IMF Country Report No. 20/39

JAPAN

February 2020

2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR JAPAN

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 2019 Article IV consultation with Japan, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its January 30, 2020 consideration of the staff report that concluded the Article IV consultation with Japan.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on January 30, 2020, following discussions that ended on November 25, 2019, with the officials of Japan on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 14, 2020.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Japan.

The document listed below has been or will be separately released.

Selected Issues

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

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FOR IMMEDIATE RELEASE
February 10, 2020

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

IMF Executive Board Concludes 2019 Article IV Consultation with Japan

On January 30, 2020, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Japan.

The Japanese economy is growing above its estimated potential, despite a significantly weaker external environment. Private consumption and public spending supported growth in the first three quarters of 2019, while exports and export-driven investment have softened in line with weaker external conditions. The two-percentage point increase in the consumption tax rate in October 2019 appears to have had less impact than the last rate increase in 2014, due in part to government countermeasures. Real GDP growth is estimated to be above potential in 2019 at 1.0 percent. While the output gap is narrowing and labor markets remain tight, overall wage growth and inflation expectations remain stagnant. CPI headline inflation and the BOJ’s core-core inflation (excluding fresh food and energy) have risen in recent months but remain below the Bank of Japan’s two-percent inflation target.

Japan’s external current account surplus is estimated to have shrunk in 2019 to about 3.3 percent of GDP, reflecting a smaller goods trade balance due to adverse external conditions. Japan’s income surplus—arising from its large net foreign asset position and high net returns—accounts for the bulk of its current account surplus. Over the last four decades, the current account surplus has been relatively stable, with rising corporate savings being offset by public sector and household dissaving. Through November 2019, the yen appreciated by 2.5 percent (in real effective terms) relative to end-2018, although markets remain volatile reflecting changes in global risk aversion and the monetary policy stances of major central banks. As with the *2019 External Sector Report*, the 2019 external position is preliminarily assessed as broadly consistent with medium-term fundamentals and desirable policies.

Underlying growth is expected to remain resilient, bolstered by fiscal and monetary support, with near-term inflation reaching about one percent. Macroeconomic challenges will increase as

[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.

demographic headwinds intensify. Supportive near-term fiscal policy and continued monetary accommodation will help sustain growth momentum and support reflation, while there is a need for gradual fiscal adjustment and consolidation, given fast-growing age-related expenditures. Structural reforms will lift long-run growth and support reflation, while strengthened financial sector policies will help contain the build-up of systemic risks. Over the medium term, growth is projected to moderate to near potential and the output gap will gradually close. Headline inflation is expected to edge up slowly but remain below the Bank of Japan's two-percent target.

Executive Board Assessment[2]

Executive Directors welcomed Japan's resilient economic growth performance despite external headwinds. Directors noted that inflation remains below target and downside risks weigh on the outlook, including from adverse demographics and weaker global growth. Against the backdrop of an aging and shrinking population, which has become central to Japan's macroeconomic policies and outcomes, Directors emphasized the need to strengthen the mutually reinforcing policies of "Abenomics" and accelerate reforms to achieve sustained high growth, durable reflation, and public debt sustainability.

Directors agreed that monetary policy should remain accommodative while improving coordination with financial sector policies to enhance the sustainability of monetary stimulus and mitigate risks to financial stability. They highlighted the importance of clear communication of policy guidance to markets. Directors considered that the current monetary policy framework is working well under the circumstances, although there may be scope to explore possible options to strengthen the framework over time with a view to further improving policy flexibility and credibility.

Noting the challenges associated with prolonged low interest rates and rising demographic pressures, Directors stressed the need to proactively strengthen the resilience of the banking sector. They encouraged the authorities to consider tightening macroprudential policies and stand ready to activate the countercyclical capital buffer. They also recommended that efforts continue to further improve financial sector supervision and regulation, the risk assessment process, and the macroprudential policy toolkit. Directors were encouraged by progress made in implementing the 2017 FSAP recommendations. They welcomed the authorities' close engagement with regional financial institutions to help them adapt their business models.

Directors welcomed the recent fiscal stimulus package and agreed that a broadly neutral fiscal stance is appropriate for the near term. They noted that a medium-term fiscal framework that is well specified and underpinned by realistic assumptions would help ensure fiscal sustainability,

[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.

lower policy uncertainty, and increase investor and consumer confidence. Directors recommended consideration of options to further strengthen the redistribution effects of taxation, improve incentives to reduce energy use, and cushion the impact of the consumption tax rate increase on the most vulnerable. They also highlighted the need to reform healthcare and public social security programs to improve spending efficiency, pension sustainability, and intergenerational equity.

Directors welcomed the ambitious agenda of structural reforms aimed at supporting reflation, productivity, labor supply, and growth. They considered labor market reforms as a priority, particularly measures to improve the 2018 Work Style Reform and increase the participation of female, elderly, and foreign workers. Directors encouraged continued efforts to ease regulations on product and service sectors, deepen corporate governance reform, and facilitate alternative sources of financing for small- and medium-sized enterprises. They commended the authorities for promoting climate change awareness and advancing mitigation and adaptation policies.

Directors took note of the staff's preliminary assessment that Japan's 2019 external position is assessed to be broadly consistent with fundamentals and desirable policies. They noted that a medium-term fiscal consolidation plan and bolder structural reforms that support domestic demand are needed to maintain external balance. Directors also commended the Japanese authorities for their commitment to further advance multilateralism.

Directors welcomed progress in combating the supply side of transnational corruption and encouraged further steps to improve enforcement of foreign bribery cases.

Japan: Selected Economic Indicators, 2017–21

Nominal GDP: US$ 4,954 Billion (2018) GDP per capita: US$ 39,166 (2018)
Population: 126 Million (2018) Quota: SDR 30.8 billion (2018)

	2017	2018	2019	2020	2021
			Est.	Proj.	
	(In percent change)				
Growth					
Real GDP	2.2	0.3	1.0	0.7	0.5
Domestic demand	1.6	0.3	1.1	1.0	0.6
Private consumption	1.3	0.0	0.5	-0.1	0.6
Business investment	4.0	2.1	1.7	1.0	3.0
Residential investment	1.7	-6.7	2.4	-1.7	0.1
Government consumption	0.2	0.9	2.1	2.8	0.4
Public investment	0.5	0.3	2.7	5.5	-6.1
Stockbuilding	0.1	0.0	0.1	-0.1	0.0
Net exports	0.5	0.0	-0.2	-0.2	-0.2
Exports of goods and services	6.8	3.4	-1.8	-0.4	2.0
Imports of goods and services	3.4	3.4	-0.6	0.6	2.8
Output Gap	-0.3	-0.7	-0.3	-0.2	-0.3
	(In annual average)				
Inflation					
Headline CPI	0.5	1.0	0.6	1.1	1.2
GDP deflator	-0.2	-0.1	0.6	1.0	0.5
	(In percent of GDP)				
Government					
General government					
Revenue	34.2	33.8	34.0	34.6	34.6
Expenditure	37.3	37.4	37.6	38.0	37.4
Overall Balance	-3.1	-3.6	-3.6	-3.5	-2.8
Primary balance	-2.7	-3.3	-3.4	-3.5	-2.9
Structural primary balance	-2.9	-3.1	-3.3	-3.4	-2.8
Public debt, gross	234.6	237.9	239.0	239.8	241.1
	(In percent change, end-period)				
Macro-financial					
Base money	9.7	5.0	6.6	6.1	5.2
Broad money	3.5	2.4	2.8	2.0	2.2
Credit to the private sector	4.0	1.5	2.9	2.5	2.5
Non-financial corporate debt in percent of GDP	138.5	141.2	142.5	143.4	144.8
	(In percent)				
Interest rate					
Overnight call rate, uncollateralized (end-period)	-0.1	-0.1	…	…	…
Three-month CD rate (annual average)	0.0	0.0	…	…	…
Official discount rate (end-period)	0.3	0.3	0.3	0.3	0.3
10-year JGB yield (e.o.p.)	0.1	0.1	-0.1	0.0	0.1
	(In billions of USD)				
Balance of payments					
Current account balance	202.0	175.3	170.4	180.6	184.8
Percent of GDP	4.1	3.5	3.3	3.4	3.4
Trade balance	44.1	11.6	2.5	-4.3	-10.1
Percent of GDP	0.9	0.2	0.0	-0.1	-0.2
Exports of goods, f.o.b.	688.9	735.9	701.3	681.5	693.5
Imports of goods, f.o.b.	644.9	724.3	698.7	685.9	703.6
Energy imports	117.8	148.5	130.7	124.1	117.3
	(In percent of GDP)				
FDI, net	3.2	2.7	2.8	2.9	2.9
Portfolio Investment	-1.0	1.8	1.4	1.2	1.1
	(In billions of USD)				
Change in reserves	23.6	24.0	11.0	11.5	11.5
Total reserves minus gold (in billions of US$)	1232.4	1239.4	…	…	…
	(In annual average)				
Exchange rates					
Yen/dollar rate	112.2	110.4	…	…	…
Yen/euro rate	126.7	130.5	…	…	…
Real effective exchange rate (ULC-based, 2010=100)	78.7	77.6	…	…	…
Real effective exchange rate (CPI-based, 2010=100)	75.0	74.4	…	…	…
	(In percent)				
Demographic Indicators					
Population Growth	-0.2	-0.2	-0.2	-0.3	-0.4
Old-age dependency	46.0	46.9	47.6	48.4	49.0

Sources: Haver Analytics; OECD; Japanese authorities; and IMF staff estimates and projections.

INTERNATIONAL MONETARY FUND

JAPAN

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

January 14, 2020

KEY ISSUES

Context: The rapid aging and shrinking of Japan's population has become central to macroeconomic policies and outcomes. *Abenomics*—now entering its seventh year—has eased financial conditions, reduced the fiscal deficit, and raised employment and female labor force participation. Nonetheless, reflation efforts have fallen short and under current policies the public debt-to-GDP ratio will continue to rise. Achieving sustained high growth and durable reflation will require a package of strengthened policies and accelerated reforms that exploit synergies.

Outlook: Underlying growth is expected to remain resilient, but will be increasingly challenged by slowing external demand and intensifying demographic headwinds. Growth in domestic demand is being eroded by the weaker external environment. Frontloading of private consumption ahead of the October 2019 consumption tax rate increase appears to have been smaller than in 2014—owing in part to government countermeasures. Over the medium term, growth is projected to moderate to near potential, while headline inflation is expected to edge up slowly but remain below the Bank of Japan's two-percent target.

Risks: Japan faces significant risks. Domestically, a sharper and more-protracted fall in consumption in the wake of the consumption tax rate increase is an immediate downside risk. External risks include weaker world growth, de-globalization, and an abrupt deterioration in market sentiment (heightening safe-haven yen appreciation and macro-financial risks). Medium-term risks are dominated by spillovers from adverse demographics—aging and shrinking population and labor force—and related slower growth. Risks also stem from demographic-fiscal pressures which could raise debt sustainability concerns, and the adoption of riskier asset allocations by financial institutions to support profitability as population aging accentuates the low-yield environment. Japan's macro-financial vulnerabilities, limited monetary policy space, and fiscal consolidation needs make the economy vulnerable to adverse shocks. These vulnerabilities will grow as the demographic transition continues.

Policies: The consultation centered on the macroeconomic effects of Japan's demographics. Mutually reinforcing policies are needed to lift current and expected inflation, stabilize public debt, and raise potential growth. Key elements are: (i) supportive near-term fiscal policy and continued monetary accommodation to help reflation; (ii) a well-specified fiscal framework, including gradual increases in the consumption tax rate and cuts to age-related expenditures to reduce debt sustainability risks; (iii) structural reforms to lift long-run growth and support reflation; and (iv) strengthened financial sector policies to contain build-up of systemic risks and make the accommodative monetary policy stance more sustainable.

Approved By
Odd Per Brekk and Sanjaya Panth

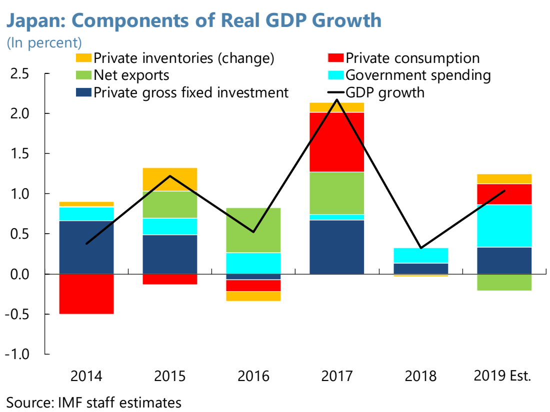
Discussions took place in Tokyo, Nagi-chō (Okayama Prefecture), and Saitama-shi (Saitama Prefecture) between November 11 and 25, 2019. The team comprised P. Cashin (mission chief), M. Colacelli, G.H. Hong, T. Hisanaga, T. Schneider, N. Westelius (all APD), and F. Vitek (MCM), C. Rebillard (RES), and S. Lizarazo Ruiz (SPR). S. Steinlein, A. Nguyen, T. Kamoshida (all OAP), and O.P. Brekk (APD) also joined the meetings, as did Japan Executive Director T. Tanaka and Alternate Executive Director K. Chikada. The Managing Director and A. Kammer (OMD), C. Rhee (APD), and G. Rice and K. Utsunomiya (both COM) joined the concluding meetings. The Managing Director met with Prime Minister Abe, Finance Minister Asō, Minister of State for Economic and Fiscal Policy Nishimura, and Bank of Japan Governor Kuroda, and held a press conference at the end of the mission. S. Abebe and A. Gjonbalaj (both APD) assisted in the preparation of this report.

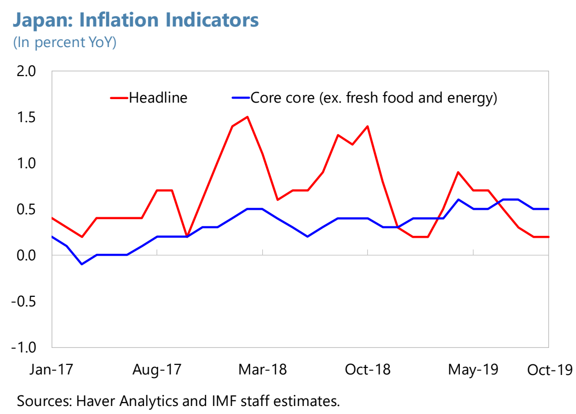
CONTENTS

ANNEXES

RECENT DEVELOPMENTS

1. **Growth is above potential despite external headwinds, but inflation momentum remains modest.** Private consumption and public spending supported growth in the first three quarters of 2019. Exports and export-driven investment have softened in line with weaker external conditions and rising uncertainty. Private consumption frontloading ahead of the October consumption tax rate increase appears to have been smaller than in 2014. However, post tax-hike, durable goods consumption decelerated as much as in 2014, while non-durable goods consumption was also dampened by typhoons.[1] Real GDP growth is estimated to be above potential at 1.0 percent in 2019. While unemployment is at its lowest rate since 1993, total hours worked are declining and the output gap remains negative.[2] Inflation expectations and wage growth remain weak (Annex I). Headline inflation momentum has eased, and core-core inflation (excluding food and energy) remains stable at around 0.5 percent.



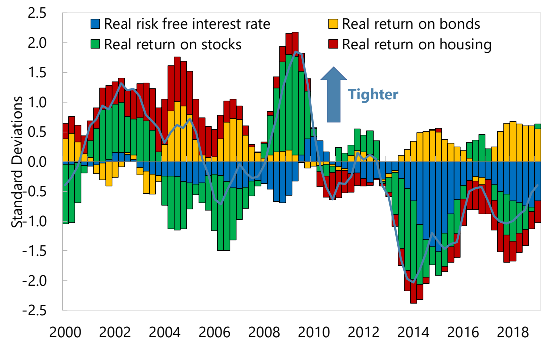


2. **Financial conditions remain loose and financial stability risks are rising.** The banking system remains well capitalized and liquid in aggregate, but the sustained low yield and highly competitive environment have compressed banks' net interest margins and undermined their profitability, spurring them to take greater risks. In their search for yield, the megabanks have increased their investment in foreign high-yield securities—including collateralized loan obligations (CLOs)—raising their dependence on foreign currency funding. Facing increasingly severe profitability challenges, the regional banks have raised their lending to financially vulnerable firms domestically, until recently expanding rapidly lending to the real estate sector. Since the returns on this lending by regional banks have not been commensurate with the risks involved, their capital adequacy ratios have been declining. To support their profitability, insurers have been shifting their investments from domestic bonds to higher yielding foreign debt instruments.

[1] See IMF (2018) Japan: Selected Issues, IMF Country Report 18/334 "The Impact of Consumption Tax Increases and Their Policy Implications for Japan" for details on the 2014 experience.

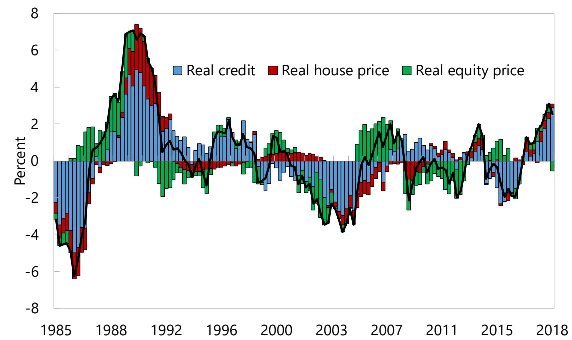
[2] See IMF (2018) Japan: Article IV Consultation—Staff Report, IMF Country Report 18/333, Annex I "Estimating Japan's Potential Output."

Japan: Financial Conditions Index



Source: IMF staff estimates.

Japan: Financial Gap

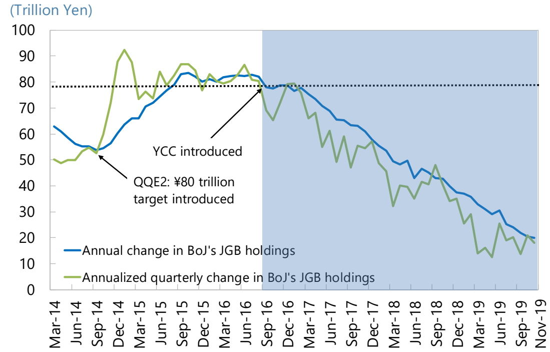


Source: IMF staff estimates.

3. The Bank of Japan (BoJ) has kept policy rates stable since 2016, while significantly reducing bond purchases. Since the introduction of its Yield Curve Control (YCC) framework in September 2016, the BoJ has maintained a negative short-term interest rate (at -10 bps) and a zero-percent yield target for 10-year Japanese Government Bonds (JGBs). This has resulted in a significant reduction in JGB purchases—reducing the annual change of JGB holdings to ¥19 trillion, well below the BoJ's current guidance of ¥80 trillion (Annex II). The BoJ has modified its forward guidance by gradually extending its commitment to keep short- and long-term interest rates at their present or lower levels, adding also in October 2019 that its interest rate policy would be state-contingent on the path of inflation. With inflation below the BoJ's two percent CPI headline inflation target, a weakening external environment, and policy easing by other major central banks, BoJ faces pressure for further stimulus.

Japan: Annual Change in BoJ's JGB Holdings, 2014-19

(Trillion Yen)



Source: Haver Analytics.

4. The consumption tax rate was increased by two percentage points as planned on October 1, together with measures to smooth demand volatility and mitigate the impact on the economy. These measures include: (i) a point-reward program for cashless payments in SMEs (Annex III); (ii) a tax allowance for automobile and house purchases; (iii) infrastructure investment; and (iv) additional spending for childcare and tertiary education. Together with a smaller rate increase (2 versus 3-percentage points in 2014), and exemption of food, non-alcoholic beverages and newspapers, these measures appear to have made frontloading of demand smaller than in 2014. However, for some durable goods, a last-minute pickup in demand was observed in September, followed by a drop in October exacerbated by the effects of Typhoon Hagibis.

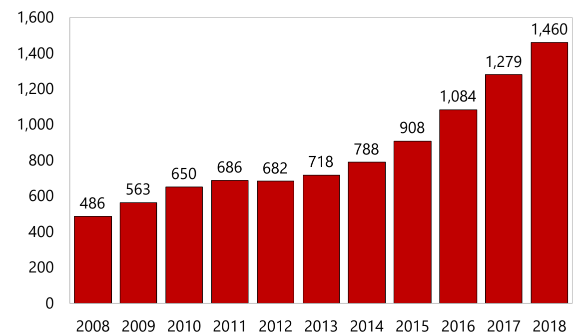
5. Structural reforms are moving forward, although the impact of some measures has been lost in the implementation process.

- *Work Style Reform*. Plans to implement "equal pay for equal work" regulations starting in April 2020 include guidelines to eliminate "irrational gaps" between regular and non-regular workers in the same firm, with oversight by national labor bureaus. However, this is unlikely to deliver higher productivity and wages as the gaps are vaguely defined and the system relies on workers' request to the firm for information and explanation of gaps. Similarly, the cap on overtime (in effect for large firms since April 2019) does not appear to have increased productivity so far as it is relatively high (100 hours per month), and survey data do not yet indicate a systematic reduction in working hours.[3] On the positive side, almost 40 percent of surveyed firms report adopting some form of flexible work style, 20 percent are overhauling performance-evaluation systems, and 20 percent are improving training.

- *Foreign labor*. A new residency status for foreign workers was enacted in April 2019 (Box 1), allowing higher inflows of specified-skilled workers into industries suffering serious labor shortages, including nursing, restaurants, construction, and agriculture. However, the relatively strict qualification requirements—in most cases workers cannot bring family members or stay more than five years, and must also pass Japanese language and skills tests—have limited the inflow of foreign workers.

- *Corporate governance*. June 2018 revisions to the *2015 Corporate Governance Code* have not substantially reduced cross-shareholding, although shareholders have reportedly increased activism and votes against management. Supporting investor activism, the Government Pension Investment Fund (GPIF) introduced incentives for its external asset managers to increase activism in the domestic equity portfolio. On the other hand, through its exchange-traded fund (ETF) purchases the BoJ has become one of the largest shareholders of listed companies, leaving less scope for activist investors. Further, the Financial Services Agency (FSA) plans to ease restrictions on banks' investments in other banks by relaxing capital requirements for non-internationally active banks to facilitate investment and support financial assistance to potentially distressed banks. Finally, the government amended the foreign investment law in November 2019, by subjecting foreign

Japan: Total Number of Foreign Workers
(In Thousand)



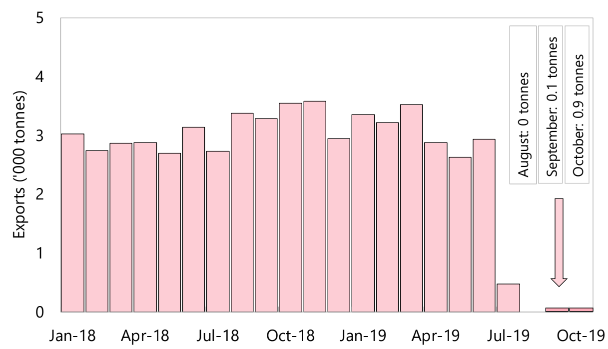
Source: CEIC.

[3] The Cabinet Agency Corporate Awareness Survey shows that while 30 percent of firms had a decline in working hours over the last year, 20 percent of firms had an increase (White Paper by the Cabinet Office "Measures to Increase Diversity," July 2019).

investment in national security-related industries to greater scrutiny (with plans to cover aerospace, electricity, telecommunications, broadcasting, railway, software).[4]

6. Japan has made substantial progress on trade relations. The *Japan-EU Economic Partnership* and the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)* took effect in February 2019 and December 2018, respectively. Japan and the U.S. signed agreements in October 2019 regarding market access for agricultural and industrial goods, as well as on digital trade, and these agreements took effect in January 2020.[5] Negotiations have advanced on the *Regional Comprehensive Economic Partnership*. Japan's strengthened procedures for exports to Korea of materials critical for producing semiconductors and displays (including hydrogen fluoride), as well as reciprocal suspension of streamlined export procedures, may have affected their exports from Japan to Korea, albeit with limited macroeconomic effects so far. Exports from Japan to Korea of automobiles and tourism have also fallen.[6]

Japan: Exports of Hydrogen Fluoride to South Korea



Source: Japan Ministry of Finance.

Authorities' Views

7. The authorites noted that the economy is expanding at a moderate pace, although the weakening global growth has affected export, production and business sentiment. The authorities highlighted that despite weakening overseas economies, corporate profits remain high, private consumption remains unaffected, and business fixed investment—particularly related to labor-augmenting technology—has supported private investment. However, the authorities also noted that inflation has been relatively weak, compared to the economic expansion and tight labor market conditions. They assessed that the consumption tax rate increase was implemented without significant trouble in October, and that their countermeasures had thus far helped contain overall consumption volatility. On trade, they plan to continue advancing bilateral and regional trade agreements. The BoJ emphasized that the reduction in JGB purchases is consistent with the

[4] For sectors designated as pertinent to national security, a proposed new rule lowers the investment threshold (from 10 to 1 percent of ownership) at or above which "prior notification with screening" is needed. For most of the remaining designated sectors, a proposed new rule would allow for an exemption from "prior notification with screening", as long as certain conditions are satisfied.

[5] On agriculture, the agreement includes lower Japanese tariffs for some products (including beef, pork, cheese, oranges, wine, almonds) and preferential U.S.-specific quotas for other products (including wheat). The U.S. agreed to reduce tariffs for certain industrial and agricultural goods imported from Japan. The agreement on digital trade with the U.S. will protect against either country imposing new restrictions on digital trade and seeks to set international precedents in areas such as data localization and protecting providers of interactive platforms from certain types of liability.

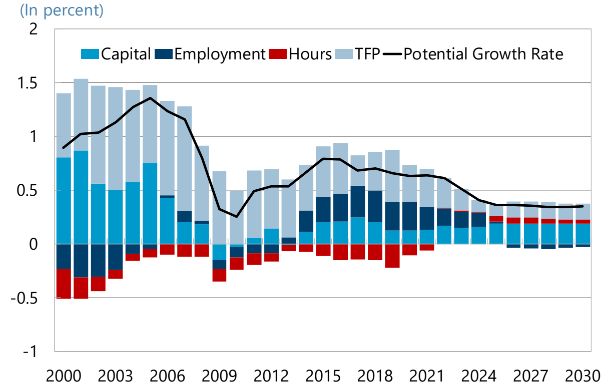
[6] See *2019 Japan: Selected Issues* paper "Japan's Boom in Inbound Tourism" which notes the high dependence on Korean tourists by some regions in Japan.

guidelines for market operations under the YCC framework and in part reflects downward pressures on yields from global developments and the recent increase in demand by foreign investors. The FSA assessed the financial system as stable, but will continue to closely monitor the functioning of financial intermediation and excessive risk taking by financial institutions.

RESILIENT GROWTH OUTLOOK AMID SIGNIFICANT RISKS

8. **The economy is expected to continue its expansion in the near term, and while inflation is edging up, is unlikely to reach BoJ's two-percent target over the medium term.** Growth in 2020–21 will be supported by domestic demand, with the assistance of the December 2019 fiscal stimulus package—offsetting an expected fall in net exports. Adverse external conditions will dampen export-driven private investment and manufacturing. However, non-manufacturing investment is expected to stay firm due to investment in labor-saving technologies. Over the medium term, external conditions will improve and support growth in converging to potential, contributing to a gradual reduction in the output gap. Expected and actual inflation are projected to remain below target under current policies.

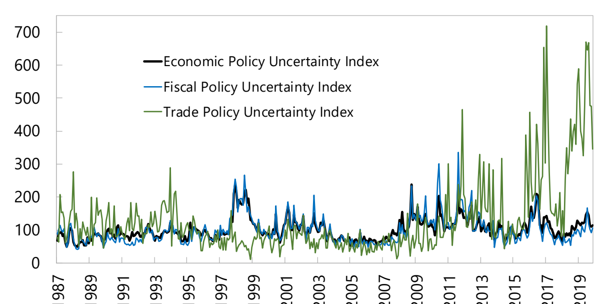
Japan: Potential Growth
(In percent)



Source: IMF staff calculations.

9. **Japan faces significant risks** (Annex IV). A rise in the Economic Policy Uncertainty Index, an increase in financial stability risks, and consumer and investor confidence at multi-year lows, all suggest a rising risk profile. Given the importance of manufacturing in the Japanese economy, a further slowdown of global manufacturing will hurt Japan's exports and investment—potentially turning into a significant downside growth risk if the slowdown spills over to services. In the event of a major downturn in economic activity, the authorities should stand ready with a coordinated policy response including growth-enhancing fiscal stimulus supported by continued accommodative monetary policy.

Japan: Economic Policy Uncertainty Index
(Index, 1987-2015 average=100)



Source: "Policy Uncertainty in Japan" by Elif C. Arbatli, Steven J. Davis, Arata Ito, Naoko Miake, and Ikuo Saito.

10. Several risks weigh on the near-term outlook (Annexes V-VI). Domestically, a sharper and more-protracted fall in consumption in the wake of the consumption tax rate increase is an immediate downside risk. External risks are dominated by weaker-than-expected global growth (particularly in China) and further de-globalization. An abrupt deterioration in market sentiment (e.g., via a disorderly Brexit or geopolitical tensions) could heighten risk aversion, safe haven yen appreciation, and macro-financial risks. Disruptions in U.S. dollar funding markets could increase the cost of funding for some Japanese banks (Annex VII).

11. Medium-term risks are dominated by spillovers from adverse demographics.

- *Financial sector risks.* The adoption of riskier asset allocations by financial institutions to support their profitability as population aging delivers a low yield environment (by supporting saving and restraining investment during the earlier pre-retirement phase of aging) may tighten their capital adequacy constraints, undermining domestic credit growth. Market risks from a collapse in equity prices could generate large valuation losses for banks, insurers and pension funds. In addition, the aging and shrinking of the population would decrease demand for financial assets, placing downward pressure on asset prices.

- *External imbalances.* Aging is expected to reduce the public and private saving-investment balance in more advanced phases of aging (particularly the post-retirement phase). On the public side, age-related fiscal spending (particularly healthcare and pensions) will rise during advanced phases of aging, increasing fiscal pressures to save during the earlier phases of aging. Related fiscal consolidation could lead to the re-emergence of excessive external imbalances if consolidation is advanced—increasing the public saving-investment balance—without a medium-term fiscal framework or structural reforms to help boost domestic demand during the earlier phases of aging.

- *Public debt sustainability and bond market stress*. Growing demographic-fiscal pressures could heighten debt sustainability concerns and trigger bond market stress. Higher risk premia could increase debt service and refinancing risks for the sovereign—with adverse feedback effects on the financial system and the real economy (Annex VIII).

- *Housing market stress.* While likely a tail risk, oversupply of housing due to a declining population could put downward pressure on house prices—raising risks for household and regional bank balance sheets.[7]

Authorities' Views

12. The authorities agreed that Japan faces a range of risks, and noted that financial institutions remain resilient to adverse shocks. The authorities consider that a longer-than-expected drag from overseas economies and heightened global uncertainty are the main risks

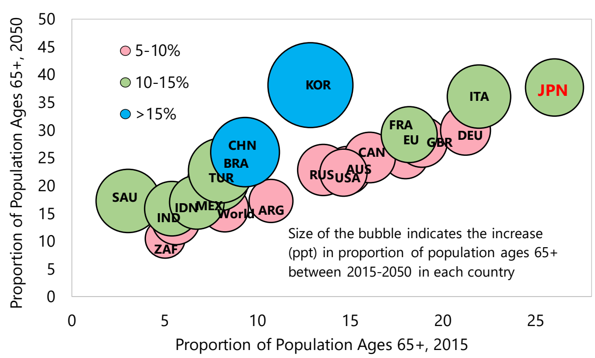
[7] See *2019 Japan: Selected Issues* paper "Disappearing Cities: Demographic Headwinds and their Impact on Japan's Housing Market."

to near-term growth. Regarding inflation, the authorities noted a flattening Phillips Curve and the sluggish adjustment of household and firm's inflation expectations as important risk factors that would constrain the increase of CPI inflation. Responding to demographic-fiscal pressures, they highlighted the social security reform package to be drawn up by mid-2020 to help maintain debt sustainability. The authorities noted that financial institutions are facing increasing profitability challenges, but argued that they remain resilient to adverse shocks, given adequate capital buffers.

ECONOMIC POLICIES FOR AN AGING AND SHRINKING POPULATION

13. Japan's macroeconomic challenges will intensify due to severe demographic headwinds.[8] Official projections anticipate that the population will age and shrink by over 25 percent in the next 40 years (Box 2).[9] This will depress growth and productivity due to a reduced and aging labor force, and magnify fiscal challenges as age-related spending rises while the tax base shrinks. Labor market rigidities also limit productivity growth and hamper pass-through of demand stimulus to real wages and prices.

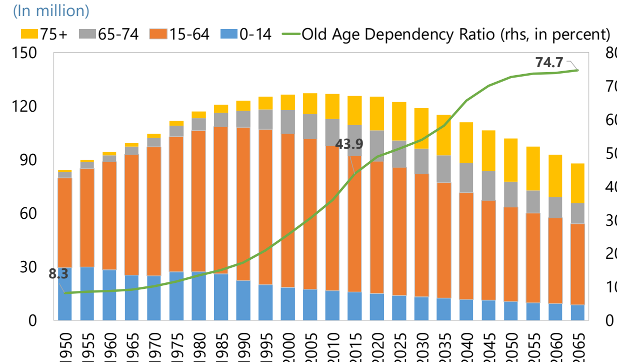
Japan: Proportion of Population Ages 65+



Source: UNDESA Population Division, World Population Prospects, 2019.

Japan: Population and Composition

(In million)



Source: Cabinet Office, White Paper on Aging (2017).

14. Abenomics—now entering its seventh year—has eased financial conditions, reduced the fiscal deficit, and raised employment and female labor force participation.[10] Nonetheless, reflation efforts have fallen short and under current policies the public debt-to-GDP ratio will continue to rise.

[8] According to projections by Japan's National Institute of Population and Social Security Research, over the next 40 years the fraction of the population aged 65 years and older will increase from 28 to 38 percent, and the total population will shrink by over 25 percent (from 127 million at present to only 95 million by 2058).

[9] See *2019 Japan: Selected Issues* paper "Japan's Fertility Rate."

[10] *Abenomics* is anchored on "three arrows"— monetary easing, flexible fiscal policy and structural reforms. For IMF work, see Botman et al. (2015*), Can Abenomics Succeed? Overcoming the Legacy of Japan's Lost Decades*, and Cashin and Schneider (forthcoming), *Economic Policies for Japan's Aging and Shrinking Population*.

Implementation of the 'third arrow' of *Abenomics* (structural reforms) has been slow. Bottlenecks remain in labor, product, and service markets, exacerbated by demographic trends.

15. Comprehensive and mutually reinforcing policies are needed to lift current and expected inflation, stabilize debt, and raise potential growth.[11] The main elements are: (i) supportive near-term fiscal policy and continued monetary accommodation to help reflation; (ii) a well-specified fiscal framework centered on gradual increases in the consumption tax rate and cuts to age-related expenditures to reduce debt sustainability risks; (iii) structural reforms to lift long-run growth and support reflation; and (iv) strengthened financial sector policies to contain build-up of systemic risks and help make the accommodative monetary policy stance more sustainable.

- *Monetary and financial policies:* BoJ's accommodative monetary policy stance should be maintained. Meanwhile, monetary and financial sector policies should be better coordinated to enhance monetary policy sustainability and mitigate financial stability risks. Specifically (i) strengthening the monetary policy framework would help lift inflation expectations and improve policy flexibility; and (ii) adjusting the YCC framework, consider tightening macroprudential policy by activating the countercyclical capital buffer, and supporting regional bank consolidation could help address low profitability and discourage excessive risk taking.

- *Fiscal policy:* Near-term fiscal and income policies should complement BoJ's reflation efforts and the implementation of structural reforms. The authorities' medium-term fiscal consolidation plan should be based on realistic growth assumptions and lay out concrete fiscal measures which will reduce policy uncertainty and boost demand, providing additional near-term fiscal space while ensuring fiscal sustainability.

- *Structural reforms:* Structural reforms are imperative to lift long-run growth potential and stabilize government debt. Deflationary supply-side effects would be offset by near-term demand that is bolstered by strengthened confidence, enhanced expectations and more effective monetary transmission (e.g., through a higher natural real interest rate).

A. Monetary and Financial Policies—Coordination and Sustainability

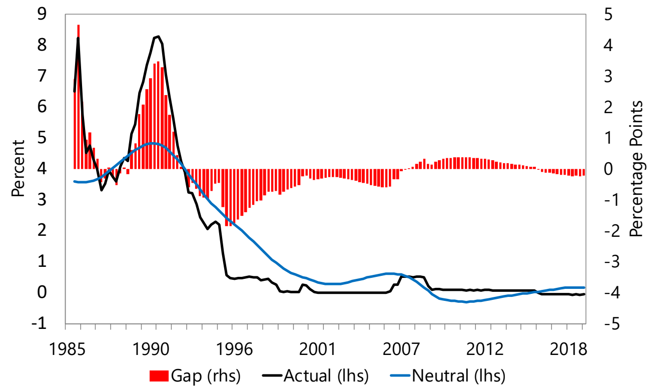
16. The YCC framework has made monetary accommodation more sustainable, but has not yet revived inflation or inflation expectations. The effective monetary stimulus of YCC—as measured through the short-term interest rate gap—has been limited. Reasons include: the low natural rate of interest due to adverse demographic trends;[12] and the inability to further reduce the real interest rate due to the effective lower bound and low inflation expectations. In the absence of structural reforms to raise the natural rate of interest (by boosting productivity growth), and with the financial side effects of prolonged monetary accommodation becoming more acute, finding a means to raise inflation expectations is critical (Annex IX).

[11] For additional details and clarification on Japanese institutions, recommended policies and macroeconomic outturn, see IMF (2018) Japan: Article IV Consultation—Staff Report, IMF Country Report 18/333; IMF (2018) Japan: Selected Issues, IMF Country Report 18/334; IMF (2017) Japan: Article IV Consultation—Staff Report, IMF Country Report 17/242; IMF (2017) Japan: Selected Issues, IMF Country Report 17/243.

[12] See Han (2019) "Demographics and the Natural Rate of Interest in Japan," IMF Working Paper 19/31.

The authorities agreed with staff on the need to continue with monetary easing and accelerate structural reforms to help maintain reflation momentum, and that the YCC framework has enhanced the sustainability of monetary stimulus.

Japan: Nominal Policy Interest Rate



Source: IMF Staff estimates.

17. A flattening yield curve is undermining financial sector profitability and encouraging risk taking. Relative to one year ago, the BoJ's sustained accommodative monetary policy and recent declines in global bond yields have flattened the JGB yield curve and pushed yields into negative territory up to the 10-year maturity. This has reduced net lending margins and investment income of banks, insurers and pension funds—which have substantial JGB holdings—spurring them to adopt riskier asset allocations. To alleviate financial stability concerns and ensure durable monetary stimulus, actions are needed to strengthen and activate macroprudential policy and adjust the YCC framework.

18. The monetary policy framework could be further strengthened to enhance policy credibility and predictability. The BoJ should maintain its accommodative policy stance while considering measures that could strengthen the monetary policy framework. Specifically: [13,14]

- *Reviewing the price stability target*. Given increased attention to structural drivers of low inflation—both global (e.g., technological progress) and domestic (e.g., demographic trends)—an updated assessment of the inflation level consistent with the price stability objective could be carried out. The review would provide the BoJ with an opportunity to: (i) reconfirm its commitment to the target; (ii) increase policy flexibility by introducing an inflation range around the target; and (iii) emphasize the medium- to long-term nature of achieving the price stability objective. This could allow the BoJ to more flexibly address competing policy objectives such as financial stability.

- *Increasing policy flexibility*. The BoJ could introduce a range around its current inflation target while emphasizing the medium- to long-term nature of achieving the price stability objective. This would enable the BoJ to more flexibly address competing policy objectives such as financial stability while at the same time acknowledge uncertainty around the optimal level of inflation. Careful market communication would be needed to avoid being misinterpreted as a move towards monetary policy normalization.

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[13] See *2019 Japan: Selected Issues* paper "Twenty Years of Independence: Lessons and Way Forward for the Bank of Japan."

[14] See Arbatli et al. (2016) "Reflating Japan: Time to Get Unconventional," IMF Working Paper 16/157, for arguments in favor of an IFT framework.

- *Strengthening the conduct of monetary policy*. BoJ could enhance its current "two perspective" policy strategy—assessing whether the near-term inflation outlook is consistent with the price stability objective, and examining the risks most relevant to the conduct of monetary policy—by adopting *Inflation Forecast Targeting* (IFT). IFT would improve policy credibility and predictability by making monetary policy respond more systematically to deviations of BoJ's inflation forecast from the price stability target.[15]

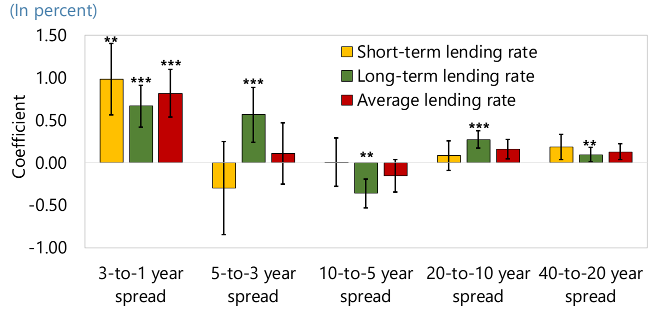
- *Improving communication with financial markets and the public*. The BoJ's policy guidance should be simplified by: abandoning the quantity guidance on JGB purchases; and at the same time delinking the overshooting commitment from the monetary base. Consistent with an IFT strategy, Board members' forecasts currently published in the BoJ's *Outlook Report* could be replaced by a BoJ staff forecast consistent with the agreed policy path.[16]

19. To safeguard financial stability as the financial cycle matures, and thereby make the accommodative stance of monetary policy more sustainable, the BoJ and FSA could consider:

- *Adjusting the YCC framework*. The BoJ may be able to mitigate the impact of its prolonged accommodative monetary policy on financial institutions' profitability through steepening the JGB yield curve—by shifting the zero percent JGB yield target from the 10-year to a shorter maturity, and reducing purchases of JGBs with longer term residual maturities. This could raise the investment income of financial institutions and boost public sentiment by increasing the rates of return on insurance and pension products while only slightly tightening financial conditions. This is because economic activity is most responsive to short- to medium-term interest rates—as corporate and household financing is mostly dependent on those rates, and most variable rate loans are linked to TIBOR, while the average duration of fixed rate loans is 3 to 4 years (see text chart). However, a careful analysis of the balance sheets of different categories of financial institutions would be called for, to assess whether future profit gains

Japan: Lending Rate Response to a One Percent Steepening of Segments of JGB Yield Curve

(In percent)



Source: IMF staff estimates.

Note: The graph shows coefficients based on regressing lending rates on JGB yield curve spreads while controlling for JGB yield levels. Whiskers indicate the standard error of lending rates by maturity. ***, ** and * show statistical significance at 1 percent, 5 percent, and 10 percent, respectively.

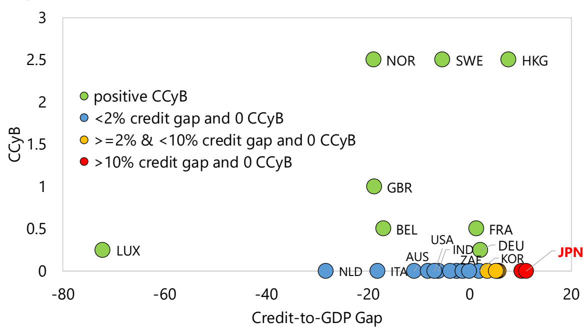
[15] Under IFT, the Policy Board would decide upon a policy path (not just current policy settings) that results in an inflation and growth forecast to best fulfill BoJ's mandate (i.e., achieving the price stability target and maintaining an orderly financial system). Moreover, by discussing the entire policy path, the BoJ could better communicate when current policy settings remain unchanged despite a deteriorating outlook.

[16] Replacing projections by Board members would not necessarily reduce transparency. Transparency concerns could be addressed by allowing dissenting views to be reflected in the *Summary of Opinions*—currently published shortly after a policy announcement. For further discussion on how to improve the communication framework see IMF (2016) Japan: Article IV Consultation—Staff Report, Box 3.

would exceed losses on existing JGB holdings.[17] Moreover, such a move would need to be communicated carefully to markets, to help ensure that it is not interpreted as signaling the end of monetary accommodation. Over time, the profitability challenges facing financial institutions such as regional banks call for restructuring and business model adjustment.

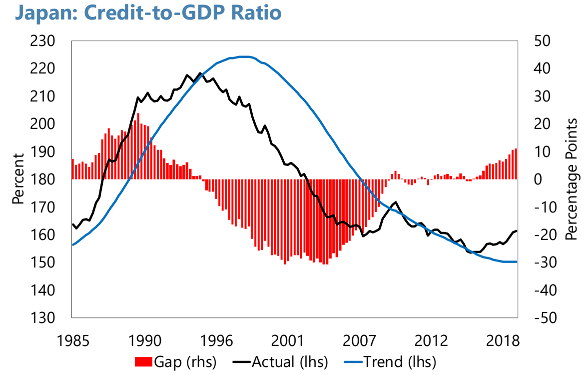
- *Activating the countercyclical capital buffer (CCyB)* (Annex X). Total credit has been growing faster than nominal GDP, financial conditions remain loose, and financial vulnerabilities are rising. To pro-actively build-up the banking system's resilience to increasing systemic risk, the FSA should consider raising the CCyB from its current level of zero percent, while expanding its coverage to the domestic credit exposures of all domestic banks, not just internationally active ones. This should have very limited effects on bank credit and output growth in the short run, while materially reducing the probability and severity of a banking crisis over the medium run.

Japan: CCyB versus Credit-to-GDP Gap
(In percent)



Source: Bank of International Settlements.

Japan: Credit-to-GDP Ratio



Source: Bank of International Settlements.

20. To address structural macrofinancial challenges arising from the sustained low yield environment and population aging, the FSA should implement some key outstanding recommendations of the 2017 FSAP (Annex XI):

- *Strengthening macroprudential supervision and regulation*. As the financial cycle matures, the FSA should continue to strengthen its financial sector supervision and regulation, by intensifying its risk assessment process and completing its macroprudential policy toolkit, to better identify and mitigate the build-up of systemic risk. In particular, it should establish a legal basis for sectoral macroprudential policy tools to manage housing market related risks, such as possibly regionally differentiated loan-to-value or debt-service-to-income limits on mortgage loans.

- *Intensifying microprudential supervision and regulation*. The FSA should also continue to encourage banks to improve their risk management and resilience through robust microprudential supervision and regulation, by fostering more forward-looking loan-loss

[17] Shifting the YCC target from the 10-year to a shorter residual maturity would raise the 10-year JGB yield, but the yield would likely remain within the current acceptable range of 10-year JGB yield fluctuations, and as such would not threaten the solvency of financial institutions from valuation losses on JGB holdings.

provisioning. It should also be granted the power to set Pillar 2 capital buffer add-ons, to tailor individual banks' capital requirements to better fit their risk profiles.

- *Supporting business model adjustment and consolidation in regional banks.* To ensure their soundness in the face of challenging profitability outlooks, the FSA should continue to encourage regional banks to diversify their revenue sources, while raising their efficiency by adopting IT/Fintech and consolidating. The FSA and BoJ should work jointly to assist regional banks in their reform efforts, including by supporting legislative reform efforts to: (i) introduce timebound exemptions for regional banks from anti-trust laws for mergers and consolidation; and (ii) proposals to provide financial assistance for the consolidation of regional banks, by reducing deposit insurance fees for banks that do so merge.

- *Addressing other financial sector policy issues.* The FSA should strengthen its crisis management and resolution framework, by for example extending the coverage of Total Loss-Absorbing Capacity requirements to all domestic systemically-important banks (D-SIBs). It should also continue to take steps towards introducing an economic-value-based solvency regime for the insurance sector, and strengthen oversight of virtual asset service providers by ensuring they are subject to AML/CFT supervision in line with international standards.

Authorities' Views

21. The BoJ stressed that while inflation has been somewhat weak, the momentum toward achieving the price stability target is maintained. The BoJ emphasized that monetary stimulus continues to be effective—as evidenced by accommodative financial conditions and a tight labor market—and that inflation expectations showed weakness primarily due to actual low inflation. Hence, the BoJ argued that raising actual inflation, by maintaining positive output gap for as long as possible, is key to achieve 2 percent medium- to long-term inflation expectations. To that end, the authorities recognized the need to continue with powerful monetary easing and mitigate financial sector side effects as well as accelerate structural reforms in order to enhance the effectiveness of monetary policy.

22. The BoJ did not see a need to adjust the monetary policy communication framework. The BoJ argued that the guidelines for market operations regarding JGB purchases do not create ambiguity as the public and financial markets understand that controlling short and long-term interest rates is the main element of the YCC and the actual amount of JGBs to be purchased is a result of achieving the desired shape of the yield curve. Also, the BoJ did not see a need to review the price stability target, because ensuring room to reduce interest rates in the long run is important and 2 percent target has been adopted by central banks in other advanced economies. The BoJ did not see a need to adopt an inflation target range, because the Bank has conducted monetary policy in a flexible way, taking account of developments in economic activity and prices as well as financial conditions. Moreover, the BoJ stressed that replacing Board members' forecasts with a staff forecast would reduce policy transparency by making the views of individual members unavailable to the public. As for shifting its zero percent YCC target from the 10-year JGB yield to a shorter maturity, the Bank did not see a need to do so, because the Bank judges that the current framework is working well, while the Bank has struck a balance between effects and side effects. In addition, the BoJ argued that although the Bank has ETFs, it is legally not the shareholder of listed companies as the Act on Investment Trusts and Investment Corporations stipulates that the settlor company of an ETF shall exercise voting rights of securities held as ETFs property.

23. The authorities assessed the financial system as stable, with financial intermediation not overheating. The authorities explained that property and equity prices have been rising, but are not overvalued. The authorities observed that household and nonfinancial corporate debt have been rising, but the leverage is not excessive. It also noted that bank lending to the real estate sector has stopped growing rapidly. Against this backdrop, the authorities argued that the banking system is resilient to severe adverse shocks, with capital and liquidity buffers well above regulatory requirements. For these reasons, the authorities do not think that activating the CCyB is warranted at the current juncture. However, the authorities emphasized that they will continue to closely monitor increases in household and corporate indebtedness, the functioning of financial intermediation, and excessive risk taking by financial institutions.

24. The FSA explained that its revamped financial supervisory framework is forward-looking and risk-based. The FSA explained that its new Early Warning Mechanism for financial institutions: (i) identifies banks with concerns for securing medium-term profitability and soundness; (ii) engages management of these banks with respect to their business models; and (iii) if necessary, takes further administrative actions to improve their business management. The FSA noted that regional banks face increasing profitability challenges, with their core net profitability on a downward trend, but that their capital buffers remain adequate for now. It argued that regional banks should develop their sustainable business model to adapt to the sustained low-yield environment, and aging and shrinking of the population, by measures such as revenue diversification, efficiency gains, and consolidation. Governor Kuroda noted that the BoJ and FSA are working jointly to assist regional banks in their reform efforts.

B. Fiscal Policy—Flexibility and Coordination

25. The December 2019 stimulus package will moderate the decline in growth in 2020, and should be accompanied by a clear commitment to long-term fiscal sustainability. The stimulus package will help navigate a deteriorating external environment and related drop in consumer and investor sentiment, and overcome the likely post-Summer 2020 Olympics slowdown. While Japan has some fiscal space—helped by limited funding risks and low borrowing costs—the high level of public debt, adverse demographics, and projected rise in social security spending call for a renewed and well-communicated approach to defining medium- and long-term fiscal targets.

Japan: Comprehensive Economic Measures to Create a Future with Security and Growth (the Cabinet Decision of December 5th, 2019)
Three pillars
(i) Recovery and reconstruction from disasters, and ensuring safety and security
(ii) Focused assistance to those who are overcoming the economic downside risks
(iii) Investing for the future and maintenance and improvement of economic vitality after the Tokyo Olympics and Paralympics
Total size: ¥26 trillion (4.6 percent of GDP) 1/
Expenditure of central and local governments: ¥9.4 trillion (1.7 percent of GDP)
Financing by the FY2019 supplementary budget (general account): ¥4.3 trillion (0.8 percent of GDP)
1/ This includes a government loan program (Fiscal Investment and Loan Program) and private sector financing.

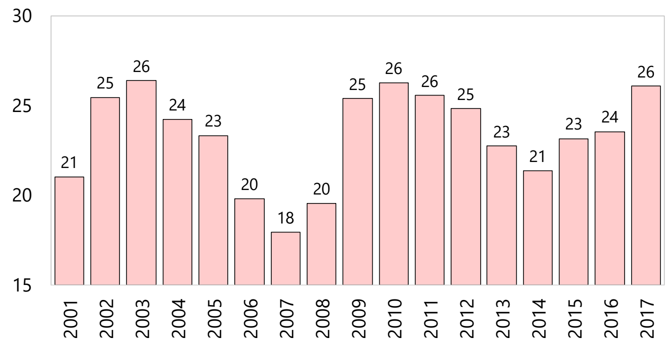
Near-Term Fiscal Support

26. A broadly neutral fiscal stance is appropriate for 2020 and could, if warranted, be extended to 2021—together with continued monetary accommodation. The increase in consumption tax revenue is expected to be largely offset by expenditure increases and revenue losses from the mitigating measures, making the 2019 fiscal stance broadly neutral. The December 2019 stimulus package is projected to make also the 2020 fiscal stance broadly neutral, while the 2021 fiscal stance would be contractionary (by about 0.6 percent of GDP) under current policies as the effects of the package fade. Given downside risks and the need to avoid a pro-cyclical fiscal tightening that might undermine growth momentum, a neutral fiscal stance might also be called for in 2021, unless economic data outturns are stronger than expected. Fiscal measures in the near term could:

- *Address the devastation caused by natural disasters.* In response to recent natural disasters, prompt fiscal measures should support efforts to rebuild infrastructure and provide relief to affected vulnerable population.
- *Extend consumption tax countermeasures in 2020.* Some key measures to cushion the impact of the October 2019 consumption tax rate increase are set to expire before the end of 2020, while economic activity is expected to soften post-Summer 2020 Olympics. Alternatively, an exit strategy from those measures should be carefully designed to minimize volatility of private consumption and cushion any impact on the most vulnerable. For example, as the point reward program carries the potential to make private consumption volatile when the measure expires in June 2020, the authorities could instead phase out the reward rate towards the end of 2020, or replace the program with another measure that carries a similar economic impact.
- *Increase wages of workers in the childcare, health and long-term care sectors further.* While it is critical to contain growth in social security spending, rising demand for these services needs to be matched by supply-side measures to ensure adequate staffing and quality of service.

- *Reinforce income policies and protect the most vulnerable.* A clear government commitment is needed for more effective corporate tax incentives for wage increases, higher minimum wages, and an increase in administratively-controlled wages and social transfers. To support reflation, administered prices should be set by a mechanism that better reflects costs, with safeguards for low-income households.

Japan: Number of Children Waiting for Vacancies at Nursery Centers
(In Thousand)

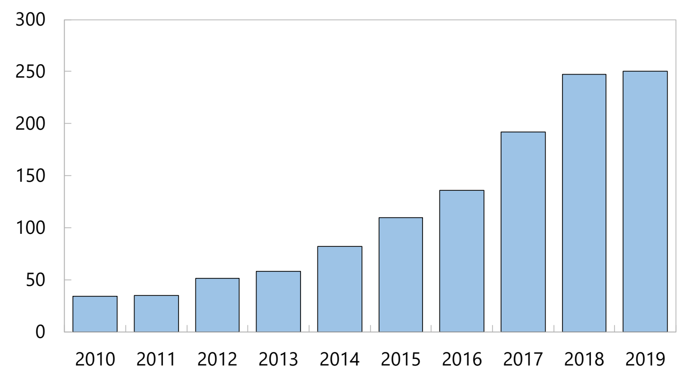


Source: Ministry of Health Labour and Welfare.

- *Support structural reforms.* Fiscal measures should raise childcare availability and strengthen firms' incentives to further increase firms' provision of childcare and nursing-care, enhance non-regular workers' productivity (i.e. training and career prospects), and boost R&D investment.

- *Measures to lessen the impact on the agriculture sector of opening up to trade.* In completing trade agreements with the European Union, ten other Pacific countries, and the United States, which open up the Japanese domestic market to increased agricultural imports, Japan revised its measures to support domestic farmers and boost agricultural exports. These recent trade agreements call for strengthening the competitiveness of agriculture—incentivizing value-added products (including exports of wagyu beef), facilitating the scale-up of small-sized farms, and enhancing rural infrastructure spending. The recently-adopted fiscal stimulus package also includes measures to bolster preparedness of farm facilities against typhoons and other natural disasters.

Japan: Beef Exports
(In Hundred Million Yen)



Source: Japan's Ministry of Agriculture, Forestry and Fisheries.
Note: 2019 value is the target amount for exports of beef.

Table 1. Japan: Countermeasures for the 2019 Consumption Tax Rate

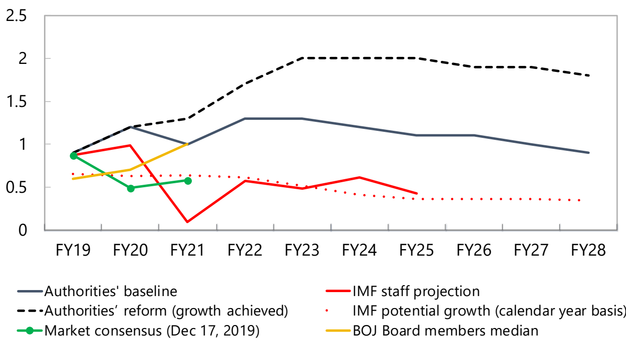
	Size, 2020		Applicable Period for the Measures								Description
	JPY trillion	In percent of GDP	2019		2020				2021	FY2021 Onwards	
			3Q	4Q	1Q	2Q	3Q	4Q	1Q		
(1) Tax Revenue Increases											
Consumption tax rate increase from 8 to 10 percent	5.7	1.0								→permanent	
Reduced tax rate on food, non-alcoholic beverage and newspapers (8 percent)	-1.1	-0.2									
Increase in tobacco and personal income taxes, etc	0.2	0.0	See Description								Partly compensating for revenue losses due to the reduced tax rate: (i) Gradual increase in the tobacco tax, from October 2018, (ii) Narrowing deductions of the personal income tax for higher incomes, from January 2020, (iii) Introduction of the invoice-based billing system, from October 2023.
(2) Countermeasures:											
(2.A) Permanent Social Security Spending Increase	**2.4**	**0.4**									
Free childcare and pre-school education	0.9	0.2								→permanent	(i) Free pre-school education and childcare for children aged 3 to 5 years, (ii) Free childcare for children up to 2 years, for low-income households.
Free tertiary education for low-income households	0.4	0.1									
Pension benefits to low-income pensioners	0.5	0.1									
Other social security spending	0.4	0.1									Including higher wages for nursing care-workers and nursery school teachers.
Compensation for the higher consumption tax on social security costs	0.2	0.0									Higher social security spending to compensate for a higher consumption tax on expenses by hospitals and other institutions.
(2.B) Infrastructure Investment	**1.2**	**0.2**									Infrastructure updates including to prevent/mitigate damages caused by natural disasters. Three year program until FY2020.
(2.C) Other measures	**1.1**	**0.2**									
Increase in subsidies to home-buyers	0.1	0.0								→2021 4Q	Increase the upper limit of the subsidies (Sumai-Kyuhu-kin) from ¥300,000 to ¥500,000.
Point reward program for home-buyers	0.1	0.0									Targeted to energy-saving, quake-resistant, and barrier-free houses.
Extension of tax breaks for housing loans	0.1	0.0									Extend the period (from 10 to 13 years) when borrowers of housing loans enjoy deductions from their personal income taxes (i.e. benefits will accrue for 3 extra years).
Reduction of car acquisition tax up to Q3 2020 (Environmental Performance-based Tax Break)	0.0	0.0									
Reduction of car possession tax	0.1	0.0								→permanent	
Point reward program up to Q2 2020	0.5	0.1									5 percent reward is applied to cashless payments at small retailers (and 2 percent reward for franchise stores).
Shopping vouchers for 6 months	0.1	0.0									Low-income households or those with children are eligible to purchase shopping vouchers with a 25 percent premium (up to ¥20,000 per person).
Comparison in 2020											
Total Revenue Increases, 2020	**4.8**	**0.8**									
Total Countermeasures, 2020	**4.7**	**0.8**									
Comparison in 2024 (after temporary measures expire)											
Total Revenue Increases, 2024	**5.4**	**0.9**									
Total Countermeasures, 2024	**3.0**	**0.5**									

Sources: Ministry of Finance, the Cabinet Office, IMF staff estimates.

Medium- and Long-Term Fiscal Strategy

27. A well-specified framework is needed to ensure fiscal sustainability and reduce debt, lower uncertainty, and support reflation and growth. While the government has set a primary balance target for FY2025, credibility would benefit from realism of assumptions and specificity of measures to achieve the target. The presence of a clear and credible fiscal framework would help diminish policy uncertainty, and likely bolster corporate investment and reduce households' precautionary saving (see Annex XII for examples of countries with a medium-term fiscal framework). Several steps could help bolster the credibility of fiscal policy:

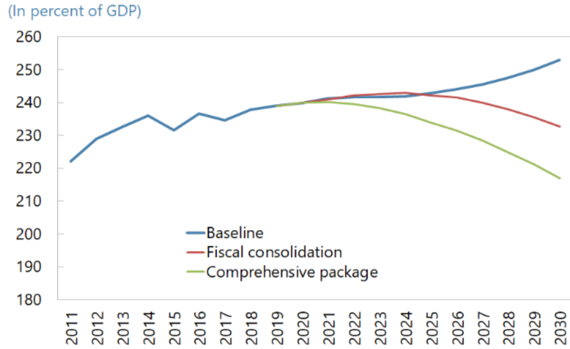
Japan: Real GDP Growth Projections
(In percent)



Sources: Japan Cabinet Office, BOJ, JCER ESP forecast and staff projection.

- *Adopt realistic growth and fiscal projections.* Realistic assumptions for TFP growth and public spending growth would add credibility and help anchor fiscal policy discussions. Staff estimates that gradual reductions in the structural primary balance of about 0.5 percent of GDP annually from 2022, accompanied by a comprehensive policy package with accelerated structural reforms, would help put the debt-to-GDP ratio on a downward path over the long term.

Japan: Gross Public Debt Under Reform Scenarios
(In percent of GDP)



Sources: IMF staff estimates and projections.

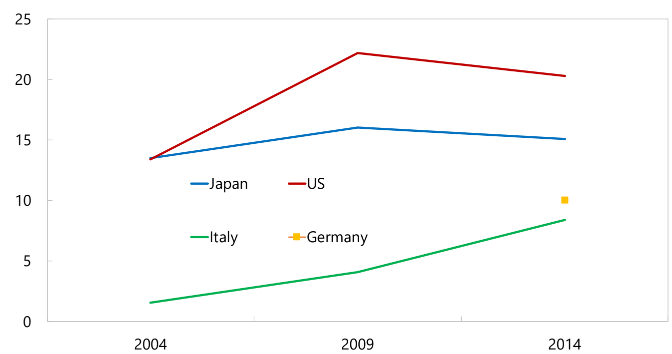
Japan: Options for Fiscal Policy Adjustment by 2030 (in percent of GDP) 1/	
Options	
Increase consumption tax rate from 10 to 15 percent	**2.5**
Health and long-term care reform (potential gains by 2030)	**Up to 2**
Curb growth rate of health and long-term spending	
Increase healthcare and long-term care copayments	
Other options	**Up to 1.5**
Re-introduce wealth tax/ Raise capital gains tax	Up to 0.3
Increase carbon tax	0.2
Containing non-social security expenditures	Up to 1
Total potential savings	**Up to 6.0**

1/ These estimates build on findings in *2018 Japan Selected Issues* paper "Japan - Options for Healthcare Reform" and McGrattan and others (2018).

- *Factor in aging costs*. It is important to continuously assess and incorporate aging costs in macro-fiscal projections. Staff scenarios suggest that to finance aging costs, the consumption tax rate would need to increase gradually to 15 percent by 2030 and to 20 percent by 2050.[18] The consumption tax rate increases should be done gradually on a regular (preferably legislated) schedule to smooth the economic impact and minimize policy uncertainty. The cost of postponing adjustment is substantial and would benefit the current elderly to the detriment of future generations.

- *Strengthen redistribution effects and address inequality*. Japan's capital gains tax (part of financial income taxes which also include taxes on dividends and interest) is a flat rate of 20 percent, with some exemptions intended to promote household financial investment. The capital gains tax rate rose from the reduced rate of 10 percent to 20 percent in 2014. The rate of taxation on capital gains should be gradually increased to 30 percent, starting in 2022. A higher capital gains tax rate—with the current exemptions kept in place—would help contain income inequality by imposing a relatively heavier burden on the wealthy. Alternatively, re-introduction of a wealth tax could be considered.[19] A new wealth tax with zero or very few exemptions, a high threshold, and a low flat rate would minimize administrative costs and help limit capital flight, while addressing inequality and collecting meaningful revenue.[20] A wealth tax could be less detrimental to productivity because those with similar wealth pay similar taxes regardless of productivity, while a higher capital gains tax could implicitly penalize entrepreneurs with higher productivity.

Japan: Median Net Wealth Ratio Between Household Ages Above 65 vs. Under 35



Sources: Japan Statistics Bureau, National Survey of Family Income and Expenditure; US Federal Reserve, Survey of Consumer Finances; European Central Bank, Househould Finance and Consumption Survey; Bank of Italy, Survey on Italian Household Income and Wealth.
Note: Above 65 is 65-69 for Japan, 65-74 for US and Germany, over 64 for Italy. Under 35 is 25-29 for Japan, 25-34 for Germany, under 34 for Italy, and under 35 for US. Data as of 2014 for Japan, Germany, Italy. Data as of 2016 for US.

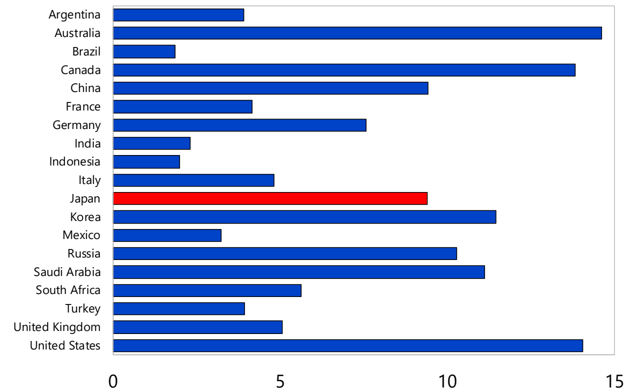
[18] See McGrattan, Miyachi, and Peralta-Alva (2018) "On Financing Retirement, Health and Long-Term Care in Japan", IMF Working Paper 18/249.

[19] A net worth tax was adopted in Japan in 1950 but repealed in 1953 because of high administrative costs and difficulties in capturing and assessing the value of assets. For some countries (Switzerland, Italy, Spain), wealth taxes remain an important part of the overall tax structure or a component in a larger fiscal consolidation plan. See OECD (2018), "The Role and Design of Net Wealth Taxes in the OECD," OECD Tax Policy Studies No. 2.

[20] According to staff estimates, if a net wealth tax of 0.5 percent is levied on households with net financial assets worth over ¥100 million (approx. US$900,000), the estimated yield is approximately 0.3 percent of GDP. According to OECD (2018) "The Role and Design of Net Wealth Taxes in the OECD", this is higher (in percent of GDP) than net wealth tax revenues in Spain (0.18 percent of GDP in 2016), France (0.22 percent of GDP in 2016), but lower than Norway (0.43 percent of GDP in 2016) and Switzerland (1.03 percent of GDP in 2016). For the capital gains tax, if the rate increases to 30 percent, the estimated yield is approximately 0.1 percent of GDP.

- *Raise the carbon tax*. To strengthen incentives to reduce energy use and shift to clean energy sources, a higher carbon tax should be considered, together with measures to support vulnerable households.[21] Time-bound grandfathering or a phased-in approach could mitigate a potential short-term adverse impact on investment and consumption, while incentivizing business and households to move gradually towards low-emission sources.

Japan: Emissions per Capita, 2030
(tons CO2/individual)



Sources: IMF, Fiscal Monitor, October 2019.

- *Improve the transparency of the budgetary framework*. There have been ten supplementary budgets since the beginning of Abenomics in late 2012. Limiting the frequency and size of supplementary budgets would help reduce policy uncertainty and increase the effectiveness of macroeconomic demand support.

28. **Reform of public social security programs is the essential second leg of fiscal consolidation.** Without meaningful change to pension, health, and long-term care spending, fiscal sustainability may remain out of reach. The authorities intend to move ahead with social security reform, as recommended by staff, noting that such reforms will help achieve their fiscal consolidation targets. The authorities' plan to draw up a comprehensive reform package by mid-2020 is welcome, and should involve the following:

- *Pension*. Recent projections indicate a funding gap under conservative scenarios if the committed replacement ratio (of 50 percent) is maintained. Reforms should focus on improving pension sustainability and intergenerational equity. Options include encouraging the elderly working population to defer pension drawdowns and lengthen the contribution period, as well as expanding the contributions base. While the government's recent initiative to provide additional pension benefits to low-income pensioners is a welcome step from the perspective of intra-generational equity, the distributional impact could be strengthened by financing this initiative with a reduction in pension benefits for the wealthy (instead of financing it with consumption tax revenues). In addition, social security and tax reforms should remove disincentives to full-time and regular work to help address gender inequality.[22]

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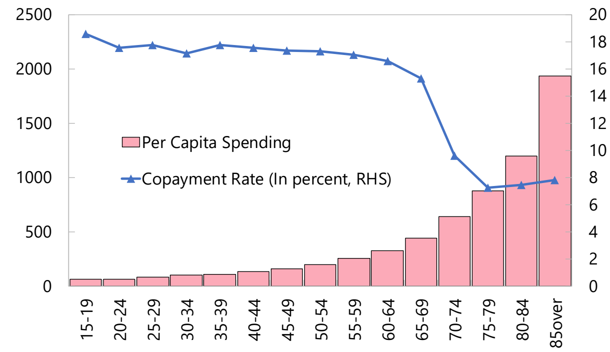
[21] In 2012, Japan introduced a carbon tax which stands at ¥289 per ton of CO_2 (approximately US$3 per ton) in 2019, much lower than the carbon tax of about US$75 per ton of CO_2 needed by 2030 to be consistent with meeting Japan's mitigation pledge for the 2015 Paris Agreement (see IMF 2019, *Fiscal Monitor*).

[22] See IMF (2018) Japan: Selected Issues, IMF Country Report 18/334 "Inequality in Japan: Generational, Gender, and Regional Considerations."

- *Healthcare and long-term care.* The prospect of continually rising healthcare expenditures, driven by population aging and use of advanced and expensive health-technology, present a sizeable challenge to Japan's fiscal sustainability.[23] Reforms could focus on: (i) improving efficiency through wider use of generic drugs and rationalization of in- and out-patient care;[24] (ii) increasing the share of out-of-pocket spending for those over 75 years old and the wealthy elderly, with safeguards for vulnerable households; and (iii) reducing the scope of covered services and drugs. On long-term care, the authorities should explore measures to contain costs, including rationalizing services to those with lower-care needs.

Japan: Health Care Transfers and Copayments by Age
(In constant Japanese Yen, thousand)



Source: Ministry of Health, Labor, and Welfare; IMF staff estimates.

Strengthening Policy Coordination

29. Strengthening the effectiveness of coordination between monetary and fiscal policy remains a high priority—both to revitalizing the economy and achieving the 2 percent inflation target and—looking forward—dealing with a changing economic environment and potential new shocks. The basis for such coordination has been established in the January 2013 Joint Statement (by Cabinet Office, Ministry of Finance, and Bank of Japan), which lays out coordinated measures to revitalize the economy and achieve the 2 percent inflation target, including regular review of the progress in the conduct of macroeconomic policies by the Council on Economic and Fiscal Policy.[25] This mechanism should be used to its full potential to ensure that fiscal and monetary policies work in tandem toward mutually reinforcing objectives of growth and reflation.

Authorities' Views

30. The authorities agreed with staff on the need for near-term fiscal policy to support the economy, as the outlook is clouded largely by rising global uncertainty. They highlighted that the December 2019 economic measures contains various measures to mitigate the adverse economic impact of recent natural disasters, and would help the economy navigate through the global headwinds and realize sustainable growth mainly led by private demand beyond the 2020 Olympics.

[23] See IMF (2018) Japan: Selected Issues, IMF Country Report 18/334 "Japan—Options for Healthcare Reform."

[24] If the share of generic drugs (over the sum of the generic drugs and the branded drugs which compete with the generic drugs) is raised from 72.6 percent in 2018 to 90 percent on a volume basis through strengthening incentives for clinics, hospitals and pharmacies, its fiscal savings would be worth 0.1 percent of GDP.

[25] See Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth, January 2013.

31. The authorities consider that their medium-term macro-fiscal projections are based on realistic assumptions. In a scenario that current economic policies show solid results, the total factor productivity growth rate is assumed to rise based on past performance. They revised the assumption downward, reflecting views of private sector representatives in the Council of Economic and Fiscal Policy, when they set the FY2025 primary-balance target. In addition, they have another projection with more prudent assumptions that the economy will grow approximately at the rate of current potential growth. They deemed that aging-related costs are duly taken into account in their projections of social security expenditures.

32. The authorities explained that they have already laid out fiscal consolidation plan and have steadily implemented it. So far, they have been steadily implementing "the New Plan to Advance Economic and Fiscal Revitalization", which was decided by the Cabinet in June 2018. Based on this plan, the Council of Economic and Fiscal Policy (CEFP), chaired by Prime Minister, established "the Reform Time Schedule" to clarify the concrete actions to be implemented for each fiscal year and set Key Performance Indicators (KPI) over 140 expenditure-related areas, such as social security, infrastructure and education. The Council will revise the schedule every year and an experts committee under the CEFP, which consists of academics on economics and public finance and experts in various fields, calls senior officials of ministries in charge to explain their progress toward KPI to set by the schedule, evaluating it.

33. There is a gap between the authorities' FY2025 primary-balance target and the projected path of primary balances without additional policy measures, thus they recognized that they will continue to implement reforms along with the plan to fill the gap. The authorities highlighted that the social security reform package (to be finalized in mid-2020) is expected to contribute into pursuing their fiscal consolidation target. The authorities stressed that the objective of the comprehensive social security reform is to rebalance the so-called "people who support" and "people who are supported," and expressed their intention to continue to pursue measures to contain social security expenditures by social security reform and promotion of further labor participation.

34. The authorities were of the view that due consideration has been given to inequality issues. The authorities emphasized recent tax and expenditure measures that have helped contain economic inequality, including: (i) an increase in the personal income tax rate for the top bracket from 40 to 45 percent (effective since 2015), (ii) a reduction of various deductions for high-income earners (effective since 2013, 2016, 2017 and 2020), (iii) an increase in the tax rate on financial investment income from 10 to 20 percent (effective since 2014), (iv) an increase in the inheritance tax (effective since 2015), and (v) the additional pension benefits to low-income pensioners (effective since October 2019). To support gender equality and women in the labor market, the authorities continue to increase childcare availability, and they consider that the 2017 revision of the spousal tax deduction is designed to reduce incentive for part-time workers to limit their working hours.

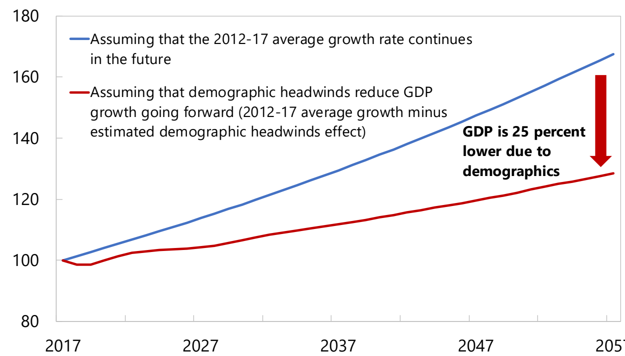
35. The authorities stressed that existing policy coordination frameworks, including the 2013 Joint Statement, already deliver coordinated monetary and fiscal policy. They view the

2013 Joint Statement as still relevant and appropriate at the current economic juncture and stressed that they will continue to enact policy coordination while also maintaining the independence of each government authority.

C. Structural Reforms—Reflation and Growth

36. Structural reforms are essential to navigate Japan's demographic headwinds. Aging and depopulation will depress productivity growth and investment—shrinking real GDP growth. Staff analysis finds that worsening demographics could reduce real GDP by 25 percent in four decades under current policies (relative to a scenario where recent growth performance is maintained, see text chart).[26]

Japan: Demographics Will Reduce Real GDP Growth
(Baseline simulation for real GDP level; Normalized, 2017 = 100)



Sources: GIMF simulations and IMF staff calculations.

37. The structural reform agenda should support reflation, while boosting productivity, labor supply, and investment. Staff simulations suggest that credible implementation of the reforms outlined below, accompanied by a continued accommodative monetary stance and public debt stabilization, can help reflation and increase real GDP by as much as 15 percent in four decades, relative to a current-policies scenario—this could offset as much as 60 percent of the demographic-driven slowdown in real GDP growth.[27] Reflation would be achieved by a demand boost from confidence effects—as firms and households increase investment and consumption due to higher expected capital returns and permanent income—in excess of the contemporaneous supply boost from the reform plan, with simulations showing about a 1 percentage point increase in inflation in the long run.[28] By contrast, a not-fully-believed path of reforms would not help reflation, and would deliver significantly smaller increases in near-term real GDP (see text chart). To strengthen reform credibility and confidence effects, specific steps to enhance the government commitment—a communication strategy and/or legislation—would be central in supporting reflation.

38. The reform agenda should prioritize reflation and growth (text chart shows indicative reform estimates and ranges for these impacts).

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[26] See Colacelli and Fernandez-Corugedo (2018), "Macroeconomic Effects of Japan's Demographics: Can Structural Reforms Reverse Them?", IMF Working Paper 18/248.

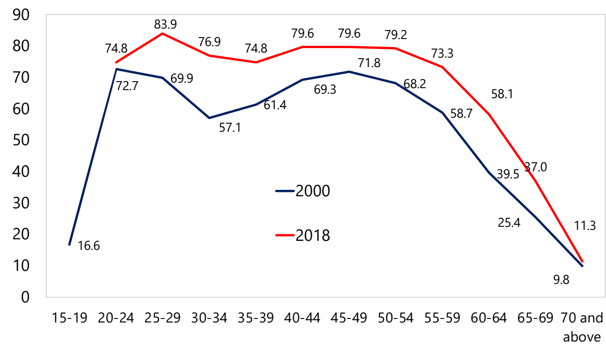
[27] See IMF (2018) Japan: Article IV Consultation—Staff Report, IMF Country Report 18/333, Box 3.

[28] Past reform episodes by OECD economies suggest uncertainty around the effects of product and labor market reforms on prices. See IMF (2016) *World Economic Outlook* (April), Chapter 3.

- ***Top-tier: Labor market reforms that increase productivity and labor supply***

The authorities should improve the 2018 Work Style Reform (WSR) to boost productivity and wages (see text table for details), and should introduce measures to further increase labor supply including by strengthening firms' incentives to support women in the labor force (Box 3). Staff simulations suggest that credible top-tier reforms could offset up to 40 percent of the demographic-related slowdown in real GDP growth in four decades.

Japan: More New Mothers Stay in the Labor Force
(FLFP by age, in percent of female population +15 years old)



Source: Ministry of Internal Affairs and Communications, Labor Force Survey.

- ***Second-tier: Regulatory and corporate reforms to lift productivity and investment***

Product and service sectors deregulation, SME reforms and corporate governance reforms should be advanced to lift productivity and investment (see text table for detailed recommendations).[29] Broader adoption of automation and Artificial Intelligence (AI) could also boost productivity, but distributional concerns should be considered to ensure gains are spread evenly across occupations and regions.[30] Staff simulations suggest that credible second-tier reforms could offset up to 20 percent of the demographic-related slowdown in real GDP growth in four decades.

- ***Third-tier: Trade liberalization and foreign direct investment (FDI) promotion to strengthen investment and growth***

Further removal of tariff and non-tariff barriers in the context of high-standard multilateral trade agreements would boost Japanese investment and growth. Staff simulations suggest that implementation of CPTPP and Japan-EU trade agreements could offset up to 4 percent of the demographic-related slowdown in real GDP growth in four decades.

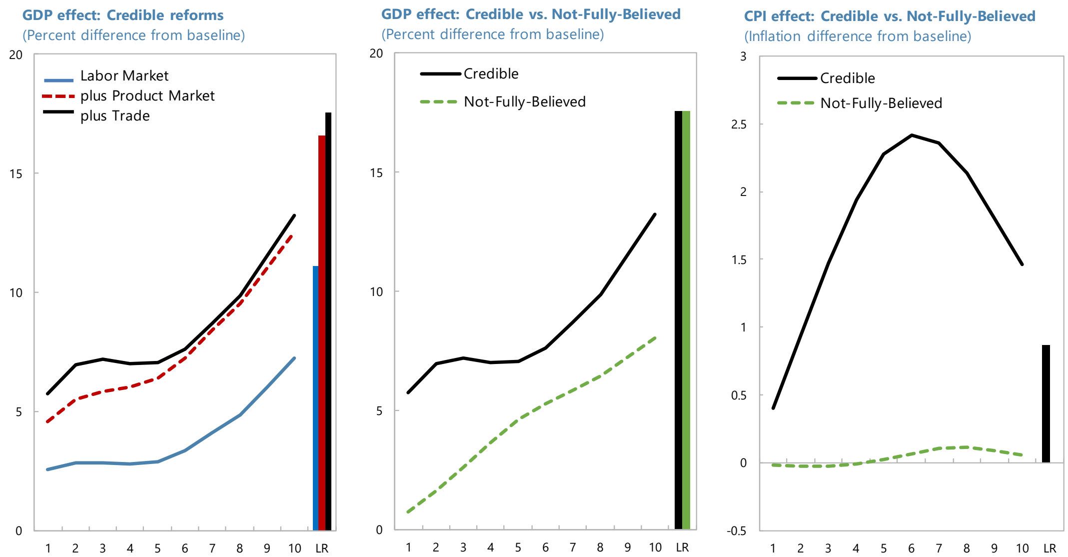
Authorities' Views

39. The authorities emphasized the significant progress with structural reforms and their continued commitment to reform plans. The authorities noted that the ongoing implementation of the Work Style Reform will boost productivity, by improving skill of labors and encouraging firm's

[29] See Colacelli and Hong (2019) "Productivity Drag from Small and Medium-Sized Enterprises in Japan?", IMF Working Paper 19/137; and Hong, Saito, Ito, and Nguyen (forthcoming) "Structural Changes in Japanese SMEs: Firm Dynamism in Aging Society and Inter-Firm Transaction Network", IMF Working Paper.

[30] See *2019 Japan: Selected Issues* paper "Is Automation the Answer to Japan's Demographic Challenges?" and IMF (2018) Japan: Selected Issues, IMF Country Report 18/334 "Japan—Macroeconomic Implications of Automation."

Text Figure. Japan: Effects from Structural Reforms



Source: GIMF simulations from Colacelli and Fernandez Corugedo (2018).
Notes: Horizontal axis in years; LR denotes long-run/steady-state (40+ years). Lines are stacked on left chart so that black shows overall impact of credible reforms. Not-Fully-Believed scenario includes a delay in firms' uptake of labor market duality reform. Baseline refers to the simulation under current policies and demographic headwinds.

investment, and will raise wages, while also reducing excessive overtime. In addition, the authorities noted that upcoming implementation of "equal pay for equal work" is expected to enable every worker to be fairly evaluated and to work with higher motivation. They are also considering measures to secure employment opportunities beyond age of 65. Regarding women in the labor market, they plan to hold consultations about workplace regulation and gender equality, and they highlighted the incentives provided by a public procurement system that supports women, including in managerial positions. The authorities noted that the number of female board members in listed firms continues to rise. They highlighted the 2019 plans to abolish the regulated retail electricity tariff in 2020. In April 2016, electricity retail sale was fully liberalized, and as a general rule, retail tariff was abolished. The authorities described they established Farmland Institutions to increase agricultural productivity by facilitating farmland consolidation through leasing, including private firms. The ongoing discussion on corporate governance reform aims to increase the quality of dialogue between asset managers and firms. The authorities stressed that the recently updated foreign investment law aims to further promote FDI conducive to sound economic growth and ensure minimal review of FDI that could pose risks to national security. They acknowledged their global leadership role in advancing bilateral and regional trade agreements.

Table 2. Japan: Priority Structural Reforms: Top-Tier Reforms

Policy area	Key measures planned by the authorities and status	IMF assessment and advice
Top-tier reforms		
Work Style Reform (WSR)	WSR legistlation done in 2018, including three pillars: (i)mandatory caps on overtime; (ii) equal pay for equal work; and (iii) exemption from work hour regulations (including overtime limits) for highly-paid professionals. Guidelines for the implementation of the "equal pay for equal work" pillar were completed in 2019, indicating that its implementation will start in April 2020.B6	To help reflation, WSR should be complemented by a stronger reporting framework of firms' wage gaps and job descriptions. WSR could also be complemented with sanctions for firms that do not comply with the "equal pay for equal work" pillar. In addition, programs to increase training and career opportunities of non-regular workers, including via contract reform, will help raise productivity and real wages and decrease labor market duality. WSR should be carefully implemented in order not to hinder firms' growth.
Female and Older Worker Labor Force Participation	WSR includes measures to limit overtime. Female and older worker LFP have continued to rise since "Abenomics" started.	WSR efforts to reduce excessive overtime will help further boost LFP. In addition, measures to help increase female labor supply include: eliminating disincentives in the social security and tax systems to full-time and regular work; increasing availability of childcare and nursing facilities; incentivizing gender-balanced management in the private and public sectors; outlawing discriminatory workplace regulations (i.e. dress code); and reducing the gender wage gap. Encouraging managerial practices rewarding productivity could further boost productivity and labor force participation, as could abolishing firms' right to set a mandatory retirement age.
Foreign labor	New residency status put in place in April 2019, to allow for higher inflows of specified-skill workers in sectors with labor shortages. WSR includes considerations to increase the use of foreign human resources, especially high-skilled. Special Economic Zones (SEZ) encourage use of foreign human resources.	The government's recent efforts to increase foreign labor should be pushed forward.

Table 3. Japan: Priority Structural Reforms: Second-Tier Reforms

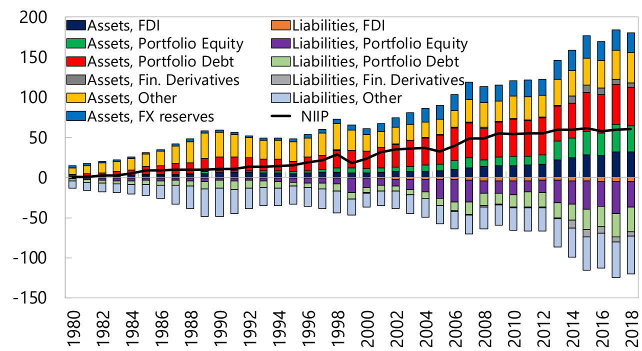
Policy area	Key measures planned by the authorities and status	IMF assessment and advice
Second-tier reforms		
Product and service sectors deregulation	Deregulation efforts in the right direction have taken place within electricity, gas, and agricultural sector.	Continued deregulation will help increase productivity and investment, including by lowering barriers to entry, removing incumbents' protections in some industries (gas and telecom), and deregulating professional services. Further deregulation in agriculture needed (including elimination of subsidy support and allowing majority holdings of private companies in agricultural enterprises).
SME reforms	Since April 2018, the coverage of credit guarantees to SMEs from Safety Net Program No.5 was lowered from 100 to 80 percent, while a new Safety Net Guarantee program was established for the event of a substantive crisis with 100 percent guarantee.	Facilitating exit of non-viable small- and medium-sized enterprises (SMEs) and entry of firms with stronger potential would increase productivity, along with reduced coverage of the credit guarantee system, incentivizing alternative sources of SME financing (i.e. asset-based lending and venture capital), supporting SME R&D investment, and supporting succession of aging CEOs in firms with high growth potential (which would also avoid exit of partner companies in the supply chain).
Corporate governance	Japan's Stewardship code for institutional investors introduced in February 2014 and revised in May 2017, with public consultation for further revision ongoing as of end-2019. Companies Act amended in June 2014 to encourage appointment of outside directors. Corporate governance code (requiring at least two outside directors on "comply or explain" basis) introduced in June 2015. June 2018 revisions to the 2015 code to incentivize a reduction in cross-shareholdings and more independent directors, and more transparent procedures to appoint and dismiss a CEO.	Significant progress has been made, but more should be done to materially affect corporate behavior. Deeper corporate governance reform could help deploy cash reserves, and boost investment and productivity, including via more ambitious requirements for outside directors, explicit limits on cross-shareholdings, and enhanced transparency of beneficial ownership.
Special Economic Zones	Ten areas were designated in 2014-15--including Tokyo and Osaka. Deregulation efforts include easing restrictions on land use and medical practices, agriculture reform, labor reform, and creation of new businesses.	SEZ used as a laboratory for reforms to be implemented at the national level, but measures discussed at the local level have been slow to progress.

D. External Position and Spillovers to and from Japan

40. Japan's external current account (CA) surplus decreased by 0.6 percentage points to 3.5 percent of GDP in 2018, while the income balance remained stable.

- *Income balance:* Japan's income surplus—arising from its large net foreign assets (NFA) position and high net returns—accounted for the bulk of the 2018 CA surplus. Japan's income surplus was significantly higher than other G7 countries, mainly due to relatively: (i) high yields on foreign assets; (ii) low FDI and portfolio debt liabilities; and (iii) low yields on portfolio debt liabilities.[31] Japan's income balance has been rising since the mid-1990s, in line with growing corporate saving. However, the overall CA surplus has been relatively stable, as dissaving by the public and household sectors has offset rising corporate saving (Annex XIII and Box 4).

Japan: Decomposition of Net International Investment Position
(In percent of GDP)



Source: Lane & Milesi-Ferretti database, External Wealth of Nations, 2018.

- *Current account:* Higher energy prices were an important driver of the decrease in the CA surplus in 2018, with the goods trade balance falling to 0.2 percent of GDP. The CA surplus is estimated to have shrunk further in 2019 to about 3.3 percent of GDP, reflecting a smaller goods trade balance—with exports decreasing more than imports—due to adverse external conditions. Through November 2019, the yen appreciated by 2.5 percent (in real effective terms) relative to end-2018.

41. The 2019 external position is preliminarily assessed as broadly consistent with fundamentals and desirable policies. As with the *2019 External Sector Report*, the estimated 2019 CA balance is preliminarily assessed as broadly consistent with medium-term fundamentals and desirable policies. Based on this CA assessment, the 2019 real exchange rate is also preliminarily assessed as in line with the real exchange rate level consistent with fundamentals and desirable policies (Annex XIV). Looking ahead, a well-specified medium-term fiscal consolidation plan and bolder and credible structural reforms that support growth and domestic demand are needed to maintain external balances that are not excessive. Staff estimates that credible implementation of structural reforms outlined above would reduce the external current account surplus by over 1 percent of GDP in the medium term.

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[31] See *2019 Japan: Selected Issues* paper "Japan's Foreign Assets and Liabilities: Implications for the External Accounts." Income flows are still much smaller than trade flows—but the significant asymmetry between credits and debits delivers the high income balance.

42. Slower growth or a tightening of financial conditions in Japan could have significant adverse outward spillovers. While the size of outward spillovers from Japan have become smaller over time, staff estimates suggest that a 1 percent decline in Japan's GDP generates output losses in other Asian countries of about 0.2 percent on average after one year.[32] In addition, a prospective tightening of financial conditions in Japan could slow positive spillovers from Japanese portfolio and FDI outflows and from overseas diversification by Japanese institutional investors. This could lead to a deterioration of global financial conditions and potentially disrupt global capital flows, particularly to regional emerging markets and developing countries. On the other hand, Japan's capital outflows might be increased by the October 2019 reclassification of the assets of Japan's Government Pension Investment Fund (GPIF), which allows it to continue shifting its portfolio allocation from domestic bonds towards foreign bonds offering higher returns.[33] Higher overseas investment by GPIF will export both loose financial conditions from Japan during normal times, and tight financial conditions during times of stress when GPIF retrenches its foreign exposures.

43. Further advancement of multilateralism would help mitigate adverse inward spillovers to Japan from an escalation of global trade disputes and yen appreciation.

- *Global uncertainty.* A more accommodative monetary stance by other major central banks, along with heightened global uncertainty from trade and geopolitical tensions, could lead to appreciation of the yen—undermining BoJ's reflation efforts.[34]

- *Trade and FDI flows.* Japan's trade and FDI regimes are relatively open, while agriculture ranks as less open among G20 economies (text chart).[35] However, ongoing global trade tensions and any further escalation could reduce Japan's net exports, investment, and growth—including from direct and indirect effects via global value chains and adverse spillovers to Japan's financial sector.[36]

- *Japan and multilateralism*. Japan's leadership in advancing multilateralism—within an open, stable, and transparent rules-based international trade system—will help mitigate adverse inward spillovers from a rise in protectionism or global uncertainty.

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[32] See *2019 Japan: Selected Issues* paper "Japanese Business Cycles, External Shocks, and Spillovers." See also Annex 15 for a discussion of Japan's extensive currency swap arrangements.

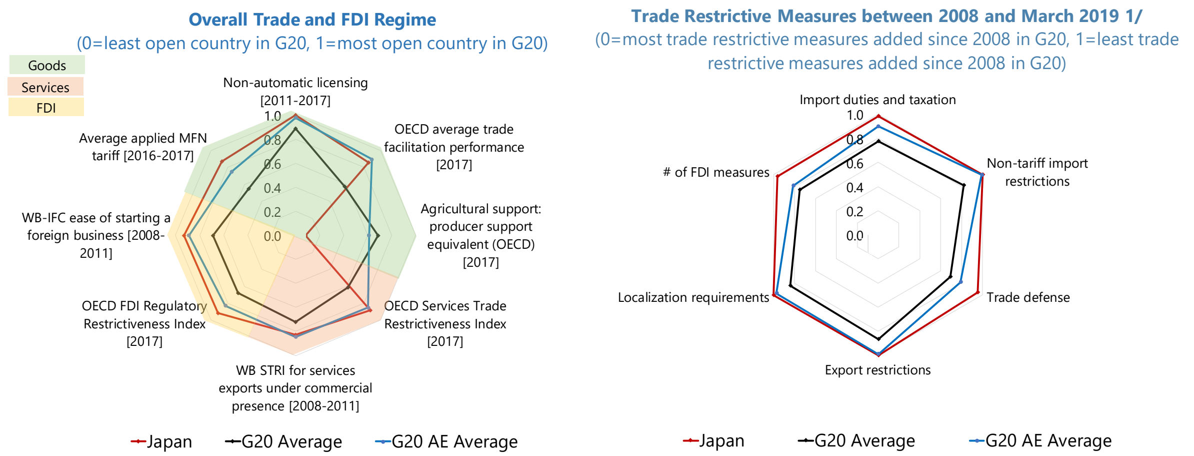
[33] GPIF is the world's largest pension fund with about US$1.5 trillion of assets under management. The reclassification labels FX-hedged foreign bonds (US$11.7 billion holdings) as "domestic debt."

[34] See Han and Westelius (2019), "Anatomy of Sudden Yen Appreciations", IMF Working Paper 19/136.

[35] In response to recent trade agreements, the government revised legislation to facilitate transfers to farmers who produce Japan's five critical agricultural products: rice, wheat, sugar, dairy, and meat (beef and pork).

[36] The October 2019 *World Economic Outlook* estimates that ongoing global trade tensions will reduce global activity—with 2020 global output about 0.8 percent below a no-tariff baseline, and a reduction in Japan's output by 0.5 percent relative to baseline, including significant market reaction effects. The October 2018 *World Economic Outlook's* simulations on the effects of auto tariffs estimated long-term real GDP losses of 0.2 percent in Japan, relative to baseline.

Text Figure. Japan: Trade and FDI Regimes Show Relative Openness, Except in Agriculture



Sources: Cerdeiro and Nam (2018) IMF Working Paper, and March 2019 update. Tariff data are from the WTO, World Tariff Profiles; the import licensing measure is based on UNCTAD TRAINS and COMTRADE data; the average trade facilitation performance, agricultural support measure, Services Trade Restrictiveness Index (STRI), and FDI Restrictiveness Index are from the OECD; WB STRI is from the World Bank; the post-GFC indicators are from Global Trade Alert.

Notes: The indicators reflect no judgment as to WTO compliance of underlying measures, nor whether certain measures (such as trade defense) are an appropriate response to the actions of other countries. The "ease of starting a business" indicator is based on perceptions as part of an established IFC survey process.

1/ Import (export) coverage ratio, except for the case of FDI (number of measures).

Authorities' Views

44. **The authorities agreed with the preliminary 2019 external assessment and related policy recommendations, but reiterated concerns regarding the methodology.** The authorities argued that continued proper implementation of structural reforms and fiscal consolidation in the medium-term also contributes to maintaining external balance by supporting growth, wages and domestic demand. The authorities have implemented tax incentives to promote investment and wage growth in the corporate sector. However, the authorities continue to have concerns over the REER assessment and the EBA methodology: (i) they assess that the trade balance and income balance's low REER semi-elasticities indicate the lack of potential external adjustment via REER; and (ii) they argue that EBA should account for different implications on value creation, including the varying propensity to consume between shareholders and workers (instead of treating equally the income from the income and trade balances). They also argue that the large unexplained portion of the EBA CA gap does not by itself prove the existence of important bottlenecks to investment and consumption. Moreover, they are of the view that a large and positive NFA position (as in Japan), with its implied large income account surplus, does not pose global financial stability risks per se. They consider that a more appropriate framework to study risks from global imbalances should focus on the sustainability of external gross liabilities.

45. **The authorities did not see significant outward spillovers from Japan at this time, while they agree that multilateralism can mitigate inward spillovers from global trade disputes.** They agree that the weakening of the global economy has reduced Japan's growth, and

they consider that further trade disputes' escalation can significantly affect Japan. They view their continued advancement of multilateralism as a significant force to counterbalance any further rise in protectionism.

E. Supply-Side of Transnational Corruption[37]

46. Japan has made progress in the fight against foreign bribery in recent years. The 2019 evaluation report by the OECD Working Group on Bribery in International Business Transactions (WGB) noted that Japan had made a number of improvements since its last evaluation.[38] Most notably, in 2017, Japan amended its law to allow the confiscation of the proceeds of foreign bribery and also criminalized the laundering of such proceeds.[39] This closed a significant and long-standing loophole in Japan's implementation of the OECD Anti-Bribery Convention. Japan also introduced a new Agreement Procedure in June 2018 to encourage cooperation by those with first-hand knowledge of certain types of crimes, including foreign bribery. This could potentially enable Japan to investigate and prosecute such cases more effectively. In addition, Japan's agency for official development assistance has debarred five Japanese and foreign companies for foreign bribery since December 2011, which constitutes a potentially powerful tool for addressing foreign bribery.

47. Concerns remain about the lack of proactivity in pursuing foreign bribery cases and the low level of investigations and convictions. Japan urgently needs to improve its foreign bribery enforcement, notably by: (i) enhancing the use of coercive investigative measures to obtain evidence in foreign bribery cases; (ii) streamlining the Ministry of Justice's procedures for transmitting allegations to prosecutors in order to prevent undue delays in opening investigations; and (iii) ensuring that decisions to investigate or prosecute foreign bribery cases is free from undue Executive influence, including the Ministry of Economy, Trade and Industry and the Ministry of Justice.[40]

48. Japan should enhance its legal framework as well as its outreach to the private sector. In particular, Japan should: (i) review its legislation to ensure that it has jurisdiction to prosecute Japanese companies that engage in bribery abroad, even when the individuals involved were neither

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[37] The discussion on whether Japan has an effective AML/CFT system to prevent foreign officials from concealing the proceeds of corruption will be included in a future Article IV consultation staff report when the ongoing Financial Action Task Force (FATF) fourth round report for Japan is concluded. Japan's last FATF report was adopted in November 2008.

[38] Information relation to supply-side transnational corruption in this section of the Staff Report draws on the WGB's Phase 4 Report of Japan adopted by the WGB on June 27, 2019. The IMF and Japan may have provided additional views and information whose accuracy have not been verified by the WGB or the OECD Secretariat, and which do not prejudice the WGB's monitoring of the implementation of the OECD Anti-Bribery Convention. The Phase 3 evaluation of Japan was completed in 2011.

[39] Amendment to the Act on Punishment of Organized Crimes and Control of Crime Proceeds.

[40] According to the WGB, Japan's enforcement rate is not commensurate with the size and export-oriented nature of its economy. Since the Convention's entry into force twenty years ago, Japan has detected only 46 allegations of foreign bribery, investigated 30, and secured convictions in five cases.

Japanese nationals nor in Japan;[41] (ii) extend the limitations period for prosecuting foreign bribery cases; (iii) ensure that the sanctions for natural and legal persons are effective, proportionate, and dissuasive; (iv) broaden the scope of its whistleblower protections; and (v) further raise awareness of the foreign bribery offence within the private sector.

Authorities' Views

49. The authorities acknowledge the relevance of the IMF initiative to assess efforts to address issues related to the supply side of corruption, and noted that they had volunteered to be part of this assessment. They stated that they are in the process of implementing the OECD Phase 4 recommendations following the adoption of the WGB's Phase 4 Report of Japan in June 2019. Through implementing the Phase 3 recommendations, the legal framework has been strengthened by the amendment of the Act on Punishment of Organized Crime and Control of Crime Proceeds that allowed the confiscation of the proceeds of foreign bribery and criminalized the laundering of such proceeds, as well as the amendment of the Code of Criminal Procedure that introduced the Agreement Procedure. In addition, the authorities have been making persistent efforts and allocating resources to investigate and prosecute foreign bribery cases. The Ministry of Foreign Affairs (MOFA) has, in line with OECD recommendations, requested overseas diplomatic missions to designate officials as contact points in order to receive inquiries and notifications about foreign bribery cases and gathering of related information as widely as possible. To prevent corruption related to Official Development Assistance (ODA), MOFA also provides consultation services to Japan's ODA projects. The authorities also noted that they had been strengthening efforts to raise the awareness of the offence of foreign bribery among the Japanese legal profession, businesses, and the general public.

STAFF APPRAISAL

50. Japan's economy is growing above potential despite external headwinds, but inflation momentum remains modest and downside risks have increased. Moderate growth in domestic demand is being eroded by the weaker external environment. Frontloading of private consumption ahead of the October 2019 consumption tax rate increase appears to have been smaller than in 2014. Underlying growth is expected to remain solid with near-term inflation reaching about one half of one percent, with a still-negative output gap. Over the medium term, growth is projected to moderate to near potential, inflation is expected to edge up slowly but remain below the Bank of Japan's two-percent target, and the output gap will gradually close. Japan faces significant risks, including a more-protracted fall in consumption following the tax rate increase, weaker-than-expected global growth, and rising adverse demographic pressures.

[41] Currently, Japan maintains that it can prosecute bribery committed on behalf of a Japanese company even when the offence is committed wholly abroad and the person who physically gave the bribe is not a Japanese national, provided that a Japanese national conspired with the bribe giver or was otherwise complicit in the offence.

51. Japan's macroeconomic challenges will intensify as its population ages and shrinks. While the strategy of Abenomics remains appropriate, a comprehensive and coordinated effort is needed to boost potential growth, lift current and expected inflation, and stabilize public debt. The accommodative stance of monetary policy should be maintained, complemented by measures to strengthen the monetary policy framework and enhance policy sustainability, to help raise inflation expectations. Strengthened financial sector policies, including tightening of macroprudential policy and support for regional bank consolidation, would help contain the build-up of financial risks stemming from demographic headwinds and prolonged low interest rates. Near-term fiscal support will help sustain domestic demand as well as the implementation of structural reforms. Over the longer term, a well-specified fiscal framework centered on gradual increases in the consumption tax rate and cuts to age-related expenditures would help reduce debt sustainability risks. Implementation of structural reforms will support long-run growth and reflation.

52. The Bank of Japan (BoJ) should maintain its short- and long-term interest rate targets to support growth and inflation, while considering measures to enhance policy sustainability. The BoJ's recent emphasis on making the accommodative stance more sustainable by mitigating side-effects on the financial system is appropriate. Building on this progress, an updated assessment of the inflation level consistent with the price stability objective could be carried out. The review would provide the BoJ with an opportunity to reconfirm its commitment to the target, increase policy flexibility by introducing an inflation range around the target, and emphasize the medium- to long-term nature of achieving the price stability objective. This would allow the BoJ to more flexibly address competing policy objectives such as financial stability.

53. Financial sector policies should be strengthened to safeguard financial stability and make the accommodative stance of monetary policy more sustainable. The financial authorities should consider tightening macroprudential policy by raising the countercyclical capital buffer above its current zero percent level, to pro-actively build-up the resilience of the banking sector to rising systemic risk. The Financial Services Agency (FSA) should also continue to strengthen its financial sector supervision and regulation, by intensifying its risk assessment process and completing its macroprudential policy toolkit to better identify and mitigate the build-up of systemic risk. The FSA should continue to engage with regional banks to facilitate the adaptation of their business models to demographic change, including by encouraging regional banks to ensure their soundness through revenue diversification, better utilization of IT/Fintech, and consolidation.

54. A broadly neutral fiscal stance is appropriate for the near term, together with continued monetary accommodation. The December 2019 stimulus package is projected to make the 2020 fiscal stance broadly neutral, while under current policies the 2021 fiscal stance is projected to be contractionary. Given downside risks and the need to avoid a pro-cyclical fiscal tightening that might undermine growth momentum, a neutral fiscal stance might also be called for in 2021, unless economic data outturns are stronger than expected. Additional fiscal measures in the near term could include: extending the duration of consumption tax countermeasures; further increasing wages of workers in the childcare, health and long-term care sectors; reinforcing income policies; and supporting structural reforms.

55. A well-specified medium-term fiscal framework is needed to reduce debt, lower uncertainty, and support reflation and growth. While the government has set a primary balance target for FY2025, credibility would benefit from greater realism in the assumptions for productivity, growth, and public spending, as well as more specificity with respect to measures to achieve the target. A clear fiscal framework would help diminish policy uncertainty, likely bolster corporate investment, and reduce households' precautionary saving. Steps to that end could include: adopting realistic growth and fiscal projections; factoring in aging costs in macro-fiscal projections; strengthening redistribution effects by raising the rate of taxation on capital gains or re-introducing a wealth tax; and raising the carbon tax. Reform of public social security programs is the essential second component of fiscal consolidation. Reforms should focus on improving pension sustainability and intergenerational equity, while healthcare reforms should include measures to increase the share of out-of-pocket spending for those over 75 years old and the wealthy elderly.

56. Implementation of an ambitious agenda of labor, product market, and corporate reforms is essential to help offset the effects of demographic headwinds. Bold implementation of such reforms would boost productivity and support reflation, and could offset as much as 60 percent of the demographic-driven slowdown in real GDP growth. Labor market reforms should be prioritized as they would have the largest growth and inflation impact. The authorities should improve on the 2018 Work Style Reform, emphasizing additional training and career opportunities for non-regular workers. Labor supply should be enhanced, including from women, older workers, and foreign workers. Reforms to corporates and the product market are the second-highest priority, where deregulation of product and service sectors, corporate governance reforms, and SME reform with support for alternative sources of financing and business succession would help lift productivity and investment.

57. The 2019 external position is preliminarily assessed to be broadly consistent with fundamentals and desirable policies, while outward spillovers from Japan can be sizeable. A well-specified medium-term fiscal framework and bolder structural reforms that support growth and domestic demand are needed to maintain external balance. As with the *2019 External Sector Report*, the estimated 2019 current account balance is preliminarily assessed as broadly consistent with medium-term fundamentals and desirable policies. Based on this current account assessment, the 2019 real exchange rate is also preliminarily assessed as in line with the real exchange rate level consistent with fundamentals and desirable policies. Slower growth or a tightening of financial conditions in Japan could generate significant outward spillovers in the form of slower growth in other Asian countries and a deterioration of global financial conditions.

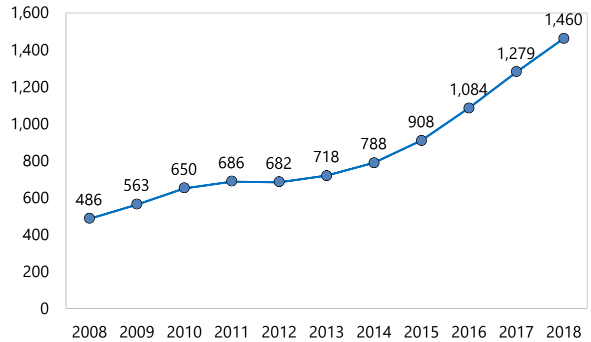
58. Efforts to improve enforcement against foreign bribery should continue. Efforts to combat the supply side of transnational corruption are welcome, including through Japan's amendment of its law to allow the confiscation of the proceeds of foreign bribery and criminalization of the laundering of such proceeds. This closed a long-standing loophole in Japan's implementation of the OECD Anti-Bribery Convention. The 2019 report of the OECD Working Group on Bribery in International Business Transactions noted that Japan had made a number of improvements since its last evaluation. Notwithstanding the recognition of Japan's recent improvements, concerns remain regarding the low level of enforcement of cases of foreign bribery of Japanese and foreign public officials, and greater efforts in raising the number of such investigations and convictions is urged.

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

Box 1. Foreign Workers in Japan[1]

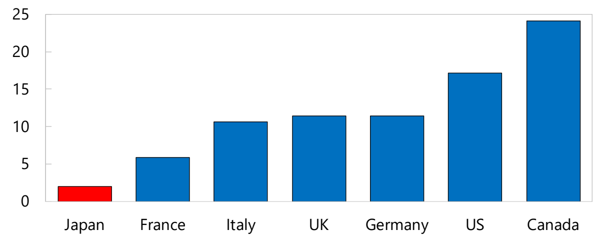
Japan's share of foreign workers is low but has grown under Abenomics. Foreign workers have been increasing since the inception of Abenomics in late-2012, with the share of foreign employment rising from 1.1 percent in 2012 to 2.0 percent in 2017. Vietnam, China and the Philippines accounted for most of the foreign labor inflows into Japan over 2012–17, with manufacturing, hotels/restaurants, and wholesale/retail as the top-employing sectors.

Japan: Number of Foreign Workers
(In Thousand)



Source: CEIC.

Foreign Employment in G7, 2017
(In Percent of Total Employment)



Sources: Haver Analytics; and Eurostat.
Note: For France, Italy, UK, and Germany, data is calculated as employed persons holding foreign citizenship in percent of total employment ages 15-64 years old. For US , data is calculated as foreign-born civilian employment in percent of total civilian employment ages 16 years and older. For Canada, data is calculated as landed immigrants (who have been granted the right to live in Canada permanently) employment in percent of total employment ages 15 years and older.

Japan has recently started opening up to larger foreign labor inflows. In April 2017, the government updated the Japanese *Green Card for Highly Skilled Foreign Professionals* by reducing the period of stay required before applying for permanent residence from five years to one. In November 2017, the government extended the residency of technical interns from three to five years.

In April 2019, Japan officially opened its doors to foreign workers with a wider set of skills.

- Under the amended *Immigration Control and Refugee Recognition Act*, passed by the Diet in December 2018, foreigners qualifying for the new Specified Skills Visa Status are able to enter Japan to work in designated sectors (including agriculture, nursing care, construction, specific manufacturing industries, and food and hospitality services) for a maximum period of five years (Category 1 visa status). The period of stay under a Category 1 visa is limited to five years, and workers are not able to bring family members.
- The new system also offers a possible path to long-term immigration via the Category 2 residence status, intended for workers with more advanced skills. The notion behind the reform is that Category 1 workers could upgrade their status to Category 2 if they qualify by passing an examination and meeting other conditions.

Preliminary indications suggest that the 2019 reforms have had limited success. At the time of inception, there was an expectation that around 340,000 workers would be granted Category 1 visas between 2019 and 2024, in addition to the inflow of technical trainees—Japan accepted around 480,000 trainees between 2013 and 2017. However, with a slow pace in the admissions process, take-up of Category 1 visas has been limited. As of end-November 2019, around 3,500 applicants had passed required exams to apply, with 1,770 visas granted but only 1,000 foreign workers in Japan (with processed new visas).

[1] Prepared by Mariana Colacelli and Todd Schneider (both APD).

Box 2. Nagi-town: A Case Study of Child-Friendly Policies[1]

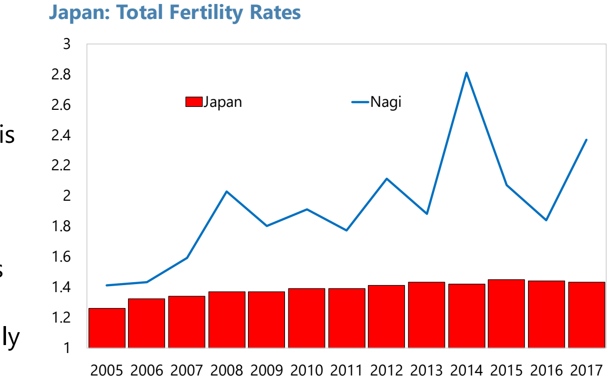
Nagi-town is a small town located in Okayama Prefecture in western Japan, with a population of about 6,000. Nagi-town's strong child-friendly policies have made it stand out as a success story in achieving a higher fertility rate. After Nagi-town residents turned down a merger with an adjacent municipality in a referendum held in 2002, the town office stepped up its efforts to raise fertility, driven by concerns that Nagi-town's economic viability would be in danger with further population declines.

Beginning in 2012, the town office became officially committed to providing full-fledged support to families with children. Measures and policies that have made Nagi-town child friendly include:

- *Financial benefits.* Benefits include one-time payouts for child birth on a rising scale from ¥100,000 (about US$900) for the first child up to ¥400,000 (about US$3,600) for the fifth child, with free healthcare for children until their graduation from high school.
- *Cooperative community*. Financial benefits are not all that matters to families with children. Hospitality and mutual support offered by the local community are equally valued by them. At "Child Home," a community center run by mothers themselves with the help of experienced advisors, new parents get to know other parents through various social events. When parents need temporary help, elderly volunteers readily provide care for their children.
- *Housing*. Availability of spacious houses with affordable rents is another attraction for families with children. The town office took the lead in developing three new residential districts in the town, which has 21 houses that are currently rented to families with children.
- *Employment opportunities*. While Nagi-town does not have easy access to big cities or major manufacturing hubs, the town office strives to create and find decent jobs for the young working generation. It developed a small industrial park which accommodates 18 firms, most of which are small to medium-sized manufacturers. It strengthened its job-matching capability by creating a one-stop facility for part-time job seekers and firms with small employment needs. As more women desire to continue to work after childbirth, the only childcare facility in town has approached its capacity, and the town office decided to build a new facility with a larger childcare capacity.

The above measures contributed to a doubling of Nagi-town's total fertility rate (the number of children per woman) from 1.4 in 2005 to 2.8 in 2014.[2] This compares with the evolution of Japan's total fertility rate, which has risen only modestly over that same period. "Each measure is not unique [to Nagi] and is replicable by other municipalities. But it is our comprehensive approach that has led parents to feel that they can have a third or fourth baby here", noted a senior Nagi-town official who himself has three children. This case study of Nagi-town provides useful lessons for other Japanese towns and prefectures, indicating that multi-faceted child-friendly policy support can have a meaningful impact on the fertility rate.

Japan: Total Fertility Rates



Source: Ministry of Health, Labor and Welfare, Nagitown.

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[1] Prepared by Takuma Hisanaga (APD).

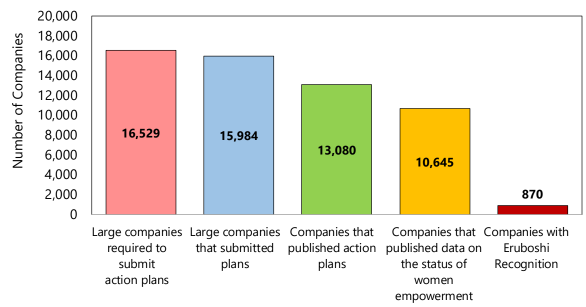
[2] The total fertility rate in a specific year is defined as the total number of children that would be born to each woman if she were to live to the end of her child-bearing years and give birth to children in alignment with the prevailing age-specific fertility rates. This indicator is measured in children per woman.

Box 3. Government Initiatives to Promote Gender Equality in Japan[1]

The government has several measures in place to support women in the workplace. Recent regulation (including the 2015 *Act on Promotion of Women's Participation and Advancement in the Workplace)* forms the basis for encouraging the advancement of women by supporting work-life balance. The Act encourages employers in the private and public sectors to formulate and publish action plans to address challenges faced by women in the workplace and to promote work-life balance. Firms with more than 300 employees (100 employees since 2019) are required to publish action plans and information on at least one of: (i) the record on providing job opportunities for women (e.g. percentage of women among new hires or in managerial positions); and (ii) the record on supporting work-life balance and a suitable work environment (e.g. data on overtime hours, and percentage of employees taking parental leave by gender).

Through the public procurement process, the government has provided incentives to firms to uphold measures that support women in the workplace. In 2016 the government introduced *Eruboshi* certification (or "L-Stars" and "Platinum L-Stars") to officially certify employers with outstanding performance on women's participation and advancement in the workplace. Specific criteria used to obtain *Eruboshi* certification include: (i) formulation of an action plan; (ii) documentation and dissemination of the action plan within the firm; (iii) documentation on achievements pertaining to women's participation and advancement; and (iv) announcement of the action plan to the general public. In making decisions on public procurement contracts, in addition to considering the price, central and local governments take into account if firms have *Eruboshi* certification. Extra points are given to *Eruboshi*-certified firms that bid for a government contract, with the specific allocation of points decided by the ministries that conduct the procurement.

Japan: Promotion of Women's Advancement in the Private Sector



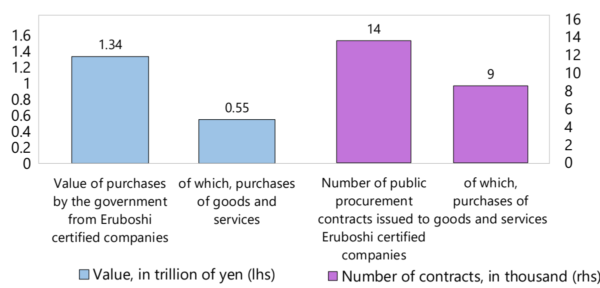
Source: The Act on Promotion of Women's Participation and Advancement in the Workplace, State of Implementation and Status Report on Women's Participation in Government Ministries and Agencies. Cabinet Office, Ministry of Health, Labour and Welfare, 2019.

There has been significant progress in responding to the government measures supporting gender equality in the workplace.

Regarding action plans to promote gender equality: As of June 2019, all central *government* agencies and local governments have submitted their action plans. In the *private* sector, 15,983 firms (96.7 percent of employers with more than 300 workers) have submitted action plans, while 10,645 have published data on key metrics stipulated in the law.

Regarding public procurement incentives: Since the April 2016 certification came into effect, the government signed 13,600 contracts with *Eruboshi*-certified companies for purchases worth a total of ¥1.34 trillion (0.24 percent of GDP) in FY2017. As of June 2019, 870 companies nationwide have been awarded *Eruboshi* certificates in recognition of their excellence in advancing women in the workplace.

Japan: Public Procurement Contracts Issued to Eruboshi Certified Companies, FY2017



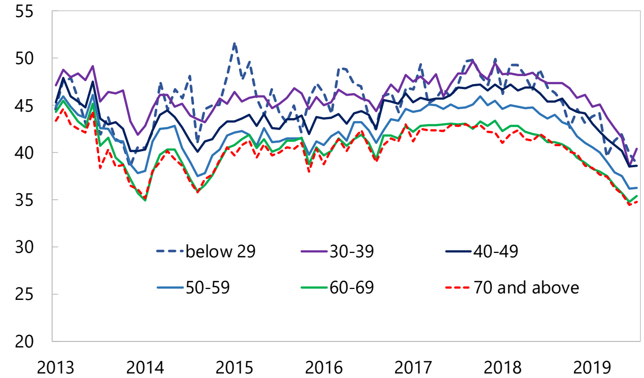
Source: Status of Efforts Regarding Public Procurement Based on the Act on Promotion of Women's Participation and Advancement in the Workplace, Cabinet Office Gender Equality Bureau, June 18, 2019.

[1] Prepared by Albe Gjonbalaj and Mariana Colacelli (both APD).

Box 4. What Explains the Decline in Japanese Consumer Confidence?[1]

Japan's consumer sentiment has deteriorated significantly since mid-2018 for all age-groups, with the largest decline observed for young Japanese. According to the monthly consumer confidence index, Japanese consumer sentiment softened for the twelfth consecutive month in October 2019, hitting a record-low level since the survey began in April 2013. While the index recovered mildly in November, it has not returned to the level seen earlier this year. By age-group, the decline was broad-based, while sentiment weakened the most for the youngest cohort (age below 29 years).

Japan: Consumer Confidence by Age Cohort
(Monthly, from April 2013 to October 2019)

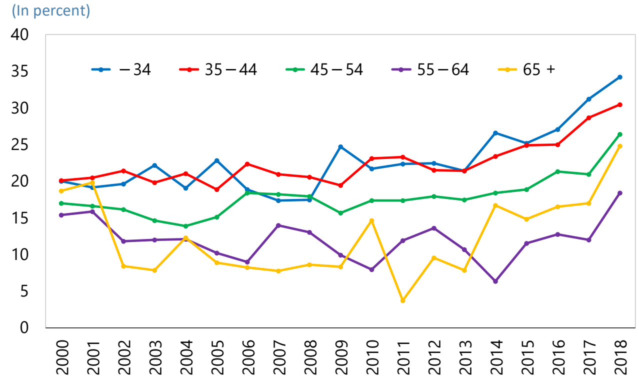


Source: Cabinet Office of Japan

The decline in consumer confidence is largely due to idiosyncratic factors. The consumption tax rate increase of October 2019 weakened Japanese consumers' perceptions of the strength of the economy and household purchasing power. Compared to the decline in confidence at the time of the consumption tax rate increase of 2014, the decline was larger this year, despite the smaller increase in the tax rate. Heightened global uncertainty due to the ongoing trade tensions is also likely to have dampened consumer confidence, beginning in 2018.

In addition, structural factors related to adverse demographics may have played a role. Concerns about the sustainability of the social security system—in the face of adverse demographic trends and perceptions of longer life expectancy—may have constrained consumption activities and dampened sentiment. One piece of evidence for such concerns is the increase in saving rates in recent years, a trend that precedes recent global trade tensions. Saving rates increased for all age groups and are higher for younger cohorts than older cohorts (see text figure). However, the rate of increase in saving rates is noticeably larger for retirees (those above age 65 years), which is difficult to reconcile with a standard Modigliani life-cycle hypothesis. One possible explanation is the accompanying increase in life-expectancy over time. Uncertainty about the health of any given individual's personal finance, in the context of a longer-than-expected life expectancy, could dampen consumer confidence and incentivize consumers, including retirees, to continue to save more even after their retirement.

Japan: Household Saving Rate by Age Group
(In percent)



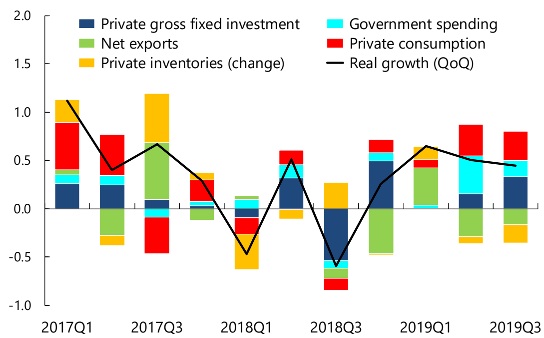
Source: Ministry of Internal Affairs and Communications, Household Survey.

[1] Prepared by Gee Hee Hong (APD).

Figure 1. Japan: Recent Economic Developments

Growth was supported by private consumption and public spending in the first three quarters of 2019…

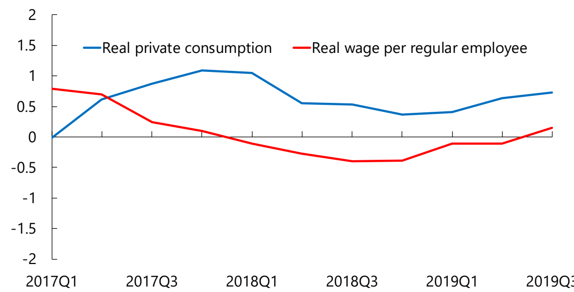
Japan: Contributions to Real GDP
(In percent QoQ, SA)



Source: Haver Analytics.

… even though real wages remained weak.

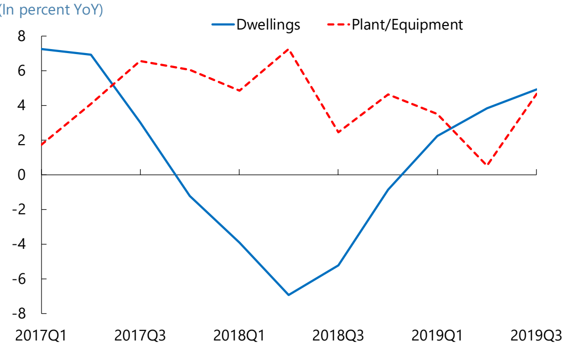
Real Wage and Real Consumption Growth
(In percent, YoY quarterly-rolling average)



Source: Haver Analytics.
Note: Wage includes scheduled earnings.

Private investment has been soft.

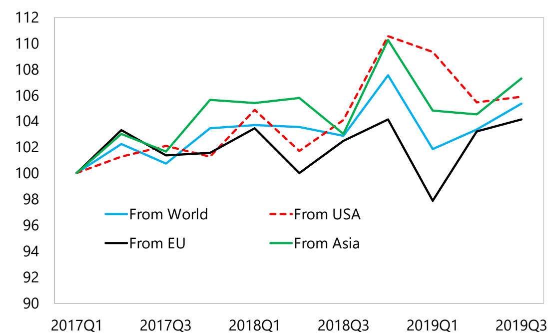
Private Investment
(In percent YoY)



Source: Haver Analytics.

Real imports have been volatile.

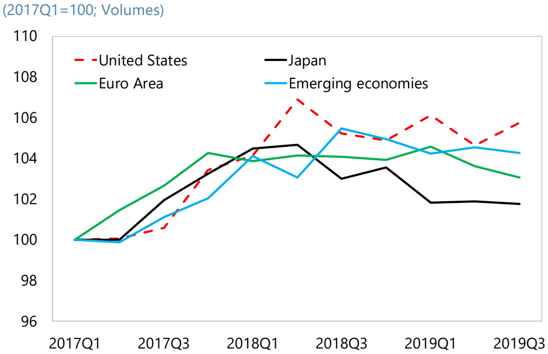
Real Imports by Origin
(2017Q1=100; SA)



Sources: Haver Analytics.

World exports have weakened…

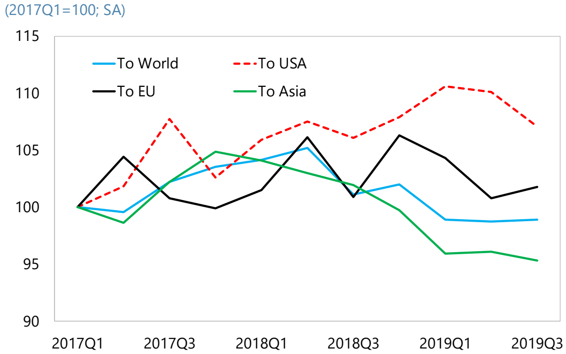
World Exports
(2017Q1=100; Volumes)



Sources: CPB World Trade Monitor.

…with Japan's exports to most of its major trading partners declining in 2019.

Real Exports by Destination
(2017Q1=100; SA)



Sources: Haver Analytics.

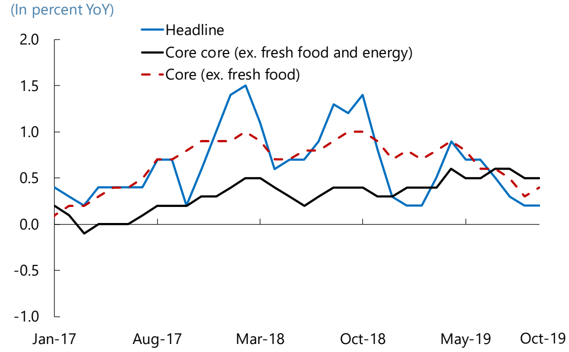
Figure 2. Japan: Inflation Developments

Headline inflation has decreased in recent months…

…while the Japanese yen (in NEER terms) has strengthened in 2019.

Inflation Indicators

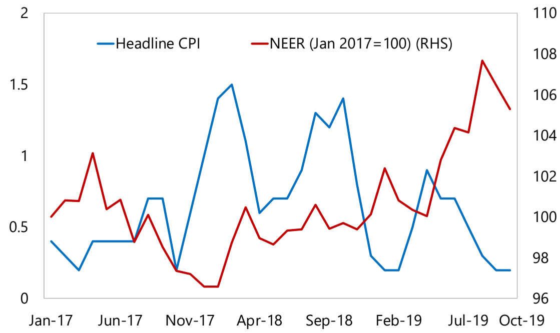
(In percent YoY)



Sources: Haver Analytics; IMF staff estimates.

Nominal Effective Exchange Rate

(In percent, YoY)



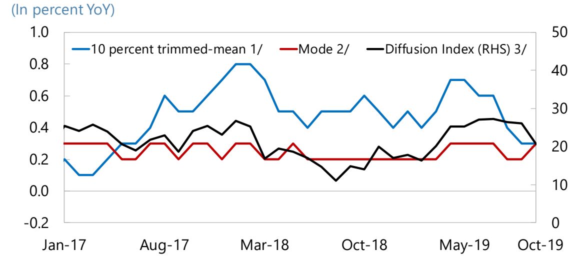
Sources: Haver Analytics; and IMF staff calculations.

BoJ's measures of underlying inflation show some positive signs.

The increase in consumption tax rate was partly offset by free education and price cuts of some items in October.

Selected BoJ Underlying Inflation Measures

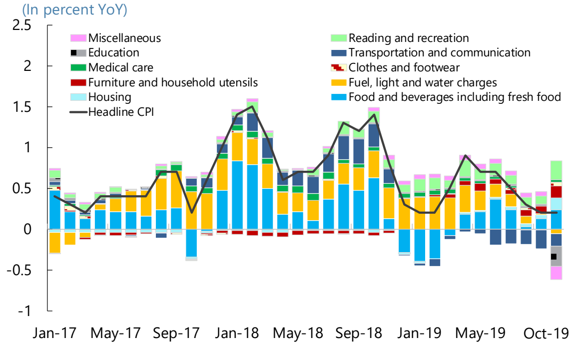
(In percent YoY)



1/ Weighted averages of yoy price changes in individual CPI items, with items falling in the upper and lower 10 percent tails (by weight) trimmed.
2/ Inflation rate with highest density in the distribution.
3/ Share of items in the CPI (less fresh food) whose price has increased from a year earlier minus share of items whose price has declined.
Source: Haver Analytics.

Headline CPI Inflation Contribution

(In percent YoY)



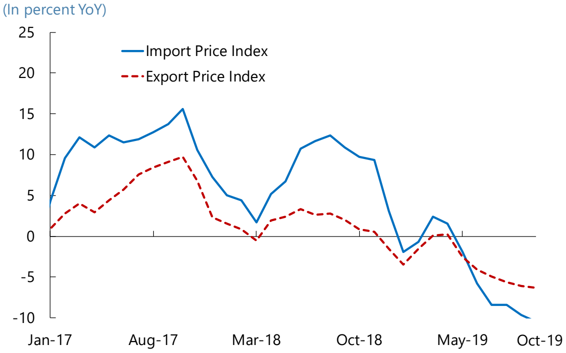
Sources: Haver Analytics; and IMF staff calculations.

Import and export prices have decreased, reflecting the decrease in oil prices.

Producer prices increased following the consumption tax rate increase.

Export and Import Price Indices

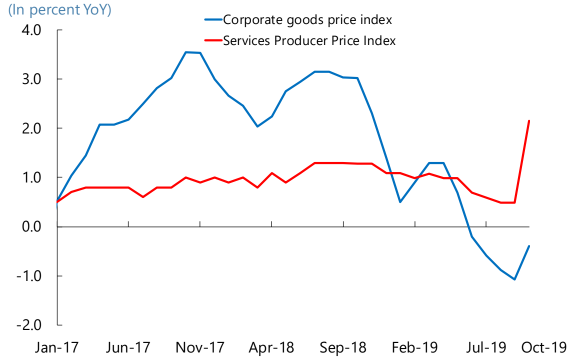
(In percent YoY)



Source: Haver Analytics.

Inflation Indicators

(In percent YoY)



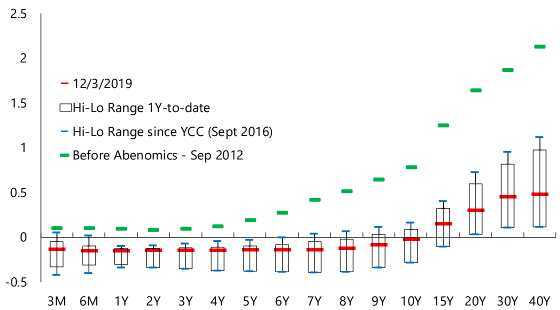
Source: Haver Analytics.

Figure 3. Japan: Monetary Policy Transmission

JGB yields across maturities have fallen significantly…

JGB Yield Curve and Range1/

(In percent)

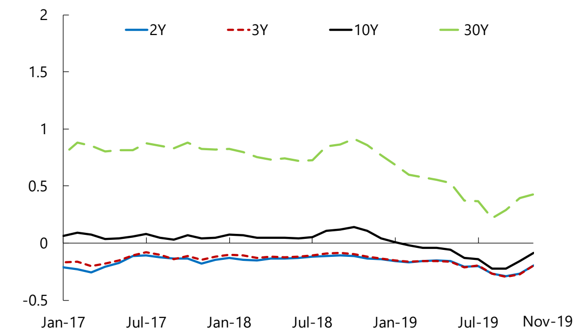


Source: Bloomberg L.P.
1/ Range indicates max & min yields per maturity per indicated period.

…and term spreads have declined.

Japanese Government Bond Yields

(In percent)

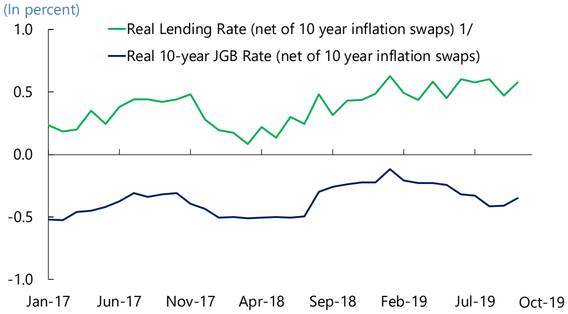


Source: Bloomberg L.P.

Real interest rates remain depressed.

Japan: Real Interest Rate

(In percent)

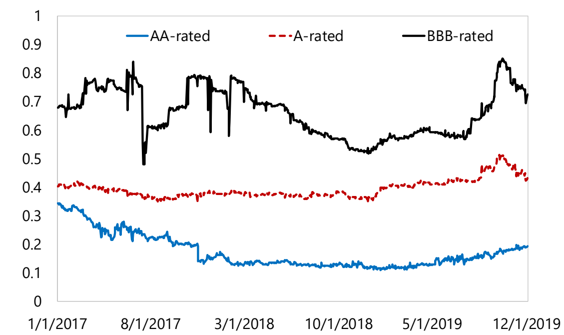


1/ Based on average long-term bank-loan rate.
Sources: CEIC; and Haver Analytics.

Corporate bond spreads have increased for the lowest-rated bonds …

Corporate-Government Bonds Spreads (5Y)

(In percent)

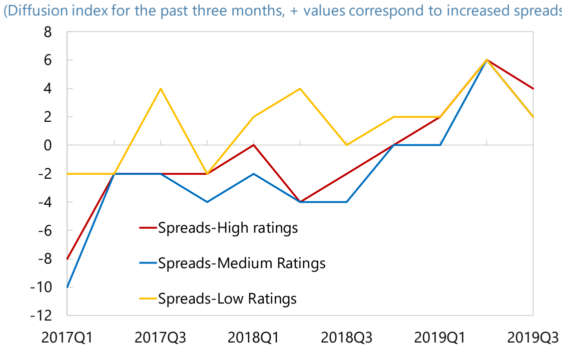


Source: Bloomberg L.P.

…and spreads on bank loans have increased…

Loan Rate Spreads

(Diffusion index for the past three months, + values correspond to increased spreads)

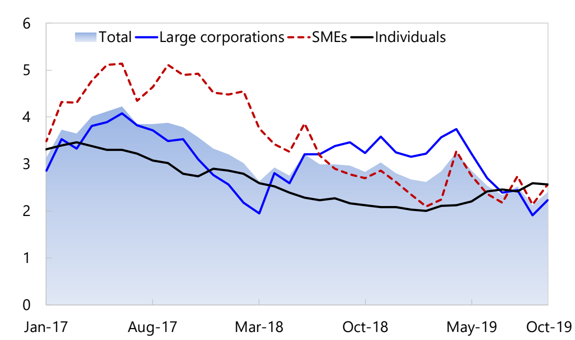


Sources: Bank of Japan, Senior Loan Officer Opinion Survey

…while growth in bank lending has weakened.

Growth in Bank Lending

(In percent YoY)



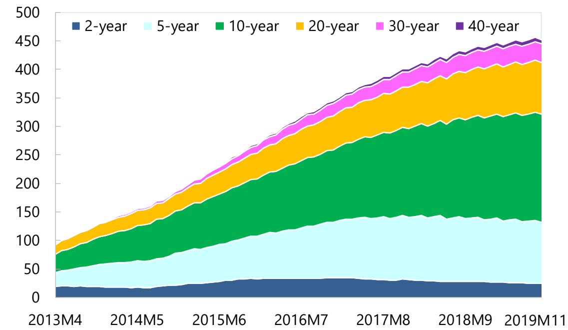
Source: CEIC.

Figure 3. Japan: Monetary Policy Transmission (concluded)

Bank of Japan's balance sheet continues to expand, but at a declining pace.

BoJ JGB Holdings by Maturity, 2013-2019

(In trillions JPY)

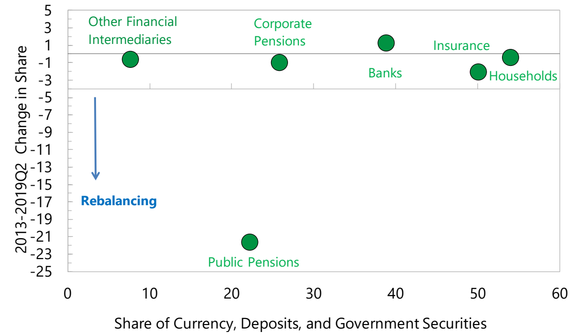


Source: Haver Analytics.

Portfolio rebalancing has been implemented by public pensions.

Currency, Deposits & Government Bonds Holdings (2019Q2)

(In percent of total portfolio)

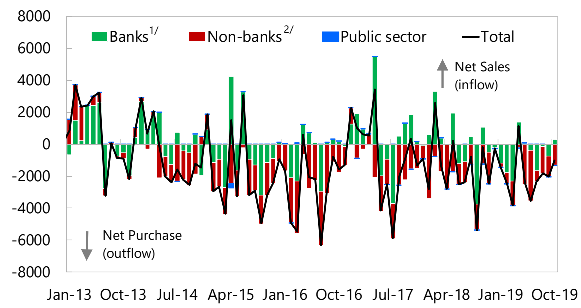


Sources: Bank of Japan Flow of Funds, Haver, and IMF Staff Estimates.

Net portfolio outflows by residents continue.

Foreign Asset Purchase/Sales by Japanese Residents

(In millions JPY)



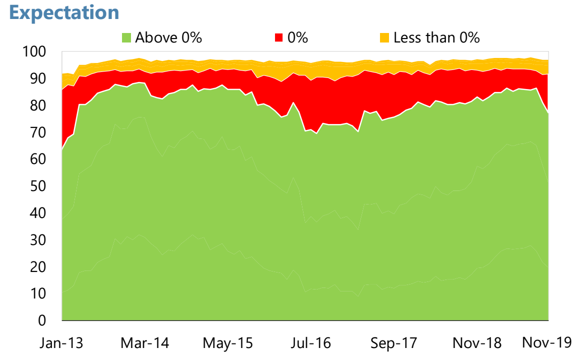
Sources: CEIC database; and IMF staff calculations.

1/ Banking accounts of banks and trust banks.

2/ Includes trust accounts of banks and trust banks.

Deflation concerns among households have fallen since 2016.

Share of Households with One Year Ahead Inflation Expectation

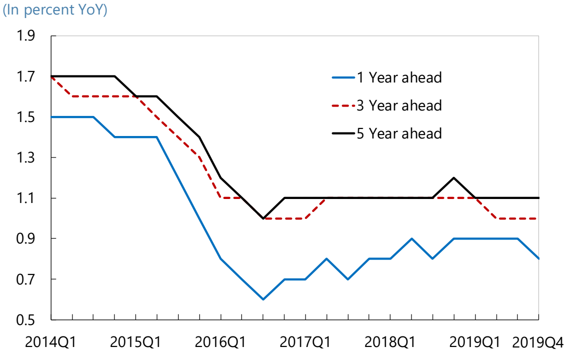


Source: Cabinet Office.

Some reduction in medium-term inflation expectations of businesses hints at possible deceleration of expectations.

Tankan Survey: Inflation Outlook

(In percent YoY)

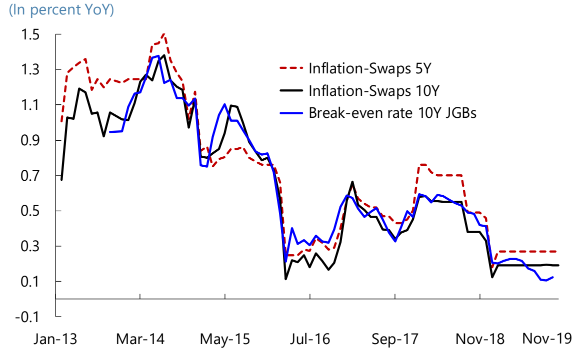


Source: Haver Analytics.

Market-based inflation expectations indicators have stabilized in recent months.

Inflation Expectations

(In percent YoY)

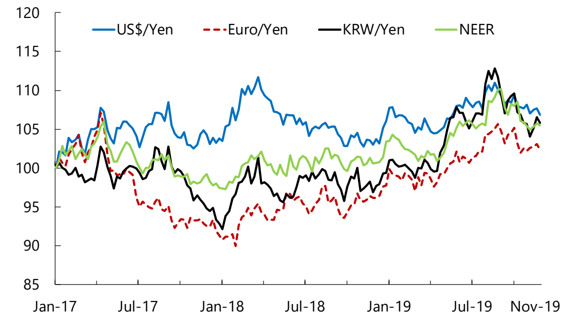


Sources: Bloomberg L.P.; and IMF staff estimates.

Figure 4. Japan: Financial Markets Developments

The yen has appreciated across the board in 2019 …

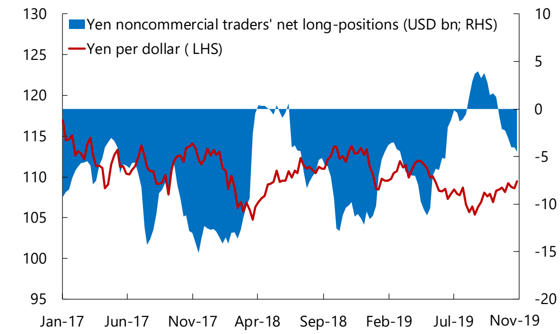
Selected Exchange Rates
(Jan 3, 2017=100)



Source: Bloomberg L.P.

… but net short-yen positions re-emerged in late-2019.

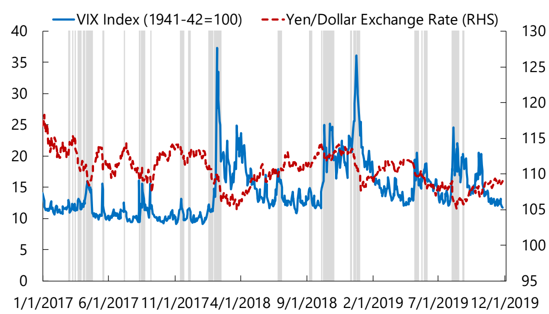
Chicago Mercantile Exchange Yen Position



Source: Bloomberg L.P.

Market uncertainty is somewhat reduced at end-2019…

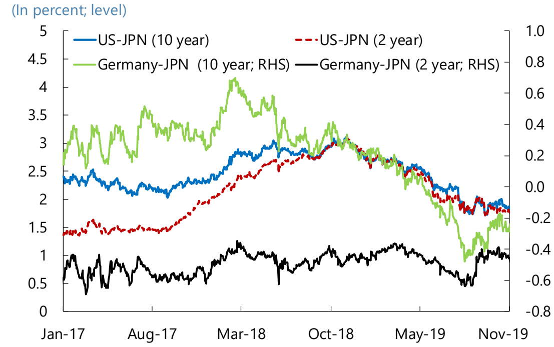
VIX Index and Exchange Rate 1/



Source: Bloomberg L.P.
1/ Shaded areas refer to risk-off episodes with the VIX one standard deviation above the 60-day moving average.

…and U.S.-Japan interest rate differentials have fallen as the U.S. Fed lowers interest rates.

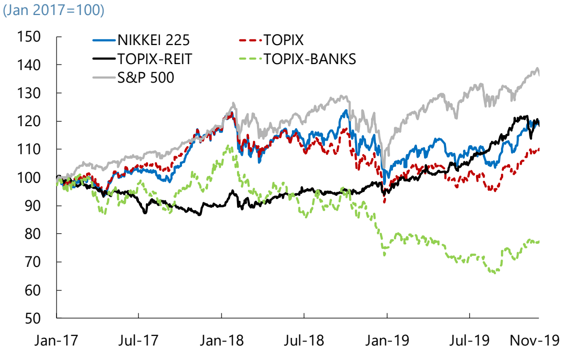
Interest Differential
(In percent; level)



Source: Bloomberg L.P.

Equity indices are broadly flat in 2019.

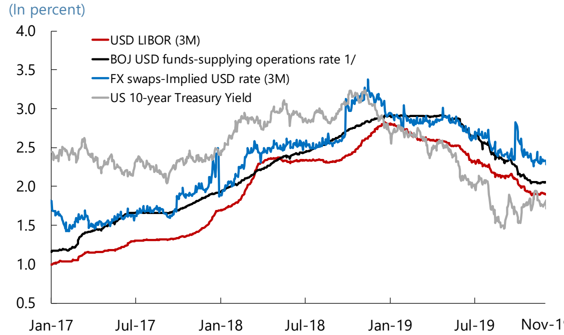
Equity Markets
(Jan 2017=100)



Source: Bloomberg L.P.

U.S. dollar funding costs have fallen recently.

USD Funding Cost in Japan
(In percent)

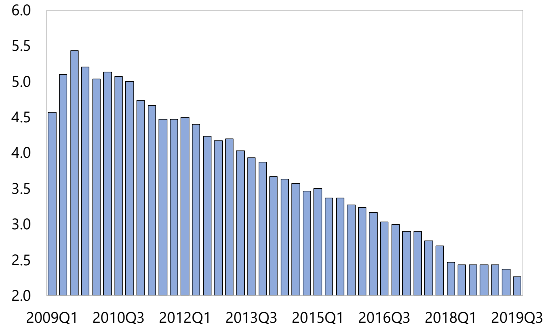


Sources: Bloomberg; and IMF staff estimates.
1/ OIS rate + 50 bps.

Figure 5. Japan: Labor Market and Wage Developments

Unemployment rate continues to decline…

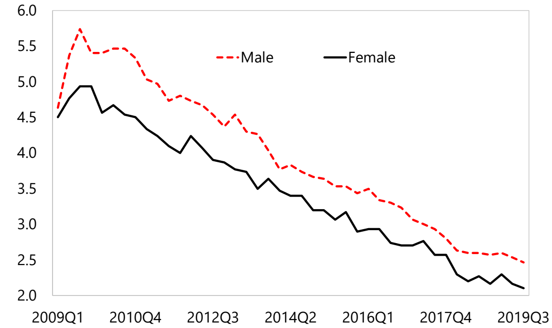
Unemployment Rate
(In percent of labor force, SA)



Sources: Haver Analytics, Ministry of Internal Affairs and Communications.

…both for male and female workers.

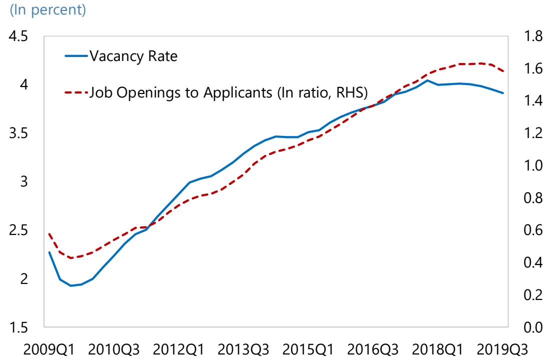
Unemployment Rate
(In percent of labor force, SA)



Sources: Haver Analytics, Ministry of Internal Affairs and Communications.

The increase in the ratio of job-openings-to-applicants has stopped…

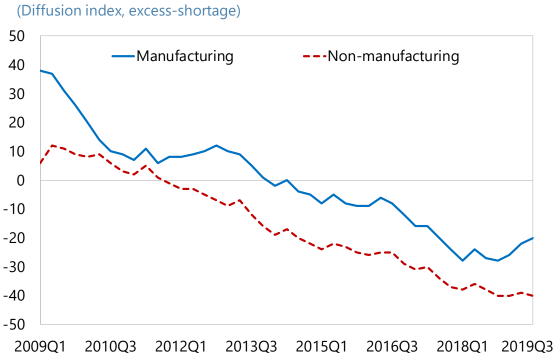
Vacancy Rate and Ratio of Job Openings to Applicants
(In percent)



Source: Haver Analytics.

…and the tight employment conditions have moderated in manufacturing.

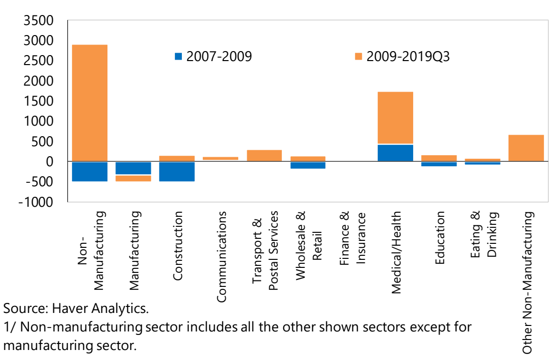
Tankan Enterprise Survey: Employment Conditions
(Diffusion index, excess-shortage)



Source: Tankan Survey, Bank of Japan.

The increase in full-time employment since the 2009 crisis has been concentrated in non-manufacturing sectors…

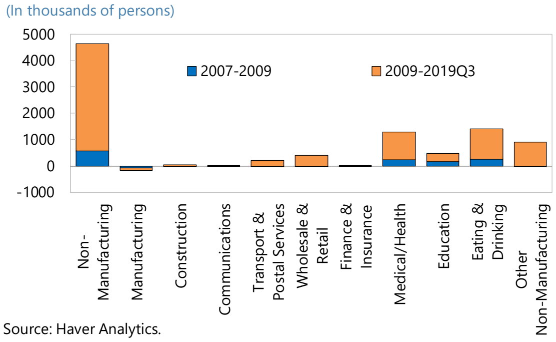
Change in Full-time Employees by Sector [1/]
(In thousands of persons)



Source: Haver Analytics.
1/ Non-manufacturing sector includes all the other shown sectors except for manufacturing sector.

…while the increase in part-time employees has remained dominant.

Change in Part-time Employees by Sector [1/]
(In thousands of persons)

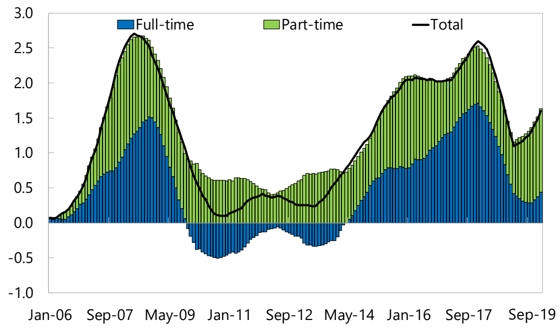


Source: Haver Analytics.
1/ Non-manufacturing sector includes all the other shown sectors except for manufacturing sector.

Figure 5. Japan: Labor Market and Wage Developments (concluded)

Employment growth has fallen, mainly due to shrinking growth in full-time workers.

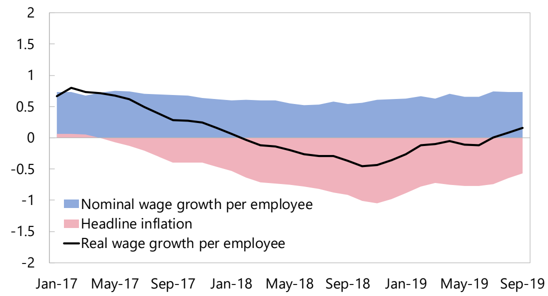
Employment Growth Rate
(Average annual growth of the number of workers, in percent)



Source: Haver Analytics.

Real wage growth per employee remains weak…

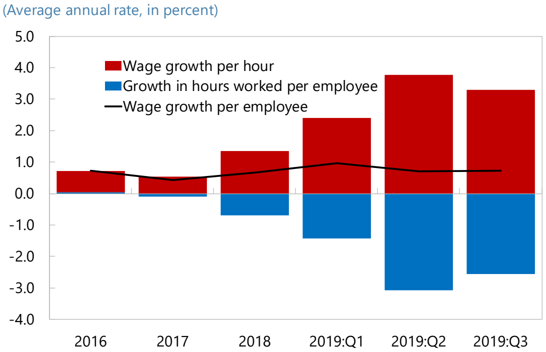
Real Wage Growth per Regular Employee
(Average annual rate, in percent)



Source: Haver Analytics.
Note: Wage includes scheduled earnings.

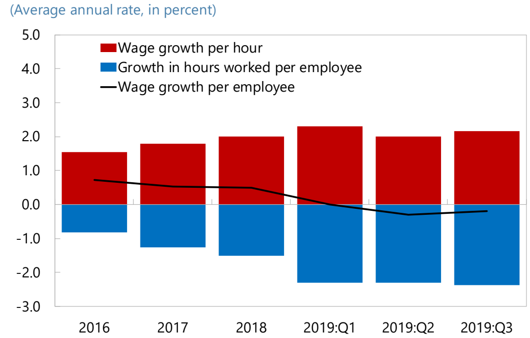
..but wage per hour is growing due to fewer hours worked per employee. The decrease in hours by the average part-time employee is likely due to low-hours worked by newly-joined workers, but the decrease in hours worked by full-time workers seems to reflect lower utilization of labor.

Nominal Wage Growth per Full-Time Employee
(Average annual rate, in percent)



Source: Haver Analytics.

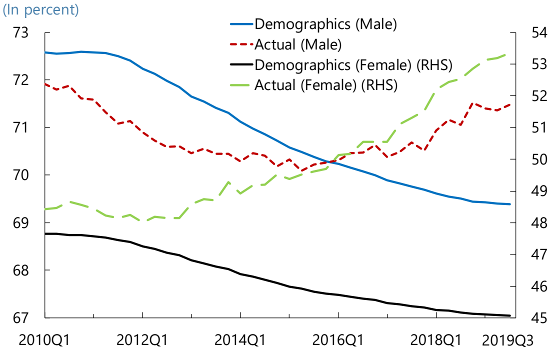
Nominal Wage Growth per Part-Time Employee
(Average annual rate, in percent)



Source: Haver Analytics.

Amid a declining population, female labor force participation has picked up…

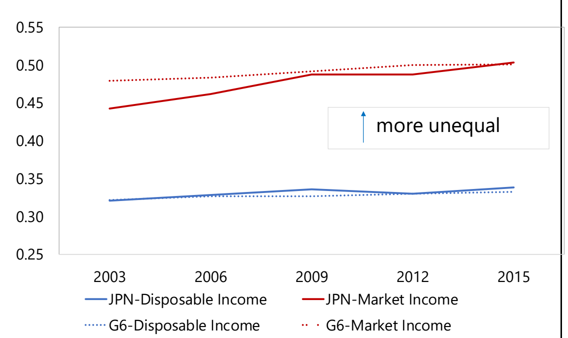
Labor Force Participation Rate
(In percent)



Source: Ministry of Internal Affairs and Communications.

… while market income inequality has been increasing.

Income Inequality: Gini Coefficient



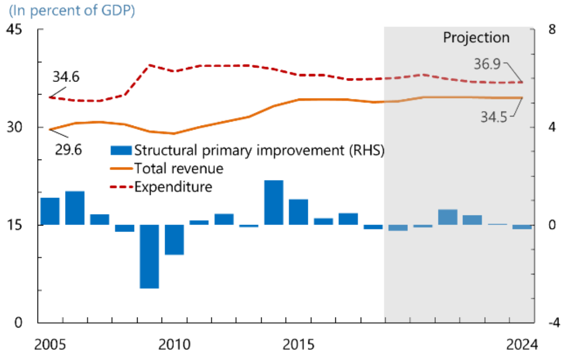
Source: OECD, Income Distribution Database.

Figure 6. Japan: Fiscal Developments and Sustainability

The fiscal balance, while remaining in deficit, is projected to improve due to the 2019 consumption tax rate increase and expiration of December 2019 stimulus package.

General Government Fiscal Balance

(In percent of GDP)

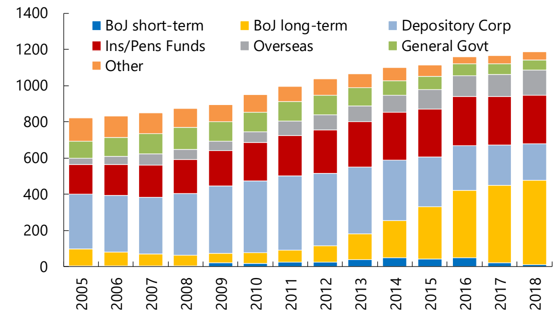


Sources: IMF, *World Economic Outlook*; and IMF staff estimates.

Bank of Japan's JGB holdings and domestic investors' home bias help maintain the current favorable funding environment.

Public Debt Financing

(In trillion yen; end of period)



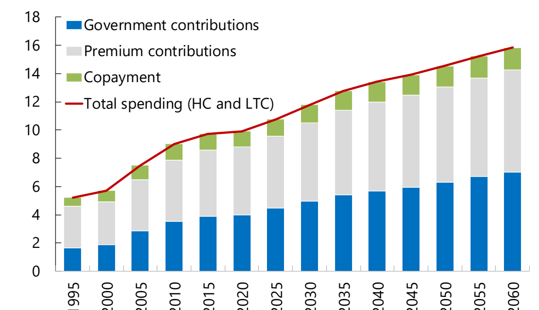
Source: Flow of Funds (Bank of Japan)

Note: Includes both central and local governments' debt (including FLIP bonds)

In the coming years, age-related costs will increase.

Financing of Health Care (HC) and Long-Term Care (LTC)

(In percent of GDP)

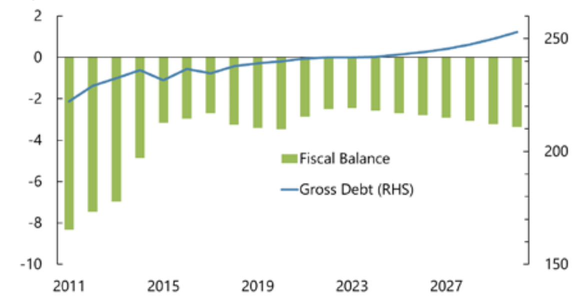


Sources: Ministry of Health, Labor, and Welfare; IMF World Economic Outlook database; and IMF staff estimates.

Public debt is unsustainable under current policies, and will continue to rise along with age-related costs.

Japan: Gross Public Debt and Fiscal Balance [1/]

(In percent of GDP)



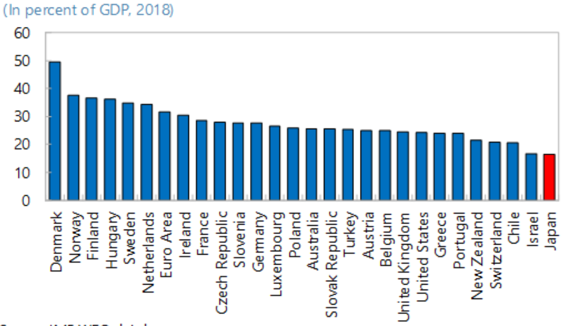
Sources: Cabinet Office; and IMF staff estimates and projections.

1/ Gross debt of the general government including the social security fund.

Relative to peers, Japan's share of non-social security spending has remained low...

OECD: Spending excluding Social Security and Interest [1/ 2/]

(In percent of GDP, 2018)



Source: IMF WEO database.

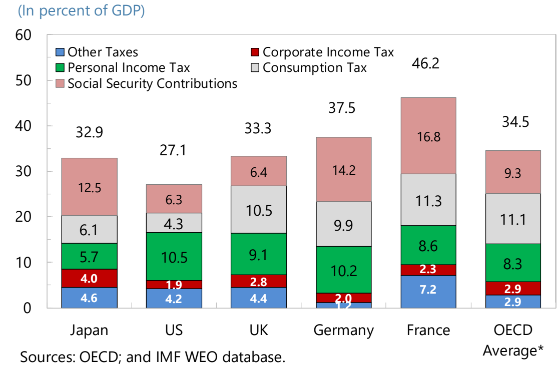
1/ OECD countries with missing data (e.g., Canada, Italy and Spain) are not reported here.

2/ General government basis.

...while there is room for increasing tax revenue.

General Government Tax and Social Security Revenue, 2017

(In percent of GDP)



Sources: OECD; and IMF WEO database.

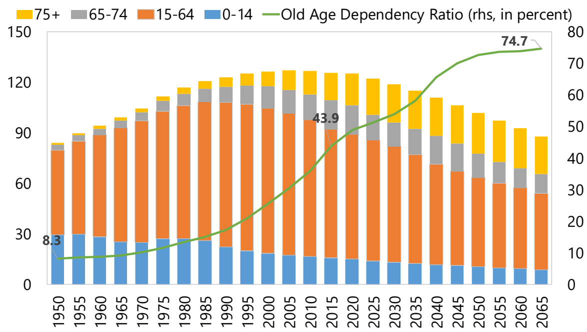
*OECD Average as of 2017

Figure 7. Japan: Demographics

Over the next 40 years, the population will shrink by over 25 percent…

Japan: Population and Composition

(In million)

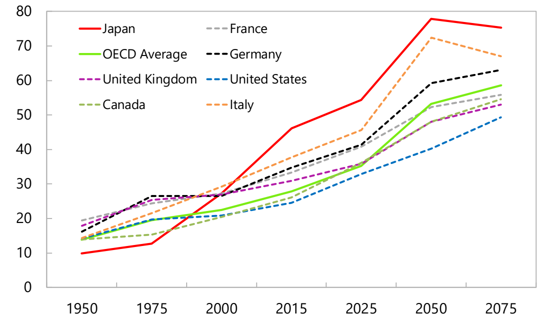


Source: Cabinet Office, White Paper on Aging (2017).

…and the old-age dependency ratio will sharply increase.

G7: Old-Age Dependency Ratio

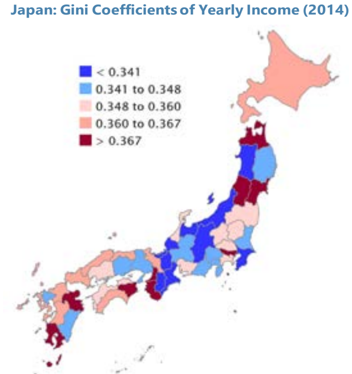
(In percent)



Source: OECD; United Nations, *World Population Prospects – 2017 Revision*.

Market income inequality has been increasing, with higher inequality in poorer and older prefectures.

Japan: Gini Coefficients of Yearly Income (2014)

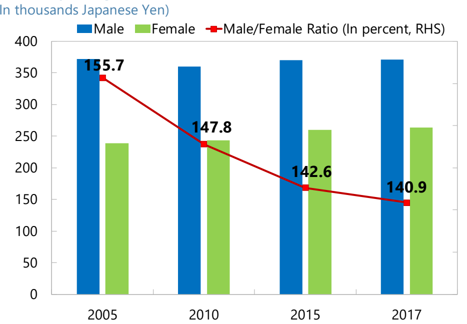


Source: National Survey of Family Income and Expenditure (2014).

Gender inequality is significant, but the male-female wage differential has decreased.

Monthly Wages (Male vs. Female)

(In thousands Japanese Yen)

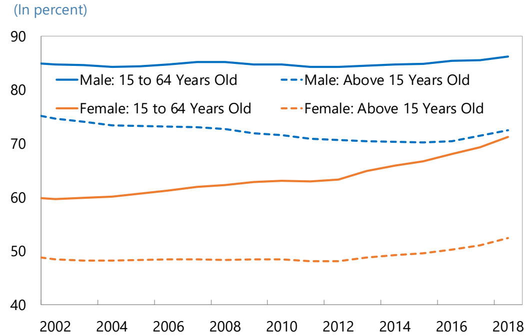


Source: Social Indicators by Prefecture (2017).

Women's economic participation has increased…

Labor Participation Ratios by Gender

(In percent)

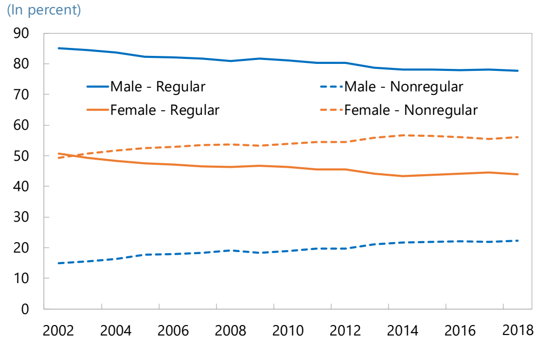


Source: Ministry of Internal Affairs and Communications.

…though most women are employed as non-regular or part-time workers, contributing to higher inequality.

Employment by Format and Gender

(In percent)

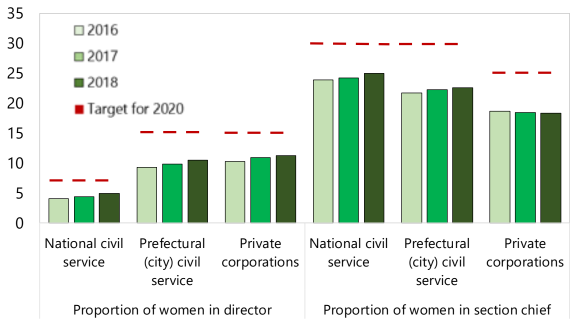


Source: Ministry of Internal Affairs and Communications.

Figure 8. Japan: Gender Inequality

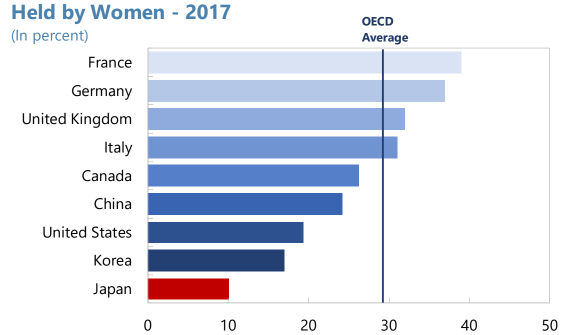
Women are underrepresented in managerial and policy-making positions.

Women in Managerial Roles
(In percent)



Source: Gender Equality Bureau, Cabinet Office.

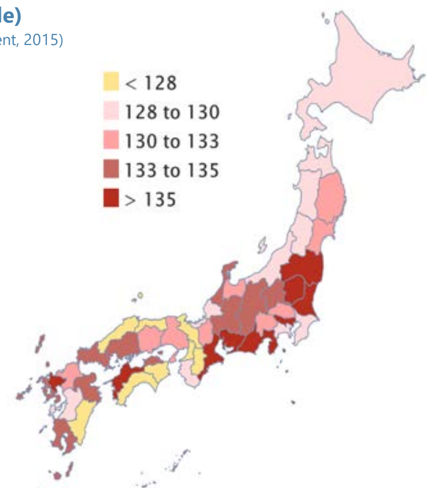
Share of Parliamentary Seats in a Single or Lower Chamber Held by Women - 2017
(In percent)



Source: Inter-Parliament Union.
Japan data is as of June 2018.

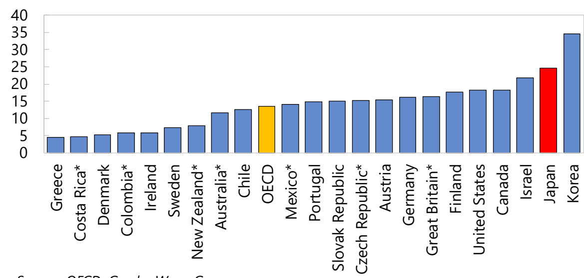
The gender wage gap is large in Japan, both across all prefectures and relative to other OECD countries.

Japan: Monthly Wages per Hours Worked (Male vs. Female)
(In percent, 2015)



Source: Social Indicators by Prefecture (2017).

Gender Wage Gap
(In percent of male median wage, data as of 2017)



Source: *OECD, Gender Wage Gap.*
*Data as of 2018.
Note: Gender wage gap is unadjusted and is defined as the difference between meadian earnings of men and women relative to median earnings of men. Data refer to full-time employees and self-employed.

Table 4. Japan: Selected Economic Indicators, 2017–21

Nominal GDP: US$ 4,954 Billion (2018)
Population: 126 Million (2018)
GDP per capita: US$ 39,166 (2018)
Quota: SDR 30.8 billion (2018)

	2017	2018	2019	2020	2021
			Est.	Proj.	
			(In percent change)		
Growth					
Real GDP	2.2	0.3	1.0	0.7	0.5
Domestic demand	1.6	0.3	1.1	1.0	0.6
Private consumption	1.3	0.0	0.5	-0.1	0.6
Business investment	4.0	2.1	1.7	1.0	3.0
Residential investment	1.7	-6.7	2.4	-1.7	0.1
Government consumption	0.2	0.9	2.1	2.8	0.4
Public investment	0.5	0.3	2.7	5.5	-6.1
Stockbuilding	0.1	0.0	0.1	-0.1	0.0
Net exports	0.5	0.0	-0.2	-0.2	-0.2
Exports of goods and services	6.8	3.4	-1.8	-0.4	2.0
Imports of goods and services	3.4	3.4	-0.6	0.6	2.8
Output Gap	-0.3	-0.7	-0.3	-0.2	-0.3
			(In annual average)		
Inflation					
Headline CPI	0.5	1.0	0.6	1.1	1.2
GDP deflator	-0.2	-0.1	0.6	1.0	0.5
			(In percent of GDP)		
Government					
General government					
Revenue	34.2	33.8	34.0	34.6	34.6
Expenditure	37.3	37.4	37.6	38.0	37.4
Overall Balance	-3.1	-3.6	-3.6	-3.5	-2.8
Primary balance	-2.7	-3.3	-3.4	-3.5	-2.9
Structural primary balance	-2.9	-3.1	-3.3	-3.4	-2.8
Public debt, gross	234.6	237.9	239.0	239.8	241.1
			(In percent change, end-period)		
Macro-financial					
Base money	9.7	5.0	6.6	6.1	5.2
Broad money	3.5	2.4	2.8	2.0	2.2
Credit to the private sector	4.0	1.5	2.9	2.5	2.5
Non-financial corporate debt in percent of GDP	138.5	141.2	142.5	143.4	144.8
			(In percent)		
Interest rate					
Overnight call rate, uncollateralized (end-period)	-0.1	-0.1	…	…	…
Three-month CD rate (annual average)	0.0	0.0	…	…	…
Official discount rate (end-period)	0.3	0.3	0.3	0.3	0.3
10-year JGB yield (e.o.p.)	0.1	0.1	-0.1	0.0	0.1
			(In billions of USD)		
Balance of payments					
Current account balance	202.0	175.3	170.4	180.6	184.8
Percent of GDP	4.1	3.5	3.3	3.4	3.4
Trade balance	44.1	11.6	2.5	-4.3	-10.1
Percent of GDP	0.9	0.2	0.0	-0.1	-0.2
Exports of goods, f.o.b.	688.9	735.9	701.3	681.5	693.5
Imports of goods, f.o.b.	644.9	724.3	698.7	685.9	703.6
Energy imports	117.8	148.5	130.7	124.1	117.3
			(In percent of GDP)		
FDI, net	3.2	2.7	2.8	2.9	2.9
Portfolio Investment	-1.0	1.8	1.4	1.2	1.1
			(In billions of USD)		
Change in reserves	23.6	24.0	11.0	11.5	11.5
Total reserves minus gold (in billions of US$)	1232.4	1239.4	…	…	…
			(In annual average)		
Exchange rates					
Yen/dollar rate	112.2	110.4	…	…	…
Yen/euro rate	126.7	130.5	…	…	…
Real effective exchange rate (ULC-based, 2010=100)	78.7	77.6	…	…	…
Real effective exchange rate (CPI-based, 2010=100)	75.0	74.4	…	…	…
			(In percent)		
Demographic Indicators					
Population Growth	-0.2	-0.2	-0.2	-0.3	-0.4
Old-age dependency	46.0	46.9	47.6	48.4	49.0

Sources: Haver Analytics; OECD; Japanese authorities; and IMF staff estimates and projections.

Table 5. Japan: Monetary Authority Accounts and Monetary Survey, 2014–21

	2014	2015	2016	2017	2018	2019 Est.	2020 Proj.	2021 Proj.
				(In trillions of JPY)				
Monetary authority								
Net foreign assets	3.9	2.3	-3.9	-12.4	-17.7	-18.7	-14.9	-14.5
NDA	272.0	353.9	441.3	492.4	521.9	556.1	585.3	614.5
Net domestic credit	291.3	374.6	467.0	521.3	548.1	582.3	611.5	640.7
Net credit to non-financial public sector	222.3	287.3	361.4	390.8	412.7	437.7	457.7	477.7
Credit to the private sector	6.7	6.8	6.6	6.6	6.0	6.2	6.4	6.6
Net credit to financial corporations	62.3	80.5	99.0	123.8	129.4	138.4	147.4	156.4
Other items net	-19.3	-20.8	-25.7	-28.8	-26.3	-26.3	-26.3	-26.3
Monetary base	275.9	356.1	437.4	480.0	504.2	537.4	570.3	599.9
Monetary survey (depository corporations)								
NFA	82.4	73.4	72.2	75.4	73.1	71.2	73.8	76.3
NDA	1,149.1	1,196.8	1,251.4	1,293.0	1,328.0	1,351.0	1,377.1	1,406.7
Net domestic credit	1,244.5	1,286.2	1,343.4	1,401.9	1,416.5	1,444.5	1,475.6	1,510.1
Net credit to nonfinancial public sector	570.6	590.7	636.7	646.1	652.1	662.7	678.6	697.2
Credit to the private sector	538.8	548.9	564.6	587.1	596.0	613.4	628.6	644.5
Net credit to other financial institutions	135.0	146.5	142.1	168.7	168.3	168.3	168.3	168.3
Other items net	-95.4	-89.4	-92.0	-108.9	-88.4	-93.4	-98.4	-103.4
Broad money	1,219.8	1,256.6	1,305.7	1,351.1	1,383.8	1,422.2	1,451.0	1,483.0
Currency in circulation	88.2	93.6	97.3	101.9	105.5	109.0	112.6	116.3
Current deposits	529.7	553.2	614.3	662.2	702.6	731.5	750.6	773.0
Other deposits	601.9	609.9	594.1	587.0	575.7	581.7	587.7	593.7
				(In percent of GDP)				
Net credit to other financial institutions	26.3	27.6	26.5	30.9	30.8	30.3	29.8	29.5
Credit to the private sector from depository corporations	104.8	103.3	105.4	107.6	108.9	110.3	111.2	112.9
Corporate debt (includes loans and securities other than shares)	142.1	137.5	137.1	138.5	141.2	142.5	143.4	144.8
Corporate debt (includes loans and securities other than shares), trillions of JPY	730.1	730.4	734.3	755.9	772.4	792.7	810.9	826.8
Household debt in percent of disposable income	100.6	100.2	100.8	102.8	99.3	99.1	99.0	98.3
				(Y-o-Y growth in percent)				
Base money	36.7	29.1	22.8	9.7	5.0	6.6	6.1	5.2
Broad money	2.9	3.0	3.9	3.5	2.4	2.8	2.0	2.2
Credit to the private sector from depository corporations	1.6	1.9	2.9	4.0	1.5	2.9	2.5	2.5
Corporate loans by domestically licenced banks	3.1	2.6	2.9	2.6	2.9	2.8	2.2	3.1
Housing loans	1.8	1.8	2.6	2.5	1.9	2.3	1.9	1.9
Credit to the private sector from all financial institutions	-6.2	2.9	1.8	5.0	0.6	2.1	1.8	1.9
Memorandum items:								
Velocity of broad money	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Money multiplier (broad money)	4.4	3.5	3.0	2.8	2.7	2.6	2.5	2.5
Loan-to-deposit ratio (percent) 1/	55.7	54.8	54.7	54.6	54.3	53.9	53.6	59.5

Sources: Bank of Japan; Haver, and IMF staff estimations and projections.

1/ Defined as the ratio of credits to the private sector and net credit to other financial institutions to customer deposits.

Table 6. Japan: External Sector Summary, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
						Est.	Proj.	
Balance of payments	*(In billions of USD)*							
Current account balance	36.8	136.4	197.9	202.0	175.3	170.4	180.6	184.8
Trade balance (goods)	-99.9	-7.4	51.4	44.1	11.6	2.5	-4.3	-10.1
Exports of goods	699.7	622.1	636.3	688.9	735.9	701.3	681.5	693.5
Imports of goods	799.7	629.5	585.0	644.9	724.3	698.7	685.9	703.6
Imports of goods, Oil	167.6	88.1	64.9	82.9	105.6	92.9	88.2	83.4
Services balance	-28.8	-16.0	-10.6	-6.2	-7.2	-7.2	-1.5	-2.0
Credits	163.2	162.6	167.5	172.8	178.4	184.3	197.2	204.3
Debits	192.4	175.6	180.9	187.0	191.7	197.8	205.8	213.6
Income balance	184.6	176.2	176.9	183.0	189.3	194.6	206.9	218.3
Credits	256.9	248.5	266.0	279.0	297.6	292.9	316.7	336.2
Debits	72.4	72.3	89.1	95.9	108.3	98.2	109.7	117.7
Current net transfers	-19.0	-16.3	-19.8	-19.0	-18.4	-19.4	-20.4	-21.4
Capital account	-2.0	-2.2	-6.5	-2.5	-1.9	-3.0	-3.5	-4.0
Financial account	24.9	163.2	282.9	136.4	181.8	154.0	163.7	167.4
Direct investment, net	118.6	133.3	137.5	153.4	132.9	143.8	152.4	156.1
Portfolio investment, net	-42.2	131.5	276.5	-50.6	91.5	72.4	63.4	59.7
Other investment, net	-60.1	-106.7	-125.4	10.0	-66.6	-73.1	-63.6	-59.9
Reserve assets	8.5	5.1	-5.7	23.6	24.0	11.0	11.5	11.5
Errors and omissions, net	24.1	46.7	75.4	-32.7	9.4	0.0	0.0	0.0
	(In percent of GDP)							
Current account balance	0.8	3.1	4.0	4.1	3.5	3.3	3.4	3.4
Trade balance (goods)	-2.1	-0.2	1.0	0.9	0.2	0.0	-0.1	-0.2
Exports of goods	14.4	14.2	12.9	14.2	14.9	13.7	12.9	12.7
Imports of goods	16.5	14.3	11.9	13.2	14.6	13.7	13.0	12.9
Services balance	-0.6	-0.4	-0.2	-0.1	-0.1	-0.1	0.0	0.0
Income balance	3.8	4.0	3.6	3.8	3.8	3.8	3.9	4.0
Global assumptions								
Oil prices (US$/barrel)	96.2	50.8	42.8	52.8	68.3	60.6	58.0	55.3
(Percent change)	-7.5	-47.2	-15.7	23.3	29.4	-11.3	-4.3	-4.7
Memorandum items:								
Nominal GDP (US$ billion)	4,852.6	4,390.0	4,925.0	4,867.3	4,954.2	5,103.9	5,269.8	5,446.7
Net foreign assets (NFA)/GDP, US$ basis	60.6	61.1	58.9	59.9	61.2	62.7	64.1	65.3
Return on NFA (in percent), US$ basis	6.3	6.6	6.1	6.3	6.3	6.1	6.1	6.1
Net export contribution to growth	0.0	0.3	0.6	0.5	0.0	-0.2	-0.2	-0.2

Sources: Haver Analytics; Japanese authorities; and IMF staff estimates and projections.

Table 7. Japan: General Government Operations, 2014–21

(In Percent of GDP)

	2014	2015	2016	2017	2018	2019	2020	2021
					Est.		Proj.	
Total revenue	33.3	34.2	34.3	34.2	33.8	34.0	34.6	34.6
Taxes 1/	18.3	18.7	18.5	18.8	18.7	18.9	19.5	19.5
Social contributions	12.5	12.5	12.8	12.9	12.9	12.9	13.0	13.0
o/w Social security contributions	12.0	12.0	12.4	12.5	12.4	12.4	12.4	12.4
Other revenue	2.4	3.0	2.9	2.5	2.2	2.2	2.1	2.1
o/w interest income	1.4	1.4	1.3	1.4	1.4	1.4	1.3	1.3
Total expenditure	38.9	38.0	38.0	37.3	37.4	37.6	38.0	37.4
Expense	38.1	37.5	37.5	36.8	36.7	36.7	36.9	36.5
Consumption	11.5	11.2	11.1	10.9	10.9	10.8	10.9	10.8
Social benefits	21.5	21.2	21.4	21.2	21.4	21.5	21.6	21.7
o/w Social security benefits	19.0	18.8	18.9	18.8	19.0	19.1	19.3	19.4
Interest	2.2	2.1	2.0	1.9	1.7	1.6	1.3	1.2
Other expense	3.0	3.0	2.9	2.9	2.7	2.8	3.0	2.7
(Memo) Compensation of employees 2/	5.6	5.4	5.4	5.3	...	...	...	...
(Memo) Use of goods and services 2/	3.4	3.3	3.4	3.3	...	...	...	...
Net investment in nonfinancial assets	0.8	0.6	0.5	0.6	0.7	0.9	1.1	0.9
Gross investment in nonfinancial assets	4.2	3.9	3.8	3.9	4.0	4.1	4.3	4.0
o/w public investment	4.0	3.7	3.6	3.7	3.8	3.9	4.1	3.9
o/w land acquisition	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
(less) Consumption of fixed capital	3.5	3.4	3.3	3.3	3.3	3.2	3.2	3.2
Net lending/borrowing (overall balance)	-5.6	-3.8	-3.7	-3.1	-3.6	-3.6	-3.5	-2.8
Excluding social security fund	-6.0	-4.8	-4.9	-4.2	-4.1	-4.1	-4.5	-3.9
Primary balance	-4.9	-3.2	-3.0	-2.7	-3.3	-3.4	-3.5	-2.9
Structural balance 3/	-5.5	-4.3	-4.1	-3.4	-3.4	-3.5	-3.4	-2.7
Structural primary balance 3/	-4.7	-3.7	-3.4	-2.9	-3.1	-3.3	-3.4	-2.8
Stock positions 4/								
Debt								
Gross 5/	236.1	231.6	236.5	234.6	237.9	239.0	239.8	241.1
Net	148.5	147.8	152.7	150.8	154.1	155.2	156.1	157.4
Net worth	13.0	8.9	4.1	7.2	...	...	...	...
Nonfinancial assets	133.9	129.7	130.0	130.0	...	...	...	...
Produced assets	110.8	107.9	108.2	108.4	...	...	...	...
Non-produced assets	23.1	21.8	21.8	21.6	...	...	...	...
Net financial worth	-120.9	-120.8	-125.9	-122.8	...	...	...	...
Financial assets	118.2	113.8	113.6	114.8	...	...	...	...
Monetary Gold and SDR, etc.	0.8	0.7	0.7	0.6	...	...	...	...
Currency and deposits	12.0	15.1	17.7	16.8	...	...	...	...
Loans	5.9	4.4	4.6	4.4	...	...	...	...
Debt securities	18.4	16.6	16.2	15.1	...	...	...	...
Equity and investment fund shares	30.6	30.0	29.6	31.0	...	...	...	...
o/w shares	10.3	10.0	10.0	11.4	...	...	...	...
Insurance, pension and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.1	0.0	...	...	...	...
Other financial assets	50.5	47.1	44.8	46.9	...	...	...	...
Liabilities	239.1	234.5	239.5	237.6	...	...	...	...
Monetary Gold and SDR, etc.	0.4	0.4	0.4	0.4	...	...	...	...
Currency and deposits	0.0	0.0	0.0	0.0	...	...	...	...
Loans	32.2	30.8	30.3	29.1	...	...	...	...
Debt securities	194.6	191.4	197.5	196.6	...	...	...	...
Equity and investment fund shares	3.0	3.0	2.9	2.9	...	...	...	...
Insurance, pension and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	...	...	...	...
Other liabilities	8.8	9.0	8.5	8.7	...	...	...	...
Memorandum item:								
Nominal GDP (trillion yen)	513.9	531.3	535.5	545.9	547.1	556.1	565.4	570.8

Sources: Japan Cabinet Office; IMF staff estimates and projections.
1/ Including fines.
2/ Fiscal year basis.
3/ In percent of potential GDP.
4/ Market value basis.
5/ Nonconsolidated basis.

Table 8. Japan: Medium-Term Projections, 2017–25

	2017	2018	2019	2020	2021	2022	2023	2024	2025
			Est.			Proj.			
					(In percent change)				
Real GDP	2.2	0.3	1.0	0.7	0.5	0.4	0.5	0.5	0.5
Private final consumption	1.3	0.0	0.5	-0.1	0.6	0.5	0.3	0.2	0.1
Government consumption	0.2	0.9	2.1	2.8	0.4	0.6	1.0	1.0	1.2
Gross Private fixed investment	3.6	2.4	0.2	0.6	2.6	2.2	1.3	1.0	0.7
Public investment	0.5	0.3	2.7	5.5	-6.1	-8.4	-3.0	-1.1	-0.3
Stockbuilding (contribution to growth)	0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Exports	6.8	3.4	-1.8	-0.4	2.0	2.8	2.7	2.6	2.7
Imports	3.4	3.4	-0.6	0.6	2.8	2.9	2.4	2.4	2.1
Total domestic demand	1.6	0.3	1.1	1.0	0.6	0.4	0.5	0.5	0.4
Net exports (contribution)	0.5	0.0	-0.2	-0.2	-0.2	0.0	0.0	0.0	0.1
Real GDP per Capita	2.3	0.5	1.3	1.0	0.9	0.8	1.0	1.0	1.0
Private final consumption per Capita	1.5	0.2	0.7	0.3	1.0	0.9	0.7	0.7	0.6
Unemployment rate (percent)	2.8	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Headline CPI inflation (average)	0.5	1.0	0.6	1.1	1.2	1.2	1.3	1.3	1.3
Output gap (in percent of potential output)	-0.3	-0.7	-0.3	-0.2	-0.3	-0.5	-0.5	-0.3	0.0
					(In percent of GDP)				
Overall fiscal balance	-3.1	-3.6	-3.6	-3.5	-2.8	-2.4	-2.3	-2.4	-2.6
Primary balance	-2.7	-3.3	-3.4	-3.5	-2.9	-2.5	-2.5	-2.6	-2.7
General government debt									
Gross	234.6	237.9	239.0	239.8	241.1	241.6	241.6	241.9	242.9
Net	150.8	154.1	155.2	156.1	157.4	157.9	157.9	158.2	159.1
External current account balance	4.1	3.5	3.3	3.4	3.4	3.4	3.5	3.5	3.7
National savings	28.2	27.9	28.0	28.3	28.3	28.3	28.3	28.4	28.7
Private	26.9	27.0	27.0	26.9	26.5	26.4	26.4	26.7	27.2
Public	1.3	0.9	1.0	1.4	1.8	1.9	1.8	1.7	1.5
National investment	24.0	24.3	24.7	24.9	25.0	24.9	24.8	24.8	25.0
Private	19.0	19.2	19.4	19.4	19.8	20.2	20.3	20.4	20.6
Public	5.0	5.1	5.2	5.5	5.1	4.7	4.5	4.5	4.4

Sources: Haver Analytics; Japanese authorities; and IMF staff estimates and projections.

Table 9. Japan: Financial Soundness Indicators, 2014–19 1/

	2014	2015	2016	2017	2018	2019
			(In percent)			
Capital adequacy						
Regulatory capital to risk-weighted assets 2/3/	15.6	15.5	15.9	16.0	17.1	17.2
Regulatory tier 1 capital to risk-weighted assets	12.1	12.5	13.3	13.5	14.9	15.1
NPL net of provisions/capital 2/4/	16.2	12.8	11.5	9.0	7.6	7.6
Asset quality						
Non-performing loans (NPL) to total loans ratio 2/4/	1.9	1.6	1.5	1.3	1.1	1.1
Sectoral distribution of loans 4/5/						
Residents	90.7	89.5	90.9	90.2	90.2	90.5
Deposit-takers	3.6	3.6	5.6	4.5	4.9	5.1
Central bank	0.0	0.0	0.0	0.0	0.0	0.0
Other financial corporations	8.9	9.3	9.5	9.9	9.6	9.5
General government	8.8	8.8	8.8	8.7	8.6	8.2
Non-financial corporations	38.0	36.8	36.7	36.8	36.7	37.2
Other domestic sectors	31.3	30.9	30.3	30.3	30.5	30.5
Non-residents	9.3	10.5	9.1	9.8	9.8	9.5
Earnings and profitability						
Return on assets 2/4/	0.3	0.3	0.3	0.2	0.2	0.1
Return on equity 2/4/	7.8	6.3	6.9	5.1	5.4	2.3
Interest margin	1.3	1.2	1.1	1.1	1.1	1.1
Net interest income to gross income 2/4/	64.2	62.9	60.4	62.6	62.2	70.4
Non-interest expenses to gross income 2/4/	60.8	60.6	62.8	67.8	69.0	82.7
Personnel expenses to non-interest expenses 2/4/	44.8	44.1	60.2	59.6	44.2	43.7
Liquidity						
Liquid assets to total assets 2/4/	26.4	26.9	27.2	28.7	29.6	29.4
Liquid assets to short-term liabilities 2/4/	47.6	48.1	49.1	49.7	49.9	49.2
Non-interbank loans-to-customer-deposits 2/4/	75.5	75.7	74.9	73.3	71.7	71.7
Other						
Capital-to-total assets 2/3/	5.5	5.8	5.5	5.4	5.5	5.4
Gross derivative asset to capital 2/4/	38.4	47.4	53.0	37.0	30.7	30.0
Gross derivative liability to capital 2/4/	38.2	48.6	50.2	35.7	28.3	28.7

Sources: IMF, Financial Soundness Indicators (FSI) database; and IMF staff estimates (as of December 11, 2019).
1/ Data for these series are for Q1 of each year.
2/ Including city banks and regional banks but not shinkin banks.
3/ Aggregated based on a consolidated basis.
4/ Aggregated based on an unconsolidated basis.
5/ Including all deposit-taking institutions in Japan.

Table 10. Japan: Sustainable Development Goals Monitoring

Goals	2005	2010	2017	Peer Average (as of 2017)
Poverty				
Poverty rate 1/	…	…	0.16	0.12
Health and Education				
Death rate, crude (per 1,000 people)	8.5	9.5	10.8	10.5
Birth rate, crude (per 1,000 people)	8.4	8.5	7.6	10.5
Fertility rate, total (births per woman)	1.3	1.4	1.4	1.6
Mortality caused by road traffic injury (per 100,000 people) 2/	…	…	4.1	8.3
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%) 2/	10.4	9.5	8.4	12.1
Mortality rate, adult, female (per 1,000 female adults) 2/	45.1	41.4	36.9	60.5
Mortality rate, adult, male (per 1,000 male adults) 2/	92.6	82.7	68.5	107.5
Inclusion				
Proportion of seats held by women in national parliaments (%)	9.0	11.3	9.3	27.5
Proportion of time spent on unpaid domestic and care work, female (% of 24 hour day) 2/ 3/ 6/	15.6	15.6	15.1	…
Proportion of time spent on unpaid domestic and care work, male (% of 24 hour day) 2/ 3/ 6/	2.7	3.0	3.1	…
Account at a financial institution (% age 15+) 4/			96.6	90.6
Share of youth not in education, employment or training, total (% of youth population)	…	4.3	3.3	11.2
Unemployment, total (% of total labor force) (national estimate)	4.4	5.1	2.8	5.6
Proportion of women in director role (%)				
National civil service 7/	…	…	4.9	…
Prefectural civil service	…	…	9.8	…
Private corporations	…	…	10.9	…
Proportion of women in section chief role (%)				
National civil service 7/	…	…	25.0	…
Prefectural civil service	…	…	22.2	…
Private corporations	…	…	18.4	…
Climate				
Terrestrial and marine protected areas (% of total territorial area)			10.0	19.0
CO2 emissions (metric tons per capita) 4/	9.7	9.1	9.5	10.9
Fossil fuel energy consumption (% of total) 5/	81.6	80.9	93.0	79.1
Global Partnership				
Net ODA provided to the least developed countries (% of GNI) 2/	0.03	0.05	0.05	…
Net ODA provided, to the least developed countries (trillions USD) 2/	1.27	2.65	2.57	…
Net ODA provided, total (% of GNI) 2/	0.28	0.20	0.20	…
Net ODA provided, total (trillions USD) 2/	13.1	11.1	10.0	…

Sources: UN SDG Indicators Global Database; Japan Cabinet Office, Gender Equality Bureau; World Bank, WDI; OECD data.

1/ Ratio of the number of people whose income falls below the poverty line; taken as half the median household income. 2015 data used for 2017 and Peer Average.

2/ 2016 data used for 2017 and Peer Average.

3/ 2011 data used for 2010.

4/ 2014 data used for 2017 and Peer Average.

5/ 2015 data used for 2017 and Peer Average.

6/ 2006 data used for 2005.

7/ July 2018 data used for 2017.

Table 11. Japan: Monthly Economic Indicators

(Percentage changes over preceding period unless otherwise indicated, seasonally adjusted)

2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Overall Activity												
PMI-Manufacturing (level)	52.7	53.3	52.4	52.7	53.1	52.4	52.1	52.2	52.9	52.8	53.6	54.0
Industrial production	-1.1	0.7	-0.1	2.6	-1.7	1.0	-0.8	1.5	-1.0	0.3	0.9	1.5
IT-related 1/	-1.8	3.4	-2.9	8.5	-6.2	3.3	-7.7	5.9	-2.3	-2.0	0.7	1.8
Shipments	-1.0	0.0	0.5	1.7	-1.4	1.6	-0.8	1.6	-2.2	-0.9	3.0	1.8
Consumption goods	-0.8	0.5	0.4	2.5	-1.6	0.9	-1.3	0.1	-1.0	-1.7	2.5	1.3
Capital goods	-0.9	-0.9	0.2	4.9	-1.7	2.7	-1.9	4.2	-4.6	1.4	2.9	6.3
Private Consumption												
Real Synthetic Consumption Index	0.5	-0.4	0.7	0.8	-0.3	-0.2	-0.3	-0.2	-0.2	-0.2	1.0	0.7
Index of retail sales	0.3	0.3	0.1	0.9	-0.9	0.3	0.3	-0.5	0.6	0.1	1.0	1.0
Household consumption expenditure	-1.1	1.2	-0.5	1.5	0.2	0.9	-0.9	-0.2	-0.1	-0.1	1.1	-0.7
Consumer confidence (level)	43.0	42.7	44.1	43.1	43.9	43.8	43.9	43.7	44.1	44.2	44.3	44.3
Consumption Activity Index (2010=100)	104.2	104.1	104.1	105.4	104.6	104.5	105.0	104.5	104.6	104.4	105.2	105.1
Business Investment												
Machinery orders: private domestic demand	-5.0	1.3	0.8	-3.8	-1.2	-0.9	3.6	2.7	-3.1	2.3	4.3	-7.7
Business confidence 2/	...	...	10.0	...	...	12.0	...	...	15.0	...	...	16.0
Residential Investment												
Housing starts -- units	4.5	-3.9	3.1	0.5	-1.0	1.1	-3.2	-1.9	1.7	-1.2	1.6	-2.4
Public Investment												
Public works contracts	5.9	0.3	1.9	-8.1	-1.6	0.5	-6.2	4.1	0.8	-7.9	11.6	-5.5
Prices, y-o-y												
CPI	0.4	0.3	0.2	0.4	0.4	0.4	0.4	0.7	0.7	0.2	0.6	1.0
Excluding fresh food	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.7	0.7	0.8	0.9	0.9
Excluding fresh food and energy	0.2	0.1	-0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3
Import price	4.3	9.6	12.1	10.9	12.4	11.5	11.9	12.8	13.8	15.6	10.5	7.3
Labor Market												
Unemployment rate (level)	3.0	2.9	2.8	2.8	3.1	2.8	2.8	2.7	2.8	2.7	2.7	2.7
Labor force participation rate (level)	60.4	60.1	60.1	60.2	60.5	60.5	60.6	60.7	60.7	60.6	60.6	60.8
Employment	-0.1	-0.4	0.0	0.3	0.1	0.4	0.2	0.2	-0.1	-0.1	0.2	0.2
Ratio job offers/seekers (level)	143.0	145.0	146.0	148.0	149.0	150.0	151.0	152.0	152.0	155.0	156.0	158.0
Total Compensation Index	0.2	0.0	-0.2	0.4	-0.3	-0.2	0.2	0.2	0.1	-0.3	0.4	0.1
Monetary, Credit, and Financial Market												
Overnight call rate	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1
10-year JGB	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Bank lending	0.3	0.0	0.4	0.3	-0.3	0.1	0.5	-0.1	0.2	0.2	0.0	0.8
Nikkei 225	-0.4	0.4	-1.1	1.5	2.4	1.9	-0.5	-1.4	3.6	8.1	3.2	0.2
Exchange Rates												
Yen per U.S. dollar (level)	114.9	113.1	112.9	110.0	112.2	111.0	112.4	109.8	110.8	112.9	112.8	112.9
NEER	0.7	0.6	-0.1	2.3	-2.5	0.5	-2.0	1.2	-1.6	-1.2	-0.1	-0.5
REER (CPI-based)	0.3	0.7	-0.2	2.3	-2.6	0.4	-2.0	1.0	-1.7	-1.4	0.1	-0.3
Trade												
Trade balance (US$ bill.)	0.8	5.0	1.0	0.1	2.1	0.6	3.0	3.7	2.7	3.1	3.7	0.0
Exports (US$ bill.)	54.0	58.5	56.5	57.5	57.0	57.3	58.0	60.2	59.8	59.1	60.3	60.6
Quantum export index (2010=100)	100.0	106.6	105.8	101.8	104.4	105.6	104.7	108.6	108.7	103.6	109.2	110.0
Imports (US$ bill.)	53.1	53.6	55.5	57.3	54.9	56.7	55.0	56.5	57.1	56.0	56.6	60.6
Quantum import index (2010=100)	102.0	95.2	105.8	101.7	102.6	105.6	101.8	104.4	100.6	102.3	104.4	106.9
Terms of Trade (unit values)	-0.1	-3.1	3.0	-0.4	0.4	-1.1	1.8	-0.2	-0.5	-1.4	0.9	-2.0
Foreign Reserves												
Gross Reserves (US$ bill.)	1231.6	1232.3	1230.3	1242.3	1251.9	1249.8	1260.0	1268.0	1266.3	1260.9	1261.2	1264.3

2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Overall Activity												
PMI-Manufacturing (level)	54.8	54.1	53.1	53.8	52.8	53.0	52.3	52.5	52.5	52.9	52.2	52.6
Industrial production	-4.2	2.6	1.1	-0.6	0.3	-1.0	0.1	-0.2	-0.1	2.0	-0.9	0.1
IT-related 1/	-3.9	1.9	0.8	1.9	2.7	-6.8	2.4	-1.1	-0.8	6.6	0.3	1.6
Shipments	-4.5	1.8	1.0	0.9	-1.1	0.1	-1.2	0.9	-0.9	2.3	-1.5	0.3
Consumption goods	-3.3	2.7	-0.1	0.9	-1.1	-0.1	-1.1	1.6	-0.4	-0.9	0.6	-0.9
Capital goods	-6.7	-1.9	4.8	1.9	-5.1	3.5	-3.4	2.6	-2.3	5.5	-2.8	1.1
Private Consumption												
Real Synthetic Consumption Index	-0.8	0.3	-1.0	0.9	-0.1	0.2	-0.2	0.2	-0.4	1.2	-0.3	-1.3
Index of retail sales	-1.5	0.3	-0.1	0.6	-0.7	0.9	0.1	0.7	0.0	0.8	-0.8	0.7
Household consumption expenditure	1.2	-0.6	-0.8	-0.3	-0.2	1.1	1.1	2.4	-3.0	1.4	-0.2	0.3
Consumer confidence (level)	44.7	44.0	44.4	43.4	44.1	44.1	43.6	43.5	43.5	42.9	42.7	42.5
Consumption Activity Index (2010=100)	105.3	105.4	104.2	105.5	105.2	105.5	105.4	105.8	105.4	106.4	106.1	106.2
Business Investment												
Machinery orders: private domestic demand	6.0	2.4	-3.4	6.8	-1.2	-7.9	9.3	6.9	-17.0	7.7	-0.1	-0.3
Business confidence 2/	...	...	17.0	...	...	16.0	...	...	15.0	...	...	16.0
Residential Investment												
Housing starts -- units	-8.1	7.7	-3.0	9.9	-0.1	-7.0	3.3	0.9	-1.6	0.7	0.6	0.6
Public Investment												
Public works contracts	-0.4	-10.2	10.2	10.4	-3.1	-5.3	-2.5	2.6	-3.8	7.9	-3.1	4.4
Prices, y-o-y												
CPI	1.4	1.5	1.1	0.6	0.7	0.7	0.9	1.3	1.2	1.4	0.8	0.3
Excluding fresh food	0.8	1.0	0.8	0.8	0.7	0.8	0.8	0.9	1.0	1.0	0.9	0.7
Excluding fresh food and energy	0.4	0.5	0.5	0.4	0.3	0.2	0.3	0.4	0.4	0.4	0.3	0.3
Import price	5.0	4.4	1.7	5.1	6.7	10.8	11.6	12.3	10.9	9.8	9.3	3.1
Labor Market												
Unemployment rate (level)	2.4	2.5	2.5	2.5	2.3	2.5	2.5	2.4	2.4	2.4	2.5	2.4
Labor force participation rate (level)	60.9	61.3	61.6	61.6	61.4	61.3	61.4	61.5	61.6	61.8	62.0	61.8
Employment	0.3	0.5	0.5	0.0	-0.1	-0.3	0.1	0.3	0.1	0.3	0.3	-0.3
Ratio job offers/seekers (level)	159.0	159.0	159.0	160.0	161.0	161.0	162.0	163.0	163.0	162.0	163.0	163.0
Total Compensation Index	0.3	0.0	0.5	-0.7	0.5	1.3	-1.1	-0.4	0.0	0.1	1.0	-0.1
Monetary, Credit, and Financial Market												
Overnight call rate	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
10-year JGB	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Bank lending	0.2	-0.3	0.2	0.4	-0.4	0.3	0.4	0.1	0.3	0.1	0.0	1.1
Nikkei 225	1.5	-4.5	-2.8	4.7	-1.2	0.5	1.1	1.4	5.5	-9.1	2.0	-10.5
Exchange Rates												
Yen per U.S. dollar (level)	111.0	107.8	106.1	107.6	109.7	110.1	111.5	111.0	112.1	112.8	113.4	112.2
NEER	0.0	2.0	1.9	-1.3	-0.3	0.8	0.4	1.4	-0.7	0.0	-0.4	0.4
REER (CPI-based)	-0.1	1.8	1.6	-1.8	-0.4	0.7	0.4	1.5	-0.9	-0.2	-0.5	0.3
Trade												
Trade balance (US$ bill.)	2.8	-3.2	0.5	4.5	-1.2	0.3	-0.7	-1.4	-1.6	-3.5	-3.4	-1.8
Exports (US$ bill.)	61.3	62.4	61.9	63.5	62.9	61.7	61.2	62.0	60.4	62.2	59.7	59.6
Quantum export index (2010=100)	111.2	105.4	109.3	109.4	111.6	108.8	106.3	109.3	103.7	107.6	106.7	103.5
Imports (US$ bill.)	58.5	65.7	61.3	59.0	64.0	61.4	61.9	63.4	61.9	65.7	63.2	61.4
Quantum import index (2010=100)	105.3	108.7	101.8	103.9	108.5	101.0	106.5	108.7	98.3	112.9	108.3	104.6
Terms of Trade (unit values)	-0.7	0.2	-2.5	1.8	-1.5	0.3	-1.0	1.7	-1.8	0.3	-0.4	1.5
Foreign Reserves												
Gross Reserves (US$ bill.)	1268.5	1261.7	1268.3	1256.0	1254.5	1258.7	1256.3	1259.3	1259.7	1252.9	1258.3	1271.0

2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Overall Activity										
PMI-Manufacturing (level)	50.3	48.9	49.2	50.2	49.8	49.3	49.4	49.3	48.9	48.4
Industrial production	-2.5	0.7	-0.6	0.6	2.0	-3.3	1.3	-1.2	1.7	-4.2
IT-related 1/	-12.2	1.9	3.8	10.7	4.6	-10.5	-4.1	10.7	-0.4	0.3
Shipments	-2.4	1.6	-1.3	1.8	1.3	-4.0	2.7	-1.3	1.5	-4.3
Consumption goods	3.4	-1.1	-1.9	3.5	-0.9	-3.3	1.5	0.5	0.1	-4.4
Capital goods	-12.1	10.8	-3.2	2.2	4.8	-9.7	7.9	-0.6	5.6	-6.0
Private Consumption										
Real Synthetic Consumption Index	1.3	-0.4	-0.2	1.4	-0.4	-1.1	0.7	0.2	1.3	...
Index of retail sales	-1.8	0.4	0.2	-0.1	0.4	0.0	-2.3	4.6	7.2	-14.4
Household consumption expenditure	1.1	-0.8	0.1	-0.8	4.2	-2.3	-0.6	2.0	6.3	-12.0
Consumer confidence (level)	41.9	41.2	40.5	40.0	39.5	38.9	37.9	37.2	35.9	36.3
Consumption Activity Index (2010=100)	107.0	106.2	105.1	106.7	107.5	106.8	104.6	107.2	111.3	103.1
Business Investment										
Machinery orders: private domestic demand	-5.4	1.8	3.8	5.2	-7.8	13.9	-6.6	-2.4	-2.9	...
Business confidence 2/	...	...	12.0	...	...	10.0	...	...	8.0	...
Residential Investment										
Housing starts -- units	-9.3	10.9	2.3	-5.8	-3.3	2.4	-1.3	-2.1	0.7	-2.0
Public Investment										
Public works contracts	-8.5	12.0	-5.2	8.5	4.1	-11.8	24.6	-19.1	-1.3	7.9
Prices, y-o-y										
CPI	0.2	0.2	0.5	0.9	0.7	0.7	0.5	0.3	0.2	0.2
Excluding fresh food	0.8	0.7	0.9	0.9	0.8	0.6	0.6	0.5	0.3	0.4
Excluding fresh food and energy	0.4	0.4	0.4	0.6	0.5	0.5	0.6	0.6	0.5	0.7
Import price	-2.0	-0.7	2.4	1.6	-1.9	-5.8	-8.4	-8.4	-9.6	-10.7
Labor Market										
Unemployment rate (level)	2.5	2.3	2.5	2.4	2.4	2.3	2.2	2.2	2.4	2.4
Labor force participation rate (level)	61.6	61.9	62.3	61.9	61.9	61.8	61.9	62.1	62.2	62.4
Employment	-0.5	0.7	0.3	-0.4	-0.1	0.1	0.2	0.3	-0.1	0.4
Ratio job offers/seekers (level)	163.0	163.0	163.0	163.0	162.0	161.0	159.0	159.0	157.0	157.0
Total Compensation Index	-1.7	0.0	-0.1	0.3	0.2	2.2	-2.3	0.4	0.4	0.1
Monetary, Credit, and Financial Market										
Overnight call rate	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
10-year JGB	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Bank lending	0.2	-0.3	0.3	0.5	-0.1	0.0	0.4	-0.1	0.3	0.1
Nikkei 225	3.8	2.9	-0.8	5.0	-7.4	3.3	1.2	-3.8	5.1	5.4
Exchange Rates										
Yen per U.S. dollar (level)	109.0	110.5	111.1	111.7	110.0	108.1	108.3	106.2	107.5	108.2
NEER	2.5	-1.6	-0.7	-0.2	3.0	1.4	-0.4	3.5	-0.9	...
REER (CPI-based)	2.5	-1.7	-1.0	-0.5	2.8	1.3	-0.5	3.4	-1.0	...
Trade										
Trade balance (US$ bill.)	-2.8	0.1	-1.8	-1.4	-4.7	-0.2	-1.1	-0.9	-0.6	...
Exports (US$ bill.)	57.2	60.1	59.0	58.8	56.7	60.6	60.3	59.8	59.9	...
Quantum export index (2010=100)	101.4	104.5	103.0	105.0	101.6	102.7	108.5	102.4	101.5	102.9
Imports (US$ bill.)	60.0	60.0	60.8	60.2	61.5	60.8	61.4	60.7	60.5	...
Quantum import index (2010=100)	105.7	101.9	102.3	108.4	106.7	97.9	113.7	101.9	105.3	105.9
Terms of Trade (unit values)	3.5	-2.4	0.6	-1.0	0.3	-0.3	2.6	1.3	-0.7	-0.3
Foreign Reserves										
Gross Reserves (US$ bill.)	1279.3	1281.8	1291.8	1293.5	1308.0	1322.3	1316.5	1331.6	1322.6	1324.5

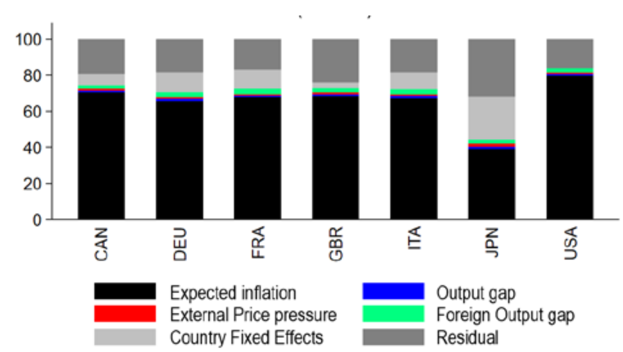
Sources: Global Insight, Nomura Database; CEIC database; Bloomberg LP and IMF, Information Notice System.
Note: Dark green highlighting denotes growth is above average. Dark red highlighting denotes growth is below average. Yellow highlighting denotes growth is average. Reverse color order applies for effective exchange rate (green denotes depreciating) and unemployment series (green denotes decreasing). The average for each data series covers data points since March 2016 to latest month.
1/ Information and communication electronics equipment.
2/ Tankan survey. Percentage of respondents reporting good business conditions less those reporting poor conditions.

Annex I. Inflation Expectations in Japan: Backward-Looking and Age-Dependent[1]

1. Understanding the drivers of inflation expectations is crucial in designing policies to raise stubbornly-low inflation expectations in Japan. Japan experienced almost twenty years of deflation, which ended in the mid-2010s. Since then, inflation expectations in Japan have been persistently low. Despite aggressive monetary easing by the Bank of Japan since the introduction of Abenomics, inflation expectations remain at around one percent. Raising inflation expectations holds the key to reaching the Bank of Japan's two-percent inflation target, and to lowering real interest rates when the nominal interest rates is bounded at the effective lower bound. To achieve these goals, it is essential to understand the mechanism of how Japanese form inflation expectations.

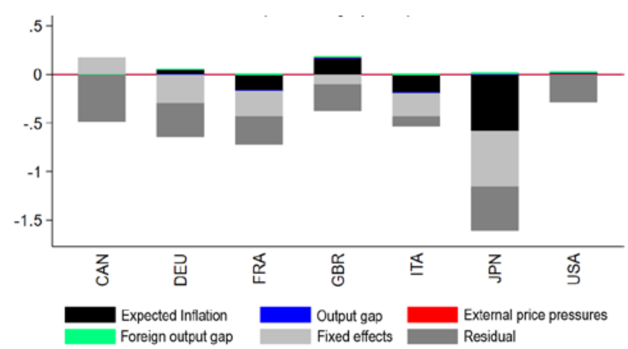
2. Control of inflation is central to good monetary policy, and inflation is undoubtedly affected by expected inflation, influencing the central bank's ability to achieve stability in the aggregate economy. Inflation expectations that are too low can lead an economy to find itself constrained by the zero lower bound on interest rates (as cash carries a nominal rate of zero), which leads to the depression of real aggregate demand as a result of an expected decline in the rate of inflation. The Japanese economy has experienced weak inflation for the past two decades, with continued efforts to raise inflation and inflation expectations that have so far fallen short. Moreover, inflation expectations in Japan seem to be strongly backward looking, and largely influenced by observed current and past inflation. Among G7 countries, Japan has the lowest contribution to CPI core (excluding food and fuel commodities) inflation dynamics and CPI headline inflation dynamics coming from expected inflation (see text figure (lhs)). Furthermore, expected inflation has a strong negative contribution to deviations of core and headline inflation from the headline CPI target (see text figure (rhs)).[2] [3]

Contributions to G7 Core Inflation Dynamics (Percent)



Notes: The bars represent the average of the absolute values of the country-specific contributions (accounting for persistency of inflation) over the period 2014Q1-2018Q2, as a percent of the sum of all contributions.

Contributions to Deviations of G7 Core Inflation from Target (Percentage points)



Notes: The bars represent country-specific averages over the period 2014Q1-2018Q2.

[1] Prepared by Paul Cashin and Gee Hee Hong (both APD).

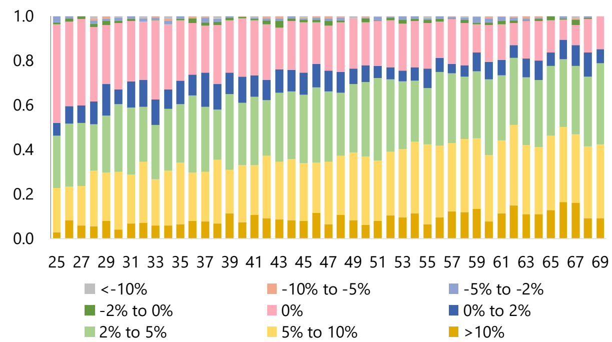
[2] These figures were generated using the methodology of Chapter 3 of the IMF's *October 2018 World Economic Outlook*, and are derived using IMF data. G7 countries are: CAN (Canada), DEU (Germany), FRA (France), GBR (United Kingdom), ITA (Italy), JPN (Japan), USA (United States).

[3] See Ilabaca and Cashin (forthcoming), "Anchoring Japanese Inflation Expectations," IMF Working Paper.

3. Japanese who are knowledgeable about the Bank of Japan's inflation target have better-anchored inflation expectations. In a recent study by Diamond, Watanabe and Watanabe (2019) using a survey about individuals' perceptions of past and future price changes, individuals who are more knowledgeable about the Bank of Japan's inflation target had inflation expectations between 0 to 2 percent.[4] This holds for different age groups: both those 30 years old and under and those older than 30 years were more likely to expect inflation in the 0 to 2 percent range, close to the Bank of Japan's inflation target.

4. Younger Japanese have lower inflation expectations. The same paper finds that younger Japanese have lower inflation expectations than older Japanese. Using different data on inflation expectations, combined with a dataset that provides demographic information on respondents, the study shows that the proportion of respondents who believe that prices will increase by at least 5 percent rises with age, while the proportion of respondents who believe that there will be deflation decreases with age.

One-Year Ahead Inflation Expectations Over Age, 2014



Source: Diamond, Watanabe and Watanabe (2019). "The Formation of Consumer Inflation Expectations: New Evidence From Japan's Deflation Experience"
Note: Each color segment represents the proportion of respondents within the given age group that believes their personal inflation rate in the following year will be within the specified range.

5. Older households may have higher inflation expectations than younger cohorts due to differences in consumption patterns. One potential explanation for the positive correlation between inflation expectations and age may be the differences in items that consumers purchase across age groups. In fact, this study shows that older households consume more of the high inflation rate items than younger households. Even for the common basket of goods, older Japanese above age 45 years pay a higher price than younger Japanese. Taken together, this suggests that older Japanese face higher inflation rates than consumers in other age groups.

6. An individual's experience of the inflation rate over their lifetime could also influence inflation expectations. Another possible explanation for this phenomenon of age-dependent inflation expectations is the historical experience of inflation for each age group—older Japanese experienced periods of inflation while younger Japanese have largely lived through periods of deflation. In fact, after controlling for household-level inflation rates, there is a statistically significant positive correlation between age and expected inflation rates. This implies that the differences in individual consumption baskets do not fully explain the variation in inflation expectations across age groups. Rather, the Diamond et al. (2019) study shows individual inflation expectations to be strongly correlated with the inflation rate of the macroeconomy over their lifetimes. This shows that, at least to some degree, forward-looking inflation rates may also be influenced by the historical inflation rates that individuals have experienced over their lifetimes.

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[4] See Diamond, J., K. Watanabe, and T. Watanabe (2019), 'The Formation of Consumer Inflation Expectations: New Evidence from Japan's Deflation Experience," Bank of Japan Working Paper Series No.19-E-13.

Annex II. Evolution of Bank of Japan's Monetary Policy During Abenomics[1]

This Annex chronicles important policy initiatives by the Bank of Japan since the beginning of *Abenomics*. The table summarizes the events, followed by relevant excerpts from the "Statement of Monetary Policy" published by the Bank of Japan, highlighting the specific policy changes.

Bank of Japan's Monetary Policy Initiatives since Abenomics	
Timeline	**Monetary Policy**
January 2013	Price Stability Target of 2 percent
April 2013	Qualitative and Quantitative Easing (QQE) with annual JGB purchases ¥50 trillion
October 2014	Qualitative and Quantitative Easing (QQE) with annual JGB purchases ¥80 trillion
January 2016	Introducing Negative Interest Rate Policy
September 2016	QQE with Yield Curve Control (YCC), Inflation-Overshooting Commitment

1. January 22, 2013: The "Price Stability Target" under the Framework for the Conduct of Monetary Policy

"The newly-introduced "price stability target" is the inflation rate that the Bank judges to be consistent with price stability on a sustainable basis. The Bank recognizes that the inflation rate consistent with price stability on a sustainable basis will rise as efforts by a wide range of entities toward strengthening competitiveness and growth potential of Japan's economy make progress. Based on this recognition, the Bank sets the "price stability target" at 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI)—a main price index."

2. April 4, 2013: Introduction of "Quantitative and Qualitative Monetary Easing"

"The Bank will achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI) at the earliest possible time, with a time horizon of about two years. In order to do so, it will enter a new phase of monetary easing both in terms of quantity and quality."

3. October 31, 2014: "Expansion of Quantitative and Qualitative Monetary Easing"

"The Bank will conduct money market operations so that the monetary base will increase at an annual pace of about 80 trillion yen (an addition of about 10-20 trillion yen compared with the past)."

[1] Prepared by Gee Hee Hong (APD). Also see *2019 Japan Selected Issues* paper "Twenty Years of Independence: Lessons and Way Forward for the Bank of Japan".

4. **January 29, 2016**: Introduction of "Quantitative and Qualitative Monetary Easing with a Negative Interest Rate"

"The Bank will apply a negative interest rate of minus 0.1 percent to current accounts that financial institutions hold at the Bank…[S]pecifically, the Bank will adopt a three-tier system in which the outstanding balance of each financial institution's current account at the Bank will be divided into three tiers, to each of which a positive interest rate, a zero interest rate, or a negative interest rate will be applied, respectively."

5. **September 21, 2016**: New Framework for Strengthening Monetary Easing: "Quantitative and Qualitative Monetary Easing with Yield Curve Control"

"…, with a view to achieving the price stability target of 2 percent at the earliest possible time, the Bank decided to introduce 'QQE with Yield Curve Control' by strengthening the two previous policy frameworks mentioned above. The new policy framework consists of two major components: the first is 'yield curve control' in which the Bank will control short-term and long-term interest rates; and the second is an 'inflation-overshooting commitment' in which the Bank commits itself to expanding the monetary base until the year-on-year rate of increase in the observed consumer price index (CPI) exceeds the price stability target of 2 percent and stays above the target in a stable manner."

Annex III. Japan's Deep and Abiding Yen for Cash[1]

1. Japan has one of the lowest electronic payments and online banking usages among advanced economies. About 20 percent of transactions by Japanese households were made using electronic payments (credit card, debit card and e-money payment) in 2016, noticeably less than other advanced economies (text table). In addition, despite large bank deposits, online banking services were used only 22 percent of the time in Japan, demonstrating the preference of Japanese consumers to visit banks or use ATMs.

Electronic Payment and Online Banking Users: International Comparison (Percent)

	Japan	USA	United Kingdom	Canada	Sweden	Korea
Electronic Payment Ratio 1/	20	46	69	56	52	96
Online Banking User	22	71	62	75	85	64

Sources: World Bank, "Household Final Consumption Expenditure (2016), Bank of International Settlements Redbook Statistics (2016), International Monetary Fund "Financial Access Survey 2017", World Bank "Global Findex
1/ Non-cash payment ratio is the ratio of sum of credit card, debit card and e-money payment value relative to household final consumption expenditure. Unit: percent

2. Japanese consumers prefer cash transactions for various reasons. According to the "Survey on Lifestyle" by the Bank of Japan (March 2018), Japanese consumers prefer to use cash due to convenience ("accepted almost everywhere", "payment completed on the spot"), better management of finance ("fear of overspending", "no transaction fees"), and habit ("uncomfortable to use non-cash means").

3. Barriers to the adoption of cashless payments by Japanese merchants were temporarily reduced by recent government measures. High implementation costs and transaction fees were cited as key factors behind the reluctance of Japanese merchants to adopt cashless payments (Ministry of Economy, Trade and Industry 2017). Starting October 2019, the government introduced measures to promote cashless payments and reduce burdens on merchants. The measures (¥278 billion allocated in FY2019 initial budget) include subsidies to SME retailers' costs to modify terminals (government pays up to two-thirds of terminal costs) and a cap on transactions fees (government pays up to one-third of total transactions fees).[2] These measures will expire at end-June, 2020.

4. A prolonged period of low interest rates also contributes to the high demand for cash. Another factor that incentivizes larger cash holdings by Japanese consumers is the low interest rate environment. Using historical data, Watanabe and Yabu (2019) show that there is an almost monotonic decline in the money-income ratio the lower the interest rate falls, and that the decline is not linear.[3] During periods of high interest rates, Japanese consumers demand less cash, as they prefer to invest in financial assets that yield higher returns than cash. As the opportunity cost of holding cash declines with low interest rates, the demand for money (cash) also increases in a non-linear way.

[1] Prepared by Gee Hee Hong (APD).

[2] For more details, see https://www.meti.go.jp/english/press/2019/0312_001.html.

[3] See Watanabe and Yabu (2019), "How Large is the Demand for Money at the ZLB? Evidence from Japan", Center for Advanced Research in Finance (CARF) Working Paper Series.

Annex IV. Risk Assessment Matrix[1]

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	**Impact and Policy Response**
➢ **Implementation of staff's credible, comprehensive and coordinated policy package**	**Low**. Implementation of a credible structural reform package combined with coordinated demand policies, effective income policies, and a well-specified medium-term fiscal framework to address debt sustainability concerns.	**High.** Higher expected growth and inflation. Public debt on a sustainable path and renewed confidence in domestic policies. Inflation expectations re-anchored at BoJ's inflation target and the current account in line with fundamentals. *Policy response:* The Bank of Japan (BoJ) should lay out a credible exit strategy.
➢ **Rising protectionism and retreat from multilateralism**	**High**. In the near term, escalating and unpredictable trade actions and a WTO dispute settlement system under threat imperil the global trade system and international cooperation. Additional barriers, including investment and trade restrictions in technology sectors, and the threat of new actions reduce growth both directly, and through adverse confidence effects and financial market volatility. In the medium term, geopolitical competition, protracted tensions, and fraying consensus about the benefits of globalization lead to economic fragmentation and undermine the global rules-based order, with adverse effects on investment, growth, and stability.	**High.** Escalated backlash against global trade could have a significant growth impact through lower external demand and a widening of the output gap. Moreover, increased market volatility could trigger a safe-haven appreciation of the yen, and lower equity prices and confidence in domestic policies. *Policy response:* Coordinated policy responses should be considered, including further multilateral efforts to safeguard global trade and trade agreements, together with growth-enhancing fiscal stimulus supported by continued accommodative monetary policy.
➢ **Weaker-than-expected global growth** Idiosyncratic factors in the U.S., Europe, China, and stressed emerging markets feed off each other to result in a synchronized and prolonged growth slowdown	**High**. In China, further escalation in trade tensions could in the near term reduce external demand, disrupt supply chains, and depress confidence and investment, but potentially also trigger tighter financial conditions, a sharp downturn in the property market, renewed PPI deflation, and a drop in commodity prices. In the medium term, weaker external demand, the potential reversal of globalization, and the increasing role of the state could weigh on growth prospects. Moreover, excessive policy easing—reversing progress in deleveraging and rebalancing—increases risks over time of a disruptive adjustment or a marked growth slowdown. In Europe, weak foreign demand, Brexit, or concerns about some high-debt countries makes some euro area businesses delay investment, while faltering confidence reduces private consumption. Inflation expectations	**High**. Japanese exports would stall due to close trade links with China and Europe, magnified by negative confidence effects that would further depress Japan's exports of capital goods. Safe-haven-based yen appreciation would also cause a sharp correction in the stock market and business profitability, further affecting investor sentiment. *Policy response*: Fiscal policy should provide a buffer against the external shock. Ambitious structural reforms are also important to boost domestic demand. **Medium**. Due to a significant trade relationship with the United States, Japan's exports would weaken. Moreover, depressed business confidence would reduce investment and Japan's exports of related capital goods. Yen appreciation due to capital flows away from stressed emerging economies would negatively affect the stock market and profitability. *Policy response*: Despite limited policy space, the Japanese government should deploy additional measures on all policy fronts to restore growth and inflation momentum and maintain confidence in Abenomics.

[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 of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability of 30 percent or more). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	**Impact and Policy Response**
	drift lower, and the region enters a prolonged period of anemic growth and low inflation. **Medium**. Confidence wanes in the United States against a backdrop of a long expansion with stretched asset valuations, rising leverage, and policy uncertainty, leading to weaker investment and a more abrupt closure of the output gap. Moreover, policy missteps, idiosyncratic shocks and/or contagion prevent expected stabilization or recovery in large stressed emerging economies from materializing, generating negative spillovers and reducing global growth.	
➢ **Sharp rise in risk premia**	**High.** An abrupt deterioration in market sentiment (e.g., prompted by policy surprises, renewed stresses in emerging markets, or a disorderly Brexit) could trigger risk-off events such as recognition of underpriced risk. Higher risk premia cause higher debt service and refinancing risks; stress on leveraged firms, households, and vulnerable sovereigns; disruptive corrections to stretched asset valuations; and capital account pressures—all depressing growth.	**Medium**. Sharp rise in risk premia could have a direct impact on growth through increased uncertainty, tighter domestic financial conditions, and higher financing costs for the government. Safe-haven-based yen appreciation would also cause a sharp correction in the stock market and business profitability, further affecting investor sentiment. *Policy response*: Domestic monetary policy space to mitigate the tightening is limited. Fiscal policy should provide the main buffer against any external shock.
➢ **Further build-up of financial vulnerabilities**	**High.** Although the turn in the monetary policy cycle toward easing provides a reprieve for risky assets, it encourages risk taking through underpricing of risk and reduces financial resilience to shocks and risk-off events. In Japan, search for yield by banks, insurers and pension funds to support their profitability is pushing them into riskier asset allocations.	**High.** Riskier asset allocations of Japanese financial institutions, including in foreign markets, may lead to balance-sheet deterioration and tightening capital constrains with negative spillovers to the real economy. *Policy response:* Fiscal policy should provide the main buffer against any external shock. The Financial Services Agency (FSA) should adopt a full risk-based approach to financial sector supervision and regulation in line with the 2017 FSAP recommendations. Moreover, FSA should consider activating CCyB to build up resilience of the banking sector to rising systemic risks. Finally, BoJ should mitigate the impact of sustained accommodative monetary policy on the profitability of financial institutions by steepening the JGB yield curve.
➢ **Intensification of geopolitical tensions and security risks**	**High.** Tensions and security risks would cause socio-economic and political disruption, disorderly migration, volatile commodity prices, and lower confidence.	**Medium.** Rise in geopolitical tensions could trigger a safe-haven-based yen appreciation, affect inflation and confidence in domestic policies. *Policy response:* Domestic monetary policy space to mitigate the shock is limited. Fiscal policy should provide the main buffer against any external shock, but policy space will depend on the existence of a credible fiscal consolidation plan.
➢ **Bond market stress from a reassessment of sovereign risk in Japan**	**Medium**. Abenomics falters, resulting in an eventual return of depressed domestic demand and deflation, and leading to bond market stress.	**High**. Staff's DSA analysis shows that an increase in the sovereign risk premium would gradually worsen public debt dynamics. But such a shock could cause distress in the financial sector with possible knock-on effects on debt. *Policy response:* Fiscal policy would have to become more contractionary and the fiscal framework strengthened, which together with additional JGB purchases by the BoJ should help contain the immediate rise in bond yields.

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	**Impact and Policy Response**
➢ **A severe natural disaster hits Japan**	**Medium**. An earthquake or other natural disaster leads to serious production disruptions and adjustments in equity markets.	**High.** Growth and confidence would decline, together with safe-haven-based yen appreciation, and equity price adjustments could hamper domestic demand. Firms may increase production offshoring. Fiscal position could deteriorate significantly, increasing future adjustment needs and the risk of a jump in the risk premium. *Policy response*: The government should deploy additional fiscal stimulus and BoJ should intervene to contain the rise in JGB yields, to help restore growth and inflation momentum and maintain confidence.

Annex V. Growth at Risk in Japan[1]

At the current juncture, we estimate elevated growth at risk in Japan, at both the short and medium-run horizons. These relatively high downside risks to output growth reflect elevated financial vulnerabilities, despite loose financial conditions.

1. Introduction. Growth at risk (GaR) measures the highest output growth rate predicted to occur with a given probability at a given horizon, conditional on a set of predictor variables. This differentiates GaR analysis from an assessment of the balance of risks to the growth outlook, which is conditional on all available information. This annex presents short and medium run GaR estimates for Japan, conditional on financial gap estimates. It also benchmarks these estimates against corresponding ones for the United States, for which GaR analysis is well established. See for example the seminal work of Adrian, Boyarchenko and Giannone (2019).

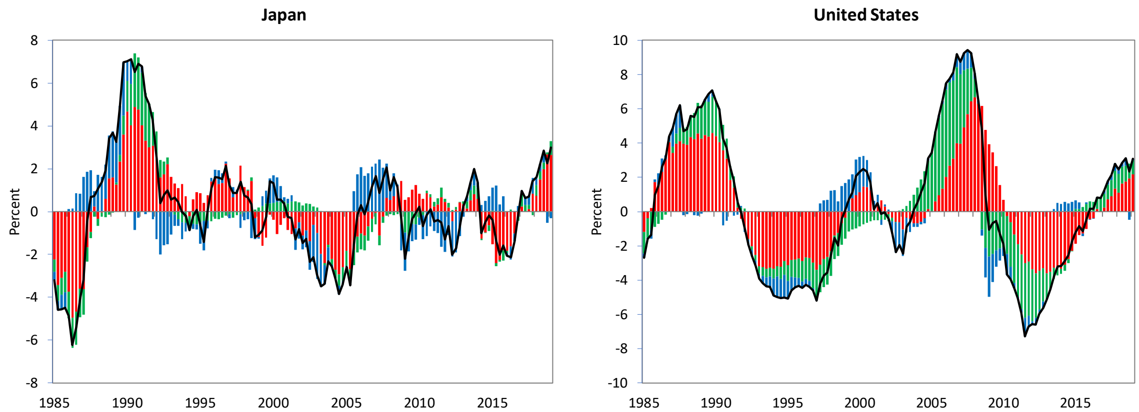
2. The financial gap. We estimate the financial gap by aggregating a set of financial vulnerability indicators using a panel quantile regression. The set of financial vulnerability indicators under consideration consists of real credit, house price and equity price gaps, estimated using the HP-filter with a relatively high smoothing parameter value of 16,000 to pass through low-frequency cyclical dynamics. These financial vulnerability indicators are aggregated based on a fixed effects panel regression of the change in each standardized financial vulnerability indicator on a linear combination of the set of lagged financial vulnerability indicators for each economy, estimated by pooled quantile regression with dummy variables at the 0.05 quantile using a two-year lag order. The resultant financial gap is that weighted average of financial vulnerability indicators which predicts a severe broad-based unwinding of financial vulnerabilities when elevated. The estimated weight on the real credit gap is 0.73, while that on the real house price gap is 0.22, and that on the real equity price gap is 0.05. The estimated financial gap peaks prior to the bursting of the credit fueled property and stock market bubbles in Japan in the early 1990s, and in the United States in the late 2000s.

3. Historical GaR. We estimate GaR as the predicted lower quantile of detrended output growth, conditional on the lagged change in and level of our estimated financial gap. The change in the financial gap reflects financial conditions, as well as other drivers of the financial cycle, while its level measures financial vulnerability. We generate this conditional lower quantile as fitted values from a fixed effects panel regression of detrended output growth on these predictor variables, estimated by pooled quantile regression with dummy variables at the 0.05 quantile. We estimate short run GaR using a one-year lag order, medium run GaR using a three-year lag order, and detrended output using the HP-filter setting the smoothing parameter to 16,000. Our historical short and medium run GaR estimates closely track the business cycle downturns that were associated with financial cycle downturns in Japan in the early 1990s, and in the United States in the early 1990s, early 2000s and late 2000s. In contrast, they do not fully track the sharp business cycle

[1] Prepared by Francis Vitek (MCM).

downturn that occurred in Japan in the late 2000s, because it was mainly caused by trade spillovers during the GFC and did not coincide with a sharp domestic financial cycle downturn.

Estimated Financial Gap



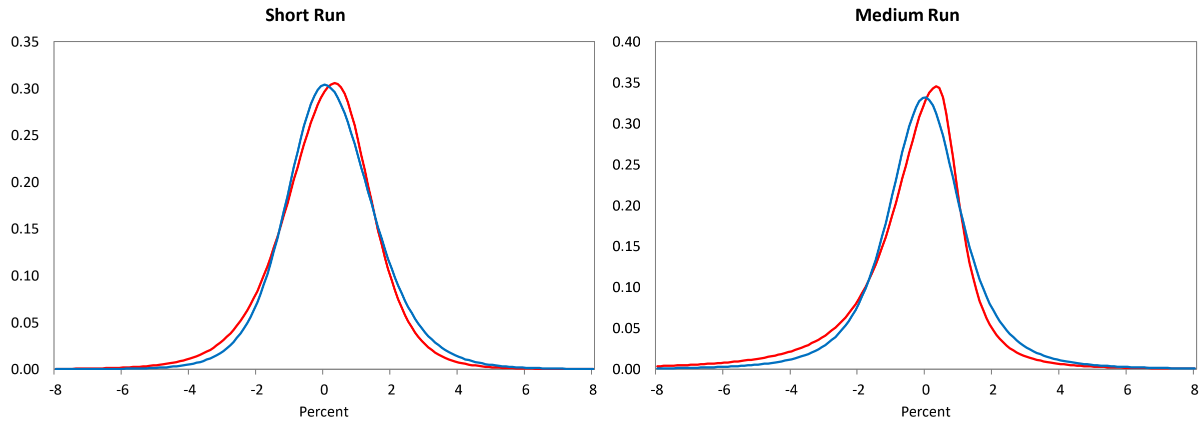
Source: IMF staff estimates.
Note: Decomposes the estimated financial gap ■ into contributions from the real credit ■, house price ■ and equity price ■ gaps.

Conditional Quantiles of Output Growth

Source: IMF staff estimates.
Note: Depicts detrended output growth ■ versus its one and three year ahead predicted mean ■ and 0.05 and 0.95 quantiles ■.

4. Current GaR. At the current juncture, we estimate elevated GaR in Japan at both the short and medium run horizons, represented by conditional distributions of detrended output growth that are skewed to the downside. These relatively high downside risks to output growth reflect elevated financial vulnerabilities, despite loose financial conditions.

Conditional Distribution of Output Growth in Japan



Source: IMF staff estimates.

Note: Depicts the current ■ versus historical average ■ predicted distribution of detrended output growth, based on a fitted skewed Student-t density.

References

Adrian, T., N. Boyarchenko and D. Giannone, 2019, "Vulnerable Growth," *American Economic Review*, Vol. 109, pp. 1263–89.

Annex VI. Japan's Economic Policy Uncertainty Index[1]

1. **Japan's Economic Policy Uncertainty Index (EPUI) is an indicator of policy-related uncertainties in Japan**. Japan's EPUI was developed in 2017, building on the approach of Baker, Bloom and Davis (2016), and is currently updated monthly by the RIETI (Research Institute of Economy, Trade and Industry), a policy think-tank established under the Japanese Ministry of Economy, Trade, and Industry. The Japan EPUI counts frequency of articles that contain keywords related to the economy, economic policy and uncertainty in the four major newspapers (Nikkei, Yomiuri, Asahi and Mainichi), and the counts are adjusted to be presented as an index.

2. **There are four uncertainty sub-indices for fiscal, monetary, trade and exchange rate policy.** While the fiscal policy uncertainty index co-varies closely with the overall index, the trade policy uncertainty index displays distinct dynamics and spiked in 2017 and 2019, driven by rising global trade uncertainties (Figure A). The contribution of each policy to overall policy uncertainty reveals that fiscal and monetary policies used to be the two leading sources of overall uncertainty, but the latter was recently overtaken by trade policy (Figure B).

3. **Japan's EPUI has risen around major political and economic events**. Such events include major economic policy changes including postponement of the consumption tax rate increase, domestic political events (e.g. contested national elections), and external shocks such as the Asian Financial Crisis and the Lehman Brothers shock.

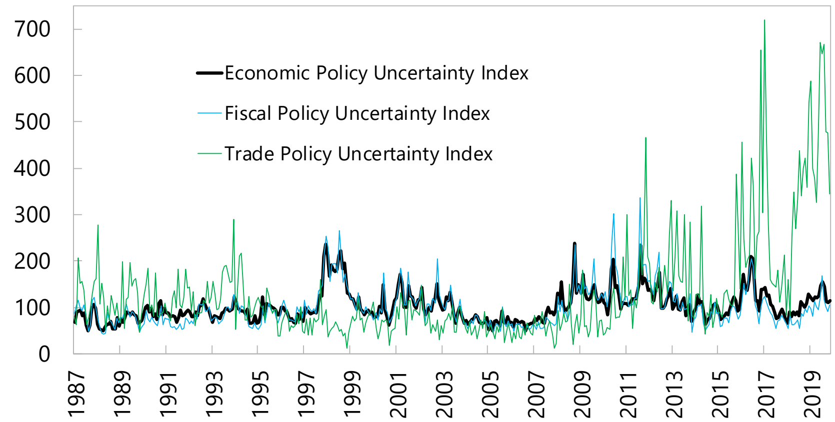
4. **In 2019, Japan's EPUI shows rising economic policy uncertainty**. After EPUI peaked at above 200 in July 2016 following the postponement of the proposed increase in the consumption tax rate and the Brexit referendum, it gradually declined and remained below 100 until the middle of 2018. In 2019, it climbed past 150 for the first time in three years in July, largely due to the upper house election (on July 21st) and elevated trade uncertainties. The latest reading is 115 for November 2019.

5. **A model-based analysis indicates that higher Japan EPUI foreshadows deteriorations in Japan's macroeconomic performance**. According to analysis based on VAR (vector autoregression) models, a unit standard deviation upward EPUI change foreshadows a subsequent fall in real GDP of about 0.3 percent after one year, partly through a slowdown in business investment activities. As argued in Arbatli et al (2017), this suggests that improvements in policy stability and stronger and more credible policy frameworks have the potential to favorably influence Japan's macroeconomic performance.

[1] Prepared by Takuma Hisanaga (APD).

Figure 1. Japan's Economic Policy Uncertainty Index

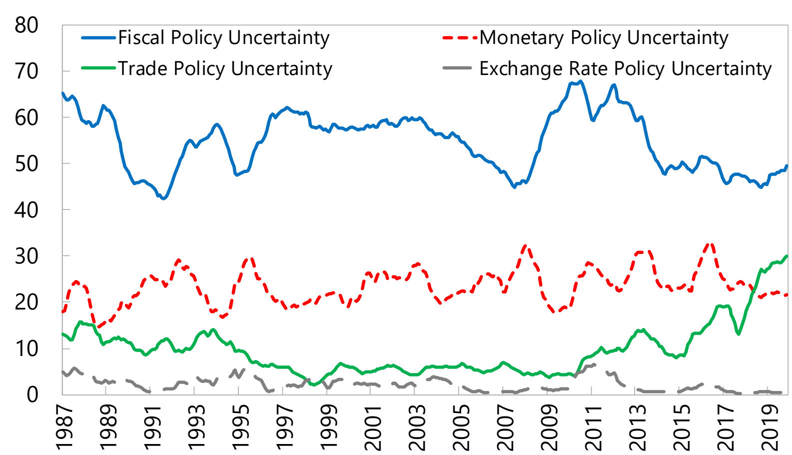
(Index, 1987-2015 average=100)



Source: "Policy Uncertainty in Japan" by Elif C. Arbatli, Steven J. Davis, Arata Ito, Naoko Miake, and Ikuo Saito

Figure 2. Proximate Sources of Japan's Economic Policy Uncertainty

(Percent of Overall EPU, 12-month centered MA)



Source: "Policy Uncertainty in Japan" by Elif C. Arbatli, Steven J. Davis, Arata Ito, Naoko Miake, and Ikuo Saito

References

Arbatli, E.C., S.J. Davis, A. Ito, N. Miake, and I. Saito, 2017, "Policy Uncertainty in Japan," IMF Working Paper 17/128 and NBER Working Paper No. 23411.

Baker, S.R., N. Bloom, and S.J. Davis, 2016, "Measuring Economic Policy Uncertainty," *Quarterly Journal of Economics*, Vol. 131, No. 4, pp. 1593–1636.

Annex VII. U.S. Dollar Funding Costs and Japanese Banks[1]

1. The U.S. dollar is a dominant currency in global financial intermediation. Reliance on the U.S. dollar provides several benefits during normal times, but also poses funding risks when financial conditions tighten. Non-U.S. banks' claims on U.S. dollar-denominated assets amount to over $12 trillion, which are roughly comparable in magnitude to those of U.S. banks. Given its prevalent use across the world, U.S. dollar intermediation provides several benefits during normal times, including efficient allocation of liquidity on a global scale. On the other hand, disruptions in dollar funding markets could be an important source of risk in global financial markets.

2. Japanese banks have one of the largest U.S.-dollar funding gaps in the world. The "U.S.-dollar funding gap" is calculated as the difference between U.S. dollar-denominated claims and liabilities, estimating the mismatch in dollar funding (or assets) in the balance sheets of financial institutions. According to this measure, Japanese banks have one of the largest U.S.-dollar funding gaps (as a ratio of their dollar-denominated claims) in the world (IMF (2019)).[2] On the asset side, Japanese banks have strong demand for overseas assets, driven by search-for-yield motives due to low returns on domestic investments in Japan's low-for-long environment. On the liabilities side, Japanese banks have large yen-based deposits.

3. In the event of a sudden and steep rise in U.S. dollar funding costs, Japanese banks will turn away from offshore investments. Banks will instead look for domestic or third-country (non-U.S., non-Japan) investment opportunities, or retrench investment altogether. If offshore investments become domestic investment opportunities, it could help ease domestic financial conditions and partly offset the adverse impact coming from a rise in U.S. dollar funding costs (Hong et al. 2019).[3] However, if investors decide to retrench investment and shrink the balance sheet, this could exacerbate domestic financial conditions.

4. Looking ahead, the authorities should focus on close monitoring of financial institutions' foreign currency exposures. Japanese financial institutions, both banks and institutional investors, are likely to increase their overseas investment due to a prolonged low interest rate environment and population aging, leading to higher demand for U.S. dollar funding and FX hedging. Regulators should monitor for possible maturity and currency mismatches in foreign currency hedging, where a sudden rise in U.S. dollar funding could disrupt financial intermediation. Having access to U.S. dollar liquidity during periods of stress is also helpful—for instance, through swap lines—and contributes to financial stability.

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[1] Prepared by Gee Hee Hong (APD).

[2] See International Monetary Fund (2019). "Bank's Dollar Funding: Financial Stability Implications," *Global Financial Stability Report*, October 2019. Washington, DC.

[3] Hong, G.H., A. Oeking, K. Kang, and C. Rhee (2019). "What Do Deviations from Covered Interest Parity and Higher FX Hedging Costs Mean for Asia?", IMF Working Paper 19/169.

Annex VIII. Debt Sustainability Analysis

1. Japan's public debt is unsustainable under current policies. Gross and net public debt amounted to 238 and 154 percent of 2018 GDP, respectively. Over the medium term, the pace of increase in the debt-to-GDP ratio is projected to be stable due to a narrowing primary deficit and a negative interest-growth differential. However, beyond the medium term, the pace of increase in the debt-to-GDP ratio will start to increase in 2024 amid demographic headwinds – rapid aging and depopulation, with debt reaching above 250 percent of GDP in 2030. While all debt profile indicators are below early warning benchmarks, Japan's extremely high financing needs point to vulnerabilities to shocks and changes in market perception. The absence of a credible fiscal framework (with annual supplementary budgets) implies the risk of future primary balance shocks.

Baseline and Realism of Projections

2. Assumptions. Macroeconomic projections and policy assumptions are consistent with the Japan macro-framework over the medium term (up to 2025). In the longer run, Japan's demographic headwinds will undermine both macroeconomic and fiscal prospects[1]. In order to capture these challenges, the time horizon for the debt sustainability analysis (DSA) exercise is extended to 2030, as was the case in the 2018 Japan DSA:

- *Growth*. Growth is projected to be around 0.5 percent over the medium term. Beyond the medium term, it is assumed that it will decrease to potential growth of 0.3 percent.

- *Fiscal policy.* The primary deficit is projected to narrow from 3.4 percent of GDP in 2019 to around 2.5 percent in 2023, due mainly to the two-percentage point increase in the consumption tax implemented in October 2019 and the fading effects of past supplementary budgets and the stimulus package (adopted in December 2019). Over the long run, social security expenditures (health and long-term care) are projected to increase as a share of GDP, consistent with Japan's aging and declining population, while other components are assumed to be constant as a share of GDP. Following the case of the 2018 Japan DSA, the time horizon is extended to 2030 to capture the effects from demographic headwinds. As a result, the primary deficit will start to increase again, reaching 3.4 percent of GDP by 2030.

- *Monetary policy and interest rate.* Monetary policy is assumed to remain accommodative over the medium term, in line with market expectations. Inflation is assumed to rise gradually to around 1 percent. In the longer-run, interest rates on JGBs (Japanese Government Bonds) are assumed to increase gradually (nominal interest rate on 10-year JGBs is assumed at around 2 percent in 2030).[2] However, the average real interest rate will only increase to 0.3 percent in 2030, helped

[1] The assumption on demography is based on the authorities' projections (the middle scenarios both for fertility and mortality).

[2] This assumption does not reflect staff's views on monetary policy, but instead aims at providing conservative fiscal projections for assessing debt sustainability risks.

by the extended maturity of government bonds. The baseline does not assume an increase in risk premiums.

3. Financing Needs. Japan's gross financing needs (defined as the sum of the fiscal deficit and maturing debt) are estimated to be around 49 percent of GDP in 2019—the highest among advanced economies. Gross financing needs will remain exceptionally large, but decline to around 45 percent of GDP in the medium term, due to an improving primary balance and extended maturity of government bonds. The maturity structure is projected by building on the FY2019 Debt Management Strategy.

4. Debt Profile. No indicators exceed the early warning benchmarks. The 10-year bond yield has been stable at an extremely low level, with a negative spread against U.S. Treasuries. The external financing requirement stood at 9 percent of GDP in 2018, well below the early warning threshold. This reflects the fact that foreign holdings of JGBs are relatively low at around 12 percent. In addition, there are no direct exchange rate risks as all JGBs are denominated in yen, which is assumed to remain the case in the future.

5. Net Debt. Net debt is an important indicator for Japan, given the large financial assets held by the government (about 84 percent of GDP). It should be noted, however, that not all financial assets are available to meet debt obligations or easy to liquidate. They include, for example, social security assets for future obligations. The financial-assets-to-GDP ratio is assumed to be stable over the projection period.

6. Realism of Baseline Assumptions.

- Past assumptions on real growth, primary balance and inflation have been neither too optimistic nor pessimistic compared to peer countries.

- The projected 3-year adjustment in the cyclically adjusted primary balance (CAPB) is in a realistic range, with a percentile rank of 41 percent compared to the historical experience for high-debt market access countries. The CAPB level is in the lowest quartile.

Shocks and Stress Tests

7. Stress tests illustrate the vulnerabilities of Japan's public debt position to various shocks and changes in market perceptions, given the unprecedented level of debt and high financing needs:

- *Fan chart.* The fan chart, which incorporates feedback effects between macroeconomic variables and relies on historical data to calibrate shocks, illustrates considerable uncertainty around the baseline. Under the worst quartile case, the debt-to-GDP ratio could reach around 270 percent of GDP in 2024—about 30 percentage points higher than in the baseline.

- *Primary balance shock.* The impact is estimated to be modest relative to other shocks. The assumed shock is equivalent to half of the 10-year historical standard deviation of changes in the primary balance, compared to the baseline. It is also assumed that additional borrowing leads to an increase in the interest rate of 25 basis points for every 1 percentage point of GDP worsening of the primary deficit. The gross debt-to-GDP ratio will be marginally higher by around 3 percent of GDP in 2024 than in the baseline.

- *Growth shock*. The shock immediately results in worsening debt dynamics with the second largest impact among the scenarios. Real output growth rates are reduced by one half of the 10-year historical standard deviation of changes in growth, for two consecutive years, starting in 2020. As a result, the primary balance deteriorates, leading to higher interest rates as in the primary balance shock scenario. Also, a decline in inflation is assumed at a rate of 0.25 percentage point per 1-point decrease in growth. The impact is significant, bringing the debt ratio to about 251 percent of GDP—around 9 percentage points higher than the baseline. This scenario highlights the importance of avoiding fiscal tightening in the near term with a view to maintain growth momentum.

- *Interest rate shock*. The effect of an interest rate shock becomes larger with the passage of time. A spike in JGB yields is an important tail risk. A shock based on the historical maximum real interest rate is assumed to occur in 2020 and remain for the rest of the period. The debt-to-GDP ratio is higher by around 9 percentage points in 2024. The difference compared to the baseline does not appear large in the medium term, but the impact will accelerate as the interest rate hike becomes fully reflected. In addition, such a shock could adversely affect financial sector liquidity and solvency positions, with possible knock-on effects on the debt ratio (see next shock).

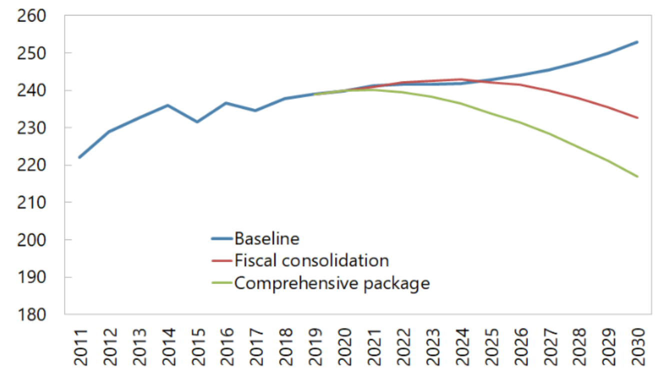
- *Interest rate and contingent liability shock*. The impact is by far the largest among the scenarios. A one-time capital injection equivalent to about 10 percent of regional banks assets will increase government spending by 5.4 percent of GDP. The interest rate is assumed to rise by 25 basis points for each percentage point increase in the primary deficit. This is also combined with the real GDP growth shock. As a result, the debt ratio will increase to around 263 percent of GDP in 2021, about 22 percentage points higher than in the baseline.

Longer-term Projections, Risks, and Reform Scenarios

8. The pace of increase in the debt-to-GDP ratio is projected to start rising in 2024, with the debt-to-GDP ratio reaching above 250 percent by 2030. This reflects rising age-related expenditures and gradual increases in the interest-growth differential. As one of the most important risks, the current favorable interest-growth differential hinges largely on domestic investors' home bias with high domestic saving, as well as large JGB purchases by the BoJ. This could be tested over time in the absence of a credible fiscal policy framework including a concrete medium-term fiscal consolidation plan.

9. Therefore, a well-specified fiscal framework is essential to anchor the medium and long-term debt trajectory. As discussed in the main text, staff recommends a neutral fiscal stance in 2020 and, if warranted, 2021. Gradual adjustment would start from 2022 with annual consolidation of about 0.5 percent of GDP in the structural primary balance. This would moderately bring down the debt-to-GDP ratio, if accompanied by a comprehensive policy package with accelerated structural reforms.

Japan: Gross Public Debt Under Reform Scenarios
(In percent of GDP)



Sources: IMF staff estimates and projections.

Figure 1. Japan Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario

(In percent of GDP unless otherwise indicated)

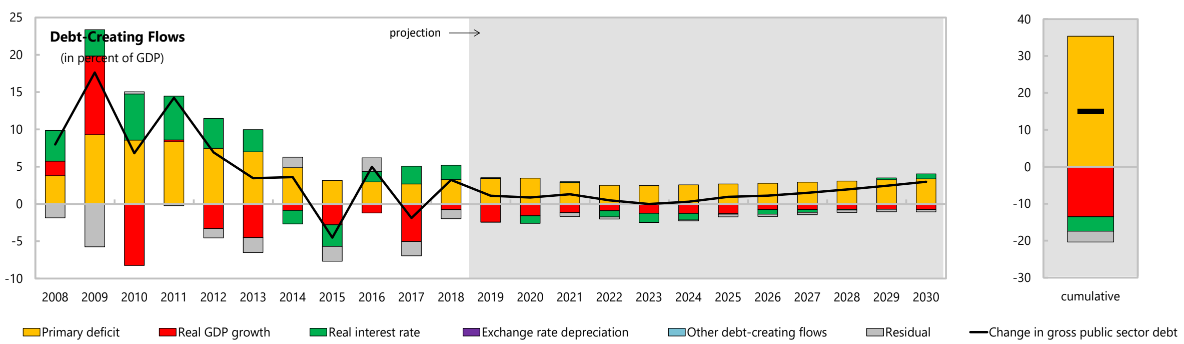
Debt, Economic and Market Indicators [1/]

	Actual			Projections											
	2008-2016 [2/]	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Nominal gross public debt	220.0	234.6	237.9	239.0	239.8	241.1	241.6	241.6	241.9	242.9	244.0	245.5	247.4	249.9	252.8
Public gross financing needs		50.9	49.5	48.5	48.5	48.5	46.8	45.0	45.8	46.2	46.1	45.9	45.2	46.0	47.0
Net public debt	138.5	150.8	154.1	155.2	156.1	157.4	157.9	157.9	158.2	159.1	160.2	161.7	163.7	166.1	169.1
Real GDP growth (in percent)	0.4	2.2	0.3	1.0	0.7	0.5	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
Inflation (GDP deflator, in percent)	-0.2	-0.2	-0.1	0.6	1.0	0.5	0.8	1.0	0.8	0.5	0.8	0.8	0.8	0.8	0.8
Nominal GDP growth (in percent)	0.1	1.9	0.2	1.6	1.7	1.0	1.2	1.5	1.4	1.1	1.1	1.1	1.1	1.1	1.1
Effective interest rate (in percent) [4/]	1.1	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	1.1

As of December 09, 2019		
Sovereign Spreads		
EMBIG (bp) 3/		-182
5Y CDS (bp)		22
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+u	A+u
Fitch	A	A

Contribution to Changes in Public Debt

	Actual			Projections													
	2008-2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	6.8	-1.9	3.2	1.1	0.9	1.3	0.5	0.0	0.3	1.0	1.1	1.5	1.9	2.4	3.0	15.0	
Identified debt-creating flows	7.8	0.0	4.4	1.1	0.9	1.8	0.8	0.0	0.4	1.3	1.4	1.8	2.3	2.8	3.3	17.9	
Primary deficit	6.2	2.7	3.3	3.4	3.5	2.9	2.5	2.5	2.6	2.7	2.8	2.9	3.1	3.2	3.4	35.4	-0.1
Primary (noninterest) revenue and grants	30.1	32.8	32.4	32.6	33.2	33.3	33.3	33.3	33.3	33.3	33.4	33.5	33.6	33.6	33.7	400.0	
Primary (noninterest) expenditure	36.2	35.5	35.7	36.0	36.7	36.1	35.8	35.7	35.8	36.0	36.2	36.4	36.6	36.9	37.1	435.4	
Automatic debt dynamics [5/]	1.7	-2.7	1.2	-2.3	-2.6	-1.0	-1.7	-2.4	-2.1	-1.4	-1.4	-1.1	-0.8	-0.5	-0.1	-17.4	
Interest rate/growth differential [6/]	1.7	-2.7	1.2	-2.3	-2.6	-1.0	-1.7	-2.4	-2.1	-1.4	-1.4	-1.1	-0.8	-0.5	-0.1	-17.4	
Of which: real interest rate	2.6	2.4	1.9	0.1	-1.0	0.1	-0.8	-1.2	-0.9	-0.1	-0.6	-0.4	-0.1	0.2	0.7	-3.9	
Of which: real GDP growth	-0.9	-5.0	-0.8	-2.4	-1.6	-1.2	-0.9	-1.2	-1.3	-1.3	-0.7	-0.7	-0.7	-0.7	-0.7	-13.5	
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	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (1) (e.g., drawdown of deposits) (negative)	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroarea loans)	0.0	0.0	0.0	0.0	0.0	0.0	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/]	-1.1	-1.9	-1.2	0.0	0.0	-0.5	-0.3	0.0	-0.1	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-2.9	

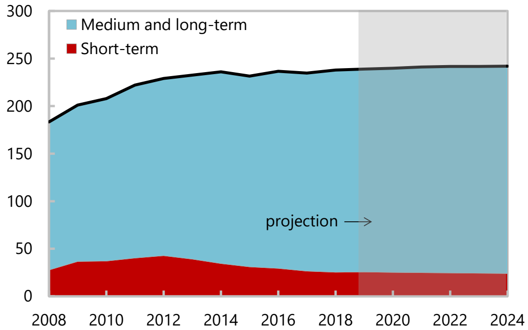


Source: IMF staff.
1/ Public sector is defined as general government.
2/ Based on available data.
3/ Long-term bond spread over U.S. bonds.
4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.
5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times 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.

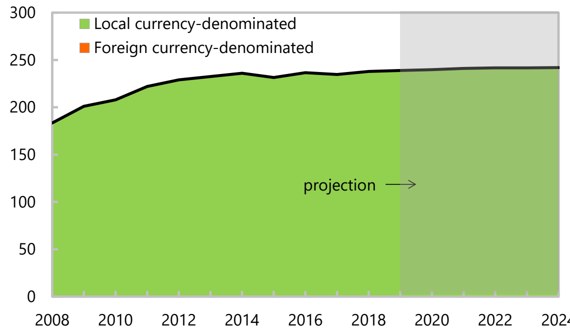
Figure 2. Japan Public DSA – Composition of Public Debt and Altenative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



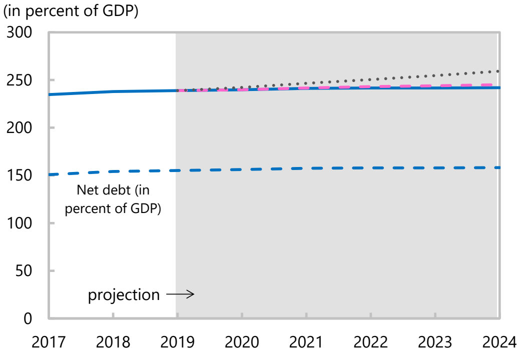
By Currency
(in percent of GDP)



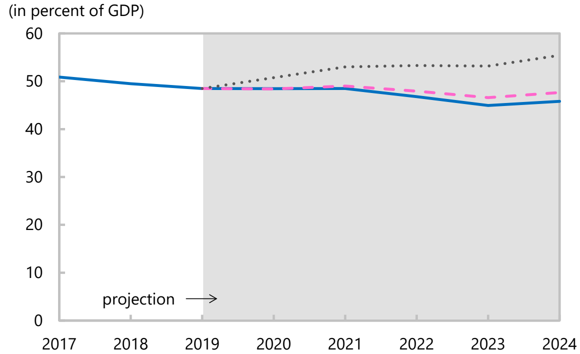
Alternative Scenarios

Baseline   Historical   Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



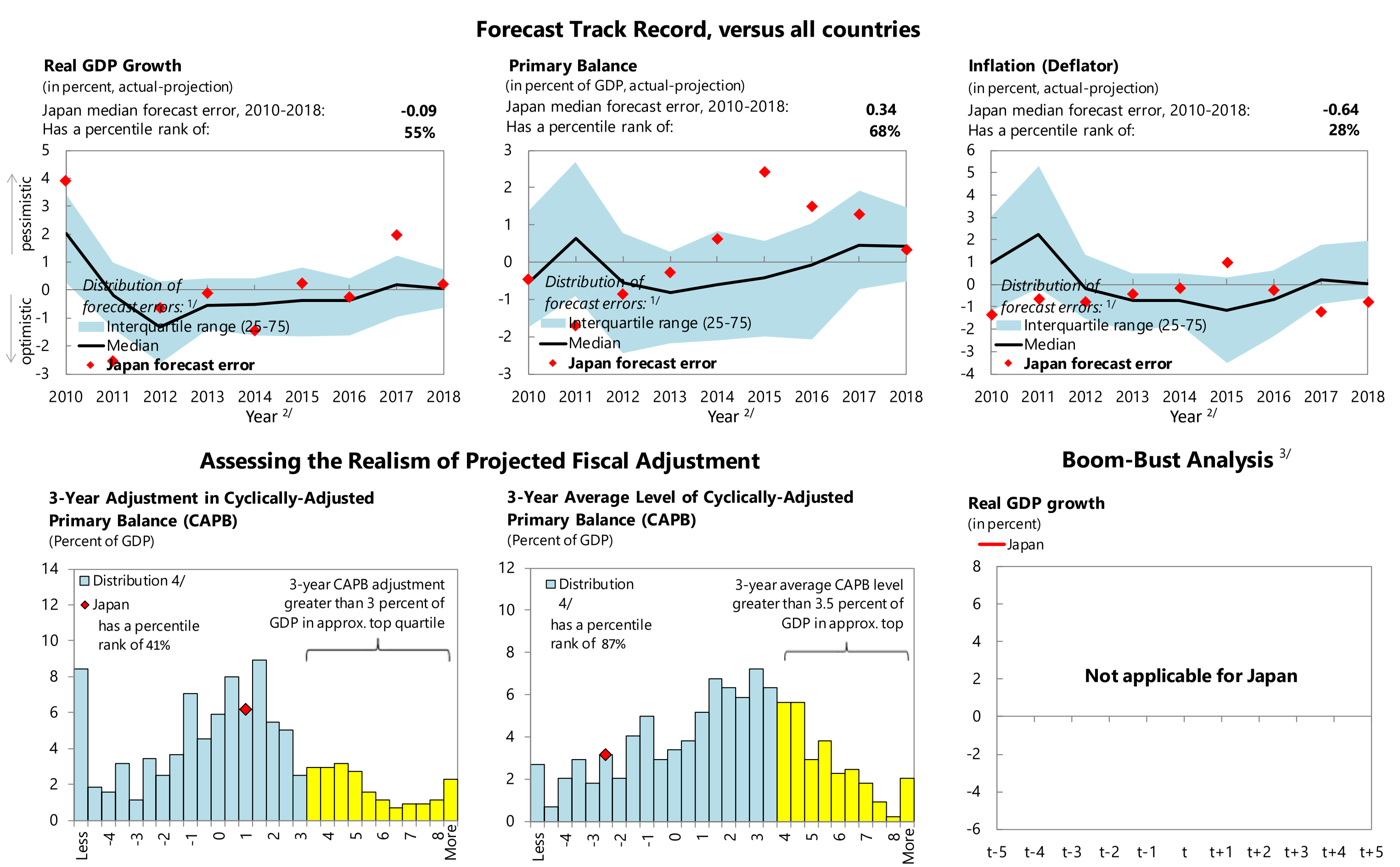
Underlying Assumptions
(in percent)

Baseline Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	1.0	0.7	0.5	0.4	0.5	0.5
Inflation	0.6	1.0	0.5	0.8	1.0	0.8
Primary Balance	-3.4	-3.5	-2.9	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	0.5	0.5	0.5	0.5
Constant Primary Balance Scenario						
Real GDP growth	1.0	0.7	0.5	0.4	0.5	0.5
Inflation	0.6	1.0	0.5	0.8	1.0	0.8
Primary Balance	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4
Effective interest rate	0.7	0.6	0.5	0.5	0.5	0.5

Historical Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	1.0	0.7	0.7	0.7	0.7	0.7
Inflation	0.6	1.0	0.5	0.8	1.0	0.8
Primary Balance	-3.4	-5.8	-5.8	-5.8	-5.8	-5.8
Effective interest rate	0.7	0.6	0.7	0.8	0.9	1.0

Source: IMF staff.

Figure 3. Japan Public DSA – Realism of Baseline Assumptions



Source : IMF Staff.

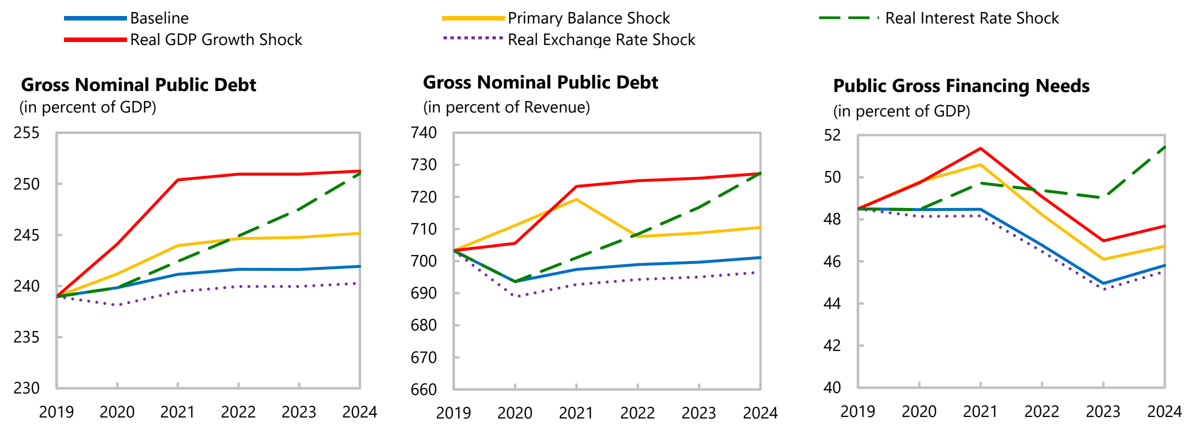
1/ Plotted distribution includes all countries, percentile rank refers to all countries.

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

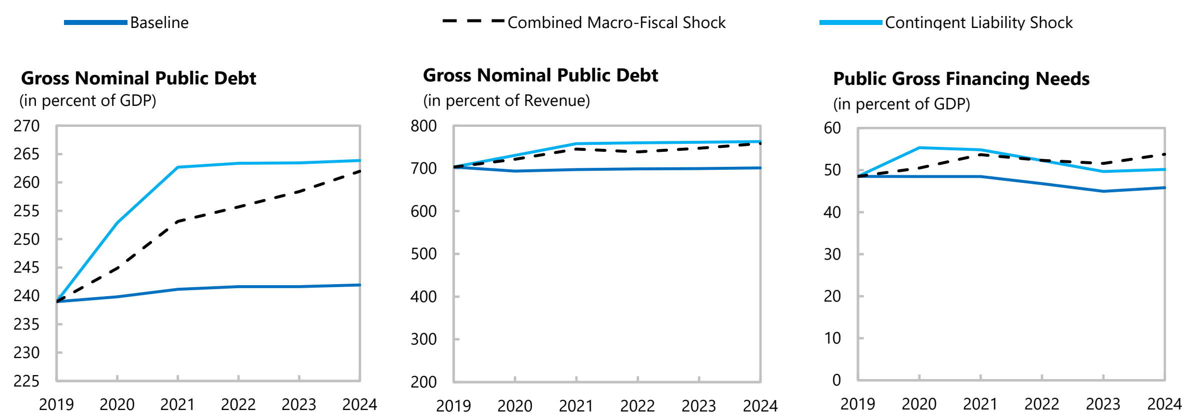
3/ Not applicable for Japan, as it meets neither the positive output gap criterion nor the private credit growth criterion.

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 4. Japan Public DSA – Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

	2019	2020	2021	2022	2023	2024
Primary Balance Shock						
Real GDP growth	1.0	0.7	0.5	0.4	0.5	0.5
Inflation	0.6	1.0	0.5	0.8	1.0	0.8
Primary balance	-3.4	-4.8	-4.2	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	0.6	0.6	0.5	0.5
Real Interest Rate Shock						
Real GDP growth	1.0	0.7	0.5	0.4	0.5	0.5
Inflation	0.6	1.0	0.5	0.8	1.0	0.8
Primary balance	-3.4	-3.5	-2.9	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	1.0	1.3	1.5	1.7
Combined Shock						
Real GDP growth	1.0	-0.6	-0.8	0.4	0.5	0.5
Inflation	0.6	0.7	0.2	0.8	1.0	0.8
Primary balance	-3.4	-4.8	-4.7	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	1.0	1.3	1.5	1.7

	2019	2020	2021	2022	2023	2024
Real GDP Growth Shock						
Real GDP growth	1.0	-0.6	-0.8	0.4	0.5	0.5
Inflation	0.6	0.7	0.2	0.8	1.0	0.8
Primary balance	-3.4	-4.0	-4.0	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	0.5	0.5	0.5	0.5
Real Exchange Rate Shock						
Real GDP growth	1.0	0.7	0.5	0.4	0.5	0.5
Inflation	0.6	1.7	0.5	0.8	1.0	0.8
Primary balance	-3.4	-3.5	-2.9	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	0.5	0.5	0.5	0.5
Contingent Liability Shock						
Real GDP growth	1.0	-1.8	-2.0	0.4	0.5	0.5
Inflation	0.6	0.4	-0.2	0.8	1.0	0.8
Primary balance	-3.4	-8.9	-2.9	-2.5	-2.5	-2.6
Effective interest rate	0.7	0.6	0.7	0.6	0.6	0.6

Source: IMF staff.

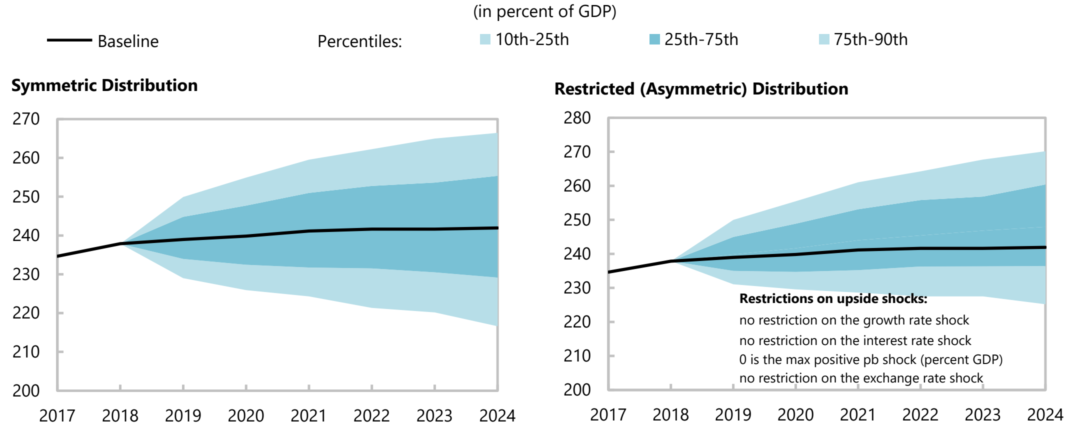
Figure 5. Japan Public DSA Risk Assessment

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

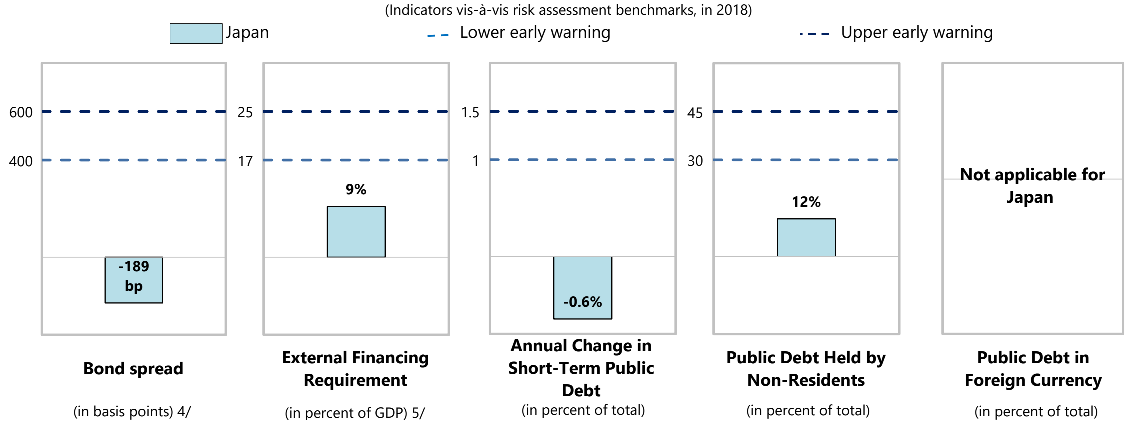
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2018)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 85% 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 20% 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:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 10-Sep-19 through 09-Dec-19.

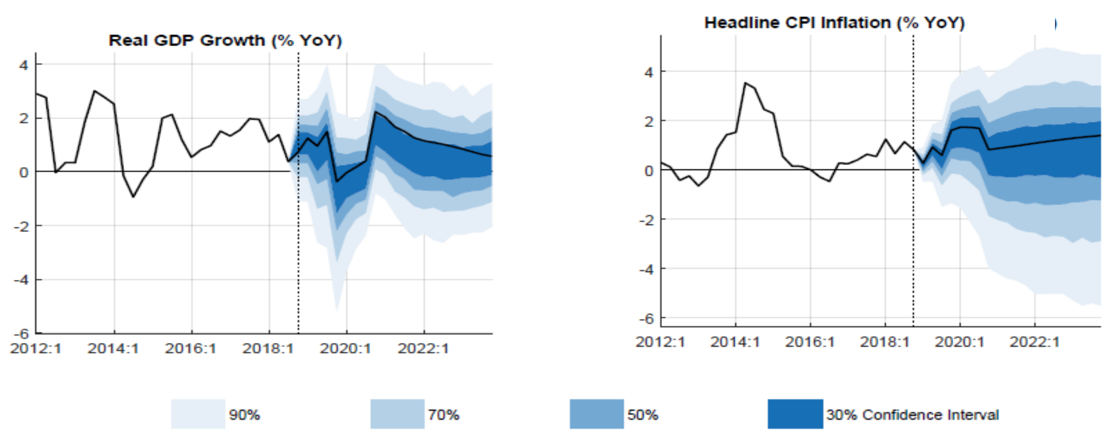
5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Annex IX. Model-Based Projections and Policy Analysis for Japan[1]

1. A simple New Keynesian model with Japan-specific features provides a framework for model-consistent projections and policy analysis for medium-term growth and inflation for Japan. The model is based on Berg et al. (2006), a small semi-structural model capturing key features of monetary policy transmission with nominal and real rigidities.[2] Japan-specific features are introduced, which include: the existence of the effective lower bound on the policy interest rate; separation of headline and core inflation; monetary policy with endogenously-determined credibility; and a simplified fiscal policy block.[3]

2. In the baseline medium-term projection, real GDP growth is expected to stabilize at the estimated potential rate, and inflation will remain below the Bank of Japan's two percent inflation target. To generate a gradual increase in inflation over the forecast horizon, a positive output gap remains open. Headline inflation rises over the medium term, although falling short of the Bank of Japan's two percent inflation target. The likelihood of headline and core inflation reaching 2 percent by 2023Q4 is about 35 percent.

Fan Charts on Real GDP Growth and Headline CPI Inflation for the Baseline Scenario



Source: IMF staff estimates.

3. Yen appreciation decreases the likelihood of inflation reaching the target and increases the likelihood of deflation over the medium-term. Under the scenario of the Japanese yen temporarily appreciating to ¥100/USD in 2019Q4 (for example, on the back of safe-haven capital inflows), the likelihood of inflation reaching the 2 percent target over the medium-term

[1] Prepared by Gee Hee Hong (APD) and Yaroslav Hul (ICD).

[2] Some examples of the FPAS model's application to other countries include: "A Practical Model-Based Approach to Monetary Policy Analysis, Overview," IMF WP/06/080 by Berg et al. (2006) for Canada; and "Food Inflation in India: The Role for Monetary Policy", IMF WP 14/178 by Anand et al. (2014) for India.

[3] See Anand, Hong and Hul (2019) "Achieving the Bank of Japan's Inflation Target", IMF Working Paper 19/229 for additional details.

decreases—to 27 percent for both headline and core inflation. Conversely, the probability of deflation (defined as negative headline inflation) by 2023Q4 increases to about 51 percent.

4. High oil prices increase the likelihood of reaching the inflation target, but only in the near-term. Under the scenario where oil prices rise to $100/barrel in 2019Q4, the likelihood of reaching 2 percent inflation over the medium-term decreases to 31 percent for both headline and core inflation. The likelihood of headline deflation is unaffected by oil price shocks.

5. Near-term growth is negatively affected by adverse shocks, but growth recovers over the medium-term as shocks dissipate. The two shocks considered (yen appreciation and high oil prices) affect growth negatively in the near-term, as net exports suffer from a stronger yen (yen appreciation) and a deterioration of the terms of trade (high oil prices). To compensate for the losses in the near-term, the path of real GDP growth needs to be higher compared to the baseline. As a result, the probabilities of real GDP growth being above 1.5 percent by 2023Q4 increase, while the probabilities of real GDP growth falling below zero decrease.

Table 1. Japan: Likelihood of Reaching Inflation Target and Real GDP Growth Under Different Scenarios

	Probability of headline inflation reaching 2 percent in 2023Q4
Baseline	34.8 percent
Yen Appreciation	27.2 percent
High Oil Price	31.2 percent

	Probability of core inflation reaching 2 percent in 2023Q4
Baseline	34.8 percent
Yen Appreciation	27.1 percent
High Oil Price	31.3 percent

	Probability of headline inflation being negative by 2023Q4
Baseline	38.6 percent
Yen Appreciation	51.2 percent
High Oil Price	38.8 percent

	Probability of real GDP growth falling below zero in 2023Q4
Baseline	38 percent
Yen Appreciation	34.5 percent
High Oil Price	35.1 percent

	Probability of real GDP growth above 1.5 percent in 2023Q4
Baseline	28.3 percent
Yen Appreciation	34.7 percent
High Oil Price	32.4 percent

Annex X. Activating the Countercyclical Capital Buffer in Japan[1]

1. Background. The countercyclical capital buffer (CCyB) is part of the Basel III capital standards for internationally-active banks, which took full effect on January 1, 2019. Gradually raising the CCyB during a credit cycle upturn helps bolster the resilience of the banking sector to the associated accumulation of systemic risk, while also leaning against excess credit growth. Lowering the CCyB in response to a credit cycle downturn helps support the supply of credit to the economy when systemic risk materializes. In Japan, the CCyB applies only to internationally-active banks, and has remained at 0 percent since it was introduced on March 31, 2016.

2. Indicators. Multiple financial vulnerability and resilience indicators support activating the CCyB in Japan:

- *Credit and financial gaps signal late stage credit and financial cycle upturns*. The credit-to-GDP gap estimated by the BIS has reached its highest level since the bursting of the credit-fueled property and stock market bubbles in the early 1990s. According to the indicative guidance in BCBS (2010), the CCyB should have been activated when this credit-to-GDP gap breached the lower threshold in 2016Q3, and should now be set to 2.5 percent after the upper threshold was breached in 2018Q4. The financial gap estimated in Annex V, which accounts for housing and equity market overvaluation in addition to excess credit growth, has also reached its highest level since the bubbles burst, indicating elevated medium run growth at risk (GaR).

- *Bank lending standards have eased for all borrowers.* Except for during the global financial crisis (GFC), bank lending standards as measured by the BoJ's senior loan officer survey have eased steadily for loans to households and firms of all sizes since the policy interest rate approached its effective lower bound in the late 1990s. This indicates a broad-based deterioration in credit quality, which may be expected to amplify the rise in NPLs when the credit cycle turns.

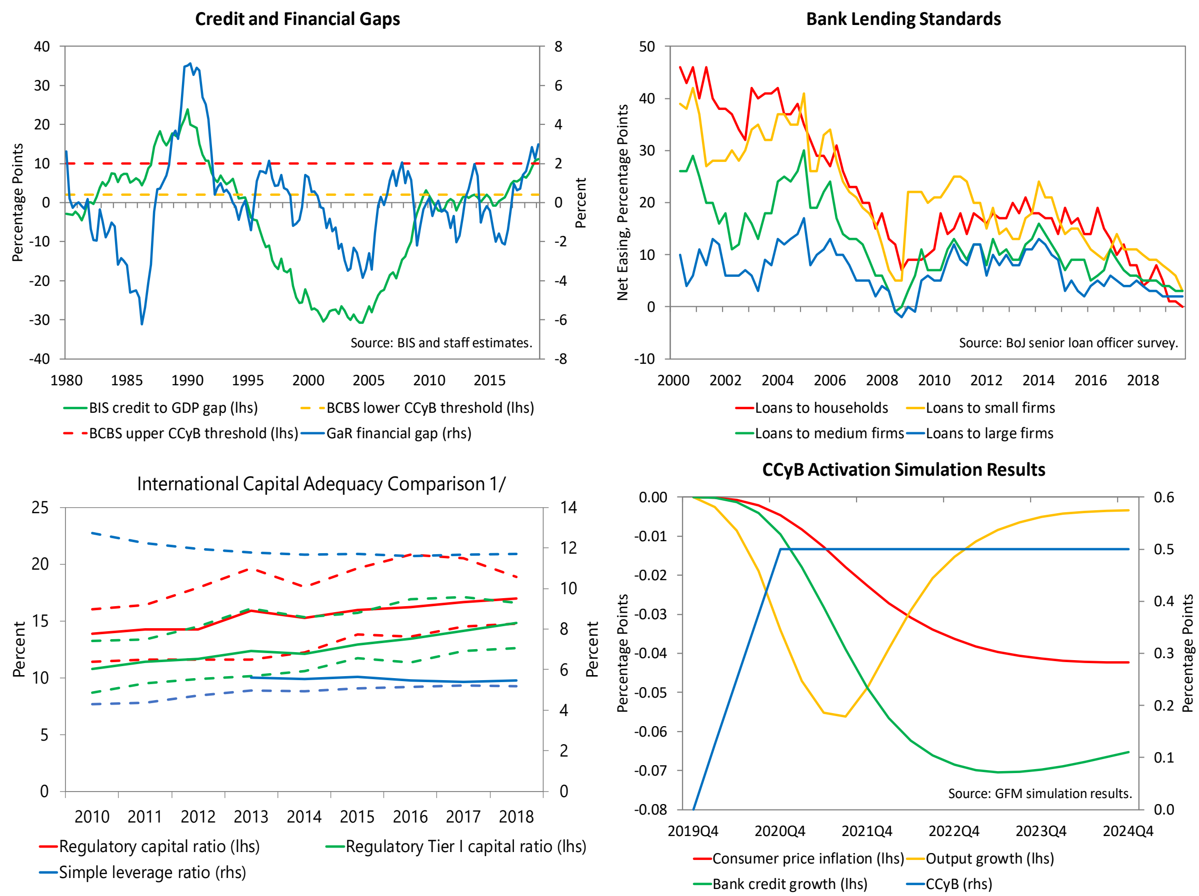
- *Higher bank capital ratios may reflect risk weight compression.* In aggregate, regulatory bank capital ratios have risen steadily since the GFC, remaining around the midpoints of their ranges across the ten-largest advanced economies in the world. However, the simple leverage ratio for the aggregate banking system has fallen slightly, remaining near the bottom of its range across major advanced economies. While this is largely the result of higher reserves held at the central bank, it may also reflect the compression of risk weights as the credit cycle has matured.

3. Recommendation. The Japanese Financial Services Agency should consider activating the CCyB to build up the resilience of the banking sector to rising systemic risk as the credit and financial cycles mature. It should also consider expanding the scope of coverage of the CCyB to the domestic credit exposures of all domestic banks, including those regional banks that are not internationally active, some of which face capital adequacy challenges. Scenario analysis using the Global Macrofinancial Model (GFM) documented in Vitek (2018) indicates that a 50-basis point

[1] Prepared by Francis Vitek (MCM).

increase in the CCyB phased in over one year applicable to the entire banking sector would only slightly reduce bank credit and output growth in Japan, even with the policy interest rate constrained by its effective lower bound.

Figure 1. Japan: Activating the CCyB in Japan: Indicators and Simulation Results



Source: IMF staff estimates.

1/ Solid lines depict values for Japan, while dashed lines depict ranges across the ten-largest advanced economies in the world.

References

Basel Committee on Banking Supervision, 2010, "Guidance for National Authorities Operating the Countercyclical Capital Buffer", Basel.

Vitek, F., 2018, "The Global Macrofinancial Model," IMF Working Paper 18/81.

Annex XI. Progress on 2017 FSAP Key Recommendations

(as of December 2019)

Fund Recommendations	Time Frame[1]	Update on Progress
Cross-Cutting Issues		
Further raise corporate governance standards to bolster independence of board and oversight functions from senior management across banking and insurance sectors (FSA).	NT	The FSA published the revised Corporate Governance Code in June 2018, which requires that a company should appoint a sufficient number of independent directors (rather than just disclose a roadmap for doing so as in the previous version) if the company believes that it needs to appoint at least one-third of directors as independent directors based on various factors. The revised Corporate Governance Code also holds companies more accountable for cross-shareholdings by requiring them to annually assess whether or not to hold each individual cross-shareholding and disclose the results of the assessment. The revised Code requires that the board appropriately oversee the systematic development of succession and appoint or dismiss a CEO through objective, timely and transparent procedures. In addition, new disclosure rules on cross-shareholdings took effect in March 2019, requiring disclosure of the method of verifying the rationality of cross-share holdings, and expanding the coverage of mandatory individual disclosures (from 30 to 60 shares).
Further develop internal processes to support full risk-based supervision for banks, insurers, and securities firms (FSA, SESC).	I	The FSA finalized the "Principles of Prudential Policy" in March 2019, laying out its new forward-looking approach to macroprudential and microprudential supervision. It solicited comments on a draft "Supervisory Guideline" paper clarifying internal supervisory procedures under this new approach in October 2019. The FSA introduced this new supervisory approach in June 2018, in line with its organizational reform.
Consider enhancing independence of FSA and BoJ in key supervisory issues (PM, MoF, FSA, BoJ).	MT	Under consideration by the authorities.
Systemic Risks		
Develop own supervisory stress testing model for both solvency and liquidity risk analysis for banks, and for solvency risk analysis for insurers, as well as stress test large exposures periodically (FSA).	NT	The FSA and BoJ will jointly conduct a bottom-up solvency stress test of 5 major banks (3 G-SIBs and 2 D-SIBs) based on a common scenario in 2019-2020, to complement its macroprudential and microprudential supervision.
Continue conducting liquidity stress testing regularly for significant foreign currencies and require banks to hold sufficient counterbalancing capacity, particularly high-quality liquid assets (FSA).	I	The FSA stated in "Providing Better Financial Services in the Era of Transition", published in September 2018, that it will encourage the three megabank groups to secure stable foreign currency funding and enhance their foreign currency liquidity management.

[1] I-Immediate" is within one year; "NT-near-term" is 1–3 years; "MT-medium-term" is 3–5 years.

Fund Recommendations	Time Frame[1]	Update on Progress
Financial Sector Oversight		
Give FSA the power to set capital requirements for banks based on specific risk profiles (Gov).	I	The FSA's revamped "Early Warning Mechanism" achieves a similar result to Pillar 2 capital buffers, by identifying banks with medium-term profitability or soundness concerns and engaging their management to take early remedial actions. In particular, the FSA periodically simulates each bank's 5-year core net profit or capital ratio under stressed conditions. It then conducts in-depth dialogues with the management of banks with medium-term profitability or soundness concerns on their business outlooks, discussing their economic forecasts, revenue diversification or cost reduction plans, and capital policies. Finally, for those banks whose profitability or capitalization prospects remain inadequate following in-depth dialogues, the FSA takes further actions as necessary to address the identified issues, such as conducting a governance review via on-site inspections, or issuing a business improvement order.
Take further steps to implement an economic-value-based solvency regime for insurers (FSA).	NT	The FSA plans to incorporate Economic Value-Based Solvency assessments into its insurance sector supervision and inspection frameworks, while working towards introducing Economic Value-Based Solvency regulation in line with the IAIS's Insurance Capital Standard Version 2.0. It has established the "Study Group on the Economic Value-Based Solvency Framework" to help guide the introduction of such a framework, while taking into consideration related global developments.
Introduce more specific periodic reporting requirements and more proactive investigations into related party transactions (FSA).	I	The FSA requires that banks which conduct transactions with related parties where arm's length rules may apply obtain approval. In addition, the FSA imposes business scope restrictions on banking groups, and prevents contamination of heterogeneous risks. As a result, the FSA considers the effect of related party transactions on the soundness of banks' business to be limited, and does not plan to change its current treatment.
Ensure robust supervision of the systemically important securities firms by ensuring access to sufficient number of experienced staff and onsite monitoring of overseas operations (FSA, SESC).	I	The FSA has been continuously monitoring the governance, profitability and risk management of major Japanese securities firms through its Securities Firms Monitoring Office (SFMO). The SFMO had 16 staff monitoring major securities firms as of end-October 2019, all experienced in supervising or inspecting securities firms. As for the overseas operations of major securities firms, the SFMO conducted on-site visits to overseas offices 4 times in 2017 (New York, London (twice), Singapore), 5 times in 2018 (New York (twice), London, Hong Kong SAR (twice)), and 4 times in 2019 (New York, London, Singapore (twice)).
Enhance recovery plan further by including extreme stress scenarios while ensuring continuity of critical services and mitigating contagion risks through clearing members (JSCC).	I	Recovery plans have not been enhanced. However, for clearing services for Listed Derivatives, discussions are ongoing for revising the compensation framework upon the default of clearing participants, with a view to aligning practices with those of major CCPs. Measures under consideration include setting a cap on the cash call (Special Clearing Charge) after allocating all clearing funds and introducing VM gains

Fund Recommendations	Time Frame[1]	Update on Progress
		haircutting and partial tear-up on non-defaulting clearing participants.
Address recovery planning issues on regulation for central counterparties (FSA).	I	Under consideration by the authorities.
Macroprudential Policy		
Clarify the mandate of the Council for Cooperation on Financial Stability (FSA, BoJ).	NT	The FSA and BoJ have been holding bi-annual meetings of the Council for Cooperation on Financial Stability, to exchange views on the state of the financial system and financial markets, among senior officials including the Commissioner of the FSA and the Deputy Governor of the BoJ.
Consider proactively enhancing the macroprudential tool box, including sectoral tools (FSA).	NT	The FSA has been monitoring emerging sources of systemic risk through its microprudential supervision, with horizontal reviews covering topics such as lending to the real estate sector, foreign currency liquidity management, and investment in CLOs. It conducts a systemic risk assessment jointly with the BOJ under the CCyB framework on a quarterly basis.
Continue to broaden and deepen the scope of systemic risk assessments (FSA, BoJ).	NT	The FSA has expanded the coverage of its intensive monitoring to some securities firms under megabank groups.
Crisis Management, Resolution, and Financial Safety Nets		
Strengthen resolution framework by removing ambiguities in the choice of tools, introducing a statutory bail-in power, clarifying triggers to enable early entry into resolution, and ensure that the role for the courts does not hinder effective resolution (FSA).	NT	The FSA has made efforts to limit financial institutions' need for temporary public support through various measures to improve their resolvability.
Consider broadening the perimeter of institutions to establish loss-absorbing capacity (FSA).	NT	The FSA has extended the coverage of Total Loss-Absorbing Capacity (TLAC) requirements to one D-SIB. But it has no plans to further extend this coverage to the remaining D-SIBs.
Encourage earlier prompt corrective action and provide a clearer path to resolution (FSA).	NT	The FSA's revamped "Early Warning Mechanism" helps guide its supervisory interventions to ensure that banks take early remedial actions to safeguard their soundness. In particular, the FSA periodically simulates each bank's 5-year core net profit or capital ratio under stressed conditions. It then conducts in-depth dialogues with the management of banks with medium-term profitability or soundness concerns on their business outlooks, discussing their economic forecasts, revenue diversification or cost reduction plans, and capital policies. Finally, for those banks whose profitability or capitalization prospects remain inadequate following in-depth dialogues, the FSA takes further actions as necessary to address the identified issues, such as conducting a governance review via on-site inspections, or issuing a business improvement order. Measures to provide a clearer path to resolution in the event of insolvency are under consideration by the authorities.
Enhance crisis preparedness and coordination via an interagency crisis management forum (MoF, Minister for FS, BoJ, FSA, DICJ).	NT	The FSA has been making efforts to enhance crisis management and inter-agency collaboration through regular monitoring practices, including information-sharing between authorities.

Fund Recommendations	Time Frame[1]	Update on Progress
Establish an orderly resolution regime, following international guidance, for central counterparties and other FMI operators (FSA).	MT	Under consideration by the authorities.
Strengthen framework for the provision of emergency liquidity assistance and tighten preconditions for the use of temporary public funding in resolution (MoF, BoJ).	NT	Under consideration by the authorities.
Financial Intermediation		
Continue engaging with banks on implications of macroeconomic and demographic trends and take actions on a timely basis when viability concerns are identified for individual institutions (FSA).	I	In "Providing Better Financial Services in the Era of Transition" published in September 2018, the FSA stated that it will conduct on-site and off-site monitoring of banks to safeguard their long-term financial soundness, while urging those with serious problems to take early corrective measures. The FSA has also analyzed the state of the rapidly ageing society, as well as the circumstances and issues that the retiring and retired generations are facing, and published its findings in an interim report titled "Financial Services in the Aging Society" in July 2018.
Encourage banks to evolve risk management practices in line with new business activities (FSA).	NT	According to "Providing Better Financial Services in the Era of Transition" published in September 2018, the FSA will continue to engage with banks on measures to enhance their risk management to maintain their financial soundness, under scenarios where interest rates remain low for long or alternatively rise. The FSA will also encourage 5 major banks (3 G-SIBs and 2 D-SIBs) to adjust their risk management practices in response to changes in the macrofinancial risk environment through joint solvency stress tests with the BoJ.
Encourage regional and *Shinkin* banks to review measures such as cost reduction, consolidation, income diversification, and fee structures to address medium term profitability concerns (FSA, Gov).	NT	Through its revamped "Early Warning Mechanism", the FSA encourages banks to take targeted measures to address medium term profitability concerns. In particular, the FSA periodically simulates each bank's 5-year core net profit or capital ratio under stressed conditions. It then conducts in-depth dialogues with the management of banks with medium-term profitability or soundness concerns on their business outlooks, discussing their economic forecasts, revenue diversification or cost reduction plans, and capital policies. Finally, for those banks whose profitability or capitalization prospects remain inadequate following in-depth dialogues, the FSA takes further actions as necessary to address the identified issues, such as conducting a governance review via on-site inspections, or issuing a business improvement order.
Lower coverage of credit guarantees (SME Agency).	MT	In April 2018, the coverage of credit guarantees to SMEs from Safety Net Program 5 was reduced from 100 percent to 80 percent. A new Safety Net Guarantee program was established with a 100 percent guarantee, to be activated in the event of a major crisis.

Annex XII. Cross-Country Case Studies of Medium-Term Fiscal Framework (MTFF)[1]

1. The adoption of a MTFF would enhance credibility of fiscal policy and help ensure long-term fiscal sustainability. Several advanced economies have adopted MTFFs, including:

- In **France**, the Constitutional Bylaw of December 2012 sets the content of the Annexes accompanying the annual budget law, as follows: (i) multi-annual (four year) macroeconomic, revenue, expenditure, deficit and borrowing projections, (ii) disaggregated multi-annual expenditure ceilings for each one of the thirty one votes of the budget, (iii) potential growth estimates, fiscal structural efforts and medium-term structural deficit targets for each one of the general government tiers, (iv) comparison between recent execution data and previous fiscal objectives, as well as corrective measures if needed, (v) fiscal estimates at current policies, and (vi) new measures to reach medium-term fiscal objectives.

- In the **United Kingdom**, the 2011 Budget Responsibility and National Audit Act and the Charter for Budget Responsibility (Autumn 2016 update) define the government's fiscal objectives, the roles of institutions and the documents to be produced. The Office of Budget Responsibility (OBR) produces detailed five-year forecasts for the economy and public finances twice a year. The OBR also assesses the government's performance against the targets, and identifies and analyses risks to the medium-term outlook for the public finances and to long-term fiscal sustainability.

- In **Australia**, the 1998 Charter of Budget Honesty Act requires the government to publish a fiscal strategy statement specifying: the government's long-term fiscal objectives within which shorter-term fiscal policy will be framed; the broad strategic priorities; key fiscal measures against which fiscal policy will be set and assessed; and, for the budget year and the following three financial years, fiscal objectives and targets and expected outcomes for the specified key fiscal measures. In addition, an Intergenerational Report is required every five years to assess the long-term sustainability of current government policies, including how demographic changes may impact public finances, over the following 40 years.

- In **New Zealand**, the 1994 Fiscal Responsibility Act requires that the Fiscal Strategy Report (FSR) be presented to Parliament yearly, describing the government's long-term objectives and its short-term fiscal plans. The FSR is also required to include projections for key fiscal aggregates for a period of ten or more years and an explanation of how these projections accord with the principles of responsible fiscal management. The FSR must also assess the consistency of the long-term objectives with those announced in the government's budget policy statement to the House of Representatives.

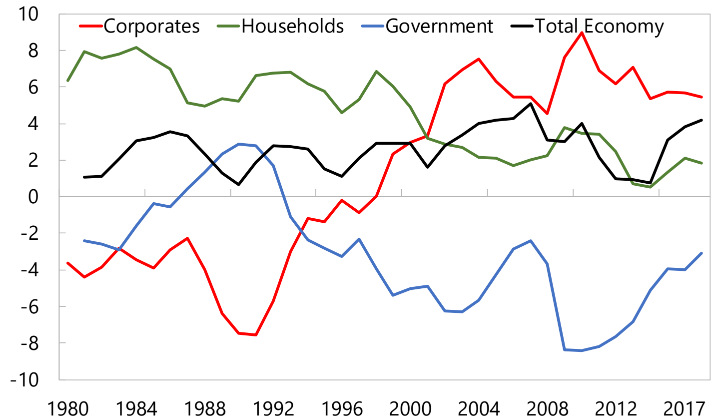
[1] Prepared by Mariana Colacelli and Takuma Hisanaga (both APD).

Annex XIII. The Rise of Corporate Savings in Japan[1]

1. While Japan's current account balance has fluctuated at around 3 percent of GDP over the last four decades, this apparent stability masks large offsetting movements across institutional sectors. In parallel with a growing income account, Japan's corporate net saving—defined as the difference between gross saving and investment—increased significantly following the burst of the real estate bubble at the beginning of the 1990s (red line in text chart). However, this was compensated by changes in households and public net saving in the opposite direction, reflecting, respectively, households' dissaving (possibly linked to Japan's advanced phase of aging), and the government's efforts to get the economy out of deflation through fiscal stimulus, plus increases in social security spending.

Japan: Gross Saving minus Investment

(In percent of GDP)

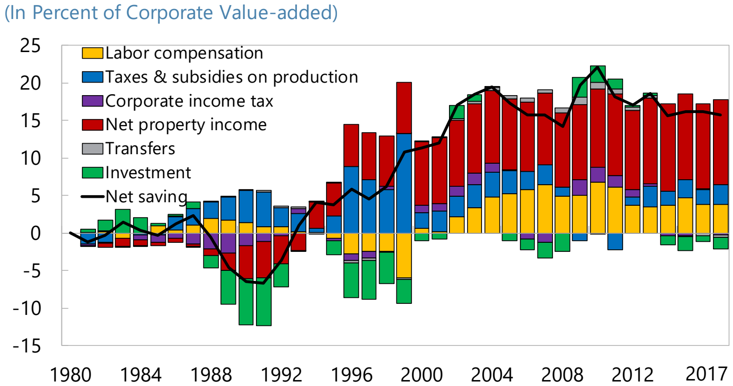


Source: AMECO database.

2. The large increase in corporate net saving can be attributed mainly to a rise in net property income and a fall in the labor share. As discussed by Ruscher and Wolff (2013), the first driver has been an increase in net property income, most of which played out already in the 1990s, and it can be related to (i) corporate deleveraging, and (ii) progressively lower interest rates as monetary policy was loosened. The fall in the labor share occurred later, from the late 1990s to the mid-2000s, in the wake of the 1995-96 labor market reforms which expanded (cheaper) non-regular employment. By contrast, and abstracting from cyclical developments (e.g. a strong increase at the time of the real estate bubble), investment did not contribute markedly to changes in net corporate saving.

Japan: Cumulative Contributions to Changes in Net Corporate Saving

(In Percent of Corporate Value-added)

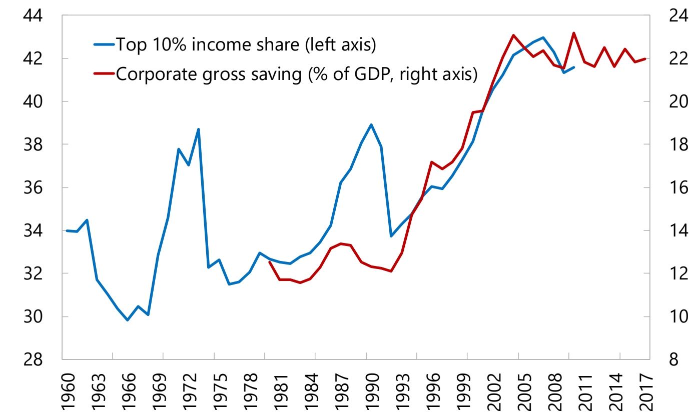


Sources: AMECO database, Chen et al (2017) online database, OECD national accounts dataset.

[1] Prepared by Mariana Colacelli (APD) and Cyril Rebillard (RES).

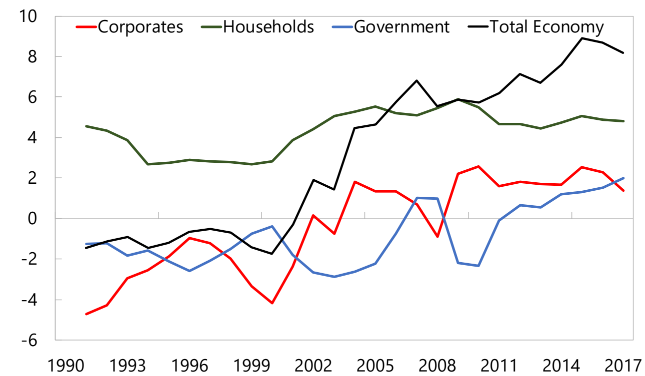
3. The rise in Japan's corporate saving appears closely linked to top-income inequality. Indeed, both series show sharp increases at around the same period, from the beginning of the 1990s to the mid-2000s. The temporary divergence between corporate saving and top-income inequality can be related to the real estate bubble, which likely boosted income from rents (i.e. outside the corporate sector) for wealthy real estate owners. However, further work is needed to better understand why, in Japan, households did offset (at least partially) higher corporate saving, while such offsetting was not observed in Germany where household saving was little changed despite a strong increase in corporate saving (see text chart). A possible explanation may be linked to demographics, with Japan being in a more advanced stage of population aging than Germany. Alternatively, easier access to credit in Japan (credit to the private sector was 107 percent of GDP in 2017, compared to 77 percent in Germany) may have facilitated consumption smoothing in Japan.

Japan: Corporate Saving vs. Top 10% Income Share



Sources: AMECO database; World Inequality Database.

Germany: Gross Saving minus Investment
(In Percent of GDP)



Source: AMECO database.

Reference

Ruscher, Eric and Guntram B. Wolff, 2013, "Corporate Balance Sheet Adjustment: Stylized Facts, Causes and Consequences," *Review of Economics* Vol. 64, pp. 117–38.

Annex XIV. External Sector Assessment

Overall Assessment: *The 2019 external position is preliminarily assessed as broadly in line with the level implied by medium-term fundamentals and desirable policies.* A continued accommodative stance by the Bank of Japan is consistent with the objective of reflating the economy and needs to be accompanied by bold structural reforms and a credible and specific medium-term fiscal consolidation plan to maintain an external position consistent with medium-term fundamentals.

Potential Policy Responses: Ensuring that the external position remains in line with fundamentals requires a coordinated policy package that addresses domestic policy distortions with offsetting effects. Whereas fiscal consolidation should proceed in a gradual manner, it will need to be accompanied by a credible medium-term fiscal framework and structural reforms that support domestic demand. These include measures to boost wages, increase labor supply, reduce labor market duality, reduce barriers to entry in some industries, and accelerate agricultural and professional services sector deregulation.

Foreign Asset and Liability Position and Trajectory	**Background.** The NIIP remained at about 60 percent of GDP over 2014–18, with assets reaching 182 percent and liabilities reaching 121 percent in 2018. In the medium term, the NIIP is projected to rise to about 67 percent with CA surpluses, before gradually stabilizing due to population aging. Japan holds the world's largest stock of net foreign assets, which at end-2018 was valued at US$3.03 trillion. **Assessment.** Foreign asset holdings are diversified geographically and by risk classes. Portfolio investment accounts for 45 percent of total foreign assets, with 20 percent yen-denominated. However, with about half of portfolio investment denominated in U.S. dollars, negative valuation effects could materialize in the event of yen appreciation against the U.S. dollar. Liabilities' vulnerabilities are limited, with equity and direct investment accounting for 31 percent of total liabilities. The NIIP generated net annual investment income of 3.8 percent of GDP in 2018. The large positive NIIP in part reflects the accumulation of assets for old-age consumption, which is expected to be gradually unwound over the long term.					
2018 (% GDP)	NIIP: 61.0	Gross Assets: 181.9	Debt Assets: 87.7	Gross Liab.: 120.9	Debt Liab.: 79.6	
Current Account	**Background**. Japan's CA surplus reflects high corporate gross saving exceeding domestic investment and a sizable income balance owing to its large NFA position. In line with growing national savings, the CA surplus has risen since 2014, reaching 3.5 percent of GDP in 2018 and an estimated 3.3 percent in 2019. The income balance continues to contribute most to the CA surplus, estimated at 3.8 percent of GDP in 2019. Lower energy prices largely underpinned the 2014–17 CA balance increase, while higher energy prices contributed to lowering the CA surplus in 2018. For 2019, even though energy prices decreased, the CA surplus is estimated to have decreased further to 3.3 percent of GDP as exports decreased more than imports due to adverse external conditions, reducing the goods trade balance. Over the medium term, the CA balance is projected to slightly increase to about 3.5 percent of GDP. **Assessment**. The 2019 preliminary CA assessment uses the EBA model, in which the estimated cyclically adjusted CA is 3.1 percent of GDP and the cyclically adjusted CA norm is estimated at 3.4 percent of GDP, with a standard error of 1.2 percent of GDP. Staff estimates a 2019 CA norm range between 2.2 and 4.6 percent of GDP. The 2019 CA gap midpoint is preliminarily assessed to be -0.3 percent of GDP (with the CA gap range between –1.5 and 0.9), suggesting that the underlying CA is in line with the level consistent with fundamentals and desirable policies. The large unexplained portion of the EBA CA gap suggests that important bottlenecks to investment and consumption remain, including entry barriers to entrepreneurship and corporate savings' distortions.					
2019 estimates (% GDP)	Projected CA: 3.3	Cycl. Adj. CA: 3.1	EBA CA Norm: 3.4	EBA CA Gap: -0.3	Staff Adj.: 0.0	Staff CA Gap: -0.3
Real Exchange Rate	**Background.** After appreciating during 2014–16, the average REER depreciated during 2016–18, with the 2018 average REER standing at its 2014 level, when it was assessed to be broadly in line with the level consistent with fundamentals and desirable policies. Estimates through November 2019 show that the REER has appreciated by 2.5 percent relative to end-2018, although markets remain volatile, reflecting changes in global risk aversion and the monetary policy stances of key central banks. **Assessment.** Using partial 2019 data, the EBA REER Level and Index models estimate the 2019 average REER to be 12 to 17 percent lower than the level consistent with fundamentals and desirable policies. However, the EBA REER gaps are unexplained by the models, partly because the REER models do not include Japan-specific factors that affect the REER, including the Japanese government bond–U.S. Treasury spread, portfolio rebalancing, and temporary speculative positions vis-à-vis the yen. As a result, less weight is given to the EBA REER models. Using the preliminary staff-assessed 2019 EBA CA gap range as a reference and applying a staff-estimated semi-elasticity of 0.14 yields an indicative range for the 2019 REER gap of between –7 and 11 percent with a midpoint of 2 percent.					
Capital and Financial Accounts: Flows and Policy Measures	**Background.** Portfolio outflows continued during most of 2018—registering a faster pace than in 2017—as institutional investors continued to diversify overseas (mostly to Europe) and FDI outflows continued. Net FDI and portfolio flows comprise the bulk of the 2018 financial account (2.7 and 1.8 percent of GDP, respectively), whereas other investments (net) recorded inflows (1.3 percent of GDP). Net short yen positions prevailed between June 2018 and July 2019.					

	Assessment. Vulnerabilities are limited. Inward investment tends to be equity-based, and the home bias of Japanese investors remains strong. So far there have been no large spillovers from the Bank of Japan's yield curve control to financial conditions in other economies (interest rates, credit growth). If capital outflows from Japan accelerate, they could provide an offset to the effects of tighter domestic financial conditions in the region.
FX Intervention and Reserves Level	**Background.** Reserves are about 25 percent of GDP, on legacy accumulation. There has been no FX intervention in recent years. **Assessment.** The exchange rate is free floating. Interventions are isolated (last occurring in 2011), intended to reduce short-term volatility and disorderly exchange rate movements.

Annex XV. Japan's Currency Swap Arrangements[1]

1. **Japan has gradually expanded its currency swap arrangements with Asian countries after the Asian Financial Crisis in the late 1990s** (see table). Japanese currency swap arrangements are divided into two categories:

- *Arrangements between the Ministry of Finance of Japan and central banks of Asian countries.* These are intended to address short-term liquidity difficulties and/or balance of payment difficulties and supplement the existing international financial arrangements. Japan currently maintains five bilateral swap arrangements that fall into this category, in addition to CMIM (Chiang Mai Initiative Multilateralization), a regional arrangement among ASEAN+3 (Korea, China and Japan) countries. Once these swap arrangements are activated, a requesting country could receive either U.S. dollars or Japanese yen[2] from Japan in return for its local currency, and this transaction is unwound at the time of maturity. Since most of the bilateral arrangements are reciprocal (except for the arrangement between Indonesia and Japan), Japan could make use of these swap lines in case of its own short-term liquidity difficulties and/or balance of payments difficulties. Of note is that the arrangement with India is by far the largest size (US$ 75 billion) among all of Japan's bilateral swap arrangements.

- *Arrangements between the Bank of Japan and central banks of Asian countries*. Japan has three such arrangements with Australia, Singapore, and China, respectively. From Japan's perspective, these mainly aim to support operations of Japanese financial institutions in these three countries, thereby contributing to financial stability of both Japan and the other three countries. For example, in the case of the arrangement with Australia, when Japanese financial institutions operating in Australia face unexpected difficulties in settlements of Australian dollars, the Bank of Japan would draw on the swap arrangement with the Reserve Bank of Australia to obtain Australian dollars which would be funneled to those Japanese financial institutions. The equivalent support is provided to Australian financial institutions operating in Japan as these arrangements are reciprocal.

[1] Prepared by Takuma Hisanaga (APD).

[2] A requesting country could receive only U.S. dollars in the swap arrangement between India and Japan.

Table 1. Japan's Currency Swap Arrangements (as of November 2019)

	Ministry of Finance						Bank of Japan 1/		
Country	India	Singapore	The Philippines	Thailand	Indonesia	CMIM	Australia	Singapore	China
Objectives	• To address short-term liquidity difficulties and/or balance of payment difficulties • To supplement existing international financial arrangements • To prevent crises						To enhance financial stability by being prepared to provide liquidity in local currencies		
Reciprocal/ Unilateral	Reciprocal				Unilateral	Multilateral	Reciprocal		
Currency	USD – Local currency	JPY/USD – Local currencies, USD – JPY (for Japan)			JPY/USD – Local currency	USD – Local currencies	JPY – Local currencies		
Maximum amount	USD 75 billion	USD 3 billion (or JPY equivalent) for Singapore, USD 1 billion for Japan	USD 12 billion (or JPY equivalent) for the Philippines, USD 0.5 billion for Japan	USD 3 billion (or JPY equivalent for Thailand)	USD 22.76 billion (or JPY equivalent for Indonesia)	USD 76.8 billion (Japan's contribution)	JPY 1.6 trillion for Australia, AUD 20 billion for Japan	JPY 1.1 trillion for Singapore, SGD 15 billion for Japan	JPY 3.4 trillion for China, CNY 0.2 trillion for Japan
Started (Renewed) in	February 2019	May 2018	October 2017	July 2018	October 2018	July 2014	March 2019	November 2019	October 2018

Source: Ministry of Finance, Bank of Japan.
1/ In addition to the above, liquidity swap arrangements have been in place among the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the Federal Reserve, and the Swiss National Bank.

INTERNATIONAL MONETARY FUND

JAPAN

January 14, 2020

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By	Asia and Pacific Department (In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of December 31, 2019)

Membership Status: Joined: August 13, 1952; Article VIII

General Resources Account:

	SDR Million	Percent Quota
Quota	30,820.50	100.00
IMF's Holdings of Currency (Holdings Rate)	25,421.68	82.48
Reserve Tranche Position	5,400.34	17.52
Lending to the Fund		
New Arrangements to Borrow	1,755.48	

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	12,284.97	100.00
Holdings	13,866.89	112.88

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Millions)	Amount Drawn (SDR Millions)
Stand-By	Mar 11, 1964	Mar 10, 1965	305.00	0.00
Stand-By	Jan 19, 1962	Jan 18, 1963	305.00	0.00

Overdue Obligations and Projected Payments to Fund [1]
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2020	**2021**	**2022**	**2023**	**2024**
Principal					
Charges/Interest	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**
Total	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Arrangement:

Japan maintains a free-floating exchange rate regime. There has been no foreign exchange intervention in recent years (last in 2011). The Ministry of Finance publishes foreign exchange intervention information on its website. The exchange system is free of restrictions on the making of payments and transfers for current international transactions, with the exceptions of restrictions imposed solely for the preservation of national or international security that have been notified to the Fund pursuant to Executive Board Decision No. 144–(52/51).

Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) Framework:

Japan underwent an assessment of its AML/CFT framework against the AML/CFT standard by the Financial Action Task Force (FATF) and the Asia/Pacific Group (APG) in 2008. Significant deficiencies were identified, notably with respect to customer due diligence (CDD) requirements, transparency of legal entities, the criminalization of terrorist financing and the freezing of terrorist assets. Since the 2014 Article IV mission, Japan has made significant progress in its commitment to strengthening its AML/CFT legal framework through the FATF standards, notably by enacting the Amendment Act on Prevention of Transfer of Criminal Proceeds, the Act to Amend the Terrorism Financing Act, and the Terrorist Assets Freezing Act. Japan will continue to be monitored by the FATF on its progress including the issuance of subsidiary legislations to implement the enacted Acts.

Article IV Consultation:

The 2018 Article IV consultation discussions were held between September 20 and October 4, 2018; the Executive Board discussed the Staff Report (IMF Country Report No. 18/333) and concluded the consultation on November 21, 2018. The concluding statement, staff report, selected issues paper, and press release were all published.

FSAP:

A mandatory financial stability assessment was conducted in time for the 2017 Article IV consultation, in line with the five-year cycle for member countries with financial sectors that are determined to be systemically important, pursuant to Decision No. 15495-(13/111), adopted December 6, 2013. The Financial System Stability Assessment (FSSA) report for the 2017 assessment has been published (Country Report No.17/244) and is available on the web at: https://www.imf.org/en/Publications/CR/Issues/2017/07/31/Japan-Financial-System-Stability-Assessment-45151.

Technical Assistance: None

Resident Representatives: None

STATISTICAL ISSUES

Economic and financial data provided to the Fund are considered adequate for surveillance purposes. Since April 2016, Japan has adhered to the Special Data Dissemination Standard (SDDS) Plus and it meets the SDDS Plus specifications for the coverage, periodicity, and timeliness of data. Japan is also progressing in the implementation of the G-20 Data Gaps Initiative (DGI-2) recommendations. It started reporting quarterly General Government Gross Debt data in April 2018 and the global Security Financial Transactions data to the Financial Stability Board in 2019. Plans are to disseminate quarterly General Government Operations in line with SDDS Plus requirements by 2021. Japan has committed to address the limited data availability to compile Securities Statistics and sectoral accounts. The last mission on the Observance of Standards and Codes (data ROSC) took place in 2005 with a report published in March 2006 (available at https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Japan-Report-on-the-Observance-of-Standards-and-Codes-ROSC-Data-Module-19054).

Table 1. Japan: Table of Common Indicators Required for Surveillance (as of December 6, 2019)

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	Nov. 2019	Dec. 2019	M	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Aug. 2019	Nov. 2019	M	M	M
Reserve/Base Money	Aug. 2019	Nov. 2019	M	M	M
Broad Money	Aug. 2019	Nov. 2019	M	M	M
International Investment Position	2019Q2	Sept. 2019	Q	Q	Q
Central Bank Balance Sheet	08/31/2019	11/13/2019	M	M	M
Consolidated Balance Sheet of the Banking System	Aug. 2019	Nov. 2019	M	M	M
Interest Rates[2]	Oct. 2018	Oct. 2018	D	D	D
Consumer Price Index	March 2019	April 2019	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2016	Jan.2018	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3] – Central Government	2016	Jan. 2018	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2018Q2	Aug. 2018	Q	Q	Q
External Current Account Balance	June 2019	Oct. 2019	Q	Q	Q
Exports and Imports of Goods and Services	Sept. 2019	Nov. 2019	M	M	M
GDP/GNP	2019Q2	Oct. 2019	Q	Q	Q
Gross External Debt	2019Q2	Sept. 2019	Q	Q	Q

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds and extra budgetary funds), local governments, and social security funds.
[5] Including currency and maturity composition.
[6] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

Statement by the IMF Staff Representative
January 30, 2020

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

1. **Japan's Cabinet Office released its revised medium- to long-term economic and fiscal projections on January 17.** These projections are revised biannually, and show the medium- to long-term paths of GDP growth and the primary balance of central and local governments under two scenarios. In the "Economic Growth Achieved Case", real GDP growth is projected to rise to around 2 percent in the early 2020s. The primary balance is projected to reach -0.5 percent of GDP in FY2025—the target year for achieving a primary surplus—and will turn positive in FY2027. In the "Baseline Case", real GDP growth is projected to decline gradually from 1.5 percent in FY2022 to 0.8 percent in FY2029. The primary balance is projected to remain in deficit throughout the projection period (attaining -1.3 percent of GDP in FY2029).

2. **The Cabinet submitted the draft supplementary budget for Fiscal Year 2019 and the draft initial budget for Fiscal Year 2020 to the Diet on January 20.** The initial budget amounts to ¥102.7 trillion (about 18.2 percent of GDP), while additional expenditures in the supplementary budget amount to ¥4.5 trillion (about 0.8 percent of GDP). Once approved by the Diet, these two budgets will provide financing for most of the measures listed in the December 2019 economic stimulus package. These include disaster recovery spending following Typhoons Faxai and Hagibis of September-October 2019; and measures to support private consumption (operating from September 2020 to March 2021) which utilize the Individual Number Card.

3. **At its Monetary Policy Meeting on January 20-21, 2020, the Bank of Japan (BOJ) kept the short-term policy interest rate at -10 basis points (bps) and a zero-percent yield target for 10-year JGBs unchanged.** It made modest upward revisions to the growth outlook for FY2019 (April 2019-March 2020) and FY2020 by 20 bps to 0.8 percent and 0.9 percent, respectively, due to additional public spending from the economic stimulus package. Despite further downward revisions to its core inflation forecasts for FY2020 and FY2021 by 10 bps to 1 and 1.4 percent, respectively, the BOJ remains committed to achieving its inflation target of 2 percent. CPI headline inflation and the BOJ's core-core inflation (excluding fresh food and energy) picked up in December 2019 to 0.8 and 0.9 percent (y/y), respectively, an increase of 0.6 and 0.2 percentage points since October.

4. **Japan's trade balance turned to a deficit of ¥153 billion (about $43 billion) in December 2019, while exports remained sluggish.** Exports fell by 6.3 percent (y/y), a thirteenth consecutive monthly decline, due to lingering supply-chain disruptions caused by the typhoons of October 2019, and the slowdown in growth of trading partners. Data released by the Japan National Tourist Organization on 17 January show that the number of tourist arrivals grew by 2.2 percent in 2019, partly due to the Rugby World Cup. Relative to mid-December 2019, the Japanese yen is broadly stable vis-à-vis the U.S. dollar. Since the beginning of 2020, Japanese equity markets have risen by 0.7 percent, and the ten-year government bond yield is broadly unchanged at -0.02 percent.

**Statement by Takuji Tanaka, Executive Director for Japan,
Ken Chikada, Alternate Executive Director, and Koki Harada, Senior Advisor to the Executive Director
January 30, 2020**

1. We appreciate a set of excellent papers, including Selected Issues, based on fruitful policy discussions between staff led by the Managing Director herself and the Japanese authorities during the Article IV Consultation last November.

2. In 2019, Japan celebrated the beginning of a new imperial era called "Reiwa," which means beautiful harmony. The government of Japan (GOJ) selected this name with hopes of making Japan a nation where every person can achieve their dreams, like the plum flowers that bloom beautifully after a severe winter to signal the start of spring. The authorities will further accelerate various reforms to realize the aspiration by achieving both sustainable and inclusive economic growth and fiscal consolidation, while tackling challenges, including the declining birth rate and aging population, which were also focused in the 2019 Article IV consultation. Based on this idea, the cabinet approved *Basic Policy on Economic and Fiscal Management and Reform 2019 (Basic Policy 2019)* last June, which shows main policies of the GOJ and decided to center on following three pillars; (i) boosting potential growth rate, (ii) expanding virtuous cycle of growth and distribution, and (iii) creating a society in which everyone plays an active role and feels secure. We recognize this Basic Policy is consistent with the staff's policy recommendation.

3. In the first year of the Reiwa, Japan increased the consumption tax rate for the first time in five and a half years (since April 2014), together with various measures to smooth demand volatility and mitigate the impact on the economy. The tax rate hike aims to preserve stable financing sources towards rebuilding a social security system for all generations, thereby both enhancing function of social security and moving forward fiscal consolidation. As we elaborate on it in the following paragraphs, the authorities will continue to steadily implement the mitigation measures, paying close attention to the economic situation.

4. Last year, we chaired and hosted the G20, which was our first time of G20 presidency in history. We thank the Fund again for its cooperation. Aging, global imbalances, resilience against natural disasters and international taxation, which were treated as priorities in the G20 in Fukuoka, have been widely discussed at the Fund today, including Article IV consultations. These issues are critical for the Japan's economy as well as the global economy. We have a strong will to address these challenges and foster international debate in cooperation with the Fund.

Recent Developments, Outlook, and Risks

5. **The "Abenomics" over the past seven years has significantly improved the Japanese economy.** The authorities have conducted Abenomics which consists of "three arrows," (i) aggressive monetary policy, (ii) flexible fiscal policy, (iii) and growth strategy including structural reforms, and have created a non-deflationary situation. Against this backdrop, the fruits of the economic expansion have been brought to a full range of society. As a result of the progress of the virtuous cycle of the economy, the Japanese economy has been recovering moderately, mainly driven by domestic demand. Corporate profits have remained at a high level. Employment and income conditions have been sound. For example, the active job openings-to- applicants ratio have exceeded one in every prefecture for three years, and the unemployment rate is 2.2%, the lowest level in 26 years. Moreover, the highest level of wage increase in this century has been observed for the sixth consecutive years. Labor participation rate of female (15-64 years old) and older workers have increased and reached at 71.3% and 24.7%, respectively. With taking countermeasures for the tax rate hike from 8% to 10% on October 1, 2019, the GOJ currently sees that overall demand fluctuations due to the tax rate hike are not as large as those by the previous increases. The GOJ will continue to closely monitor the economic situation.

6. **Our authorities agree that Japan faces a range of risks.** Particularly, external risks, including trade tensions, developments of the Chinese economy, vulnerabilities in Emerging Markets, and geopolitical tensions that call for continued vigilance. In addition, Japan has been working on recovery and reconstruction after serious damage from typhoons and other natural disasters last year and will accelerate it. In light of these circumstances, the Cabinet approved the Comprehensive Economic Measures to Create a Future with Security and Growth, including fiscal expenditures around 13 trillion-yen, last December as introduced in the staff report. Together with the effects of these measures, the Japanese economy in FY2020 is expected to grow around 1.4% in real GDP and 2.1% in nominal GDP mainly by its domestic demand.

7. **The aim of our export control operation review on three items (hydrogen fluoride, resists, and fluoride polyimide) is to maintain its effectiveness with regards to goods and technologies divertible to military use, as responsibility of a global community member under an international regime for non-proliferation of weapons of mass destruction.** We underscore that their exports are not restricted but have been permitted as long as they are verified as legitimate private transactions under rigorous examination. We must point out that it is inappropriate to discuss this security matter in connection with the economic trade statistics of changes in exports.

8. **Changes in trade volume cannot be said to be affected only by a single measure and therefore their causal relationship should be analyzed from a comprehensive point of view.** The trade volume between Japan and Korea can be affected by multiple factors

such as the deterioration of the Korean economy and overall bilateral relations. The export value of hydrogen fluoride from Japan to Korea accounts for less than one percent of total trade value between Japan and Korea in 2018. Thus, its macroeconomic impact is negligible. Given the facts and the texts “albeit with limited macroeconomic effects so far” in paragraph 6 of the report, the chart in the same paragraph, exports of hydrogen fluoride from Japan to Korea, is inconsistent and misleading.

9. **There is no direct relationship between tourism and the export control operation review.** As for the number of tourists from Japan to Korea, while it decreased in the fourth quarter in 2019, it increased by 11% in an annual basis from the previous year. Thus, it has not negatively affected on the macroeconomic trends throughout the year. In addition, the review has not affected the overall trend of the travel balance. The number of tourists visiting Japan recorded a high figure in 2019. Revenue from tourism is expected to be the highest ever.

10. **Based on these understandings, it would not be appropriate to inordinately accentuate the export control operation review in the Article IV consultation report.** We believe that the IMF, as a macroeconomic institution, should discuss macro-critical issues.

Monetary Policy

11. **The Bank of Japan (BOJ) will continue with “QQE with Yield Curve Control”, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner.** The BOJ recognizes that while inflation has been somewhat weak, the momentum toward achieving the price stability target has been maintained and its monetary stimulus continues to be effective. Regarding discussions on the lower for longer, the BOJ will examine the risks considered most relevant to the conduct of monetary policy, including the deterioration of financial intermediation function due to the impact on profits of financial institution, and will conduct its policy in an appropriate manner, taking account of developments in economic activity and prices as well as financial conditions. As for the adjustment of the monetary policy framework which the staff pointed out, the BOJ recognize the current framework is working well and does not see a need.

Financial Sector

12. **Japan’s financial sector remains stable.** The authorities have consistently implemented the 2017 FSAP recommendations, including on macroprudential policies and resolution. The authorities have been continuously improving supervisory approaches; the Japan Financial Services Agency (JFSA) reviewed their Early Warning Mechanism to ensure the soundness of financial institution management; the JFSA and the BOJ decided to conduct a stress test on major financial institutions to prepare for any major shakeout in financial markets last year.

13. The environment surrounding the financial sector has been significantly changing due to acceleration of digitalization, demographic changes, and prolonged low-interest rate. Under such circumstances, the authorities recognize that financial institutions are required to provide more user oriented financial services suitable to the new era. To support their efforts, the JFSA set the priorities as (i) promoting finance digitalization strategy utilizing data, (ii) improving financial services to accommodate various needs, and (iii) securing financial intermediation and stability. In order to ensure profitability and soundness, especially for regional financial institutions, the authorities will develop a business environment to establish a sustainable business model and will urge them to improve their management and governance.

Fiscal policy

14. **The GOJ firmly maintains the basic principle "without economic revitalization, there can be no fiscal consolidation" and will accelerate and expand the three pillars reform, overcoming deflation and revitalizing the economy, expenditure reforms, and revenue reforms.** The Japanese economy has grown 13% in the past seven years, tax revenue forecasts for the next fiscal year's budget have reached a record high, and public debt issuance on an initial budget has decreased for eight consecutive years since the beginning of the current administration. Based on the New Plan to Advance Economic and Fiscal Revitalization formulated in June 2018, the GOJ aims both for the primary surplus of the central and local governments by FY 2025 and for the steady reduction on the debt to GDP ratio.

15. **Japan increased the consumption tax rate on October 1, 2019 as scheduled.** The tax rate hike is necessary to preserve stable financing sources for establishing a social security system for all generations. The GOJ has already introduced various tax and budgetary measures to smooth demand volatility and mitigate its impact on the economy such as introduction of reduced tax rate, support program for purchases of automobiles and housing, and establishment of point rewards for cashless shopping.

16. **The GOJ decided to take drastic fiscal policies to overcome the downside risks of the economy and ensure future security and approved the Comprehensive Economic Measures.** These measures consist of three pillars; (i) restoration and reconstruction from natural disasters and ensuring safety and security, (ii) intensive support for those striving to overcome economic downside risks, and (iii) investing for a future and maintaining/enhancing economic vitality beyond the 2020 Tokyo Olympics and Paralympics. In this context, we recognize that the short-term fiscal stimulus proposed in the staff report has already been realized by these measures.

Growth Strategy and Structural Reforms

17. **Growth strategy, including structural reforms, the third arrow and the central part of the Abenomics, is progressing significantly.** The GOJ has speedily implemented

many structural reforms such as the "work-style reform," greater labor participation of female and older workers, acceptance of highly-skilled foreign professionals, corporate governance reforms, and trade liberalization and FDI promotion under the current administration. Thus, the GOJ does not think implementation has been slow as staff pointed out, while it will further accelerate reforms going forward. For example, as a result of the revision of the Corporate Governance Code in June 2018 and the revision of the relevant cabinet order in January 2019, private companies in Japan are already reducing their cross- shareholdings, and the data on it is actually decreasing.

18. **On the other hand, the authorities agree with the staff's views that they need to prioritize and further accelerate structural reforms to raise the potential growth rate, while addressing the demographic changes issues.** To this end, as explained above, the authorities prioritized the key policy issues in the Basic Policy 2019 and have confirmed the concrete steps for the steady implementation of structural reforms by making Action Plan of the Growth Strategy last June and the Interim Report on the Formulation of a New Action Plan of the Growth Strategy last December. In the interim report, the authorities decided to mainly focus on; promoting investment in new fields, establishing rules for the digital market in light of the progress of the digitalization and reviewing laws and regulations related to fintech and financial sector, and responding to changes in the social structure of the region and maintaining regional infrastructure. We believe that these efforts will lead to sustainable and inclusive growth of Japanese economy.

19. **The GOJ has also made steady progress on the three tiers of structural reforms, which the staff has identified as a priority.** Regarding labor market reforms, the new rules established by Work Style Reform Law, including correcting long-working hours, realization of a diversified and flexible workstyle and implementation of equal pay for equal work, has been sequentially implemented since April 2019. In addition, to improve the labor participation rate of women, the GOJ is making effort to develop environment to support childcare. The GOJ is tackling other various labor-market related policies, including income policies such as increase in minimum wage. These aim to realize a society where everyone can play an active role, thereby preventing fixing inequality. As for the regulatory and corporate reforms, the GOJ will promote not only the establishment of rules for the digital market and fintech, but also the use of new technologies, such as AI, robots, and IoT, improvement of mobility and enhancement of corporate governance. Regarding trade liberalization and foreign direct investment (FDI) promotion, the authorities take note that the staff estimated that implementation of CPTPP (became effective in December 2018) and Japan-EU trade agreements (became effective in February 2019) could offset up to 4 percent of the demographic-related slowdown in real GDP growth. In this context, the authorities believe that the Japan-US trade agreement which came into effect this month is a major achievement for Japanese economy. The GOJ will further promote open and rule-based, multilateral trade and investment system, including the RCEP negotiation.

20. **Along with the momentum of enhancing corporate governance, the Foreign Exchange and Foreign Trade Act was amended in November of last year.** The amendment aims to properly address foreign investment that could pose national security risks. the GOJ is currently working on the implementing rules and regulations of the amended Act. Furthermore, details of the new rule are still under consideration and therefore, it is not appropriate to mention about the detailed information at this stage.

Climate change

21. **The GOJ will focus more on climate change adaptation policies to enhance resilience.** As mentioned above, Japan suffered severe damage last year due to typhoons and other natural disasters. However, we also found the fact that a dam built in the past prevented rivers from flooding and helped reducing damage. The GOJ aims to create a country that is resilient to calamities by taking advantage of the lessons learned from repeated natural disasters. Accordingly, the GOJ promotes disaster prevention and mitigation policies as well as land resilience policies, including the utilization of dams and development of embankments. Furthermore, Japan will lead international efforts to spread high-quality infrastructure.

22. **Japan has soundly exercised climate change mitigation policies and will continue their effort.** We would like to emphasize the fact that Japan has achieved the world's highest level of energy saving. Aiming for Japan's INDC (Intended Nationally Determined Contributions) based on the Paris Agreement (26% reduction from FY2013 in FY2030), Japan's greenhouse gas (GHG) emissions have been reduced for the fifth consecutive year since FY2014 (about 11.8%). On the other hand, the level of the CO2 marginal reduction cost is relatively high.

23. **In Japan, GOJ has already imposed certain tax for climate change mitigation on fossil fuels based on CO2 emissions**, in addition to the taxes which are imposed on fossil fuels across broad sectors such as industry, electricity-generation and transportation. Furthermore, carbon pricing including carbon tax has been intensively discussed from both professional and technical viewpoints, taking into account the current circumstances of Japan, the impact on international competitiveness of Japanese industries and international debate. The GOJ will continue to work on this problem with a sincere attitude.

External Sector

24. **Reducing excess global imbalances is critical to sustain the global economic growth.** It is important for the Fund to continuously refine the EBA methodology, which is a multilateral monitoring tool to assess individual countries' CA balances.

25. **We agree with staff's assessment that the projected 2019 CA balance is broadly in line with fundamentals and desired policies, as well as related policy**

recommendations. As we have mentioned above, the authorities will continue to promote fiscal consolidation as well as structural reforms.

26. **However, the authorities are still concerned about the EBA methodology.** Although it was great step to share the views on the uniqueness of CA structure of Japan with staff through the Article IV consultation last year, the GOJ would like to continue to discuss the issues of the ESR with staff and contribute to the improvement of the Fund's evaluation method and their structural policy recommendations to the member countries.

Supply-Side of Corruption and AML/CFT

27. **The authorities acknowledge the importance of tackling the corruption and AML/CFT in which the Fund has been strengthening its involvement these days.** As for the supply-side issues to address corruption, the GOJ has made steady efforts to tackle the problem, including relevant law amendments. Based on the Phase 4 recommendations by the OECD Working Group on Bribery, which were adopted last June, the GOJ continues taking necessary measures. In addition, the GOJ continues working on AML/CFT in light of the forthcoming report of the Financial Action Task Force (FATF), which is currently undergoing a fourth review for Japan.