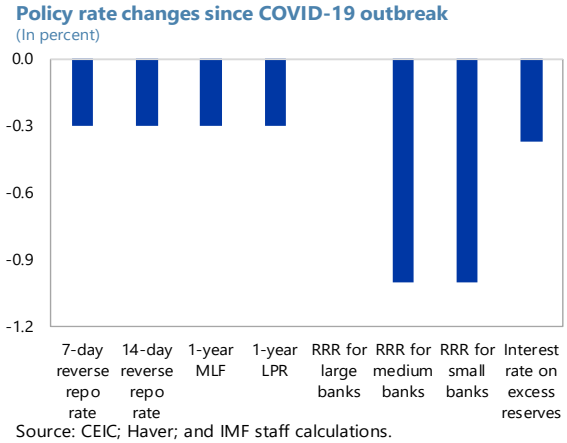
…while social spending remains lower than peers.



Source: ASPIRE (World Bank); and ; and IMF staff calculations

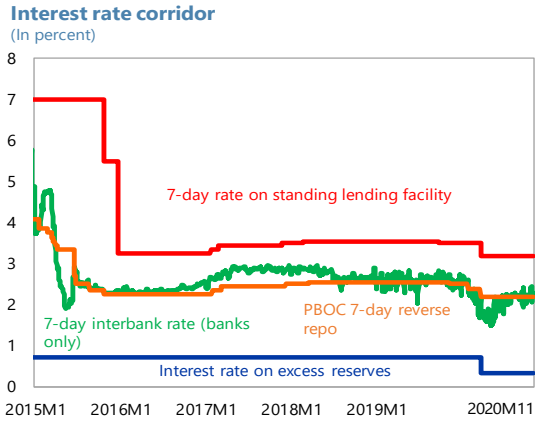
Figure 5. China: Monetary—Policy Eased but Inflation Remained Low

The PBC has cut policy rates and injected liquidity, among other unconventional measures.



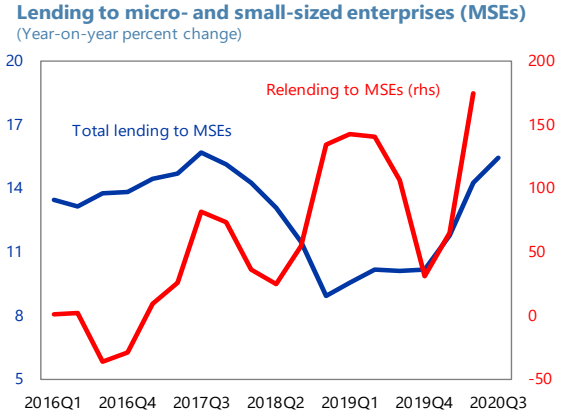
Source: CEIC; Haver; and IMF staff calculations.

...and the interest rate corridor has shifted downward.



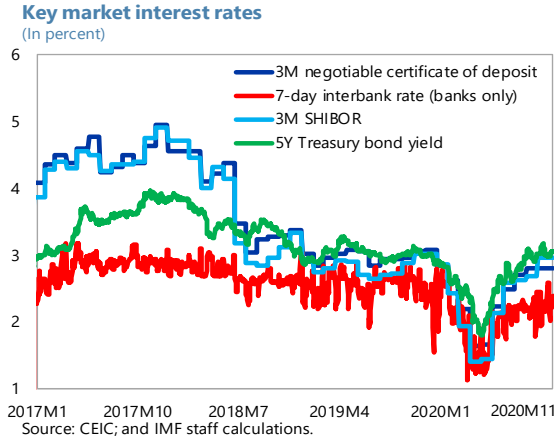
Source: CEIC; and IMF staff calculations.

Non-interest rate policies such as the PBC's relending facilities have helped boost lending to smaller firms.



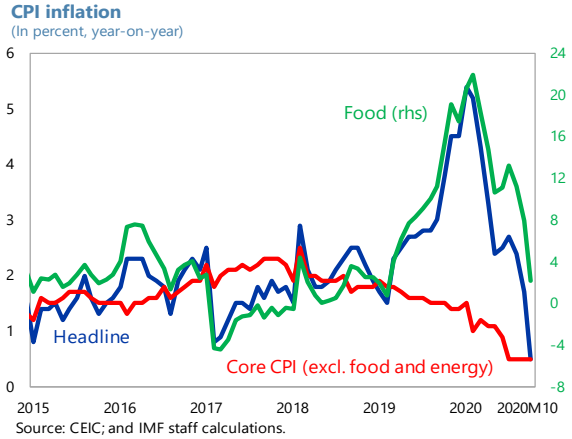
Source: CEIC; and IMF staff calculations.

Market rates declined in response but have increased recently amid faded expectations of further easing.



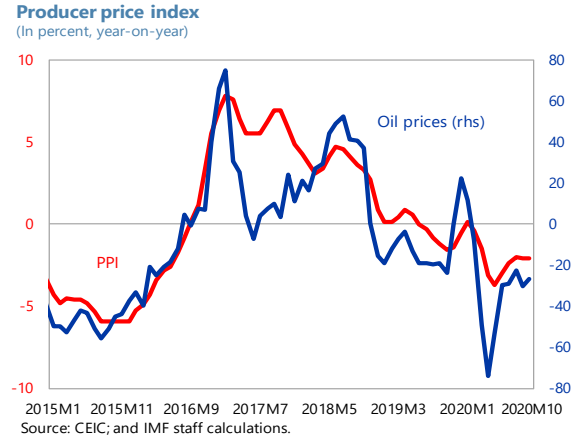
Source: CEIC; and IMF staff calculations.

Core inflation is subdued while food inflation has stabilized more recently.



Source: CEIC; and IMF staff calculations.

PPI inflation has risen gradually but is still in deflationary territory.

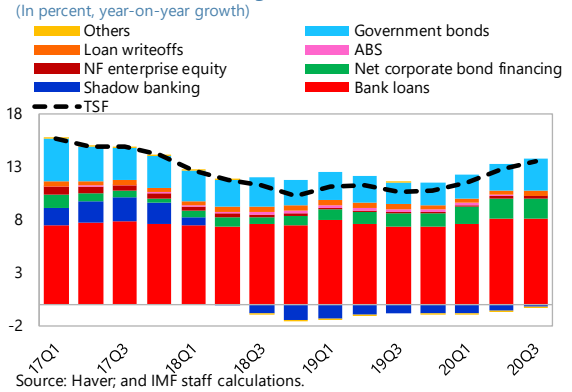


Source: CEIC; and IMF staff calculations.

Figure 6. China: Credit—Credit Growth Accelerated and Debt Levels Increased

TSF growth has increased since the COVID-19 outbreak…

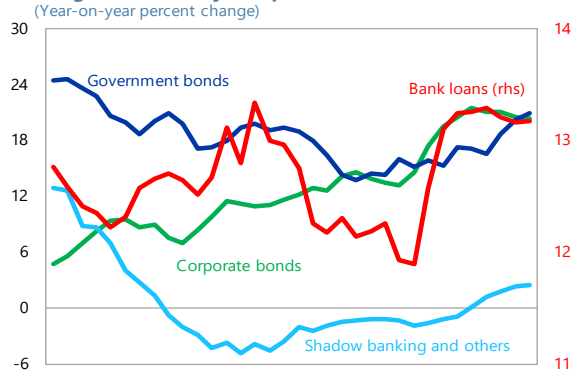
Contribution to TSF stock growth
(In percent, year-on-year growth)



Source: Haver; and IMF staff calculations.
Note: Since January 2017, ABS, loan writeoffs, and local government special pu
included. Since December 2019, local government special purpose bonds are e
government bonds (including all central and local government bonds) traced b

…mainly driven by higher bank loan growth and corporate and government bond issuance.

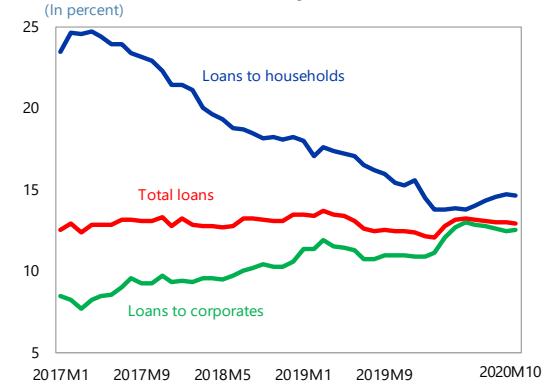
TSF growth rates by component
(Year-on-year percent change)



Source: Haver; and IMF staff calculations

Bank lending accelerated in 2020H1 with some marginal slowdown in Q3, mainly driven by loans to corporates…

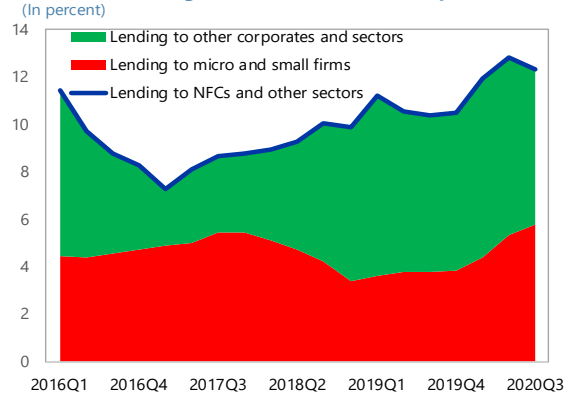
Growth rate of bank loans by borrower
(In percent)



Source: Haver; and IMF staff calculations.

…with lending to smaller firms expanding faster amid the authorities' supporting measures for these firms.

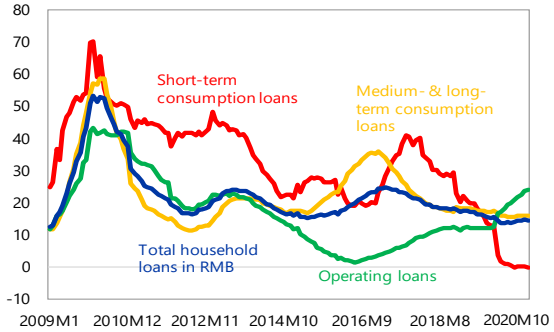
Contributions to growth of nonfinancial corporate loans
(In percent)



Source: Haver; CEIC; and IMF staff calculations.

Household loan growth slowed, driven by a sharp decline in short-term consumption loan growth partly offset by higher growth in operating loans.

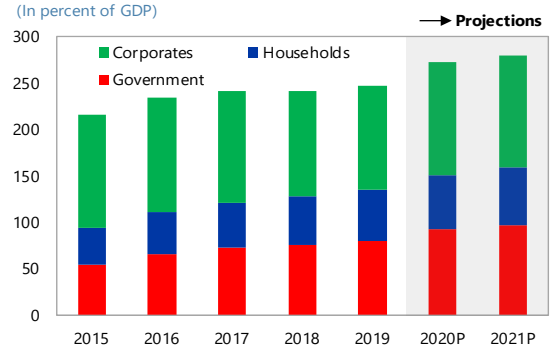
Household loan growth by type
(Year-on-year percent change)



Source: Haver; and IMF staff estimates.
Note: There is a structural break in the stock data for short-term consumption loans and mid-/long-term consumption loans in January 2020. To correct for the structural break, the components are estimated using the flow data of short-term and mid-/long-term household loans in RMB.

Debt-to-GDP ratios are projected to increase for both private and public sectors.

Domestic non-financial sector debt
(In percent of GDP)

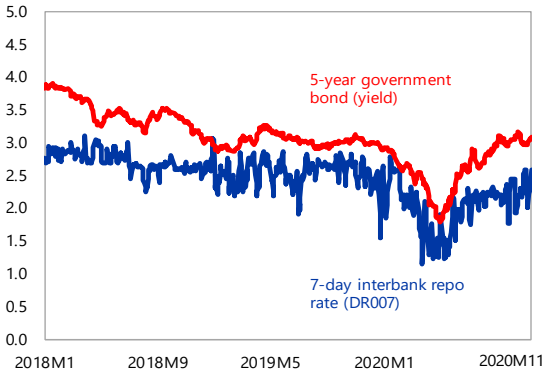


Source: CEIC; Haver; and IMF staff estimates.
Note: Government debt includes debt of central and local governments, government funds, and LGFVs.

Figure 7. China: Financial Market—Funding Conditions Turned Tighter After Initial Easing

Short-term market rates and longer-term government bond yields fell sharply in 2020H1 but rebounded after the PBC scaled back expectations for further interest rate reductions.

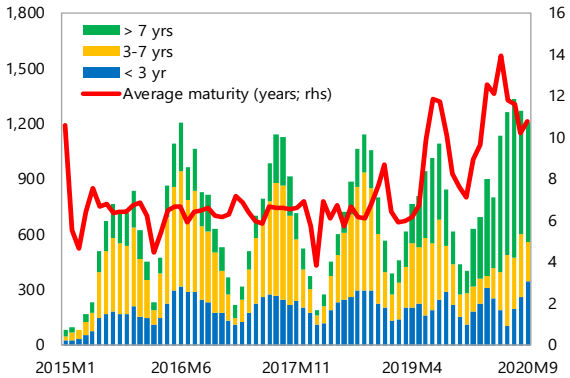
Money market rates and government bond yields
(In percent)



Source: WIND database; and IMF staff calculations.

Government bond supply pressures, particularly at long-maturity tenors, played a role in pushing yields higher.

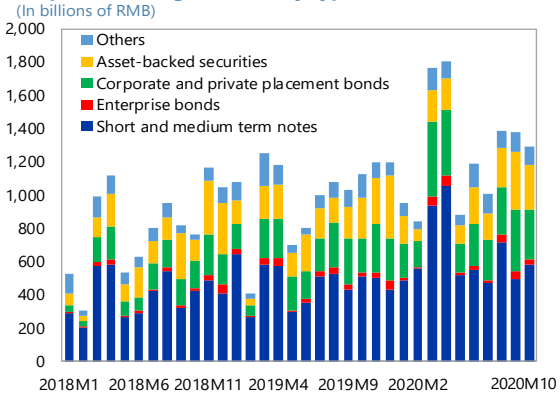
Gross central and local government bond issuance
(In billions of RMB, 3-month moving average, rhs)



Source: Bloomberg; and IMF staff calculations.

Corporate bond issuance started picking up from August.

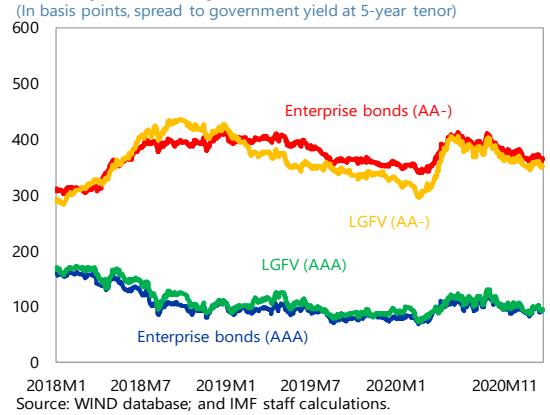
Corporate bond gross issue by type
(In billions of RMB)



Source: WIND database; and IMF staff calculations.

Corporate credit spreads rose, underscoring challenges in maintaining supportive financial conditions.

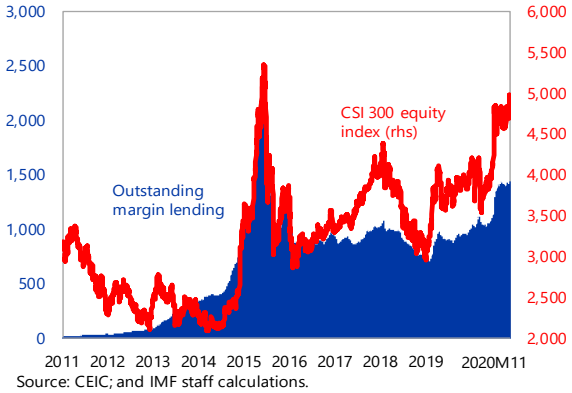
Credit spread of corporate and LGFV bond issuers
(In basis points, spread to government yield at 5-year tenor)



Source: WIND database; and IMF staff calculations.

Equity prices rose as market leverage rebounded.

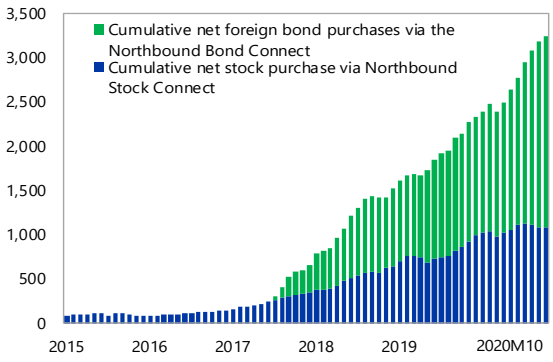
Equity market margin lending and index prices
(In billions of RMB; price index 12/31/2004=1000, rhs)



Source: CEIC; and IMF staff calculations.

Foreign investors continued to increase their participation in Chinese bond and stock markets.

Portfolio inflows
(In billions of RMB)

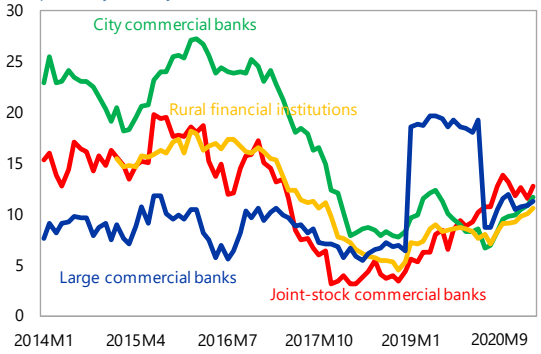


Source: CEIC; and WIND database; and IMF staff calculations.

Figure 8. China: Banks—Sector Expands Amid Rising Profitability Pressures

Bank asset growth rebounded after the Q1 lockdown, led by large and medium-size banks.

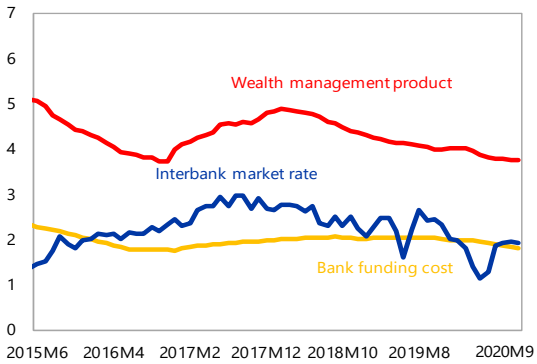
Growth rate of bank assets
(In percent, year-on-year)



Source: CEIC; and IMF staff calculations.
Note: PSBC has been classfied as large commercial banks for data on bank assets since Jan 2019.

Bank funding costs remained steady despite the fall in policy interest rates.

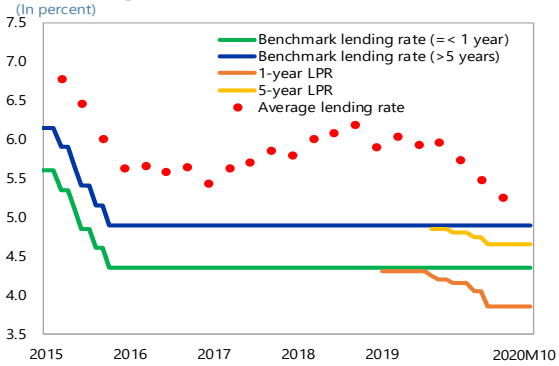
Banks' funding costs
(In percent)



Source: CEIC; SNL Financial; and IMF staff calculations.

Lending yields declined as the PBC cut the Loan Prime Rate (LPR) and guided banks to reduce lending rates, squeezing margins.

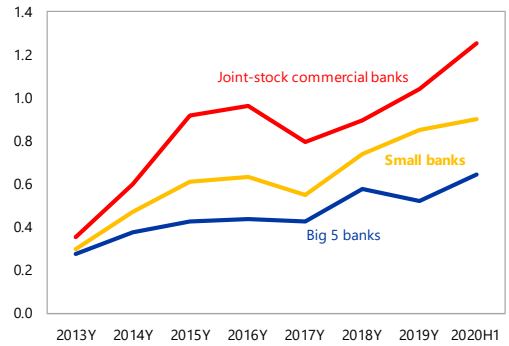
Bank lending rates
(In percent)



Source: CEIC; Haver; and IMF staff calculations.

Impairment expenses also rose.

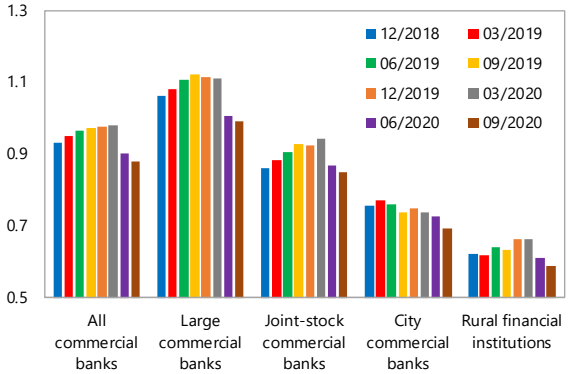
Commercial banks' impairment expense
(In percent of total assets)



Source: SNL Financial; and IMF staff calculations.

As a result, bank profitability has declined across the board.

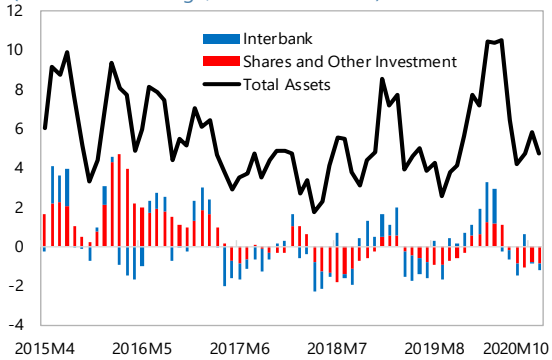
Commercial banks' net profits
(In percent of total assets, 4-quater moving average)



Source: CEIC; and IMF staff calculations.

Interbank and nonstandard bank assets rebounded amid further delays to implementation of asset management rules.

Chinese banks: asset growth by selected components
(Three month change, in trillions of RMB)



Source: CEIC; and IMF staff calculations.

Table 1. China: Selected Economic Indicators

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
						Projections					
	(Annual percentage change, unless otherwise indicated)										
NATIONAL ACCOUNTS											
Real GDP (base=2015)	6.9	6.8	6.9	6.7	6.1	1.9	7.9	5.7	5.6	5.5	5.4
Total domestic demand	7.3	7.9	6.8	7.4	5.5	1.5	8.7	5.8	5.6	5.6	5.4
Consumption	8.3	8.5	7.3	8.1	6.4	-0.8	11.3	6.4	6.5	6.2	6.1
Investment	6.1	7.2	6.1	6.5	4.5	4.6	5.4	5.1	4.6	4.8	4.5
Fixed	7.9	7.3	5.9	7.1	5.1	4.3	6.3	4.9	4.6	4.8	4.5
Inventories (contribution)	-0.6	0.0	0.1	-0.2	-0.2	0.2	-0.3	0.1	0.0	0.0	0.0
Net exports (contribution)	-0.1	-0.8	0.3	-0.5	0.7	0.4	-0.5	0.0	0.0	0.0	0.0
Total capital formation (percent of GDP)	43.0	42.7	43.2	44.0	43.1	43.1	41.8	41.2	40.4	39.6	38.8
Gross national saving (percent of GDP) 1/	45.8	44.5	44.8	44.1	44.1	45.0	42.7	42.0	41.1	40.2	39.4
LABOR MARKET											
Unemployment rate (annual average) 2/	5.0	5.0	5.0	4.9	5.2	5.4	n.a.	n.a.	n.a.	n.a.	n.a.
Employment	0.3	0.2	0.0	-0.1	-0.1	-0.3	0.2	0.1	0.1	0.1	0.1
PRICES											
Consumer prices (average)	1.4	2.0	1.6	2.1	2.9	2.4	0.5	1.9	1.9	2.0	2.0
GDP Deflator	0.1	0.9	3.9	3.5	2.4	2.1	1.6	2.1	2.1	2.2	2.2
FINANCIAL											
7-day repo rate (percent)	2.4	2.7	5.4	3.1	3.1	...	...	...	...	...	...
10 year government bond rate (percent)	3.7	3.0	3.9	3.3	3.2	...	...	...	...	...	...
Real effective exchange rate (average)	9.8	-4.9	-2.9	1.4	-0.8	...	...	...	...	...	...
Nominal effective exchange rate (average)	9.7	-5.4	-2.5	1.5	-1.8	...	...	...	...	...	...
MACRO-FINANCIAL											
Total social financing	12.5	30.5	14.1	10.3	10.7	13.8	12.2	9.4	8.8	8.4	7.9
In percent of GDP	200	242	248	248	253	276	283	287	290	291	292
Total nonfinancial sector debt 3/	14.5	16.8	14.3	10.8	10.7	13.9	12.4	9.8	9.2	8.7	8.2
In percent of GDP	222	241	248	248	253	277	284	289	293	295	297
Domestic credit to the private sector	15.9	12.6	11.6	8.3	9.2	12.0	11.0	7.9	7.5	7.1	6.5
In percent of GDP	161	168	169	166	167	179	182	182	181	180	178
House price 4/	9.1	11.3	5.7	12.3	8.6	7.0	6.5	6.2	5.9	5.8	5.7
Household disposable income (percent of GDP)	61.1	61.6	60.1	59.3	59.1	57.6	59.2	59.1	58.9	58.6	58.3
Household savings (percent of disposable income)	38.4	37.2	35.7	34.8	34.4	37.1	33.7	31.8	29.9	27.9	25.9
Household debt (percent of GDP)	39.1	44.7	48.9	52.3	55.6	58.3	61.3	62.4	64.0	64.9	66.0
Non-financial corporate domestic debt (percent of GDP)	122	124	120	113	111	121	120	119	117	115	112
BIS credit-to-GDP gap (percent of GDP)	25.4	20.8	11.8	0.3	-2.2	...	...	...	...	...	...
GENERAL BUDGETARY GOVERNMENT (Percent of GDP)											
Net lending/borrowing 5/	-2.8	-3.7	-3.8	-4.7	-6.3	-11.9	-11.0	-10.1	-9.1	-8.3	-7.5
Revenue	28.8	28.2	27.8	28.3	27.7	24.5	25.0	25.3	25.8	26.5	27.1
Additional financing from land sales	1.9	2.0	2.5	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Expenditure	33.5	33.9	34.2	35.8	36.9	39.3	38.9	38.3	37.9	37.8	37.6
Debt 6/	36.7	36.7	36.2	36.5	38.1	44.7	47.2	49.5	51.2	52.6	53.8
Structural balance	-2.5	-3.4	-3.6	-4.5	-6.0	-10.6	-10.3	-9.6	-8.8	-8.1	-7.5
BALANCE OF PAYMENTS (Percent of GDP)											
Current account balance	2.7	1.8	1.6	0.2	1.0	1.9	0.9	0.8	0.8	0.6	0.5
Trade balance	5.2	4.4	3.9	2.9	3.0	3.5	2.6	2.8	2.6	2.5	2.4
Services balance	-2.0	-2.1	-2.1	-2.1	-1.8	-1.1	-1.3	-1.7	-1.7	-1.7	-1.7
Net international investment position	15.1	17.4	17.1	15.5	14.7	16.1	15.2	14.8	14.4	13.9	13.4
Gross official reserves (billions of U.S. dollars)	3,406	3,098	3,236	3,168	3,223	3,579	3,842	4,127	4,427	4,734	5,056
MEMORANDUM ITEMS											
Nominal GDP (billions of RMB) 7/	69,209	74,598	82,898	91,577	99,493	103,462	113,377	122,286	131,750	142,072	153,020
Augmented debt (percent of GDP) 8/	55.2	66.4	72.8	76.4	80.5	91.7	96.4	101.4	105.6	109.3	112.7
Augmented net lending/borrowing (percent of GDP) 8/	-8.7	-15.9	-13.5	-11.8	-12.6	-18.2	-17.2	-16.3	-15.4	-14.6	-13.8

Sources: Bloomberg, CEIC, IMF International Financial Statistics database, and IMF staff estimates and projections.

1/ IMF staff estimates for 2019.

2/ Surveyed unemployment rate.

3/ Includes government funds.

4/ Average selling prices estimated by IMF staff based on the data of national housing sale values and volumes published by the National Bureau of Statistics

5/ 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.

6/ The estimation of debt levels after 2015 assumes zero off-budget borrowing from 2015 to 2025.

7/ Expenditure side nominal GDP.

8/ The augmented balance expands the perimeter of government to include government-managed funds and the activity of local government financing vehicles (LGFVs).

Table 2. China: Balance of Payments

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
						Projections					
	(In percent of GDP, unless otherwise indicated)										
Current account balance	2.7	1.8	1.6	0.2	1.0	1.9	0.9	0.8	0.7	0.6	0.5
Trade balance	5.2	4.4	3.9	2.9	3.0	3.5	2.6	2.8	2.6	2.5	2.4
Exports	19.3	17.7	18.1	17.5	16.7	16.7	15.7	15.3	14.7	14.4	14.1
Imports	14.1	13.4	14.2	14.6	13.7	13.2	13.1	12.5	12.1	11.9	11.6
Services balance	-2.0	-2.1	-2.1	-2.1	-1.8	-1.1	-1.3	-1.7	-1.7	-1.7	-1.7
Income balance	-0.4	-0.4	-0.1	-0.5	-0.2	-0.6	-0.5	-0.3	-0.2	-0.2	-0.2
Current transfers	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Capital and financial account balance	-3.9	-3.7	0.9	1.3	0.3	0.5	0.8	0.8	0.8	0.9	0.9
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	-3.9	-3.7	0.9	1.3	0.3	0.5	0.8	0.8	0.8	0.9	0.9
Net foreign direct investment	0.6	-0.4	0.2	0.7	0.4	0.3	0.3	0.3	0.3	0.2	0.2
Foreign Direct investment	2.2	1.6	1.4	1.7	1.1	1.0	1.0	0.9	0.9	0.8	0.8
Overseas Direct Investment	-1.6	-1.9	-1.1	-1.0	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
Portfolio investment	-0.6	-0.5	0.2	0.8	0.4	0.4	0.5	0.5	0.6	0.7	0.7
Other investment	-3.9	-2.8	0.4	-0.1	-0.5	-0.2	0.0	0.0	0.0	0.0	0.0
Errors and omissions 1/	-1.9	-2.0	-1.7	-1.3	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	-3.1	-4.0	0.7	0.1	-0.1	2.4	1.6	1.6	1.5	1.4	1.4
Reserve assets	3.1	4.0	-0.7	-0.1	0.1	-2.4	-1.6	-1.6	-1.5	-1.4	-1.4
International investment position											
Asset	55.4	58.0	58.3	53.5	53.6	55.0	52.0	50.7	49.4	48.2	47.1
Direct investment	9.9	12.1	14.7	14.3	14.5	14.7	13.8	13.4	12.9	12.6	12.2
Securities investment	2.4	3.3	4.0	3.6	4.5	5.0	5.1	5.4	5.6	5.7	5.8
Other investment	12.5	15.0	13.1	12.6	12.1	12.0	11.1	10.6	10.3	10.0	9.8
Reserve assets	30.6	27.6	26.4	22.9	22.4	23.3	22.0	21.3	20.6	19.9	19.3
Liability	40.3	40.6	41.2	38.0	38.8	39.5	37.5	36.6	35.9	35.1	34.5
Direct investment	24.3	24.5	22.2	20.4	20.3	20.6	19.4	18.7	18.1	17.6	17.0
Securities investment	7.4	7.2	9.0	7.9	9.5	10.2	10.2	10.4	10.7	11.0	11.3
Other investment	8.7	8.8	9.9	9.6	9.0	8.8	8.0	7.5	7.0	6.6	6.2
Net international investment position	15.1	17.4	17.1	15.5	14.7	15.5	14.5	14.0	13.6	13.1	12.6
Memorandum items											
Export growth (value terms, percentage change)	-4.5	-7.2	11.4	9.1	-0.8	4.0	4.8	5.7	4.4	5.7	5.5
Import growth (value terms, percentage change)	-13.4	-4.2	16.0	16.2	-2.4	0.0	10.9	3.2	5.3	5.8	5.7
FDI (inward, billions of U.S. dollars)	242	175	166	235	156	155	164	168	173	178	183
External debt (billions of U.S. dollars)	1,383	1,416	1,758	1,983	2,057	2,290	2,536	2,797	3,073	3,366	3,678
As a percent of GDP	12.4	12.6	14.3	14.3	14.3	15.3	15.2	15.5	15.7	15.9	16.1
Short-term external debt (remaining maturity, billions of U.S. dollars	887	866	1,145	1,280	1,320	1,450	1,588	1,734	1,888	2,053	2,228
Gross reserves (billions of U.S. dollars) 2/	3,406	3,098	3,236	3,168	3,223	3,579	3,842	4,127	4,427	4,733	5,055
As a percent of ST debt by remaining maturity	384	358	283	247	244	247	242	238	234	231	227
Terms of trade (percentage change)	12.1	0.9	-5.1	-2.7	4.6	8.3	-2.2	-0.3	-0.3	0.0	0.0
Real effective exchange rate (2010 = 100)	130	124	120	122	121	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nominal GDP (billions of U.S. dollars)	11,114	11,227	12,265	13,842	14,402	14,947	16,681	18,085	19,578	21,183	22,889

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

	2015	2016	2017	2018	2019
Monetary and financial					
General government debt (in percent of GDP, narrow definition)	36.7	36.7	36.2	36.5	38.1
Broad money (M2: annual percentage change)	13.3	11.3	9.0	8.1	8.7
Foreign currency deposits to broad money (percent)	2.9	3.2	3.1	2.7	2.7
Local currency loans to the economy (annual percentage change)	14.3	13.5	12.7	13.5	12.3
Foreign currency loans to bank domestic credit (in percent)	4.0	3.4	3.1	2.8	2.5
Stock exchange index (end-of-period, December 19, 1990 = 100) 1/	3,704	3,250	3,463	2,611	3,196
Stock exchange capitalization (percent of GDP)	94.3	91.6	94.7	77.8	92.7
Number of listed companies (A-share)	2,808	3,034	3,467	3,567	3,690
Balance of payments					
Exports (annual percentage change, U.S. dollars)	-4.5	-7.2	11.4	9.1	-0.8
Imports (annual percentage change, U.S. dollars)	-13.4	-4.2	16.0	16.2	-2.4
Current account balance (percent of GDP)	2.7	1.8	1.6	0.2	1.0
Capital and financial account balance (percent of GDP)	-3.9	-3.7	0.9	1.3	0.3
Of which: gross foreign direct investment inflows	2.2	1.6	1.4	1.7	1.1
Foreign Exchange Reserve					
In billions of U.S. dollars 2/	3,406	3,098	3,236	3,168	3,223
Coverage in terms of:					
Imports (in months)	21.0	16.8	15.2	15.3	16.4
Broad money (percent)	15.2	13.3	12.9	11.5	11.2
Short-term external debt by remaining maturity (percent)	384	358	283	247	244
ARA (range, in percent of ARA metrics) 3/	120-317	106-285	94-246	89-229	85-220
External debt and balance sheet indicators					
Total external debt (percent of GDP)	12.4	12.6	14.3	14.3	14.3
Total external debt (billions of U.S. dollars)	1,383	1,416	1,758	1,983	2,057
Short-term external debt by original maturity (billions of U.S. dollars)	887	866	1,145	1,280	1,320
Net foreign assets of banking sector (billions of U.S. dollars)	444	540	500	570	666
Total debt to exports of goods & services (percent)	58.6	64.4	72.4	74.8	77.8
Total debt service to exports of goods & services (percent)	37.8	39.6	47.4	48.8	45.8
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	A1	A1
Standard and Poor's	AA-	AA-	AA-	AA-	A+

Sources: CEIC; Bloomberg; IMF, Information Notice System; and IMF staff estimates.
1/ Shanghai Stock Exchange, A-share.
2/ Includes foreign currency reserves and other reserve assets such as SDRs and gold.
3/ Range for the ARA metric under different assumptions of exchange rate regime and capital controls.

Table 4. China: Monetary and Credit Developments

	2015	2016	2017	2018	2019
MONETARY SURVEY					
			(Annual percentage change)		
Net foreign assets	-2.7	-5.9	-4.0	1.0	3.5
Monetary authority (contribution)	-8.6	-9.1	-2.4	-1.5	0.5
Depository institutions (contribution)	5.9	3.1	-1.6	2.5	3.0
Domestic credit	23.7	20.1	11.3	10.4	10.6
Claims on government, net (contribution)	4.0	4.8	2.7	2.6	2.0
Claims on nonfinanical sectors (contribution)	13.8	8.6	7.7	9.1	9.2
Claims on other financial sectors (contribution)	5.9	6.6	0.9	-1.3	-0.6
Broad money (M2)	13.3	11.3	9.0	8.1	8.7
M1 (contribution)	4.3	6.1	3.7	0.5	1.3
Quasi-money (contribution)	9.0	5.2	5.4	7.6	7.4
Reserve money	-6.0	11.8	4.2	2.8	-2.0
TOTAL SOCIAL FINANCING					
			(In percent)		
TSF 1/	15.1	16.0	14.1	10.3	10.7
Bank loans (contribution)	8.8	8.5	7.6	7.5	7.4
Shadow banking (contribution)	0.7	0.8	2.0	-1.4	-0.8
Net corporate bond financing (contribution)	2.4	2.3	0.4	0.9	1.2
Non-financial enterprise equity (contribution)	0.6	0.9	0.5	0.2	0.2
Government bonds (contribution)	...	...	3.1	2.4	2.1
Others (contribution) 2/	2.5	3.5	0.6	0.8	0.6
			(In percent of GDP)		
TSF 1/	204.4	219.9	248.4	247.9	252.6
Bank loans	138.4	144.5	146.6	149.5	154.5
Shadow banking	32.2	31.4	32.4	26.2	22.3
Net corporate bond financing	21.1	24.0	22.7	22.6	23.6
Non-financial enterprise equity	6.5	7.7	8.0	7.7	7.4
Government bonds	...	30.3	34.0	36.0	37.9
Others 2/	6.1	14.6	4.6	5.9	6.9
MEMORANDUM ITEMS					
			(In percent)		
Nonperforming loans ratio	1.7	1.7	1.7	1.8	1.9
Provision coverage ratio (provisions/NPLs)	181	176	181	186	186
Liquidity ratio (liquid assets/liquid liabilities)	48.0	47.6	50.0	55.3	58.5
Loan to deposit ratio	67.2	67.6	70.6	74.3	75.4
Return on assets	1.1	1.0	0.9	0.9	0.9
Return on equity	15.0	13.4	12.6	11.7	11.0
Capital adequacy ratio	13.5	13.3	13.7	14.2	14.6
Tier 1 capital adequacy ratio	11.3	11.3	11.4	11.6	12.0
Core tier 1 capital adequacy ratio	10.9	10.8	10.8	11.0	10.9
Net open FX position (in percent of capital)	3.7	3.5	2.5	2.4	2.7

Sources: Haver Analytics; People's Bank of China (PBC); and IMF staff estimates.

1/ The TSF numbers for 2015-16 are calculated based on the old TSF without government bonds and adjusted to include the local government debt swap. The TSF numbers from 2017 onward are the new TSF (revised by the PBC in December 2019) which includes all government bonds.

2/ Others include local government debt swap and other components in 2015-16, and include asset-backed securities, loan write-offs, and other components from 2017 onward.

Table 5. China: General Government Fiscal Data

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
									Projections				
						(In RMB billions)							
Balance: General Budgetary (official)													
(1)	**Revenue (incl. adjustments) (1a)+(1b)**	16032	16688	18273	19813	21255	21310	24274	26380	28433	30623	32963	35564
(1a)	Headline revenue	15227	15960	17259	18336	19039	18312	20481	22531	24924	27852	30873	34440
(1b)	Adjustments 1/	806	727	1014	1477	2216	2998	3793	3850	3509	2771	2090	1124
(2)	**Expenditure (incl. adjustments) (2a)+(2b)**	17658	18854	20626	22192	24013	25113	27847	30026	32339	34863	37540	40408
(2a)	Headline expenditure	17588	18776	20309	22091	23886	24986	27720	29899	32212	34736	37413	40281
(2b)	Adjustments 2/	70	78	318	102	127	127	127	127	127	127	127	127
(3)	**Fiscal balance (official) (1)-(2)**	-1626	-2166	-2353	-2379	-2758	-3803	-3573	-3645	-3906	-4240	-4577	-4844
Balance: General Budgetary (Fund definition)													
(4)	**Revenue (1a)+(4a)+(4b)**	19942	21048	23055	25891	27519	25349	28329	30995	34044	37686	41465	45844
(1a)	General budget headline revenue	15227	15960	17259	18336	19039	18312	20481	22531	24924	27852	30873	34440
(4a)	Social security revenue	4466	4827	5538	7265	8084	6525	7387	7967	8584	9256	9970	10734
(4b)	SOE fund revenues 3/	249	260	258	290	396	512	461	497	536	578	622	670
(5)	**Expenditure (2a)+(5a)+(5b)+(5c)**	23176	25309	28317	32758	36703	40666	44064	46876	49924	53635	57469	61874
(5a)	Social security expenses	3936	4392	4895	6459	7499	7633	8874	9571	10312	11120	11977	12895
(5b)	SOE fund expenditures 3/	185	217	201	216	229	238	411	443	477	515	554	597
(5c)	Managed funds' expenditure financed by land sales, bond issuance or carryover 4/	1467	1924	2912	3992	5089	7810	7059	6963	6922	7264	7524	8101
(5d)	of which: net expenditure financed by land sales	1302	1498	2082	2604	2903	3019	3309	3569	3845	4146	4465	4808
(6)	**Net borrowing/lending (Fund definition) (4)-(5)+(5d)**	-1932	-2762	-3179	-4263	-6280	-12298	-12427	-12313	-12036	-11804	-11538	-11223
Balance: Augmented (staff estimates of general government)													
(7a)	Additional infrastructure spending financed by LGFV debt	3641	7529	6168	4807	4368	4542	4977	5368	5784	6237	6718	7233
(7b)	Additional spending of special construction (SCF) and gov't guided funds (GGF)	469	1566	1825	1713	1873	1948	2133	2300	2477	2670	2874	3094
(8)	**Augmented net lending/borrowing (6)-(7a)-(7b) 5/**	-6043	-11857	-11172	-10783	-12521	-18788	-19537	-19981	-20296	-20710	-21130	-21549
Debt: General government													
(9)	**General budgetary debt (official) (10)+(11)**	25417	27362	29987	33423	37925	46245	53518	60504	67429	74725	82294	90358
(10)	Central government debt 6/	10660	12007	13477	14961	16804	20424	22997	25638	28536	31763	35323	39144
(11)	Explicit local government debt 7/	14757	15356	16510	18462	21121	25821	30521	34866	38893	42962	46971	51214
(11a)	Non-swap LG bonds	1624	2550	3904	5466	8516	13216	17916	22260	26288	30356	34365	38608
(11b)	Other recognized LG debt	13133	12806	12606	12996	12606	12606	12606	12606	12606	12606	12606	12606
(12)	Additional LGFV debt likely/possible to be recognized 8/	12331	20187	26556	30972	34748	39290	44267	49636	55419	61656	68374	75607
(13)	Additional debt tied to SCF and GGFs 9/	440	2006	3831	5544	7417	9365	11498	13798	16274	18944	21818	24912
(14)	**Augmented debt (9)+(12)+(13)**	38188	49556	60373	69939	80090	94900	109284	123937	139123	155326	172486	190876
Memorandum items:													
(15)	Augmented excluding "possible to be recognized" 10/	28714	35900	42772	49154	56174	67524	78117	88684	99467	110923	122972	135860
						(In percent of GDP) 11/							
Balance: General Budgetary (official)													
(1)	**Revenue (incl. adjustments) (1a)+(1b)**	23.2	22.4	22.0	21.6	21.4	20.6	21.4	21.6	21.6	21.6	21.5	21.6
(1a)	Headline revenue	22.0	21.4	20.8	20.0	19.1	17.7	18.1	18.4	18.9	19.6	20.2	20.9
(1b)	Adjustments 1/	1.2	1.0	1.2	1.6	2.2	2.9	3.3	3.1	2.7	2.0	1.4	0.7
(2)	**Expenditure (incl. adjustments) (2a)+(2b)**	25.5	25.3	24.9	24.2	24.1	24.3	24.6	24.6	24.5	24.5	24.5	24.5
(2a)	Headline expenditure	25.4	25.2	24.5	24.1	24.0	24.1	24.4	24.4	24.4	24.4	24.4	24.4
(2b)	Adjustments 2/	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(3)	**Fiscal balance (official) (1)-(2)**	-2.3	-2.9	-2.8	-2.6	-2.8	-3.7	-3.2	-3.0	-3.0	-3.0	-3.0	-2.9
Balance: General Budgetary (fund definition)													
(4)	**Revenue (1a)+(4a)+(4b)**	28.8	28.2	27.8	28.3	27.7	24.5	25.0	25.3	25.8	26.5	27.1	27.8
(4a)	Social security revenue	6.5	6.5	6.7	7.9	8.1	6.3	6.5	6.5	6.5	6.5	6.5	6.5
(4b)	SOE fund revenues 3/	0.4	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
(5)	**Expenditure (2a)+(5a)+(5b)+(5c)**	33.5	33.9	34.2	35.8	36.9	39.3	38.9	38.3	37.9	37.8	37.6	37.6
(5a)	Social security expenses	5.7	5.9	5.9	7.1	7.5	7.4	7.8	7.8	7.8	7.8	7.8	7.8
(5b)	SOE fund expenditures 3/	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4
(5c)	Managed funds' expenditure financed by land sales, bond issuance or carryover 4/	2.1	2.6	3.5	4.4	5.1	7.5	6.2	5.7	5.3	5.1	4.9	4.9
(5d)	of which: net expenditure financed by land sales	1.9	2.0	2.5	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
(6)	**Net borrowing/lending (Fund definition) (4)-(5)+(5d)**	-2.8	-3.7	-3.8	-4.7	-6.3	-11.9	-11.0	-10.1	-9.1	-8.3	-7.5	-6.8
Balance: Augmented (staff estimates of general government)													
(7a)	Additional infrastructure spending financed by LGFV debt	5.3	10.1	7.4	5.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
(7b)	Additional spending of special construction (SCF) and gov't guided funds (GGF)	0.7	2.1	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
(8)	**Augmented net lending/borrowing (6)-(7a)-(7b) 5/**	-8.7	-15.9	-13.5	-11.8	-12.59	-18.16	-17.2	-16.3	-15.4	-14.6	-13.8	-13.1
Debt: General government													
(9)	**General budgetary debt (official) (10)+(11)**	36.7	36.7	36.2	36.5	38.1	44.7	47.2	49.5	51.2	52.6	53.8	54.8
(10)	Central government debt 6/	15.4	16.1	16.3	16.3	16.9	19.7	20.3	21.0	21.7	22.4	23.1	23.8
(11)	Explicit local government debt 7/	21.3	20.6	19.9	20.2	21.2	25.0	26.9	28.5	29.5	30.2	30.7	31.1
(11a)	Non-swap LG bonds	2.3	3.4	4.7	6.0	8.6	12.8	15.8	18.2	20.0	21.4	22.5	23.4
(11b)	Other recognized LG debt	19.0	17.2	15.2	14.2	12.7	12.2	11.1	10.3	9.6	8.9	8.2	7.7
(12)	Additional LGFV debt likely/possible to be recognized 8/	17.8	27.1	32.0	33.8	34.9	38.0	39.0	40.6	42.1	43.4	44.7	45.9
(13)	Additional debt tied to SCF and GGFs 9/	0.6	2.7	4.6	6.1	7.5	9.1	10.1	11.3	12.4	13.3	14.3	15.1
(14)	**Augmented debt (9)+(12)+(13)**	55.2	66.4	72.8	76.4	80.5	91.7	96.4	101.4	105.6	109.3	112.7	115.9
Memorandum items:													
(15)	Augmented excluding "possible to be recognized" 10/	41.5	48.1	51.6	53.7	56.5	65.3	68.9	72.5	75.5	78.1	80.4	82.5

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 government debt.

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.

11/ GDP in this table refers to expenditure side nominal GDP.

Table 6. China: Nonfinancial Sector Debt

	(In RMB trillions)						(In percent of GDP)						Coverage	
	2017	2018	2019	2020	2021	2022	2017	2018	2019	2020	2021	2022		
Total non-financial sector debt	205	227	252	287	322	353	248	248	253	277	284	289		
Central government	13	15	17	20	23	26	16	16	17	20	20	21	Official Government Debt	Staff Estimate of General Government Debt ("Augmented")
Local government 1/	17	18	21	26	31	35	20	20	21	25	27	29		
Local government financing vehicles (LGFV)	27	31	35	39	44	50	32	34	35	38	39	41		
"Likely" to be recognized														
As per the 2014 audit	1	1	1	1	1	1	1	1	1	1	1	1		
New borrowing (staff estimate) 2/	12	15	17	20	24	27	14	16	17	20	21	22		
Additional debt possible to be recognized														
As per the 2014 audit	8	8	8	8	8	8	9	9	8	8	7	6		
New borrowing (staff estimate) 2/	6	7	9	10	12	14	7	8	9	10	10	11		
Government funds 3/	4	6	7	9	11	14	5	6	7	9	10	11		
Households	41	48	55	60	70	76	49	52	56	58	61	62		Private Sector Debt
Corporates (excluding LGFV)	104	110	116	131	143	153	126	120	117	127	126	125		
Domestic 4/	100	104	110	125	137	146	120	113	111	121	120	119		
External	5	5.6	5.8	6.0	6.6	7.1	6	6.2	5.8	5.8	5.8	5.8		
Memo items:														
Total domestic non-financial sector debt	200	221	246	280	315	346	242	242	247	271	278	283		
Corporates (including LGFVs)	131	140	151	171	187	203	158	153	152	165	165	166		
of which LGFVs	27	31	35	39	44	50	32	34	35	38	39	41		
Households	41	48	55	60	70	76	49	52	56	58	61	62		
General government (Official definition)	30	33	38	46	54	61	36	36	38	45	47	49		
Government funds 3/	4	6	7	9	11	14	5	6	7	9	10	11		
Nominal GDP	83	92	99	103	113	122								

Sources: CEIC Data Co., Ltd.; Bloomberg, L.P.; Ministry of Finance; and IMF staff estimates.

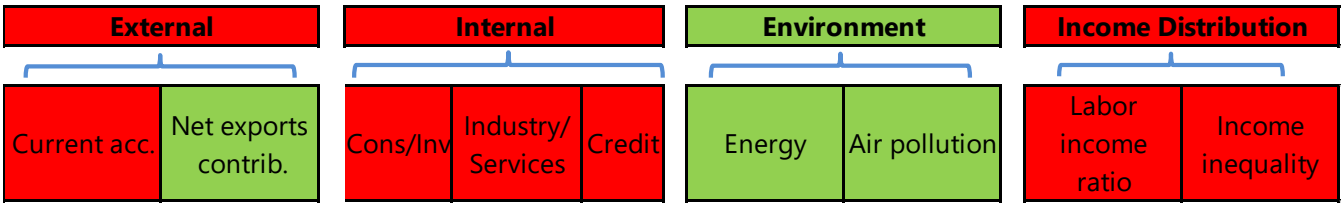
1/ Including LGFV debt recognized as LG debt as of 2014 (by the 2014 audit).

2/ New LGFV borrowing estimates were re-estimated from 2016 onward based on aggregating debt of individual LGFVs using firm-level data from Bloomberg. Previously new LGFV borrowing was estimated based on infrastructure fixed asset investment data. Two-thirds of the new LGFV borrowing is assumed "likely" to be recognized and one-third is assumed "possible" to be recognized.

3/ Government guided funds (GGF) and special construction funds (SCF). Social capital portion only.

4/ Domestic corporate debt (excluding LGFV) for 2017-18 changed relative to the 2019 Article IV Staff Report due to the new LGFV borrowing estimates and the TSF data revisions in December 2019.

Table 7. China: Rebalancing Scorecard



	Unit	2016	2017	2018	2019	2020 Projection / YTD
1. External rebalancing						
Contribution of net exports to GDP growth	%	-0.8	0.3	-0.5	0.7	0.4
Current account balance	% of GDP	1.8	1.6	0.2	1.0	1.9
FX reserve coverage	months of imports	16.8	15.2	15.3	16.4	16.3
National saving rate	% of GDP	44.5	44.8	44.1	44.1	45.0
2. Internal rebalancing						
Demand side						
Growth contribution of consumption vs investment	%	1.5	1.5	1.6	1.9	-0.2
Share of private consumption (nominal)	% of GDP	38.7	38.7	38.7	38.8	36.2
Share of investment (nominal)	% of GDP	42.7	43.2	44.0	43.1	43.1
Supply side						
Growth contribution of Tertiary vs Secondary sector 1/	%	1.7	1.8	1.8	1.6	0.6
Share of Tertiary sector (nominal) 1/ 2/	% of GDP	52.4	52.7	53.3	53.9	55.4
Share of Tertiary sector in total employment	%	43.5	44.9	46.6	48.1	…
Credit Side						
Private domestic credit	% of GDP	168	169	166	167	179
Credit intensity		4.1	2.5	1.9	2.2	6.2
Return on asset: SOE - private 1/ 2/	%	-7.7	-5.6	-2.9	-3.1	-1.7
3. Environmental rebalancing						
Energy intensity of output 1/	per unit of output	82.9	80.5	79.6	78	71
PM 2.5 (weighted by usual residence) 1/	mcg per cubic metre	49.8	48.0	44.6	40.7	36.3
4. Income distribution						
Gini	index number	0.465	0.467	0.468	0.465	…
Household disposable income	% of GDP	61.6	60.1	59.3	59.1	57.6
Urban/rural income gap 1/ 2/	income ratio	2.72	2.71	2.69	2.64	2.67
Real disposable income growth: Median – Mean 1/	%	-0.1	-1.7	-0.1	0.1	-0.8

Note: The color coding is based on the change in each indicator from 2019 to 2020. 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. See Zhang, L. (2016), "Rebalancing in China—Progress and Prospects," IMF Working Paper No. 16/183 for the framework.

1/ Reported values for 2020 are for 2020 YTD (through Q3), not full year projections. In addition, environmental indicators are significantly affected by the lockdowns in 2020 so far.

2/ Given the importance of seasonality for this indicator, the score is calculated from the difference in this share relative to 2019 Q3 (YTD).

Table 8. China: SOE Performance

Dimension	Indicator	2015	2016	2017	2018	2019
		(In percent unless otherwise indicated)				
Profitability	Return on assets SOEs 1/	1.8	1.6	1.9	1.9	0.9
	Return on assets industrial SOEs	2.9	3.0	3.9	4.2	3.5
	Return on assets industrial private	8.7	8.9	8.5	7.4	6.3
Efficiency	Cost per unit of income -SOE	97.3	94.8	97.1	97.1	97.4
Leverage	Debt to equity SOEs 2/	192	190	192	183	182
	-Central	213	217	213	210	209
	-Local	175	171	174	165	165
	Debt to asset SOE	65.7	65.5	65.7	64.7	63.9
	-Central	68.1	68.4	68.0	67.7	67.0
	-Local	63.7	63.1	63.5	62.2	61.6
	Debt to asset - above designated size industrial	56.6	55.9	56.0	56.7	56.6
	Debt to asset - industrial state holding enterprises	61.9	61.6	60.5	58.7	57.8
	Debt to asset - industrial private	51.8	50.7	52.6	56.5	57.4
	Number of zombies 3/		2041	841	141	102
	Number of bankruptcies	3568	5665	9542	18823	...
Corporate governance	Central SOEs with board of directors	85.0	85.0	87.0	94.0	97.0
	Number of central SOEs 4/	106.0	102.0	98.0	96.0	97.0
	Dividend payments to budget	11.9	10.1	7.6	7.4	7.6
SOEs share in the economy	Employment	15.4	14.9	14.3	13.2	...
	Above designated size industrial sales	21.8	20.6	23.4	27.5	27.0
	Asset(industrial state holding enterprises/total above designated size industrial)	38.8	38.5	39.2	39.6	38.9
	Liability(industrial state holding enterprises/total above designated size industrial)	42.5	42.4	42.4	41.1	39.9

Sources: CEIC, NBS, Ministry of Finance.

1/ Latest observation is for 2019 June

2/ Since June 2019 the government has only disclosed SOEs's debt-to-assets ratio instead of exact number of assets, debts and liabilities.

3/ Number of zombies refers to legal entities of central SOEs. According to SASAC's 3-year plan, all zombie enterprises will be cleaned up by 2020. Latest observation is for 2019Q3

4/ There are 97 central SOEs and 39000 legal entities affilicated to these SOEs by 2019.

Appendix I. External Sector Assessment

<table>
<tr><td colspan="6">Overall Assessment: The external position in 2019 was broadly in line with the level implied by medium-term fundamentals and desirable policies. The CA surplus is expected to temporarily widen in 2020 amid the pandemic, and trend downward over the medium term in line with rebalancing. On a preliminary basis and adjusting for transitory factors, recent developments suggest a broadly unchanged overall external position in 2020 compared to 2019. However, this assessment is highly uncertain given the lack of full-year data for 2020 and the COVID-19 crisis, and a complete analysis will be provided in the 2021 External Sector Report.

Potential Policy Responses: Policy reactions have appropriately prioritized support to the most affected households, workers, and firms, with increased focus on further supporting the demand recovery. China has room to provide more policy support if needed, including on green investment and strengthening the public health system and social safety net. If imbalances that existed prior to the COVID-19 outbreak persist in the medium term, policies to achieve a lasting balance in the external position should include a gradual fiscal consolidation and successful implementation of the authorities' reform agenda, which addresses distortions and supports rebalancing. Reform priorities include improving the social safety net, SOE reform and opening markets to more competition, attracting more FDI, creating a more market-based and robust financial system, and moving to a more flexible exchange rate along with a more market-based and transparent monetary policy framework.</td></tr>
<tr><td>Foreign Asset and Liability Position and Trajectory</td><td colspan="5">Background. The NIIP declined to 14.7 percent of GDP in 2019 from 15.5 percent in 2018, after peaking at 30.4 percent in 2008. This decline reflects lower loans extended abroad and higher securities investment received amid robust GDP growth, despite a higher CA surplus. The NIIP edged up to 15.7 percent as of end-Q2 in 2020.
Assessment. The NIIP-to-GDP ratio is expected to remain positive, with a modest decline over the medium term. The NIIP is not a major source of risk at this point, as assets remain high—reflecting large foreign reserves (US$3.2 trillion; 22.4 percent of GDP)—and liabilities are mostly FDI related.</td></tr>
<tr><td>2019 (% GDP)</td><td>NIIP: 14.7</td><td>Gross Assets: 53.6</td><td>Res. Assets: 22.4</td><td>Gross Liab.: 38.8</td><td>Debt Liab.: 14.3</td></tr>
<tr><td>Current Account</td><td colspan="5">Background. The CA surplus widened to one percent of GDP in 2019, reflecting the economic slowdown arising from continued financial regulatory strengthening and U.S.-China trade tensions. Trade flows (especially those related to the inventory cycle) in 2018–19 shifted in response to expected and realized tariff hikes, contributing to a lower trade balance in 2018 and a higher balance in 2019. Moreover, imported foreign inputs for exports fell with signs of accelerated "onshoring" and adjustments in global value chains, though their long-term effect on the CA balance remains unclear. Lower commodity and semiconductor import prices also boosted the trade balance, while outbound tourism spending declined (by ¼ percent of GDP) following a pronounced slowdown in overseas travel and lower tourism spending. Viewed from a longer perspective, the CA surplus has been trending down from the peak of 10 percent of GDP in 2007, reflecting strong investment growth, REER appreciation, weak external demand, and progress in rebalancing. The CA is expected to reach 1.9 percent of GDP in 2020. This reflects: (i) the collapse in outbound tourism spending; (ii) lower commodity prices amid weak global demand; and (iii) a surge in exports of pandemic-related goods and other products, supported by China's early recovery of production and significant increases in export prices. These temporary factors are expected to dissipate as the pandemic subsides and the CA surplus is projected to converge to about 0.5 percent of GDP over the medium term, in line with continued rebalancing.
Assessment. The EBA CA methodology estimates the CA gap in 2019 to be 1.2 percent of GDP. Considering that shifts in timing of trade and the accelerated onshoring raised the CA surplus by about ¼ percent of GDP, the IMF staff assesses the CA gap to range from –0.5 to 2.5 percent of GDP, with a midpoint of one percent. This assessment is subject to uncertainties around the degree of the temporary nature of these factors. The EBA-identified policy gaps are close to nil on balance, reflecting the impact of loose fiscal policy offsetting that of a relatively closed capital account (in a de jure sense), while the earlier negative credit gap was closed following moderate credit growth. The overall gap is accounted for by the residual, which reflects other factors, including distortions that encourage excessive saving.</td></tr>
<tr><td>2019 (% GDP)</td><td>Actual CA: 1.0</td><td>Cycl. Adj. CA: 0.8</td><td>EBA CA Norm: –0.4</td><td>EBA CA Gap: 1.2</td><td>Staff Adj.: –0.2</td><td>Staff CA Gap: 1.0</td></tr>
<tr><td>Real Exchange Rate</td><td colspan="5">Background. In 2019, the REER depreciated by 0.8 percent from the 2018 average. The signaling effect from a stronger use of the countercyclical adjustment factor (CCAF) helped counter the depreciation pressure from heightened trade tensions, leading to a moderate NEER depreciation (1.8 percent). In October 2020, the use of CCAF was phased out and the REER had appreciated by 3.9 percent from the 2019 average.
Assessment. The EBA REER index regression estimates the REER gap in 2019 to be –1.1 percent and that resulting from the IMF staff CA gap (using an elasticity of 0.23) to be –4.4 percent. Overall, staff assesses the REER gap to be in the range of –12 to 8 percent, with a midpoint of –2 percent, while noting that the RMB depreciation was driven largely by the escalation of trade tensions. The assessment, in this context, is subject to especially high uncertainty.</td></tr>
<tr><td>Capital and Financial Accounts: Flows</td><td colspan="5">Background. Capital outflows (including net errors and omissions) increased to about US$160 billion in 2019, up from US$6 billion in 2018. Benefiting partially from continued opening, despite external pressure and weaker domestic growth, the amount was significantly below the annual outflows of about US$650 billion in 2015–16. In</td></tr>
</table>

and Policy Measures	October 2020, the reserve requirement on FX forwards, a CFM, was lowered from 20 percent to zero. Two CFMs were eased in 2020 to attract inflows or ease outflows; the ceiling on cross-border financing under the macroprudential assessment framework was raised by 25 percent and restrictions on the investment quota of foreign institutional investors (QFII and RQFII) were removed, while new quota ($12.7 billion) was granted for domestic institutional investors. The first half of 2020 registered net capital outflows of $82 billion. **Assessment.** While currently absent, substantial net outflow pressures may resurface as the private sector seeks to accumulate foreign assets faster than nonresidents accumulate Chinese assets. Over the medium term, the sequence of further capital account opening consistent with exchange rate flexibility should carefully consider domestic financial stability. Specifically, further capital account opening is likely to create substantially larger two-way gross flows. Hence, the associated balance sheet adjustments and the shifts in market sentiment require prioritizing the shift to an effective float (while using FX intervention to counter disorderly market conditions) and strengthening domestic financial stability prior to a substantial further opening. Efforts should be redoubled to encourage inward FDI, which would support growth, and improve corporate governance. CFMs should not be used to actively manage the capital flow cycle or substitute for warranted macroeconomic adjustment and exchange rate flexibility.
FX Intervention and Reserves Level	**Background.** FX reserves increased by US$35 billion in 2019, following a decline of US$67 billion in 2018, reflecting mainly valuation effects, interest income, and adjustments in net forward positions, with no sign of large FX intervention. In 2020, FX reserves increased by US$20 billion as of October. **Assessment.** The level of reserves—at 85 percent of the IMF's standard composite metric at end-2019 (89 percent in 2018) and 136 percent of the metric adjusted for capital controls (142 percent in 2018)—is assessed to be adequate. The decline in the ratios reflects higher broad money, external debt, and other liabilities, all of which raised the metric.

Appendix II. Risk Assessment Matrix[1,2]

Likelihood	Nature and Identification of Risks	Impact and Policy Response
Conjunctural		
High ↓	**Unexpected negative shift in the Covid-19 pandemic.** The disease proves harder to eradicate (e.g., due to difficulties in finding/ distributing a vaccine), requiring more containment efforts and impacting economic activity directly and through persistent behavioral changes (prompting costly reallocations of resources). Monetary and fiscal policy response is insufficient amid dwindling policy space and concerns about debt sustainability. Financial markets reassess real economy risks leading to a repricing of risk assets, unmasking of debt-related vulnerabilities, and weakening banks and nonbank financial intermediaries–forcing them to reduce credit (further weighing on growth). Financing difficulties extend to vulnerable sovereigns, leading to cascading debt defaults, capital outflows, depreciation pressures, and in some cases inflation. Pandemic-prompted protectionist actions (e.g. export controls) reemerge, disrupting trade and global value chains.	**High**. Macroeconomic policy should step up should the recovery fall short. Additional fiscal expansion should be on-budget, centrally financed, and focused on rebalancing and areas with high impact on growth such as spending on low-income households, public health, and social safety nets. More forceful monetary easing should focus on policy rate cuts. The exchange rate should remain flexible.
Low ↑	**Unexpected positive shift in the Covid-19 pandemic.** Recovery from the pandemic is faster than expected due to the discovery of an effective and widely available vaccine and/or a faster-than-expected behavioral adjustment to the virus that boosts confidence and economic activity.	**High**. Policy support should be scaled back. Fiscal consolidation should be accelerated, while monetary policy should stay put or tighten moderately in line with the pace of recovery and inflation development. Financial regulatory reform should resume more quickly.
High ↓	**Accelerating de-globalization.** Geopolitical competition and fraying consensus about the benefits of globalization lead to further fragmentation. Reshoring and less trade reduce potential growth.	**High**. Limitations to China's access to the international technology frontier and resulting decline in knowledge diffusion across borders could lead to lower productivity growth. Restrictions on financial flows could also have a significant impact on China. China should work with trading partners to address shortcomings in the global trading and investment system. China should accelerate reforms to strengthen the role of markets, increase competition, foster openness, and tackle climate change.
Medium ↓	**Insufficient pickup in private demand.** Persistently high precautionary savings and continued uncertainty about the global outlook hold back private consumption and private investment.	**Medium**. Fiscal policy should accelerate its shift towards household support to strengthen consumption growth and rebalancing.
Medium ↓	**A downturn in the property market.** A sudden correction in property prices could have significant adverse impact on financial sector stability and the real economy.	**High**. Macroprudential policies for the property market can curb excessive risk taking and be eased in the event of a sharp downturn.
Structural		
Medium ↓	**Cyber-attacks** on critical global infrastructure, institutions, and financial systems trigger systemic financial instability or widespread disruptions in socio-economic activities and remote work arrangements.	**High**. Put in place adequate firewalls and security measures. Enhance crisis preparedness for cyberattacks.
Low ↓	**Higher frequency and severity of natural disasters related to climate change.** A sequence of severe events in large economies reduces global GDP and prompts a recalculation of risk and growth prospects. Disasters hitting key infrastructure or disrupting trade raise commodity price levels and volatility.	**Medium**. A push for green investment, combined with well-sequenced climate change mitigation strategies, would boost the near-term recovery while promising large environmental, health, fiscal, and economic benefits over the long term.
Medium ↑	**A comprehensive reform package.** Reforms that increase the role of markets, aided by greater openness could significantly boost productivity and potential growth.	**High**. Implement a high-quality comprehensive reform package based on market-oriented policies.

[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. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

[2] Green upward and red downward arrows denote upside and downside risks respectively.

Appendix III. Debt Sustainability Analysis[1]

The debt sustainability analysis (DSA) assesses government debt under both general "budgetary (official)" and staff's estimated general government "augmented" definitions. Expansionary fiscal policy to support the economy through the pandemic and the early recovery, as well as carryover from the 2019 tax reforms, widened the budget deficits considerably in 2020. While general "budgetary (official)" debt remains manageable, "augmented" debt and associated gross financing needs are high and debt under both definitions is on an upward trajectory. Medium-term fiscal adjustment is expected to stabilize official budgetary debt and augmented debt over the long term. External debt is 0.2 percent of GDP and considered sustainable.

1. 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 general budgetary (official) 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 local government financing vehicle (LGFV) debt was explicitly recognized as a 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 LGFVs via bank loans, bonds, trust loans and other funding sources, estimated by staff.[2] 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 have substantial revenues. It is also possible that some general government activity takes place outside of staff's augmented definition (e.g. public-private partnerships (PPPs)).
- **Macroeconomic assumptions**: The projection reflects a projected rebound in in real GDP growth to 7.9 percent in 2021 from 1.9 percent in 2020 followed by a gradual tapering to a 5.2 percent growth rate in 2025. The average GDP deflator growth of about 2 percent over the same period. The fiscal assumptions differ in the scenarios with budgetary government debt or augmented debt.
  - *Fiscal balance in the general budgetary (official) coverage scenario.* This scenario assumes all spending is done within the confines of the budget, and thus off-budget public investment is sharply reduced. Under this scenario, the primary deficit (excluding net revenue from land sales)

[1] Prepared by John Ralyea.

[2] The LGFV debt stock from 2016-2019 was revised upwards between RMB 4.2 trillion to RMB 6.7 trillion depending on the year, based on a new methodology for estimating LGFV debt, which aggregates individual LGFVs' debt based on firm-level data.

is assumed to increase to 13.8 percent of GDP in 2020 from 8.4 percent of GDP in 2019, driven mainly by fiscal measures to protect lives and livelihoods during the lockdown and support the nascent recovery (temporary tax cuts, increased social spending, and higher public investment), before gradually declining to 9.3 percent of GDP in 2025. The authorities increased the special purpose local bond quota to RMB 3,750 billion RMB in 2020 from RMB 2,150 billion RMB in 2019, which is equivalent to an additional 1.6 percent of GDP. The proceeds from the issuance primarily finance local government investment projects. In addition, the authorities issued a special central government bond for pandemic control of RMB 1,000 billion (1 percent of GDP). Most of the proceeds from this issuance were transferred to local governments to help cover local public health and other infrastructure construction and anti-pandemic related expenditures.

- *Fiscal balance in the augmented scenario*. Off-budget local government spending (including interest payments) remain constant over the projection period at 6.3 percent of GDP, below the 5-year average of 8.2 percent. 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 increase from 12.6 percent of GDP in 2019 to 17.8 percent in 2020, before gradually decreasing to 13.4 percent in 2025
- *Asset sales and withdrawals*. Since 2016 the government has increasingly relied on net proceeds from land sales and asset withdrawals (e.g. use of stabilization fund balances) to finance deficit spending and tax cuts. In 2020, the proceeds from net land sales and asset drawdowns are estimated to be 7.1 percent of GDP. The DSA assumes that asset-based financing, after peaking in 2022, declines gradually relative to GDP over the projection horizon as anticipated fiscal consolidation over the medium term eases financing needs.
- *Interest rates and amortization*. The effective interest rate for central government and local government bonds is projected to decline slightly over the medium-term to 2.2 percent in 2025 reflecting expectations of lower global and domestic interest rates relative to the past. The interest rates of off-budget borrowing (only in the augmented scenario) are assumed to be about 3 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.

2. **In both coverage scenarios, debt continues to rise, but the annual increase relative to GDP slows over the projection horizon.** A favorable growth-interest rate differential contributes to this result. Government debt under the general budgetary (official) coverage scenario increases to 54 percent of GDP in 2025 up from 38 percent of GDP in 2019.[3] Augmented debt rises to 113 percent of GDP in 2025 from 81 percent of GDP in 2019. The debt-stabilizing augmented primary balance is estimated to be -4.4 percent of GDP in the medium term, 9 percentage points of GDP higher than its projected 2025 level. Nonetheless, the gradual adjustment path assumed in the baseline, if maintained over the long term, will stabilize both debt-to-GDP ratios.

[3] To the extent that LGFV's or state-owned enterprises hold government debt, net government debt is lower.

3. Although China faces relatively low risks to debt sustainability under the general budgetary (official) debt scenario, the worsening debt dynamics of augmented debt pose large risks to debt sustainability.

- In the narrow coverage scenario, budgetary government debt approaches 80 percent of GDP at the end of the projection horizon in all standard stress tests except for the one with a contingent liability shock, in which it approaches 100 percent of GDP.[4] In the stress tests, the authorities would face an increase in gross financing needs that could be sensitive to market financing conditions and may entail rollover risks. China's large domestic savings mitigates this risk somewhat.
- In the broad coverage scenario, the augmented debt level approaches about 140 percent of GDP or more in 2025 under the various stress tests.

4. That stability of China's debt profile will largely depend on the implementation of the fiscal adjustment envisaged in the baseline and the growth enhancing effects of an expected reduction of public investment and expansion of the social safety net.

- Based on the projected debt dynamics under the narrow coverage, which assumes annual fiscal adjustment of about 0.75 percentage points of GDP in the cyclically adjusted primary balance from 2022-25, China's debt profile is still manageable, especially given that it is mostly domestically financed.
- The broader debt dynamic crucially depends on the evolution of public investment, especially off-budget investment. The extent to which off-budget investment is undertaken strictly on a commercial basis, will determine whether the realized size of the public debt stock is closer to the narrow-coverage scenario or the broad-coverage scenario. If local governments continue to incur off-budget liabilities, the broad-coverage scenario is a better guide for fiscal policy.

5. Stable and lower debt burdens that would accompany medium-term fiscal adjustment would also provide more room for handling fiscal risks.

- New borrowing avenues have emerged, such as less supervised PPP. Also, as overall SOE profitability remains weak and about a third of SOEs remain loss making, fiscal risks from SOE debt especially given SOE assets may not be liquid are on the rise. In addition to aggressively monitoring, actively mitigating, and effectively managing these risks, it would be prudent to ensure public debt levels provide room to absorb the potential realization of the those risks without leading to undue strain on funding markets or abrupt shifts in fiscal policy.

[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 2019 and 2020 would be 2–2.5 percent lower (a one standard deviation shock).

Figure 1. China: Public Sector Debt Sustainability Analysis (Augmented Debt: Broad Coverage)

(In percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

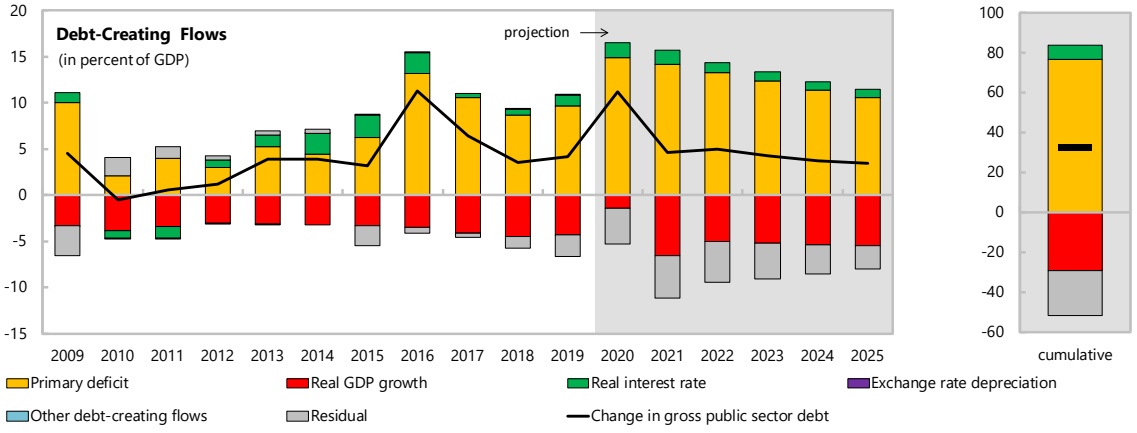
	Actual			Projections					
	2009-2017 [2/]	2018	2019	2020	2021	2022	2023	2024	2025
Nominal gross public debt	51.9	76.4	80.5	91.7	96.3	101.2	105.5	109.3	112.7
Public gross financing needs	26.9	23.5	23.6	29.7	28.7	28.2	27.7	27.2	27.0
Real GDP growth (in percent)	8.1	6.7	6.1	1.9	7.9	5.7	5.6	5.5	5.4
Inflation (GDP deflator, in percent)	2.9	3.5	2.4	2.1	1.6	2.1	2.1	2.2	2.2
Nominal GDP growth (in percent)	11.3	10.5	8.6	4.0	9.6	7.9	7.7	7.8	7.7
Effective interest rate (in percent) [4/]	5.1	4.7	4.2	4.2	3.5	3.4	3.3	3.3	3.2

As of November 13, 2020

Sovereign Spreads		
EMBIG (bp) 3/		239
5Y CDS (bp)		32
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+	A+
Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2009-2017	2018	2019	2020	2021	2022	2023	2024	2025	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	3.8	3.5	4.1	11.2	4.6	4.9	4.3	3.7	3.4	32.2	
Identified debt-creating flows	4.0	4.9	6.5	15.1	9.1	9.3	8.2	6.9	6.0	54.6	-4.5
Primary deficit	6.5	8.7	9.6	14.9	14.2	13.3	12.3	11.4	10.5	76.7	
Primary (noninterest) revenue and grants	27.1	28.3	27.7	24.5	25.0	25.3	25.8	26.5	27.1	154.3	
Primary (noninterest) expenditure	33.7	36.9	37.3	39.4	39.2	38.6	38.2	37.9	37.6	231.0	
Automatic debt dynamics [5/]	-2.5	-3.8	-3.1	0.1	-5.1	-4.0	-4.2	-4.5	-4.5	-22.1	
Interest rate/growth differential [6/]	-2.5	-3.8	-3.1	0.1	-5.1	-4.0	-4.2	-4.5	-4.5	-22.1	
Of which: real interest rate	0.9	0.7	1.2	1.6	1.5	1.1	1.1	0.9	0.9	7.1	
Of which: real GDP growth	-3.4	-4.4	-4.3	-1.5	-6.6	-5.1	-5.2	-5.4	-5.4	-29.2	
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	
Revenue: Net privatization proceeds (RMB bil) (negative)	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	
Please specify (2)	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/]	-0.2	-1.3	-2.4	-3.9	-4.5	-4.4	-3.9	-3.2	-2.6	-22.4	



Source: IMF staff.

1/ Public sector is defined as general government.

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.

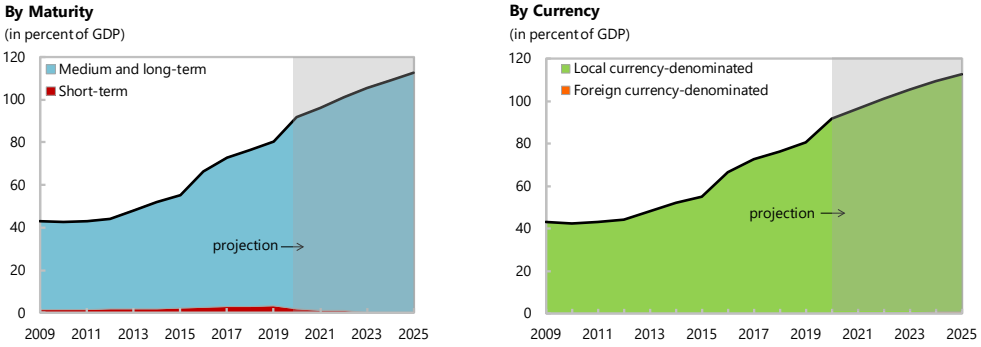
7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

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

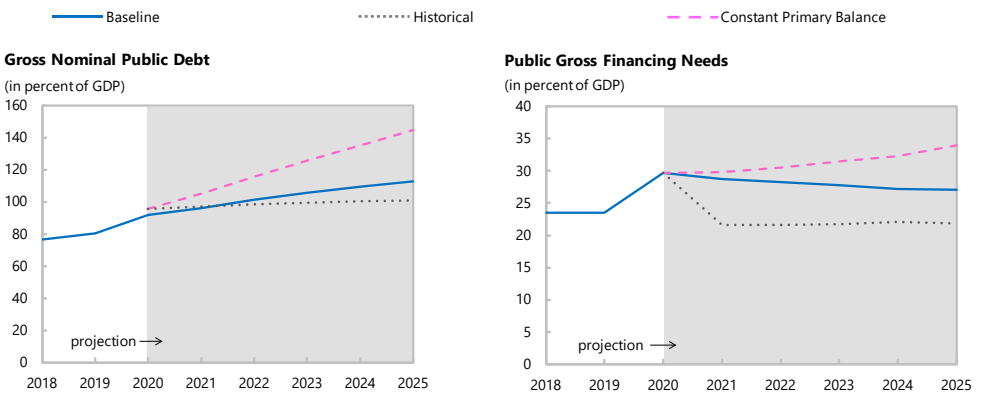
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 2. China: Public DSA — Composition of Augmented Debt (Broad Coverage) and Alternative Scenarios

Composition of Public Debt



Alternative Scenarios



Underlying Assumptions

(in percent)

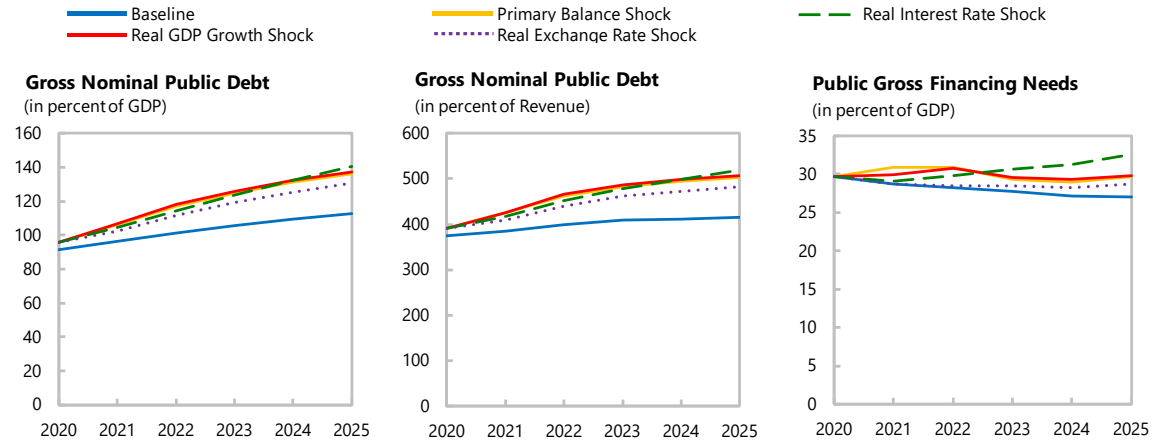
Baseline Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-14.9	-14.2	-13.3	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	3.4	3.3	3.3	3.2
Constant Primary Balance Scenario						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-14.9	-14.9	-14.9	-14.9	-14.9	-14.9
Effective interest rate	4.2	3.5	3.4	3.3	3.2	3.2

Historical Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.7	7.7	7.7	7.7	7.7
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-14.9	-6.7	-6.7	-6.7	-6.7	-6.7
Effective interest rate	4.2	3.5	3.5	3.5	3.6	3.6

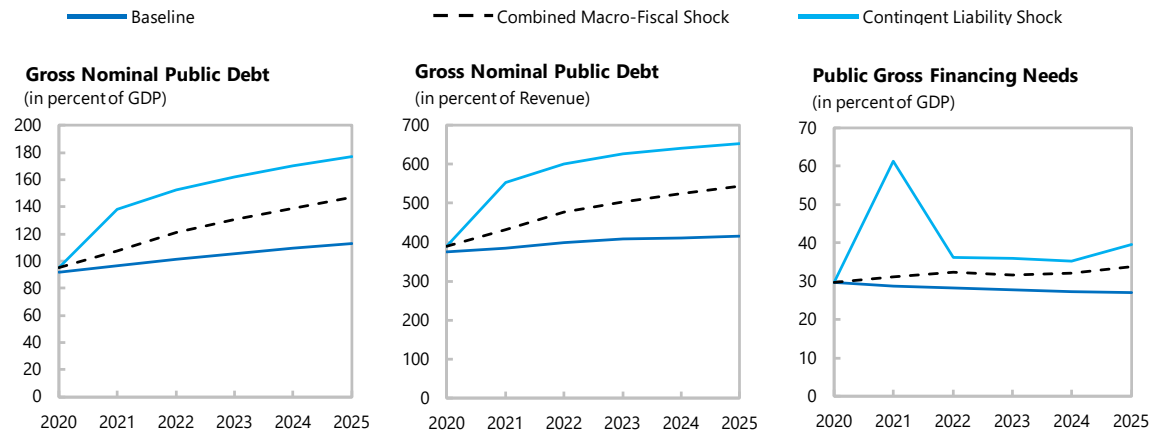
Source: IMF staff.

Figure 3. China: Public DSA (Augmented Debt: Broad Coverage) – Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

Primary Balance Shock	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary balance	-14.9	-16.0	-15.1	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	3.5	3.5	3.4	3.4
Real Interest Rate Shock						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary balance	-14.9	-14.2	-13.3	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	4.3	5.0	5.5	5.9
Combined Shock						
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-14.9	-16.0	-15.1	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	4.4	5.0	5.5	6.0

Real GDP Growth Shock	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-14.9	-14.8	-14.6	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	3.4	3.4	3.3	3.3
Real Exchange Rate Shock						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	3.9	2.1	2.1	2.2	2.2
Primary balance	-14.9	-14.2	-13.3	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.5	3.4	3.3	3.2	3.2
Contingent Liability Shock						
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-14.9	-46.0	-13.3	-12.3	-11.4	-10.5
Effective interest rate	4.2	3.8	6.8	6.1	5.6	5.2

Source: IMF staff.

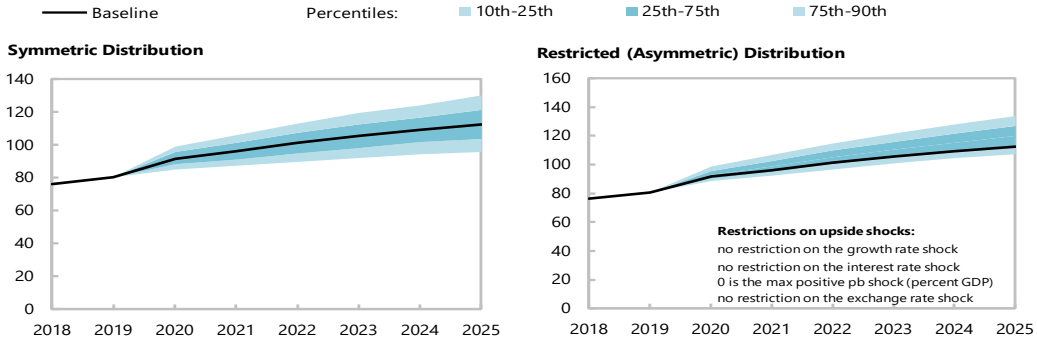
Figure 4. China: Public DSA (Augmented Debt: Broad Coverage) – Risk Assessment

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

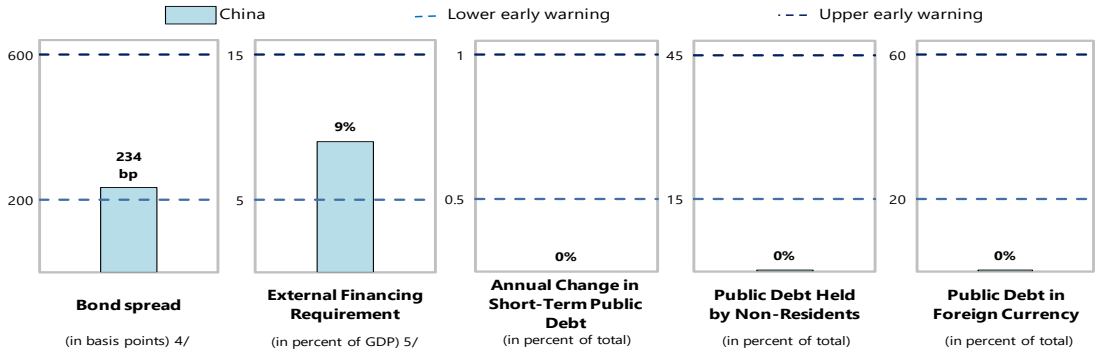
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2019)



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, 15-Aug-20 through 13-Nov-20.

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 5. China: Public Sector Debt Sustainability Analysis (General Budgetary (Official) Debt)

(In percent of GDP, unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

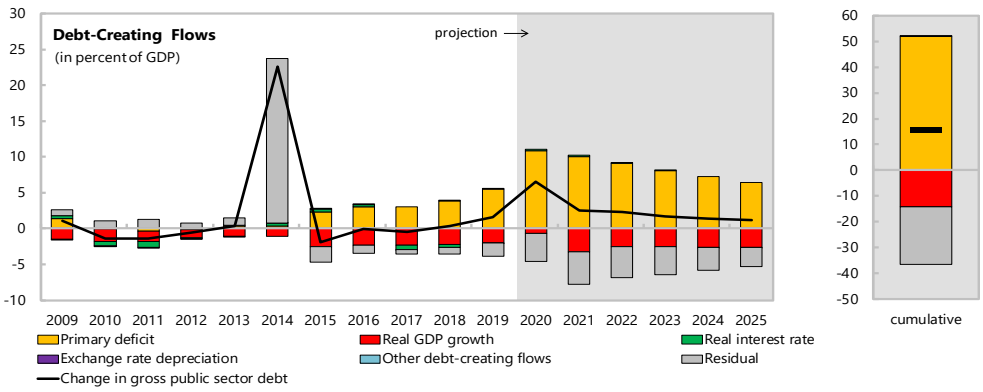
	Actual			Projections					
	2009-2017 [2/]	2018	2019	2020	2021	2022	2023	2024	2025
Nominal gross public debt	25.8	36.5	38.1	44.7	47.2	49.5	51.2	52.6	53.8
Public gross financing needs	11.5	9.8	9.9	16.5	15.4	14.7	14.1	13.6	12.9
Real GDP growth (in percent)	8.1	6.7	6.1	1.9	7.9	5.7	5.6	5.5	5.4
Inflation (GDP deflator, in percent)	2.9	3.5	2.4	2.1	1.6	2.1	2.1	2.2	2.2
Nominal GDP growth (in percent)	11.3	10.5	8.6	4.0	9.6	7.9	7.7	7.8	7.7
Effective interest rate (in percent) [4/]	2.8	2.5	2.5	2.6	2.2	2.2	2.2	2.2	2.3

As of November 13, 2020

Sovereign Spreads		
EMBIG (bp) 3/		239
5Y CDS (bp)		32
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+	A+
Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2009-2017	2018	2019	2020	2021	2022	2023	2024	2025	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	2.0	0.3	1.6	6.6	2.5	2.3	1.7	1.4	1.2	15.7	
Identified debt-creating flows	-0.6	1.2	3.4	10.4	7.1	6.6	5.6	4.6	3.8	38.1	
Primary deficit	1.1	3.8	5.5	10.9	10.0	9.1	8.1	7.3	6.5	51.9	-2.7
Primary (noninterest) revenue and grants	27.1	28.3	27.7	24.5	25.0	25.3	25.8	26.5	27.1	154.3	
Primary (noninterest) expenditure	28.2	32.1	33.1	35.4	35.0	34.4	34.0	33.8	33.6	206.2	
Automatic debt dynamics [5/]	-1.7	-2.6	-2.1	-0.5	-3.0	-2.5	-2.5	-2.7	-2.7	-13.8	
Interest rate/growth differential [6/]	-1.7	-2.6	-2.1	-0.5	-3.0	-2.5	-2.5	-2.7	-2.7	-13.8	
Of which: real interest rate	0.0	-0.4	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.4	
Of which: real GDP growth	-1.7	-2.2	-2.1	-0.7	-3.2	-2.5	-2.6	-2.6	-2.6	-14.2	
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	
Net privatization revenues	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	
Please specify (2)	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/]	2.7	-0.9	-1.8	-3.9	-4.6	-4.4	-3.9	-3.2	-2.6	-22.4	



Source: IMF staff.

1/ Public sector is defined as general government.

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).

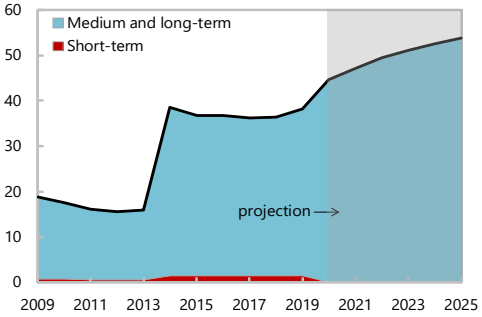
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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.

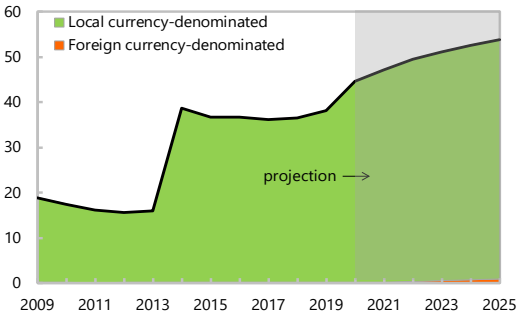
Figure 6. China: Public DSA—Composition of General Budgetary (Official) Debt and Alternative Scenarios

Composition of Public Debt

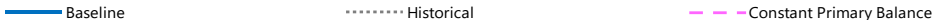
By Maturity
(in percent of GDP)



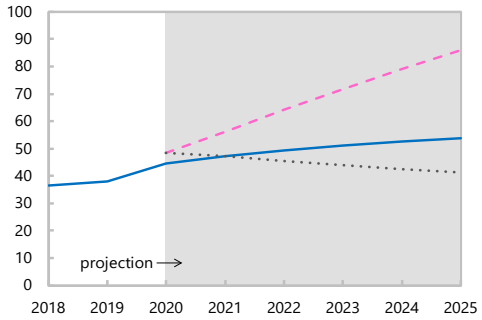
By Currency
(in percent of GDP)



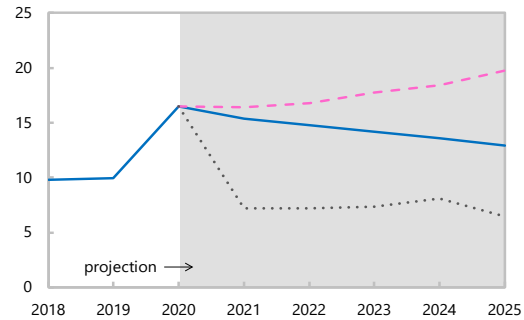
Alternative Scenarios



Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

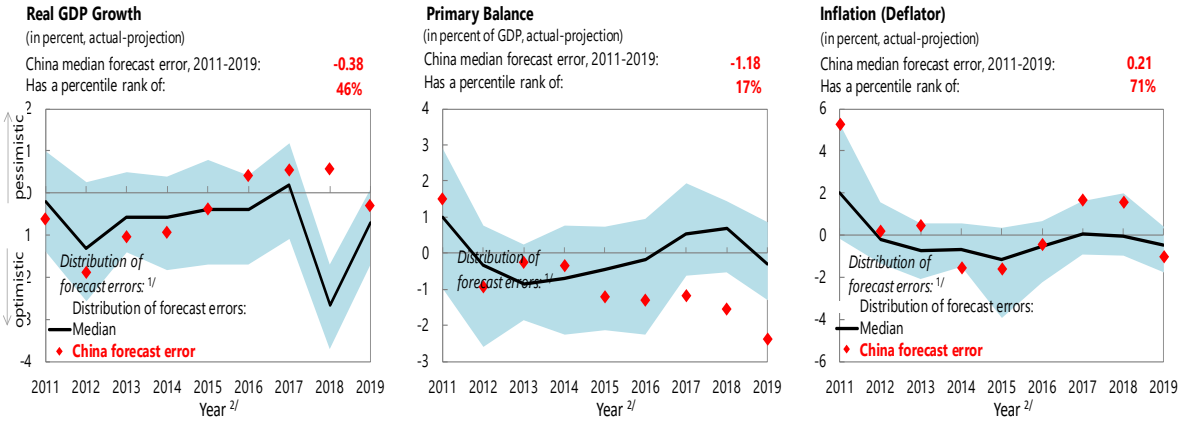
Baseline Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-10.9	-10.0	-9.1	-8.1	-7.3	-6.5
Effective interest rate	2.6	2.2	2.2	2.2	2.2	2.3
Constant Primary Balance Scenario						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-10.9	-10.9	-10.9	-10.9	-10.9	-10.9
Effective interest rate	2.6	2.2	2.2	2.2	2.2	2.3

Historical Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.7	7.7	7.7	7.7	7.7
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary Balance	-10.9	-1.8	-1.8	-1.8	-1.8	-1.8
Effective interest rate	2.6	2.2	2.1	2.0	1.9	1.8

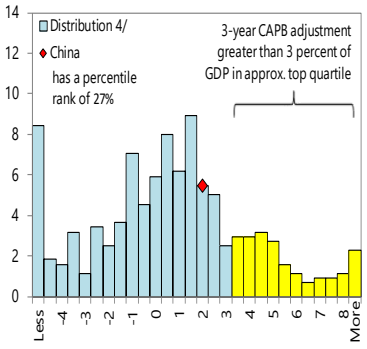
Source: IMF staff.

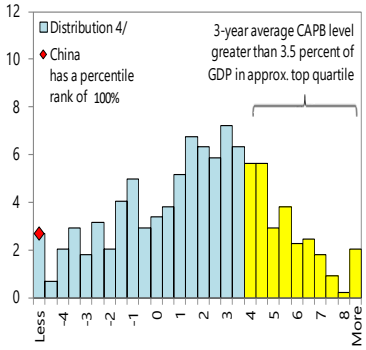
Figure 7. China: Public DSA (General Budgetary (Official) Debt) – Realism of Baseline Assumptions

Forecast Track Record, versus surveillance countries

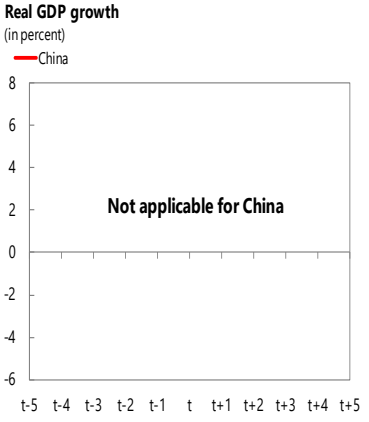


Assessing the Realism of Projected Fiscal Adjustment





Boom-Bust Analysis 3/



Source : IMF Staff.

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

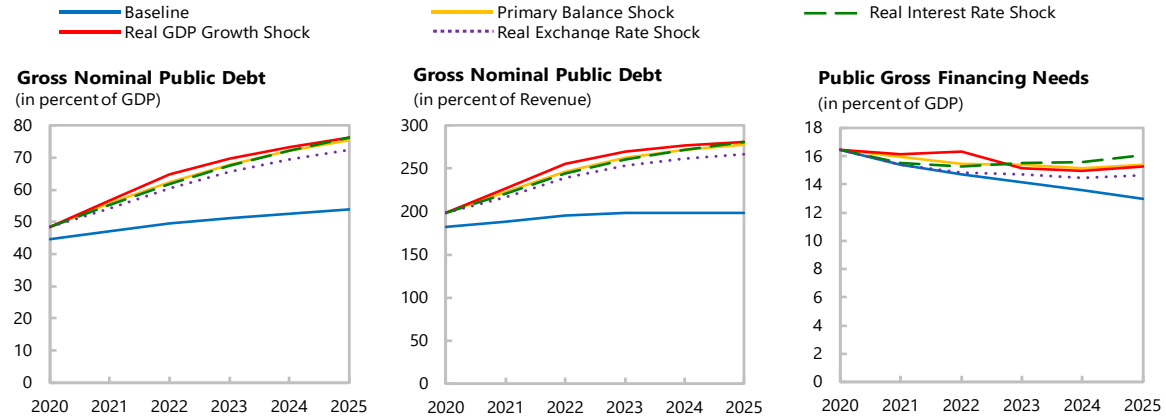
2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for China, as it meets neither the positive output gap criterion nor the private credit growth criterion.

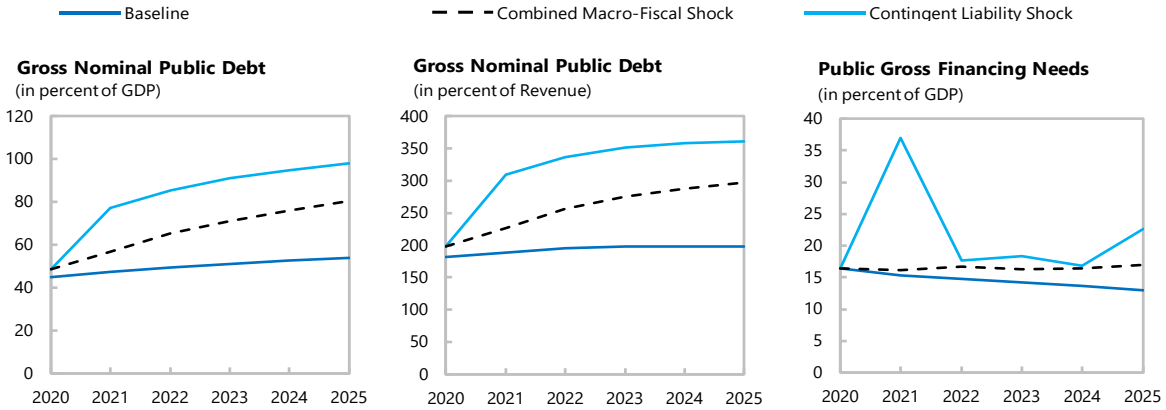
4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure 8. China: Public DSA (General Budgetary (Official) Debt) – Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

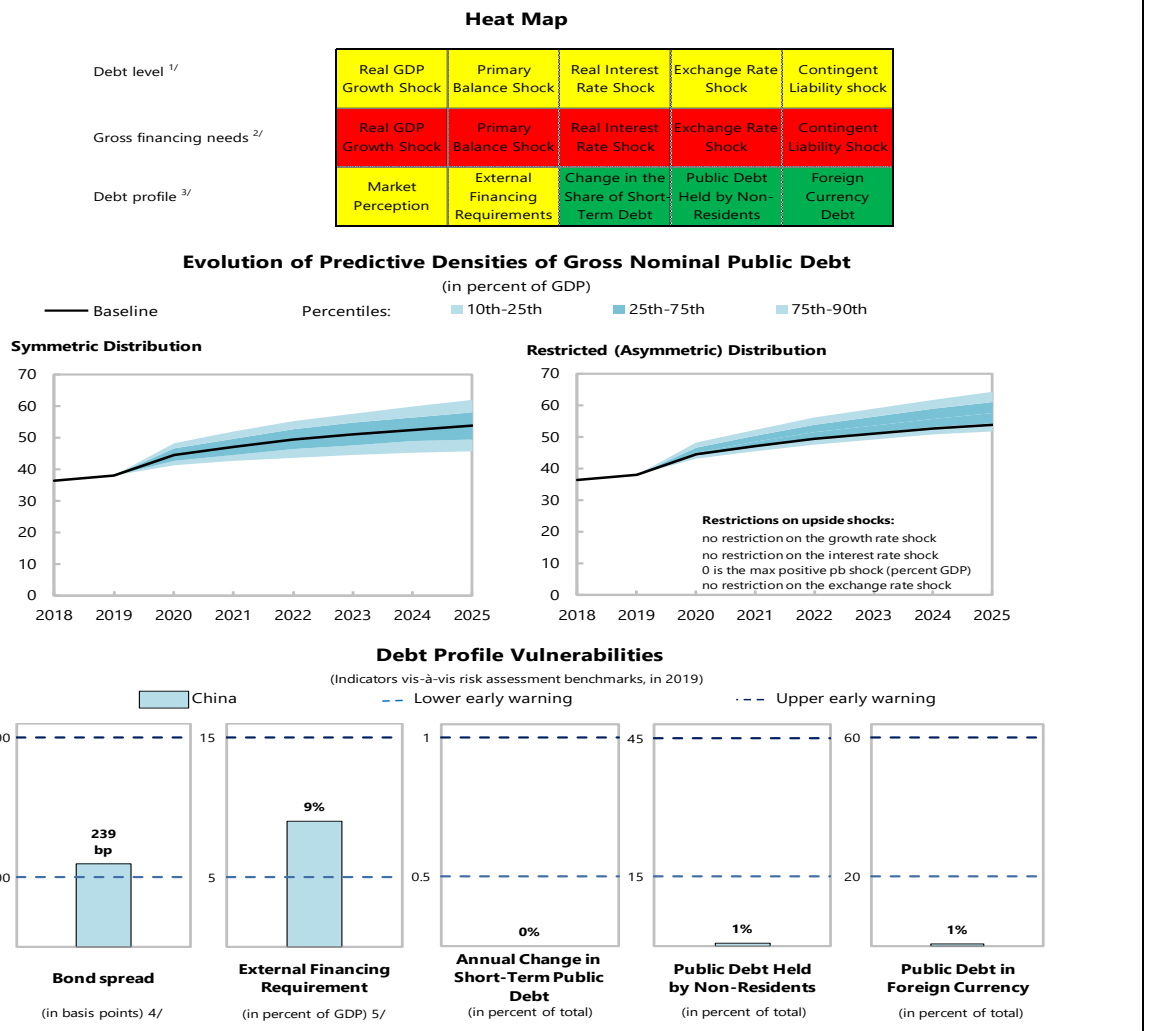
(in percent)

Primary Balance Shock	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary balance	-10.9	-10.5	-9.6	-8.6	-7.7	-6.9
Effective interest rate	2.6	2.2	2.3	2.3	2.3	2.3
Real Interest Rate Shock						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	1.6	2.1	2.1	2.2	2.2
Primary balance	-10.9	-10.0	-9.1	-8.1	-7.3	-6.5
Effective interest rate	2.6	2.2	2.9	3.4	3.7	4.1
Combined Shock						
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-10.9	-10.6	-10.2	-8.6	-7.7	-6.9
Effective interest rate	2.6	2.2	2.9	3.4	3.8	4.1

Real GDP Growth Shock	2020	2021	2022	2023	2024	2025
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-10.9	-10.6	-10.2	-8.1	-7.3	-6.5
Effective interest rate	2.6	2.2	2.3	2.3	2.3	2.3
Real Exchange Rate Shock						
Real GDP growth	1.9	7.9	5.7	5.6	5.5	5.4
Inflation	2.1	4.0	2.1	2.1	2.2	2.2
Primary balance	-10.9	-10.0	-9.1	-8.1	-7.3	-6.5
Effective interest rate	2.6	2.2	2.2	2.2	2.2	2.3
Contingent Liability Shock						
Real GDP growth	1.9	6.5	4.3	5.6	5.5	5.4
Inflation	2.1	1.2	1.7	2.1	2.2	2.2
Primary balance	-10.9	-31.3	-9.1	-8.1	-7.3	-6.5
Effective interest rate	2.6	2.5	4.7	4.4	4.0	3.8

Source: IMF staff.

Figure 9. China: Public DSA (General Budgetary (Official) Debt) – Risk Assessment



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, 15-Aug-20 through 13-Nov-20.

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 IV. Implementation of Main Recommendations of the 2019 Article IV Consultation

Announced Reform Measures since June 2019	Date	Comments
Continue to rein in credit growth		
Corporate deleveraging		
NDRC issued a guideline on deleveraging in 2019, with an emphasis on debt-to-equity swap program, which allows creditors to convert the debt holding into equities.	Jul-19	Debt-equity swap has accelerated
Tackling local government debt		
MOF established the Government Debt Research and Valuation Center to undertake statistical analysis and risk assessment of government debt, monitor compliance of the issuance and use of government bonds fund, and publish regularly government debt information.	Nov-19	
A more holistic approach towards financial regulation		
PBC issued rules on financial holding companies.	Sep-20	Effective since November 1, 2020
PBC published a three-year fintech development plan to strengthen Fintech regulation via building a sound system of fundamental fintech regulatory rules.	Aug-19	Implementation in progress
CBIRC issued a regulation on insurers' related-party transactions, aiming to stop the use of insurers as "ATM machines" and prevent risks.	Aug-19	Implemented
CBRIC set new regulatory requirements for banks' wealth management subsidiaries, including a minimum net capital requirement of RMB 500 million or equivalent freely convertible currencies (and above 40 percent of net assets and 100 percent of risk-weighted assets).	Nov-19	Effective March 1, 2020
PBC, CBIRC, CSRC, and SAFE jointly published rules on identifying standard credit assets, effective from Aug 3.	Jun-20	Implementation in progress
Given the impact of the pandemic, PBC, in conjunction with relevant agencies, extended the transition period of the new asset management rules by one year to end-2021.	Jul-20	Implementation in progress
Overcapacity cut/Zombie exit		
NDRC and 12 other ministries jointly issued a proposal to improve the mechanism for exit of market entities.	Jun-19	Implementation in progress
Accelerating rebalancing efforts		
Promoting lending to small and private firms		
MOF and other ministries announced financial support measures to private and SMEs in pilot cities. During 2019-22, MOF will provide RMB 2 billion to about 60 pilot cities annually. The fund could be used to mitigate banks' credit	Jul-19	Implementation in progress

risk, or to replenish capital for government guarantee schemes.		
PBC issued the "Administrative Measures for Standardized Bills" to improve SME and supply chain financing.	Jun-20	Implementation in progress
CBIRC issued Assessment Guideline on commercial banks' financial services to SMEs (for trial implementation).	Jun-20	Implementation in progress
FSDC issued a work plan on deepening reform and replenishment of small and medium-sized banks to accelerate their replenishment of capital.	Jun-20	To be implemented
Promoting consumption		
MOFCOM issued guidance to promote consumption, calling for a close combination of resuming work and business with expanding domestic demand and consumption.	Apr-20	Implementation in progress
The State Council issued measures to help exporters explore domestic market.	Jun-20	Implementation in progress
Poverty reduction		
NDRC issued the 2020 action plan of pro-consumption campaign to aid poverty alleviation and will carry out 30 specific actions jointly with other 27 departments.	Mar-20	
MCA and the State Council Leading Group Office of Poverty Alleviation and Development issued action plan to provide a basic safety net for vulnerable groups.	Mar-20	
MOF issued a guidance to further enhance supervision on the use of poverty alleviation fiscal funds.	Jun-20	Implementation in progress
Reducing urban-rural gap		
The authorities announced plans to improve the market-based allocation of factors of production by closing the gap between rural and urban land markets, improving household registration policy in megacities, and easing restrictions on urban residency.	Apr-20	Implementation in progress
Promoting urbanization		
The State Council announced measures to *(i)* eliminate hukou restrictions in cities with less than 3 million residents; *(ii)* relax it in cities with 3-5 million residents; and *(iii)* simplify it in cities with more than 5 million residents.	Dec-19	Implementation in progress
Tackling pollution		
MEE has established and implemented a positive list of environmental impact assessment approval and a positive list of supervision and law enforcement to conduct classified supervision over enterprises.	Mar-20	Implemented
MOF, MEE and Shanghai Municipality jointly launched the National Green Development Fund, with a registered capital	Jul-20	Implemented

of RMB 88.5 billion. This is China's first national investment fund in the field of ecological environment.		
Healthcare Reform		
The CPC central committee and the State Council announced measures to deepen medical insurance system reform and improve commercial health insurance, centralize drug procurement and promote generic drugs.	Mar-20	Implementation in progress
Fostering greater openness		
Financial Commission unveiled 11 new financial opening-up measures.	Jul-19	Implementation in progress
SAFE promoted 12 measures to facilitate cross-border trade and investment.	Oct-19	Implemented
Restrictions on foreign shares ratio of domestic futures companies was cancelled.	Jan-20	Implemented
The authorities released a master plan for constructing the Hainan free trade port.	Jun-20	Implementation in progress
NDRC and MOFCOM issued the 2020 version of Negative List of Foreign Investment Access.	Jun-20	Implemented from July 23
CSRC and CBIRC jointly issued rules to allow eligible foreign banks in China to apply for the qualification of securities investment fund custody business.	Jul-20	Implemented
MOFCOM released revised Working Measures for Complaints from Foreign Invested Enterprises.	Aug-20	Implemented
The city of Beijing set up a national comprehensive demonstration area in service opening-up.	Sep-20	Implemented
Capital account liberalization		
The Shanghai-London Stock Connect was officially launched, to allow listed companies to issue global depository receipts on the other exchange based on local rules and regulations.	Jun-19	Implemented
SAFE removed the investment quota for qualified foreign institutional investors (QFII) and RMB qualified foreign institutional investors (RQFII).	Sep-19	Implemented
Tariff reductions		
China cut the MFN tariff rate of 298 IT products.	July-19	Implemented from July 1
Import tariffs were cut for 850 products effective Jan 1, 2020, and 176 IT products effective July 1, 2020.	Dec-19	Implemented
Increasing the role of market forces		
FX market reform		
CFETS announced that banks participating in a daily operation to determine the RMB's trading mid-point have phased out use of the counter-cyclical factor in the formula, which was introduced in May 2017.	Oct-2020	Implemented

PBC announced to reduce the reserve requirement ratio for foreign exchange risks in forward foreign exchange sales from 20 percent to zero.	Oct-2020	Implemented
SOE reform		
The authorities issued guidelines to optimize state capital by accelerating mixed-ownership reform.	May-20	To be implemented
The Central Committee for Deepening Overall Reform approved the three-year action plan for SOE reform (2020-22).	Jun 30	To be implemented
Business environment		
The authorities issued guideline to accelerate the improvement of its socialist market economy in the new era, highlighting market-based allocation of production factors.	May-20	Implementation in progress
The State Council published the "Regulations on Payment Protection for Small and Medium-sized Enterprises".	Jul-20	Implemented
The State Council published Implementation Opinions on "Further Optimize Business Environment to Better Serve Market Entities."	Jul-20	Implementation in progress
SAMR issued a circular to further optimize start-up services.	Aug-20	Implementation in progress
PBC, CSRC and NDRC jointly published 'Notice on the Disposition of Default of Corporate Credit Bonds', effective August 1, 2020.	Jul-20	Implementation in progress
CBIRC eased limits on Insurance companies' equity investment.	Jul-20	Implementation in progress
CBIRC removed the restriction on foreign shareholding of personal insurance companies.	Dec-19	Effective January 1, 2020
CSRC issued Guidelines for publicly listed infrastructure REITs.	Aug-20	Implementation in progress
CSRC proposed to abolish mandatory credit rating requirements for corporate bond issuance.	Aug-20	To be implemented
Modernizing policy frameworks		
Monetary Policy		
PBC announced a reform of the LPR mechanism requiring banks to price their new loans based on the LPR.	Aug-19	Implemented
PBC required financial institutions to stop using the benchmark lending rate as the pricing reference for all credit from January 2020, while gradually converting existing loans to LPR or fixed rate from March 2020. By end-August 2020, over 92 percent of the outstanding floating interest rate bank loans have been shifted to the new benchmark.	Dec-19	Implemented
PBC organized the Interest Rate Self-regulatory Mechanism to propose a self-regulatory initiative, bringing the floor rate of	Dec-19	Implemented

structured deposit into the scope of self-regulatory management.		
Fiscal Policy		
The State Council issued a new guideline on the division of responsibility between the central and local governments on 1/ education, 2/ transportation, 3/ distribution of tax revenue, 4/ public culture and 5/ natural disaster.	1/ Jun-19 2/ July-19 3/ Oct-19 4/ Jun-20 5/ Jun-20	Implementation in progress
MOF issued Administrative Measures for the Dynamic Monitoring of the Implementation of the Central Budget to strengthen the management and supervision of the implementation of the central budget.	Jan-20	Implementation in progress
MOF encouraged policy-based financial guarantee business to support SMEs.	Apr-20	Implementation in progress
MOF set up a special transfer payment system to ensure funds directly benefit the enterprises and people.	Jun-20	Implementation in progress
MOF and STA jointly issued preferential income tax plans for business and talents in Hainan FTP.	Jun-20	Effective between Jan 2020 to Dec 2024.
MOF, MIIT, MOST and NDRC jointly issued the Notice on improving fiscal Subsidy Policies for the Promotion and Application of New Energy Vehicles.	Apr-20	Immediate implementation
The State Council published a revised regulation on the implementation of the budget law, effective October 1, 2020.	Aug-20	Effective from Oct 1, 2020
The authorities have introduced a series of policies to reduce tax and fees as follows: 1/preferential policy for community family services; 2/strengthening management of illegal charges related to enterprises; 3/ tariff and tax policy supporting COVID-19 prevention and control; 4/ temporary fee reduction or exemption on social security fee; 5/ lowering rents for SMEs and individual business.	1/ Jun-19 2/ Aug-19 3/ Feb-20 4/ Feb-20 5/ May-20	Implementation in progress
Capital Market		
The Standing Committee of the National People's Congress approved new securities law with registration-based IPO system, effective from March 2020.	Dec-19	To be implemented
CSRC eased refinancing rules.	Feb-20	Implemented
CSRC and NDRC jointly issued circulars to launch registration-based issuance of enterprise/corporate bonds.	Mar-20	Implemented
CSRC issued multiple regulations to promote ChiNext reform and transit to a registration-based system.	Jun-20	Implementation in progress
CSRC allowed qualified National Equities Exchange and Quotations (NEEQ)-listed companies to switch listing board to STAR or ChiNext.	Jun-20	Implementation in progress

PBC and CSRC issued a joint announcement to connect interbank bond market and exchange bond market.	Jul-20	To be implemented
Enhancing data quality and transparency		
• NBS circulated a draft law to penalize statistics manipulation, including to prevent and penalize illegal statistics-related practices at county or city level governments.	Oct-2019	To be implemented
Not yet announced		
• Publishing data on foreign exchange intervention	n/a	n/a

Appendix V. Implementation of Main Recommendations from China's 2017 FSAP[37]

Recommendation	Priority Level	Timing Requirement	Measures Taken
Macroeconomic recommendations			
Reduce the relatively high GDP growth forecasts in national plans; these high forecasts encourage local governments to set high growth targets.	Highest	Near-term measures	The development objectives mentioned in the 2020 Report on the Work of the Government were to "prioritize employment and protect the people's livelihood, resolutely win the battle against poverty, and strive to achieve the goals and tasks to comprehensively build a well-off society." No mention was made of a specific economic growth target for the year; instead, all areas were guided to soundly and successfully accomplish the "six stabilizations" work and comprehensively implement the "six protections" tasks.
Systemic risk, macroprudential policies, and strengthening supervision			
Newly establish a financial stability sub-committee and entrust it with the sole function of maintaining financial stability.	Highest	Near-term measures	**In 2018, a new session of the Financial Stability and Development Committee under the State Council (hereinafter, the FSDC) was established.** The office of the FSDC is housed at the PBC, to advance various tasks centered on strengthening planning and coordination of work in the areas of the financial sector serving the real economy, financial reform and opening, and the prevention and defusing of financial risk. As of September 11, 2020, the FSDC has held forty plenary meetings and more than ten ad hoc meetings. A series of policy measures has been adopted in the area of preventing and defusing financial risk: Stabilizing the macro-leverage ratio and managing shadow bank risks; deepening capital market reforms in accordance with the principles of "system-building, nonintervention, and zero tolerance"; resolving high-risk medium and small banks and promoting reforms for medium and small banks; and maintaining stable and sound financial market operations, and responding to external shocks and risks. The measures above were devised to win the battle to defuse major financial risks and upholding the bottom line of no systemic risks.
Establish vigorous mechanisms for cooperation, coordination, and information sharing with participants in domestic and foreign financial security networks, including the	Highest	Near-term measures	**Mechanisms have been established to create linkages among agencies and across fields.** Under the leadership of the FSDC, in regard to major issues that have an impact across government departments and fields, financial regulatory agencies have established multiple work linkage mechanisms, enhanced policy coordination, and achieved policy synergies, and work is advancing in an orderly fashion.

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

sharing of detailed financial data.			**Local coordination mechanisms have been established.** In January 2020, the office of the FSDC printed and distributed the *Opinion on the Establishment of Local Coordination Mechanisms*, establishing coordination mechanisms for FSDC local offices at provincial level (including autonomous regions and municipalities directly under the central government), One important function of these mechanisms is to "promote the sharing of financial information, and to establish regional mechanisms for the sharing of financial data and mechanisms for the timely communication and exchange of important events and emergencies in the financial services industry." **Regarding mechanisms for the exchange of information with participants in foreign financial safety networks.** The CBIRC has convened core supervision conferences for four regulatory authorities overseeing global systemically-important banks and held multilateral and bilateral consultation with the relevant domestic and foreign regulatory agencies. As of the end of August 2020, the CBIRC has signed 122 bilateral memoranda of understanding regarding supervision cooperation or supervision cooperation agreements with financial regulatory agencies in 83 countries and regions, and has continually deepened cross-border supervision information exchange, coordination, and cooperation, and improved the competence of cross-border supervision. The CSRC regularly reports to the FSB data of intermediary business by non-bank financial institutions that are subject to its supervision.
Trigger the countercyclical capital buffer, assess bank capital requirements, and implement targeted capital replenishment (in some cases, substantial replenishment).	Highest	Near-term measures	**In September 2020, the PBC and the CBIRC jointly issued the *Notice Concerning the Establishment of the Countercyclical Capital Buffer*,** which explicitly established a countercyclical capital buffer and simultaneously set the initial countercyclical capital buffer ratio for bank financial institutions at 0. Going forward, the PBC and the CBIRC will assess and adjust the countercyclical capital buffer ratio at the appropriate times, giving comprehensive consideration to such factors as macroeconomic and financial conditions, the macro-leverage ratio level, the soundness of the banking system, and systemic financial risks.
Amend major laws to strengthen the operational and budgeting autonomy of the PBC and regulatory agencies and increase their resources.	Highest	Medium-term measures	**Regulatory agencies have adopted various measures to strengthen team-building and increase supervision resources.** The CBIRC and CSRC have actively strengthened communication and coordination with the relevant agencies, pressed ahead with the implementation of central government requirements to strengthen grassroot regulatory agencies, and striven to achieve more budgetary support.
Resolve data gaps that place constraints on	Highest	Medium-term measures	**The PBC has accelerated development of a basic national financial database,** and collected basic

systemic risk monitoring and effective financial regulation and supervision.			financial data, to provide data and information support for the monitoring of systemic risk. **The CBIRC has continually improved the framework and content of offsite supervisory reports,** and in the near-term, will refine and update the reports for relevant operations including on-balance-sheet investments, interbank operations, wealth management operations, and stock pledged financing, to facilitate the strengthening of systemic financial risk monitoring. **The CSRC has built and continues to improve its central database, which has amasses basic data** covering account opening, entrustments, and trading data for stock, bond, and futures markets; basic information of listed companies, securities and futures fund institutions and their employees, investor profits and losses, and international and domestic macroeconomic data.
Evaluate and simplify the objectives and structure of the PBC's macroprudential assessments, and only use them as a means of monitoring by the financial stability sub-committee and its subordinate agencies.	Medium		The banking system is the core hub for the transmission of China's monetary policy. The primary objectives of macroprudential assessments (MPAs) are to guide reasonable growth of broad credit at banks and other deposit-taking financial institutions, and to promote reasonable growth in the money supply and total social finance according to the economic condition; it is an important monetary policy tool, and aids in preventing systemic financial risk and maintaining financial stability. In recent years, the PBC has continually improved the MPA framework based on macro-control requirements, effectively developed the incentive and constraint roles of MPAs, and continually increased the precision and effectiveness of monetary policy.
Bank regulation and supervision			
Strengthen risk supervision of financial holding group companies, and upgrade supervision capabilities with respect to banks and their affiliated financial holding companies and their ownership structure, including identification of ultimate beneficiary owners.	Highest	Medium-term measures	**In September 2020, the *Provisional Measures for the Supervision and Administration of Financial Holding Companies* were introduced,** emphasizing the conducting of comprehensive, ongoing, look-through supervision of financial holding companies on a consolidated basis, in accordance with "substance over form" principle. First, the provisions impose more stringent requirements for the supervision of shareholder qualifications, mandating simple, clear, and look-through equity structures. Second, they strengthen supervision of the authenticity of capital source and compliance in fund use, requiring that investments be made using legitimate, proprietary funds, and implementing see-through administration of the capital compliance of financial holding companies. Third, they establish a complete supervisory system for consolidated capital adequacy and impose more stringent requirements for controlling debt risks. Fourth, they improve corporate governance structure, strengthen

			controls for related-party transactions and overall risks, and improve risk "firewall" systems.
Stop considering the effects of collateral in loan classifications, restrict loan rollover to non-medium and small enterprise borrowers, and categorize all loans that are 90 days or more past due as non-performing loans.	Highest	Medium-term measures	The CBIRC is in the process of drafting *Provisional Measures for the Risk Classification of the Financial Assets of Commercial Banks*.
Strengthen implementation of "look-through" principles.	Medium		**Detailed rules and regulations supporting the *Guiding Opinions on Standardization of Financial Institution Asset Management Operations* have continued to be released.** On February 25, 2020, the CBIRC issued the *Provisional Measures on the Administration of Insurance Asset Management Products*, which went into effect on May 1. The Measures establish strict standards in such areas as removing implicit guarantee for redemption, eliminating multi-layer nesting, de-channeling, prohibiting fund pooling operations, and restricting maturity mismatches, and they maintain consistency with the New Asset Management Rules. "**Look-through" supervision of the trust industry has been strengthened.** Based on the New Asset Management Rules, the CBIRC has formulated the *Provisional Measures for the Administration of Trust Company Fund Trusts*, and is currently soliciting public comment, to fully embody "look-through" principles. Troubleshooting work is conducted regularly with respect to trust company risks, with two-way "look-through" style troubleshooting of each aspect of trust operations, to clearly identify the scale of all associated risks. In offsite supervision of trust operations, the focal points are trust product compliance supervision, look-through supervision, and risk monitoring. Participating entities and the sources and uses of funds in trust operations are required to be visible and controllable. **Technology-powered inspections are being used to gradually realize the objectives of "look-through" supervision.** The CBIRC has built an intelligent inspection big data platform with macroscopic horizon and microscopic analytical capabilities, and has developed and run trial operations of capital flow auxiliary analytical tools, with a focus on difficult problems in the area of look-through supervision, including tracing fund flows covered by fund pooling and identifying ultimate controlling owners. **The utilization of "look-through" principles has been strengthened in regulatory agencies' onsite inspections in key areas.** Beginning in 2017, the CBIRC

			has conducted special projects to rectify financial market for four years consecutively. All of the rectification work in past years has emphasized applying "look-through" supervision principles to onsite inspections in the areas of equity management and corporate governance, reducing the high-risk assets of shadow banks, and cross-market financial products.
Increase liquidity coverage ratio requirements for interbank products and off-balance-sheet financial products.	Medium		No updates.
Increase supervision reporting requirements, and collect more detailed supervision data, including bank investment information and corresponding provisions.	Medium		**The offsite reporting system has been continually improved and refined, and data quality requirements have been strengthened.** The CBIRC is currently revising the offsite reporting system and plans to further refine the relevant statistics for all types of on-balance-sheet investments and provisions in the 2021 reporting system. In 2018, the CBIRC issued the *Guidelines for the Data Governance of Bank Financial Institutions*, which systematically put forward relevant supervision requirements for the data governance of banking institutions, and in 2020, the CBIRC initiated a special governance project for the quality of supervision data, which covered all types of banking and insurance institutions and required them to initiate self-examinations referencing the data governance guidelines, while also conducting inspections and assessments of the self-examinations, to push the institutions to continually improve the quality of supervision data submitted.
The CBRC should strengthen its forward-looking comprehensive risk analysis to identify vulnerabilities, question banks, and encourage intervention before the fact.	Medium		**Progress has continued with the development of the early warning system.** Updates to the information in the bank Risk Early Warning Analysis Supporting System (REASS) have continued. The system has been comprehensively upgraded, adding more indicators that reflect changes in bank operations and risks, and optimizing page display, to reflect bank risk conditions and vulnerabilities comprehensively. **Stress testing and internal capital adequacy assessment process (ICAAP) have been conducted regularly,** and differentiated "one bank, one policy" supervision and guidance have been implemented for banks with greater vulnerabilities. Stress testing methodology has been used to measure the impact of adverse shocks, such as the pandemic, on bank risk levels and soundness. **Market analysis and trend research have been strengthened,** with research into potential risks, successful issuance of risk warnings, and timely proposal of effective response measures, to supervise and urge institutions to be prudent in the conduct of financial

			market operations. Risk analysis bulletins and special research projects have been used to study potential risks and propose effective response measures in a timely manner. **Supervision of corporate governance has been strengthened, to manage and control risk at its source.** Banking institutions are guided to improve modern financial enterprise systems, perfect the various corporate governance systems and mechanisms, elevate governance standards and effectiveness, accelerate the transition to high quality development, and eliminate triggers of major risks resulting from faulty governance. **Prudential supervision has been strengthened to maintain secure, stable, and sustainable bank operations.** Business information, information on all types of risk, and prudential supervision indicators for banking institutions continue to be collected, and the overall risk level and development trends of banking institutions continue to be assessed and studied, to identify risks in key institutions, key regions, key businesses, and key fields, and promptly discover and resolve major prudential risks in their infancy and maintain secure, stable, and sustainable bank operations. Supervision of the innovative businesses of banking institutions has been improved, frontloading risk supervision to strengthen continual tracking and comprehensive risk analysis of business operations and promptly withdraw products that are non-compliant or "cross the line," and promptly eliminate major hidden risks. **Compliance supervision has been strengthened, to correct violations of laws and regulations.** Supervision of bank business activities, internal controls, operational and employee conduct, and bank products is implemented in accordance with laws and regulations to promptly correct violations of laws and regulations and deficiencies in internal control, preserve order in the markets, contain ethical risks and operational risks, with a focus on identifying issues early, identifying issues while they are still minor, and identifying fundamental issues, to prevent the occurrence of major financial incidents, and effectively protect the legal rights and interests of consumers.
Stress testing			
To do a better job with stress testing and the assessment of systemic risk, data and information sharing among the "one bank and three commissions" must be substantially increased	Highest	Medium-term measures	Currently, financial regulatory agencies already share statistical data on TSF, money and credit, banking operations and risks, and securities and futures markets. The breadth and depth of the data shared have both increased. **The PBC continues to conduct stress testing,** to study banks' ability to withstand risks under such stress scenarios as macroeconomic downturns, deterioration in

and systematized. Use more detailed supervision data in stress testing.			risk conditions in key areas, increases in liquidity stress, interbank transaction counterparty defaults, deterioration in conditions in fields that are more vulnerable to the novel coronavirus pandemic, etc. The tests use internal data and supervision data submitted by banks, and the granularity of data is being gradually increased in such areas as historical non-performing asset trends, classification of interest-bearing assets and liabilities, bond investment types, and the measurement of capital adequacy ratio. **The CBIRC is already using more refined, look-through data in bank stress testing.** For example, the interbank transaction data used in transmission risk stress testing covers detailed data for interbank financing, interbank investment, and derivative products. **In the area of securities, the CSRC** has established mechanisms for regular stress testing for important institutions in the capital markets, selecting important institutions for the implementation of differentiated stress testing arrangements, expanding the scope of test data, and further increasing the effectiveness of stress testing. **In the futures area,** the CSRC has actively pressed ahead with the sharing of relevant data and information with the PBC and the CRIRC, strengthening inter-agency coordination, and instructing China Futures Market Monitoring Center to submit customer account opening, transaction, position, and funding data to China Securities Data Company Ltd., to aggregate data across markets and enhance the analytical capabilities of the stress testing team.
In systemic risk assessments, substantially expand the scope of coverage for non-banking institutions and their relationship with other financial institutions and develop and integrate stress testing for collective investment plans.	Medium		**In 2020 bank stress testing, the PBC used a network analysis model to assess business relationships and risk transmission among banks and between banks and non-banking institutions.** Macro scenario stress tests and sensitivity stress tests considered the impacts on capital adequacy ratio by non-standard credit investments, off-balance-sheet operations, and bonds valued using amortized cost approach, and liquidity risk stress tests considered the impact of wealth management product redemptions on bank liquidity. **As for the CBIRC, first,** it is studying bringing banking, insurance, and large and medium-sized trust institutions under the same framework for coordinated stress testing, to measure institutional relationship risk based on the interbank business data of the three types of institutions. **Second,** it has incorporated trust company liquidity risk stress testing and credit risk stress testing within the scope of comprehensive risk screening for the trust industry, to promote regular stress testing and predict, prevent, and control industry risk in advance. **Third,** it regularly conducts stress testing for

			asset management companies. In 2019, key factors including stress test scenario settings and assumptions were further improved, and asset management companies were instructed to optimize methodologies to make stress testing more scientific.
Strengthen inter-agency coordination and the analytical capabilities of the stress testing teams.	Medium		**The PBC has strengthened communication and coordination among all internal departments;** for example, in the design of macro stress scenarios, reference is made to the macroeconomic measurement model developed by the People's Bank of China Research Bureau. A stress testing group has been established, creating synergy among members from PBC headquarters and branches as well as commercial banks. This group holds regular discussions and exchanges on stress testing technology, to increase the technological expertise of stress testing and analytical capabilities. At the same time, during the course of ongoing stress testing, the PBC maintains close contact and communications with the CBIRC regarding the scope, scenario assumptions, key methodologies, and test results of the stress testing. **In the process of initiating supervision stress testing, the CBIRC** coordinates full participation by the various supervision agencies and its local branches in key tasks including program design and supervisory verification, to strengthen communication and cooperation within the commission. Stress test training and industry exchanges are regularly held to increase the technological expertise and analytical capabilities of the stress testing team. **The CSRC regularly conducts uniform scenario stress testing and continues to study and improve scenario indicators.** The CSRC has established mechanisms for cooperation and sharing of relevant data with the PBC and the CBIRC, and, going forward, will continue to press ahead with inter-agency cooperation and further expand the scope of data sharing.
Shadow banking and implicit guarantees			
Amend laws or supervisory regulations, to ensure the bankruptcy remoteness of collective investment plans (including wealth management products) when a manager or custodian goes bankrupt.	Highest	Medium-term measures	**Financial regulatory agencies** have successively formulated relevant regulations and systems, such as the *Guiding Opinions on Standardizing Financial Institution Asset Management Operations* and the *Administrative Measures on the Supervision of Commercial Bank Wealth Management Operations,* the *Provisional Measures for the Administration of Insurance Asset Management Products,* and the *Provisional Measures for the Administration of Trust Company Fund Trusts* (currently already released for public comment), establishing relevant requirements in such areas as strengthening the isolation of risks, smashing rigid redemption, and full disclosure of information and risks.

Conditioned on the elimination of implicit guarantees, gradually eliminate credit restrictions on certain industries.	Medium		Financial institutions are being guided to accelerate the strengthening of support for the talent pool and intelligence pool in high-tech manufacturing and the transformation and upgrading of traditional industries, enhance their analytical and risk assessment capabilities for the corresponding industries, and continue to intensify support in areas that are upgrading basic industrial capacity and standards.
Intervention measures in capital markets (including real estate and stock markets) should be limited to those in response to systemic risk.	Medium		**The CSRC attaches great importance to responding to systemic risk in the capital markets,** resolutely upholds the principle of "system-building, non-intervention, and zero tolerance," and formulates and dynamically updates plans to respond to substantial volatility in the capital markets in a timely manner. The overall response principles are to respect market rules, on the one hand, in order to increase the tolerance of market volatility and not to intervene under ordinary circumstances; and to hold to the bottom line thinking, on the other, to decisively adopt response measures when systemic risks or other extreme situations occur.
Regulation and supervision of securities markets			
Improve information disclosure for collective investment plans and prohibit the stating of anticipated rate of return in the prospectuses of wealth management products.	Highest	Near-term measures	No updates.
Introduce functional supervision, to ensure that similar products issued by different financial institutions are subject to similar supervision.	Highest	Medium-term measures	**First,** in concert with the relevant agencies, the PBC has given full consideration to the realities of the effects of the pandemic this year. Conditioned on upholding the supervision requirements of the New Asset Management Rules policy framework, it was decided in July 2020 that the transition period for the New Asset Management Rules would be extended to the end of 2021. At the same time, incentive and constraint mechanisms were established and supporting policy arrangements were improved to steadily press ahead with the standardization of the asset management industry. **Second,** during the process of pushing the introduction of detailed regulations for the bank wealth management, wealth management subsidiary, securities fund and futures, and trust and insurance industries, the PBC has maintained close communication with the CBIRC and the CSRC, to ensure that the functional supervision concept spelled out in detailed industry regulations and the New Asset Management Rules are is implemented and put in place, to realize equal access for, and uniform regulation of, the various types of financial institutions engaging in asset management operations. **Third,** the CBIRC has actively improved policy documents that support the

			New Asset Management Rules, and supervised trust companies' implementation of the New Asset Management Rules requirements; accelerated the research and formulation for the *Provisional Measures for the Administration of Trust Company Fund Trusts* (already released for public comment), and, in accordance with the principle of uniform supervision standards, referenced the New Asset Management Rules to propose supervision requirements in such areas as controlling fund trust maturity mismatches, restricting nested investments, controlling leverage and concentration of risk, strengthening investor suitability management, and strengthening sales compliance.
Strictly control repo collateral qualifications and improve the discount rate calculation methodology.	Medium		**The CSRC has instructed China Securities Depository and Clearing Corporation Ltd. to continue to strengthen risk monitoring of pledged bonds and development of dynamic management mechanisms,** strengthen the application of internal bond credit ratings and market implied ratings, and successfully achieve dynamic adjustment of repo qualifications and discount coefficients for risky pledged bonds. At the micro level, dynamically adjusting discount coefficients or canceling repo qualifications based on such factors as the credit risk and liquidity risk of pledged bonds, it effectively guards against the credit risks of individual bonds, while at the macro level, it continues to promote improvements in the qualification level of pledged bonds as a whole. **China Securities Depository and Clearing Corporation Ltd. continues to improve the prudent standard bond discount rate calculation methodology**, with an emphasis on countercyclical adjustment, gradually applying autonomous risk adjustment estimates that meet central counterparty risk management needs to the calculation of discount rates for standard bonds.
Strengthen systemic risk monitoring mechanisms, to ensure that the relationships among securities markets and between securities markets and other financial sectors is examined from a holistic perspective.	Medium		**The PBC has strengthened monitoring of bond market default risk**, improving the default rate monitoring framework for the market as a whole, and calculating bond market default rates for various statistical scopes on a monthly basis. **The CSRC has established and improved comprehensive risk response mechanisms.** A stock market risk monitoring and response leadership group has been established, to plan and coordinate stock market risk monitoring and response work, and a normalized meeting mechanism has been established, to assess risk conditions on a scheduled and unscheduled basis, promptly communicate information, and plan and arrange risk monitoring and response work. **The CSRC continues to strengthen stock market and bond market risk monitoring.** A stock market risk

			monitoring model is under development, with combined consideration of such factors as economic fundamentals, market structure, market sentiment, market trends, and risk transmission. Overall bond market credit risk is evaluated on a regular basis, and analysis of early warnings has been strengthened for high-risk bonds on a case-by-case basis. **The CSRC has strengthened risk monitoring in key areas.** Approached from the perspective of such indicators as total outstanding securities, collateralization rates, the scale of exchange-traded defaults, and the scale of expected maturities, the CSRC continually analyzes the overall risk conditions of stock pledging operations. Monitoring indicators are teased out and prepared from perspectives including the basic information, holders, fund operations, positions, and trading of private securities funds, to perfect the system of risk monitoring indicators for private funds. Stress testing is conducted regularly based on a dynamic grasp of securities and futures fund broker-dealer institution data. **The CSRC has strengthened the development of intersecting and systemic risk monitoring systems.** Progress continues in the development of the central platform for supervision information for the securities and futures industry, to strengthen monitoring of intersecting asset management products. This involves summarizing and accumulating macro, meso, and micro data, from the two perspectives of integrity and contagion, and filtering such indicators as stock market, bond market, stock index futures, foreign exchange market, cross-market linkages among the stock, bond, and foreign exchange markets, cross-market linkages between domestic and foreign stock markets, to build a comprehensive index model for systemic risk and regularly monitor systemic risk conditions.
Regulation and supervision of insurance			
Formulate a risk-based supervision plan that incorporates all issues and conduct of each insurance company (including market conduct).	Medium		**The *Provisions on the Administration of the Solvency of Insurance Companies* have been amended,** strengthening risk-oriented solvency supervision, and were released for public comment in July 2020. **Work on the Second Phase Project of the China Risk-Oriented Solvency System has begun,** comprehensively revising various supervision rules, to further increase the risk orientation of the solvency system, and to make risk measurement more scientific and increase the effectiveness of risk management. **Work to amend the *Measures for the Administration of Insurance Group Companies* is actively progressing,** to amend systems and rules in key supervision areas such as market entry and exit, fund

			utilization, risk management, and information disclosure, integrating domestic and foreign supervision rules for financial holding companies. Consolidation supervision has been strengthened with the establishment and improvement of a system of consolidation supervision indicators. Corporate governance assessments and onsite inspections have begun, to ensure principal responsibility of holding companies, strengthen supervision of consolidation and non-insurance subsidiaries, and guard against risks in key areas such as fund utilization and equity pledging. **The *Notice of the General Office of the China Banking and Insurance Regulatory Commission Concerning Improving the Valuation Interest Rate Formation Mechanism for Personal Insurance Liability Reserves and Adjusting the Valuation Interest Rates for Liability Reserves* was introduced,** to optimize the valuation interest rate formation mechanism for personal insurance liability reserves, guard against interest spread loss risk in the personal insurance industry. A supervision file has been established for each personal insurance company, annual supervision assessments are conducted for each company, and companies are pressed to rectify and reform promptly. Risk monitoring of the personal insurance market has been strengthened with the issuance of the *Notice Concerning Further Strengthening of Personal Insurance Market Risk Monitoring Work* to personal insurance companies, establishing further requirements in the areas of risk monitoring and reporting. ***Provisional Measures for the Offsite Supervision of Insurance Companies* were studied and formulated,** further establishing and improving the system for offsite supervision of insurance companies, and further increasing the quality and efficiency of offsite supervision of insurance companies through continued monitoring and analysis of all insurance company risk factors. **In accordance with the requirements of the *Notice of the General Office of the China Banking and Insurance Regulatory Commission on Strengthening the Business Management of Intermediary Channels of Insurance Companies*, related training and market order standardization work have begun.**
Formulate a plan to gradually use more market-oriented means of valuation.	Medium		No updates.
Supervision of financial market infrastructure			

China Securities Depository and Clearing Corporation Ltd. should make full use of delivery-versus-payment (DVP)	Highest	Near-term measures	**The CSRC attaches great importance to the recommendation to improve DVP arrangements and has already incorporated "improve the registration and clearing system, and initiate reform of the A-share DVP clearing model" into key work tasks.** Since 2018, the CSRC has arranged for China Clearing to earnestly draw on the FSAP evaluation recommendations, giving full consideration to the realities of China's securities markets and the effects of market reforms, to study and formulate a DVP reform plan. China Clearing has solicited and investigated the opinions of all parties through multiple market institution communication meetings, visits, and surveys, and a basic consensus for the reform plan has taken shape.
Fully implement the principles of the Committee on Payment and Settlement Systems and the International Organization of Securities Regulators and strengthen the legal framework to increase the resilience of the financial market infrastructure.	Highest	Medium-term measures	**At the PBC: First,** in February 2020, in concert with the relevant agencies, the PBC jointly printed and distributed the *Work Plan for Coordinating and Supervising Financial Infrastructure*, which clarified that six types of facilities and corresponding operating institutions (financial asset registration and custody systems, clearing and settlement systems - including central counterparties engaging in centralized clearing operations, trading facilities, transaction report libraries, important payment systems, and the basic credit information system) would be included within the scope of financial infrastructure coordination and supervision, and established uniform supervision standards, improved entry management, optimized the distribution of facilities, and improved governance structures, to promote the formation of an advanced, reliable, and flexible financial infrastructure system with reasonable distribution and effective governance. **Second,** in accordance with PFMI, in January 2020, the evaluation of qualified central counterparties (QCCPs) for the Shanghai Gold Exchange was completed, further consolidating the risk prevention and control capabilities of China's financial market infrastructure. **At the CSRC: First,** the new *Securities Law* has been thoroughly implemented, and progress has been made in the amendment of the *Measures for the Administration of Securities Registration and Settlement*, consolidating the legal foundation for securities registration and settlement operations, and supporting the reform and development of the securities registration and settlement industry. **Second,** efforts to amend the *Measures for the Administration of Futures Exchanges* have continued, with further clarification of the relevant requirements of *Financial Market Infrastructure Principles* at the departmental regulation level.
Extend the services of the central bank to all	Medium		Currently, the PBC only provides settlement services to China Central Depository & Clearing Co., Ltd., the

systemically-important central counterparties.			Shanghai Clearing House, and the Shanghai Gold Exchange. **The PBC is considering extending settlement services to China Securities Depository & Clearing Corporation Ltd. and four futures exchanges.** Taking advantage of central bank currency settlement can lower the credit risks for these institutions, and the high-value payment system can provide them with convenient and efficient fund settlement services. However, the potential problems that could arise from allowing these five central counterparties direct access to the high-value payment system must be centrally planned and considered: **First,** this would mean that these institutions would have access to central bank liquidity arrangements, which could lead these institutions to ignore market risks, thus resulting in moral hazard and even systemic financial market risks. To this end, the functional responsibility must be put in place for the PBC to perform prudential management of these institutions. At the same time, these institutions must be urged to conscientiously strengthen risk management. **Second,** these institutions must complete the conversion of relevant systems and adjustments to business logic, which will take a certain amount of time.
Anti-money laundering and combating the financing of terrorism			
Adopt stronger customer due diligence measures with respect to domestic political and public figures based on risk.	Medium		China is currently considering how to introduce amendments to the *Anti-Money Laundering Law* and regulations regarding the adoption of customer due diligence measures for domestic political and public figures.
Ensure that more effective investigations are conducted for acts of self-laundering, and prosecute them as independent convictions.	Medium		China is currently amending the *Criminal Law* to consider making acts of self-laundering independent convictions.
Crisis management			
The conditions that trigger government-led crisis responses should be more clearly defined and limited to systemic events that require the use of public resources.	Highest	Near-term measures	**The CSRC, under the uniform direction and coordination of the FSDC, has formulated plans to respond to major volatility in the capital markets and enhance crisis response policy tools, in order to earnestly implement the "system-building, non-intervention, and zero tolerance" policy.** The relevant response plans have more explicit, clearer trigger conditions. The general response principles are, on the one hand, to respect market rules and increase tolerance of market volatility, and not to intervene under ordinary circumstances, and on the other, to uphold the bottom line thinking, and decisively adopt response measures when systemic risk and other extreme conditions occur. The CSRC has defined crisis response trigger conditions as clearly as possible based on market development

			conditions, specific national conditions, and formulated corresponding risk response mechanisms.
Formulate special resolution mechanisms for banks and systemically important insurance companies.	Highest	Medium-term measures	**On September 30, 2020, the PBC and CBIRC began soliciting public comment on the *Administrative Measures on the Total Loss Absorption Capacity of Global Systemically Important Banks (Draft for Comments)*.** These measures establish total loss absorption capacity requirements for global systemically important banks incorporated domestically in China, and set explicit requirements for total loss absorption capacity ratios, composition, and supervision inspections and information disclosure, to ensure that global systemically important banks have adequate loss absorption capacity and recapitalization capacity when they enter the resolution phase. **The PBC has drafted *Operating Guidelines for Early Corrective Actions for Deposit Insurance (Provisional)*,** using case studies and other methods to direct banks in the proposal of realistic, effective measures to defuse risk and improvement requirements targeting the specific risk conditions of insured institutions, in order to promote the implementation of accountability of all parties and joint defusing of risks. The PBC and the CBIRC have established a working mechanism of "joint discussions and joint research," to promptly announce key risk situations and progress in defusing risks. **A plenary meeting of the four-bank (ICBC, ABC, BOC, and CCB) cross-border crisis management working group was convened in 2019.** The meeting reviewed the four banks' updates to recovery and resolution plans, and required the four banks to continually improve stress testing, improve early warning systems, strengthen the operability of recovery plans, strengthen consolidation management, and closely track the potential effects on recovery and resolution plans of reforms to loan prime rates and other financial policies.
The PBC should formulate a formal emergency liquidity bail-out framework.	Highest,	Medium-term measures	No updates.
Upgrade the institutional design of various types of protection funds to limit moral hazard.	Medium		**Regarding deposit insurance funds,** we have continued to successfully perform basic tasks such as premium collection and fund management and improved mechanisms for risk-adjusted premium rates. The risk conditions of insured institutions are monitored quarterly, verification work has intensified, and the risk correction role of risk warnings and early corrective actions have been developed in concert with the relevant agencies.

			Regarding trust protection funds, based on a comprehensive assessment of existing trust protection mechanisms, the relevant systems for trust protection funds have been actively studied and improved. **Regarding insurance protection funds,** we have studied and explored risk premium rates, and a risk premium rate collection system (draft proposal) has taken shape, to guard against moral hazard and adverse selection in insurance companies. Intensive research has begun into the scope and standards for policy relief, and the basic train of thought and initial recommendations for revising the scope and standards of policy relief have been proposed.
Inclusive finance			
Upgrade the legal, regulatory, and supervision framework for financial technology.	Medium		**The PBC resolutely upholds the "two-handed grasp" of development and supervision.** Concurrent with promoting the implementation of the *Financial Technology (FinTech) Development Plan*, the PBC has strengthened the top-level design of financial technology supervision and accelerated improvements to achieve a financial technology supervision framework that has innovative supervision tools as the foundation, supervision rules at its core, and digital supervision as its means. **First,** the design of tolerant, prudent, and highly flexible trial and error and fault tolerance mechanisms for innovation has been actively explored, focusing efforts on creating innovative financial technology supervision tools that are in accord with national conditions in China and are in line with international standards. Pilot projects have begun in nine regions: Beijing, Shanghai, Chongqing, Chengdu, Shenzhen, Guangzhou, Xiong'an, Hangzhou, and Suzhou. **Second,** the digital supervision capabilities have been strengthened, fully developing the key roles of production factors including data and technology, using artificial intelligence means including natural language processing, knowledge graphs, and deep learning to achieve the formalization, digitization of, and procedure-based supervision rules, increasing the depth and breadth of regulatory penetration, and accelerating the process of blessing FinTech supervision with data and arming it with technology. **The CBIRC has actively strengthened its study of financial technology,** and is conducting research into the application of financial technology by banking and insurance institutions, sorting through the situations and accumulating materials, so that it is able, at the appropriate time, to formulate basic supervision rules for the application of artificial intelligence, blockchain, and biometrics in the financial field, and formulate and introduce guiding opinions to promote the healthy development of financial technology in the banking and

			insurance industries, in order to perfect the system of rules for the supervision of financial technology. **The CSRC attaches great importance to financial technology supervision work and is continually improving financial technology supervision systems and frameworks.** It has established a financial technology supervision working committee and a technology supervision bureau, to form a four-in-one system of technology supervision work, comprising the technology supervision bureau, information center, China Securities Data, and China Securities Technology Co., Ltd. The work that has begun and is underway includes: First, in accordance with the *Provisions on the Administration of Filings by Securities Service Institutions Engaging in Securities Services*, improvements are being made to the administrative requirements for filings by securities and fund information technology service institutions, to begin filing administration work according to law and include information technology service providers that provide financial technology services in the scope of administration. Second, the *Notice Concerning Successfully Carrying Out Filing Work for the Mobile Application Software of Securities and Futures Broker-Dealer Institutions* was distributed, requiring securities and futures broker-dealer institutions to complete filing work for mobile apps. Third, based on the *Guiding Opinions on Promoting the Healthy Development of the Financial Technology Industry*, arrangements have been made for stock exchanges and other industry institutions to explore and initiate pilot programs for innovative capital market financial technology. Fourth, relevant technical standards for financial technology have been formulated and published.

INTERNATIONAL MONETARY FUND

PEOPLE'S REPUBLIC OF CHINA

STAFF REPORT FOR THE 2020 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

December 2, 2020

Prepared By

Asia and Pacific Department
(In consultation with other departments)

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FUND RELATIONS

(As of October 31st, 2020)

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

General Resources Account:

	SDR Million	% Quota
Quota	30,482.90	100.00
Fund holdings of currency	24,287.99	79.68
Reserve position in Fund	6,194.95	20.32
Lending to the Fund		
New Arrangements to Borrow	679.66	

SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	6,989.67	100.00
Holdings	7,937.72	113.56

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				
	2020	2021	2022	2023	2024
Principal		0.00	0.00	0.00	0.00
Charges/interest		0.09	0.09	0.09	0.09
Total		0.09	0.09	0.09	0.09

Exchange Arrangements:

China's de facto exchange rate regime has been classified as other managed arrangement, effective June 22, 2018. The previous classification was crawl-like against the basket of currencies in the CFETS index since June 1, 2017. 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 percent 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 percent 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.

RELATIONS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

World Bank: https://www.worldbank.org/en/country/china

Asian Development Bank: https://www.adb.org/countries/prc/main

STATISTICAL ISSUES

(As of November 20, 2020)

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 and quarterly GDP by expenditure is compiled at constant prices but is not published. Quarterly estimates of GDP are cumulative. Limited expenditure components' contributions to GDP are 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 index of services production, 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. The index is compiled using weights derived from 2015 household expenditures. However, the weights are not published. The PPI is aggregated according to the structure of the economy in 2015 but would benefit from expansion of coverage to include services activities. The NBS publishes residential property price indices (RPPIs) for selected cities. The indices are compiled following a basic mix-adjustment methodology (by size). A national composite index covering new and second-hand properties is not compiled.
Government Finance Statistics: Serious data shortcomings continue to hamper fiscal analysis. Comprehensive 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, few improvements have been made in monetary and financial statistics. 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.
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. China reports data on some key series and indicators of the Financial Access Survey (FAS), including the two indicators adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

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, and from semi-annual to quarterly frequency from the first quarter of 2019.

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 (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. Similar information is also available on the website of the State Administration of Foreign Exchange (SAFE). 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. However, with the transition to BPM6, data gaps remain in the BOP pertaining to the relevant series of workers remittances, merchanting, and primary income data (portfolio investment income). Regular training programs for staff in the provincial offices of SAFE have been recommended, aiming at improving the granularity of the primary and secondary income accounts.
China has made considerable efforts to improve 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 and no breakdown is available between equity and debt instruments; (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. The latter does not include the coverage on currency composition of reserves by groups of currencies at least once a year.

There remains a need to strengthen external debt monitoring and compilation, including dissemination of granular data for the CDIS. 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.

Table 1. China: Common Indicators Required for Surveillance
(As of November 20, 2020)

	Date of Latest Observation	Date Received	Frequency of Data[9]	Frequency of Reporting[9]	Frequency of Publication[9]
Exchange rates	Oct 2020	Nov 2020	M	M	M
International reserve assets and reserve liabilities of the monetary authorities[1]	Sep 2020	Oct 2020	M	M	M
Reserve/base money	Sep 2020	Oct 2020	M	M	M
Broad money	Sep 2020	Oct 2020	M	M	M
Central bank balance sheet	Sep 2020	Oct 2020	M	M	M
Consolidated balance sheet of the banking system	Sep 2020	Oct 2020	M	M	M
Interest rates[2]	Sep 2020	Oct 2020	M	M	M
Consumer price index[3]	Oct 2020	Nov 2020	M	M	M
Revenue, expenditure, balance and composition of financing[4]—general government[5]	2019	May 2020	A	A	A
Revenue, expenditure, balance and composition of financing[4]—central government	Oct 2020	Nov 2020	M	M	M
Stocks of central government and central government-guaranteed debt[6]	2020Q2	Sep 2020	Q	Q	Q
External current account balance	2020Q3	Nov 2020	Q	A, Q	A, Q
Exports and imports of goods and services[7]	Sep 2020	Oct 2020	M	M	M
GDP/GNP[8]	2020Q3	Oct 2020	A, Q	A, Q	A, Q
Gross external debt	2020Q2	Sep 2020	A, Q	A, Q	A, Q
International investment position	2020Q2	Sep 2020	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) and the economic classification of expenditures 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 and services trade data are both provided monthly, with services trade data release slightly lagging goods trade data release.
[8] For GNP, level data are available only on an annual basis.
[9] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

CAPACITY DEVELOPMENT AND TECHNICAL ASSISTANCE

Table 2. China: Summary of Capacity Development and Technical Assistance, 2011–20 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	Tax Policy for promoting entrepreneurship and employment	September 2017
FAD	Social security contributions	March 2018
FAD	VAT policy	September 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	Tax administration—outbound investment and Taxpayer services	October 2017
FAD	Evaluate implementation of multi-year tax administration modernization	January 2018
FAD	Tax administration—performance measurement	March 2018
FAD	Tax administration--PIT	November 2018
FAD	Workshop and report on tax modeling and analysis	April 2019
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

Table 2. China: Summary of Capacity Development and Technical Assistance, 2011–20 (continued)

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 Market Development	April 2016
FAD	Expert visit on Treasury – Central Bank Coordination	June 2016
FAD	Workshop on Medium-term Expenditure Frameworks	April 2017
FAD	Government accounting and financial reporting	April 2018
FAD	Performance Budgeting	April 2019
FAD		
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
STA	Quarterly National Accounts	March 2019
Monetary Policy, Bank and financial Supervision, and AML/CFT		
LEG	AML/CFT Legislative Drafting	March 2011
LEG	Bank Resolution	May 2012
MCM	Seminar on Article VIII of IMF's Articles of Agreement	July 2017
MCM	Securities Markets Supervision Workshop	September 2017
MCM	Mission on Securities Market Supervision	March 2018
MCM	Regulatory and Prudential Framework	August 2018
MCM	Financial Sector Technical Assistance	September 2018
MCM	Financial Sector Technical Assistance	November 2018
MCM	Monetary Policy Implementation and Operations	January 2019
MCM	Financial Sector Technical Assistance	January 2019
MCM	Financial Sector Technical Assistance	April 2019
MCM	Workshop on Sovereign Bond Futures Market	April 2019
MCM	Indicator-based Framework for Systemic Risks Monitoring	May 2019
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

Table 2. China: Summary of Capacity Development and Technical Assistance, 2011–20 (continued)

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
MCM	Course on External and Systematic Financial Risks	July 2017
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

Table 2. China: Summary of Capacity Development and Technical Assistance, 2011–20 (concluded)

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
STA	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
ICD	Monetary and Fiscal Policy Analysis with DSGE models	August 2018
ICD	Monetary and Fiscal Policy Analysis with DSGE models(advanced)	August 2018
MCM	Stress Testing and Systemic Risks I	October 2018
ICD	Financial Programming and Policies	October 2018
ICD	Inclusive Growth	December 2018
MCM/ICD	Adapting Financial Supervision to New Financial Technologies	January 2019
SPR	Debt Sustainability Framework in Low-Income Countries and Fund Policies	February-March 2019
MCM	Stress Testing and Systemic Risk II	March 2019
ICD/MCM	Financial Markets and Instruments	April 2019
ICD	Financial Sector Policies	April 2019
ICD	Macroeconomic Diagnostics	May 2019
MCM/ICD/LE	Managing Capital Flows	May 2019
ICD	Financial Sector Surveillance	June 2019
STA	Debt Securities Statistics	June 2019
ICD	Monetary & Fiscal Policy Analysis with DSGE Models-Advanced Workshop	September 2019
ICD	Fiscal Sustainability	September 2019
LEG	Current International Issues in Tax Law Design	September 2019
MCM	Bank Restructuring and Resolution	September 2019
ICD	Macroeconomic Diagnostics	October-November 2019
STA	Cross-Border Position Training	November 2019
ICD	Financial Programming and Policies	December 2019
SPR	Virtual Workshop on Debt Sustainability Analysis and IMF Policies	July 2020
MCM	Virtual Course on Stress Testing and Systemic Risk	September 2020
ICD	Virtual Course on Macroeconomic Diagnostics	October 2020

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 Jin Zhongxia, Executive Director for People's Republic of China,
Zhengxin Zhang, Alternate Executive Director, and
Yun Liu, Senior Advisor to Executive Director
December 17, 2020

Our authorities would like to thank staff and management for the constructive policy dialogue during this year's Article IV consultation. We greatly value staff's timely and well-focused analysis, especially during these challenging times. We also appreciate staff's professionalism and hard work under the exceptional pandemic circumstances. The authorities broadly view staff's assessment has been robust. As the Chinese economy continues to steadily recover from the COVID-19 shock, the authorities remain committed to pursuing prudent policies that will foster sustainable and high-quality growth going forward.

I. Crisis Response

COVID-19 has posed an unprecedented shock to the Chinese economy. The authorities have responded rapidly and decisively with comprehensive, stringent, and transparent containment measures, which focused on timely detection, targeted control, thorough tracing, and effective treatment. A set of measures were also implemented to mitigate the economic and social fallout. Specifically:

- Strong and exceptional fiscal support was put in place to offset the negative impact of COVID-19. China's budgetary deficit is projected to increase by RMB 1 trillion this year, reaching over 3.6 percent of GDP. Taxes and fees relief amounting around RMB 2.5 trillion is expected to reduce operational costs of the corporate sector and support manufacturing and small businesses in particular. The authorities issued RMB 1 trillion special central government bonds. The local authorities also increased the issuance of their own special purpose bonds of RMB 3.75 trillion for infrastructure investment and containment measures. Public health expenditures directly related to COVID-19 prevention and control increased by 66.1 percent in the first three quarters.

- Fiscal support has targeted the most vulnerable households and firms. This was achieved by increasing transfers and unemployment benefits, as well as strengthening the social security system. In the first three quarters, expenditure on social security and employment subsidies has increased by 8.2 percent. The authorities have introduced an unemployment allowance scheme, raised unemployment insurance benefits, prioritized budget arrangements for people's livelihood, and intensified supervision of the use of funds.

- The People's Bank of China (PBC) has taken timely action to respond to COVID-19 while supporting high-quality economic development. The PBC's supportive measures have amounted to around 9 percent of GDP. Since the beginning of this year, RMB 1.75 trillion of liquidity has been released into the banking system by lowering the RRR three times, and RMB 1.8 trillion of liquidity has been provided through central bank lending and discount

window. The weighted average interest rate of newly issued corporate loans declined to 4.64 percent at the end of June 2020, 48 basis points lower than that of the end of 2019. The main interest rates in the money and bond markets are also significantly lower compared to the previous year. At the same time, a range of financial support measures have been taken to support the real economy, targeting the severely affected SMEs and micro enterprises.

II. Recent Economic Developments

As a result of the authorities' forceful response, the outbreak was brought under effective control. That in turn has allowed for the resumption of people's work and production, and paved the way for a steady recovery. In the first three quarters of this year, the Chinese economy recorded a positive 0.7 percent growth. Recent data indicate that the pickup in growth momentum has been broad-based, including the industrial and service sectors. The growth of retail sales of consumer goods in October accelerated to 4.3 percent year-on-year, while domestic traveling has rebounded notably. The manufacturing PMI has been staying above 50 for nine consecutive months. Other indicators have also pointed to a steady recovery – consumer prices and employment rates have remained basically stable, while FDI has continued to grow. The total value of import and export of goods in the first ten months increased by 1.1 percent year-on-year, of which exports increased by 2.4 percent and imports declined by 0.5 percent. China's steady recovery has also contributed substantially to the global recovery.

The Chinese economy is facing increasing external uncertainties and risks, including resurgences of infections, weak global demand, and heightened geopolitical tensions. However, we are confident that China's substantial growth potential and resilience remain quite solid. Given the fast-evolving external environment and huge domestic consumption growth potential, the authorities have adopted a "dual (internal and external)–circulation" development pattern, relying more on domestic demand as the main driver for growth while broadening access to Chinese markets and expanding international economic cooperation. Supported by concerted efforts in COVID-19 control and a quick and steady economic recovery, the Chinese economy is expected to register a positive growth of about 2 percent in 2020 and contribute to the global recovery. As we move into 2021, the first year of China's 14th Five-Year Plan, we are confident that growth is expected to pick up further from a relatively low base this year.

III. Broader Policy Issues

Fiscal Policy

As a result of the economic slowdown and the government's response to COVID-19, China's fiscal revenue declined 5.5 percent year-on-year in the first 10 months of this year. However, tax revenue increased by 11.2 percent in October, the highest single-month growth so far this year. With the economy recovering steadily, we expect fiscal revenue to continue to improve next year. Going forward, the authorities are committed to continue a proactive fiscal policy, with an

emphasis on improving its effectiveness, while making more efforts to prevent and mitigate potential risks associated with local government debt.

We want to reiterate our disagreement with staff's concept of augmented deficit and debt, which cannot accurately reflect China's public debt and deficit in some important aspects. A major reason for our disagreement arises from the treatment of those debts issued by local government financing vehicles (LGFVs) after 2014. It is important to note that the debt burden of LGFVs issued after 2014 is borne by issuers themselves, and are not legally recognized by the Chinese government. Thus, these parts of LGFV debt should be considered as corporate debt rather than public debt.

Monetary Policy

China continues to have policy space to pursue prudent monetary policy in a flexible, fine-tuned, and targeted manner with an aim to balance growth and manage risks. The PBC will use a variety of policy tools to ensure appropriate and sufficient liquidity while avoiding "flooding" the financial system. Efforts will be made to enhance structured monetary policy tools to ensure precise liquidity injection and enable the policies to provide more direct support for the real economy. Policy measures – especially those assisting small, micro, and private companies, stabilizing employment, and promoting green development – will be continued to support the "dual-circulation" development pattern.

The RMB's purchasing power has remained basically stable, and its exchange rate moved in both directions based on market supply and demand with increased flexibility. The PBC has had little FX interventions in recent years. Going forward, the PBC will continue to maintain the flexibility of the RMB exchange rate and rationalize market expectations, so as to keep the RMB exchange rate at an adaptive equilibrium level. China has fulfilled the data disclosure commitment to the Fund regarding the inclusion of RMB into SDR basket. We will continue to improve the quality of our data reporting based on the rules of the Fund.

Managing Financial Sector Risks

China's financial system remains broadly stable and resilient. Prior to COVID-19, excessive growth in the macro leverage ratio has been effectively brought under control. As a result of counter-cyclical adjustments in response to COVID-19, the macro leverage ratio has increased. With the steady recovery of the economy, we expect the macro leverage ratio to stabilize and decline gradually. The authorities have taken differentiated and tailored policies for troubled banks. Major risks have been resolved in an orderly manner and market discipline has been strengthened. The recent stress test shows that the banking sector is resilient to severe shocks, with risks facing most small- and medium-sized banks well under control, and the overall loss absorption capacity of the banking sector remaining strong. As of the end of 2020 Q3, the capital adequacy ratio and the non-performing loan (NPL) ratio of the banking sector were 14.41 percent and 1.96 percent respectively. The PBC and China Banking and Insurance Regulatory

Commission (CBIRC) have recently asked commercial banks to make full use of options to increase provisions and strengthen non-performing loan resolution.

The authorities have also further strengthened the institutional and legal underpinning of its financial regulatory and supervisory framework. The PBC has recently issued a draft of the amended *Law of the People's Bank of China*, strengthening the PBC's operational authority and its role in overseeing the financial sector, and also providing legal basis for issuing digital RMB. The proposed amendments will strengthen macro-prudential management, and coordinate supervision of systemically important financial institutions and financial holding companies.

The draft version of the amended *Commercial Bank Law* was also issued in October 2020. The proposed amendments will focus on further improving governance, enhancing the core role of the board of directors and independent directors, strengthening macro-prudential and risk management requirements, and raising penalties for violations in the commercial banking sector. Meanwhile, the authorities also strengthened the orderly bank resolution mechanism through risk rating and alerting, early correction, restructurings, takeovers, and bankruptcies to address weak banks. New requirements regarding the protection of the rights of financial consumers have also been introduced.

The financial regulators have recently further refined the fintech regulatory framework and strengthened the coordination between China's regulatory authorities. The State Administration for Market Regulation (SAMR) recently issued a consultation draft of the *Anti-Monopoly Guidelines on the Sector of Platform Economies* aiming at preventing monopolistic behavior by internet platforms to ensure fair competition and strengthen anti-monopoly law enforcement. Under the new regulatory framework, all companies engaged in financial business must be subject to financial supervision. Measures to contain risks related to internet financing and illegal fund-raising have also been strengthened.

The policy response to Covid-19 will inevitably incur some costs to the economy. Both public and corporate debt level have increased significantly, the NPL ratio in banking sector will also likely to rise. The authorities are aware of these risks and are dealing with them. The measures include, among others, increasing provisioning requirements, strengthening non-performing loan treatment, raising capital for some local banks, and establishing a bank resolution mechanism.

Establishing a temporary and fiscally backed centralized resolution fund, as suggested by staff, may not facilitate formulating a market-based incentive and risk constraining resolution mechanism. Practices of some other countries have suggested that such funds have not achieved satisfactory results.

Stated-Owned Enterprise (SOE) Reform

SOE reform has made steady progress amid fighting against COVID-19, while the modern corporate governance system has been strengthened based on the principle of competitive

neutrality. A market-oriented operation system has been facilitated with the formation of a career manager system and improvement in the incentive system. So far, 95 percent of zombie firms on the national level has been disposed of, and non-viable firms have been or will be liquidated. Meanwhile, viable SOEs are making greater effort in improving efficiency and profitability to offset downward pressure. SOEs have played a pivotal role in combating COVID-19, reopening the economy, and stabilizing the job market.

Staff pointed out in Box 5 that more fundamental reform would include removing implicit guarantees. Caution should be exercised when using the perception-based "implicit guarantee" concept. The recent cases of default of bonds issued by some SOEs have once again questioned assumptions and perceptions on implicit guarantee, and investors in the market have already repriced risks. The average coupon rate for newly issued SOE bonds has reached 5.7 percent in October concerning risks of default, which is one percentage point higher than that of the first three quarters. The financing cost of Chinese companies, including SOEs, is higher than most comparable companies in developed countries, where very low or negative interest rates were set by central banks there.

Regarding progress on structural reforms in Box 5, staff pointed out limited progress in SOEs and the financial sector due to the COVID-19 crisis. Structural reforms around the world always focus on policy objectives in the medium and long term. In the near term, policy objectives should continue to focus on responses to the COVID-19 crisis while keeping the structural objectives in mind. Many countries have also adopted supportive credit measures and adjusted regulatory policies in a flexible way. Such measures are time-limited. China's progress on structural reforms should be assessed more objectively.

E-CNY

The PBC is carefully designing and testing the e-CNY and advance the work in a very cautious manner, paying special attention on protection of privacy and avoiding potential negative effects. We will actively participate international communication and discussions to work on best practices.

DSSI

China has attached great importance to the implementation of the DSSI. China's total suspended collection of debt service payments has amounted to USD 2.5 billion, and this is the largest contributor among G20 members. We will make more effort in this regard. The challenge is that total bilateral official credit only account for one third of total debt in low income countries.

Targeting Vulnerable Groups and Relieving Poverty

Staff pointed out that the pandemic has brought China's inequality challenges to the forefront, which is a point that deserves a cautious discussion. Since the outbreak of COVID-19, China has stepped up efforts to protect the livelihood of vulnerable groups through introducing a series of measures to stabilize employment, increase household income, and help people out of poverty.

The authorities have endeavored to ensure no single poor area or individual would be left behind and have committed to ending absolute poverty by 2020. All severely impoverished 832 counties in China have successfully eliminated absolute poverty by this November. In the first three quarters of this year, the income gap between urban and rural households has further narrowed, with the real rural per capita income growing 1.9 percentage points faster than that of urban per capita income, and the ratio of urban to rural per capita income narrowing to 2.67 from 2.75 a year earlier. Based on a consistent national standard, the number of people who live in poverty has been reduced from 98.99 million at the end of 2012 to 5.51 million at the end of 2019. The low income and fragile people in China have benefited the most from China's successful containment of COVID-19, through reduced or avoided unemployment and free treatment of COVID-19 cases by the country's medical system.

Trade

The COVID-19 and unfair export control measures taken by the U.S. have undoubtedly had an impact on Chinese purchases of U.S. goods and services this year. The two sides should work together and step up cooperation to get out of this difficult time. Restrictive and discriminatory action against Chinese firms should be stopped to create conditions for the implementation of the Phase 1 trade deal. It is imperative that countries enhance mutual trust, share information, refrain from trade restrictions, and take strong measures to maintain the normal functioning of the global supply chains. In this regard, the recent signing of the Regional Comprehensive Economic Partnership (RCEP) agreement represents a new milestone for international economic integration. The COVID-19 crisis has also further highlighted the importance of maintaining a multilateral trade system and strengthening international cooperation, while making joint efforts to reform the WTO in a good faith and win-win approach. That said, we concur with staff that China and its trading partners should work together to build a more open, stable, and transparent rules-based international trade system.

The "dual circulation" development strategy is an answer to the changing internal and external environment and uncertainty. China is one of the few largest single-country markets in the world. This market has big potential for much deeper division of labor and improvement in supply chains, and is the basis and bottom line of our growth. The technology decoupling advocated by some people is a policy against a whole large country, with a population accounting for one fifth of global population, which is against historic trend. China will continue to expand global economic linkage and cooperation to enhance its economic efficiency and resilience. The signing of the RCEP free trade agreement, the negotiation of bilateral investment agreement with EU, the continued effort to reform WTO, and the negotiation and implementation of trade deal with the USA, are all part of this effort.

We share staff's observation that China's current account surplus is expected to temporarily widen this year, mainly reflecting the surge in pandemic-related exports, declines in outbound tourism and commodity prices.

Opening Up

The authorities remain committed to opening up and jointly fostering development opportunities with other countries. Earlier this year, the *Foreign Investment Law,* aiming at providing a more reliable and friendly business environment, came into effect. Despite COVID-19, the pace of opening up in China has continued to step up this year. China is working towards full implementation of the "Pre-establishment National Treatment Plus Negative List" management system for foreign investment. The items on the national negative list for foreign investment have been shortened from 40 to 33. In the wake of COVID-19, China has adopted a range of pro-business policies that apply equally to all companies, including foreign firms, that have been registered in China. China has been resolutely pushing forward the opening up of the financial industry to create a market-oriented, law-based international business environment. From January to September this year, foreign investors have increased their holdings of interbank-market bonds by RMB 719.1 billion. Going forward, China will continue to strengthen intellectual property protection to safeguard the legal rights and interests of foreign investors.

Climate Change

The authorities are committed to building a low-carbon, safe, and efficient energy system. President Xi recently announced that China aims to have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060. The authorities will actively improve the policy framework to boost the green recovery and implement the new development approach. At the end of 2019, China's carbon intensity declined by 48.1 percent from the 2005 level, while the share of clean energy in China's total energy consumption further increased to 23.4 percent, compared to 22.1 percent one year ago. Carbon emissions per unit of GDP in China have fallen by more than 50 percent from 2005 to 2019. China has also established the carbon trading market, covering high-carbon emitting industries. As of August 2020, cumulative transactions reached RMB 9.3 billion. China has also established one of the most developed green bond markets in the world, and the central bank has recently issued its comprehensive policy guidance to further implement the green financing agenda in both banking system and capital market.

Going forward, China will actively support a green recovery through green finance, innovative green financial products, more investments into green industries in line with market principles, and a low-carbon green growth model. Meanwhile, climate change mitigation requires comprehensive and global action. China will continue to promote the establishment of a fair, reasonable, and win-win global climate governance system, and strives to fulfill its global responsibilities commensurate with China's development level, and make contributions to build a beautiful and clean world.

IV. Other Issues

While we largely share the staff's assessment, there are both underestimation and overestimation on a few issues. The positive impact and externality of many government led projects, such as infrastructure investment, have been underestimated. Unlike the development banks, the Fund usually calculates financial returns, not economic returns. In this way, it has ignored the

increased capacity and treated it as a pure burden of further growth. On the other hand, when staff say “China can lead on global solutions to overcome global crisis”, we feel it an over-estimation and actually a reflection of lack of inclusive leadership and a call for more multilateral cooperation. We will no doubt to make initiative when necessary, and make our contribution to the joint effort of the international community to overcome global crisis.

In this economic platform, I would refrain from responding to individual Director’s accusation on China’s policy to safeguard sovereignty and social stability in HK SAR and XinJiang province. They are basically a legacy issue of colonialism, or issues related to anti-extremism and anti-terrorism.

Lastly, I would like to thank Mr. Geoffrey Okamoto for your leadership. We also thank Mr. Kenneth Henry Kang, Mr. Helge Berger and the entire China team for their arduous and professional work.