INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/242

JAPAN

July 2017

2017 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 2017 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 July 26, 2017 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 July 26, 2017, following discussions that ended on June 20, 2017, 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 July 12, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Japan.

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

Selected Issues
Financial Stability System Assessment

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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July 31, 2017

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Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Japan

On July 26, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Japan.

Japan's economy is growing above potential, narrowing the negative output gap. The expansion is now broader and more balanced than in 2015, with private consumption growth turning positive and private investment strengthening on the back of residential investment. However, labor shortages are evident, wage growth remains weak, and inflation is stubbornly low.

Net exports picked up in the second half of 2016 as global demand rebounded and imports fell, driven by lower energy costs. The current account balance, while dominated by the income account, strengthened accordingly, while the real effective exchange rate appreciated substantially between 2015 and 2016 moving it to a level consistent with medium-term fundamentals.

Growth momentum will carry through 2017 but would weaken in 2018 if fiscal support fades as currently scheduled. The fiscal stimulus package supports 2017 growth through higher consumption and investment. Monetary policy is expected to remain accommodative and facilitate a virtuous cycle between credit and economic growth. However, the possible expiration of fiscal support in 2018, together with a smaller expansion in foreign demand would reduce the rate of growth, despite an anticipated Olympics-related boost in private investment.

An aging and shrinking population is likely to reduce the role of banks in financial intermediation, posing a particular challenge for regional and *Shinkin* banks. Financial sector stability and long-term challenges were analyzed during the IMF's Financial Sector Assessment Program (FSAP). The FSAP's findings are summarized in the accompanying Financial System Stability Assessment (FSSA).

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[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.

Executive Board Assessment[2]

Executive Directors broadly agreed with the thrust of the staff appraisal. They welcomed the improvement in Japan's economic performance. However, they noted that recent growth is rooted primarily in favorable external conditions and fiscal support, and could be temporary. Moreover, domestic consumption and investment growth remain modest, wages and incomes have yet to rise adequately, inflation remains below target, and the low interest rate environment and demographic headwinds pose risks to the financial sector. With this background, Directors stressed that the current favorable environment provides an opportunity to push ahead with a comprehensive and coordinated reform package to help sustain growth, raise inflation, and address medium term challenges, including fiscal consolidation and an increase in potential growth.

Directors considered structural reforms as an essential element of putting Japan on a path toward reaching its ambitious objectives. The focus should first be on measures to strengthen productivity and wage pressures by reducing labor market duality and increasing mobility. This should be followed by reforms to bolster investment as well as diversifying and enhancing labor supply to raise potential growth. To this end, full-time work, female and older labor market participation, and use of foreign labor should be facilitated. These reforms should be complemented by income policies, including stronger incentives for profitable firms to raise wages.

Directors emphasized that sustained accommodative monetary policy remains warranted. They welcomed the policy upgrade signaled by the yield curve control framework and the Bank of Japan's commitment to overshoot the inflation target.

Directors underscored the need for medium-term fiscal consolidation to address risks from the high level of public debt, reduce policy uncertainty, and anchor policy-making. In this context, they broadly supported a pre-announced path for a gradual and sustained increase in the consumption tax, although a few Directors pointed to implementation risks. Directors also recommended containing social security spending and broadening the tax base. Many Directors supported the need for short-term fiscal support to the economy, although a number of others emphasized the urgency of fiscal consolidation.

Directors noted that the substantial real effective exchange rate appreciation in 2016 had moved the yen to a level consistent with fundamentals. A coordinated policy package, with a strong structural reform element, can help bring the moderately strong external position in line with fundamentals over the medium term and mitigate inward spillovers from any rise in protectionism. Many Directors called for refining the analytical basis of this assessment of the external position.

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

Directors encouraged the authorities to strengthen financial sector oversight, along the lines of the Financial Sector Assessment Program recommendations. These efforts need to include moving toward full risk-based prudential supervision, strengthening corporate governance across the banking and insurance sectors, tailoring capital requirements to the banks' risk profiles, and implementing a more robust framework for regulation of the insurance sector. Directors welcomed efforts to improve the macroprudential framework, and a few Directors emphasized the need to clarify the mandate of the Council for Cooperation on Financial Stability and to proactively expand the macroprudential toolkit.

Directors stressed the need for continued engagement with financial institutions on the implications of macroeconomic and demographic trends, and timely action when viability concerns are identified. They also stressed the need to strengthen the crisis management and resolution framework to limit expectations of public support. Directors highlighted the need for regional banks to consider augmented fee-based income, cost reduction, and consolidation.

Japan: Selected Economic Indicators, 2012–18

Nominal GDP: US$ 4,941 Billion (2016)
Population: 127 Million (2016)
GDP per capita: US$ 38,937 (2016)
Quota: SDR 30.8 billion (2016)

	2012	2013	2014	2015	2016	2017	2018
						Proj.	
Growth (percent change) 1/							
Real GDP	1.5	2.0	0.3	1.1	1.0	1.3	0.6
Domestic demand	2.3	2.4	0.4	0.7	0.4	0.7	0.7
Private consumption	2.0	2.4	-0.9	-0.4	0.4	0.8	0.7
Business investment	4.1	3.7	5.2	1.1	1.3	3.0	3.3
Residential investment	2.5	8.0	-4.3	-1.6	5.6	3.1	2.4
Government consumption	1.7	1.5	0.5	1.7	1.3	0.7	-0.2
Public investment	2.7	6.7	0.7	-2.1	-3.0	-0.2	-4.4
Stockbuilding 2/	0.0	-0.4	0.1	0.6	-0.3	-0.4	-0.1
Net exports 2/	-0.8	-0.4	0.0	0.3	0.6	0.5	-0.1
Exports of goods and services 3/	-0.1	0.8	9.3	2.9	1.2	6.3	2.4
Imports of goods and services 3/	5.4	3.3	8.3	0.8	-2.3	3.0	2.7
Output Gap	-3.6	-2.2	-2.6	-2.1	-1.8	-1.1	-0.9
Inflation (annual average)							
CPI 4/	-0.1	0.3	2.8	0.8	-0.1	0.7	0.6
CPI excluding VAT	-0.1	0.3	1.2	0.3	-0.1	0.7	0.6
Core Core CPI excluding VAT 5/	-0.4	-0.2	0.7	0.9	0.6	...	...
GDP deflator	-0.8	-0.3	1.7	2.1	0.3	-0.1	0.9
Unemployment rate (annual average)	4.3	4.0	3.6	3.4	3.1	3.1	3.1
Government (percent of GDP)							
General government							
Revenue	30.4	31.2	32.7	33.2	32.6	32.6	32.4
Expenditure	38.7	38.9	38.0	36.7	36.8	36.7	35.7
Overall Balance	-8.3	-7.6	-5.4	-3.5	-4.2	-4.1	-3.3
Primary balance	-7.5	-7.0	-4.9	-3.1	-4.0	-4.0	-3.3
Structural primary balance	-6.3	-6.4	-4.6	-3.5	-3.6	-3.7	-3.1
Public debt, gross	236.6	240.5	242.1	238.2	239.4	240.7	240.3
Macro-financial (percent change, end-period, unless otherwise specified)							
Base money	19.3	60.3	36.7	29.1	17.9	16.7	14.5
Broad money	2.8	4.0	3.0	3.0	3.4	3.1	2.7
Credit to the private sector	3.1	5.5	1.5	2.1	2.7	2.6	2.6
Non-financial corporate debt in percent of GDP	134.3	134.7	135.7	131.7	133.4	134.9	136.2
Household debt in percent of disposable income	119.7	121.9	124.2	126.4	129.6	130.0	131.1
Interest rate							
Overnight call rate, uncollateralized (end-period)	0.1	0.1	0.1	0.0	-0.1	...	...
Three-month CD rate (annual average)	0.3	0.2	0.2	0.2	0.1	...	...
Official discount rate (end-period)	0.3	0.3	0.3	0.3	0.3	0.3	0.3
10-year JGB yield (e.o.p.)	0.9	0.7	0.6	0.4	0.0	0.1	0.2
Balance of payments (in billions of US$)							
Current account balance	59.7	45.9	36.8	134.1	188.1	186.8	208.0
Percent of GDP	1.0	0.9	0.8	3.1	3.8	3.9	4.2
Trade balance	-53.9	-90.0	-99.9	-7.4	51.4	54.0	67.8
Percent of GDP	-0.9	-1.7	-2.1	-0.2	1.0	1.1	1.4
Exports of goods, f.o.b.	776.0	695.0	699.7	622.1	635.3	676.1	705.0
Imports of goods, f.o.b.	829.9	784.9	799.7	629.5	583.9	622.2	637.2

Energy imports	272.2	257.4	241.8	133.8	94.9	114.4	113.6
FDI, net (percent of GDP)	1.9	2.8	2.4	3.0	2.7	2.5	2.5
Portfolio Investment, net (percent of GDP)	0.5	-5.4	-0.9	3.0	5.7	4.1	3.8
Terms of trade (percent change)	-1.8	-2.5	-1.0	14.1	9.3	-17.2	3.6
Change in reserves	-37.9	38.7	8.5	5.1	-5.7	10.0	10.5
Total reserves minus gold (in billions of US$)	1227.2	1237.3	1231.0	1207.1	1188.4	…	…
Exchange rates (annual average)							
Yen/dollar rate	79.8	97.6	105.9	121.0	108.8	112.2	110.8
Yen/euro rate	102.6	129.6	140.8	134.3	120.4	122.5	122.4
Real effective exchange rate (ULC-based) 6/	118.6	95.9	86.8	83.6	93.6	…	…
Real effective exchange rate (CPI-based) 7/	100.6	80.3	75.1	70.1	79.5	…	…
Demographic Indicators							
Population Growth	-0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.4
Old-age dependancy	37.8	39.8	41.8	43.5	44.9	46.2	47.2

Sources: IMF, Competitiveness Indicators System; OECD, and IMF staff estimates and projections as of Jun 12, 2017.

1/ Annual growth rates and contributions are calculated from seasonally adjusted data.

2/ Contribution to GDP growth.

3/ For 2014 export and import growth rates are inflated because of changes in the compilation of BoP statistics *(BPM6)* implying a break in the series relative to previous years.

4/ Including the effects of consumption tax increases in 2014 and 2015.

5/ Bank of Japan Measures of Underlying Inflation; excluding fresh food & energy.

6/ Based on normalized unit labor costs; 2005=100.

7/ 2010=100.

INTERNATIONAL MONETARY FUND

JAPAN

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

July 12, 2017

KEY ISSUES

Abenomics has improved economic conditions and engendered structural reforms but has not yet achieved a durable exit from deflation. The economy has expanded at a pace above potential the last five consecutive quarters, and unemployment has fallen to record low levels. Short-term fiscal stimulus and rising global demand have been key drivers. However, inflation, public debt sustainability, and growth objectives remain to be secured. Risks to the outlook are tilted to the downside, particularly in the medium term.

The current favorable economic environment is an opportunity to accelerate reforms. A comprehensive and mutually reinforcing package of accelerated structural reform, coordinated demand and income polices, strengthened policy frameworks, and enhanced financial sector policies is needed. The reform agenda should prioritize structural measures aimed at facilitating reflation (particularly labor market reforms to boost wages), followed by policies to lift potential growth.

Coordinated demand and income policies would help boost inflation and shift the economy to a durable growth path. Monetary accommodation should be sustained while near-term fiscal policy should be at least broadly neutral. Complementing demand support with income policies, including stronger incentives for profitable firms to raise wages, should help amplify demand support and spur positive wage-price dynamics.

Stronger policy frameworks would bolster credibility and reduce long-term risks. For the medium term, a credible and gradual fiscal consolidation plan should be adopted to put public debt on a sustainable path. The plan should include a gradual, pre-announced schedule of consumption rate tax hikes of 0.5-1.0 percent in regular intervals, starting as soon as possible and continuing until the rate reaches at least 15 percent. Monetary policy communication could be further strengthened to improve policy predictability, bolster the credibility of the new monetary policy framework, and facilitate the pass-through to inflation.

Enhanced financial sector policies are needed to contain financial stability risks. The low interest rate environment and demographic headwinds are creating new risks in the financial sector. Policies to safeguard the financial system include strengthening the financial oversight and resolution frameworks, facilitating change in regional financial institutions' business models, and enhancing these institutions' risk management capacities.

The implementation of the recommended policy package would help mitigate inward spillovers and secure external balance over the medium term. The 2016 external position was assessed as moderately stronger than consistent with medium-term fundamentals and desirable policies, while the substantial appreciation of the real effective exchange rate in 2016 moved it to a level consistent with medium-term fundamentals.

Approved By
Odd Per Brekk and Sanjaya Panth

Discussions took place in Tokyo from June 6–20, 2017. The staff team comprised O.P. Brekk (Head), M. Colacelli, K. Miyachi, T. Schneider, and N. Westelius (all APD), F. Han (MCM), X. Li (RMU), G. Ganelli and N. Miake (both OAP). G. Gelos (MCM) joined the final part of the mission to discuss the conclusions of the Financial Sector Assessment Program (FSAP). Messrs. Kaizuka, Saito, Takeuchi, and Tsuden (OED) participated in the discussions. Mr. Lipton held meetings with senior officials. G. Gamwalla and Y. Liu (both APD) assisted in this report's preparation. The mission was assisted by OAP staff.

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ANNEXES

ABENOMICS ADVANCING BUT KEY GOALS REMAIN TO BE ACHIEVED

1. **Structural impediments underlie Japan's struggle with stagnant growth and deflation.** A rapidly aging population and shrinking labor force are hampering growth and productivity.[1] The low growth/low interest rate environment is constraining monetary easing and fostering macro-financial challenges manifest in sovereign-financial linkages, declining profitability of financial institutions, and emerging risks associated with intensified search for yield. While there is room in the short-term for fiscal support under certain conditions, the scope for fiscal stimulus in the medium term is constrained, as gradual consolidation will be needed to address an unsustainable level of public debt. Structural bottlenecks in the labor market undermine productivity growth and limit the pass-through of demand stimulus to higher wages. Weak domestic demand and increased overseas investment have strengthened the underlying external balance by constraining imports and boosting income from abroad.

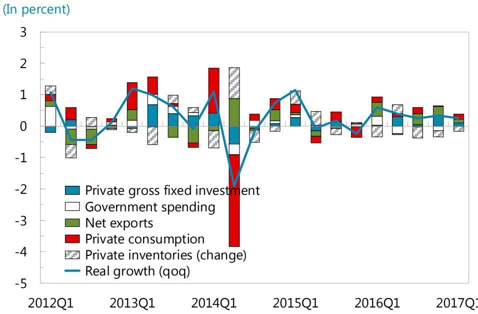
2. **Abenomics has improved economic conditions and engendered structural reform, but key policy targets remain out of reach under current policies.** Abenomics—with its "three arrows" of monetary easing, flexible fiscal policy, and structural reform—has helped ease financial conditions, increase corporate profits, and boost employment and female labor force participation. Structural reforms have advanced in energy and agriculture, trade and investment promotion, and corporate governance. Revised national accounts indicate more robust GDP growth during 2013-15 than originally estimated, reflecting stronger private investment and consumption (Box 1). Nevertheless, inflation is well below target, public debt remains unsustainable under current policies, and progress in removing bottlenecks to private consumption and investment has been uneven. Ensuring adequate coordination and pace of the three arrows has been a main challenge. While monetary policy has taken the lead through balance sheet expansion, fiscal policy has been characterized by a stop-go approach and structural reforms have lagged.

ECONOMY GAINING MOMENTUM

A. Recent Developments

3. **Recent growth has been driven mainly by external demand and temporary fiscal stimulus.** The economy is growing above potential, narrowing the negative output gap. The expansion is now broader and more balanced than in 2015, with private consumption growth turning positive and private investment strengthening on the back of residential investment. Net exports picked up in the second half of 2016 as global

Contributions to QoQ Real Growth (SA)
(In percent)



Source: Haver Analytics.

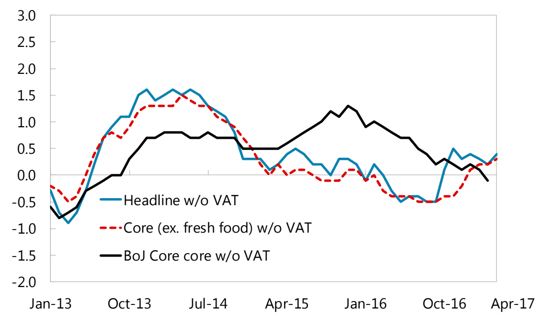
[1] See Yihan and Westelius (The Impact of Demographics on Productivity and Inflation in Japan, WP/16/237) and APD's Regional Economic Outlook (April 2017).

demand rebounded and imports fell, driven by lower energy costs. The current account balance, while dominated by the income account, strengthened accordingly. Exports, private consumption and investment maintained momentum in the first quarter of 2017, with imports starting to pick up in late 2016.

4. Labor shortages are evident, but wage growth remains weak (Figure 6). Unemployment has fallen to a 25-year low and the job-to-applicant ratio is at an all-time high. Wage pressure is mounting in the lower-paid non-regular work segment but overall wage growth is lackluster—manifest in the outcome of the 2017 spring wage negotiation. The reasons for the low responsiveness of wages include limited labor mobility, preference for job security, and base pay negotiations guided by current inflation. Female labor force participation has increased, but the gap between male and female employment rates remains high.

5. Inflation is stubbornly low. After falling during the first three quarters of 2016 due to lower energy prices and a stronger yen, headline inflation began to rise in the last quarter on the back of stabilizing energy prices and higher fresh food prices. Meanwhile, inflation excluding fresh food and energy declined throughout 2016. Medium- and long-term inflation expectations were depressed in 2016 and remain low, although market based indicators suggest that they may be approaching an inflection point (Figure 3).

Inflation Indicators
(YoY; in percent)



Sources: Haver Analytics; IMF staff estimates.

6. Monetary policy has settled in to a more sustainable accommodative stance and fiscal policy has been marked by a delay in the planned increase in the consumption tax and implementation of supplemental spending.

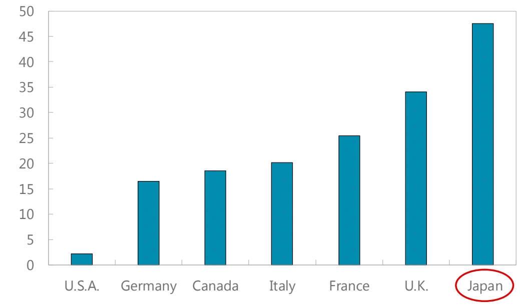
- Following adoption of its negative interest rate policy (NIRP) in February 2016, the Bank of Japan (BoJ) introduced "QQE with yield curve control" (YCC) in September, including a long-term interest rate target and a commitment to overshoot the 2 percent inflation target. The framework upgrade was aimed at raising inflation expectations and strengthening the commitment to sustained monetary easing (Box 2). Communication about the timing of achieving the inflation target was deemphasized, providing more flexibility to monetary policy.
- In June 2016, the government postponed the planned 2 percentage point increase in the consumption tax rate from April 2017 to October 2019, and followed up in August 2016 with a 1.5 percent of GDP supplementary fiscal package, raising spending primarily in 2017.[2]

7. Structural reform remains the lagging element of Abenomics. That said, the Work Style Reform (WSR) agenda unveiled in March 2017 seeks to address wage gaps between regular and non-regular workers, envisages a cap on overtime that is expected to boost productivity and labor

[2] The package of mostly short-term measures included $15 billion for infrastructure investment, $24 billion for disaster alleviation and reconstruction of quake-hit areas, $22 billion to improve welfare services, including support for child care, and $5 billion to support SMEs and to revitalize local economies.

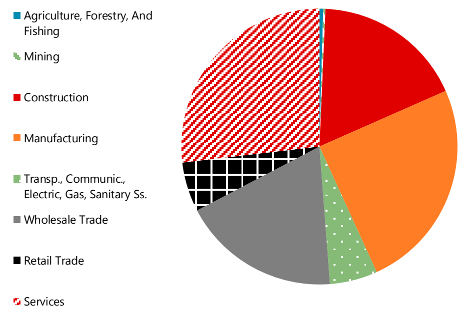
force participation, and provides an expansion in childcare facilities to support further integration of women in the labor market (Annex I). Moreover, the government strengthened income policies by raising the minimum wage by 3 percent in FY2017 and enhancing tax incentives for wage increases. However, WSR implementation will be slow and reforms to remove labor market duality and eliminate disincentives to regular work embedded in the tax and social security system have fallen short (Annex I). Corporate tax rate cuts and governance reforms have yet to mobilize corporates' large cash reserves (at almost 50 percent of GDP) for private investment and wage increases. New trade agreements, including with the remaining eleven Trans-Pacific Partnership (TPP) countries and the EU, could encourage restructuring in the services and agriculture sectors.

Non-Financial Sectors: Currency and Deposits
(In percent of GDP)



Source: Haver Analytics.

Cash Holdings by Sector
(In percent of total cash, 2014)

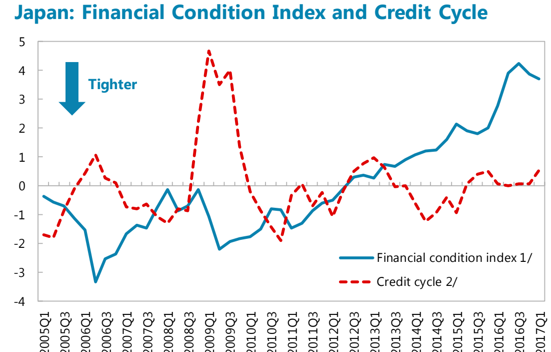


Source: Orbis firm-level data.

8. Macro-financial challenges persist. The new monetary policy framework has brought stability to markets in the short run. However, financial firms face a challenging environment from the structural impact of demographic headwinds combined with low interest rates—reducing profitability and leading to a search for higher yields. Meanwhile, sovereign-financial linkages remain high and claims on overseas assets have increased.[3]

- *Sovereign debt market*. Following implementation of the YCC framework, the shorter end of the yield curve stabilized, and the 10-year yield has hovered close to the zero percent target. Super-long yields rose amid higher global interest rates, recovering some ground lost in the wake of NIRP introduction. With BoJ's JGB purchases continuing to outpace government issuance, financial institutions' JGB holdings fell in 2016. However, the pace of purchases has slowed recently and some aspects of market liquidity have improved (Box 2, Figure 5).

Japan: Financial Condition Index and Credit Cycle



Sources: Bank of Japan; Ministry of Finance; Haver Analytics; and IMF staff estimates.
1/ Estimated as the first principal component of (standardized) 2-year/3-month JGB yield spread, 10-year/2-year JGB yield spread, 3-month TIBOR/3-month JGB yield spread, 1-year/1-month TIBOR spread, short-term prime lending rate/1-year JGB yield spread, long-term prime lending rate/10-year JGB yield spread, benchmark housing finance rate/10-year JGB yield spread, first difference of log stock price, and first difference of log nominal effective exchange rate.
2/ Estimated as the average of the HP-filtered real total credit growth (deflated by CPI) and total credit-to-GDP ratio.

[3] Balance sheet analysis suggests that JGBs are still the key linkage among sectors. JGB holdings by banks and institutional investors as of end-December 2016 amounted to one third of household deposits at banks and are half of household assets at institutional investors, respectively.

- *Financial intermediation*. Financial institutions continued to increase their risk-taking in search of higher yields, by expanding real-estate and overseas lending. Investment in foreign securities has been on an upward trend but has weakened recently. Credit growth picked up in the last quarter of 2016 and reached 3 percent in Q1 2017—higher than the historical average of 2 percent during 2011–16—suggesting an expansionary credit cycle (Figure 3). Financial conditions remain broadly favorable.

- *FX and equity markets*. Some of the sharp nominal yen appreciation in the first half of 2016 was reversed by end-year as U.S. interest rates rose. Together with a more favorable global outlook, this elevated equity prices. U.S. dollar funding costs increased in 2016, but have lessened somewhat in 2017 due to lower investment demand for foreign bonds and relatively higher dollar supply from sovereign wealth funds and EM foreign reserve managers.

- *Households*. Housing loans grew about 2 percent in 2016. Household portfolio rebalancing toward risky assets remained slow. Direct household exposure to equity is low and indirect exposure through investment trusts and insurance products has increased only marginally.

- *Corporates*. Retained earnings grew significantly, contributing to further build-up of large cash holdings. Corporates continued to show preference for loan financing—which grew by nearly 3 percent in 2016—while issuance of equity and debt securities remained relatively low.

Authorities' Views

9. The authorities noted that growth momentum is strengthening and that labor shortages are starting to create wage pressures. They pointed to strong regional demand as a main driving force for exports and noted that underlying fundamentals, such as business confidence, corporate profits, and the income and employment situation, are improving, with imports showing a pick-up since end-2016. They acknowledged that inflation has been lower than expected given the improvement of output gap and tight labor market. However, wage increases for non-regular workers are beginning to spill over to regular workers while some firms are responding to labor shortages by investing in labor saving measures. The BoJ emphasized that the new monetary policy framework has been well received by market participants and helped enhance the sustainability of the accommodative monetary policy stance. The authorities noted that the supplementary budget measures are starting to kick in and that structural reforms are progressing, including the adoption of the action plan for Work Style Reform.

B. Outlook and Risks

10. The growth momentum will carry through 2017 but would weaken in 2018 if fiscal stimulus fades as currently scheduled. The fiscal stimulus package supports 2017 growth through higher consumption and investment. Monetary policy under YCC is expected to remain accommodative and facilitate a virtuous cycle between credit and economic growth. However, the possible expiration of the fiscal stimulus in 2018 (a contraction of 0.6 percent of GDP in the structural primary balance) together with a smaller expansion in foreign demand would reduce the rate of growth to less than half of that in 2017, despite an anticipated Olympics-related boost in private investment. While exports are expected to rise, the contribution to growth from net exports would narrow in 2017 and turn negative in 2018 as stronger investment and consumption boost imports.

11. Inflation is expected to rise only gradually despite the tight labor market. Average inflation would remain below one percent in 2017, notwithstanding a narrowing output gap and stabilizing energy prices. Wage-push inflation is unlikely to contribute significantly given modest wage increases. In 2018, average inflation is projected to decline slightly as growth slows. With only gradual reforms to reduce labor market duality and engender a stronger focus on nominal wage increases, tight labor market conditions would not generate meaningful wage-related price pressures.

12. Over the medium term, growth will stay close to potential and inflation below target. Without discretionary fiscal support, the fiscal stance would be contractionary in 2018–20 due to expiry of the 2017 stimulus measures and the scheduled consumption tax hike. Consumption is likely to rise prior to the tax hike but then contract, causing growth to rise and fall in 2019–20, delaying the closing of the output gap over the medium term. Together with strong backward-looking expectations, the negative output gap would keep inflation below the 2 percent target. Demographic headwinds will weigh on potential growth through a shrinking labor supply and lower productivity—intensifying over the next 10–15 years as the most productive segment of the working age population starts to fall.[4] The current account surplus is expected to rise gradually over the medium term under the current policy mix, as an expansion of foreign demand generates a higher goods trade balance.

13. Risks to the outlook are tilted to the downside, particularly in the medium term. Japan's prolonged experience with low growth and interest rates, together with underlying demographic headwinds, has created persistent macro-financial challenges that, if unaddressed, could amplify shocks originating outside of the financial system and make medium term vulnerabilities acute (see figure).

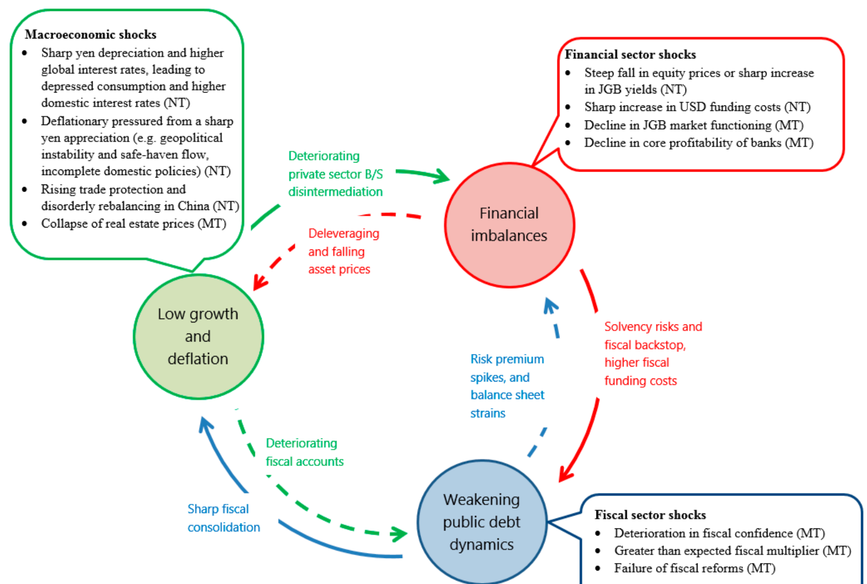
- *Near-term risks*: Upside risks relate to a possible supplementary budget for 2018 and further strengthening of exports due to higher global demand. On the other hand, a sharp yen appreciation caused by geopolitical instability and safe-haven flows, or a loss of confidence in domestic policies, could renew deflationary risks. Weakened functioning of JGB markets could constrain the BoJ's monetary operations, and market risks from a decline in equity prices or an increase in JGB yields could lead to substantial losses for banks and life insurers.[5] Considering their expansion overseas for higher yields, some regional banks could experience negative funding gaps in foreign currencies under adverse liquidity scenarios. Finally, a global retreat from cross-border integration, disorderly rebalancing in China, and regional geopolitical shocks would generate significant spillovers to the Japanese economy.

[4] See Yihan and Westelius (WP/16/237).

[5] FSAP stress tests show regional banks have high credit risk exposures.

- *Medium-term risks*: Doubts about fiscal sustainability could lead to a jump in the sovereign risk premium, forcing abrupt fiscal adjustment with adverse feedback effects to the financial system and the real economy. Low bank profitability and demographic headwinds could pose solvency problems for regional financial institutions. Life insurers could fail to meet interest guarantees and face solvency pressures if low interest rates persist. Finally, some segments of the real estate market seem to be moderately overvalued, and could pose risks given the rapid expansion of real estate lending.

Macro-financial Challenges and Shock Amplification



Note: ST= Near-term; MT=Medium-term

Authorities' Views

14. The authorities were more optimistic about near-term growth while pointing to external factors as the main source of risk. The authorities did not foresee a significant growth slowdown in 2018, emphasizing sustained external demand and investment. They noted that consumption is likely to strengthen gradually due to rising base wage dynamics. The BoJ acknowledged that weak inflation expectations remain a major obstacle to reflation, but emphasized that a positive output gap and rising energy prices should gradually lift actual and expected inflation towards the 2 percent target in FY2018. The authorities agreed that risks are tilted to the downside and highlighted external risks as the main threat to the outlook, particularly spillovers from China's rebalancing. They broadly agreed with the assessments of financial risks and highlighted recent efforts toward curbing FX risks through bilateral dialogue with financial institutions. The authorities also acknowledged that the low interest rate environment and adverse demographic trends are contributing to declining profitability of financial institutions and could spur excessive risk taking, impair financial intermediation, and potentially lead to solvency risk for regional financial institutions down the road, and noted that they have already initiated necessary reforms (see FSAP).

MAKING THE MOST OF CURRENT TAILWINDS

15. The favorable economic environment presents an opportunity to push forward with an ambitious reform agenda. A comprehensive policy package exploiting complementarities between macro-critical structural reforms and coordinated income and demand polices should help lift potential growth and spur inflation. While the near-term fiscal stance should be at least broadly neutral, the package should include a credible medium-term fiscal consolidation plan, based on steady, gradual adjustments, to put public debt on a sustainable path. Finally, policies should be employed to contain financial risks stemming from the low interest rate environment and demographic headwinds. These measures should also help deliver an external position consistent with medium-term fundamentals.

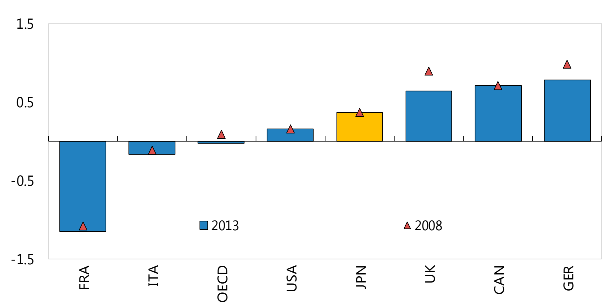
A. Macro-Structural Reforms

16. The structural reform agenda should weigh trade-offs and synergies. Given Japan's long struggle with low inflation, the strategy should prioritize measures aimed at reflating the economy, followed by those intended to lift potential growth. As some reforms (such as boosting the labor supply) may generate deflationary pressure in the near term, providing appropriate demand support will be key. However, reforms are also likely to be mutually reinforcing. For instance, reforms that lift labor supply—and potential growth in general—will also raise the return on investment and thereby the neutral real interest rate, making the accommodative monetary policy more effective.

17. Structural reforms should aim to boost labor market flexibility, investment, and labor supply. Many of the policy measures geared to spur wages and bolster growth have already been identified in the government's strategy (Table 7 summarizes major structural reform plans and their possible growth impact). However, some gaps remain, implementation horizons could be more ambitious, and clearer prioritization is needed.

- *First priority: Labor market reforms to boost wages and increase productivity.* The government's new Work Style Reform appropriately recognizes the need for broad labor market reform. Employment protection for regular workers is relatively high in Japan. Clarifying the legal framework for "intermediate" contracts could help promote their use, facilitate a better balance between job security and wage increases, and reduce labor market duality. Support for worker mobility across firms – including via contract reform, portability of pensions, and government programs – would improve resource allocation while increasing wages. Accelerating the "equal-pay for equal work" initiative, together with the introduction of job descriptions, should also help close the wage gap between regular and non-regular workers (Annex I).

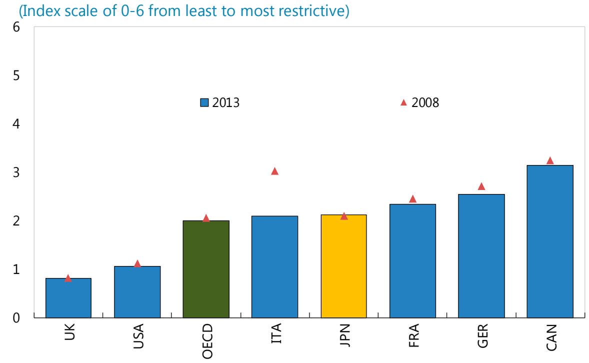
Difference in Employment Protection: Regular vs Temporary



Source: OECD, Employment Protection Database.
Note: Difference in index for protection of regular employment and index for protection of temporary employment. Each index is a scale 0-6 from least to most restrictive.

- *Second priority: Reforms to increase private investment and productivity*. The restrictiveness of product and service sectors in Japan is high in some areas relative to G7 peers. Deregulation, including reduced barriers to entry and removal of protections to incumbents in some industries (i.e., telecoms and gas sectors) and deregulation of professional services, would increase productivity.[6] There is also scope for further corporate governance reform; more ambitious requirements for outside directors, enhanced transparency of beneficial ownership, and explicit limits on cross-shareholdings should improve monitoring of firm performance and encourage firms to invest. Providing greater clarity on macroeconomic policy frameworks to reduce policy uncertainty, promoting trade and FDI, and expediting deregulation in Special Economic Zones should help boost productivity, investment, and long-term growth.

Sectoral Regulation in Professional Services
(Index scale of 0-6 from least to most restrictive)

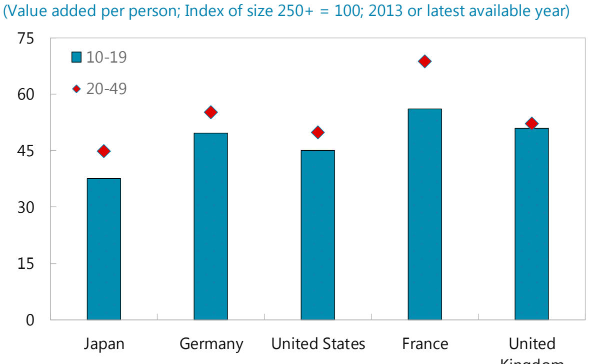


Source: OECD Product Market Regulation Database and Koske (et al) 2013 update.

- *Third priority: Diversification and enhancement of labor supply.* Measures to boost female and older-worker labor force participation and to allow more use of foreign workers and their integration in the economy are crucial to compensate for a shrinking working-age population. Reducing excessive overtime and encouraging managerial practices that reward productivity rather than long hours could further increase labor force participation and productivity. Eliminating disincentives to full-time and regular work stemming from the tax and social security system, and increasing the availability of childcare and nursing facilities, including via deregulation could help boost labor supply (Box 3). Flexible employment and a wage system based on ability rather than seniority should be encouraged, and firms' right to set a mandatory retirement age should be abolished. Efforts to increase the use of robotics and automation could help boost productivity and potential growth.

18. **Financial sector policies aimed at efficient credit allocation to small and medium enterprises (SMEs) would further promote innovation, productivity, and investment.** The productivity of Japanese SMEs is low. With SME lending based largely on fixed-asset collateral or personal guarantees, credit may not be channeled to the most productive firms (Annex III). Consistent with FSAP recommendations, financial sector policies should facilitate the move towards more risk-based lending—by upgrading banks'

SME Productivity in Manufacturing by Enterprise Size 1/
(Value added per person; Index of size 250+ = 100; 2013 or latest available year)



Source: OECD SDBS database.
1/ Size = number of employees.

[6] See Selected Issues Paper, "Why Isn't Private Investment Higher in Japan?"

credit risk-assessment capacity, lowering the coverage of public credit guarantees, and improving SMEs' reporting standards. Policies should also encourage internationalization of SMEs as part of the global supply chain, and facilitate provision of financial services towards the demand of an aging society. Alternative forms of finance to SMEs and startups, such as asset-based lending and venture capital, should also be promoted.

Authorities' Views

19. The authorities emphasized the importance of a comprehensive reform agenda to boost growth. They agreed that labor market reforms are key to revitalizing the economy and increasing inflation, and underscored that new legislation based on the action plan by the Council for the Realization of Work Style Reform (which includes representatives from the government, labor, and corporates) will be submitted to the Diet promptly. The authorities emphasized that the recent revision of the spousal tax deduction has encouraged private companies to review requirements for family allowance. They also highlighted that the corporate governance code introduced in 2015 has sharply increased the share of companies with independent directors, while cross-shareholdings have been significantly reduced. In further efforts to strengthen the implementation of corporate governance, revisions to the Stewardship Code has recently been finalized[7]. Energy market liberalization is also advancing, with full liberalization of the gas retail market in April this year. Even though the U.S. opted out of the TPP agreement, the authorities highlighted progress on multiple fronts, including considerations for "TPP-11" and negotiations of a Japan-EU Economic Partnership Agreement (EPA). The authorities highlighted recent measures to further promote FDI, including establishing a one-stop center for start-ups in 2015 and streamlining procedures for import and incorporation. The authorities also pointed out that the SME Credit Guarantee Scheme is being reformed to encourage banks to avoid overreliance on credit guarantees and to provide loans based on business assessment, and that relevant bills were passed in June. Finally, key initiatives under the 2017 growth agenda focus on improving the efficiency and effectiveness of healthcare services and address labor shortages in mass transportation *inter alia* by promoting driverless transportation services.

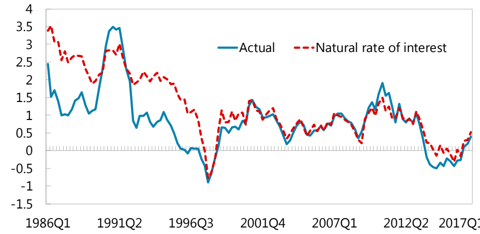
B. Coordinated Demand and Income Policies

20. Monetary policy should maintain a sustained accommodative stance. With backward-looking inflation expectations and a shrinking gap between the short-term actual and natural real interest rate, the BoJ faces an uphill battle in reaching the inflation target. Combining income policies and labor market reform with sustained monetary accommodation should help alleviate these constraints. Keeping the long-term benchmark yield stable should also help amplify positive spillovers from favorable external conditions. The BoJ should maintain the current accommodative monetary stance and carefully calibrate its yield curve policy in the event downside risks materialize. Specifically, the BoJ should maintain the current stance even if stronger than expected global

[7] The aim of the Code is to encourage institutional investors to take a more active involvement in the companies in which they invest.

demand puts upward pressure on interest rates. Additional monetary easing by lowering the yield curve—in coordination with fiscal stimulus and with due consideration to profitability of financial institutions and JGB market functioning—should be considered if deflationary pressures increase.

Japan: Natural Rate of Interest
(In percent)



Sources: Bank of Japan; Haver Analytics; and Fund staff estimates.
Note: The blue line is the actual real discount rate deflated by the inflation expectations estimated from an MA(4) model, and the red line marks the mean posterior estimates of the natural rate of interest from a Bayesian time-varying parameter vector autoregression (TVP-VAR) model following Lubik and Matthes (2015).

21. Near-term fiscal policy should support demand and provide a buffer against adverse shocks. Japan's public debt is at an unprecedented high level. However, limited funding risks and low borrowing costs, underpinned by JGB purchases by the BoJ and domestic investors' home bias, allow some fiscal space in the near term, provided the medium-term debt trajectory is anchored by a credible fiscal consolidation plan. The fiscal stance should be at least broadly neutral in 2018—avoiding the scheduled withdrawal of fiscal stimulus—followed by gradual consolidation in subsequent years. With scope for additional monetary easing relatively more constrained, fiscal policy should take a leading role if adverse shocks materialize.

22. Fiscal support should aim to promote and complement structural reforms and income policies. A neutral fiscal stance in 2018 (an additional 0.6 percent of GDP) could accommodate discretionary fiscal measures to accelerate structural reforms and income policies.[8] Beyond this, a near-term expansionary fiscal stance could be considered in the face of a downside shock, but even that should be contingent on the ambition of reforms, and the credibility of the medium-term fiscal framework. Staff model simulations suggest that near term fiscal support, if provided in the context of comprehensive and coordinated policy package including a credible medium-term fiscal consolidation strategy, would boost growth and inflation without aggravating fiscal sustainability.[9] Prioritization should be given to fiscal incentives for intermediate labor contracts, active labor market policies to support worker mobility, and increased provision of childcare. Moreover, fiscal savings from removing distortionary measures (e.g., disincentives for dual earner households, unemployment insurance payments for elderly) could be redistributed to growth-friendly initiatives.

23. Using income policies as part of the demand stimulus strategy can help reflate the economy by strengthening wage dynamics. A decisive approach to incentivize profitable companies to raise wages by at least three percent (the inflation target plus average productivity growth) could help address the deflationary mindset. This could include more effective tax incentives, or penalties as a last resort, to increase the share of base wages, as opposed to bonuses, in overall compensation.[10] The government could commit to raising administratively controlled wages annually in line with the inflation target and ensure that similar policies are adopted at the

[8] For instance, the budget impact of a wage increase for government employees of 3 percent is equivalent to about 0.1 percent of GDP per year. The budget for WSR agenda (about 0.04 percent of GDP in FY2017) can be further increased.

[9] See Arbatli and others. (Reflating Japan, Time to Get Unconventional?, WP/16/157).

[10] The current tax credit applies to the total amount of overall compensation that exceed the level in 2012, but could be improved by targeting the annual increment of base wages.

prefectural level. Combining these efforts with near-term monetary and fiscal support could help raise inflation expectations and facilitate pass-through of higher wages to prices.

24. Demand policies should be coordinated in terms of size of support, sequence and communication. The YCC and overshooting commitment provide a fresh opportunity to strengthen policy coordination. The government and BoJ could further deepen consultations—through the existing Council on Economic and Fiscal Policy—on macroeconomic conditions, the most effective means of providing demand support, and on how to best support income policies. Such coordination should *inter alia* aim to prevent a premature fiscal tightening. However, unorthodox policies such as a monetized fiscal expansion or an unbacked fiscal expansion conditioned on reaching the inflation target are not recommended under current circumstances as the associated risks well outweigh any potential benefits.[11]

Authorities' Views

25. The authorities noted that policy coordination is already built into the current policy framework, as are some income policies. They agreed that fiscal policy plays an important role in mitigating downside risks, but stressed that, in their view, available fiscal space is limited given the high level of public debt and adjustment need. The BoJ acknowledged that, if called for, there is further room for monetary easing, including by cutting the short-term policy rate and the target level of the long-term interest rate, which are key benchmark rates for yield curve control, or expanding asset purchases. The authorities agreed on the importance of providing fiscal support to growth-friendly reform initiatives. They highlighted that the recent fiscal stimulus package is already promoting macro-critical structural reforms and that current income policies, such as subsidies for wage increases, may be further fine-tuned once their impact has been fully evaluated.

C. Stronger Macroeconomic Policy Frameworks

26. A credible fiscal policy framework is essential to enhance the effectiveness of near-term demand support and minimize longer-term risks. The recent fiscal policy approach—medium-term consolidation plans based on optimistic growth assumptions and stop-go yearly stimulus packages—has increased policy uncertainty and undermined macroeconomic performance. An interim fiscal review scheduled for FY2018 will provide an opportunity to strengthen the fiscal framework, by limiting the use of supplementary budgets, relying on more independent and realistic assessments of the outlook and budget projections, and defining specific fiscal measures to deliver consolidation.

27. A steady pace of medium-term fiscal consolidation would help anchor policymaking and improve confidence. The debt-GDP ratio is projected to be relatively stable over the medium term, due largely to a negative interest-growth differential, but would start increasing after 2022. To

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[11] See the 2016 Article IV consultation report, and the 2017 Selected Issues Paper "Is an Unbacked Fiscal Expansion the Answer for Japan?"

balance the objectives of protecting growth and putting debt on a stable path, medium-term fiscal consolidation should embed a gradual approach with an average annual consolidation of 0.5 percent of GDP in the structural primary balance.[12] Faster consolidation could achieve sharper debt reduction, but could potentially undermine reflation prospects. The exact pace of year-to-year adjustment and supporting measures should be set allowing some flexibility to account for economic conditions.

28. The consumption tax remains the preferred source for raising additional revenue given its low rate, broad base, and applicability across age groups. However, the planned 2 percentage point consumption tax rate hike in 2019 would pose cyclical challenges, and should be replaced with a pre-announced schedule of gradual increases of 0.5–1.0 percentage points over regular intervals until the rate reaches at least 15 percent, while preserving the unitary structure of the tax. Further, mitigating measures with high multipliers (such as cash transfers to low income households) could be used to address business cycle fluctuations. Other tax measures—such as an asset tax, property tax reform, or a strengthened personal income tax—should be explored to supplement the consumption tax in a growth friendly manner. On the spending side, the consolidation plan should curb social security outlays, given that their rapid increase is putting pressure not only on fiscal sustainability but also on private consumption through further increases in premium contributions (Annex II).[13]

Options for Fiscal Policy Adjustment (in percentage point of GDP)

Revenue	
Increase consumption tax rate from 8 to 15 percent	3.5
Personal income tax	
Broaden personal income tax base (including a reduction of the wage deduction)	0.5 to 1.0
Eliminate preferential tax treatment for pension benefit income 1/	1/4
Targeted tax credits [Offsetting measures]	…
Increase property tax	…
Increase healthcare copayments and premium contributions 1/	1.0
Expenditure	
Curb growth rate of health spending 1/	1.0
Raise pension eligiblity age to 67 or higher	1/4
Total savings	6.5 to 7.0

1/ Kashiwase and others, 2012, IMF Working Paper 12/285, Nozaki and others, 2014, IMF Working Paper 14/142, Annex II.

29. Maintaining credibility of the monetary policy framework is crucial to underpin the accommodative stance and ensure policy flexibility. The BoJ has shown a strong commitment to its new framework (Box 2). Care should be taken to maintain an accommodative stance until significant progress has been made on reflation. To bolster credibility and lift inflation expectations, the BoJ could further strengthen its communication framework, by publishing staff forecasts of

[12] Annual consolidation of 0.5 percent of GDP would be consistent with a stabilization of the public debt ratio by 2030.

[13] See also Selected Issues Paper "Tax Policy Challenges of an Aging/Declining Population."

inflation and gradually phasing out references to quantitative JGB targets.[14] Over the medium term, the costs of maintaining the current policy stance are likely to rise if inflation remains below target and the BoJ is unable to reduce JGB purchases (e.g., low profitability of financial institutions and deterioration in JGB market functioning)—highlighting the urgency of implementing a comprehensive coordinated policy package in line with staff's recommendations.

Authorities' Views

30. The authorities remain committed to achieving a primary budget surplus by FY2020, reducing the public debt-to-GDP ratio, and implementing the 2019 consumption tax hike. The authorities stressed that achieving the primary surplus target and reducing the public debt to GDP ratio represent important goals in the medium-term consolidation plan and that the consumption tax increase is crucial to finance rising social security spending. They recognized that a gradual approach to raising the consumption tax has merits in terms of smoothing the economic impact, but argued that the administrative burden would be large and noted that the 2019 tax hike is written into law. They highlighted that the FY2018 interim fiscal review will assess the progress towards achieving the above-mentioned fiscal consolidation targets and consider additional expenditure and revenue measures if necessary.

31. The BoJ stressed that the new policy framework has increased policy sustainability and flexibility. The authorities emphasized that the BOJ will make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions. The BoJ further argued that market participants understand that JGB purchases will fluctuate according to market developments and the need to keep the long-term interest rate close to target, but considered that the reference to quantitative JGB targets nevertheless provided helpful guidance. The BoJ also noted that JGB scarcity is not a severe constraint to monetary operations as the amount that the BoJ need to purchase to keep the yield stable is inversely related to the scarcity of JGBs in the market. Moreover, while the BoJ does not currently have plans to publish its staff's inflation forecasts (which they see as an internal exercise), the authorities agreed that effective communication about the conduct of monetary policy is important to reduce market uncertainty and ensure policy credibility.

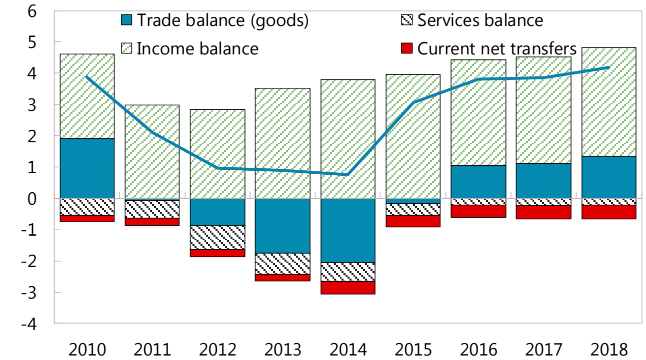
D. External Position and Spillovers

32. The current account strengthened in 2016 due to an improved goods trade balance. Goods exports (as a share of GDP) decreased but goods imports decreased by more, with the value and volume of energy and consumption goods imports falling. The income balance continued to account for most of the current account surplus, though it declined in 2016 in line with yen appreciation. The high income balance is due to Japan's large net foreign asset position and high

[14] See Box 3 in 2016 Article IV Consultation report.

rates of return on net foreign assets (partly reflecting Japan's safe-haven status). A stronger corporate saving-investment balance, with further build-up of already large cash holdings, also contributed. The services balance remained stable. All told, the overall current account surplus increased from 3.1 percent of GDP in 2015 to 3.8 percent in 2016, and is projected to increase to 3.9 percent of GDP in 2017, reflecting a higher goods trade balance driven mainly by foreign demand.

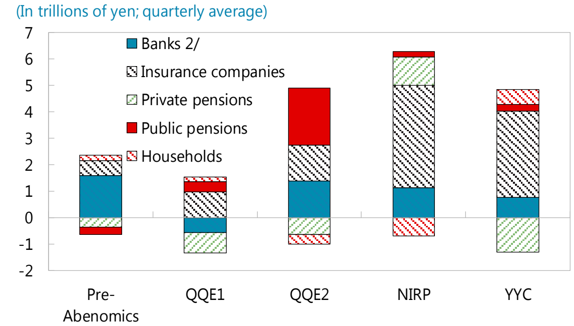
Current Account Balance
(In percent of GDP)



Sources: National authorities ; and IMF staff calculations.

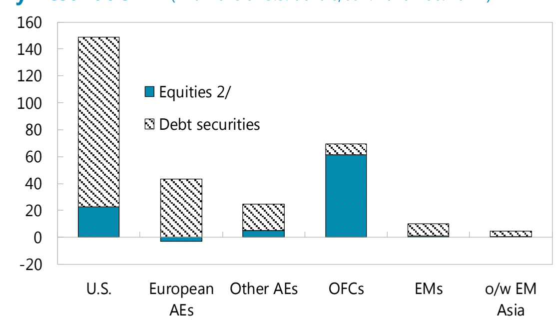
33. Capital outflows continued during most of 2016 as institutional investors' overseas diversification and FDI outflows persisted. The bulk of FDI outflows in 2016 went to Europe and Central/South America, while portfolio outflows were driven largely by insurance companies and channeled to U.S. bonds and foreign equities. Outflows to emerging markets remained very low and concentrated in the region—and were modest also when scaled by the market capitalization of recipient countries.

Capital Outflows of Japan: By Sector 1/
(In trillions of yen; quarterly average)



Sources: Haver analytics; and IMF staff calculations.
1/ Valuation effects are not included. Pre-Abenomics is 2010Q2-2013Q1; QQE1 is 2013Q2-2014Q3; QQE2 is 2014Q4-2015Q4; NIRP is 2016Q1-2016Q2; YYC is 2016Q3-2016Q4
2/ Including banks' direct investment.

Cumulative Capital Outflows of Japan since NIRP: By Destination 1/ (In billions of U.S. dollars; Jan. 2016-Feb. 2017)

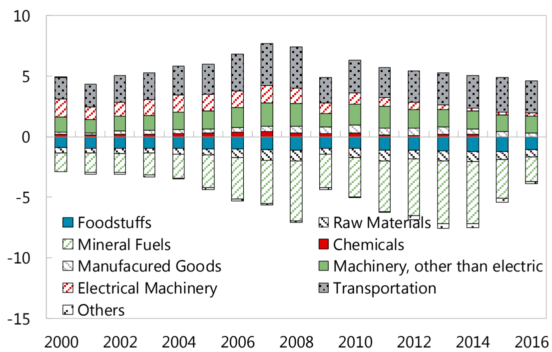


Sources: Haver analytics; and IMF staff calculations.
1/ Valuation effects are not included. OFCs stands for offshore financial centers as defined in IMF (2000).
2/ Including investment fund shares.

34. Outward spillovers from YCC have been limited. Portfolio and FDI outflows, as well as a continued expansion of Japanese banks abroad, have been associated with positive spillovers. If capital outflows from Japan were to accelerate, they could offset tighter domestic financial conditions in the region due to the expected normalization of policy interest rates in other advanced economies.

35. Potential changes to the global architecture may have spillover effects. Japan's goods import tariff (MFN simple average) is comparable to those in other advanced economies for both agricultural and non-agricultural goods (see charts). Services trade restrictiveness is low among peers. A global retreat from cross-border integration would likely decrease Japan's goods trade surplus and negatively impact growth, at least initially, if main export sectors (transportation and machinery) were affected. Beyond the direct impact on local producers, Japanese firms that rely on global value chains or operate abroad are exposed to trade policy changes, which would in turn affect the equity market and the broader economy. Potential unwinding of U.S. financial regulations would likely reduce U.S. dollar funding cost for Japan's financial institutions and facilitate rebalancing to overseas investments.

Goods Trade Balance, By Sector
(In percent of GDP)

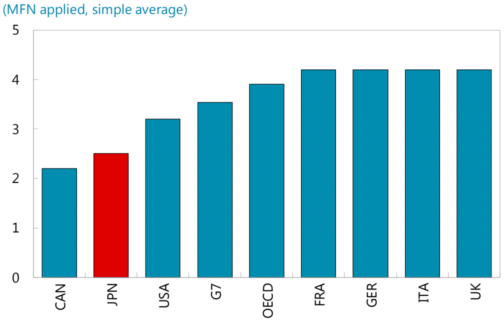


Source: Haver Analytics.

Services Trade Balance, By Sector
(In percent of GDP)

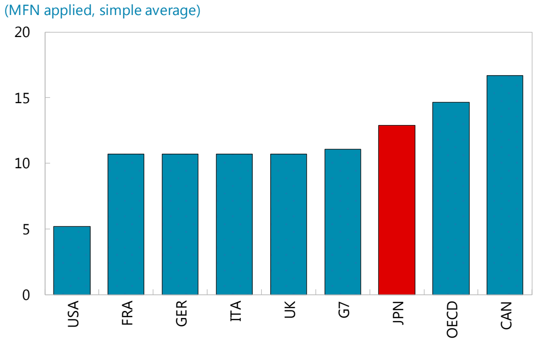
Source: Haver Analytics.

Import Tariffs Non-Agricultural Products
(MFN applied, simple average)



Source: WTO 2015.

Import Tariffs Agricultural Products
(MFN applied, simple average)



Source: WTO 2015.

36. Bolder domestic policies are important to secure external balance over the medium term and mitigate inward spillovers. With the current account strengthened relative to 2015, the 2016 external position was assessed as moderately stronger than the level consistent with medium-term fundamentals and desirable policies (Annex V). Meanwhile, the real effective exchange rate appreciated substantially between 2015 and 2016 moving it to a level consistent with medium-term fundamentals. This overall assessment is based on the IMF external balance assessment (EBA) methodology supplemented by judgement and further analysis. Specifically, the 2016 current account norm is estimated at 1.3-3.3 percent of GDP after adjustments (EBA estimates the norm at 3.4 percent), while the 2016 cyclically-adjusted current account is estimated at 3.3 percent after adjustments (EBA estimates it at 3.1 percent), delivering a 2016 current account gap midpoint of 1.0 percent. This leaves the current account just moderately stronger than warranted by desirable policies and medium-term fundamentals. The adjustments reflect factors not captured by EBA: (i) the current account norm is adjusted to capture the anticipated effect from structural reforms and removal of domestic distortions holding back demand and imports, and structurally lower exports reflecting production offshoring; and (ii) the cyclically adjusted current account is adjusted for elevated energy imports associated with the nuclear power plant shutdown. A coordinated domestic policy package as outlined above is needed to increase resilience and reduce deflation risks. Bolder structural reforms and a credible and specific medium-term consolidation plan would support growth, domestic demand, imports and prices, and help bring the external position in line with fundamentals over the medium term. These desirable policies would also help mitigate inward spillovers from external factors that could increase external imbalances. Desirable policies would also mitigate inward spillovers from any rise in protectionism.

Authorities' Views

37. **The authorities expressed serious reservations about the 2016 external assessment, including the methodology and its application to Japan.** First, the authorities considered that the EBA model does not properly capture the drivers of Japan's current account, as the surplus mostly reflects the income balance rather than the trade balance. In particular, they pointed out that the model does not capture large differences in the rate of return of Japan's gross foreign assets and liabilities in the context of low domestic interest rates. Second, they disagreed with the three adjustors that staff used to modify the EBA (current account) model results,[15] with concerns about the theoretical underpinnings and quantification, as well as evenhandedness in the application of adjustors across countries. The authorities questioned the staff's application of the EBA assessment framework to Japan, noting that staff's judgement and additional analysis applied in making adjustments to the EBA model results in effect changed the sign of the current account gap and the assessment to "moderately stronger than" from "in line with" medium-term fundamentals and desirable policies. The authorities emphasized that given the large extent of adjustment to the EBA estimates, this assessment should be treated with caution.

38. **The authorities agreed with the need for a bolder and coordinated policy package to boost domestic demand and saw potentially large spillovers from changes to the global architecture.** The authorities agreed with the need for bolder structural reforms and a coordinated domestic policy package to support growth, inflation, domestic demand, and imports. The authorities also agreed with the limited spillovers from YCC, and with the potentially large impact on Japan from a global retreat from cross-border integration due to interconnectedness of business activities.

E. Enhanced Financial Sector Policies[16]

39. **Financial oversight has improved but further progress is needed.** The authorities should move to full risk-based prudential supervision to keep pace with sophisticated activities emerging across financial institutions. Corporate governance needs to be strengthened across the banking and insurance sectors, and the authorities should encourage regional financial institutions to improve risk management capacity. Capital requirements need to be better tailored to individual bank risk profiles, and a stronger principles-based approach to related party exposures is required to prevent risks from building up as banks are forming alliances with each other and other types of

[15] For additional details on the assessment and adjustments, see Annex V.

[16] This section draws on the FSAP recommendations.

financial services firms. Further steps should be taken to implement an economic-value-based solvency regulation for the insurance sector since certainty about future regime would help companies adjust their business and investment strategies. The macroprudential framework should be strengthened further by (i) clarifying the mandate of the Council for Cooperation on Financial Stability; (ii) broadening systemic risk assessments to non-systemically important banks and non-banks; and (iii) developing tools for the housing sector. Internationally active financial institutions should be required to hold sufficient liquidity buffers in significant foreign currencies.

40. The authorities should continue engaging with financial institutions on macroeconomic and demographic trends, and take timely action when viability concerns are identified. The authorities should (i) further engage with bank boards and senior management to ensure that the implications of population dynamics for their future viability are fully understood and act promptly to resolve unviable firms; and (ii) facilitate transition of regional banks to higher fee-based income by charging routine banking transactions. Consolidation among regional and *Shinkin* banks may bring valuable economies of scale and scope, although consolidation alone is unlikely to be sufficient to address challenges.[17]

41. Long-term challenges for banks' business models and the existence of systemic institutions highlight the need to strengthen the crisis management and resolution framework. The complexity of the framework and ambiguities regarding the circumstances under which different regimes would be used, could make implementation challenging and may fuel expectations of public support.[18] Preconditions for emergency liquidity assistance should be tightened to anchor solvency and collateralization requirements. The authorities could consider extending the requirements on loss absorbing capacity to domestic systemically important banks to further limit the need for temporary public funding. Steps to ensure that supervisory powers can be deployed quickly should be firmly embedded in the framework for early intervention. Expansion of the resolution toolkit, enhancement and clarification of the legal framework (including extension to central counterparties), and operational improvements would help authorities' readiness and guide market expectations and incentives.

42. Measures to contain JGB market risks should be considered. The authorities should continue to monitor scarcity of JGBs in the market and consider the increasingly negative effect on market liquidity when conducting outright purchases. The impact of JGB scarcity on repurchase markets—the largest funding market for financial institutions—should continue to be monitored closely. In situations of stress, the authorities could consider offsetting measures to provide JGBs in short supply to the market. The Ministry of Finance could continue to tailor its Auction for Enhanced-Liquidity and re-opening scheme to reduce the demand-supply imbalances in certain JGBs, and coordinate with the BoJ regarding these auctions to avoid potential liquidity stress in an *ex ante* manner.

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[17] Empirical evidence by the BoJ's Financial System Report (April 2017) suggests that the business stability of regional and *Shinkin* bank has declined in recent years as a result of intensified competition.

[18] There are currently three separate regimes comprising different tools for dealing with failing financial institutions.

Authorities' Views

43. The authorities broadly agreed with the recommendations, but had different views from staff on a range of issues surrounding the crisis management and resolution framework. The authorities stressed their intention to use FSAP recommendations to guide the reforms of their supervisory approaches. However, they noted that the CCFS has been effective and did not see the need to sharpen its mandate. On crisis management and resolution, they noted that the framework was built on Japan's past experiences and was compatible with Key Attributes, but also acknowledged the importance of strengthening it if there is scope for further improvements. They stressed the importance of ELA as the lender of last resort and did not see it necessary to change current framework. They were not considering broadening the loss-absorbing capacity to D-SIBs, noting the international agreement setting out G-SIBs as its scope, sufficient loss-absorbing capacity under the current framework, and market infeasibility for issuance of such instruments (e.g., lack of potential buyers).

44. The authorities agreed on the needed change in regional financial institutions' business models to cope with demographic challenge. They appreciated the FSAP work on long-term financial intermediation, and echoed that regional financial institutions needed to transition towards higher value-added services such as transactional and fee-based services.

STAFF APPRAISAL

45. Economic conditions have improved but inflation remains low and risks to the outlook are tilted to the downside. A pick-up in external demand, short-term fiscal stimulus, and accommodative monetary policy have facilitated a stronger economy and narrowed the output gap. However, absent continued demand stimulus and further reform, momentum would fade. Domestic consumption and investment have yet to build up sufficient steam. Sustained inflation pressures have also yet to materialize as wage growth remains subdued despite labor shortages. A slip in external demand or a sharp increase in global interest rates could stall the growth momentum and complicate efforts to reflate. Meanwhile, the low interest rate environment and demographic headwinds pose risks to the financial sector.

46. The authorities should seize the opportunity to accelerate reforms. A comprehensive and coordinated policy package is needed to support near-term growth and bring ambitious targets within reach. After more than four years of Abenomics, inflation is still below target, high public debt is still a concern, and structural bottlenecks remain. Recent growth, a supportive policy mix, and a favorable external environment present a favorable backdrop for reinvigorating and deepening the reform process.

47. A more determined structural reform effort is needed. The government should prioritize structural policy measures aimed at reflating the economy, followed by those to lift potential growth. The first priority should be to strengthen productivity and wage pressures by reducing labor market duality and increasing mobility. The second priority should be to promote investment and potential growth by deregulating product and services markets, strengthening corporate governance, boosting trade and FDI, and improving credit allocation to SMEs. Diversifying and enhancing labor supply is also essential. Disincentives to full-time work should be removed and support provided for female and older labor market participation, and increased use of foreign labor. In this context, the government's Work Style Reform plan is welcome, and should be accelerated and broadened.

48. The renewed effort on macro-critical structural reforms should go hand in hand with demand support and income policies to reflate the economy. Sustained accommodative monetary policy and a fiscal stance that is at least neutral in the near-term should be complemented by income policies, including stronger incentives for profitable firms to raise wages. An expansionary fiscal stance may be considered, if there is substantial progress on structural reforms and if macroeconomic conditions warrant additional near-term support. Complementary growth-enhancing reforms would make monetary policy more effective by raising the neutral real interest rate and supporting credit demand. Strengthening monetary policy communication should improve policy predictability, maintain credibility in the new monetary policy framework, and lift inflation expectations.

49. A clear and credible medium-term fiscal consolidation plan would enhance policy effectiveness and mitigate risk. The government should move to address Japan's unsustainable level of public debt through an annual consolidation in the structural primary balance of 0.5 percent of GDP on average. The plan should emphasize gradual and pre-announced consumption tax hikes of 0.5–1.0 percentage points in regular intervals, starting as soon as possible. Social security spending will need to be curbed through fundamental reforms. The FY2018 interim fiscal review provides an opportunity to strengthen the fiscal policy framework, by limiting reliance on supplementary budgets, using more independent and realistic macroeconomic assumptions, and specifying fiscal measures.

50. Financial sector policies should seek to contain emerging risks and address solvency concerns of regional financial institutions. The authorities should move to full forward-looking risk-based supervision and continue to enhance corporate governance. The macroprudential framework could be strengthened further. The authorities should engage with financial institutions on the future of their business models, and take timely actions if viability concerns are identified. The financial sector crisis management and resolution framework should be strengthened.

51. The recommended policy package would help mitigate inward spillovers and secure external balance over the medium term. The 2016 external position was assessed as moderately stronger than consistent with medium-term fundamentals and desirable policies, while the substantial appreciation of the real effective exchange rate in 2016 moved it to a level consistent with medium-term fundamentals. Bolder structural reforms and a credible and specific medium-term consolidation plan—in line with staff's recommended policy package—would help mitigate inward spillovers and bring the external position in line with fundamentals over the medium term.

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

Box 1. National Accounts Revision and Reassessment of Economic Developments Under Abenomics [1/]

A comprehensive revision of the national accounts was published in December 2016. The revision reflects the switch to System of National Accounts 2008 (SNA2008), updating the benchmark year from 2005 to 2011, incorporating detailed source statistics, and other methodological changes. The switch to SNA2008 brings Japan up to the international standards adopted by most OECD countries. Under the revision, nominal GDP 2015 rose by 6.2 percent, with 61 percent of the upward revision reflecting capitalization of R&D under SNA2008. With higher GDP, the 2015 fiscal balance improved by 0.4 percentage points while the public debt to GDP ratio decreased by 15 percentage points.

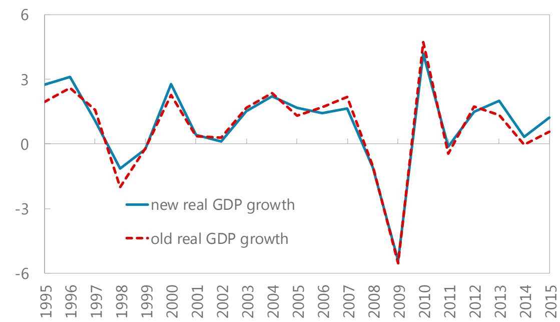
Japan: Revisions to Nominal GDP and Real GDP Growth
(In billion yen or percent)

	2013	2014	2015
Nominal GDP (new)	503,176	513,698	530,545
Nominal GDP (old)	479,084	486,871	499,281
Real GDP growth (new)	2.0	0.3	1.2
Real GDP growth (old)	1.4	0.0	0.6

Source: Haver Analytics.

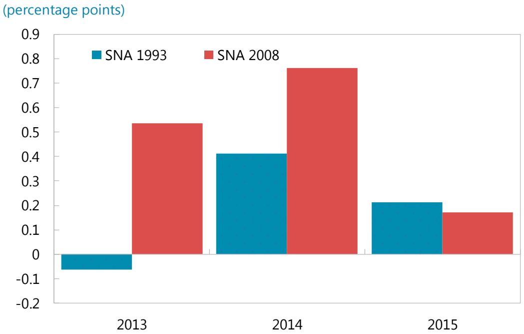
The revised data suggest Abenomics has had a more positive impact on domestic demand than previously thought. While the real GDP growth rate hasn't changed substantially over the entire period, it is noticeably stronger since 2013. Real GDP growth in 2013–15 now averages 1.2 percent compared to 0.6 percent pre-revision. Contributions to real GDP growth over 2013–15 are significantly higher for private consumption (0.2 percentage points per year versus -0.1 pre-revision) and for private non-residential investment (0.5 percentage points per year versus 0.2 pre-revision).

Japan: Revisions to Real GDP Growth
(In percent)



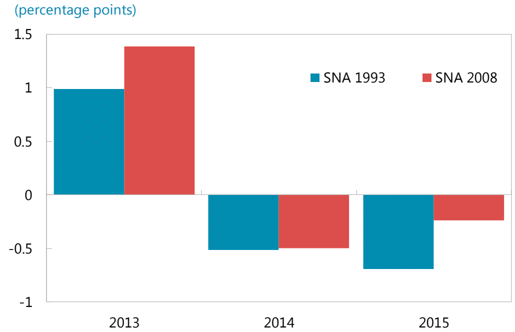
Source: Haver Analytics.

Private Non-Residential Investment, Contribution to Growth
(percentage points)



Source: IMF WEO Database

Private Consumption, Contribution to Growth
(percentage points)



Source: IMF WEO Database

[1/] Prepared by Mariana Colacelli (APD).

Box 1. National Accounts Revision and Reassessment of Economic Developments Under Abenomics (concluded)

The data revision has also improved Japan's standing relative to G7 peers. Japan's average real GDP growth since 2013 ranks 5th among the G7 economies, compared to 6th before the revision. While the growth contribution from private consumption since 2013 has improved, it still looks low in a G7 context. While G7 private investment has been weak across the board in recent years, the revision does place Japan in a relatively strong position among G7 peers.

G7: Real GDP Growth and Contributions from Private Consumption and Gross Fixed Investment

Period average, in percent

	2013-16			2010-12			2000-07			1995-99		
	Priv C	**Priv I**	**GDP**	**Priv C**	**Priv I**	**GDP**	**Priv C**	**Priv I**	**GDP**	**Priv C**	**Priv I**	**GDP**
Japan	0.2	0.5	1.1	0.8	0.4	1.9	0.7	0.3	1.5	0.7	0.2	1.1
France	0.6	0.2	0.9	0.4	0.4	1.4	1.3	0.6	2.1	1.3	0.7	2.6
Italy	0.1	-0.1	0.0	-0.6	-0.4	-0.2	0.6	0.5	1.5	1.4	0.5	1.7
US	1.7	0.6	2.1	1.3	0.8	2.1	2.2	0.4	2.7	2.7	1.4	4.0
Germany	0.8	na	1.4	0.5	na	2.8	0.4	na	1.6	0.9	na	1.6
Canada	1.3	-0.3	1.9	1.5	1.5	2.7	1.9	0.9	2.8	1.8	0.9	3.5
UK	1.4	0.5	2.2	0.4	0.6	1.6	2.2	0.4	2.9	2.5	0.9	2.9

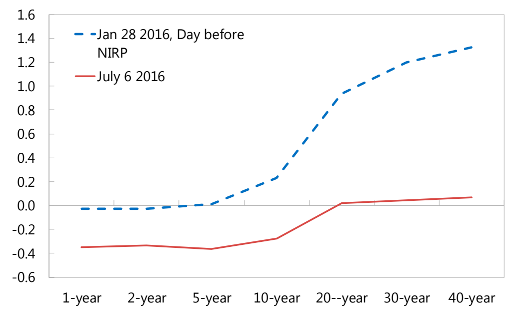
Source: IMF 2017 April WEO database.

Box 2. Yield Curve Control (YCC): The Road Less Traveled[1]

Faced with a weakening economic outlook and heightened global uncertainty, the BoJ adopted the negative interest rate policy (NIRP) in February 2016. In September, the BoJ further adjusted its monetary policy framework by deemphasizing quantitative JGB purchases in favor of a long-term interest rate target and an inflation overshooting commitment. These changes expanded the BoJ's monetary toolbox and made the accommodative stance more sustainable. A key challenge will be maintaining framework credibility while safeguarding against risks to financial sector profitability and lower JGB market liquidity.

Three years after the introduction of QQE and nine months after introduction of NIRP—inflation was still below target and concerns over adverse effects on financial markets and institutions were rising. While QQE helped lower JGB yields as intended, market liquidity had deteriorated partly due to the "scarcity effect" of QQE.[2] Given collateral needs of banks, asset-liability management constraints of insurers, and announced asset allocation targets of major pension funds, concerns grew that the BoJ would need to taper JGB purchases.[3] Moreover, the NIRP had a sizeable impact on long-term yields—bull-flattening the yield curve and dropping the 10-year benchmark yield below zero. Fears grew that the NIRP was negatively impacting financial sector profitability and that lower returns on insurance and pension products could adversely affect consumer sentiment and economic activity.

Downward Shift of Yield Curve following NIRP
(percent)



Note: After early July the yield curve started to slowly move upwards again.
Source: Haver

The BoJ enhanced its policy framework by introducing QQE with Yield Curve Control (YCC) combined with a commitment to overshoot the inflation target. Following a comprehensive review of monetary policy effectiveness, the BoJ deemphasized its annual 80 trillion yen JGB purchase target in favor of targeting the 10-year JGB yield at "around zero" and committed to expanding the monetary base until inflation exceeded 2 percent. The BoJ also deemphasized its two-year time horizon for hitting the inflation target, and in February 2017 increased transparency on the timing and quantities of planned monthly JGB purchases. The new framework aimed to improve monetary policy effectiveness by making it more predictable, flexible, and sustainable. By allowing the BoJ to adjust its JGB purchases in a flexible manner, the interest rate target opened the possibility reducing JGB purchases without this being interpreted as a policy tightening. The framework also allows the BoJ to shape the yield curve to address low returns on insurance and pension products. Finally, the inflation overshooting commitment was intended to boost inflation expectations by enhancing forward guidance and policy predictability.

1/ Prepared by Fei Han (MCM) and Niklas Westelius (APD).

2/ See the accompanying Financial System Stability Assessment for details.

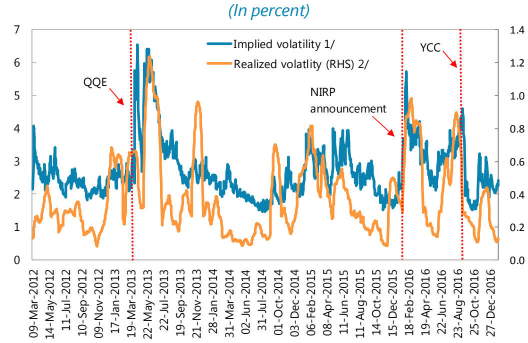
3/ see Arslanalp and Botman, 2015, IMF Working Paper 15/186.

Box 2. Yield Curve Control (YCC): The Road Less Traveled (concluded)

The new framework has worked largely as intended. Volatility in yields up to the 10-year benchmark has fallen and the yield curve has remained stable except for an increase in super long-term yields. The latter gives long-term institutional investors some reprieve from compressed term premiums. The new framework has also been associated with favorable developments in the JGB market. The pace of annual JGB purchases by BoJ have dropped to about 60 trillion yen and some aspects of JGB market liquidity (e.g., price dispersion and bid-ask spreads) appear to have improved, despite continued weakening in market functioning and increased scarcity of JGBs in the market.[4] Limited spillovers from the rise in global interest rates to JGB yields have contributed to higher interest spreads and some reversal of the yen appreciation seen in the first half of 2016. Credit growth has also risen since the advent of YCC. However, there are emerging signs of scarcity in the JGB market, and it is too early to properly evaluate the overall impact on the economy.

JGB Market Volatilities

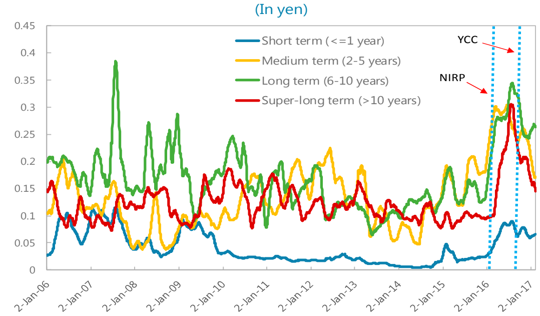
(In percent)



Source: Japan Exchange Group.
1/ The S&P/JPX JGB VIX index. A vlue of 2.0 indicates that the market estimate of the price fluctuation of 10-year JGB futures over the next 30 days is expected to be 2.0 percent per annum.
2/ 30-day rolling standard deviation of the 10-year JGB price divided by its average price.

JGB Price Dispersion: By Remaining Maturity 1/

(In yen)



Sources: Bloomberg, L.P.; IMF staff calculations.
1/ The price dispersion is first calculated for bonds with the same remaining maturity (rounded up to years) and the same coupon rate, as the standard deviation of the prices of these bonds divided by the average of their prices. Then the median of these price dispersion measures across different coupon rates are calculated and grouped into four categories according to their remaining maturities. The median of for each group (smoothed by 30-day moving average) is presented in the chart.

Maintaining credibility in the new framework will be crucial for its success and for preventing a premature interest rate hike. YCC helps stabilize yields and support demand, but could also have side effects on financial sector profitability and JGB market functioning. For example, reduced JGB market trading could make it more difficult to execute large transactions and decrease the capacity of market participants to carry out traditional intermediation activities. While these costs are currently small, a self-fulfilling cycle may arise where the loss of credibility leads to an accelerated sell-off of JGBs, raising the perceived costs of maintaining the target. The initial trigger could arise if global conditions improve faster than the domestic economy and other major central banks start to normalize monetary policy by raising policy rates. This risk highlights the need to complement monetary policy with near-term fiscal support and accelerated structural reform.

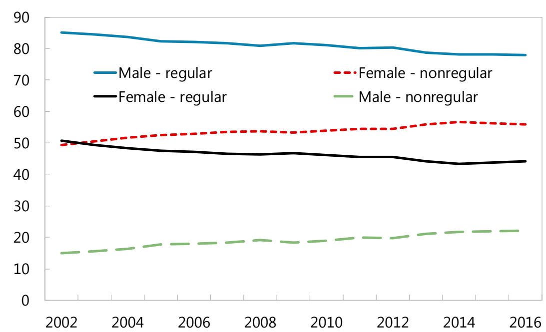
4/ Continued weakening in market functioning refers to declining trading activities of JGBs. There are also signs of JGB scarcity in the market: i) the intensified use of BoJ's Securities Lending Facility; ii) the rapidly rising spread between the General Collateral and Special Collateral repo rates—which indicates the lending fee for JGBs—since late 2016, and iii) increasing number of fails in the repo market.

Box 3. Japan's Lifetime Employment System and Gender Inequality[1]

Lifetime employment is common for male workers. Japan's lifetime employment system, backed by seniority-based wages, became the standard after the 1950s. Even after revising the Dispatched Workers Act in the late 1990s to raise labor market flexibility, the system persists (especially for men) as employment laws make it almost impossible to fire regular workers. Nearly 30 percent of men work at the same firm where they started—virtually unchanged since 1990. Only 19 percent of women stay at the same firm, and the ratio has been declining.

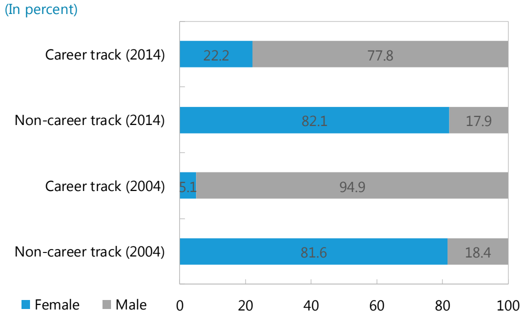
Women are overrepresented in non-regular jobs. More than 50 percent of women in the labor force are non-regular workers, compared to 20 percent of men. Women choose non-regular work to balance the demands of child care, elder care, and housework, due to limited availability of childcare and nursing facilities.[2] The choice also reflects frequent demands for overtime (which is weakly regulated and either unpaid or underpaid) in the lifetime employment system. Some choose non-regular work because regular positions are not available. If regular-work contracts allowed flexible or shorter working hours, female non-regular workers would likely shift to regular contracts with higher wages.

Employment by format and gender
(In percent)



Source: Ministry of Health, Labour and Welfare "Labour Force Survey"

Gender ratio among career and non-career tracks
(In percent)



Source: Ministry of Health, Labour and Welfare "Status of Dual Track Management System and Administrative Guidance" 2015

Recent increases in the work force are concentrated in non-regular positions. The proportion of non-regular workers rose from 20.3 percent in 2004 to 37.5 percent in 2016. Part-time non-regular workers' wage (per hour) is about half of full-time regular workers. This has suppressed the overall wage bill despite a labor shortage, putting downward pressure on wage-price dynamics.

The dual-track system pays less for female regular workers. Women entering the work force under regular contracts are often relegated to lower-paid jobs under the dual-track system—a fast track for management stream employees (career track) and a slow path for routine, clerical work (non-career track). Although both tracks are open, men dominate the former. Companies require workers to commit to their track before hiring, and limit track switching. Some companies mandate relocation as a condition for applying for the career track, discouraging those who share family responsibilities (mostly women). Women in non-career track are deprived of training opportunities and thus limited chance for promotion, resulting in lower wages compared to male peers.

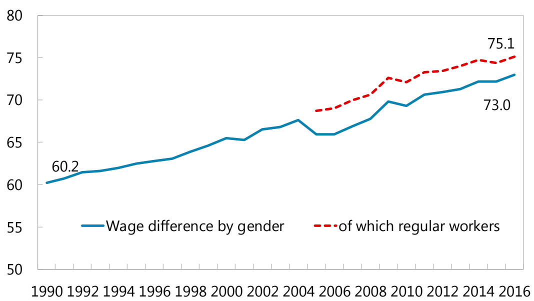
1/ Prepared by Naoko Miake.

2/ Childcare capacity rose by 500,000 in 2009-16, but waitlisted children remained above 20,000 for the same period.

Box 3. Japan's Lifetime Employment System and Gender Inequality (concluded)

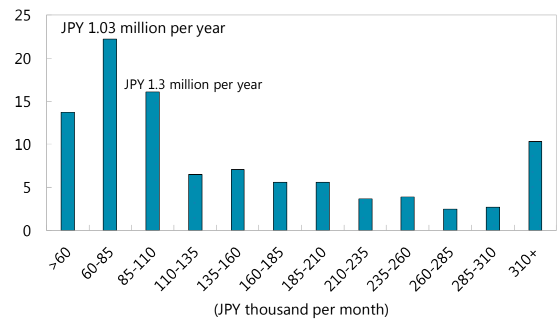
Tax and social security systems discourage female labor. The tax system deters female labor from taking on regular positions. Many non-regular workers intentionally choose fewer hours or lower wages, as they are exempted from income and residential tax if they earn less than JPY 1.03 million per year, and from social security premiums if they earn less than JPY 1.3 million per year. Household heads can also receive spousal allowance if the second-earner (typically the woman) earns less than the threshold, which is usually set below the tax or social security premium threshold. The government raised the threshold for spousal deduction from JPY 1.03 million to JPY 1.5 million, effective January 2018.

Wage Difference by Gender
(Female wage as percent of men)



Source: Ministry of Health, Labour and Welfare "Basic Survey on Wage Structure" 2016

Wives' Income Distribution – Distortion by Tax and Social Security (In percent)



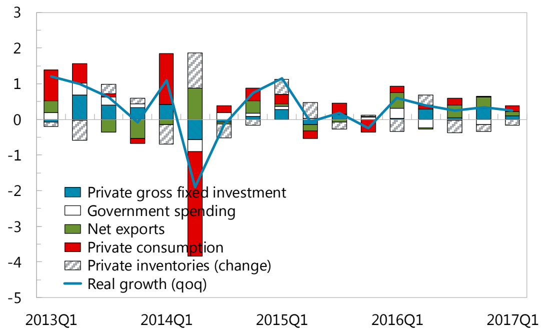
Source: Ministry of Internal Affairs and Communication "Household Survey" 2016

Success in equalizing opportunities within the labor market hinges on comprehensive policy action. While reform of employment contracts, and tax and social security systems is a prerequisite to raise female labor force participation and to create upward pressure on wage-price dynamics, it is not sufficient. More public investment in family support is required, and finding its stable financing is an urgent issue.

Figure 1. Japan: Recent Economic Developments

Growth was above potential in 2016…

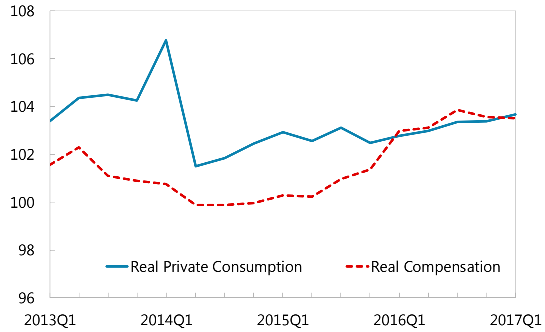
Contributions to QoQ Real Growth (SA)
(In percent)



Source: Haver Analytics.

…with consumption growth turning positive after contracting for two consecutive years…

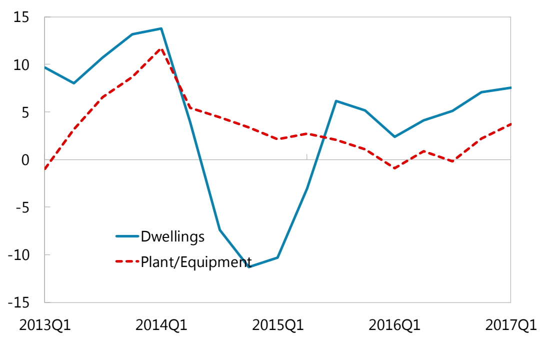
Real Compensation and Real Consumption
(2010=100)



Source: Haver Analytics.

…and private investment strengthening on the back of stronger residential investment.

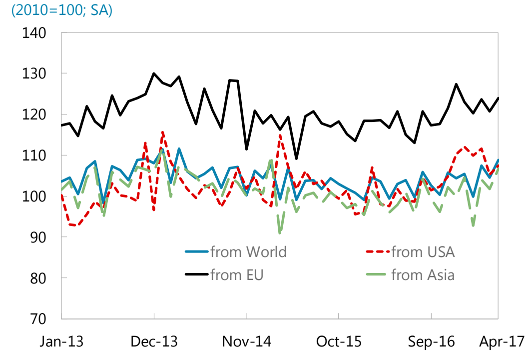
Private Investment
(YoY; In percent)



Source: Haver Analytics.

Net exports picked up, as imports fell…

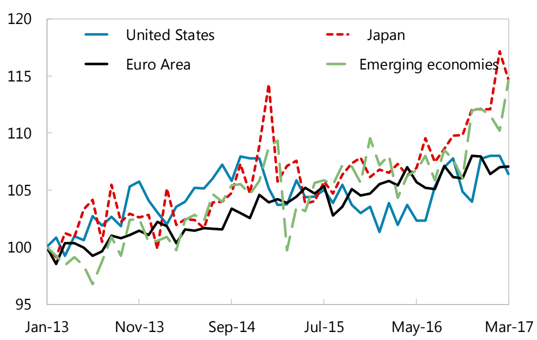
Real Imports
(2010=100; SA)



Source: Haver Analytics.

…while the rebound in global demand boosted Japan's exports…

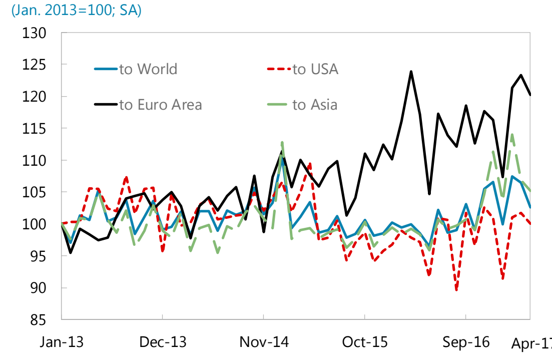
World Exports
(Jan.2013=100; SA; Volumes)



Source: CPB World Trade Monitor.

…with rising Asian demand for smartphone-related electronics and automobiles sales to Europe.

Real Exports by Destination
(Jan. 2013=100; SA)

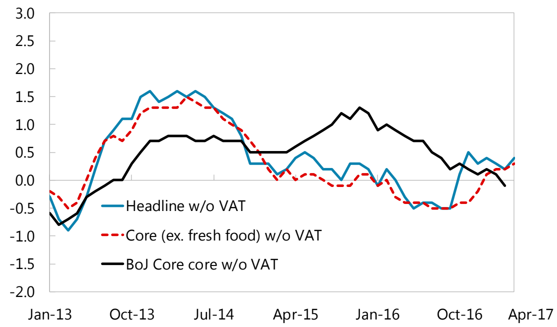


Source: Haver Analytics.

Figure 2. Japan: Inflation Developments

Deflationary pressures remain.

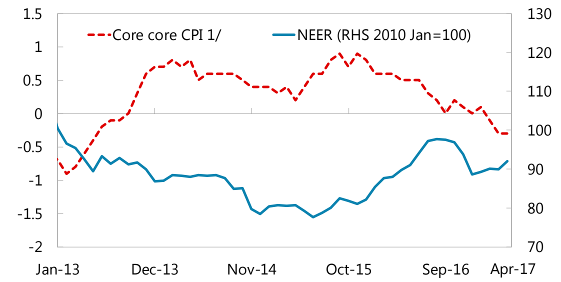
Inflation Indicators
(YoY; in percent)



Sources: Haver Analytics; IMF staff estimates.

The currency has weakened…

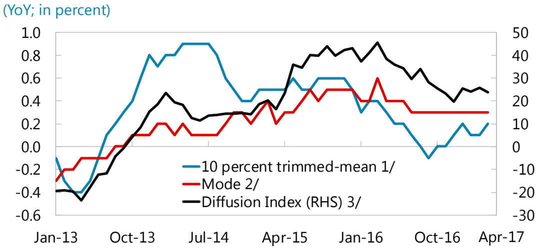
Inflation and Nominal Effective Exchange Rate
(YoY, in percent)



Sources: Haver analytics; and IMF staff calculations.
1/ Excluding food and energy; adjusted for consumption tax hike in 2014 and 2015.

…while underlying inflation is relatively stable.

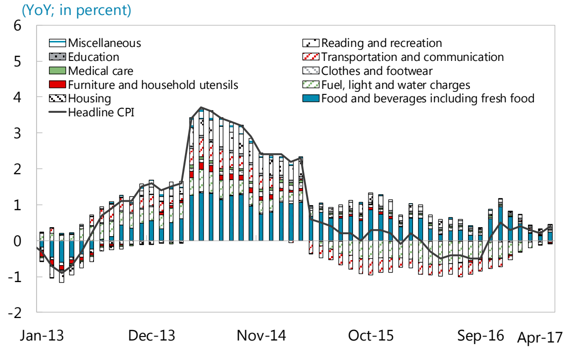
Selected BoJ Underlying Inflation Measures
(YoY; in percent)



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.

Energy prices stabilized and fresh food prices increased in Q4.

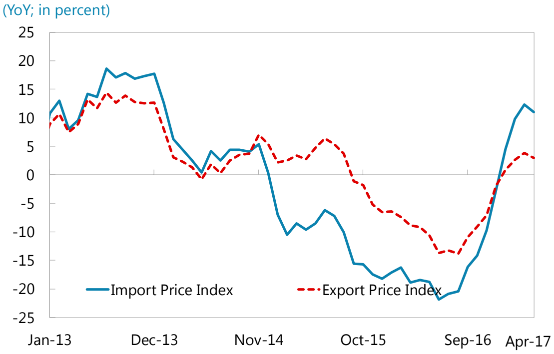
Headline CPI Inflation Contribution
(YoY; in percent)



Sources: Haver Analytics; and IMF staff calculations.

Growth in export and import prices turned positive as oil prices stabilized.

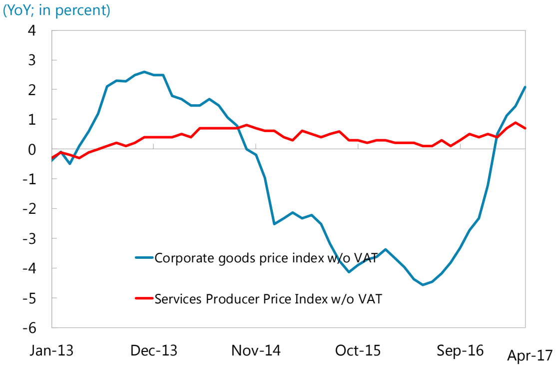
Export and Import Price Indices
(YoY; in percent)



Source: Haver Analytics.

Corporate goods price inflation rose to positive territory, and services producer price inflation remained positive.

Inflation Indicators
(YoY; in percent)



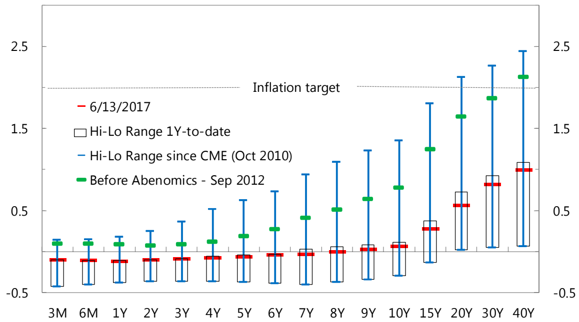
Source: Haver Analytics.

Figure 3. Japan: Monetary Policy Transmission

Yields remain very low though super-long yields have risen…

JGB Yield Curve and Range[1/]

(In percent)



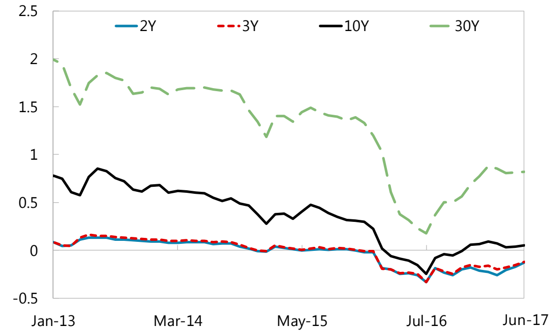
Source: Bloomberg.

1/ Range indicates max & min yields per maturity per indicated period.

…and term spreads have increased.

Japanese Government Bond Yields

(In percent)

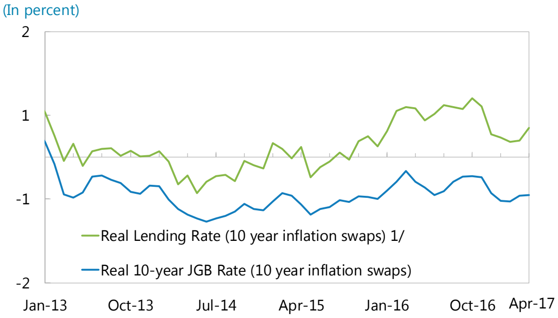


Source: Bloomberg

The real interest rate has fallen somewhat.

Japan: Real Interest Rate

(In percent)



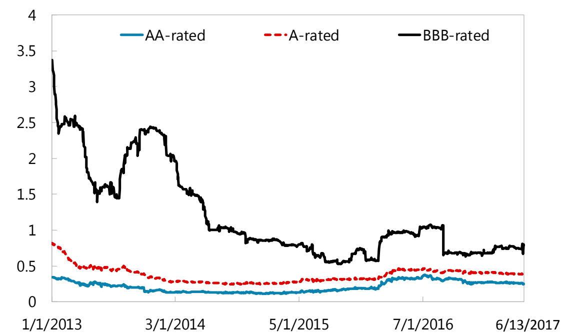
1/ Based on average long-term bank-loan rate.

Sources: CEIC; and Haver Analytics.

Corporate bond spreads have been relatively stable…

Corporate-Government Bonds Spreads (5Y)

(In percent)

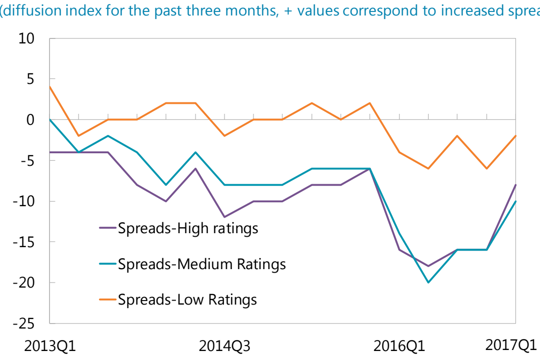


Source: Bloomberg L.P.

…and spreads on bank loan rates have risen…

Senior Loan Officer Survey Opinion Survey-Spreads of loan rates

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

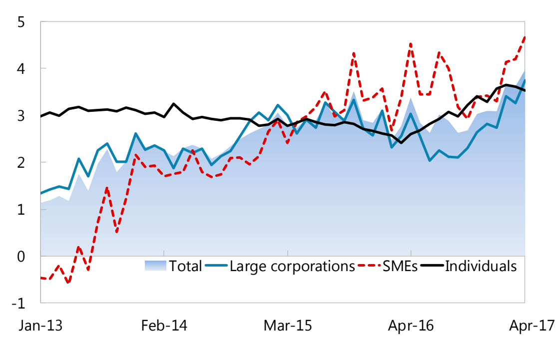


Sources: Bank of Japan, Senior Loan Officer Opinion Survey

… as credit growth has picked up.

Growth in Bank Lending to Corporates

(YoY; in percent)

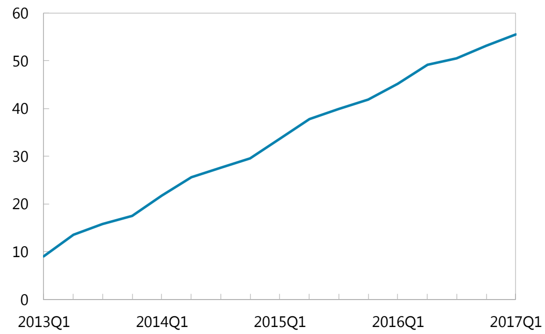


Source: CEIC.

Figure 3. Japan: Monetary Policy Transmission (concluded)

Banks continued to accumulate excess reserves…

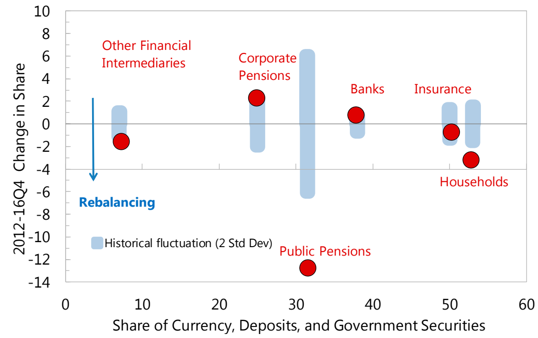
Excess Reserves
(In percent of GDP)



Source: Haver Analytics.

…as their portfolio rebalancing is progressing slowly.

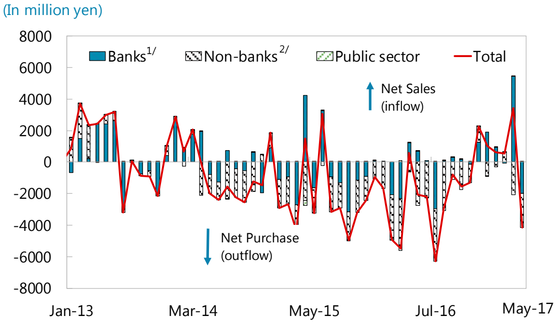
Currency, Deposits & Government Bonds Holdings (2016Q4)
(In percent of total portfolio)



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

Portfolio outflows continued during most of 2016, mainly driven by non-banks.

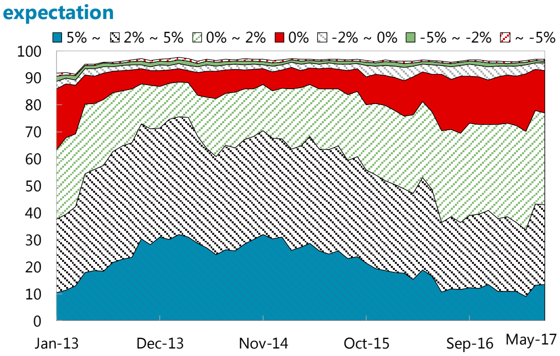
Foreign asset purchase/sales by Japanese residents
(In million yen)



Sources: CEIC database; and IMF staff calculations.
1/ Banking accounts of banks and trust banks.
2/ Includes trust accounts of banks and trust banks.

Inflation expectations of households has stabilized somewhat…

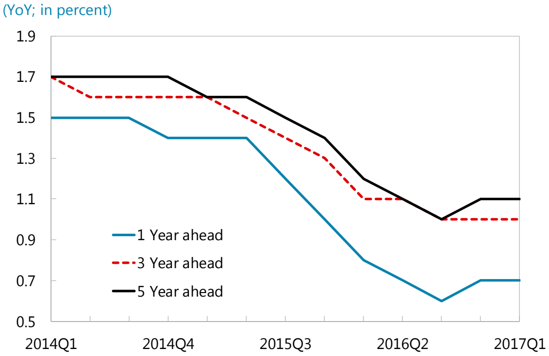
Share of households with one year ahead inflation expectation



Source: Cabinet Office.

…as have the expectations of business…

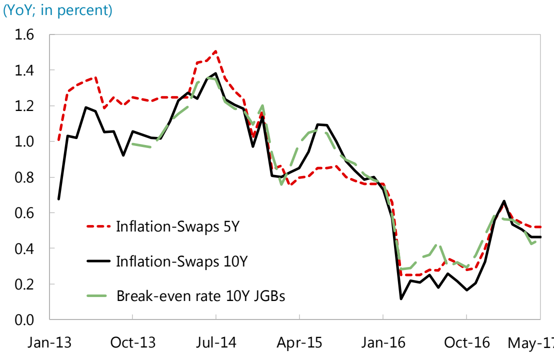
Tankan Survey: Inflation Outlook
(YoY; in percent)



Source: Haver Analytics.

…but market-based indicators have shown a stronger uptick.

Inflation Expectations
(YoY; in percent)

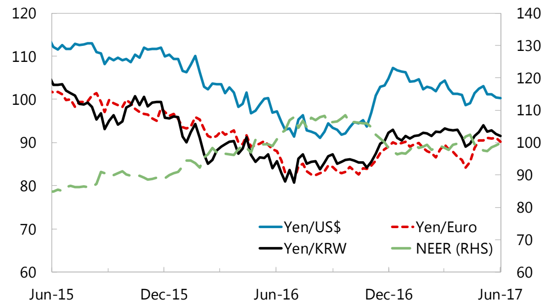


Sources: Bloomberg; and IMF staff estimates.

Figure 4. Japan: Financial Markets Developments

The yen depreciated in late 2016, but has since appreciated

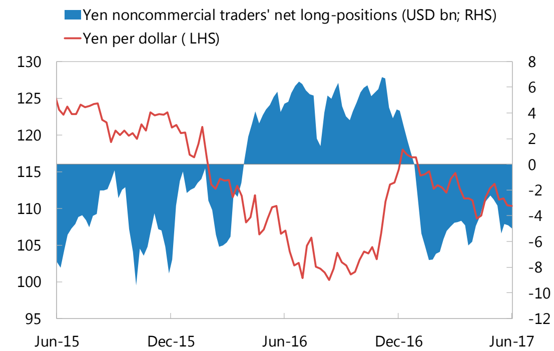
Selected Exchange Rates
(2005=100)



Source: Bloomberg, L.P.

…as net short-yen positions remained.

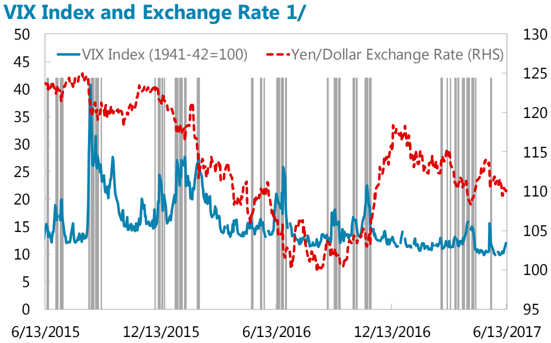
Chicago Mercantile Exchange Yen Position



Source: Bloomberg, L.P.

Market uncertainty increased recently…

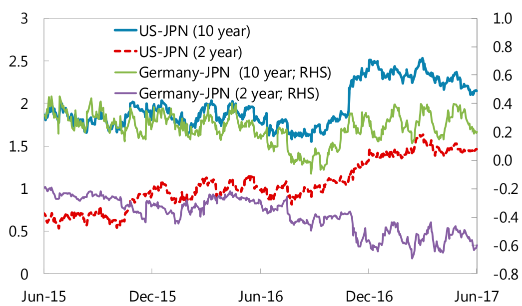
VIX Index and Exchange Rate 1/



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 interest rate differentials fluctuated.

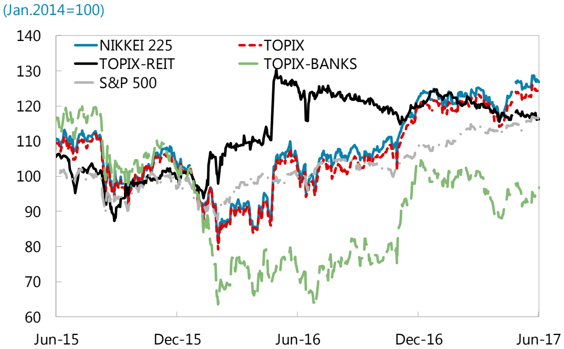
Interest Differential
(In percent; level)



Source: Bloomberg, L.P.

Equity prices have risen with a more favorable global outlook.

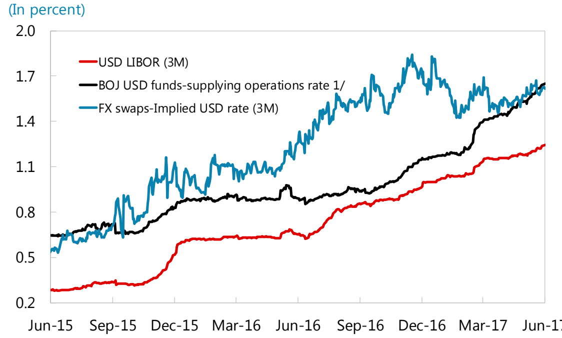
Equity Markets
(Jan.2014=100)



Source: Bloomberg, L.P.

USD funding costs remain high.

USD Funding Cost in Japan
(In percent)



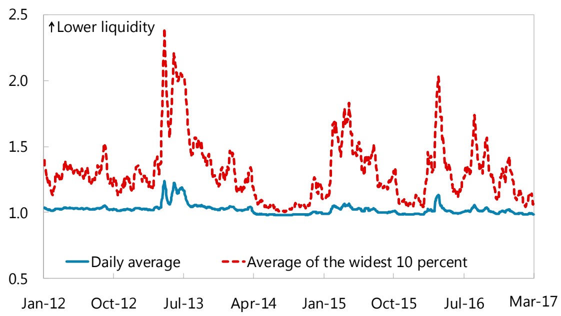
Sources: Bloomberg; and IMF staff estimates.
1/ OIS rate + 50 bps.

Figure 5. Japan: JGB Market Liquidity

Bid-ask spreads in the JGB futures market have improved since the introduction of YCC…

Bid-ask Spreads 1/

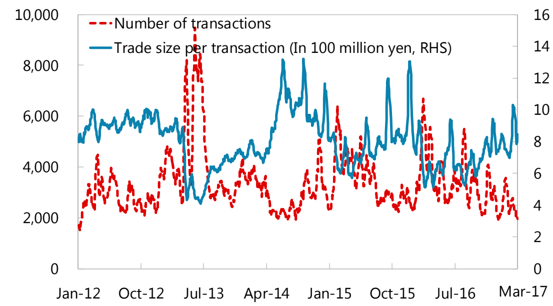
(Daily Average and Average of the Widest 10 percent; JPY cents)



Source: Nikkei NEEDS.
1/ "Daily average" is the average of the bid-ask spread data with a 1-minute frequency within each business day."Average of the widest 10 percent" is the average of the widest 10 percent of that data. A 10-day backward moving average is then applied to both time-series.

…while trading volume has declined.

Transactions Volume and Trade Size 1/

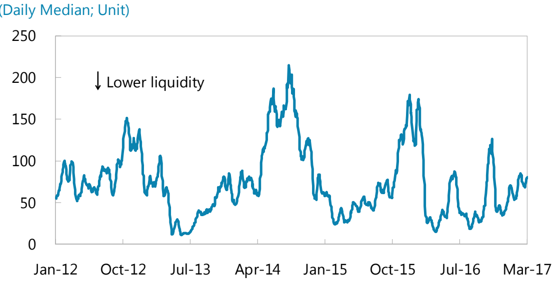


Source: Nikkei NEEDS.
1/ 10-day backward moving average.

Volume of limit orders at the best-ask prices in the JGB futures market has increased…

Volume of Limit Orders at the Best-ask Price 1/

(Daily Median; Unit)

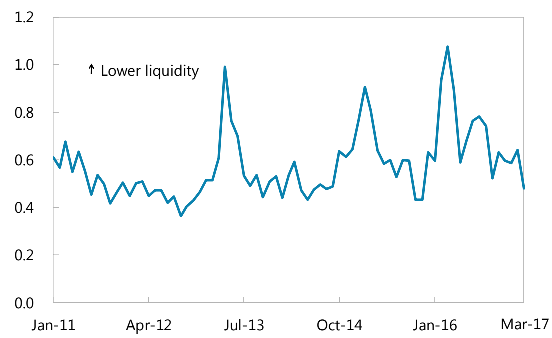


Source: Nikkei NEEDS.
1/ Figures are calculated by taking the median of the volume of limit orders at the best-ask price with a 1-minute frequency within each business day, and then applying a 10-day backward moving average.

…along with a lower spread between the best and worst quotes.

Best-worst Quote Spreads

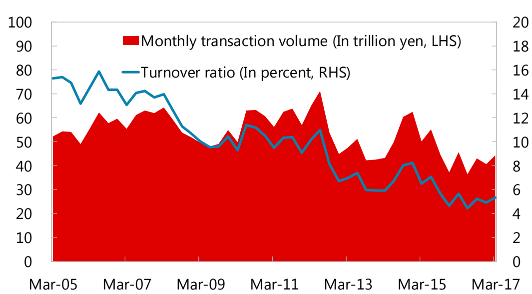
(bps)



Source: Yensai.com.

Trading volume and turnover ratio in the JGB cash market have been on a downward trend for both inter-dealer…

Inter-dealer Monthly Transaction Volume 1/2/

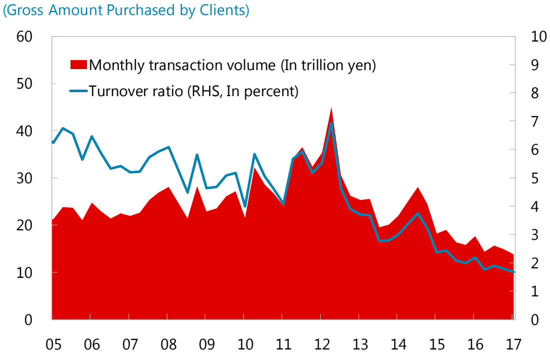


Sources: Japan Securities Dealers Association; Ministry of Finance.
1/ Treasury Discount Bills, etc. are excluded from transaction volume.
2/"Turnover ratio" is calculated by dividing the transaction volume by the outstanding amount.

…and dealer-to-client transactions.

Dealer-to-client Monthly Transaction Volume

(Gross Amount Purchased by Clients)

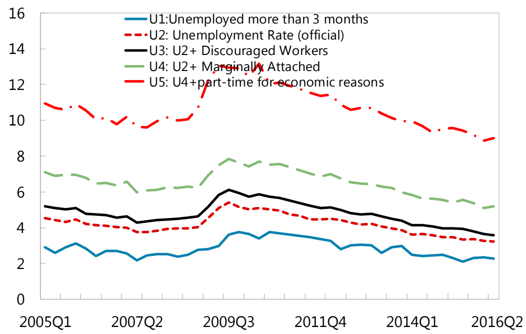


Sources: Japan Securities Dealers Association; Ministry of Finance.

Figure 6. Japan: Labor Market and Wage Developments

Measures of unemployment continue to decline…

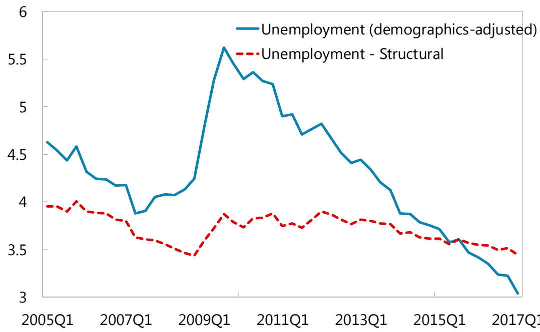
Alternative Measures of Labor Underutilization
(In percent)



Sources: Japan Labor Force Survey; and IMF staff calculations.

…and the unemployment gap is estimated to have closed.

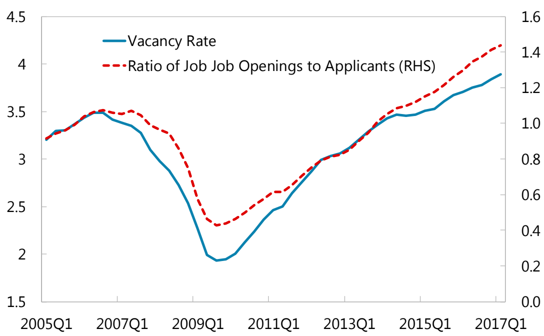
Unemployment Rate and Gap
(In percent)



Sources: Haver Analytics; and IMF staff calculations.

With vacancy rates at historically-high levels…

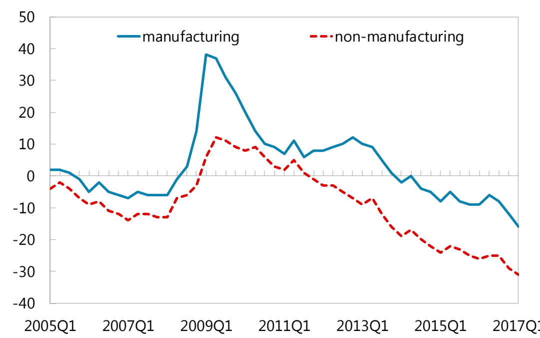
Vacancy Rate and Ratio of Job Openings to Applicants
(In percent, ratio)



Source: Haver Analytics.

…employment conditions tightened, especially in the non-manufacturing sector.

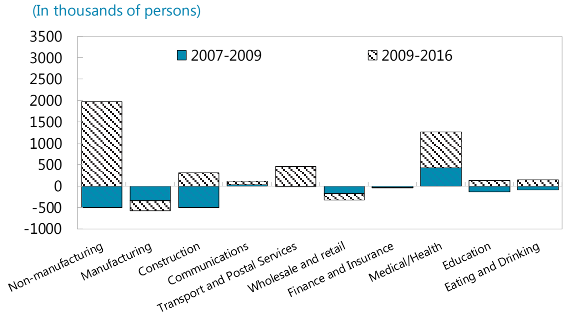
Tankan Enterprise Survey: Employment Conditions
(diffusion index, excess-shortage)



Source: Tankan Survey, Bank of Japan.

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

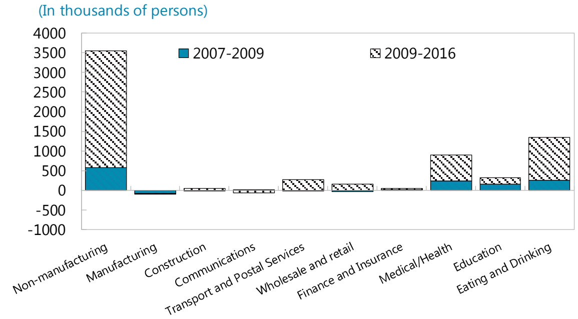
Change in Full-time Employees by Sector [1/]
(In thousands of persons)



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

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

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

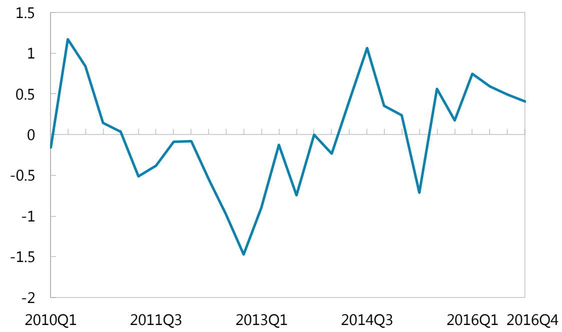


Source: Haver Analytics.
1/ Non-manufacturing sector includes all the other shown sectors except for manufacturing sector.

Figure 6. Japan: Labor Market and Wage Developments (concluded)

Scheduled earnings per employee increased slightly over 2016…

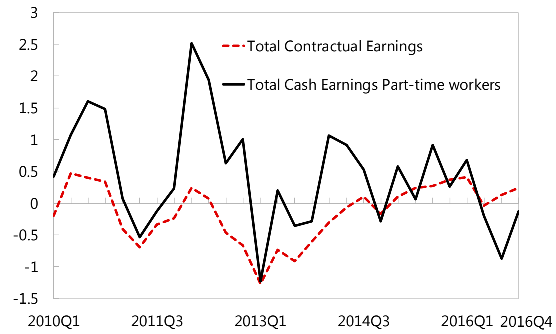
Total Cash Earnings
(per employee; YoY; in percent)



Sources: Haver Analytics; and IMF Staff calculations.

…and part-time workers' wages ticked up recently.

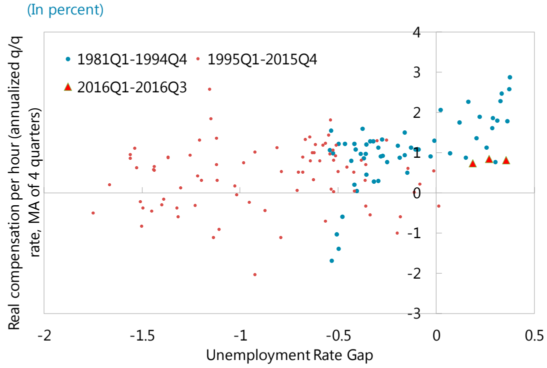
Different Measures of Wage Growth
(per employee; YoY; in percent)



Sources: Haver Analytics; and IMF Staff calculations.

Tightness in the labor market in 2016 failed to deliver strong wage growth…

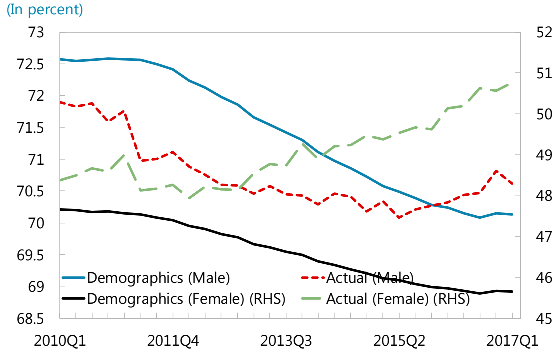
Real Compensation Growth and Unemployment Gap
(In percent)



Sources: Haver Analytics; and IMF staff calculations.

…amid continued increase in labor force participation.

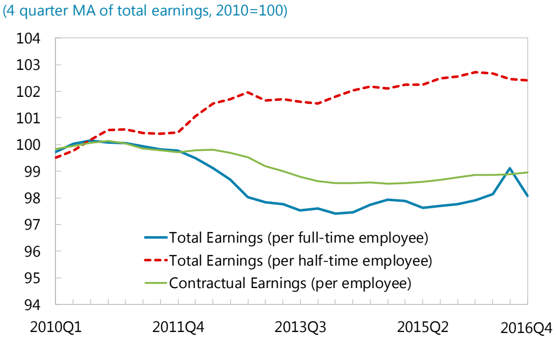
Labor Force Participation Rate
(In percent)



Source: Ministry of Internal Affairs and Communications.

Over the last few years, wage growth for part-time workers has been higher…

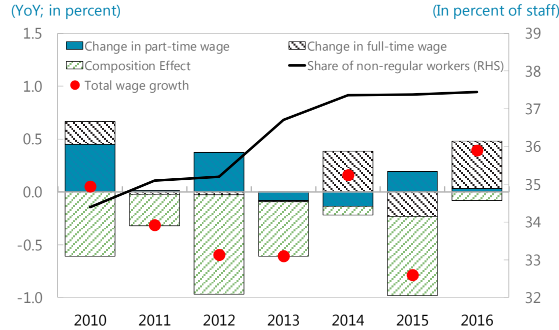
Different Measures of Earnings
(4 quarter MA of total earnings, 2010=100)



Sources: Haver Analytics; and IMF staff calculations.

…while the share of non-regular workers has stabilized.

Nonregular Workers and Wage Growth [1/]
(YoY; in percent) (In percent of staff)

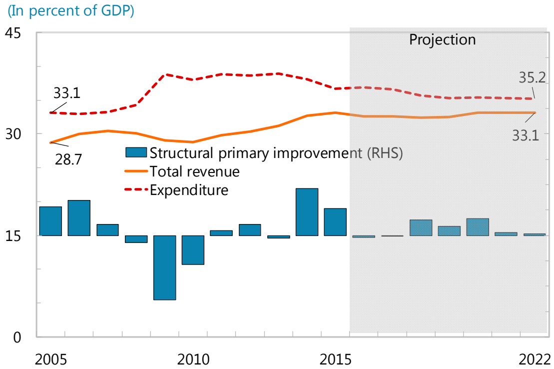


Sources: Haver Analytics; and IMF staff estimates.
1/ Yearly Average.

Figure 7. Japan: Fiscal Developments and Sustainability

The fiscal balance, while still negative, has improved in part due to the 2014 consumption tax rate hike…

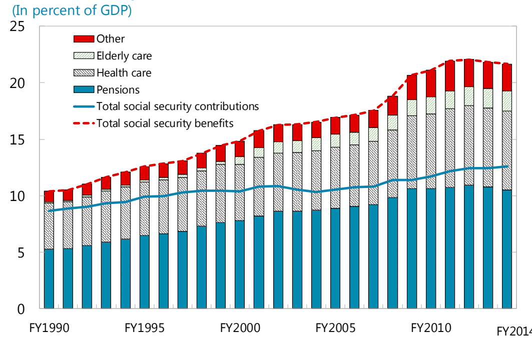
General Government Fiscal Balance
(In percent of GDP)



Sources: WEO database; and IMF staff estimates.

…but the gap between social security spending and contributions is growing, amid aging population.

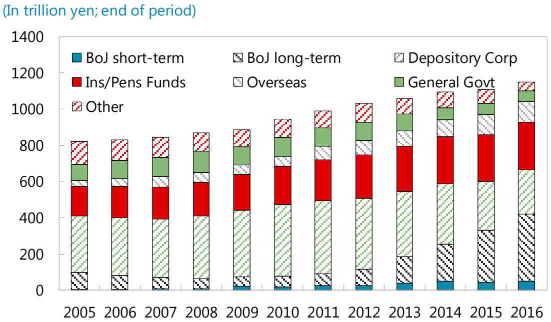
Social Security Benefits and Contributions
(In percent of GDP)



Sources: National Institute of Population and Social Security Research.

BoJ's JGB holdings and domestic investors' home bias help the current favorable funding conditions…

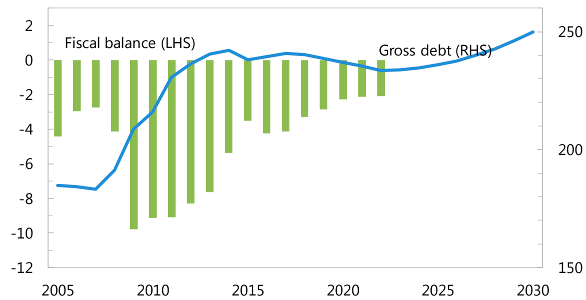
Public Debt Financing
(In trillion yen; end of period)



Source: Flow of Funds (Bank of Japan)
Note: Includes both central and local governments' debt (including FLIP bonds)

…but debt is unsustainable under current policies and will start rising along with the interest-growth differential.

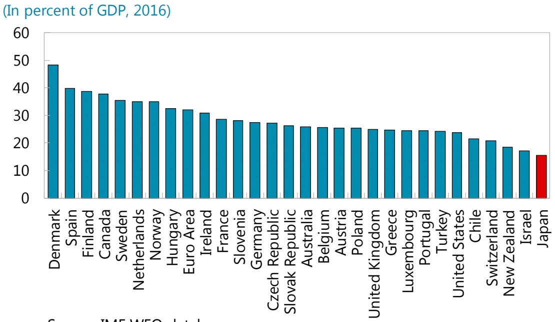
Japan: Gross Public Debt[1/] and Fiscal Balance
(In percent of GDP)



Sources: Cabinet Office; and staff estimates and projections.
1/ Gross debt of the general government including the social security fund.
Withdrawal of fiscal stimulus and consumption tax increases to 10 percent in October 2019 are assumed.

Non-social security spending has remained low…

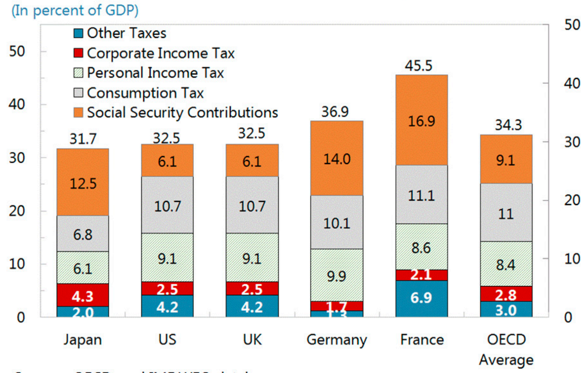
OECD: Spending excluding Social Security and Interest [1/ 2/]
(In percent of GDP, 2016)



Source: IMF WEO database.
1/ OECD countries with missing data (e.g., Italy) are not reported here.
2/ General government basis.

…while there is room for increasing tax revenue.

General Government Tax and SS Revenue, 2015
(In percent of GDP)



Sources: OECD; and IMF WEO database.

Table 1. Japan: Selected Economic Indicators, 2012–18

Nominal GDP: US$ 4,941 Billion (2016)
Population: 127 Million (2016)
GDP per capita: US$ 38,937 (2016)
Quota: SDR 30.8 billion (2016)

	2012	2013	2014	2015	2016	2017	2018
						Proj.	
Growth (percent change) 1/							
Real GDP	1.5	2.0	0.3	1.1	1.0	1.3	0.6
Domestic demand	2.3	2.4	0.4	0.7	0.4	0.7	0.7
Private consumption	2.0	2.4	-0.9	-0.4	0.4	0.8	0.7
Business investment	4.1	3.7	5.2	1.1	1.3	3.0	3.3
Residential investment	2.5	8.0	-4.3	-1.6	5.6	3.1	2.4
Government consumption	1.7	1.5	0.5	1.7	1.3	0.7	-0.2
Public investment	2.7	6.7	0.7	-2.1	-3.0	-0.2	-4.4
Stockbuilding 2/	0.0	-0.4	0.1	0.6	-0.3	-0.4	-0.1
Net exports 2/	-0.8	-0.4	0.0	0.3	0.6	0.5	-0.1
Exports of goods and services 3/	-0.1	0.8	9.3	2.9	1.2	6.3	2.4
Imports of goods and services 3/	5.4	3.3	8.3	0.8	-2.3	3.0	2.7
Output Gap	-3.6	-2.2	-2.6	-2.1	-1.8	-1.1	-0.9
Inflation (annual average)							
CPI 4/	-0.1	0.3	2.8	0.8	-0.1	0.7	0.6
CPI excluding VAT	-0.1	0.3	1.2	0.3	-0.1	0.7	0.6
Core Core CPI excluding VAT 5/	-0.4	-0.2	0.7	0.9	0.6	...	...
GDP deflator	-0.8	-0.3	1.7	2.1	0.3	-0.1	0.9
Unemployment rate (annual average)	4.3	4.0	3.6	3.4	3.1	3.1	3.1
Government (percent of GDP)							
General government							
Revenue	30.4	31.2	32.7	33.2	32.6	32.6	32.4
Expenditure	38.7	38.9	38.0	36.7	36.8	36.7	35.7
Overall Balance	-8.3	-7.6	-5.4	-3.5	-4.2	-4.1	-3.3
Primary balance	-7.5	-7.0	-4.9	-3.1	-4.0	-4.0	-3.3
Structural primary balance	-6.3	-6.4	-4.6	-3.5	-3.6	-3.7	-3.1
Public debt, gross	236.6	240.5	242.1	238.2	239.4	240.7	240.3
Macro-financial (percent change, end-period, unless otherwise specified)							
Base money	19.3	60.3	36.7	29.1	17.9	16.7	14.5
Broad money	2.8	4.0	3.0	3.0	3.4	3.1	2.7
Credit to the private sector	3.1	5.5	1.5	2.1	2.7	2.6	2.6
Non-financial corporate debt in percent of GDP	134.3	134.7	135.7	131.7	133.4	134.9	136.2
Household debt in percent of disposable income	119.7	121.9	124.2	126.4	129.6	130.0	131.1
Interest rate							
Overnight call rate, uncollateralized (end-period)	0.1	0.1	0.1	0.0	-0.1	...	...
Three-month CD rate (annual average)	0.3	0.2	0.2	0.2	0.1	...	...
Official discount rate (end-period)	0.3	0.3	0.3	0.3	0.3	0.3	0.3
10-year JGB yield (e.o.p.)	0.9	0.7	0.6	0.4	0.0	0.1	0.2
Balance of payments (in billions of US$)							
Current account balance	59.7	45.9	36.8	134.1	188.1	186.8	208.0
Percent of GDP	1.0	0.9	0.8	3.1	3.8	3.9	4.2
Trade balance	-53.9	-90.0	-99.9	-7.4	51.4	54.0	67.8
Percent of GDP	-0.9	-1.7	-2.1	-0.2	1.0	1.1	1.4
Exports of goods, f.o.b.	776.0	695.0	699.7	622.1	635.3	676.1	705.0
Imports of goods, f.o.b.	829.9	784.9	799.7	629.5	583.9	622.2	637.2
Energy imports	272.2	257.4	241.8	133.8	94.9	114.4	113.6
FDI, net (percent of GDP)	1.9	2.8	2.4	3.0	2.7	2.5	2.5
Portfolio Investment, net (percent of GDP)	0.5	-5.4	-0.9	3.0	5.7	4.1	3.8
Terms of trade (percent change)	-1.8	-2.5	-1.0	14.1	9.3	-17.2	3.6
Change in reserves	-37.9	38.7	8.5	5.1	-5.7	10.0	10.5
Total reserves minus gold (in billions of US$)	1227.2	1237.3	1231.0	1207.1	1188.4	...	...
Exchange rates (annual average)							
Yen/dollar rate	79.8	97.6	105.9	121.0	108.8	112.2	110.8
Yen/euro rate	102.6	129.6	140.8	134.3	120.4	122.5	122.4
Real effective exchange rate (ULC-based) 6/	118.6	95.9	86.8	83.6	93.6	...	...
Real effective exchange rate (CPI-based) 7/	100.6	80.3	75.1	70.1	79.5	...	...
Demographic Indicators							
Population Growth	-0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.4
Old-age dependancy	37.8	39.8	41.8	43.5	44.9	46.2	47.2

Sources: IMF, Competitiveness Indicators System; OECD, and IMF staff estimates and projections as of Jun 12, 2017.
1/ Annual growth rates and contributions are calculated from seasonally adjusted data.
2/ Contribution to GDP growth.
3/ For 2014 export and import growth rates are inflated because of changes in the compilation of BoP statistics.
(BPM6) implying a break in the series relative to previous years.
4/ Including the effects of consumption tax increases in 2014 and 2015.
5/ Bank of Japan Measures of Underlying Inflation; excluding fresh food & energy.
6/ Based on normalized unit labor costs; 2005=100.
7/ 2010=100.

Table 2. Japan: Monetary Authority Accounts and Monetary Survey, 2012–18

	2012	2013	2014	2015	2016	2017	2018
					Est.	Proj.	
				(In trillions of yens)			
Monetary authority							
Net foreign assets	6.3	5.0	3.9	2.3	-1.8	-1.7	-1.7
NDA	132.2	196.9	272.0	353.9	421.6	491.6	562.4
Net domestic credit	143.5	210.8	291.3	374.6	449.2	519.2	590.0
Net credit to non-financial public sector	96.1	159.2	222.0	288.5	356.4	426.4	496.4
Credit to the private sector	8.5	11.7	13.9	17.8	19.2	19.2	19.4
Net credit to financial corporations	38.9	39.8	55.4	68.4	73.6	73.6	74.2
Other items net	-11.3	-13.9	-19.3	-20.8	-27.6	-27.6	-27.6
Monetary base	138.5	201.8	275.9	356.1	419.8	489.9	560.7
Monetary survey (depository corporations)							
NFA	101.5	104.3	100.3	129.2	121.7	122.6	126.7
NDA	1,050.2	1,086.5	1,126.2	1,135.1	1,176.8	1,215.8	1,248.5
Net domestic credit	1,124.8	1,165.3	1,215.4	1,220.0	1,258.2	1,302.2	1,339.9
Net credit to nonfinancial public sector	482.4	527.7	562.3	567.8	587.3	616.5	638.8
Credit to the private sector	516.5	544.9	553.3	564.7	579.9	594.7	610.1
Net credit to other financial institutions	125.9	92.7	99.8	87.6	91.0	91.0	91.0
Other items net	-74.6	-78.8	-89.2	-84.9	-81.4	-86.4	-91.4
Broad money	1,146.3	1,184.2	1,219.7	1,255.9	1,298.4	1,338.4	1,375.2
Currency in circulation	83.1	85.3	88.2	93.6	92.7	95.7	98.9
Current deposits	477.7	504.7	530.7	553.1	602.8	633.7	661.3
Other deposits	585.5	594.2	600.8	609.2	603.0	609.0	615.0
				(In percent of GDP)			
Credit to the private sector from depository corporations	104.4	108.3	107.7	106.5	108.0	109.5	110.6
Net credit to other financial institutions	25.4	18.4	19.4	16.5	17.0	16.8	16.5
Credit to the private sector from depository corporations	104.4	108.3	107.7	106.5	108.0	109.5	110.6
Corporate debt (includes loans and securities other than shares)	134.3	134.7	135.7	131.7	133.4	134.9	136.2
Household debt in percent of net disposable income	119.7	121.9	124.2	126.4	129.6	130.0	131.1
				(Y-o-Y growth in percent)			
Base money	19.3	60.3	36.7	29.1	17.9	16.7	14.5
Broad money	2.8	4.0	3.0	3.0	3.4	3.1	2.7
Credit to the private sector from depository corporations	3.1	5.5	1.5	2.1	2.7	2.6	2.6
Credit to the corporate sector from other depository corporations for fixed investments 1/	1.1	1.0	1.8	2.9	1.3	2.4	2.5
Housing loans 2/	2.1	2.3	1.8	1.9	2.8	2.6	1.7
Credit to the private sector from all financial institutions	2.6	7.1	2.1	3.9	2.7	2.6	2.6
Memorandum items:							
Velocity of broad money	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Money multiplier of broad money	8.3	5.9	4.4	3.5	3.1	2.7	2.5
Loan-to-deposit ratio (percent) 3/	60.4	58.0	57.2	57.1	56.1	55.6	55.1

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

1/ Projections were made using the correlation between lending and non-residential investment in the 2002–15 period.

2/ Projections were made using the correlation between lending and residential investment in the 2008–15 period.

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

Table 3. Japan: External Sector Summary, 2012–18

	2012	2013	2014	2015	2016	2017	2018
						Proj.	
Balance of payments			*(In billions of U.S. dollars)*				
Current account balance	59.7	45.9	36.8	134.1	188.1	186.8	208.0
Trade balance (goods)	-53.9	-90.0	-99.9	-7.4	51.4	54.0	67.8
Exports of goods	776.0	695.0	699.7	622.1	635.3	676.1	705.0
Imports of goods	829.9	784.9	799.7	629.5	583.9	622.2	637.2
Imports of goods, Oil	196.9	184.9	167.6	88.1	64.9	78.2	77.7
Services balance	-47.8	-35.7	-28.8	-16.0	-10.8	-11.5	-10.5
Credits	136.8	135.3	163.2	162.6	167.5	172.8	178.4
Debits	184.6	171.0	192.4	175.6	180.9	187.0	191.7
Income balance	175.6	181.6	184.6	173.8	167.1	165.0	172.4
Credits	229.6	241.3	256.9	246.5	251.0	235.0	247.9
Debits	54.0	59.7	72.4	72.7	83.9	69.9	75.4
Current net transfers	-14.2	-10.0	-19.0	-16.3	-19.7	-20.7	-21.7
Capital account	-1.0	-7.7	-2.0	-2.2	-6.5	-3.4	-3.3
Financial account	47.2	-62.5	24.9	160.8	283.4	191.6	213.0
Direct investment, net	117.5	144.7	118.6	131.0	134.6	120.7	123.8
Portfolio investment, net	28.8	-280.6	-42.2	131.5	282.2	196.5	187.9
Other investment, net	-61.1	34.8	-60.1	-106.7	-127.7	-135.5	-109.2
Reserve assets	-37.9	38.7	8.5	5.1	-5.7	10.0	10.5
Errors and omissions, net	-4.8	-42.6	24.1	46.7	85.1	0.0	0.0
			(In percent of GDP)				
Current account balance	1.0	0.9	0.8	3.1	3.8	3.9	4.2
Trade balance (goods)	-0.9	-1.7	-2.1	-0.2	1.0	1.1	1.4
Exports of goods	12.5	13.5	14.4	14.2	12.9	14.0	14.2
Imports of goods	13.4	15.2	16.5	14.4	11.8	12.8	12.8
Services balance	-0.8	-0.7	-0.6	-0.4	-0.2	-0.2	-0.2
Income balance	2.8	3.5	3.8	4.0	3.4	3.4	3.5
Global assumptions							
Exchange Rate (¥/US$)	79.8	97.6	105.9	121.0	108.8	112.2	110.8
(Percent change)	0.0	22.3	8.6	14.3	-10.1	3.1	-1.2
Oil prices (US$/barrel)	105.0	104.1	96.2	50.8	42.8	51.9	52.0
(Percent change)	1.0	-0.9	-7.5	-47.2	-15.7	21.2	0.1
Memorandum items:							
Nominal GDP (US$ billion)	6,202.2	5,157.2	4,850.9	4,378.7	4,936.8	4,843.7	4,979.2
Net foreign assets (NFA)/GDP, US$ basis	57.7	61.1	62.8	63.5	60.9	66.7	69.8
Return on NFA (in percent), US$ basis	4.9	5.8	6.1	6.3	5.6	5.1	5.0
Net export contribution to growth	-0.8	-0.4	0.0	0.3	0.6	0.5	-0.1

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

Table 4. Japan: General Government Operations, 2012–18

In percent of GDP

	2012	2013	2014	2015	2016	2017	2018
					Est.	Proj.	
Total revenue	30.4	31.2	32.7	33.2	32.6	32.6	32.4
Taxes 1/	16.5	17.2	18.3	18.8	18.4	18.4	18.4
Social security contributions	12.3	12.4	12.5	12.5	12.5	12.5	12.4
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	1.5	1.7	1.8	1.9	1.7	1.7	1.6
o/w interest income	1.2	1.3	1.4	1.5	1.3	1.3	1.3
Total expenditure	38.7	38.9	38.0	36.7	36.8	36.7	35.7
Expense	34.1	33.9	33.5	33.0	32.5	32.4	31.6
Compensation of employees 2/	5.7	5.5	5.6	5.4	...	...	...
Use of goods and services 2/	3.3	3.5	3.4	3.4	...	...	...
Consumption of fixed capital	3.4	3.4	3.5	3.4	3.3	3.3	3.3
Interest	2.0	2.0	1.9	1.8	1.6	1.5	1.3
Grants 2/	0.1	0.2	0.1	0.1	...	...	...
Social security benefits	20.5	20.5	20.1	19.9	19.8	19.9	19.9
Other expense	-1.0	-1.0	-1.1	-1.0	...	...	...
Net acquisition of nonfinancial assets	1.1	1.6	1.1	0.3	1.0	1.0	0.9
Acquisitions of nonfinancial assets	4.6	5.0	4.5	3.7	4.3	4.3	4.2
o/w public investment	3.6	3.9	4.0	3.7	3.5	3.6	3.4
o/w land acquisition	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Consumption of fixed capital	-3.4	-3.4	-3.5	-3.4	-3.3	-3.3	-3.3
Net lending/borrowing (overall balance)	-8.3	-7.6	-5.4	-3.5	-4.2	-4.1	-3.3
Excluding social security fund	-7.6	-7.2	-5.7	-4.5	-4.3	-4.3	-3.3
Primary balance	-7.5	-7.0	-4.9	-3.1	-4.0	-4.0	-3.3
Structural balance 3/	-7.1	-7.1	-5.1	-3.9	-3.8	-3.9	-3.1
Structural primary balance 3/	-6.3	-6.4	-4.6	-3.5	-3.6	-3.7	-3.1
Financing	8.3	7.6	5.4	3.5	4.2	4.1	3.3
Net issuance of debt securities	8.0	6.7	8.1	4.5	...	...	...
Other	0.3	0.9	-2.7	-1.0	...	...	...
Stock positions 4/							
Debt							
Gross 5/	236.6	240.5	242.1	238.2	239.4	240.7	240.3
Net	120.5	117.4	119.0	118.5	119.9	121.3	120.9
Net worth	12.5	16.0	14.9	11.8	...	...	...
Nonfinancial assets	133.0	133.4	133.9	130.3	...	...	...
Fixed assets (excluding land)	107.5	108.5	109.9	107.5	...	...	...
Land	23.6	22.9	22.3	21.4	...	...	...
Other	1.9	2.0	1.7	1.4	...	...	...
Net financial worth	-120.5	-117.4	-119.0	-118.5	...	...	...
Financial assets	116.1	123.1	123.2	119.7	...	...	...
Monetary Gold and SDR, etc.	0.6	0.7	0.8	0.7	...	...	...
Currency and deposits	8.1	8.5	11.3	14.8	...	...	...
Loans	6.7	7.0	5.7	4.3	...	...	...
Debt securities	24.6	22.6	17.3	15.7	...	...	...
Equity and investment fund shares	35.6	38.9	38.0	37.2	...	...	...
o/w shares	6.2	9.2	10.2	10.0	...	...	...
Insurance, pension and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...
Financial derivatives and employee stock options	0.0	0.1	0.0	0.0	...	...	...
Other financial assets	40.5	45.4	50.2	47.0	...	...	...
Liabilities	236.6	240.5	242.1	238.2	...	...	...
Monetary Gold and SDR, etc.	0.3	0.4	0.4	0.4	...	...	...
Currency and deposits	0.0	0.0	0.0	0.0	...	...	...
Loans	33.6	33.3	32.3	31.4	...	...	...
Debt securities	185.0	189.5	193.6	190.2	...	...	...
Equity and investment fund shares	12.1	12.1	10.5	10.2	...	...	...
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	5.6	5.2	5.3	6.0	...	...	...
Memorandum item:							
Nominal GDP (trillion yen)	495.0	503.2	513.7	530.0	536.8	543.2	551.6

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 5. Japan: Medium-Term Projections, 2014–22

	2014	2015	2016	2017	2018	2019	2020	2021	2022
				Projections					
				(Percent change)					
Real GDP	0.3	1.1	1.0	1.3	0.6	0.8	0.2	0.7	0.6
Private final consumption	-0.9	-0.4	0.4	0.8	0.7	0.9	-0.6	0.6	0.6
Government consumption	0.5	1.7	1.3	0.7	-0.2	0.7	1.2	0.8	0.6
Gross Private fixed investment	3.5	0.7	2.0	3.0	3.2	3.3	1.2	1.4	1.2
Public investment	0.7	-2.1	-3.0	-0.2	-4.4	-5.3	-1.1	-2.0	-1.7
Stockbuilding (contribution to growth)	0.1	0.6	-0.3	-0.4	-0.1	0.0	0.0	0.0	0.0
Exports	9.3	2.9	1.2	6.3	2.4	2.1	2.9	1.8	1.6
Imports	8.3	0.8	-2.3	3.0	2.7	3.1	1.9	1.7	1.4
Total domestic demand	0.4	0.7	0.4	0.7	0.7	1.0	0.0	0.7	0.6
Net exports (contribution)	0.0	0.3	0.6	0.5	-0.1	-0.2	0.2	0.0	0.0
Real GDP per Capita	0.5	1.2	1.1	1.7	1.0	1.3	0.7	1.3	1.0
Private final consumption per Capita	-0.7	-0.3	0.4	1.2	1.0	1.3	-0.2	1.1	1.0
Unemployment rate (percent)	3.6	3.4	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Headline CPI inflation (average)	2.8	0.8	-0.1	0.7	0.6	1.1	1.6	1.3	1.6
memo item: without planned consumption tax increases	1.2	0.3	-0.1	0.7	0.6	0.9	0.9	1.3	1.6
Output gap (in percent of potential output)	-2.6	-2.1	-1.8	-1.1	-0.9	-0.7	-1.0	-0.8	-0.7
				(In percent of GDP)					
Overall fiscal balance	-5.4	-3.5	-4.2	-4.1	-3.3	-2.8	-2.3	-2.1	-2.1
Primary balance	-4.9	-3.1	-4.0	-4.0	-3.3	-2.9	-2.3	-2.1	-2.1
General government debt									
Gross	242.1	238.2	239.4	240.7	240.3	238.7	237.1	235.5	233.6
Net	119.0	118.5	119.9	121.3	120.9	119.3	117.7	116.1	114.2
External current account balance	0.8	3.1	3.8	3.9	4.2	4.1	4.4	4.4	4.3
National savings	24.6	27.0	27.2	27.2	27.6	27.7	28.1	28.3	28.2
Private	24.1	25.5	25.8	25.7	25.4	25.4	25.2	25.3	25.3
Public	0.6	1.4	1.4	1.6	2.2	2.4	2.9	3.0	2.9
National investment	23.9	23.9	23.4	23.4	23.4	23.6	23.8	23.9	23.9
Private	18.6	18.8	18.5	18.5	18.9	19.3	19.6	19.7	19.9
Public	5.3	5.1	4.9	4.8	4.6	4.3	4.2	4.1	4.0

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

Table 6. Japan: Financial Soundness Indicators (FSI), 2010–16 1/

	2010	2011	2012	2013	2014	2015	2016
				(In percent)			
Capital adequacy							
Regulatory capital to risk-weighted assets 2/3/	13.3	13.8	14.2	15.2	15.6	15.5	16.2
Regulatory tier 1 capital to risk-weighted assets	9.9	10.7	11.3	11.7	12.1	12.5	13.4
NPL net of provisions/capital 2/4/	22.7	22.2	21.4	19.2	16.2	12.8	10.9
Asset quality							
Non-performing loans (NPL) to total loans ratio 2/4/	2.5	2.4	2.4	2.3	1.9	1.6	1.4
Sectoral distribution of loans 4/5/							
Residents	94.8	94.0	93.8	92.5	91.0	90.0	91.1
Deposit-takers	5.8	5.7	6.2	6.5	4.6	4.9	6.2
Central bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financial corporations	8.9	8.3	8.5	8.4	8.0	8.2	7.9
General government	7.7	8.2	8.4	8.7	8.8	8.8	8.9
Non-financial corporations	37.7	37.0	36.5	35.3	35.4	34.1	33.3
Other domestic sectors	34.7	34.8	34.2	33.6	34.2	34.0	34.7
Non-residents	5.2	6.0	6.2	7.5	9.0	10.0	8.9
Earnings and profitability							
Return on assets 2/4/	0.2	0.2	0.3	0.4	0.3	0.3	0.3
Return on equity 2/4/	5.5	4.8	5.7	9.1	7.8	6.3	8.3
Interest margin	1.5	1.5	1.5	1.4	1.3	1.2	1.1
Net interest income to gross income 2/4/	72.8	74.1	69.2	61.0	64.2	62.9	61.0
Non-interest expenses to gross income 2/4/	62.2	65.8	63.3	57.0	60.8	60.6	62.1
Personnel expenses to non-interest expenses 2/4/6/	…	…	…	44.2	44.8	44.1	60.2
Liquidity							
Liquid assets to total assets 2/4/	23.2	25.6	26.3	26.1	26.4	26.9	27.1
Liquid assets to short-term liabilities 2/4/	46.6	49.1	49.0	48.0	47.6	48.1	48.2
Non-interbank loans-to-customer-deposits 2/4/	77.3	74.9	74.5	75.3	75.5	75.7	74.0
Other							
Capital-to-total assets 2/3/	4.4	4.7	4.7	5.5	5.5	5.8	5.5
Gross derivative asset to capital 2/4/	70.7	61.4	54.2	51.2	38.4	47.4	50.7
Gross derivative liability to capital 2/4/	65.3	56.6	52.0	50.5	38.2	48.6	45.6

Sources: IMF, Financial Soundness Indicators (FSI) database; and IMF staff estimates.
1/ Data for these series are for Q1 of each year besides 2016 series are Q3.
2/ Including city banks and regional banks and 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.
6/ 2016 series are as of 2016Q1.

Table 7. Japan: Macro-Critical Structural Reforms

Policy area	Key measures planned by the authorities and status	IMF assessment and advice	Impact if comprehensive reform consistent with IMF advice is implemented
Labor market			
Labor market duality	Work Style Reform (WSR) action plan published in March 2017, including the "equal pay for equal work" initiative. Legislation to be submitted to the Diet promptly.	Implementation plans have long horizons and should be advanced. "Equal pay for equal work" should be complemented with the introduction of job descriptions. WSR includes some effort to increase worker mobility across firms for SME, but the issue needs to be addressed more widely. Further, while WSR proposes subsidies/support to firms converting non-regular workers to regular positions, the gap in employment protection between regular and non-regular workers can be reduced by promoting "intermediate" job contracts that better balance job security and wage increases.	A substantial reduction in labor market duality would increase productivity, potential growth and wages, although the precise magnitude is difficult to quantify for Japan (Aoyagi and Ganelli IMF WP 13/202). OECD estimates that a 20 percent reduction in employment protection legislation in advanced economies increases labor productivity by 0.44 percentage points after five years.
Female and Older Worker Labor Force Participation	WSR action plan published in March 2017, including measures to limit overtime. Legislation to be submitted to the Diet promptly.	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, disincentives to full-time or regular work stemming from the tax and social security system should be fully eliminated. Managerial practices that reward productivity rather than long hours or seniority should be encouraged to further increase LFP and productivity. Moreover, increasing the availability of affordable and high-quality childcare and nursing facilities to meet demand, including via deregulation, should help boost labor supply. Firms should also be discouraged from setting a mandatory retirement age.	GDP per capita would increase by 4 percentage points (and potential GDP would increase by 0.2 percentage points) if Japan's female LFPR rose to the G7 average, excluding Japan and Italy (Steinberg and Nakane, 2012 IMF WP/12/248). Also, the Japanese government estimated that if 3.42 million women were to join the labor force, workers' wages would increase by JPY 7 trillion (about 1.4 percent of GDP).
Immigration	WSR includes considerations to increase the use of foreign human resources, especially high-skilled. Special Economic Zones (SEZ) encourage use of foreign human resources.	WSR lacks concrete measures to increase use of medium and low-skilled foreign labor, which is needed the most in sectors with labor shortages. The technical intern program in place should be converted into a guest worker program and enhanced (Ganelli and Miake, IMF WP 15/181).	Immigration equivalent to a rise of Japan's labor force by 1 percent distributed over a decade could increase potential growth by 0.1-0.2 percent per year (2013 Art. IV).
Deregulation			
Product and service sectors deregulation	Deregulation efforts in the right direction have taken place within electricity, gas, and agricultural sector.	Further deregulation to reduce barriers to entry and protections to incumbents is some industries (telecom, gas), and deregulation in professional services. Further deregulation in agriculture needed (including elimination of subsidy support and allowing majority holdings of private companies in agricultural enterprises).	OECD estimates that a 20 percent reduction in product market regulation in advanced economies delivers a 2.4 percent level gain in multifactor productivity after five years.
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.	Unlikely to have a significant growth effect in the short term, but could be more substantial once rolled out at the national level.

Table 7. Japan: Macro-Critical Structural Reforms (concluded)

Policy area	Key measures planned by the authorities and status	IMF assessment and advice	Impact if comprehensive reform consistent with IMF advice is implemented
Business and Financial			
Corporate governance	Japan's Stewardship code for institutional investors introduced in February 2014. 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.	Significant progress has been made, but more should still be done to materially affect corporate behavior. Increasing compliance with established guidelines is needed (i.e. pension funds). Also, the corporate governance code could be more ambitious in its requirements for outside directors and regulatory limits on cross shareholdings.	Raising shareholders' rights could result in unlocking excessive corporate savings. The economic impact is difficult to quantify but likely to be substantial (see Aoyagi and Ganelli, WP 2014) especially in combination with other reforms that reduce incentives for large cash balances stemming from precautionary demand, transactions costs, and taxation (see Sher, WP 2014).
SMEs	Bills passed by the Diet in June 2017 to reform the SME credit guarantee scheme, including a reduction from 100 to 80 percent in the largest 100 percent guarantee scheme (safety net program 5).	Financial sector policies should aim to reduce SMEs' financing constraints and promote productivity and investment, including facilitating banks' move to risk-based lending—by upgrading banks' credit risk assessment capacity, further lowering the coverage of public credit guarantees, and improving SMEs' reporting standards—and further encouraging the internationalization of SMEs. Alternative forms of finance to SMEs and startups, such as asset-based lending and venture capital should also be promoted.	Restructuring of the SME sector could lift potential growth by about 0.2 percentage points (Source: 2013-14 Art. IV Reports).
Trade			
Trans Pacific Partnership and trade policy	The 12-nation free trade plan was ratified by Japan in 2017 even though the US abandoned the deal earlier in the year. Japan continues to push for TPP, TPP-11, and other trade agreements. An agreement with the EU is expected to be finalized in the near future.	TPP ratification and continued pursuit of plurilateral agreements are welcome developments. Uncertainty could undermine the momentum of structural reforms especially in services and agriculture sectors.	Japan would stand to gain considerably from an agreement, provided it is a comprehensive deal that leads to widespread tariff reductions and liberalization. Peterson Institute estimates that TPP could have increased growth by about 0.1-0.2 (p.a.).

Source: staff estimates and cited sources.

Annex I. Japan's Labor Market Bottlenecks and the Work Style Reform Plan[1]

1. **The structure of Japan's labor market hinders labor supply, productivity, and growth**. Labor market duality reduces productivity by lowering motivation and access to training of non-regular workers. A working culture based on long hours prevents the economy from fully benefiting from the contribution of Japan's highly-educated women. The lack of a clear framework for admission of medium and low-skilled foreign workers implies virtually zero foreign labor supply in sectors with acute labor shortages.

2. **Several factors keep wage growth moderate despite a tight labor market—preventing the robust wage-price dynamics needed to escape the deflationary mindset**. These include: (i) reduced bargaining power and low wages of non-regular workers; (ii) aspects of the lifetime employment system for regular workers which reduce incentives to increase wages to attract workers from competitors (low horizontal mobility; emphasis on employment stability rather than wage increases; intra-firm job rotation; seniority-based wages); and (iii) Japan's long history of deflation and entrenched deflation expectations, which magnify the impact of (i) and (ii) by reducing the need for nominal wage increases.

3. **The recently released action plan for Work Style Reform (WSR) is a step in the right direction to reduce bottlenecks**. Encouraging wage growth and diverse working styles, attracting women into the job market, improving working conditions of non-regular workers, and supporting mobility of workers across firms are among chief objectives of the plan. The key measures which could in principle positively affect productivity, consumption, wage-price dynamics, and labor supply include (see also Table 1):

- ***A cap on excessive overtime***—aimed at increasing both labor participation and productivity by improving work-life balance and shifting corporate culture from long hours to productivity.
- ***Income and productivity policies***—increasing the minimum wage; providing subsidies to encourage firms to increase productivity; improving price negotiating power of SMEs.
- ***Addressing labor market duality***—guidelines to avoid wage discrimination against non-regular workers; subsidies/support to firms converting non-regular workers to regular positions; increasing awareness of the 5-year rule (effective April 2018) under which firms must convert non-regular workers in the same job for more than five years to regular positions.
- ***Policies to support horizontal mobility*** of workers across firms, including through subsidies and provision of information to workers and SMEs.

[1] Prepared by Chie Aoyagi and Giovanni Ganelli (APD).

Table 1. Main Points of the Action Plan for the Realization of Work Style Reform
Measures which could positively impact productivity, consumption, and wage-price dynamics
Overtime
- A cap on excessive overtime
Maximum 45 hours per month and 360 hours per year, or
Maximum 720 hours per year (60 hours per month) during busy times with a labor-management agreement (subject to limitations, including a 100-hour monthly limit)
Income and productivity
- Increasing the minimum wage
Aim at minimum wage rise of about 3% per year
Toward an hourly wage of 1,000 yen in nationwide weighted average
- Tax exemptions and subsidies for companies to increase wages and productivity
- Improving price negotiating power of SMEs when subcontracting with large companies
Labor market duality
- Equal Pay for Equal Work:
Draft guidelines showing unreasonable differences in treatment between regular and non-regular workers
Legal revisions based on the draft guidelines
- Providing subsidies for companies which convert non-regular workers to regular position
- Increasing awareness of the five-year rule
Horizontal mobility of workers across firms
- Subsidies and provision of information to workers and SMEs
Subsidies for companies introducing the capacity-based worker evaluation rather than the seniority-based one
Guidelines for companies to accept workers changing their jobs
Measures which could increase labor supply
Support integration of women in the labor market
Consider ways of accepting foreign human resources (mostly for skilled labor)

- ***Policies to support the full integration of women*** in the labor market.

- ***Considering increasing use of foreign human resources***, especially high-skilled ones.

4. However, under current plans WSR implementation will be slow, and its overall impact on productivity, wages, and labor supply remains to be seen. Several of the measures (e.g., on overtime and equal pay for equal work) may take several years to become effective, depending on the speed of the legislative process and its implementation. While the plan includes some measures to encourage companies to shift managerial practices (e.g., promoting telework and discouraging seniority-based wages), these are mostly piecemeal. Further, limiting excessive overtime, while desirable, is unlikely to be a silver bullet to change working styles and increase productivity. Guidelines on equal pay for equal work could be circumvented, given the lack of a job description framework in Japan, and may not result in higher pay for non-regular workers. Encouraging companies to convert non-regular to regular positions through subsidies is unlikely to be effective in the absence of contract reform to reduce differences in employment protection between regular and non-regular workers, and the 5-year rule can be circumvented. The plan also lacks concrete measures to increase use of medium and low-skilled foreign labor, which is needed the most in sectors with labor shortages.

5. To maximize its impact, the WSR plan should be strengthened and embedded in a more comprehensive package to increase wage growth, labor supply, and productivity. Some concrete measures in this direction could be:

- Accelerate the timeframe for key measures of the current WSR plan, and make them more effective (for example by introducing job descriptions to facilitate equal pay for equal work).

- Widen the income policies toolkit to encourage wage growth. In addition to the recent minimum wage increase, possible options include expanding and better targeting tax incentives for wage growth and increasing public wages.

- Implement labor contract reform to reduce duality (see Aoyagi and Ganelli, IMF WP 13/202). This would imply a higher level of employment security and career prospects for non-regular workers, but lower employment protection for regular workers.

- Introduce a comprehensive framework to encourage change in firms' managerial practices to focus more on productivity than on working hours. Reliance only on subsidies to achieve this goal is unlikely to be sufficient given previous experience, while coordination with efforts to reduce overtime and increase flexible-work arrangements will help enhance its impact, complemented with corporate governance reforms that require action plans reported to shareholders on a comply-or-explain basis.

- Further encourage female labor force participation, especially in regular jobs, by enhancing public and private childcare provision and eliminating the income tax spousal deduction.

- Relaxing entry requirements for low-medium skilled foreign workers, especially in sectors facing labor shortages. This could include the introduction of guest worker programs, following the experience of other countries (see Ganelli and Miake, IMF WP 15/181).

- Moreover, some of the WSR planned measures will create market distortions (i.e. subsidies to increase firm productivity, improving the pricing power of SMEs, etc.), and they should be phased out once the exit from deflation is consolidated.

Annex II. Shifting Japan's Healthcare System Reform into High Gear

1. Health spending has been increasing, substantially exceeding the pace of GDP growth. Health spending in percent of GDP increased to 9.7 percent in 2014[1] from 7.4 percent in 2004 – equivalent to an average annual growth rate of 2.8 percent. Aging effects account for about two-thirds of this growth, while rising "excess costs account" for the rest. In the last five years, the ratio of health spending to GDP grew at a somewhat more moderate pace, helped by per capita GDP growth and healthy aging effects (i.e., per capita spending of the elderly is contained relative to the benchmark cohort). This highlights the importance of accelerating GDP growth and promoting measures to prevent lifestyle related diseases. However, these measures will not be silver bullets given the significant aging effect and higher growth of per capita spending of benchmark cohort.

Decomposition of Changes in Health Spending (Annual percent change, period average)

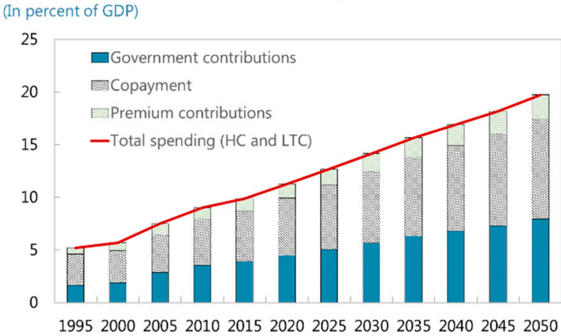
	2004-2014	2009-2014
Ratio of healthcare and long-term care spending to GDP	2.8	2.0
Aging effect	1.9	1.8
Healthcare	1.4	1.3
Long-term care	4.4	4.0
Excess cost growth (e.g. Technology upgrade)	1.1	0.9
Per capita spending of benchmark cohort	1.1	2.0
Healthcare	1.3	2.0
Long-term care	-0.1	1.9
GDP per capita	0.0	-1.1
Healthy aging (Spending profile shift)	-0.2	-0.7
Healthcare	-0.3	-0.7
Long-term care	0.0	-0.7

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

Note: Methodologies follow Nozaki, M., Kashiwase, K., and Saito, I., 2014 "Health Spending in Japan: Macro-Fiscal Implications and Reform Options"

2. The projected increase in healthcare expenditure will put pressure on fiscal sustainability. Health spending in Japan is financed by government contributions, premium contributions and copayment (about 40, 48, 12 percent of total spending respectively). Assuming an annual excess-cost-growth of 1 percent, broadly in line with the historical average, health spending in percent of GDP will reach to 14.2 and 19.7 percent in 2030 and 2050 respectively. If the current financing structure is extended, the government contributions will increase by 4 percent of GDP by 2050. This is equivalent to about 8 percentage point increase in the

Financing of Health Care and Long-Term Care
(In percent of GDP)



Sources: Ministry of Health, Labor, and Welfare; IMF World Economic Outlook database; and IMF staff estimates.
Note: Excess cost growth of 1 percent is assumed for 2015-2050.

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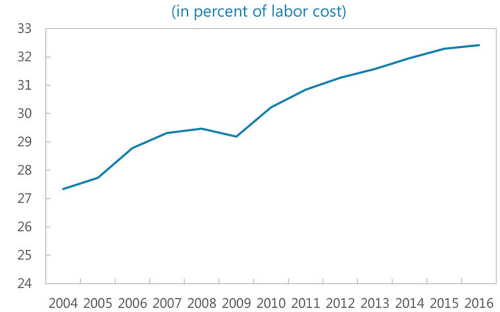
[1] The OECD health statistics, which includes some additional items such as procedures not covered by public health insurance, shows that Japan's health spending amounts to 11.2 percent of GDP in 2015, the third highest among the OECD countries.

consumption tax rate. Given the political sensitivities surrounding tax policy reform, it is neither feasible nor desirable to fully address the projected increase in health spending through tax measures on top of current fiscal adjustment needs.

3. A corresponding rise in premium contributions could negatively affect private consumption and labor supply. The tax wedge has steadily increased reflecting, among others, the health insurance premium. Based on the current financing structure, premium contributions will increase to 6.8 and 9.5 percent of GDP in 2030 and 2050 respectively from 4.8 percent in 2015. This implies a further rise in tax wedge, putting a drag on consumption and labor supply.

Tax Wedge
(in percent of labor cost)



Sources: OECD

4. An ambitious reform package is urgently needed. The authorities' medium term reform plan published in 2015[2] should be accelerated with concrete measures. The most promising strategy appears to involve a mix of (i) macro-level instruments to contain costs; (ii) micro-level reforms to improve spending efficiency, and (iii) demand-side reforms. The reform should be designed to ensure that low income households maintain the access to healthcare system. Although various options are available,[3] some perspectives have been highlighted in recent policy discussions and researches.

(i) Strengthening the role of prefectures in macro- and micro-level reforms. Prefectures will take over as insurers of the National Health Insurance for self-employed, non-regular workers and the majority of the elderly between 65–74 years old from municipalities from FY2018. The wide regional variations in per-capita health spending suggest that prefectures should play a more important role in both macro- and micro-level reforms. For example, prefectures could enhance capacity to monitor supply-induced demand and the healthcare mix, since price controls – the authorities' primary macro-level tool – will be less effective if hospitals respond by increasing the volume and cost of services. Supply constraints, such as the number of doctors and beds, can be best-managed at the prefecture level taking account of regional demographic changes. In addition, prefectures should accelerate micro-level reforms (e.g., introducing gatekeepers, expanding DRG type arrangements and health technology assessments) as insurers to improve the cost-effectiveness. The central government can strengthen incentive schemes to support these efforts. Going further, prefectures might be able to develop tailored budget caps in line with central government direction. Nozaki and others (2014) estimated that fiscal savings from macro- and micro-level reforms could amount to 1 percent of GDP.

(ii) Demand-side reform – Introducing multiple copayment rates. Raising copayment rates could be a strong tool for containing public health expenditures and discouraging excess demand. For example, raising the out-pocket payment in percent of total health spending to the OECD average

[2] Ministry of Health Labour and Welfare, 2015 "Japan Vision Health Care 2035"

[3] Nozaki, M., Kashiwase, K., and Saito, I., 2014 "Health Spending in Japan: Macro-Fiscal Implications and Reform Options"

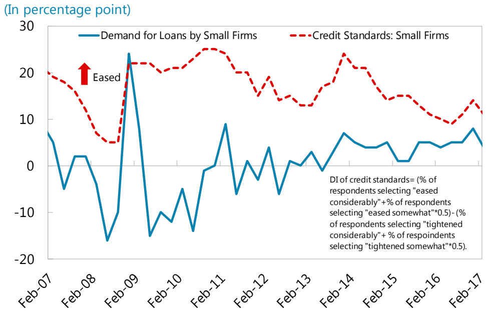
would lead to fiscal savings of about 0.5 percent of GDP. On the other hand, increasing copayment rates across the board could impair the effectiveness and redistribution function of public health insurance. Introducing multiple copayment rates depending on "ability to pay" and "type of service" can be an option to address these drawbacks. The authorities recently decided to raise the copayment rate for long-term care from 10 percent to 30 percent for the elderly whose income is equivalent to that of the working-age generation. Furthermore, Innami (2016) argues that copayment rates could be differentiated by type of services – maintaining the low rate for life-saving care while raising the rate for more self-supportive medical services.[4] Although challenging political and moral discussions will be required, these options could potentially pave the way to avoid automatic increases in both the government fiscal burden and premium contributions.

[4] Innami, I., 2016 "Revisiting Healthcare Expenditure Reforms" (Japanese only).

Annex III. Are Japanese SMEs Financially Constrained?[1]

1. Financing conditions for SMEs are key to revitalize regional economies but remain subdued. Lending to SMEs has increased to pre-crisis levels, but has been mainly concentrated in construction and real-estate related business. Financing conditions in other key sectors such as manufacturing, IT, and services remain subdued (SME White Paper, 2016). Despite weak demand for loans, many small firms still face difficulty in accessing bank loans—their main source of external financing.

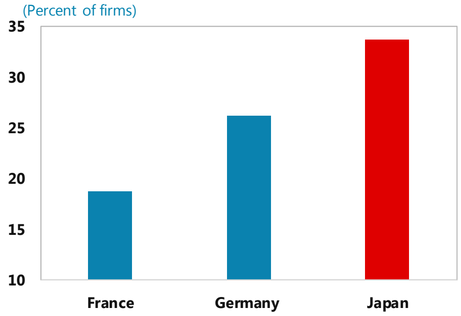
Credit Standard and Loan Demand for Small Firms
(In percentage point)



Source: Bank of Japan, Senior Loan Officer Survery.

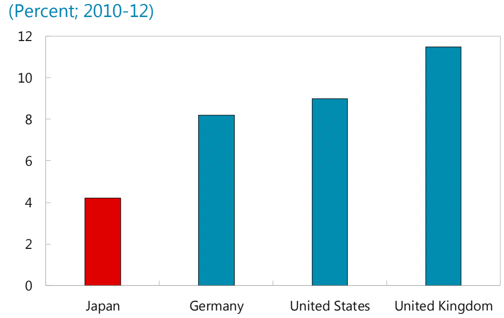
2. The Kaplan-Zingales index suggests that about one third of SMEs might face financing constraints in Japan. The index in Japan is about 7 and 15 percentage points higher than in Germany and France, respectively, mainly due to higher debt (relative to cash flows)—particularly in those nonviable firms.[2] An OECD survey also suggests that access to finance is particularly difficult for female entrepreneurs in Japan. As a result, firm creation, essential to boost productivity and innovation, is slow in Japan and well below that observed in peer countries.

Financial Constraints: Kaplan-Zingales Index
(Percent of firms)



Source: IMF estimates

SME Entry Rates
(Percent; 2010-12)



Source: OECD 2015.

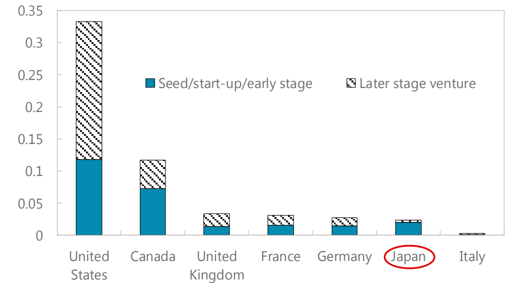
3. Alternative forms of financing such as asset-based lending (ABL) and venture capital (VC) could be further promoted. ABL has increased recently as a result of the efforts by government institutions. However, ABL based on movable assets (e.g., machines and inventory) and account receivables is less than 0.5 percent of total bank loans. Challenges include the ban on the

[1] Prepared by Fei Han (MCM) based on FSAP findings.

[2] The Kaplan-Zingales index is constructed based on a five-factor model (i.e., cash flow-to-capital ratio, Tobin's Q, debt-to-capital ratio, dividends-to-capital ratio, and cash-to-capital ratio) following Lamont, Polk, and Saa-Requejo (2001). Since two factors (Tobin's Q and dividends-to-capital ratio) are not available for Japanese SMEs, the remaining three factors are used in the calculation. A higher Kaplan-Zingales index indicates a higher degree of financial constraints. See the Technical Note of the 2017 Japan FSAP entitled "Long-Term Challenges for Financial Intermediation" for details.

transfer of credit in the civil code and the limited capacity of financial institutions in assessing the value and status of the movable assets. VC can play an important role but requires improving the environment for angel inventors who not only supply finance, but also provide mentoring and networking. Investment by pension funds in VC funds is limited in Japan compared to the U.S., and could be promoted along with their portfolio rebalancing targets.

Venture Capital Investments in G7
(In percent of GDP, 2015 or the latest availiable)



Source: Entrepreneurship at a Glance 2016, OECD 2016.

4. Large public credit guarantees could weaken banks' incentives in credit screening/monitoring and undermine risk-based lending. Public credit guarantees remain large in scale and broad in scope (with a coverage of 80–100 percent) despite a decline in the total amount outstanding. International best practices suggest that lower coverage and shorter duration of public credit guarantees could reduce distortions and encourage risk-based lending (World Bank, 2014).

Annex IV. Risk Assessment Matrix[1]

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	**Impact and Policy Response**
➢ **Successful reflation following comprehensive reforms**	**Low** Aggressive monetary policy easing and a credible medium-term fiscal and growth strategy with incomes policies could lead to a virtuous cycle of high growth and positive inflation.	**High.** Credible policy frameworks with incomes policies and short-term demand stimulus would raise inflation and growth and restore confidence in fiscal sustainability and medium-term growth prospects. *Policy response:* The BoJ should prepare a credible exit strategy.
➢ **Retreat from cross-border integration**	**High** A fraying consensus about the benefits of globalization could lead to protectionism and economic isolationism, leading to reduced global and regional policy collaboration with negative consequences for trade, capital and labor flows, sentiment, and growth.	**High.** A backlash against global trade will have a significant growth impact and will increase market volatility. *Policy response:* Flexible policy responses should be considered, including multilateral efforts to restore global trade and bilateral trade agreements.
➢ **Weaker than expected global growth:** Structurally weak growth in key advanced and emerging economies	**High/Medium** Low productivity growth (U.S., the Euro Area, and Japan), a failure to fully address crisis legacies and undertake structural reforms, and persistently low inflation (the Euro Area, and Japan) undermine medium-term growth in advanced economies (high likelihood). Resource misallocation and policy missteps, including insufficient reforms, exacerbate declining productivity growth in emerging markets (medium likelihood).	**Medium**. The output gap would widen and growth potential could be adversely affected complicating efforts to restore public debt sustainability. *Policy response*: Despite limited policy space, the government should deploy additional measures on all policy fronts (including incomes policies) in order to restore growth and inflation momentum and maintain confidence in Abenomics.
Significant China slowdown and its spillovers	**Low/Medium** Key near-term risks are disruptive drying up of liquidity for weaker borrowers in the interbank market and increasing pressure on the Renminbi, which could lead to overcorrection. Weak domestic demand further suppresses commodity prices, roils global financial markets, and reduces global growth (Likelihood: low in short-term, medium thereafter).	**High**. The recovery of exports would stall not only due to close trade links with China but also because of safe-haven appreciation causing a sharp correction in the stock market and sentiment. *Policy response*: Fiscal policy should provide a buffer against the external shock. If the authorities commit to a credible fiscal consolidation plan by passing concrete measures, the near-term fiscal withdrawal could be made more gradual. Ambitious structural reforms are important to boost domestic demand.
➢ **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 worsen public debt dynamics gradually as the average maturity is about 7.7 years. 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 needs to be strengthened, which together with additional JGB purchases by the BoJ should contain the immediate rise in bond yields.

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	**Impact and Policy Response**
➢ **A severe earthquake hits Japan**	**Medium** Earthquake leads to serious production disruptions, sharp yen appreciation and adjustments in equity markets.	**High.** Growth and confidence would decline, together with safe-haven 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 and monetary stimulus to restore growth and inflation momentum and maintain confidence.

[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.

Annex V. Assessment of Japan's External Sector

	Japan
Foreign asset and liability position and trajectory	**Background**. The net international investment position (NIIP) has increased from 55 to 61 percent of GDP between 2011 and 2016 (assets: 164 percent; liabilities: 103 percent). In the medium term it is projected to rise to about 85 percent with current account (CA) surpluses, before gradually stabilizing due to population aging. **Assessment**. Vulnerabilities are limited (equity and direct investment comprise a rising share of liabilities, now at 32 percent of total). Assets are diversified geographically and by risk classes. The NIIP generated net annual investment income of 3.4 percent of GDP in 2016.
Current account	**Background**. The CA surplus was about 2 percent of GDP in 2011 and about 1 percent in 2012-14. In 2016, the CA increased to 3.8 percent of GDP - from 3.1 percent in 2015 - due to an improvement in the goods trade balance (by about 1.2 percent of GDP). Exports of goods as a share of GDP decreased in 2016 (to 12.9 percent) but imports of goods decreased by more (to 11.8 percent of GDP) with value and volume of energy imports declining and imports of consumption goods also decreasing. The income balance continues to account for most of the current account surplus (89 percent in 2016). **Assessment**. The CA assessment uses the EBA estimates, but makes adjustments to both the cyclically-adjusted CA and the CA norm to reflect factors that are not fully captured in the EBA model. In particular: - EBA estimates the 2016 cyclically-adjusted CA at 3.1 percent of GDP which is adjusted to reflect temporary factors (elevated energy imports with the nuclear power plant shutdown, adjusted for the decline in energy prices), to compute an underlying, cyclically-adjusted CA of 3.3 percent of GDP. 1/ - EBA estimates the 2016 CA norm at 3.4 percent of GDP, with a high degree of uncertainty (the standard deviation of the estimated CA norm is 1.8 percent). Staff adjusts this estimate to account for factors not captured by EBA— anticipated effect from structural reforms and removal of domestic distortions holding back demand and imports, and structurally lower exports reflecting production offshoring—to compute a norm of 1.3-3.3 percent of GDP. 2/ The underlying CA gap in 2016 is therefore assessed to be 0.0-2.0 percent of GDP, with a midpoint estimate of 1.0, leaving it just moderately stronger than warranted by desirable policies and medium-term fundamentals. The 2017 surplus is expected to rise to about 3.9 percent of GDP under the current policy mix, due to higher goods trade balance.
Real exchange rate	**Background**. The real effective exchange rate (REER) appreciated 13.3 percent between 2015 and 2016, reflecting the safe-haven status of Yen amid heightened risk aversion, and despite the introduction of negative rates on marginal excess reserves and the adoption of QQE with yield curve control in Japan. As of May 2017, the REER has depreciated 3.5 percent relative to its 2016 average, reflecting partly the US dollar appreciation. **Assessment**. The EBA REER Level model estimates the 2016 average REER to be 11 percent weaker (EBA Index REER model: 21 percent weaker) than the level consistent with fundamentals and desirable policies, mainly from a large unexplained residual as the model does not include fiscal policy and so the estimated policy gap is close to zero. Other Japan-specific factors that affect the REER— JGB-UST spread, portfolio rebalancing, and temporary speculative short positions against the yen—are also not included. Because of these missing factors, the EBA REER model is not used in Japan's assessment. Using the staff-assessed CA gap range as reference and a semi-elasticity of 0.14 yields an indicative range of the REER gap as -14 to 0 percent (with a midpoint of 7 percent). Taking into consideration this very broad REER gap range (due to the low semi-elasticity) alongside the significant appreciation during 2016, the REER is assessed as broadly in line with medium-term fundamentals and desirable policies.
Capital and financial accounts: flows and policy measures	**Background**. Portfolio outflows continued during most of 2016 as institutional investors continued to diversify overseas and FDI outflows continued. Net long yen positions prevailed during most of 2016 but turned into net short positions in December. More recently these positions have eased, contributing to exchange rate strengthening. **Assessment**. Vulnerabilities are limited (inward investment tends to be equity-based and home bias of Japanese investors remains strong). So far there have been no large spillovers from YCC to financial conditions in other economies (interest rates, credit growth). If outflows from Japan accelerate, they could provide an offset to tighter domestic financial conditions in the region due to normalization of policy rates in other advanced economies.
FX intervention and reserves level	**Background**. Reserves are about 24 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 in 2011) to reduce short-term volatility and disorderly exchange rate movements.
Technical Background Notes	1/ Last year, staff adjusted the EBA estimate of Japan's cyclically-adjusted CA to account for the reliance on energy imports after the 2011 earthquake that temporarily reduced the CA. This year staff reduced this adjustment to reflect the decline in energy prices. 2/ Japan's norm is positive because of high corporate saving in excess of domestic investment opportunities, low residential investment, and a sizable income account owing to the large NFA position. Adjustments to the EBA CA norm reflect the need to capture the anticipated effect from structural reforms and removal of domestic distortions (not captured by the EBA model) and to account for structurally lower exports due to production offshoring, although this latter adjustment has been reduced to reflect recent trends, including the leveling off of production offshoring.

Overall Assessment
Overall Assessment: *The 2016 external position was moderately stronger than the level consistent with medium-term fundamentals and desirable policies.* Japan's current account has strengthened somewhat relative to 2015, reflecting the reduction in its energy import bill and some decline in consumption goods imports. On the other hand, the REER appreciated substantially between 2015 and 2016 moving it to a level consistent with medium-term fundamentals. A continued accommodative stance by the BoJ 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 deliver an external position consistent with medium-term fundamentals. **Potential Policy Responses** A more forceful and coordinated policy package is needed to raise growth and inflation. This includes measures to boost wages and labor supply, reduce labor market duality, enhance risk capital provision, and accelerate agricultural and services sector deregulation. Fiscal consolidation should proceed in a gradual manner anchored by a concrete plan to achieve the medium-term target, and its conduct attuned to economic conditions and prospects. These 'desirable' policies are expected to support growth, imports and prices, and help bring back the external position in line with fundamentals over the medium term.

Annex VI. Debt Sustainability Analysis

1. Japan's public debt is unsustainable under current policies, amounting to 239 percent of GDP in 2016.[1] The debt-to-GDP ratio is projected to decrease slightly during the medium term (up to 2022) due to an improving primary balance and a negative interest-growth differential. However, the complementary analysis up to 2030 (Figure 7, middle right chart) shows that the debt-to-GDP ratio will start increase from 2023 and reach around 250 percent of GDP in 2030 as interest-growth differential is assumed to gradually revert to positive territory. While all debt profile indicators are below early warning benchmarks, Japan's extremely high financing needs point to vulnerabilities to various shocks and changes in market perceptions especially over the medium term. Moreover, a larger-than-expected increase in public health spending beyond the projection period is an important downside risk.

Baseline and Realism of Projections

2. **Assumptions.** The analysis is based on the following key macroeconomic projections and policy assumptions:

- Potential growth is projected to be around 0.5 percent over the projection period. Actual growth will likely be somewhat volatile due in part to fiscal policy.
- Fiscal projections incorporate the planned 2 percentage point consumption tax rate hike in October 2019, which will reduce the primary deficit to around 2 percent of GDP by 2022.
- Monetary policy is assumed to remain accommodative during the entire projection period, with CPI inflation gradually rising to around 1 percent over the medium term. Interest rate projections are in line with market expectations.
- The interest-growth differential is projected to remain negative, as effective interest rates will remain low – helped by the accommodative monetary stance and extended maturity of government bonds. The baseline does not assume an increase in risk premium.
- Beyond the projection period (for the complementary analysis up to 2030), potential growth is projected to trend down to around 0.1 percent by 2030 reflecting demographic headwinds. The interest-growth differential is assumed to gradually revert to positive territory and toward the historical average of 1 percent (around 0.5 percent in 2030).

3. **Financing Needs.** Japan's gross financing needs (defined as the sum of fiscal deficit and maturing debt) are estimated to be around 54 percent of GDP in 2016 – the highest among advanced economies. Gross financing needs will remain exceptionally large at around 50 percent of GDP while showing a moderate decline overtime due to the improvement of the primary balance and extended maturity of government bonds. The maturity structure is projected by building on the FY2017 debt management strategy, which intends to lengthen the average maturity of JGBs.

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[1] The public debt has been reduced by more than 10 percent of GDP compared the previous Staff Report owing to a comprehensive revision of national accounts, which among other things, increased the level of nominal GDP.

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 US Treasuries. The external financing requirement stood at 8 percent of GDP in 2016, well below the early warning threshold. This reflects the fact that foreign holdings of JGBs are relatively low at about 10 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 amounting to about 120 percent of GDP.[2] It should be noted, however, that not all the financial assets are available for debt repayment or easy to liquidate. They include, for example, assets for future pension payments. 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 33 percent compared to the historical experience for high-debt market access countries. The CAPB level is in the lowest quartile. This baseline assumes fiscal contraction of around 0.6 percent of GDP in 2018 due to the fading of the fiscal stimulus. However, as discussed in the main text, staff sees a need for supportive fiscal stance to maintain growth and inflation momentum. In addition, the past record of yearly supplementary budgets indicates the risk of primary balance shocks.

Shocks and Stress Tests

- *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. For example, under the worst quartile case, the debt-to-GDP ratio could reach around 260 percent of GDP in 2022, more than 25 percentage points higher than in the baseline. In addition, when the possibility of a positive primary balance shock is ruled out, the debt-to-GDP ratio could be even higher by about 4 percent of GDP in 2022.

- *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 primary balance, compared to the baseline. It is also assumed that additional borrowing leads to an increase in interest rate of 25 basis points per 1 percent of GDP worsening of the deficit. The gross debt-to-GDP ratio will be marginally higher by around 3 percent of GDP in 2022 than the baseline.

[2] Major items include financial assets held by the Social Security Funds (about 44 percent of GDP), foreign currency reserve (about 27 percent of GDP), and equity and investment fund shares held by the central and local governments (about 29 percent of GDP), as of end-2015.

- *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 a half of the 10-year historical standard deviation of changes in growth for 2 consecutive years starting in 2018. 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 248 percent of GDP at the peak, around 9 percentage points higher relative to the baseline.

- *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 medium-term tail risk. A shock based on the historical maximum real interest rate is assumed to occur in 2018 and remain for the rest of the period. Although increasing only gradually due to the weighted average of JGB's maturity at around 7.7 years,[3] the effective interest rate is higher by more than 1 percentage point in 2022 than the baseline, with the debt ratio higher by around 8 percentage points. The difference compared to the baseline does not appear large, but the impact will accelerate as the interest rate hike becomes fully reflected. In addition, such a shock could have a material effect on the financial sector with possible knock-on effects on the debt ratio and could lead to distress in the financial sector (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 3.6 percent of banking sector assets (approximately 10 percent of regional banks assets) will increase government spending by around 5.8 percent of GDP. The interest rate is assumed to rise by 25bps 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 264 percent of GDP in 2019, about 26 percentage points higher than in the baseline.

7. Longer-term Projections and Risks. Despite the relatively stable debt trajectory over the projection period, the debt-to-GDP ratios are projected to start increasing after 2023 and reach around 250 percent of GDP by 2030, reflecting a gradual rise in interest-growth differential. As one the most important risk, the current favorable interest-growth differential largely hinges on domestic investors' home bias with high domestic savings as well as large JGB purchases by the BoJ, and will be tested over time in the absence of a credible medium-term fiscal consolidation plan.

8. Another important downside risk is a larger increase in public health spending than assumed in the baseline (See Annex II, and Nozaki and others (2014)). Maintaining the same macroeconomic assumptions as in the baseline, this would imply a debt ratio of 255 percent of GDP by 2030.

[3] Sources: Bloomberg L.P. and IMF staff calculations.

Japan Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

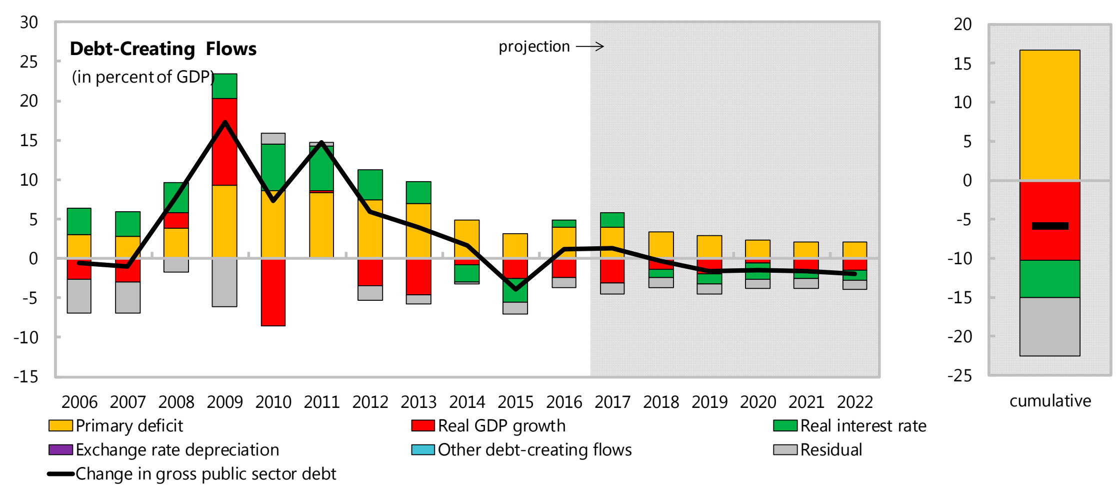
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2006-2014 [2/]	2015	2016	2017	2018	2019	2020	2021	2022
Nominal gross public debt	214.8	238.2	239.4	240.7	240.3	238.7	237.1	235.5	233.6
Public gross financing needs		57.5	54.5	50.2	50.1	49.5	48.7	46.7	46.6
Net public debt	100.0	118.5	119.9	121.3	120.9	119.3	117.7	116.1	114.2
Real GDP growth (in percent)	0.5	1.1	1.0	1.3	0.6	0.8	0.2	0.7	0.6
Inflation (GDP deflator, in percent)	-0.7	2.1	0.3	-0.1	0.9	1.1	1.4	0.9	1.1
Nominal GDP growth (in percent)	-0.2	3.2	1.3	1.2	1.5	1.9	1.6	1.6	1.7
Effective interest rate (in percent) [4/]	0.9	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.5

As of June 20, 2017		
Sovereign Spreads		
EMBIG (bp) 3/		-209
5Y CDS (bp)		26
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+u	A+u
Fitch	A	A

Contribution to Changes in Public Debt

	Actual			Projections							
	2006-2014	2015	2016	2017	2018	2019	2020	2021	2022	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	6.4	-3.9	1.2	1.3	-0.4	-1.6	-1.5	-1.6	-1.9	-5.8	
Identified debt-creating flows	8.3	-2.5	2.5	2.6	0.9	-0.4	-0.3	-0.4	-0.7	1.7	
Primary deficit	6.1	3.1	4.0	4.0	3.3	2.9	2.3	2.1	2.1	16.7	-2.8
Primary (noninterest) revenue and gra	28.8	31.7	31.3	31.3	31.2	31.2	31.9	31.9	31.9	189.4	
Primary (noninterest) expenditure	34.9	34.8	35.2	35.3	34.5	34.1	34.2	34.1	34.0	206.1	
Automatic debt dynamics [5/]	2.2	-5.6	-1.4	-1.4	-2.4	-3.3	-2.6	-2.5	-2.8	-15.0	
Interest rate/growth differential [6/]	2.2	-5.6	-1.4	-1.4	-2.4	-3.3	-2.6	-2.5	-2.8	-15.0	
Of which: real interest rate	3.3	-3.1	0.9	1.8	-1.0	-1.3	-2.1	-0.8	-1.3	-4.7	
Of which: real GDP growth	-1.1	-2.5	-2.4	-3.1	-1.4	-1.9	-0.5	-1.7	-1.5	-10.2	
Exchange rate depreciation [7/]	0.0	0.0	0.0	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization/Drawdown of Deposits	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	
Other debt-creating flows (specify) (-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	-2.0	-1.5	-1.3	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-7.5	



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).

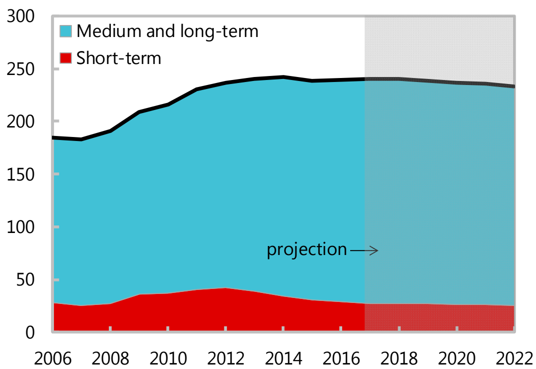
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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.

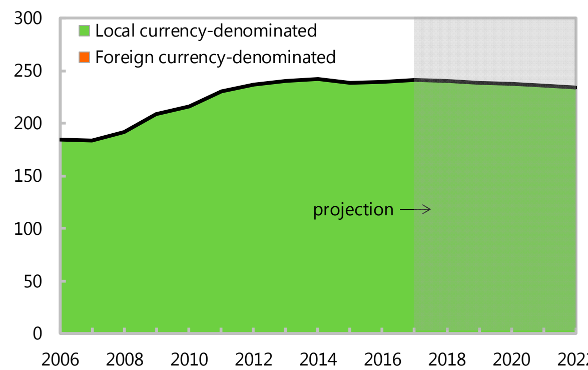
Japan Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



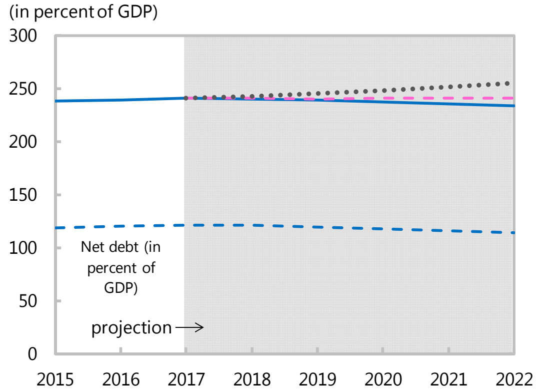
By Currency
(in percent of GDP)



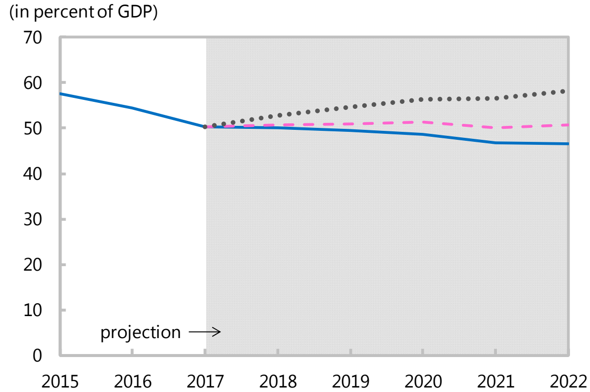
Alternative Scenarios

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)

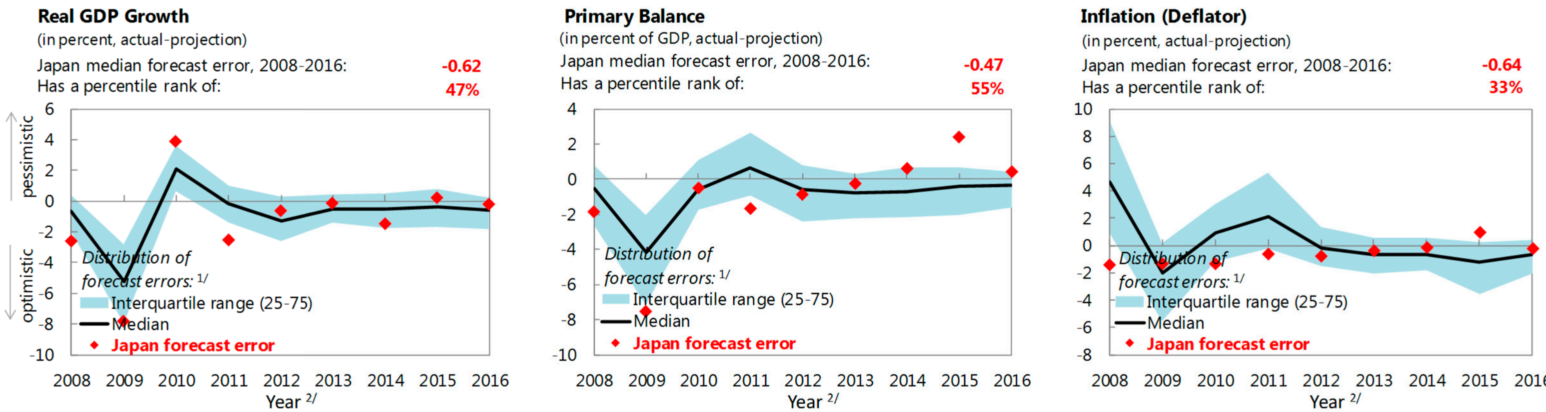
Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	0.6	0.8	0.2	0.7	0.6
Inflation	-0.1	0.9	1.1	1.4	0.9	1.1
Primary Balance	-4.0	-3.3	-2.9	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	0.5	0.5	0.5	0.5
Constant Primary Balance Scenario						
Real GDP growth	1.3	0.6	0.8	0.2	0.7	0.6
Inflation	-0.1	0.9	1.1	1.4	0.9	1.1
Primary Balance	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0
Effective interest rate	0.6	0.5	0.5	0.5	0.5	0.5

Historical Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	0.5	0.5	0.5	0.5	0.5
Inflation	-0.1	0.9	1.1	1.4	0.9	1.1
Primary Balance	-4.0	-5.9	-5.9	-5.9	-5.9	-5.9
Effective interest rate	0.6	0.5	0.7	0.9	1.0	1.1

Source: IMF staff.

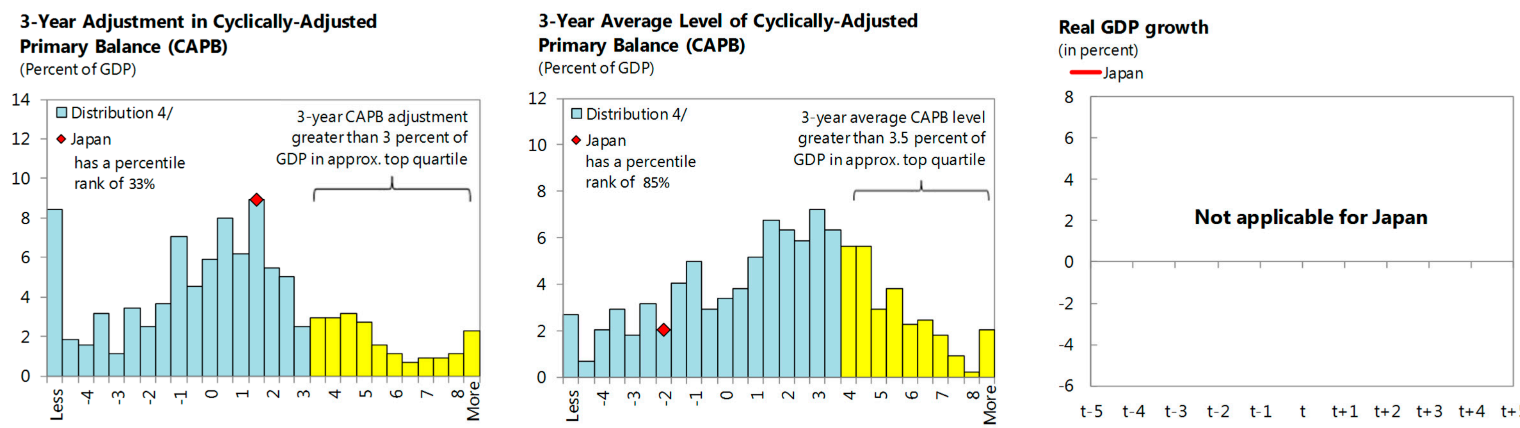
Japan Public DSA - Realism of Baseline Assumptions

Forecast Track Record, versus all countries



Assessing the Realism of Projected Fiscal Adjustment

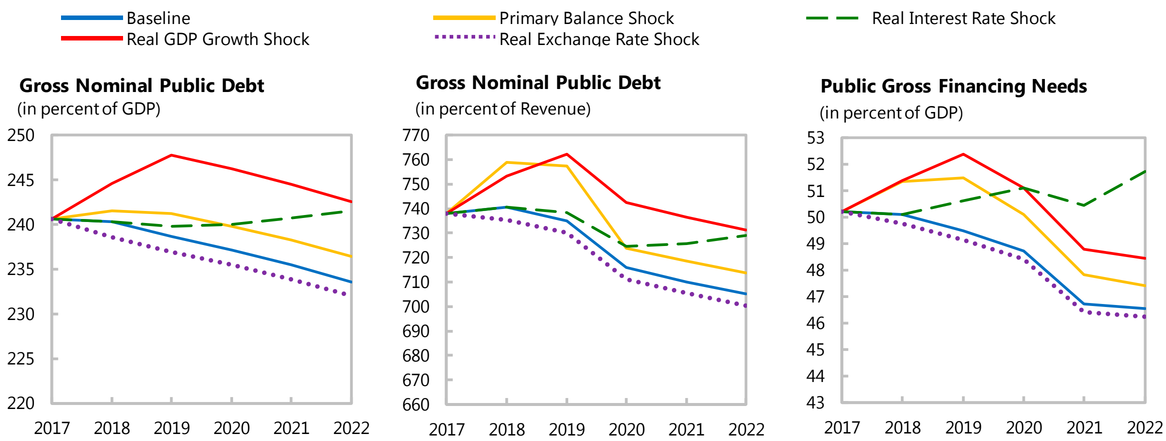
Boom-Bust Analysis 3/



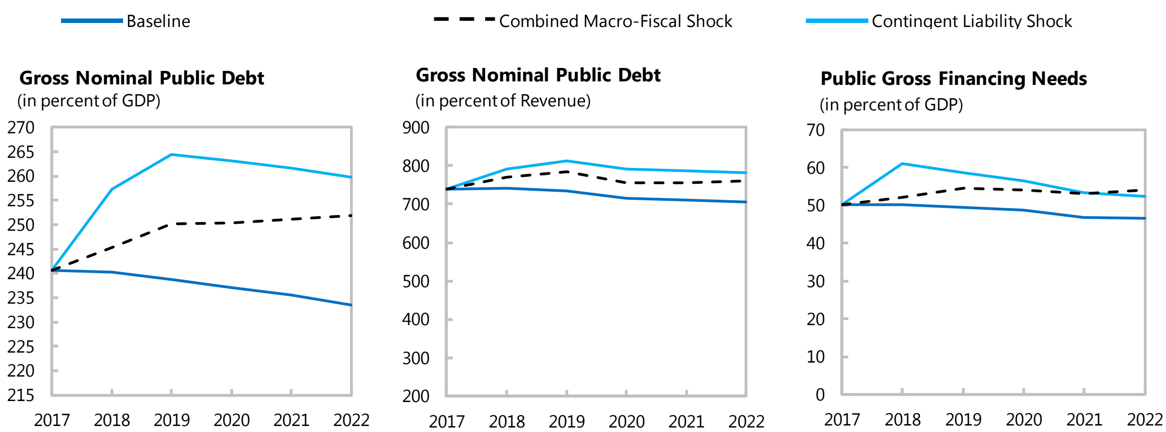
Source : IMF Staff.
1/ Plotted distribution includes all countries, percentile rank refers to all countries.
2/ Projections made in the spring WEO vintage of the preceding year.
3/ Not applicable for Japan, as it meets neither the positive output gap criterion nor the private credit growth criterion.
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.

Japan Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

Primary Balance Shock	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	0.6	0.8	0.2	0.7	0.6
Inflation	-0.1	0.9	1.1	1.4	0.9	1.1
Primary balance	-4.0	-4.6	-4.1	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	0.6	0.6	0.6	0.6
Real Interest Rate Shock						
Real GDP growth	1.3	0.6	0.8	0.2	0.7	0.6
Inflation	-0.1	0.9	1.1	1.4	0.9	1.1
Primary balance	-4.0	-3.3	-2.9	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	1.0	1.3	1.5	1.7
Combined Shock						
Real GDP growth	1.3	-0.7	-0.4	0.2	0.7	0.6
Inflation	-0.1	0.6	0.8	1.4	0.9	1.1
Primary balance	-4.0	-4.6	-4.6	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	1.0	1.3	1.5	1.7

Real GDP Growth Shock	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	-0.7	-0.4	0.2	0.7	0.6
Inflation	-0.1	0.6	0.8	1.4	0.9	1.1
Primary balance	-4.0	-3.9	-4.0	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	0.5	0.6	0.5	0.6
Real Exchange Rate Shock						
Real GDP growth	1.3	0.6	0.8	0.2	0.7	0.6
Inflation	-0.1	1.7	1.1	1.4	0.9	1.1
Primary balance	-4.0	-3.3	-2.9	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	0.5	0.5	0.5	0.5
Contingent Liability Shock						
Real GDP growth	1.3	-1.9	-1.7	0.2	0.7	0.6
Inflation	-0.1	0.3	0.4	1.4	0.9	1.1
Primary balance	-4.0	-12.7	-2.9	-2.3	-2.1	-2.1
Effective interest rate	0.6	0.5	0.9	0.7	0.7	0.7

Source: IMF staff.

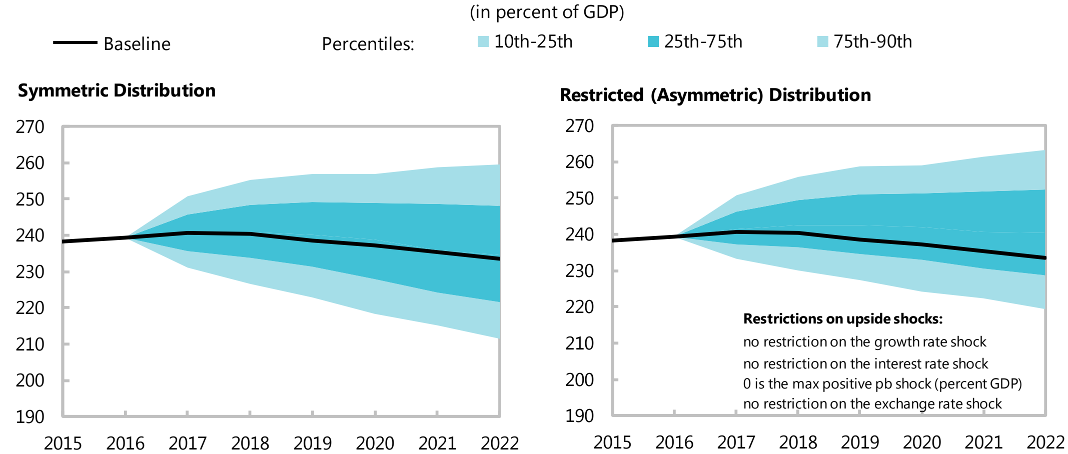
Japan Public DSA Risk Assessment

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

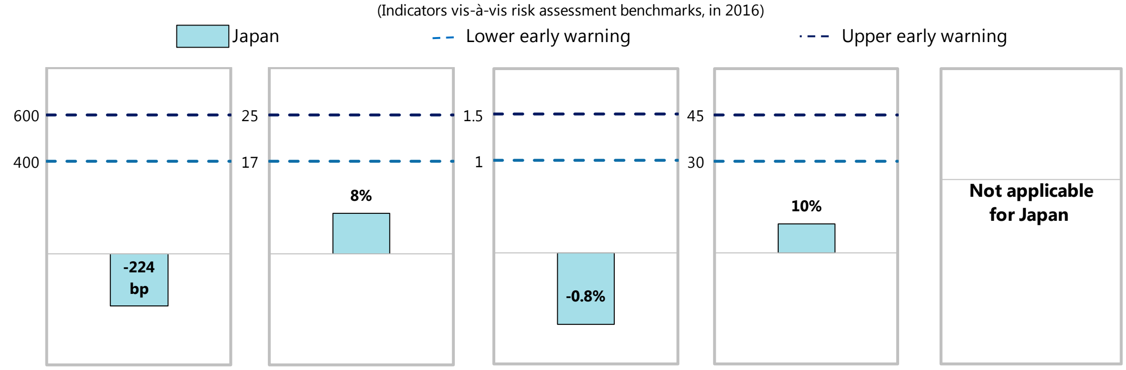
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2016)



Bond spread (in basis points) 4/ | External Financing Requirement (in percent of GDP) 5/ | Annual Change in Short-Term Public Debt (in percent of total) | Public Debt Held by Non-Residents (in percent of total) | Public Debt in Foreign Currency (in percent of total)

Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 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, 22-Mar-17 through 20-Jun-17.

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 VII. Main Recommendations of the 2016 Article IV Consultation

Fund Recommendations	Policy Actions
Policy Coordination:	
Coordinated fiscal and monetary demand support will be crucial to facilitate the pass-through of higher wages to prices and the implementation of structural reforms. Fiscal and monetary actions should be closely coordinated in terms of timing, mix, and level of stimulus.	The BoJ has implemented its "QQE and Yield Curve control" program which stabilizes the 10-year JGB yield at around zero. At the same a 1.5 percent of GDP fiscal stimulus package was announced in August 2016. Moreover, the government is trying address wage gaps between regular and non-regular workers under the Work Style Reform (WSR), and has adjusted income policies by increasing the minimum wage by 3 percent in FY2017 and enhancing tax incentives for wage increases.
Fiscal Policy:	
A credible fiscal consolidation course needs to be charted. • The government could commit to a gradual increase in the consumption tax towards at least 15 percent, e.g., in increments of 0.5–1 percentage points over regular intervals. The single rate structure should be maintained as much as possible and concerns for the tax impact on low income households addressed by targeted cash transfers. • A steady fiscal consolidation by 0.5 percent of GDP per year through 2030 would be sufficient to put the public debt-to-GDP ratio on a downward path. • Broadening the tax base, containing nominal social security spending growth to 0.5 percent and implementing some other expenditure reforms would balance the adjustment between revenue and expenditure side.	• The authorities remain committed to achieving a primary surplus by FY2020, although concrete measures haven't been identified. • The authorities remain committed to implementing the 2019 consumption tax hike. • In line with the authorities' medium-term fiscal consolidation plan, the growth of social security expenditure has been contained by JPY 100 billion in FY2017 initial budget. However, the stop-go nature of yearly stimulus packages makes it difficult to gauge the actual fiscal stance.
The fiscal framework should be strengthened to enhance policy credibility. This requires adopting rules to curb expenditures, limits on the use of supplementary budgets, and publication of more independent assessments of the outlook and budget projections. To this end, an independent fiscal institution could play an important role.	No significant progress has been made.
Monetary Policy:	
The BoJ can improve monetary policy credibility and reduce policy uncertainty by publishing the staff forecast	The BoJ has currently no plans to publish staff forecasts of inflation.
The BoJ could provide stronger forward guidance, including by communicating willingness to overshoot the inflation target and maintaining a large balance sheet, even once objectives are achieved, to strengthen its commitment and facilitate portfolio rebalancing.	In September 2016, the BoJ implemented an inflation overshooting commitment. The Bank committed itself to expanding the monetary base until the year-on-year rate of increase in the observed consumer price index exceeds the price stability target of 2 percent and stays above the target in a stable manner
BoJ's pre-specified time horizon for meeting its inflation target has merit during the transition phase to higher inflation, its function as a commitment mechanism should be gradually phased out as inflation expectations become better anchored	The BoJ has moved away from its previous language of achieving the price stability target of 2 percent "at the earliest possible time". The new language states that "The Bank will continue with "Quantitative and Qualitative Monetary Easing (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.
Income Policies	
The government could replicate the "comply or explain" approach adopted under the corporate governance reform to ensure that profitable companies raise wages by at least three percent (the inflation target plus average productivity growth) and back this up by stronger tax incentives or penalties as a last resort, given that	The government has adjusted income policies by increasing the minimum wage by 3 percent in FY2017 and enhancing tax incentives for wage increases.

Fund Recommendations	Policy Actions
the latter would be contractionary if they failed to trigger higher wages. In addition, the government can commit to raising administratively controlled wages annually in line with the inflation target and ensure similar policies are adopted at the prefectural level. These measures can be supported by calling for supplementary wage rounds in addition to the "Shunto" and conversion of bonuses to base pay	
Financial Sector Policy:	
The financial sector's role in promoting innovation and new growth areas could be enhanced by encouraging securitization and private-equity funds; reducing government guarantees to SME lending to promote restructuring of viable firms and exit of nonviable ones; and fostering business succession.	Bills passed by the Diet in June 2017 to reform the SME Credit Guarantee Scheme, including a reduction in the coverage from 100 to 80 percent in the largest 100 percent guarantee scheme (safety net program 5).
Further strengthen monitoring to enhance JGB liquidity by regularly assessing the impact of developments in inventories of primary dealers on their market-making activities.	The BoJ's bond market survey monitors closely the functioning of the bond market. The responsibility and entitlement of primary dealers were revised by the MoF in response to the Bank of Tokyo-Mitsubishi UFJ (BTMU)'s withdrawal of its primary dealership and the demand-supply balance in the issuance market, respectively.
Ensure a sufficiently high liquidity coverage for significant foreign currencies if FX loans keep growing more rapidly than corresponding FX deposits	The FSA enhanced supervision on FX liquidity risk, but has not introduced any requirement on FX liquidity buffers.
Reform the regulation of regional banks, including the required level of capital and the calculation of risk-weighted assets while enhancing some elements of the core capital. Consolidation could help improve profitability, but has been slow	The regulatory reform of domestic banks is in progress.
FSA and BoJ could continue to intensify their cooperation via enhanced sharing of systemic risk assessments and findings from supervisory activities; and ensure that the respective roles of the BoJ and FSA in managing the relevant tools remain clear	The FSA is the ultimate agency responsible for macroprudential policy making. However, the sharing of systemic risk assessments and findings from supervisory activities remains limited.
Growth Strategy	
Accelerate the "equal pay for equal work" program. Promote "intermediate" contracts that balance job security and wage increases, including by clarifying the legal framework. Provide subsidies for converting non-regular workers to "intermediate" contracts.	Work Style Reform (WSR) action plan published in March 2017, including the "equal pay for equal work" initiative and subsidies/support to firms converting non-regular workers to regular positions. Legislation to be submitted to the Diet promptly.
Eliminate disincentives to full-time or regular work due to the tax and social security system such as the spousal deduction and allowance, as well as raising the availability of child-care facilities through deregulation.	The government raised the threshold for spousal deduction from JPY 1.03 million to JPY 1.5 million, effective January 2018.
Boost the labor supply of women and older workers and allowing for more foreign labor.	WSR action plan includes measures to limit overtime and increase the use of foreign human resources (especially high-skilled), with legislation to be submitted to the Diet promptly.
Further corporate governance reform such as more ambitious requirements for outside directors, greater transparency of beneficial ownership and explicit limits on cross-shareholdings.	Since the corporate governance code introduction in 2015, the share of companies with independent directors has increased and cross-shareholdings have decreased, with revisions to the Stewardship Code completed in May 2017.
Promote trade, FDI, and technology sharing by supporting the full implementation and possible expansion of TPP as well as proceeding with other trade and bilateral investment agreements.	TPP, the 12-nation free trade plan, was ratified by Japan in 2017 even though the US abandoned the deal earlier in the year. Japan continues to push for TPP, TPP-11, and other trade agreements including with the EU.
Reducing barriers to entry to retail trade, professional services, and certain segments of network industries.	Deregulation efforts have taken place including liberalization of the retail gas sector in April 2017 (with plans to unbundle gas distribution from manufacturing and retail by 2022).

INTERNATIONAL MONETARY FUND

JAPAN

July 12, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

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

CONTENTS

FUND RELATIONS

(As of May 31, 2017)

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)	27,224.69	88.33
Reserve Tranche Position	3,596.10	11.67
Lending to the Fund		
New Arrangements to Borrow	5,082.51	

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	12,284.97	100.00
Holdings	13,518.98	110.04

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			
	2017	2018	2019	2020	2021
Principal					
Charges/Interest		**0.36**	**0.36**	**0.36**	**0.36**
Total		**0.36**	**0.36**	**0.36**	**0.36**

[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. Since the 2016 Article IV consultation, Japan has not had foreign exchange intervention. 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 2016 Article IV consultation discussions were held during June 6–20, 2016; the Executive Board discussed the Staff Report (IMF Country Report No. 16/267) and concluded the consultation on July 29, 2016. The concluding statement, staff report, staff supplement, selected issues paper, and PIN were all published.

STATISTICAL ISSUES

Economic and financial data provided to the Fund are considered adequate for surveillance purposes. Japan subscribes to the Special Data Dissemination Standard (SDDS) and meets the SDDS specifications for the coverage, periodicity, and timeliness of data. The Japanese authorities hosted a data module mission for a Report on the Observance of Standards and Codes (data ROSC) in September 12–28, 2005. The Report on Observance of Standards and Codes - Data Module, Response by the Authorities, and Detailed Assessments Using the Data Quality Assessment Framework (DQAF) were published March 17, 2006 and are available at http://www.imf.org/external/pubs/ft/scr/2006/cr06115.pdf.

Japan: Table of Common Indicators Required for Surveillance (as of June 20, 2017)

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]	Memo Items: Data Quality – Methodological soundness[7]	Memo Items: Data Quality – Accuracy and reliability[8]
Exchange Rates	June 2017	June 2017	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	6/10/2017	6/13/2017	Every 10 days	Every 10 days	Every 10 days		
Reserve/Base Money	May 2017	June 2017	M	M	M		
Broad Money	May 2017	June 2017	M	M	M		
International Investment Position	2017Q1	June 2017	Q	Q	Q	LO, LO, LO, LO	O, O, O, O, O
Central Bank Balance Sheet	6/10/2017	6/13/2017	Every 10 days	Every 10 days	Every 10 days		
Consolidated Balance Sheet of the Banking System	April 2017	June 2017	M	M	M		
Interest Rates[2]	June 2017	June 2017	D	D	D		
Consumer Price Index	April 2017	May 2017	M	M	M	O, LO, O, O	O, O, LO, O, O
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2015	January 2017	A	A	A	O, LNO, O, O	LO, O, O, O, LO
Revenue, Expenditure, Balance and Composition of Financing[3] – Central Government	2015	January 2017	A	A	A		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2017Q1	May 2017	Q	Q	Q		
External Current Account Balance	April 2017	June 2017	M	M	M		
Exports and Imports of Goods and Services	April 2017	June 2017	M	M	M	O, O, LO, O	LO, O, O, O, O
GDP/GNP	2017Q1	June 2017	Q	Q	Q	O, O, O, O,	LO, LO, O, O, LNO
Gross External Debt	2017Q1	June 2017	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).
[7] Reflects the assessment provided in the data ROSC or the Substantive Update (published on May 17, 2006, and based on the findings of the mission that took place during September 2005) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).
[8] Same as footnote 7, except referring to international standards concerning (respectively) source data and its assessment, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

Statement by Masaaki Kaizuka, Executive Director for Japan;
Yoshihito Saito, Alternate Executive Director;
and Masahiko Takeuchi, Advisor to Executive Director
July 26, 2017

1. We highly appreciate a set of excellent papers, including Selected Issues, compiled through fruitful discussions between staff and our authorities during the Article IV Consultation this year. In addition, we are grateful for valuable discussions with the FSAP team over a year.

2. **The current favorable economic conditions in Japan, resulting from Abenomics, provides an opportunity to accelerate necessary reforms to lift potential growth and reduce medium- and long-term risks, including an aging problem.** Thus, we totally agree with a lot of suggestions by staff, such as structural reforms for boosting wages, a well-balanced policy package taking into consideration trade-offs and synergies between monetary policy, fiscal policy, incomes policy and structural reforms, and fundamental reforms to achieve more efficient social security spending. We welcome staff's further suggestions on their fronts.

3. However, we have serious reservations on the external sector assessment, including the methodology and its application to Japan, considering the market-sensitive nature of the exercise. We urge staff to improve the methodology and way of communication. In what follows, we will explain our authorities' assessment of Japan's economic developments as well as their views and commitments in terms of macroeconomic policies and structural reforms.

Current Developments and Outlook for the Japanese Economy

4. **Japan's economic fundamentals are solid.** Real GDP has been growing above the country's potential growth for five consecutive quarters (quarter to quarter). Business investment has recorded positive growth for two consecutive quarters. The job applicant ratios have risen above one in all the prefectures and are higher than those in the 1980's bubble years. Unemployment rate reaches a historically low level of 3.1 percent. Wage growth rates for the last four consecutive years are the highest in this century, as staff points out the importance of boosting wages. Thus, Abenomics has improved the economic conditions, and the current economic momentum in Japan would be a strong tailwind which could accelerate further necessary reforms to lift potential growth and reduce medium- and long-term risks, including those of the aging society.

Policy package

5. **We share the staff's view on the importance of a comprehensive policy package exploiting complementarities among monetary policy, fiscal policy, structural reforms, and financial sector policies.** Our authorities have conducted Abenomics with its "three arrows" composed of monetary policy, fiscal policy, and structural reforms to boost inflation and lift potential growth. However, as staff mentioned, Japan faces significant medium- and long-term challenges, such as demographic headwinds and an unprecedented high level of public debt, and it would apparently take time to address these challenges. Against this backdrop, our authorities will ensure that the positive economic cycle created by Abenomics does not end up being only a temporary phenomenon but rather turn to be a virtuous cycle of growth and distribution, where wealth generated by growth is widely shared by the citizens.

Structural Reforms

6. **The progress made in structural reforms, including those to boost wages and lift potential growth, has been significant.** As mentioned in its concluding statement of the 2017 Article IV mission, the Abenomics has proven successful in pushing forward with structural reforms, increasing corporate profits, boosting employment and female labor force participation, promoting trade and investment, and improving corporate governance since its inception in 2012. However, we have recognized the need, as staff pointed out, to continue labor market reforms to increase productivity and boost wages, followed closely by reforms to increase private investment and long-term growth as we face the abovementioned structural challenges, including aging problem. To this end, as shown in “Basic Policies 2017” (a package of policies decided by the cabinet in June), we will promote “Work Style Reform” and enhance investment in human capital through improving quality of education, in order to realize a sustained and stable wage growth and raise potential growth. In particular, “Work Style Reform” is a priority in our structural reform agenda, and we published "The Action Plan for the Realization of Work Style Reform” in March 2017. Based on the Action Plan, we continue pushing structural reforms to facilitate female and older people’s labor force participation and to raise productivity. These reforms will lead to sustainable and inclusive growth, which is a common current policy agenda globally shared.

7. **We truly welcome staff’s valuable suggestions regarding labor market reforms.** While wage growth rates have been setting record highs for the last four consecutive years, it is important to realize a durable wage growth. Until now, our authorities raised the minimum wage by 3 percent and enhanced tax incentives for wage increases. Moreover, based on the “The Action Plan for the Realization of Work Style Reform”, we have conducted other policies to boost wages like “equal pay for equal work”. These policies are in line with the staff’s suggestions made since last year’s Article IV discussion. Staff also provides useful suggestions this time, such as the clarification for legal frameworks for “intermediate” contracts and the introduction of job descriptions. Also, staff points out that legislation frameworks are not enough for realizing “Work Style Reform”. In this regard, we would like to underscore that our authorities plan to submit new legislation based on the Action Plan to the Diet promptly. Overall, we consider it particularly important to realize the virtuous cycle of steadily raising wages, boosting inflation, and increasing consumption. We expect that staff’s further suggestions would advance discussions, leading to the promotion of several policies.

8. **We share the staff’s view that structural reforms to increase business investment and productivity are necessary.** We thank staff for their many valuable suggestions regarding this point, such as the deregulation of professional services and corporate governance reforms. In order to realize "Increasing productivity through investment in human resources", our authorities aims to encourage investment and innovation as well as promoting “Work Style Reform”. **“**The Action Plan for the Realization of Work Style Reform”, which includes such policies as putting a cap of overtime and improving education and training environment, is a key policy agenda for our authorities and will be steadily implemented to increase productivity. Also, for promoting innovation, we will also take advantage of open IT infrastructure, such as cloud computing, to accelerate the development of artificial intelligence, Internet of Things, and robotics. In addition, we are going to push forward corporate governance reforms for fostering long-term business investment and several deregulations to improve business environment.

Fiscal policy

9. **Under the principle of "no fiscal consolidation without economic revitalization", we will push forward three reforms, which are: overcoming deflation/economic revitalization, expenditure reforms, and revenue reforms.** Our authorities aims to achieve a primary surplus by FY 2020, and at the same time steadily reduce the public debt to GDP ratio. The importance of the "fiscal consolidation targets" set in the "Plan to Advance Economic and Fiscal Revitalization" has not been changed for implementing the reforms. For expenditure reforms, we have made our expenditure, especially social security expenditure, more efficient. For revenue reforms, as the structures of the economy and society have been drastically changing, our authorities will continue to proceed with a comprehensive overhaul of the entire tax system. In FY 2018, based on the "Plan to Advance Economic and Fiscal Revitalization," our authorities will assess progress toward the targets, and will consider additional expenditure and revenue reforms if required. Furthermore, we also remain committed to implementing the 2019 consumption tax hike to strengthen the foundation of social security and ensure trust in Japan from overseas and markets. To achieve this objective, our authorities are committed to create an environment conducive to the implementation of the tax hike by firmly realizing a virtuous cycle.

10. **We thank staff's valuable analysis of Japan's social security systems.** Our authorities have implemented several policies, bearing in mind that social security reform is a central topic in terms of addressing income inequality and implementing fiscal consolidation. Demographics in many advanced economies and a number of developing economies tells that social security reform is a globally common agenda now and in the future. We expect staff to do further work on social security issues.

Monetary policy

11. With a view to achieving the price stability target of 2 percent at the earliest possible time, the Bank of Japan (BOJ) introduced "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control (YCC)" in September 2016. This policy framework consists of two major components: the first is "YCC" in which the BOJ controls short-term and long-term interest rates; and the second is an "inflation-overshooting commitment" in which the BOJ commits itself to expanding the monetary base. **The BOJ will continue with "QQE with YCC," 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 will make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions, with a view to maintaining the momentum toward achieving the price stability target. This policy is conformable to staff's suggestion that "monetary policy should maintain a sustained accommodative stance".

Financial Sector

12. We welcome staff's view under this year's FSAP that the Japanese financial system is stable and broadly sound. We also consider that the IMF is rightly focusing its analysis on the possible effects on the Japanese financial system from the low growth and low interest environments and the headwinds which come from demographic changes. We will continue enhancing our supervision to maintain the soundness of our financial system under these environments taking into account staff's recommendations.

13. We agree that financial institutions need to review their business models based on the current environments. Dramatic changes in the environment financial institutions operate in - such as globally persistent low and flat yield curve and technological innovations – are rendering balance-sheet size oriented business models unsustainable. Each financial institution needs to review the sustainability of its current business model. Sustainability of business models may be enhanced by creating shared value with customers. If financial institutions provide high-quality financial services for the best interest of customers, that will help enhance the productivity of the corporate sector and contribute to steady asset accumulation of the household sector, and the resultant stronger customer base will secure stable revenue flows. Our authorities will enhance the supervision of financial institutions in a forward-looking manner taking into account individual financial institution's condition, and continue in-depth dialogue with financial institutions to encourage them to address the emerging challenges in an innovative way.

Trade Policy

14. We consider it important to promote free trade and keep free, fair and rules-based markets. Keeping and improving the trade system based on free and fair rules are the source of growth for the world economy. As Japan achieved rapid economic growth through free trade after WWII, we are committed to taking a leadership role as a flag-bearer of free and fair rules of trade and investment. Promoting regional trade agreements is also important. Japan and the EU have reached an agreement in principle on their bilateral Economic Partnership Agreement (EPA). The Japan-EU EPA is to create a new economic zone based on free and fair rules, which is the largest accounting for about 28 percent of the world GDP and 37 percent of the world trade. We will make every effort to reach a final agreement as soon as possible. Also, we will expand high-level rules by pushing forward the TPP, RCEP, other trade partnerships like Japan-China-Korea FTA, and investment partnerships.

External Sector Assessment

15. We generally concur with the fact that excess current account imbalances could be potential risks which countries need to address together. However, the external sector should be analyzed carefully enough since these analyses could be market-sensitive. In this light, **although we commend staff's efforts to have the candid dialogue between staff and our authorities during this year's Article IV Consultation, we still have serious reservations about the external sector assessment, including the methodology and its application to Japan.**

Staff's adjustments to the results of the EBA models based on judgment

16. **Our authorities disagree with the three adjustors that staff used to modify the EBA model results, as the theoretical underpinnings and quantification are not convincing and evenhandedness in the application of adjustors across countries are not assured.** It is regrettable that convincing justifications for these adjustors have not been provided to the end by staff.

- In particular, we would like to emphasize that as a result of staff's adjustments, the sign of the current account gap, which is estimated by the EBA model to be negative, was turned to positive. More specifically, the EBA model estimate implied a gap of -0.3 percent of GDP with the cyclically-adjusted current account at 3.1 percent and the current account norm at 3.4 percent, which means Japan's external position is slightly weak. However, staff resorted to judgment by applying the three large, unconvincing adjustors, i.e., (1) domestic distortions holding back demand and imports, (2) structurally lower exports reflecting production offshoring, and (3) elevated energy imports with the nuclear power plant shutdown, and assessed the gap to be 0.0-2.0 percent of GDP. As a result, a midpoint estimate of +1.0 percent has put Japan's current account position on the borderline between "moderately stronger" and "in line with fundamentals," which leads us to skepticism that staff might have made [discrete] adjustments for the sake of leading Japan's current account assessment to a pre-determined conclusion of "just moderately stronger".

17. In addition:

- The adjustment related to the nuclear power plant shutdown is based on an inaccurate understanding of staff about the current situation of those plants in Japan; and
- Although domestic distortions and production offshoring are not unique to Japan, the adjustors related to these challenges are applied only to Japan to lower the current account norm.

We are therefore of the view that this assessment is not convincing and should be treated with caution. Furthermore, we also regret that there is no convincing explanation about the reason why staff did not apply other adjustors that would result in an adjustment in the opposite direction. For example, adjustments could have reflected structural increases in Japan's tourism receipts resulting from recent policy changes, such as relaxation of visa requirements and deregulation of lodging business. We will continue requesting staff's clear and convincing explanations about the abovementioned unconvincing adjustments.

Limitations of the EBA model

18. **We think that there are some areas of improvement in the current EBA models to capture characteristics of countries' economic structures more precisely, such as the difference between trade and income balances and difference of propensity to consumption and savings**. The case of Japan, in which staff resorted to judgment by applying the abovementioned three adjustors, could notably be representing the limitations of the IMF's current external sector assessment. In the review of the assessment methodologies next year, we encourage staff to examine Japan's case in detail to improve the methodology. In what follows, we will explain three specific points:

- First, the existing EBA models should take into full account the discrepancy between the rates of return of foreign assets and liabilities to reflect each country's specific features of income receipts and payments. The EBA models employ net foreign assets (NFA) as a variable for capturing structural net income receipt. However, as a fact, the relationship between income balance and NFA varies across countries, which aspect should be more precisely captured by the EBA model. For example, although the net international investment position (NIIP) of the United States is negative, its net primary income is positive, mainly due to the discrepancy between the rates of return of foreign assets and liabilities. As for Japan, in addition to its large net foreign assets, the rate of return of foreign assets exceed that of foreign liabilities by a large degree, which leads to its large income surplus and eventually current account surplus. Given this backdrop, Japan's current account norm should be larger than the current EBA model suggests.

- Second, we would like staff to explore the possibility to introduce country residents' risk appetite (some are relatively risk taking, while others are relatively risk averse) to the EBA model as a new variable. The difference in their attitudes toward risks would lead to the difference in their saving behavior, which would affect IS balance of the entire economy. In this regard, it appears rational that optimal savings in a country with more risk-averse national traits would be higher because of the utility optimization by risk-averse residents. Thus, Japan's current account norm would reflect the risk averse national trait of the Japanese people as a structural factor. Although finding a suitable variable representing country residents' risk appetite is very challenging, the rate of safe assets among the whole household assets might be an option to be considered.

- Third, the existing method of calculating real effective exchange rate (REER) could be improved further.

  i. Instead of conventional "trade-weighted" REER, we might use as weight the ratio of volume that a trade currency is settled to the overall trade volume.

  ii. Due to a rapid increase in capital flows across countries, foreign exchange transactions of hard currencies are mainly driven by capital flows rather than trade flows. Therefore, we would like staff to explore the possibility of using "capital-weighted" REER instead of the canonical "trade-weighted" REER by taking advantage of related studies.

Role of the exchange rate in the external sector assessment

19. **Last but not least, as we mentioned at the Board discussion on the 2017 External Sector Report, we would like to point out that assessing the exchange rate in the context of addressing global excess imbalances might have become less meaningful.** Indeed, staff themselves mentioned in the 2017 External Sector Report that automatic adjustment mechanisms, such as nominal exchange rate adjustment, have been weak in key countries [1], including Japan. In addition, in cases where the income balance dominates the current account balance, like in Japan, changes in the exchange rate does not lead to structural changes in the current account balance. Thus, expenditure switching through changes in the exchange rate might have become less relevant in correcting excess trade imbalances, while exchange rate adjustment is not useful in correcting excess income imbalances.

20. In this regard, for a large economy with a currency whose price is determined freely in the market under a floating exchange rate regime, like Japan, an external sector analysis based on the conventional theoretical relationship between the current account and the exchange rate does

[1] "Japanese exporters have long demonstrated pricing-to-market behavior by maintaining the stability of their export prices in overseas markets and absorbing exchange rate fluctuations through profit margins. This practice results in limited exchange rate pass-through to export prices." in "WEO October 2015 Chapter 3 (Box 3.3. Japanese Exports: What's the Holdup?)" (IMF, 2015)

"This paper presents empirical evidence that for a number of OECD countries firm's increasing participation in global value chains may have contributed to reducing exchange rate pass-through to the terms of trade, which may in turn have contributed to reducing the response of trade balances to exchange rate changes." in "The Changing Role of the Exchange Rate for Macroeconomic Adjustment" (OECD WP Ollivaud et al., 2015).

not seem to be convincing. We would therefore suggest that staff give serious consideration to these recent developments and reconsider what exchange rate assessment means in the context of addressing global excess imbalances.