



JAPAN

2016 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

August 2016

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 2016 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 29, 2016 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 29, 2016, following discussions that ended on June 20, 2016, 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 13, 2016.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Supplement** updating information on recent developments.

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

Selected Issues

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International Monetary Fund
Washington, D.C.



INTERNATIONAL MONETARY FUND



Press Release No. 16/372
FOR IMMEDIATE RELEASE
August 2, 2016

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

IMF Executive Board Concludes 2016 Article IV Consultation with Japan

On July 29, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Japan.

Economic growth has slowed due to weak private consumption and sluggish investment, and inflation has lost its forward momentum. While financial conditions remain accommodative, falling stock prices and the appreciation of the yen have resulted in a modest tightening. The authorities responded to the weaker domestic and external economic environment through additional monetary and fiscal support, including the adoption of the negative interest rate policy, plans for additional fiscal stimulus, and the postponement of the scheduled 2017 consumption tax hike by two and a half years.

Nevertheless, the outlook for growth and inflation remains subdued. Private consumption is projected to grow modestly and weakness in the global recovery and trade, higher uncertainty, especially in the wake of the Brexit referendum, and the recent appreciation of the yen will likely pose a drag on net exports and investment. Consequently, the economy is expected to expand at a moderate pace of about 0.3 percent in 2016, before slowing to 0.1 percent in 2017, excluding the possible effect of the yet to be adopted economic stimulus package. Over the medium term growth is projected to be in line with potential (which is on a declining trend), while inflation is expected to rise to about 1 percent. Additional fiscal support could boost growth in the near term, but downside risks dominate in the medium term relating to weak external and domestic demand, uncertainty about the sustainability of low interest rates in a high public debt environment, and financial stability risks in the context of unprecedented monetary easing. These risks may affect the financial system which so far has remained sound and resilient, with good capitalization and a declining NPL ratio.

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.

While Abenomics made initial headway in boosting expectations and revitalizing the Japanese economy, structural impediments and policy shortfalls, especially on the structural side, are making it difficult to achieve a sustained lift off. In particular, low confidence in economic growth prospects is holding back investment and credit demand. Labor market duality and inflexibility are hampering wage growth and the financial sector's support of risk-taking is limited. In addition, the stop-go nature of fiscal policy and optimistic growth assumptions underlying medium-term budget projections have left fiscal policy without a credible medium-term anchor and are contributing to policy uncertainty. Weak monetary transmission, sluggish wage-price dynamics, and a falling natural rate of interest are preventing the needed rise in inflation expectations, creating a communication and credibility challenge for the BoJ.

Abenomics has also faced external headwinds, with global weakness and volatility complicating matters. Sluggish global growth and overcapacity in the traded goods sector prevented the weaker yen from materially boosting exports. Declining commodity prices failed to boost activity as expected, but instead put downward pressure on headline inflation and forced the BoJ to repeatedly push out its timeline for hitting the inflation target. Moreover, concerns in emerging markets and revisions to the expected path of monetary policy in advanced economies led to heightened volatility in financial markets and safe haven appreciation pressures. In light of this, while Japan's 2015 external position was moderately stronger than the level consistent with medium-term fundamentals and desired policies, the subsequent appreciation of the real effective exchange rate has moved it towards a level consistent with medium-term fundamentals suggested by the 2015 assessment, while it may undermine the effort to lower deflation risks.

Executive Board Assessment²

Executive Directors welcomed the initial success of Abenomics and the authorities' forceful implementation of policies to lift growth and inflation. Nevertheless, growth remains subdued and deflation persists, on the back of weak consumption, lackluster private investment, and sluggish exports. Directors noted strong headwinds from a weak global recovery, the appreciation and volatility of the exchange rate, and adverse demographics. They generally agreed that a comprehensive and coordinated policy upgrade is now needed to achieve the ambitious targets on growth, reflation, and fiscal consolidation.

Directors considered structural reforms as an essential component of the reloaded Abenomics, aimed at raising productivity, labor supply, and potential growth. They supported labor market reforms to reduce duality and increase labor force participation by female, older, and foreign workers. As part of the overall policy mix, Directors generally saw a role for policies that could help generate wage-price dynamics without excessive interference in market mechanisms. In

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>.

this regard, they welcomed the decision to lift minimum wage growth, and recommended consideration of options to strengthen incentives for companies to raise wages and promote flexible labor contracts. Directors stressed the importance of complementing these measures with fiscal and monetary demand support, carefully balancing short-term growth with the medium-term objectives of fiscal sustainability and financial stability. They cautioned that, absent a full policy upgrade, macroeconomic policies may need to be recalibrated, implying larger fiscal consolidation needs and a looser monetary policy over a longer period of time, which could increase potential risks, with negative spillovers to the global economy. In this context, Directors took note of the recent announcements of the additional monetary easing and economic stimulus plans.

Directors underscored the need to chart a credible course for fiscal consolidation to place debt on a downward trajectory, reduce policy uncertainty, and create near-term fiscal policy space. They broadly agreed that a pre-announced path for gradual but sustained increase in the consumption tax, insofar as it is administratively feasible, would mitigate any negative impact on the economy and enhance policy credibility. Directors also recommended containing social security spending growth and broadening the tax base.

Directors encouraged further efforts to strengthen policy frameworks, particularly fiscal institutions. Most Directors saw merit in the adoption of spending rules and an independent assessment of the outlook and budget projections, noting that the authorities' initiatives to enhance the existing framework are in the right direction. Directors emphasized the need for clear, effective communication around monetary policy and better use of forward guidance.

Directors commended the authorities for maintaining a sound and stable financial sector. They noted that financial stability risks could nonetheless arise from prolonged unconventional monetary policies and the delay in achieving reflation and fiscal sustainability. Directors therefore encouraged the authorities to continue to strengthen the macroprudential policy toolkit; and enhance the monitoring of liquidity in the government bond market, financial institutions' profitability, and foreign exchange risks. Efforts should also continue to improve the resilience of regional banks and inter-agency coordination.

Directors noted the staff's assessment that the yen appreciation earlier this year has moved Japan's external position toward a level broadly consistent with fundamentals. Noting that a stronger yen would make reflation efforts more challenging, they underscored the importance of strengthening domestic policies to mitigate inward spillovers and secure external balance over the medium term.

Japan: Selected Economic Indicators, 2011–17

Nominal GDP: US\$ 4,124 Billion (2015)

Population: 127 Million (2015)

GDP per capita: US\$ 32,480 (2015)

Quota: SDR 15.6 Billion (2015)

	2011	2012	2013	2014	2015	2016–2017 Proj.	
Growth (percent change) 1/							
Real GDP	-0.5	1.7	1.4	0.0	0.5	0.3	0.1
Domestic demand	0.4	2.6	1.7	0.0	0.1	0.4	0.3
Private consumption	0.3	2.3	1.7	-0.9	-1.2	0.6	1.1
Gross Private Fixed Investment	4.3	3.6	1.1	1.5	0.8	1.5	2.1
Business investment	4.1	3.7	-0.5	3.1	1.5	1.1	1.8
Residential investment	5.1	3.2	8.4	-5.3	-2.5	2.5	3.6
Government consumption	1.2	1.7	1.9	0.1	1.2	1.1	-1.6
Public investment	-8.2	2.7	8.0	0.4	-2.5	-5.3	-7.5
Stockbuilding 2/	-0.2	0.2	-0.2	0.2	0.5	-0.2	0.0
Net exports 2/	-0.8	-0.8	-0.2	0.3	0.4	-0.1	-0.3
Exports of goods and services 3/	-0.4	-0.2	1.2	8.3	2.8	-0.2	1.1
Imports of goods and services 3/	5.9	5.3	3.1	7.2	0.3	0.2	3.0
Output Gap	-3.3	-2.0	-1.1	-1.6	-1.5	-1.7	-2.0
Inflation (annual average)							
CPI 4/	-0.3	0.0	0.4	2.7	0.8	0.2	0.4
CPI excluding VAT	-0.3	0.0	0.4	1.2	0.3	0.2	0.4
Core Core CPI excluding VAT 5/	-0.8	-0.4	-0.2	0.7	0.9	...	...
GDP deflator	-1.9	-0.9	-0.6	1.7	2.0	0.6	0.3
Unemployment rate (annual average)	4.6	4.3	4.0	3.6	3.4	3.2	3.3
Government (percent of GDP)							
General government							
Revenue	30.8	31.1	32.1	33.6	34.1	33.8	34.0
Expenditure	40.6	39.8	40.6	39.8	39.3	38.9	38.3
Overall Balance	-9.8	-8.8	-8.6	-6.2	-5.2	-5.1	-4.3
Primary balance	-9.0	-7.9	-7.8	-5.6	-4.9	-5.1	-4.5
Structural primary balance	-7.7	-7.0	-7.5	-5.2	-4.5	-4.7	-4.0
Public debt, gross	231.6	238.0	244.5	249.1	248.0	250.7	254.0
Macro-financial (percent change, end-period, unless otherwise specified)							
Base money	22.2	19.3	60.3	36.7	29.1	22.6	18.3
Broad money	3.6	2.8	4.0	3.0	3.1	2.7	2.7
Credit to the private sector	-0.6	3.1	5.5	1.5	2.6	2.3	2.4
Non-financial corporate debt in percent of GDP	191.3	196.3	225.6	238.2	234.4	234.0	236.1
Household debt in percent of disposable income	128.3	127.1	128.5	129.3	129.3	130.3	131.8
Interest rate							
Overnight call rate, uncollateralized (end-period)	0.1	0.1	0.1	0.1	0.0	...	...
Three-month CD rate (annual average)	0.3	0.3	0.2	0.2	0.2	...	...
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.)	1.1	0.9	0.7	0.6	0.4	-0.1	-0.1
Balance of payments (in billions of US\$)							
Current account balance	129.8	59.7	45.9	36.4	135.6	159.4	143.2
Percent of GDP	2.2	1.0	0.9	0.8	3.3	3.4	2.9
Trade balance	-4.5	-53.9	-90.0	-99.9	-5.3	19.3	0.7
Percent of GDP	-0.1	-0.9	-1.8	-2.2	-0.1	0.4	0.0
Exports of goods, f.o.b.	790.8	776.0	695.0	699.4	621.9	620.5	643.0
Imports of goods, f.o.b.	795.3	829.9	784.9	799.3	627.2	601.2	642.3
Energy imports	242.8	272.2	257.4	241.7	133.7	112.6	130.3
FDI, net (percent of GDP)	2.0	2.0	2.9	2.6	3.2	2.5	2.4
Portfolio Investment, net (percent of GDP)	-2.8	0.5	-5.7	-0.9	3.2	3.3	3.4
Terms of trade (percent change)	-9.0	-1.8	-2.5	-1.0	14.0	1.3	-1.2
Change in reserves	177.3	-37.9	38.7	8.5	5.1	9.5	10.0
Total reserves minus gold (in billions of US\$)	1258.2	1227.2	1237.3	1231.0	1207.1	...	...
Exchange rates (annual average)							

Yen/dollar rate	79.8	79.8	97.6	105.9	121.0	106.9	101.1
Yen/euro rate	111.0	102.6	129.6	140.8	134.3	118.9	112.5
Real effective exchange rate (ULC-based) 6/	118.5	119.7	96.7	88.8	85.0	...	...
Real effective exchange rate (CPI-based) 7/	101.7	100.6	80.4	75.1	70.2	...	...
Demographic Indicators							
Population Growth	0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3
Old-age dependency	36.4	37.8	39.8	41.8	43.6	45.1	46.3

Sources: IMF, Competitiveness Indicators System; OECD, and IMF staff estimates and projections as of July 7, 2016.

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



JAPAN

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

July 13, 2016

KEY ISSUES

Abenomics needs a significant policy upgrade to regain traction. Abenomics initially made good progress in revitalizing the economy, but the targets for growth, inflation, and the primary balance remain out of reach under current policies. Recognizing the risk of falling short, the authorities introduced a negative interest rate policy, delayed the planned consumption tax hike, and adopted additional structural reforms, but the outlook remains weak. Abenomics can still achieve its ambitious targets through a comprehensive and coordinated policy upgrade. In the absence of such a reload, policies and targets will need to be reset for more gradual and realistic progress to avoid adding to volatility and uncertainty.

Ambitious income policies supported by demand stimulus are a priority to spur inflation through wage–price pressures. This calls for (i) incentivizing profitable companies to increase wages, (ii) raising administratively controlled wages in line with the inflation target, and (iii) addressing labor market duality by promoting new hiring under contracts that better balance job security and wage increases. Success will require concurrent sustained and balanced fiscal and monetary support for demand.

A credible fiscal consolidation plan is urgently needed to address Japan’s looming fiscal sustainability problem and create policy space. Replacing the planned 2 percentage point consumption tax hike in 2019 with a path of gradual increases of about 0.5–1 percentage points over regular intervals until the rate reaches at least 15 percent will better balance growth and fiscal sustainability objectives. Social expenditure reform, especially of medical care, is urgent.

Bold structural reforms and stronger policy frameworks are needed to reinforce the effectiveness of these policies. Reforms to improve medium-term prospects should include (i) measures addressing the headwinds from demographics, (ii) strengthening the medium-term fiscal framework through more independent and realistic macroeconomic and budget projections and rules to curb expenditure, (iii) and improving monetary policy communication and forward guidance.

Safeguarding financial stability is important to ensure a smooth transition to fiscal sustainability and higher inflation and deal with external uncertainty. JGB markets should be closely monitored for structural changes and measures taken to prevent sudden dry ups in market liquidity and spikes in risk premia. Further strengthening the macroprudential policy framework will be essential to preempt shock amplification through macro-financial linkages.

Strengthening domestic policies is important to mitigate inward spillovers and secure external balance over the medium term. The 2015 external position was assessed to be moderately stronger than fundamentals. The appreciation of the real effective exchange rate since early 2016 has moved it towards a level broadly consistent with medium-term fundamentals suggested in the 2015 assessment but may undermine efforts to lower deflation risks.

A supplement to this report will be issued to discuss the implications of Brexit.

Approved By
Odd Per Brekk and
Sanjaya Panth

Discussions took place in Tokyo from June 6–20, 2016. The staff team comprised L. Everaert (Head), E. Arbatli, D. Botman, I. Saito, and N. Westelius (all APD), F. Han (MCM), H. Tong (RES), G. Ganelli and N. Miake (all OAP). Mr. Rhee (APD) joined part of the mission. Messrs. Kaizuka, Hiroshima, and Watanabe (OED) participated in the discussions. Mr. Lipton held meetings with senior officials. S. Abebe and Y. Liu (all APD) assisted in this report’s preparation. The mission was assisted by OAP staff.

CONTENTS

ABENOMICS IS AT A CROSSROAD	4
TARGETS OUT OF REACH UNDER CURRENT POLICIES	4
A. Recent Developments	4
B. Headwinds and Policy Challenges	7
C. Outlook and Risks	9
GETTING ABENOMICS BACK ON TRACK	12
A. Reloading Abenomics: Comprehensive and Coordinated Policy Package	12
B. Resetting Targets and Policies to Prepare for the Long Haul	15
C. Unorthodox Polices to the Rescue?	16
SAFEGUARDING FINANCIAL STABILITY	18
EXTERNAL POSITION AND SPILLOVERS	20
STAFF APPRAISAL	22
BOXES	
1. Effectiveness and Limitations of the Negative Interest Rate Policy (NIRP) in Japan	24
2. Reforming Japan’s Fiscal Framework: Merits of an Independent Fiscal Council	26
3. Strengthening the Bank of Japan’s Communication Framework	27
FIGURES	
1. Recent Economic Developments	28
2. Inflation Developments	29
3. Monetary Policy Transmission	30
4. Financial Markets Developments	32
5. JGB Market Liquidity	33
6. Labor Market and Wage Developments	34
7. Economic and Policy Uncertainty	36

8. Fiscal Developments and Sustainability	37
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TABLES

1. Selected Economic Indicators, 2011–17	38
2. Monetary Authority Accounts and Monetary Survey, 2011–17	39
3. Medium-Term Projections, 2014–21	40
4. General Government Operations, 2011–17	41
5. Financial Soundness Indicators (FSI), 2010–15	42
6. External Sector Summary, 2011–17	43

ANNEXES

I. Risk Assessment Matrix	44
II. Assessment of Japan’s External Sector	46
III. Debt Sustainability Analysis	48
IV. Main Recommendations of the 2015 Article IV Consultation	57

ABENOMICS IS AT A CROSSROAD

1. Abenomics met with initial success in tackling two decades of mild deflation and weak growth. Strong coordination between the Bank of Japan's (BoJ) unprecedented quantitative and qualitative easing program and fiscal stimulus combined with an announcement of ambitious structural reforms helped narrow the large output gap, reversed the undue appreciation of the yen, eased financial conditions, boosted corporate profits, lifted actual and expected inflation into positive territory, improved corporate governance and boosted labor force participation. The economy reached full employment and modest, but historically significant, increases in base wages took hold. Progress was made with fiscal consolidation.

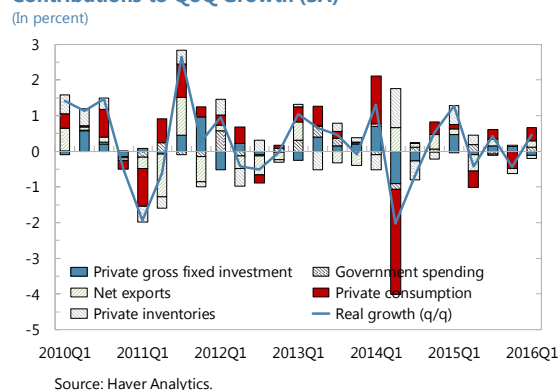
2. Three years after its introduction Abenomics needs a significant policy upgrade. Inflation has lost its forward momentum and the BoJ has repeatedly pushed out its timeline for hitting its inflation target. Public debt remains unsustainable while record corporate profits and rising employment have failed to generate sufficient base wage growth. Investment and consumption growth remain weak amid uncertainty surrounding the growth outlook and real income. Finally, the global trade slowdown and effects of production offshoring have prevented exports from benefitting substantially from the weak yen while the sharp fall in oil prices has put downward pressure on headline inflation. To overcome these headwinds and safeguard against associated risks, Abenomics needs a comprehensive upgrade.

TARGETS OUT OF REACH UNDER CURRENT POLICIES

A. Recent Developments

3. Growth remains subdued. After a strong start, economic growth slowed to 0.5 percent in 2015 due to weak private consumption, hamstrung by timid wage growth despite an unemployment rate close to an all-time low (Figure 1 and Table 1). Slack has emerged in the tradeable goods sector (in line with weak global markets) but firms prefer to hold on to their work force while employment growth has been concentrated in the less productive service sectors. Private investment was muted, reflecting lack of confidence in future demand prospects, and export growth slowed. Nevertheless, the external balance improved significantly as oil prices declined and service exports rose on the back of increased tourism from China. Growth in the first quarter of 2016 showed a modest rebound, driven in part by leap-year effects. While consumption picked up, investment remained weak, which could reflect increasing economic and policy uncertainty and declining growth prospects. The highly anticipated wage negotiations in the spring fell short of expectations as base wages rose by only 0.4 percent compared to 0.6 percent the previous year. High frequency indicators show continued weakness in industrial production and

Contributions to QoQ Growth (SA)

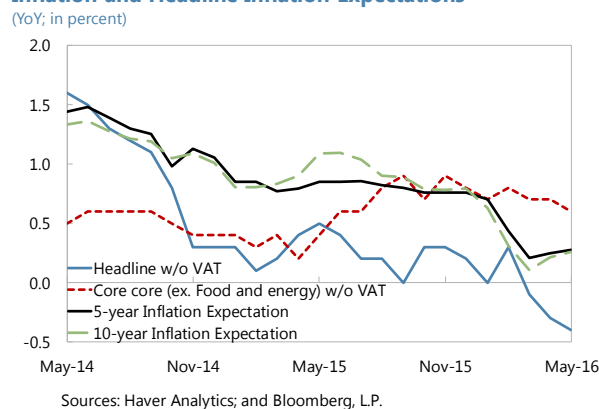


consumption. The Kumamoto earthquakes have hampered near-term growth but will only have a minor impact for the year as a whole reflecting reconstruction activity, some payback after production disruptions, and the fiscal stimulus.

4. Inflation lost its forward momentum.

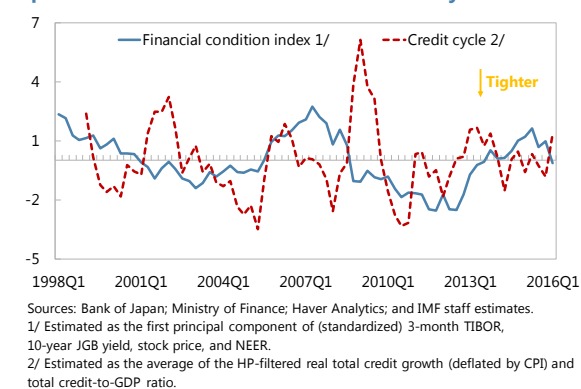
Average headline inflation (excluding the consumption tax) declined from 1.2 percent in 2014 to 0.3 percent in 2015, due to falling oil prices. The decline has continued in 2016, with May numbers showing a 0.4 percent (y/y) decline in the price level (Figure 2). The BoJ's Core-core inflation (excluding fresh food and energy) remained steady in 2015, reaching 1.3 percent at the end of the year, but has since fallen to 0.9 percent. Weakening inflation dynamics spilled over to medium and long-term inflation expectations due to their backward looking nature.

Inflation and Headline Inflation Expectations



5. Financial conditions remain accommodative but tightened recently (Figure 3 and 4). While interest rates declined and the credit cycle continued to expand, falling stock prices and the strong appreciation of the yen resulted in a modest tightening of financial conditions, posing a challenge to monetary transmission.

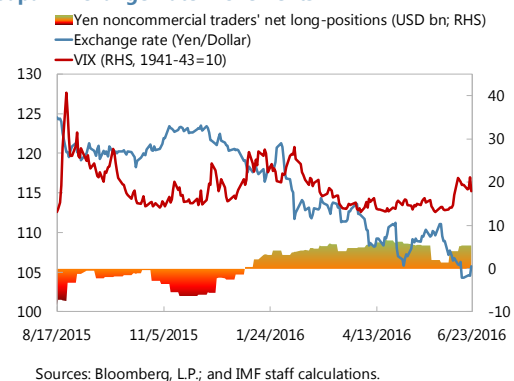
Japan: Financial Condition Index and Credit Cycle



- **Debt and equity markets.** The nominal yield curve shifted down and flattened significantly in the first half of 2016, with the 10-year benchmark JGB falling into negative territory. The shift in the yield curve also translated into lower lending rates and corporate bond yields, with corporate debt issuance picking up, especially in long maturities. In contrast, equity prices started to decline in the second half of 2015, led by financial and energy sectors, and volatility increased.
- **Portfolio rebalancing:** Households continued to increase the share of risky assets in their financial portfolios, but the pace slowed recently, reflecting higher market volatility. Banks have accelerated rebalancing towards domestic lending, equities and investment trusts, and foreign securities (See Selected Issues Paper “Is Home Bias Weakening?”). Japan Post Bank continued to reallocate investments towards foreign bonds, and similarly, life insurers, who used to actively purchase super-long-term JGBs, increased the share of foreign bonds in their portfolios. The Government Pension Investment Fund (GPIF) has almost reached its reduced target for JGB holdings, while other pension funds continue to rebalance towards domestic and foreign equities.

- *Credit cycle.* Domestic credit growth picked up in 2015 and the credit cycle continued to expand (Table 2) (See Selected Issues Paper “QEs Impact on Financing Conditions of Listed Firms”). Overseas loans continued to grow rapidly as did loans for, and equity investment in, real estate. Asset quality improved with the NPL ratio—including that of overseas loans—declining further. Recently, financial institutions have become more cautious in extending overseas loans due to global growth concerns, especially in emerging markets, and higher foreign currency funding costs.
- *Exchange rate.* The yen depreciation started to reverse in the second half of 2015 and its appreciation accelerated in early 2016 to levels last seen prior to the 2014 expansion of QE. Underlying drivers include safe-haven effects due to global financial market volatility, a narrowing of interest rate differentials with the U.S., market perceptions of limits to BoJ’s stimulus, and a rising current account surplus. So far the authorities have verbally expressed concern about disorderly market movements, but refrained from actual foreign exchange interventions.

Japan Exchange Rate Movements



6. The weaker domestic and external economic environment triggered a sequence of monetary and fiscal policy responses in the first half of 2016.

- *Supplementary budget and earthquake relief.* In January, a 0.6 percent of GDP supplementary package was approved for FY2016.¹ In addition, the government later announced a frontloading of the FY2016 initial budget, and the Kumamoto earthquakes in April prompted the formulation of a supplementary budget estimated to raise GDP growth by around 0.1 percent.
- *Negative Interest Rate Policy:* The adoption of the negative interest rate policy (NIRP) amid a weakening of the outlook and higher global uncertainty reinforced the BoJ’s commitment to its inflation target and added another tool to the policy framework, allowing it to be more open ended. So far the NIRP has been successful in lowering the entire yield curve and has not adversely impacted market functioning, beyond expected effects on JGB liquidity and bank profitability (Figure 5). More time is needed to see its full transmission to the real economy (Box 1) (See Selected Issues Paper “Negative Interest Rate Policy and Bank Deposit Rate”).
- *Delayed consumption tax hike and planned stimulus.* The authorities’ decisions to adopt additional stimulus and to postpone the scheduled 2017 consumption tax hike by two and a half years while maintaining the FY2020 primary surplus target, demonstrate the challenge of

¹ The supplementary package focuses on (i) increased funding for medical and long-term care which involves transfers to low-income households; (ii) boosting competitiveness in the agriculture sector through improvements in infrastructure and measures to promote agriculture exports; and (iii) improving disaster recovery and raising infrastructure spending.

simultaneously stimulating the economy and moving towards fiscal sustainability in a short timeframe. While these decisions will reduce deflation risks and support near-term growth, they will likely affect the achievement of the authorities' medium-term fiscal target, unless abrupt consolidation takes place, which would again undermine reflation prospects.

7. Structural reforms progressed in some core areas.

- *New “three-arrows”.* In September 2015, PM Abe announced a plan to promote the “Dynamic Engagement of All Citizens,” and a new “three-arrows” strategy consisting of: (i) a strong economy, with a target of raising nominal GDP to 600 trillion yen;² (ii) childcare support to lift the fertility rate and labor force participation; and (iii) a social security system to prevent people from leaving employment to provide nursing care. Implementing measures remain to be elaborated.
- *Minimum wage and corporate tax.* The government has been rightly calling for higher wage increases through the tripartite dialogue and recently announced a floor of 3 percent on annual minimum wage increases (See Selected Issues Paper “Minimum Wages as a Policy Tool”). The government also cut the statutory corporate income tax rate below 30 percent in FY2016, one year earlier than scheduled, to entice firms to deploy their cash, although the impact on investment appears limited so far.
- *Corporate governance reform.* Progress so far includes acceptance of the Stewardship Code by 210 institutional investors; the application of the Corporate Governance code, inter alia requiring listed companies to appoint at least two outside directors on a “comply or explain” basis; the amendment of the Companies Act; and the launching of the JPX-Nikkei 400 index comprising only profitable firms with good corporate governance and disclosure.
- *Trans-Pacific Partnership (TPP).* The government reached an agreement on the TPP, but the ratification decision has been pushed back to the next Diet session in the fall. If fully implemented TPP would raise the level of GDP by 2–3 percentage points in the long run and associated deregulation would yield further significant benefits.

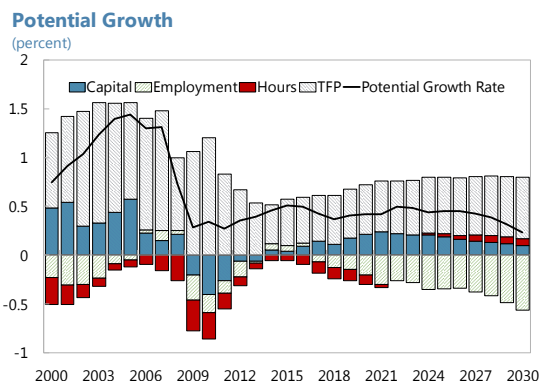
B. Headwinds and Policy Challenges

8. Structural impediments hamper demand and wage growth. Low confidence in economic prospects, related to an aging and shrinking population, is holding back investment and credit demand, constraining portfolio rebalancing (See Selected Issues Paper “Impact of Demographics on Growth and Inflation in Japan”). Labor market duality and inflexibility are limiting the pass-through from a tightening labor market and high profits of large firms to wage increases (Figure 6).³ Weak

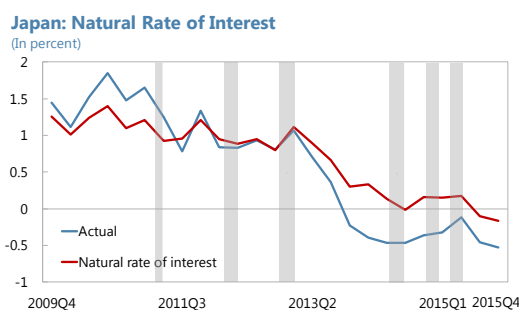
² The government’s plan to reach the nominal GDP target was approved on June 2, 2016, and can be understood as combining the old three arrows.

³ Porcellachia (IMF WP16/20) models conceptually how these features cause weak real wage growth and contribute to deflationary pressures. Specifically, a rising share of non-regular workers who earn lower wages than regular workers, not only reduces average wages directly, but also causes a decline in labor’s overall bargaining power, hampering wage growth. See also Selected Issues Paper “Labor Market and Wage Developments”.

demand and a lingering deflationary mindset are reducing the ability of firms to raise output prices. Labor market duality is hampering lending owing to the inability of part-time workers to obtain bank credit, and hurting investment, corporate restructuring and mergers and acquisitions due to the high level of job protection. The financial sector does not sufficiently support risk taking, limiting access to risk-based capital, as suggested by high reliance of banks on fixed asset collateral and slow restructuring of non-viable SMEs.



9. Policies could have been more effective. The stop-go nature of fiscal policy, with yearly supplementary budgets, discretionary changes in consumption tax hikes, and optimistic growth assumptions underlying medium-term budget projections have left fiscal policy without a credible medium-term anchor and are contributing to policy uncertainty (Figure 7).⁴ Weak monetary transmission, sluggish wage-price dynamics, and a falling natural rate of interest are preventing the needed rise in inflation expectations, creating a communication and credibility challenge for the BoJ. Structural reform efforts did not sufficiently address the above-mentioned structural impediments, notably in the labor market. Perceptions of weakness in the policy framework have contributed to the tendency of the yen to appreciate when the Japanese economy is hit by negative shocks.



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). The shadow areas highlight the recession periods (defined as when the SAAR real GDP growth falls below zero for at least two consecutive quarters).

10. Global weakness and volatility constituted headwinds. Sluggish global growth and overcapacity in the traded goods sector prevented the weaker yen from materially boosting exports in 2014–15. Since mid-2015, concerns in emerging markets and revisions to the expected path of monetary policy in advanced economies led to heightened volatility in financial markets and safe-haven appreciation pressures, which intensified in early 2016. Declining commodity prices since mid-2014 did not boost activity as expected, but instead put downward pressure on headline inflation and forced the BoJ to repeatedly push out its timeline for hitting the inflation target.

Authorities' Views

11. The authorities emphasized that despite a deflationary mindset and structural impediments to growth, policies are gaining traction. They recognized that the public's

⁴ See Selected Issues Paper "Economic Policy Uncertainty".

deflationary mindset is changing more slowly than anticipated. Together with labor market rigidities, this had led to a subdued response of wages to the very tight labor market. Low growth expectations related to an aging and shrinking population and unfavorable external conditions had dampened investment, exports, and credit demand, creating a challenging environment for monetary policy. Nevertheless, the BoJ emphasized that QQE and NIRP significantly reduced real interest rates and encouraged more risk-taking by banks as they rebalanced their portfolios away from JGBs. The authorities also pointed out that they had met their commitment to cut the primary deficit in half compared to the 2010 level while at the same time facilitating higher nominal growth through flexible fiscal policy implementation. Meanwhile, structural reforms had helped to generate a virtuous cycle between corporate profits, employment and real income, as evidenced by three consecutive years of base wage increases.

C. Outlook and Risks

12. Growth is expected to remain weak due to anemic consumption, lackluster investment and fiscal drag. The economy is projected to grow in line with potential at 0.5 percent in 2016, before slowing to 0.3 percent in 2017, excluding the possible effect of the yet-to-be-adopted supplementary budget (Table 3).

- *Consumption.* Private consumption will grow modestly in 2016, underpinned by lower commodity prices, targeted fiscal transfers, and rising labor force participation. The rising ratio of retirees to workers, however, has increased the share of non-wage income to total net disposable income, currently at 50 percent, making consumption less dependent on wage developments.
- *Public spending and taxation.* Fiscal policy will pose a drag on growth in 2017, reflecting the withdrawal of past stimulus and waning reconstruction spending.
- *Net exports.* A slow global recovery and yen appreciation are expected to dampen export growth.
- *Investment.* High profits, an aging capital stock, and supportive credit conditions should provide a favorable environment for investment. However, heightened uncertainty, sustained appreciation of the yen and shrinking domestic markets will curb investment demand. As a result, the expansion of the credit cycle is expected to be restrained in the medium term.

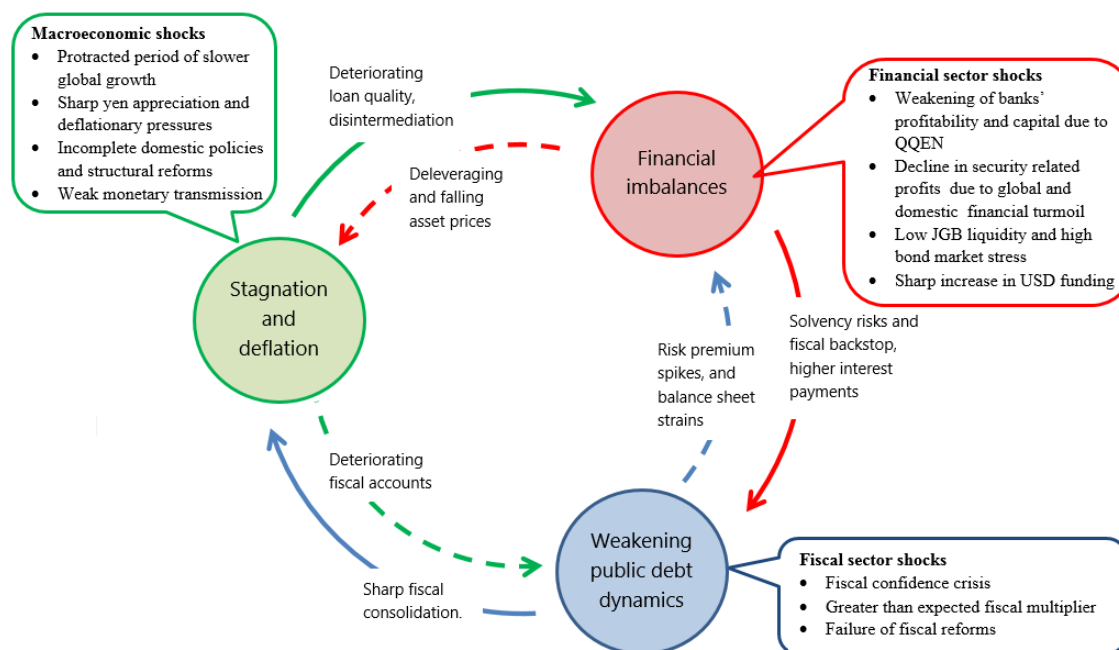
13. Inflation will remain well below the BoJ's inflation target. Average headline inflation is projected to remain at around 0.2 percent in 2016, reflecting drag from low energy prices, the recent yen appreciation, lower inflation expectations, and weakness in demand. Over time, inflation will gradually rise, supported by energy price developments and slowly building wage-price pressures, but with adaptive expectations progress will remain slow.

14. Risks to the near-term outlook are tilted to the upside from likely additional fiscal demand support, but downside dominates in the medium term (Annex I).

- *Domestic risks.* Upside risks reflect the likely adoption of a substantial supplementary budget for 2017. On the other hand, incomplete policies may lead to further appreciation of the yen, triggering renewed deflation risks.
- *External risks.* A sharper-than-expected moderation of growth in China and/or weaker growth in advanced economies – including due to the outcome of the Brexit referendum – could lead to global financial turbulence causing safe-haven yen appreciation, potentially derailing the recovery (See forthcoming Supplement to this report).
- *Financial stability risks.* If the decline in JGB market liquidity became structural, it could trigger higher volatility in government bond yields. Moreover, risk exposures from equity price volatility and from the rapid expansion of overseas loans could impact financial stability, particularly given global financial volatility and rising USD funding costs.

15. Macro-financial feedback loops could be shock amplifiers. At the core of the risk nexus lies the sustainability of low risk premiums in a high public debt environment, and a stable financial system in the context of unprecedented unconventional monetary policies. In this environment, shock amplification can occur through macro-financial linkages between stagnation and deflation, financial imbalances, or public debt dynamics (see figure). The main risk stems from loss of fiscal confidence, leading to higher sovereign risk premiums, and forcing abrupt further fiscal adjustment with adverse feedback loops to the financial system and the real economy. Risks from imbalances in the financial system, although limited at present, constitute a tail risk with scope for an adverse feedback loop if they triggered a sovereign backstop.

Macro-financial Linkages as Shock Amplifiers



16. Available buffers and policy responses to downside risks depend on the size and origin of the shock. A coordinated response, making use of fiscal and monetary policies should be the first line of defense to counter downside growth shocks. The fiscal response will need to be contingent on the behavior of the sovereign risk premium and its impact on financial stability. Substantial downward shocks with a large adverse impact on growth, inflation, and debt dynamics or the failure of policies to make progress toward fiscal sustainability over the medium term could exhaust the effectiveness of conventional buffers.

Authorities' Views

17. The authorities were confident that growth will pick up, and the BoJ was confident that inflation could still reach its target in FY 2017. While noting recent weakness in consumption, the government expected the economy to continue its modest recovery as investment picks up and the employment and income situation improve. They noted that the decision to postpone the consumption tax and introduce an economic stimulus package should prevent demand from stalling and accelerate the recovery further. The authorities maintained their medium-term growth target of 2 percent underlying the fiscal consolidation plan and would update their medium-to long-term projections this summer. The BoJ noted that their inflation forecast hinged on inflation expectations becoming more forward-looking and rising towards the target during their timeframe, triggered by the emergence of a positive output gap, rising actual inflation, and their strong commitment and recent policy actions. The authorities broadly agreed with staff's risk assessment, but highlighted that external factors dominated, including the slowdown in overseas economies and volatility in global financial markets.

GETTING ABENOMICS BACK ON TRACK

Under current policies, the high nominal growth goal, the inflation target, and the primary budget surplus objective all remain out of reach within the timeframe set by the authorities. A comprehensive and coordinated policy upgrade, centered on income policies, would significantly increase chances of achieving Abenomics' ambitious targets. In the absence of such a reload, targets and policy frameworks would need a reset to be consistent with a protracted adjustment process. More unorthodox policy packages could pay dividends, but entail unacceptable risks at the current juncture.

A. Reloading Abenomics: Comprehensive and Coordinated Policy Package

18. The staff's reload package puts income policies at the fore in order to raise inflation, combined with further demand stimulus in the near-term based on a temporary, modest, fiscal expansion and further monetary easing. Ensuring coordinated demand support while tackling labor market reforms and removing policy uncertainty will create important synergies. To maximize long-term sustainability, these policies should be enshrined in stronger policy frameworks and high-impact structural reforms to raise growth and address demographic headwinds.

Invigorating wage-price dynamics to raise inflation

19. Sustained nominal wage increases can help trigger positive wage-price dynamics and raise inflation expectations. A deflationary mindset and a secular decline in the bargaining power of labor have led to upward wage inflexibility, while a rising share of non-regular workers with lower wages has dampened average wage growth. This highlights the need for policies to directly target the wage formation process and reforms to reduce labor market duality. Higher wages passed on to prices will boost actual and expected inflation which would stimulate economic activity through lower real interest rates and support fiscal consolidation.

20. Despite important steps to encourage higher base-wage increases, bolder measures are required to trigger positive wage-price dynamics.

- *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 latter would be contractionary if they failed to trigger higher wages.⁵ 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.

⁵ In FY 2014, about 78,000 enterprises made use of the tax incentives leading to foregone fiscal revenue equivalent to 0.05 percent of GDP. Applying the incentive to base wages and increasing the amount would raise the effectiveness of the measure.

- *Labor market and corporate governance reforms:* Promoting “intermediate” contracts that balance job security and wage increases, including by clarifying the legal framework and providing subsidies for converting non-regular workers to such contracts, would reduce labor market duality and reinforce income policies provided new hiring is done under these contracts. It would also stimulate productivity growth through greater incentives for skill formation. Moreover, accelerating the recently introduced “equal-pay for equal work” program would help close the wage gap between regular and non-regular workers faster. Eliminating 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 remain critical. Further corporate governance reform—such as more ambitious requirements for outside directors, greater transparency of beneficial ownership and explicit limits on cross-shareholdings—would encourage corporates to use their high cash reserves more efficiently, which could result in higher wages, dividends, and investment.

21. More sustained, balanced, and coordinated demand support is needed to ensure the success of income policies. To facilitate the pass-through of higher wages to prices it is imperative that monetary and fiscal policy give a balanced and sustained growth impulse in the near term, warranting a modest near-term fiscal expansion, calibrated on the need to accelerate the closing of the output gap. Supportive demand policies are also critical to ensure that structural reforms to raise potential growth such as policies to boost labor supply do not create deflationary pressures. Fiscal stimulus should be coordinated with further monetary easing, where all policy tools should remain on the table. Given the overriding importance of signaling the need for a comprehensive and balanced policy package, there are merits in using all tools: some overall increase in asset purchases, some shift to purchases of assets held outside the banking system, and a modest further cut in deposit rates. Fiscal and monetary actions should be closely coordinated in terms of timing, mix, and level of stimulus.⁶

22. Generating wage-push inflation is not without risks and success is not guaranteed. The main aim of income policies is to raise wages and prices in tandem, without increasing unit labor costs, distorting relative prices, or undermining competitiveness. Nevertheless, incomes policies may not successfully raise inflation, if for instance, firms increase hiring of non-regular workers, if there are timing and coordination problems, if “comply-or-explain” policies do not deliver sufficient compliance, or if there is the perception by firms or households that policies can be reversed. Possible declines in competitiveness and profitability—especially for labor intensive SMEs and export-oriented companies— could have an adverse impact on employment and growth in the near term. Finally, efforts to increase public wages are likely to encounter political resistance in light of ongoing fiscal consolidation plans.

⁶ In particular, building on their 2013 joint statement, the Government and BoJ could deepen their consultations—through the established Council on Economic and Fiscal Policy—on macroeconomic conditions and how to most effectively support income policies.

Achieving fiscal sustainability through reliance on gradual consumption tax hikes

23. A credible fiscal consolidation course needs to be charted now, including a pre-announced path of gradual consumption tax hikes (Figure 8 and Table 4). Given low potential growth, and the need to avoid leaning excessively against the BoJ's easing policies, committing 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, would better balance the objectives of supporting growth and achieving fiscal sustainability in the long run. The precise path should be determined mindful of the need to secure political buy-in, compliance costs for firms, and the administrative burden for the tax authorities. Starting the increases as soon as possible and replacing the currently planned 2019 hike with such a pre-announced, gradual path would enhance the credibility of the long-run fiscal adjustment effort, reduce uncertainty for consumers, and avoid large intertemporal shifts in spending around the time of the tax hikes (See Selected Issues Paper "Fading Ricardian Equivalence in Ageing Japan"). 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. In addition to the consumption tax increase, 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.⁷

Complementary policies to lift potential growth and strengthen policy frameworks

24. More structural reforms especially in the labor market are the only viable option to significantly raise growth prospects. A stronger push on structural fronts would increase the chances of success of income policies by improving the effectiveness of fiscal and monetary policy and raising growth expectations. In particular, reforms should aim to:⁸

- *Expand the labor force.* Boosting the labor supply of women and older workers and allowing for more foreign labor would be crucial to address a shrinking working-age population and protect the tax base.
- *Increase productivity.* Significant benefits can be reaped from: (i) promoting 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; (ii) reducing barriers to entry to retail trade, professional services, and certain segments of network industries; and (iii) expediting deregulation in Special Economic Zones (SEZs) and subsequent rolling out nation-wide reforms to improve productivity and provide investment opportunities.
- *Enable capital deepening.* The financial sector's role in promoting innovation and new growth areas could be enhanced by encouraging securitization and private-equity funds; reducing

⁷ For a detailed overview of consolidation measures see Country Report No. 15/197.

⁸ See Country Report No. 15/197 and the Annex for more details on structural reform advice to boost growth.

government guarantees to SME lending to promote restructuring of viable firms and exit of nonviable ones; and fostering business succession.

25. The fiscal framework should be strengthened to enhance policy credibility. The authorities' medium-term consolidation plan of achieving primary surplus by FY2020 should avoid relying on optimistic growth assumptions, which undermines confidence by masking the required amount of structural adjustment, leaving fiscal policy without a medium-term anchor. The authorities use the revitalization scenario to anchor their policies, which expects more than 2 percent real and 3 percent nominal annual GDP growth over the medium-term on average. Their more realistic baseline case anticipates a primary deficit of more than 2 percent of GDP in FY2020. Strengthening the fiscal framework requires adopting rules to curb expenditure, especially on social security, limits on the use of supplementary budgets, and publication of more independent assessments of the outlook and budget projections (See Selected Issues Paper "An Independent Fiscal Institution for Japan"). Social expenditure reform, especially of medical expenses, has taken on added importance as fiscal revenues are being delayed. To this end, an independent fiscal institution (IFI) could play an important role, including by preparing short and medium-term macro-fiscal forecasts, and providing real time monitoring of fiscal policy making (Box 2). This would allow the Ministry of Finance to adopt realistic macroeconomic assumptions.

26. Clearer communication and better use of forward guidance can help strengthen monetary policy credibility and raise inflation expectations. The BoJ has gradually enhanced its transparency and communication framework over the past two decades. However, more can be done to improve monetary policy credibility and reduce policy uncertainty by publishing the staff forecast (Box 3). 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. Moreover, while maintaining the 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.

B. Resetting Targets and Policies to Prepare for the Long Haul

In the absence of an ambitious policy shift, the timeframe for achieving all targets should be pushed out and policies reset for steady but more gradual progress while building risk resilience. By embarking on more realistic goals, these measures would help strengthen policy credibility and reduce uncertainty. Nevertheless, compared to staff's reload package, the reset option would generate weaker nominal growth, higher and prolonged fiscal consolidation needs, and render the economy more vulnerable to fiscal confidence and financial stability shocks.

27. Policy space will be very limited and should be used sparingly. Without ambitious income policies and the associated comprehensive reforms, an expansionary fiscal policy stance could be counterproductive by raising risk premiums. Nonetheless, the weak outlook suggests that the fiscal stance will need to be broadly neutral in the near term. Similarly, since achieving the

inflation target will take longer, loose financial conditions will have to be maintained for an extended period. Hence, monetary policy would have to be reset for the long haul and carefully balance the benefits of providing further easing with the potential risks to medium-term financial stability, including JGB market liquidity, the profitability of financial institutions, disintermediation, and reduced market functioning, and limits to JGB purchases and negative interest rates.

28. The resulting weak inflation and low growth require a drawn-out fiscal consolidation and a more flexible monetary policy framework. Absent higher nominal growth, the required fiscal adjustment would be cumulatively larger and have to take place over a longer time horizon to avoid an excessive drag on growth, implying greater vulnerability to shocks. A gradual fiscal consolidation by about $\frac{1}{4}$ to $\frac{1}{2}$ percent of GDP per year in structural terms would need to be maintained for as long as needed to turn debt dynamics around. The monetary policy framework would need to become more flexible, with the BoJ abandoning the use of a specific calendar date for achieving its inflation target. While such a shift should raise BoJ credibility by setting a more realistic goal, the transition will need to be well communicated to avoid perceptions that the BoJ is reducing its commitment to achieving its inflation target and to limit the potential for adverse market reactions, including yen appreciation.

C. Unorthodox Policies to the Rescue?

29. More unconventional policy packages have merit but could be risky compared to the staff's reload package. Unorthodox policy packages typically mentioned in Japan's context include a monetized fiscal expansion, a sharp fiscal expansion combined with continued low interest rates, or a price level path target supported by a complementary exchange rate policy (Svensson's foolproof proposal). While these packages could generate reflation quickly, helping to reduce government debt, they are subject to various risks. On balance staff analysis suggests that the reload package has a better chance of success than these more unconventional policy alternatives from a risk-return perspective.⁹ For example, if aiming for "escape velocity" through highly expansionary fiscal policy leads to an increase in the term premium, government debt dynamics would deteriorate further. Likewise, under the foolproof proposal, if the interest premium does not decline as envisaged, the policy would rely mainly on expenditure switching. Inflation then fails to converge to the inflation target and output only increases initially, worsening debt dynamics relative to the reload package. In staff's judgement, as the financial market reaction to these alternatives are difficult to predict, relying on a broad set of instruments in a coordinated manner would be preferable from a risk-management perspective.

30. Likewise, risks from the oft-discussed monetized fiscal expansion likely outweigh benefits. While this approach is likely to increase inflation expectations and nominal GDP, thus reducing public debt, there is a major tail risk of an inflation scare leading to a spike in interest rates. This could occur as the commitment to not resort again to monetary financing may not be credible in an environment of elevated deficits and high debt, leading to fiscal dominance. The impact on

⁹ See Selected Issues Paper "Reflating Japan: Time to Get Unconventional?".

Japan's prosperity and the global economy (given the role of the yen and JGBs in international markets and Japan's large NFA position) of such a tail risk scenario would be so severe that a risk-return calculus would again favor the reload package.

Authorities' Views

31. The authorities argued that current policy frameworks are broadly appropriate. The authorities stressed that the delay of the consumption tax and the planned implementation of comprehensive and bold economic policies this autumn all aim to accelerate Abenomics in a coordinated manner to achieve the promised targets. The authorities noted that public sector wages are set based on private sector developments and that income policies are already incorporated in the current policy package through the tripartite negotiations, the increase in minimum wage growth, and the provision of tax incentives to firms that raise wages, and that it is necessary to consider the effects of the policy at this point. They understood the need to consider the impact on the economy when designing a consumption tax hike, but noted compliance costs for firms and the administrative burden for the tax authorities due to gradual consumption tax increases. They also recognized the need for more independent assessments of economic and fiscal developments, but felt this could be accomplished by strengthening existing institutions.

32. The BoJ maintained that the practice of mentioning the timing for reaching its inflation target as a collective forecast of the policy board was useful for communication purposes. Removing it was not needed given its forecast and its efforts to maintain credibility and raise inflation expectations. In addition, the BoJ voiced concern that publishing a staff forecast could lead to confusion given that the board members' projections are already made public. Nevertheless, the BoJ was aware that the current policy communication framework might be revisited if the BoJ judges sometime in the future that it would take a considerably longer time to achieve two percent inflation. More extreme unconventional policies, such as various forms of monetization, had been offered as solutions to Japan's woes in the past, but were seen as too risky and to varying degrees not feasible within Japan's current legal and institutional set up.

33. The authorities remained determined to achieve the FY2020 primary surplus target. They emphasized that the target constitutes an important commitment to debt sustainability and is realistic under the current fiscal consolidation plan which calls for accelerated structural reforms combined with expenditure reforms. In particular, building on achievements during the past 3 years, the government will make efforts to enhance efficiency and promote institutional reforms, under the benchmark of the levels equivalent to the sum of the expected increase due to population aging (approximately 1.5 trillion yen in 3 years) until FY2018. The delay of the consumption tax should have only a modest impact on the achievement of the fiscal consolidation target in FY2020 as its primary impact is to shift the revenue increases from FY2017 to FY2019.

34. The authorities emphasized that ongoing structural reforms are already in line with staff's advice. Efforts are underway to promote the improvement of involuntary non-regular to regular workers. Also in order to provide women and young people with a wide range of choices on how to work, consideration is being given to achieving equal-pay for equal-work. Removing

disincentives in tax and social security to full time work for spouses remains on the agenda. Efforts to invite foreign professionals into the country have gained momentum, including through a possible Japanese-version green card system for highly skilled foreign professionals. Finally, the authorities noted that upcoming structural efforts will focus on product and regulatory reform and deregulation in the services sector, and that they are considering changes to the credit guarantee scheme.

SAFEGUARDING FINANCIAL STABILITY

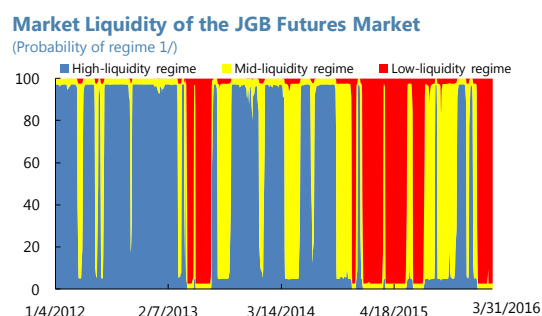
Safeguarding financial stability, particularly in the context of prolonged unconventional monetary policy, low growth, and demographic trends, remains essential.

35. Preserving financial stability requires progress in upgrading macroeconomic policies.

Overall, the financial system has remained sound and resilient, with good capitalization and a declining NPL ratio (Table 5). For the time being, systemic risks stemming from unsustainable public finances are contained by the strong domestic demand for JGBs and the effects of the BoJ's quantitative easing policies which are keeping the sovereign's funding cost and refinancing risks to a minimum. However, over the medium term, failure to achieve reflation and higher growth and the likely resulting absence of progress toward fiscal sustainability will create increasing vulnerabilities from low nominal growth and low profitability as well as from possible reemergence of risk premia. Moreover, in such a scenario, the likely need for prolonged unconventional monetary policies could engender financial stability risks. Conversely, the financial system could help to reduce the likelihood that these downside risks materialize and support growth in the medium term by adapting business models, consolidation, and improving risk management to support more risk-taking by SMEs.

36. Financial sector policies should safeguard the liquidity of JGB markets.

Market conditions are significantly affected by the BoJ's purchases which absorb more than new issuance, thus diminishing the availability of JGBs for collateral and asset-liability management use. There is some evidence of increased scarcity of JGBs in the cash market. While this has not yet led to structural changes in market functioning, with repo market transactions remaining high, JGB market liquidity appears to have declined after the expansion of QQE and the introduction of NIRP (Figure 5).¹⁰ Meanwhile, market liquidity has become less resilient as the probability that the market has moved into a mid-to-low liquidity state has increased sharply, suggesting that large transactions may have more



Sources: The Bank of Japan (BoJ); and Fund staff estimations.
1/ Estimated from a Markov regime-switching model following the October 2015 GFSR with the price impact as the measure of market liquidity. The BoJ kindly provided such data for the analysis.

¹⁰ The average lending fee for JGBs has increased in the special collateral repo market, which is important for market-making activities.

significant price impacts than before.¹¹ Together with the increase in foreign participation in the JGB market, these developments may expose the JGB and funding markets to higher volatility. In addition to the recent measures taken which have helped to enhance liquidity, the authorities could further strengthen their monitoring by regularly assessing the impact of developments in inventories of primary dealers on their market-making activities.¹²

37. Lower profitability and higher FX risks related to funding liquidity and international equity holdings of financial institutions warrant close monitoring.

- *Banks.* The flattening of the yield curve has been putting pressure on net interest margins and profitability, especially for regional banks which rely more on domestic activity. Moreover, the sharp rise in USD funding cost since last year has increased FX funding pressure on banks (Figure 4), as nearly 15 percent of their FX lending is funded by short-term market sources, exposing them to rollover risk. The authorities have encouraged banks to secure stable deposit bases in major foreign currencies. In addition, the authorities should ensure a sufficiently high liquidity coverage for significant foreign currencies if FX loans keep growing more rapidly than corresponding FX deposits. Finally, market risk associated with equity holdings has increased due to higher volatility.
- *Institutional investors.* Insurers and pension funds have accelerated the rebalancing of their portfolios towards more risky assets such as foreign bonds and equity. Most of the principal is hedged against FX risk but interest and dividend income remain largely exposed. The surging USD funding costs are raising the cost of these hedges which have shorter maturities than the underlying assets. As a result, some life insurers appear to have increased purchases of unhedged foreign bonds, raising concerns about their FX risk, as the USD funding cost could rise further. Finally, the yen appreciation has significantly reduced profits derived from international holdings.

38. The resilience of regional banks should be bolstered through further regulatory reforms. Major banks are on track to meet the Basel III capital and liquidity requirements according to the phasing-in schedule. However, regional banks are facing additional challenges given lower profitability, higher interest rate risk, and high real estate and FX exposures. The authorities should 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.

39. The authorities have made significant progress to strengthen the macroprudential policy (MaPP) framework, but inter-agency coordination could be further improved. Recent

¹¹ Based on an estimated Markov regime-switching model for price impact indicators following the October 2015 GFSR.

¹² Recent measures include (i) allowing for consecutive use of its Securities Lending Facility for a longer period, (ii) raising the upper limit on the amount of sales per issue in February 2016, (iii) regularly publishing the bond market survey and liquidity indicators in the JGB markets since 2015, and (iv) the MoF's plan to issue additional off-the-run JGBs with remaining maturity of 1–5 years in the Auctions for Enhanced-Liquidity in FY2016.

efforts include (i) establishing a macroprudential office in the FSA, (ii) launching the Council for Cooperation on Financial Stability between the FSA and the BOJ at the management level, and (iii) holding a monthly meeting between the MoF, FSA, and BoJ at the staff level for information sharing on international financial and capital markets. However, the FSA and BoJ could continue to intensify their cooperation via enhanced sharing of systemic risk assessments and findings from supervisory activities. In addition, although the FSA has the ultimate responsibility and discretion to implement regulations related to MaPP, it is important to ensure that the respective roles of the BoJ and FSA in managing the relevant tools remain clear. The upcoming FY2017 FSAP will make a detailed assessment.

40. Reduction in corresponding banking relationships (CBRs) has not been observed. A reduction in the provision of cross-border financial services by Japanese banks, especially CBRs, in response to reduced risk-taking or regulatory changes has not been observed, but the situation should be monitored.

Authorities' Views

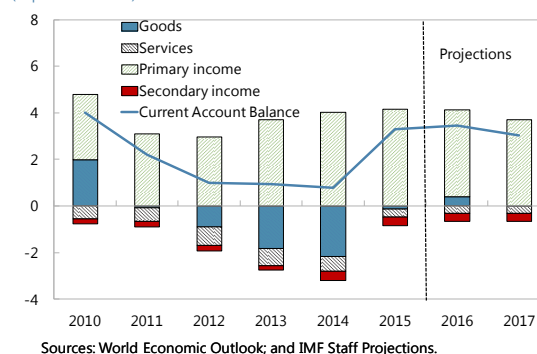
41. The authorities highlighted the recent progress made to safeguard financial stability and promote economic growth. They pointed out that absolute bank profits are still close to historically high levels despite some recent declines. In addition, the expansion in overseas lending required enhancing banks' risk and credit assessment capacity. In response to the potentially increasing FX liquidity risk, the authorities felt that supervisory dialogs regarding enhancing banks risk management should be carried out, rather than imposing one-size-fits-all FX liquidity requirements. The authorities expressed concerns over external risks, particularly the high leverage in Asia and emerging markets resulting from the global monetary easing and which could be affected by the slowdown in China and the Fed's tightening. They noted that the adverse effects of NIRP on bank profitability were limited and emphasized that the overall effect would be positive once effects on economic growth and credit demand materialize and banks progress further in adapting business models to cope with a structurally flat yield curve. The authorities have encouraged regional banks to change their business models from collateral-based lending to business potential-based lending and indicated that consolidation of regional banks should be decided by themselves voluntarily as a management decision. The FSA highlighted the recent progress in strengthening the macroprudential policy framework, acknowledging the need to continue close inter-agency information sharing.

EXTERNAL POSITION AND SPILLOVERS

42. The current account improved in 2015, due to declining oil prices and a weaker currency. The goods trade balance increased, reflecting a significant reduction in the energy import bill, while the services balance improved due to higher travel service receipts, boosted by rising tourist arrivals in particular from China (Table 6). The income balance remained high, reflecting Japan's large and increasing net foreign asset position, relatively high rates of return on its net foreign assets and the yen depreciation. The limited response to the oil windfall together with fiscal

consolidation raised domestic savings, contributing to the increase in the overall current account from 0.8 percent of GDP in 2014 to 3.3 percent in 2015. The current account is projected to reach about 3.5 percent of GDP in 2016 reflecting lower oil prices.

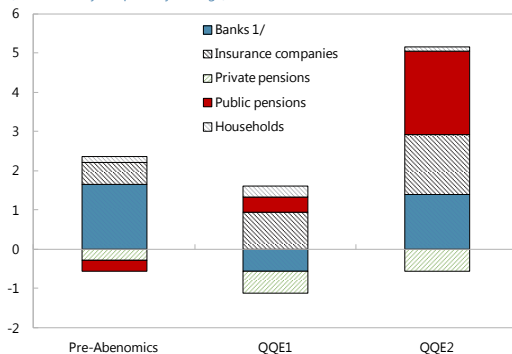
Current Account
(In percent of GDP)



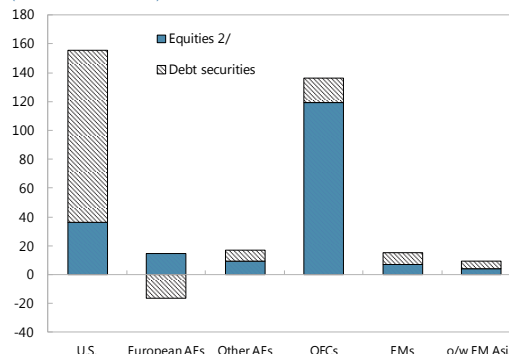
43. Capital outflows increased significantly in 2015, reflecting accelerated portfolio rebalancing by financial institutions towards foreign assets.

Japan’s gross portfolio outflows more than doubled last year, while FDI flows remained relatively stable. Most of the portfolio outflows were channeled to U.S. bonds and foreign equities. Outflows to emerging markets remained very low and concentrated in the region—and are modest even when scaled by the market capitalization of recipient countries. Going forward, capital outflows are expected to strengthen further against the backdrop of ongoing NIRP and the diverging monetary policies in other advanced economies, while the weaker outlook for emerging markets and higher USD funding costs could be restraining factors.

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



Cumulative Capital Outflows of Japan since QQE2: By Destination
(In billions of U.S. dollars)



Sources: Bank of Japan; BIS; Haver analytics; and IMF staff calculations.
 Note: Valuation effects are not included. QQE2 corresponds to October 2014–December 2015. OFCs stands for offshore financial centers as defined in IMF (2000).
 1/ Including banks’ direct investment.
 2/ Including investment fund shares.

44. Japan has absorbed global shocks during episodes of global risk aversion due to its safe-haven status. As exemplified during the recent increase in market volatility, the yen tends to appreciate during risk-off episodes, providing some offset to the associated decline in global demand. Japan’s QQE policies and the associated confidence and expectations effects have had modest positive spillovers on emerging Asian economies.¹³ Portfolio outflows, which are expected to accelerate as portfolio rebalancing continues, foreign direct investment and the continued expansion of Japanese banks abroad have been associated with positive spillovers.

¹³ See Ganelli and Tawk (WP/16/99).

45. Strengthening domestic policies is important to mitigate inward spillovers and secure external balance over the medium term. Inward spillovers from the slowdown in emerging markets, bouts of global financial volatility, and lower oil prices are posing a challenge for Japan's efforts to raise growth and reduce deflation risks. The 2015 external position was moderately stronger than the level consistent with medium-term fundamentals and desirable policies (Annex II). The appreciation of the real effective exchange rate since early 2016 has moved it towards a level broadly consistent with medium-term fundamentals suggested in the 2015 assessment while it may undermine the effort to lower deflation risks. Strengthening domestic policies remains the most effective tool to reduce deflation risks and increase resilience. Without bolder structural reforms and credible fiscal consolidation, domestic demand could remain sluggish, and any further monetary easing could lead to overreliance on depreciation of the yen. In this context, exchange rate intervention should not be used as a policy tool nor aim at a specific exchange rate level, but reserved to respond to disorderly market conditions, preferably coordinated with international partners to ensure effectiveness.

Authorities' Views

46. The authorities accepted the 2015 external assessment, but expressed some concerns about the staff's approach. They noted that Japan's strong current account position in 2015 mainly reflected its income balance and falling oil prices, and expressed concern that the external assessment methodology did not fully take these dynamics into account. Moreover, the authorities stressed that the assessment should focus only on 2015 to avoid that references to developments in 2016 could be interpreted as a premature assessment for 2016.

47. The authorities reiterated their commitment to mobilize all means to contribute to the global economy. They emphasized that the planned acceleration of the pace of structural reform and the deployment of the upcoming fiscal stimulus reflected the joint G7 commitment to strengthen policy responses in a cooperative, forceful and balanced manner. Moreover, the authorities noted that, as the G7 and G20 agreed, excess volatility and disorderly movements in exchange rates can have adverse implications for economic and financial stability.

STAFF APPRAISAL

48. The outlook for growth and inflation remains subdued with downside risks dominating in the medium-term. Despite a tight labor market, domestic consumption and investment remain sluggish and the weakness of the global recovery and yen appreciation are combining with adverse demographics to create an uncertain outlook. Inflation will remain subdued amid modest wage growth, rising gradually over the medium term but remaining below the BoJ's inflation target. The authorities have responded with welcome additional monetary and fiscal support and plans for additional structural reform.

49. Following initial success, achieving Abenomics' ambitious targets now requires a further comprehensive and coordinated policy reload. Income policies and labor market reforms are a priority to generate wage-price pressures and lift nominal growth. Companies should be

induced to increase base wages while administratively controlled wages should be raised in line with the inflation target. Labor market contracts that better balance job security and wage growth should be promoted and disincentives to work full time abolished. 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.

50. A credible fiscal consolidation course needs to be charted now, including a pre-announced path of gradual consumption tax hikes. Together with social security reform, a gradual but sustained increase in the consumption tax would address the looming fiscal sustainability problem, reduce policy uncertainty, and create policy space. Such a gradual and steady approach is essential to better balance support for growth and progress toward fiscal sustainability.

51. Structural reforms and strong policy frameworks are needed to raise productivity, address the demographic overhang, and enhance policy credibility. Structural reforms should focus on boosting domestic labor supply, enhancing the financial sector's role in promoting new growth areas, and fully implementing trade and bilateral investment agreements. Stronger fiscal institutions, including an independent assessment of the outlook and budget projections, should lend credibility to fiscal policy and help curb expenditure. Clearer communication and better use of forward guidance by the BoJ could strengthen monetary policy credibility and raise inflation expectations.

52. In the absence of a clear policy upgrade, policies will need to be reset for a prolonged adjustment. The required fiscal consolidation would be larger and take place over a longer time horizon, implying greater vulnerability to fiscal confidence and financial shocks. The BoJ would have to abandon its pre-specified time horizon for meeting the inflation target and maintain loose financial conditions for an extended period, requiring a careful balancing between benefits of further easing and the costs to medium-term financial stability.

53. Financial stability risks could emerge from prolonged unconventional monetary policies or the failure to achieve reflation and fiscal sustainability. The financial sector remains stable overall. However, JGB market liquidity appears to have fallen and financial institutions face declining profitability and elevated market and FX risks due to increased risk-taking, which should continue to be closely monitored. Measures to safeguard financial stability should include enhancing the monitoring process of JGB market liquidity and strengthening the MaPP framework.

54. Strengthening domestic policies would help mitigate inward spillovers and secure external balance over the medium term. While the 2015 external position was moderately stronger than the level consistent with medium-term fundamentals and desired policies, the appreciation of the yen since the beginning of 2016, has moved it toward a level broadly consistent with medium-term fundamentals, suggested in the 2015 assessment, and may undermine the Japan's efforts to lower deflation risks.

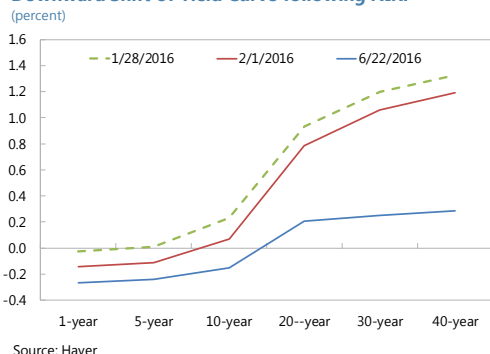
55. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Box 1. Effectiveness and Limitations of the Negative Interest Rate Policy (NIRP) in Japan¹

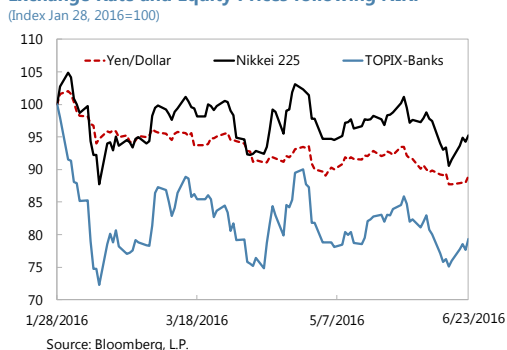
On January 29, the BoJ complemented its QQE program by announcing a negative interest rate on financial institutions' excess reserves held at the Bank. The intention was to (i) put downward pressure on short-term interest rates while at the same time reinforcing QQE's effect on the entire yield curve, and (ii) raise inflation expectations by dispelling concerns that QQE had reached its limit and reconfirming the Bank's commitment to its inflation target. To mitigate the direct impact on the earnings of financial institutions – which might be significant with excess reserves of more than 50 percent of GDP and more than 25 percent of total bank assets—the BoJ introduced a three-tiered reserve deposit system where only the top tier receives a negative interest rate of -0.1 percent (currently accounting for 10 percent of total reserves).

The NIRP helped lower market rates and accelerate portfolio rebalancing. Immediately following the introduction of the NIRP, the yield curve shifted down and flattened, with the 10-year benchmark yield falling below zero. Similar to European peers with NIRPs, the impact on short-term money market rates has been almost complete with the interbank funding rate (3-month TIBOR) falling from 17 bps at the beginning of the year to 6 bps. Lending and deposit rates have also fallen, but the impact has differed across banks—reflecting banks' different funding models. Meanwhile, financial institutions accelerated the rebalancing of their portfolios in search of higher yields. Corporate debt issuance picked up, especially in long maturities, as firms took advantage of low interest rates.

Downward Shift of Yield Curve following NIRP

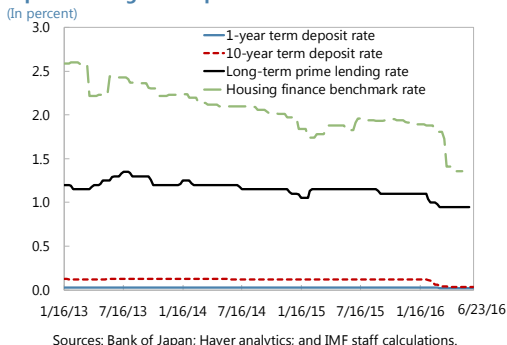


Exchange Rate and Equity Prices following NIRP

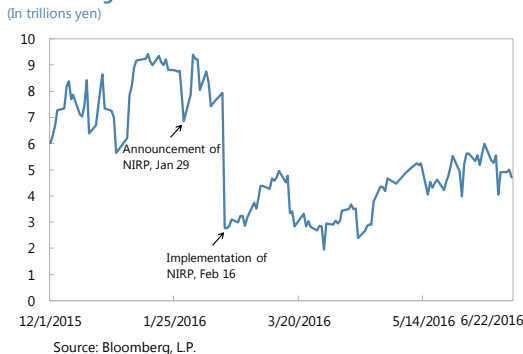


However, it is too early to assess NIRP's full impact on the economy. In particular, higher asset prices and inflation expectation have been overshadowed by lower stock prices amid yen appreciation, a slowing recovery, and persistent doubts about the ability of the BoJ to reach its inflation target. Hence, it is too early to judge the full impact of the NIRP as the second-round effects on credit demand and economic activity have yet to be fully observed.

Japan: Lending and Deposit Rates



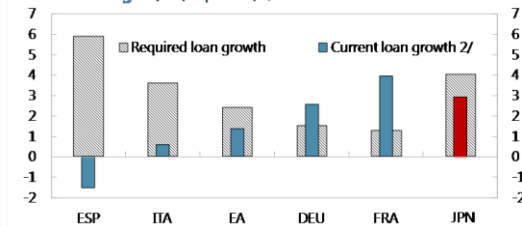
Outstanding Amount in the Uncollateralized Call Market



Box 1. Effectiveness and Limitations of the Negative Interest Rate Policy (NIRP) in Japan (concluded)

The NIRP raised concerns about market functioning and the profitability of financial institutions. As money market rates dropped into negative territory, transactions and amounts outstanding declined. In the call markets, investment trusts including money reserve funds and money market funds reduced their lending due to difficulties in managing assets with a negative rate. In addition, many financial institutions on both the lending and borrowing sides experienced practical difficulties in trading at negative rates, highlighting the need to upgrade IT systems. In the JGB markets, measures constructed from transaction data point to a decline in the market liquidity in both futures and cash market after the introduction of the NIRP (Figure 6). While bank profitability, already affected by QQE, is likely to be further squeezed under the NIRP, the direct impact has been offset to a large extent by the three-tier system. Staff estimates that, to completely offset the decline in net interest income, domestic loans need to grow at an annual rate of about 4 percent, which is higher than similar measures for most euro area economies, and above the 3 percent average growth rate since the introduction of QQE in April 2013.² That said, major banks could partly offset such losses by raising fee income or cutting operational costs. However, the room for regional banks to do so may be limited due to high competition.

Annual Loan Growth Required to Maintain Banks' Net Interest Margin (YoY, in percent) 1/



Sources: Bloomberg L.P., Bank of Japan, EBA Transparency Exercise (2015), ECB, Haver, SNL, and IMF staff calculations.

1/ For Japan, projections assume that banks' NIMs decline by 7 bps on average (based on actual changes in banks' NIMs from 2015Q4 to 2016Q1) and that the share of loans with variable interest rates account for 64.7 percent of total loans (based on mid-2015 data); for euro area, the results are obtained from the April 2016 GFSR with an update to March 2016.

2/ End-February 2016 for Japan, and end-March 2016 for euro area countries.

What are the limitations to the BoJ's NIRP? Effectiveness of NIRP will depend on the trade-off between its ability to stimulate growth and the associated financial costs. Several factors are likely to impact this net benefit calculation. First, prospects of additional stimulus through lower interest rates may be limited due to weak credit demand and already very low interest rates and inflation expectations. Second, compared to their European peers, Japanese banks' higher dependence on customer deposits might make it harder to pass through the NIRP to lending rates.³ Third, bank profitability in Japan has been declining and further deterioration could impact credit intermediation, particularly for regional banks. Fourth, while the current three-tiered system limits the direct impact on profitability, it does not encourage banks to move existing excess reserves into riskier investments, mitigating the policy impulse. Finally, how low and long the NIRP can go is affected by individual and corporate willingness to store cash, which in turn depends on storage, transportation, convenience, and insurance costs.⁴ Taking these factors together, there is a danger that wide spread skepticism about the efficacy of NIRP could by itself limit its effectiveness by preventing inflation expectations from rising. Therefore, it is crucial that monetary easing is complemented by other policies and reforms.

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

² The impact of reduced NIMs of local-currency bonds on banks' interest income is not taken into account in the exercise.

³ Customer deposits account for over 70 percent of banks' total liabilities in Japan but only 40 percent in euro area.

⁴ In this context, household preference to hold cash has been high compared to other advanced economies.

Box 2. Reforming Japan's Fiscal Framework: Merits of an Independent Fiscal Council¹

There are benefits to improving the fiscal policy framework in Japan towards greater credibility and transparency. Japan's fiscal policy has been conducted mostly in a discretionary manner, reflecting political cycles and reactions to unanticipated shocks. For example, the 1997 Fiscal Structural Reform Act included specific consolidation measures in major policy areas with an aim to reduce the headline fiscal deficit to 3 percent of GDP by 2005, but was suspended one year after its introduction partly due to its lack of flexibility in the face of the Asian financial crisis. A medium-term framework was adopted in 2006 to achieve primary balance in 2011, but it was abolished due to the global financial crisis. A three-year framework was created in 2010 to contain primary spending, but this ended in 2012 when the current cabinet took office. The current cabinet set a fiscal benchmark for FY2018 and a primary surplus target for FY2020, but the macroeconomic scenarios underpinning them are overly optimistic. Mid-year supplementary budgets are the rule rather than the exception—at least one every year and 41 since 1990. All combined, Japan's fiscal framework creates policy uncertainty and leaves fiscal expectations unanchored.

An independent fiscal institution (IFI) could play an important role in Japan, given its large adjustment needs. With unsustainable debt, concerns about future JGB financing, and a drawn out fiscal consolidation ahead, formulating a credible medium-term framework is essential. As part of this effort, an IFI could help improve the quality and transparency of fiscal policy by providing real-time forward-looking surveillance of fiscal policymaking in terms of its budgetary and macroeconomic consequences and to assess debt sustainability and risk. Japan already has two councils providing advice on fiscal policy: the Fiscal System Council (FSC) (an advisory board to the Finance Minister whose members include academics, business leaders and other experts) and the Council on Economic and Fiscal Policy (an advisory board to the Prime Minister, whose members include PM, ministers, the governor of the BoJ, academics and business leaders). While they play an important role, neither of these councils meets the main attributes enumerated in the OECD Principles for IFIs: ownership; independence and non-partisanship; mandate; resources; relationship with the legislature; access to information; transparency; communication; and external evaluation.

Drawing on the successful experience of IFIs with a sufficiently long track record, designing an IFI in Japan would involve the following considerations:²

- **Functions:** should include preparation of short- and medium-term macro-fiscal forecasts analysis of the government's fiscal policy stance, reflected in the budget bill; oversight of compliance with the government's own medium-term fiscal goals; and assessment of public debt sustainability on the basis of long-term quantitative scenarios, possibly adjusted for risk. The government would be required to respond to reports produced by the IFI. While the FSC provides proposals for fiscal consolidation and produces long-term projections, it does not perform an analysis of the macro-fiscal forecasts of the government and compliance with its medium-term fiscal goals.
- **Statutory basis:** the IFI should be created through informed debate and legislation with broad political consensus; although formally affiliated to the Diet, or with no affiliation at all, the IFI must enjoy *de facto* independence; and the coverage of its remit may need to be extended beyond the national government, to the rest of the public sector.
- **Structure:** the IFI can consist of an individual head or a collective leadership, but its assessments and projections should be based on impartial, expert opinion.

¹ Prepared by George Kopits (Consultant).

² Relevant examples of successful IFIs include the UK's Office for Budget Responsibility (OBR), the US's Congressional Budget Office (CBO) and the Netherlands Bureau for Economic Policy Analysis.

Box 3. Strengthening the Bank of Japan's Communication Framework¹

Effective BoJ communication, followed by consistent policy action, is essential to defeat Japan's deflationary mindset. Policy predictability and credibility are crucial for the central bank to impact long-term interest rates, anchor inflation expectations, and reduce excessive asset price volatility. Achieving these objectives requires the public to have a good understanding of the policy setting process and underlying assumptions. For the BoJ, communication is likely to play a particularly important role because (i) with the policy rate close to the effective lower bound, guidance about future policy actions is vital; and (ii) the BoJ faces the formidable challenge of anchoring inflation expectations at a level well above those observed during the past two decades.

The adoption of an explicit inflation target in January 2013 constituted a major advance in transparency. It was followed in April by the introduction of QQE and a pre-specified time-dependent guidance of achieving the target "at the earliest possible time within a time horizon of about two years," and "to continue with QQE until 2 percent inflation has been achieved in a stable manner." The initial impact of the regime change was a boost to policy credibility and a rise in inflation expectations. The BoJ took further measures to improve its transparency and accountability framework late in 2015, including issuing a quarterly report discussing the baseline outlook and associated upside and downside risks, providing board members' point estimates for inflation and GDP growth, and disseminating minutes and summary opinions from Monetary Policy Meetings.

However, three years have now past and long-term inflation expectations remain below the 2 percent target. The fact that financial markets have been caught off guard repeatedly—when the BoJ adopted new easing measures or made technical changes to its framework and when policy stayed passive despite a deteriorating inflation outlook—indicate a low degree of policy predictability that at times has created uncertainty about the BoJ's commitment.

To reduce policy uncertainty and impact inflation expectations, the BoJ should clarify its current guidance while strengthening the coherence of its monetary policy framework:

- *Move away from a pre-specified time horizon for meeting the target.* This is particularly important in the absence of a coordinated and comprehensive reload of policies. While the time-dependent guidance was intended to demonstrate the BoJ's strong commitment to reflate the economy, the opposite may have been achieved given the large and persistent gap between BoJ and market forecasts for inflation and the fact that monetary policy has, at times, remained passive in the face of large adverse shocks. Repeatedly pushing out the time horizon for hitting the target has undermined policy credibility.
- *Clarify which inflation measure drives policy decisions.* While the BoJ's explicit inflation target is defined in terms of headline inflation, board members and staff projections are specified in terms of a core measure that excludes fresh food prices. Declining oil prices induced the BoJ to develop a third measure labeled core-core inflation, excluding both energy prices and fresh food, to flag underlying price pressures. To avoid volatile components such as energy prices from triggering changes in policy expectations or de-anchoring long-term inflation expectations it is important that the BoJ clearly states which measure drives policy.
- Publish the BoJ staff baseline forecast with confidence bands together with underlying policy assumptions. This would (i) enable the Bank to present its detailed near-term outlook without a false sense of precision; (ii) improve the public's understanding of the relationship between policy instruments and the outlook; and (iii) provide a useful reference point for Board members to discuss dissenting views.
- Discuss alternative scenarios. This would clarify implications of selected shocks, or of basic differences in forecast assumptions that may exist among policymakers. It would generate a better understanding of the BoJ's approach to managing the macroeconomic risks, and thus help improve policy predictability. It also would reinforce that the baseline forecast is conditional.

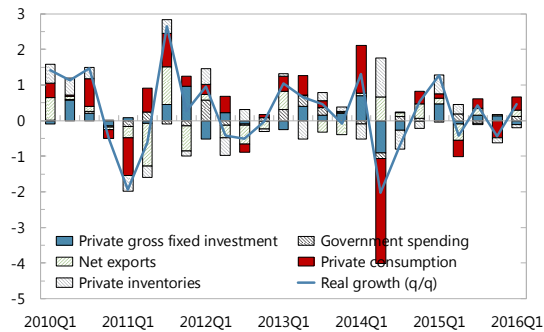
¹ Prepared by Dennis Botman (APD) and Niklas Westelius (APD).

Figure 1. Japan: Recent Economic Developments

Recovery has stalled, driven by weak consumption growth..

Contributions to QoQ Growth (SA)

(In percent)

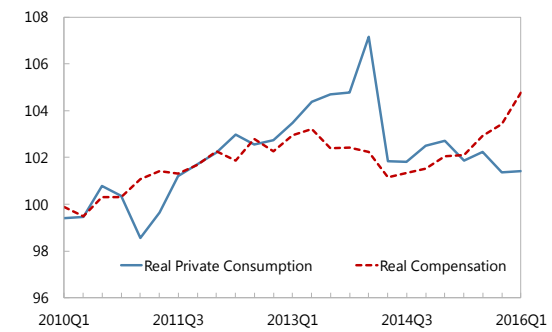


Source: Haver Analytics.

...despite a pick-up in real compensation.

Real Compensation and Real Consumption

(2010=100)

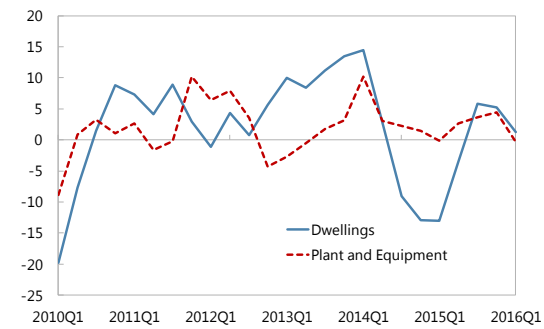


Source: Haver Analytics.

Private investment growth was modest...

Private Investment

(YoY; In percent)

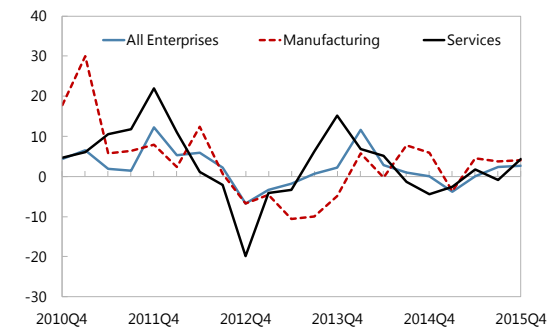


Source: Haver Analytics.

...with more momentum in manufacturing.

Private Investment Growth by Sector

(YoY; in percent)

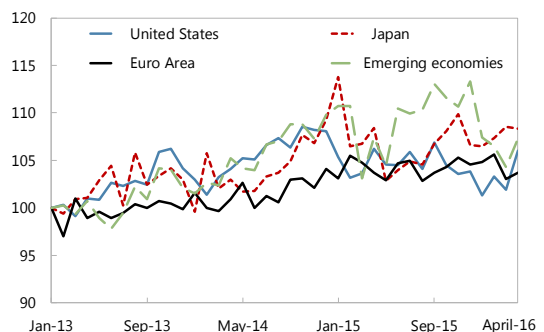


Source: Haver Analytics.

Overall exports were flat, as elsewhere...

World Exports

(Jan.2013=100; SA; Volumes)

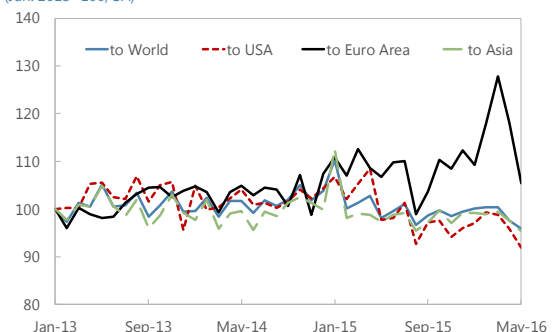


Source: CPB World Trade Monitor.

...with weaknesses in Asia offsetting Europe.

Real Exports by Destination

(Jan. 2013=100; SA)

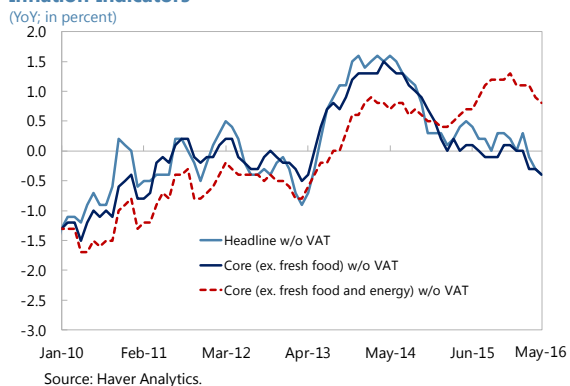


Source: Haver Analytics.

Figure 2. Japan: Inflation Developments

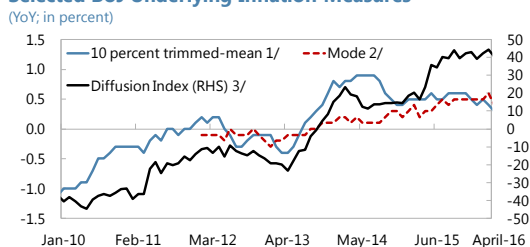
Headline inflation dropped to zero in 2015, while core inflation rose...

Inflation Indicators



Other measures of inflation were mixed.

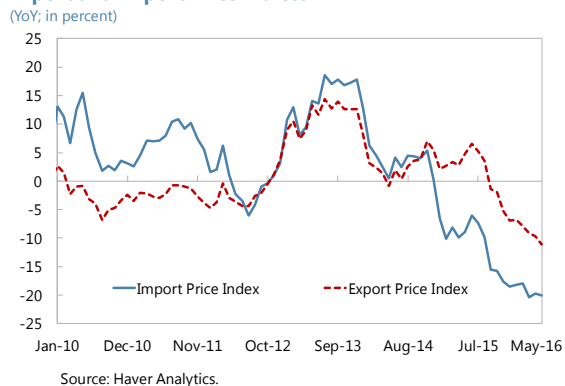
Selected BoJ Underlying Inflation Measures



1/ Weighted averages of the year-on-year price changes in individual items making up the CPI with items falling into the upper and lower 10 percent tails by weight trimmed. 2/ Inflation rate with the highest density in the distribution. 3/ The share of items in the CPI (less fresh food) whose price has increased from a year earlier minus the share of items whose price has declined.

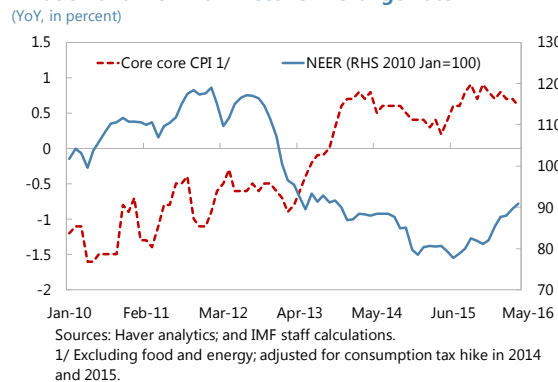
Import prices declined considerably, reflecting the large oil price shock.

Export and Import Price Indices



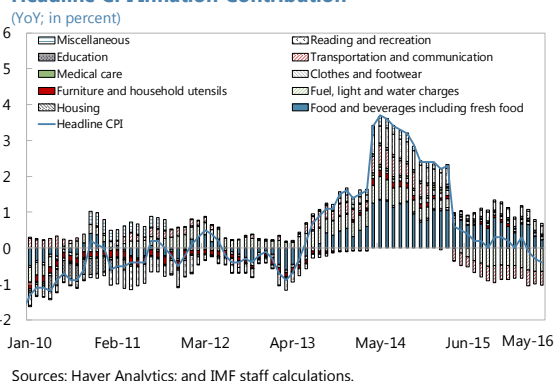
...boosted by the exchange rate depreciation.

Inflation and Nominal Effective Exchange Rate



Food and beverages and reading and recreation contributed positively.

Headline CPI Inflation Contribution



Corporate goods price inflation plummeted, but services producer price inflation remained positive, albeit barely.

Inflation Indicators

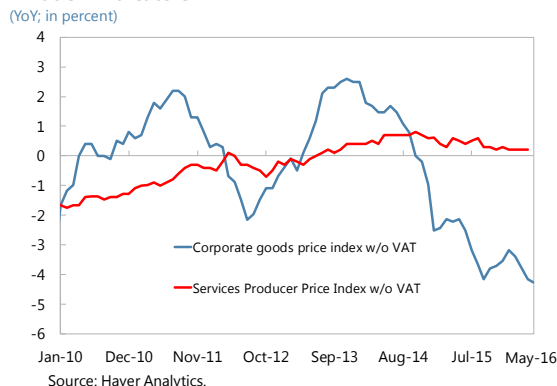
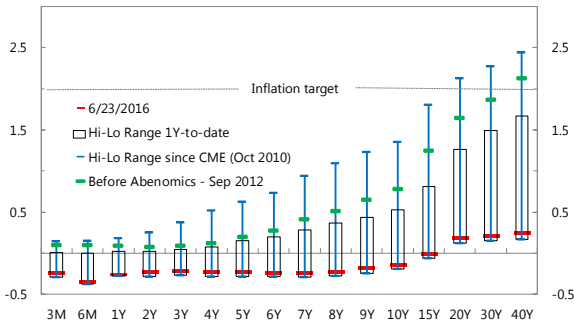


Figure 3. Japan: Monetary Policy Transmission

The BoJ's NIRP pushed yields to all-time lows.

JGB Yield Curve and Range^{1/}

(In percent)

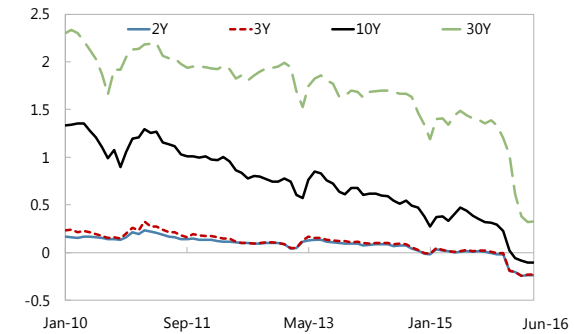


Source: Bloomberg.
1/ Range indicates max & min yields per maturity per indicated period.

Term spreads also declined considerably....

Japanese Government Bond Yields

(In percent)

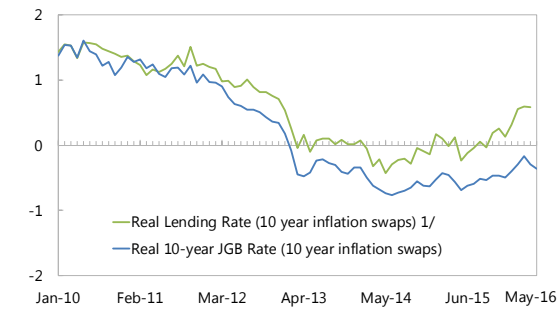


Source: Bloomberg

Real interest rates are low, but picked up recently due to lower inflation expectations

Japan: Real Interest Rate

(In percent)

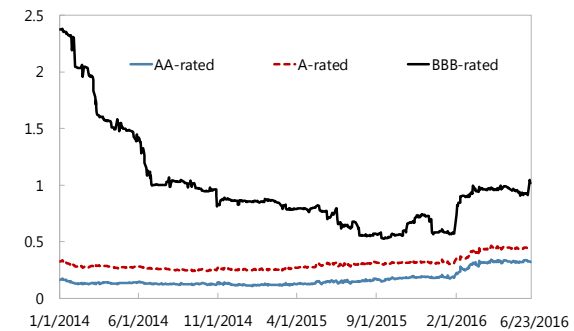


1/ Based on average long-term bank-loan rate.

...and bond spreads rose for lower-rated corporates.

Corporate-Government Bonds Spreads (5Y)

(In percent)

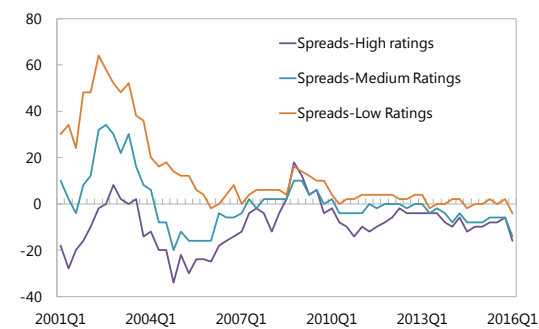


Source: Bloomberg L.P.

But spreads on bank loan rates recently declined....

Senior Loan Officer Survey Opinion Survey-Spreads of loan rates

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

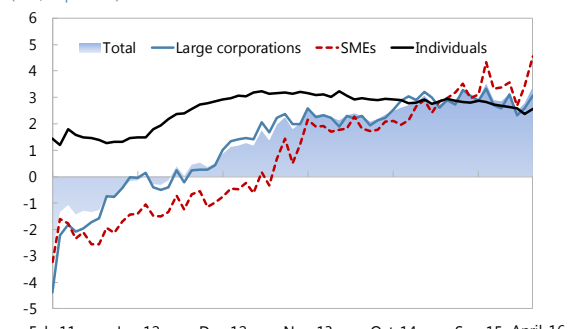


Sources: Bank of Japan, Senior Loan Officer Opinion Survey

...amid modest growth in bank credit.

Growth in Bank Lending to Corporates

(YoY; in percent)

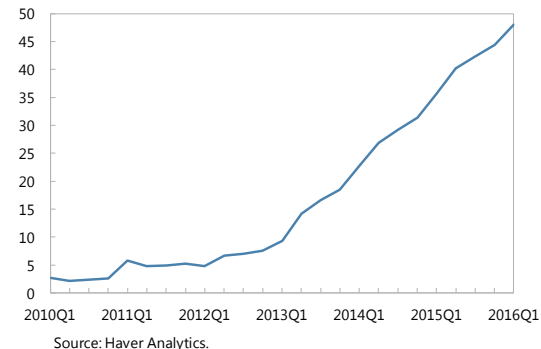


Source: CEIC.

Figure 3. Japan: Monetary Policy Transmission (concluded)

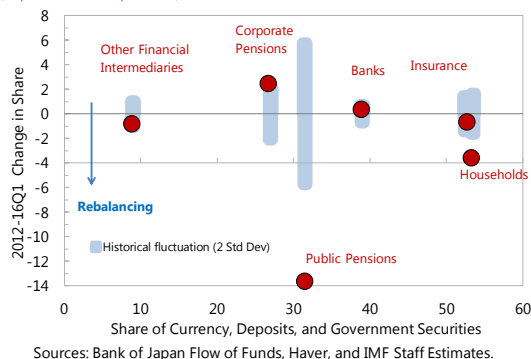
Banks have accumulated large excess reserves...

Excess Reserves
(In percent of GDP)



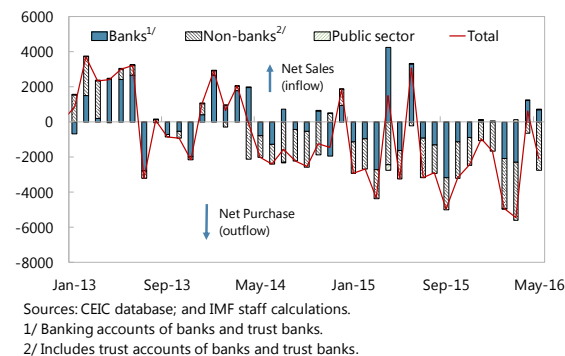
...and their rebalancing is progressing slowly.

Currency, Deposits & Government Bonds Holdings (2016Q1)
(In percent of total portfolio)



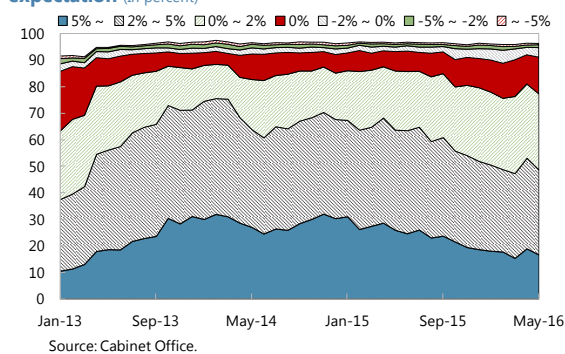
Portfolio outflows increased in 2015, driven by non-banks.

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



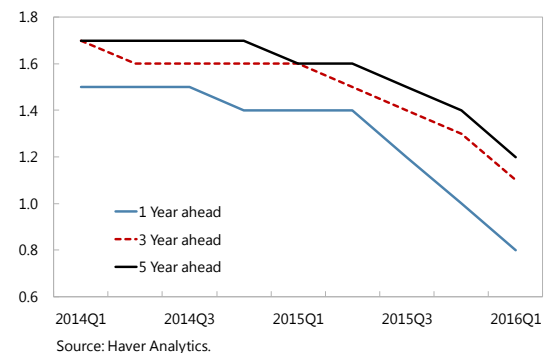
Inflation expectations of households declined recently.

Share of households with one year ahead inflation expectation (In percent)



So did the expectations of businesses...

Tankan Survey: Inflation Outlook
(YoY; in percent)



...and market-based inflation expectations.

Inflation Expectations
(YoY; in percent)

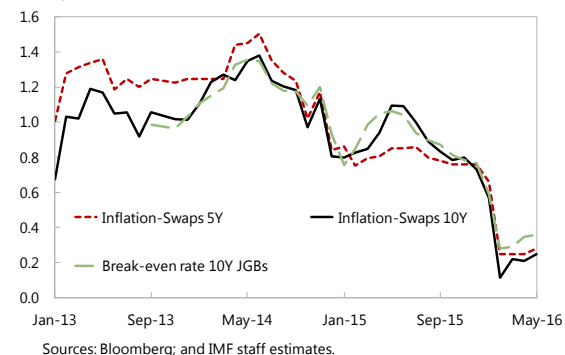
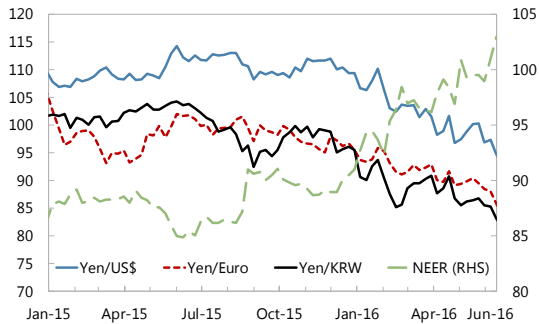


Figure 4. Japan: Financial Markets Developments

Exchange rate appreciated substantially....

Selected Exchange Rates

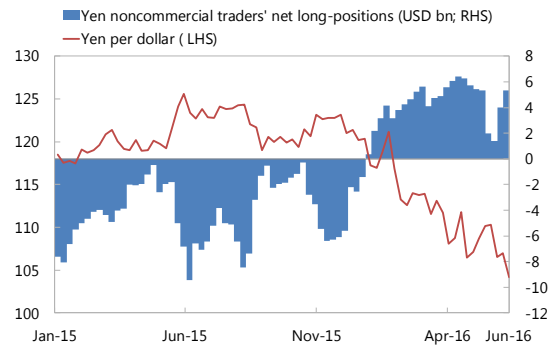
(2005=100)



Source: Bloomberg, L.P.

....as net open positions turned positive...

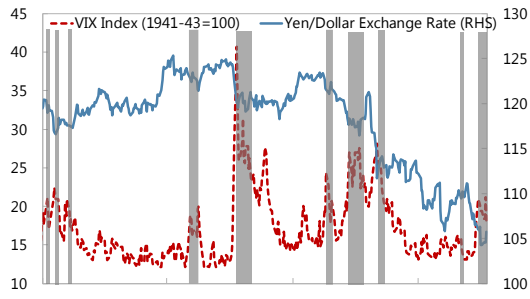
Chicago Mercantile Exchange Yen Position



Source: Bloomberg, L.P.

...global risk aversion increased...

VIX Index and Exchange Rate 1/



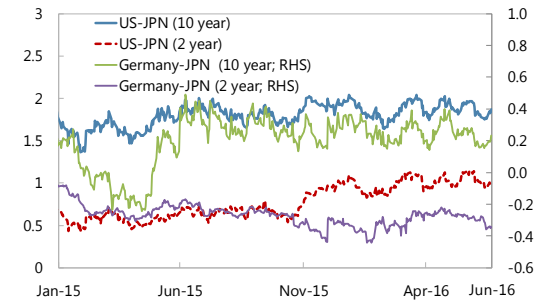
Source: Bloomberg L.P.

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)

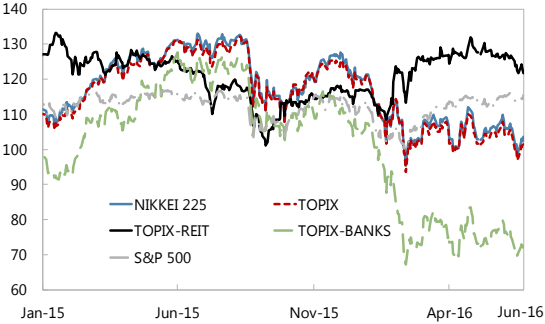


Source: Bloomberg, L.P.

Equity prices declined significantly, led by bank stocks.

Equity Markets

(Jan.2014=100)

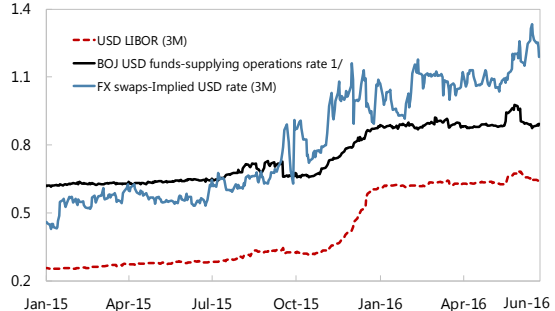


Source: Bloomberg, L.P.

USD funding costs increased.

USD Funding Cost in Japan

(In percent)



Sources: Bloomberg; and IMF staff estimates.

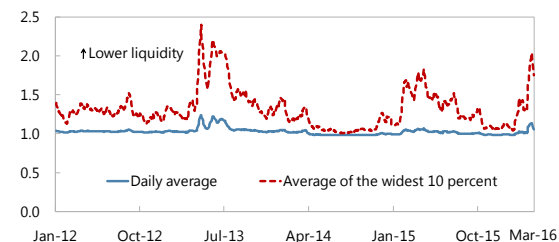
1/ OIS rate + 50 bps.

Figure 5. Japan: JGB Market Liquidity

JGB bid-ask spreads increased with NIRP

Bid-ask Spreads ^{1/}

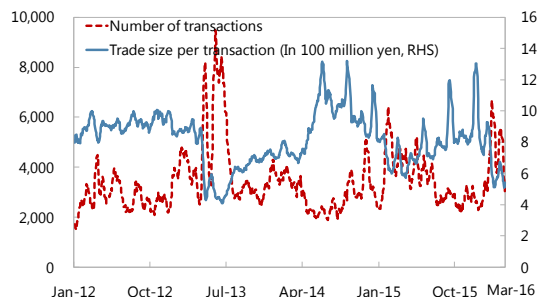
(Daily Average and Average of the Widest 10 percent; JPY cents)



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.

...and average trade size declined

Transactions Volume and Trade Size ^{1/}



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

Depth of the futures market declined.

Volume of Limit Orders at the Best-ask Price

(Daily Median; Unit)

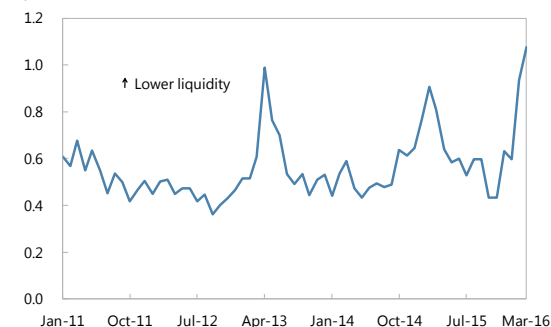


Source: Nikkei NEEDS.
 1/ Figures are calculated by taking the median of the volume of limit orders at the best-ask price with a 1-minute frequency within each business day, and then applying a 10-day backward moving average.

Best-worst quote spreads widened...

Best-worst Quote Spreads

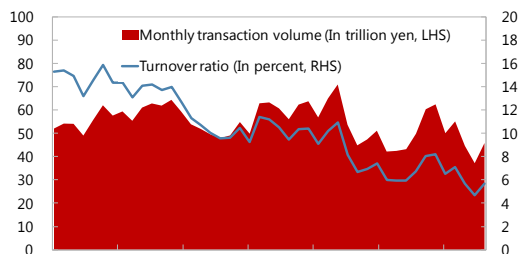
(bps)



Source: Yensai.com.

... and the volumes of both inter-dealer transactions...

Inter-dealer Monthly Transaction Volume ^{1/2/}

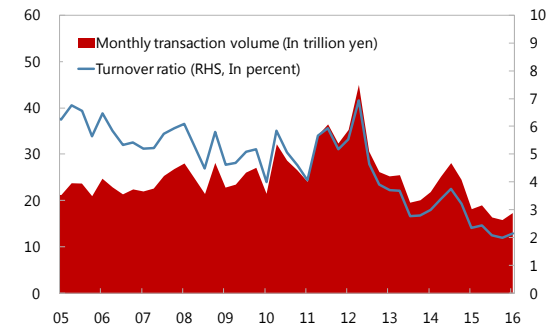


Sources: Japan Securities Dealers Association; Ministry of Finance.
 1/ Treasury Discount Bills, etc. are excluded from transaction volume.
 2/ "Turnover ratio" is calculated by dividing the transaction volume by the outstanding amount.

...and dealer-to-client transactions declined.

Dealer-to-client Monthly Transaction Volume

(Gross Amount Purchased by Clients)

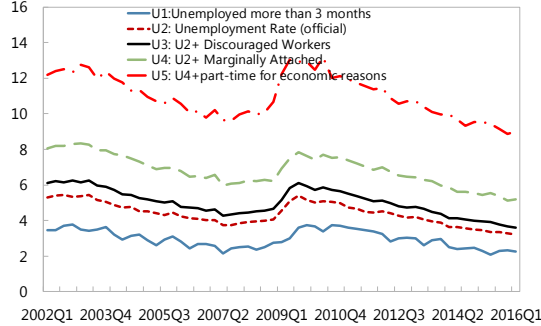


Sources: Japan Securities Dealers Association; Ministry of Finance.

Figure 6. Japan: Labor Market and Wage Developments

Alternative measures of unemployment declined considerably since the crisis...

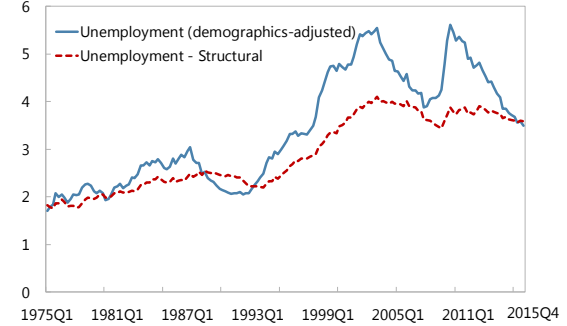
Alternative Measures of Labor Underutilization
(In percent)



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

...and the unemployment gap is estimated to have closed.

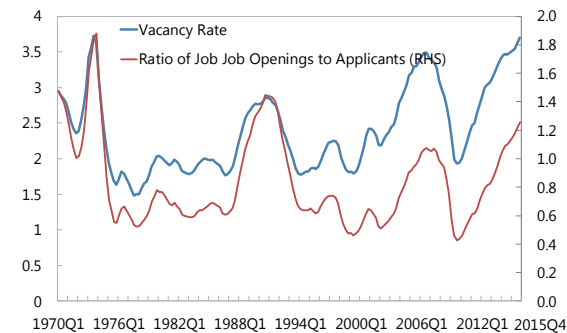
Unemployment Rate and Gap
(In percent)



Sources: Haver Analytics; and IMF staff calculations.

With vacancy rates at historically-high levels...

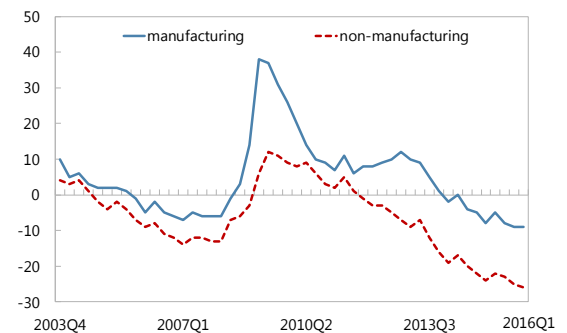
Vacancy Rate and Ratio of Job Openings to Applicants
(In percent, ratio)



Source: Haver Analytics.

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

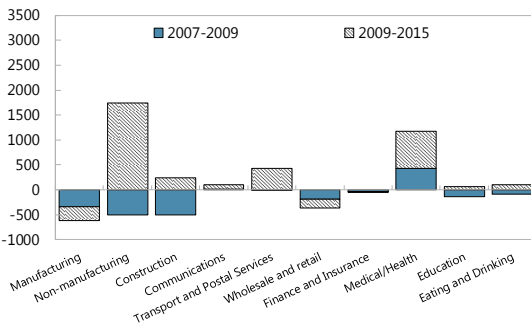
Tankan Enterprise Survey: Employment Conditions
(diffusion index, excess-shortage)



Source: Tankan Survey, Bank of Japan.

Full time employment since the crisis was concentrated in the non-manufacturing sectors...

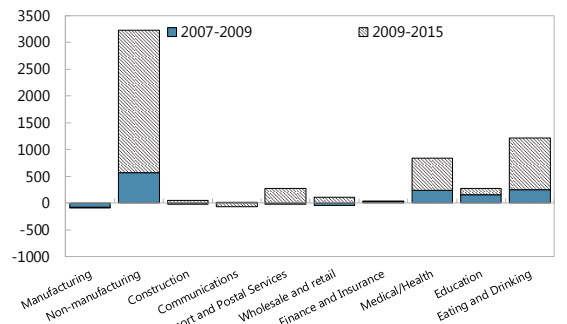
Change in Full-time Employees by Sector
(In thousands of persons)



Source: Haver Analytics.

...but employment of part-time workers remained more dominant.

Change in Part-time Employees by Sector
(In thousands of persons)



Source: Haver Analytics.

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

Wage growth has been stagnant since the crisis, but there is some positive momentum more recently....

Nominal and Real Cash Earnings Growth

(YoY; in percent)

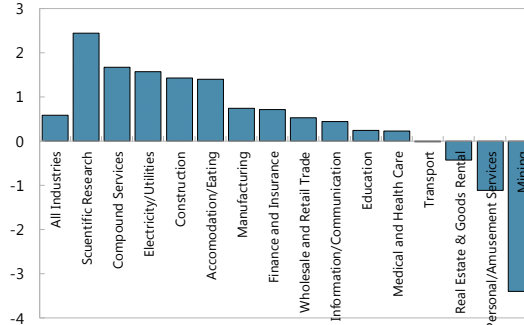


Source: Haver Analytics.

...driven by certain sectors facing labor shortfalls and with higher productivity.

Hourly Wage Growth by Sector 2015-2013

(In annual average percent)

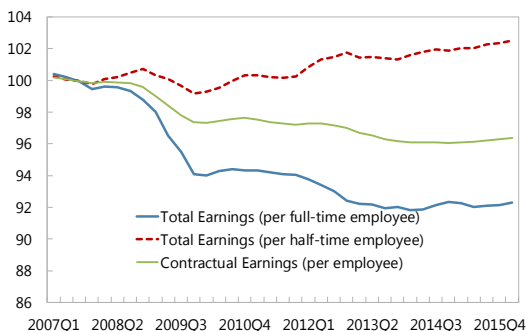


Sources: Haver Analytics; and IMF staff calculations

Wage growth for part-time workers has been higher....

Different Measures of Earnings

(4 quarter MA of total earnings, 2007=100)



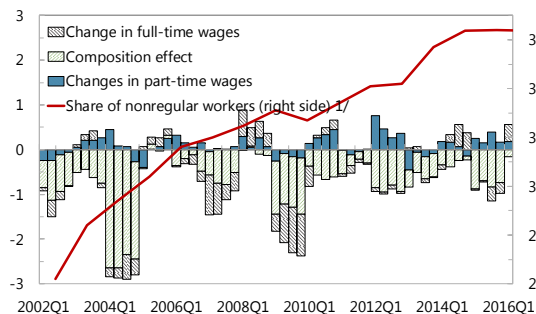
Sources: Haver and IMF staff calculations

...but the rising share of part-time workers has pushed average wages down reflecting their lower wage levels.

Nonregular Workers and Wage Growth

(YoY; in percent)

(In percent of staff)

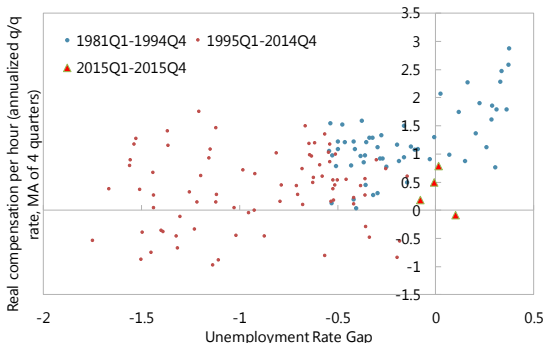


Sources: Haver Analytics; and IMF staff estimates. 1/ Yearly Average.

Further tightness in the labor market is necessary for higher wage growth...

Real Compensation Growth and Unemployment Gap

(In percent)

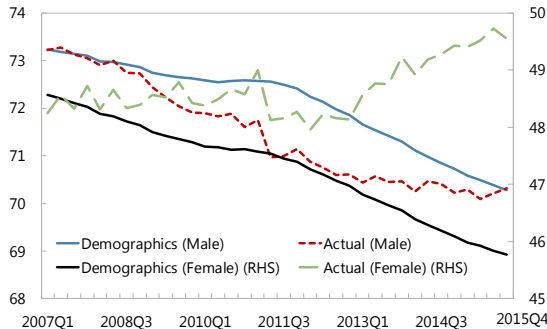


Sources: Haver Analytics; and IMF staff calculations.

...which requires more demand pressures amid continued increase in labor force participation rates.

Labor Force Participation Rate

(In percent)

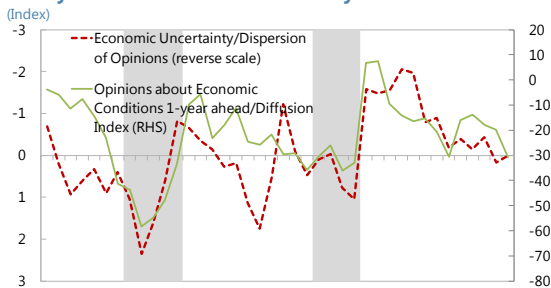


Source: Haver Analytics.

Figure 7. Japan: Economic and Policy Uncertainty

Near-term economic uncertainty has increased from its post-Abenomics-low...

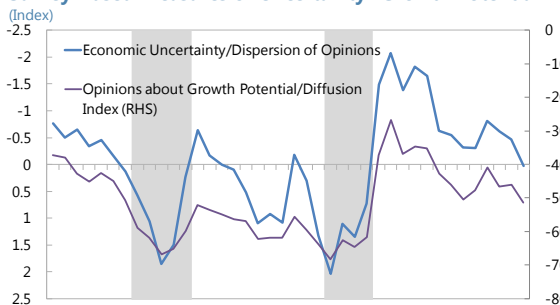
Survey-Based Measures of Uncertainty-Economic Conditions



Jun-06 Jun-07 Jun-08 Jun-09 Jun-10 Jun-11 Jun-12 Jun-13 Jun-14 Jun-15 Mar-16
 Note: Shaded areas show recession dates according to the Cabinet Office. The economic uncertainty index is standardized using the sample mean and standard deviation.
 Sources: Haver and IMF staff calculations

.. as has uncertainty about long-run growth potential.

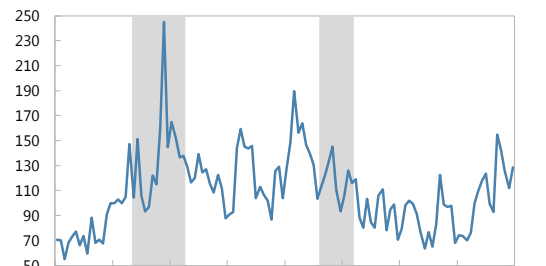
Survey-Based Measures of Uncertainty- Growth Potential



Jun-06 Sep-07 Dec-08 Mar-10 Jun-11 Sep-12 Dec-13 Mar-15 Mar-16
 Note: Shaded areas show recession dates according to the Cabinet Office. The economic uncertainty index is standardized using the sample mean and standard deviation.
 Sources: Haver analytics; and IMF staff calculations.

Recently, economic uncertainty has been in the news

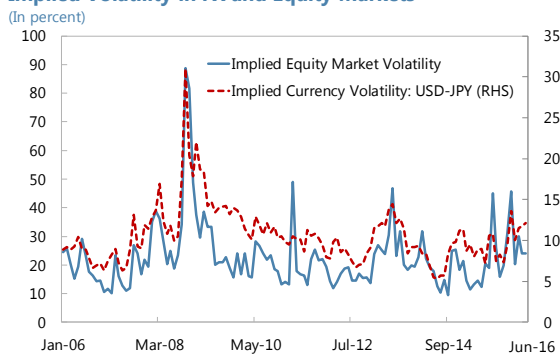
Newspaper Article Count Based Measure of Uncertainty 1/
 (Index 1987-2015=100)



Jun-06 Sep-07 Dec-08 Mar-10 Jun-11 Sep-12 Dec-13 Mar-15 May-16
 Source: Arbatli et. al. (2016)
 1/ Based on article counts in Asahi, Mainichi, Nikkei and Yomiuri newspapers containing keywords related to "economic" and "uncertainty".

.....together with rising market volatility.

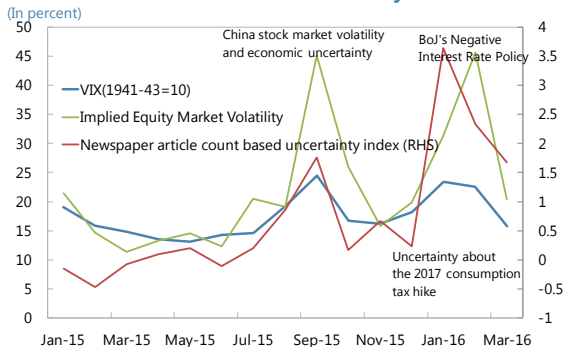
Implied Volatility in FX and Equity Markets



Source: Bloomberg.

Domestic policy uncertainty played a role as well...

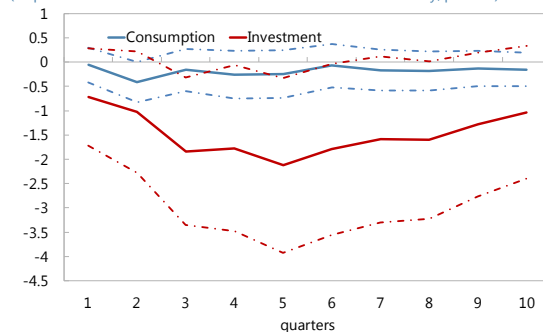
VIX and Measures of Economic Uncertainty



Source: Bloomberg.

...with possible negative effect on investment and consumption.

Response of Consumption and Investment to Economic Uncertainty
 (response to 2-standard deviation shock to economic uncertainty, percent)



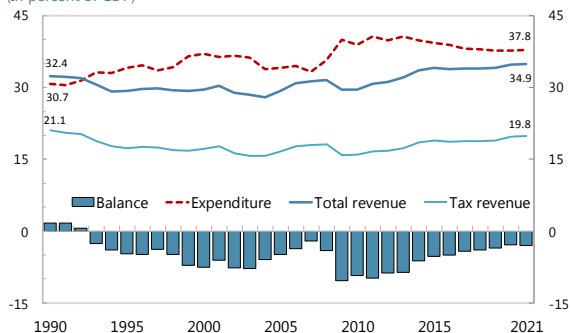
Note: Estimated using a quarterly VAR (1986Q2-2015Q4) with VIX, Japan economic uncertainty, equity prices, interest rate, investment and consumption.
 Sources: IMF Staff estimates

Figure 8. Japan: Fiscal Developments and Sustainability

Fiscal deficits have continued...

General Government Fiscal Balance

(In percent of GDP)

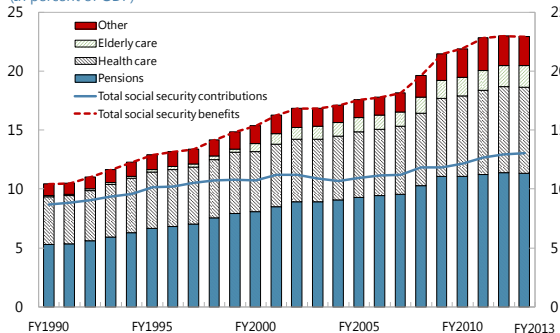


Sources: IMF WEO database; and IMF staff estimates.

...with the gap between social security spending and contributions expanding.

Social Security Benefits and Contributions

(In percent of GDP)

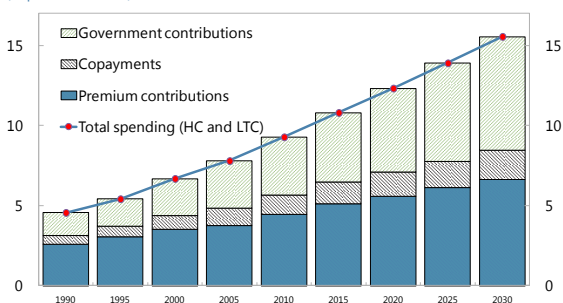


Sources: National Institute of Population and Social Security Research.

Health spending is projected to keep increasing...

Financing of Health Care and Long-Term Care

(In percent of GDP)

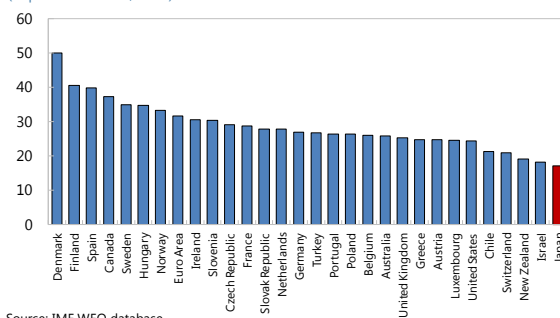


Source: "Health Spending in Japan: Macro-Fiscal Implications and Reform Options," Kashiwase, Nozaki, and Saito (2014).
Note: Excess cost growth of 1 percent is assumed for 2011-30.

...but non-social security spending remained low.

OECD: Spending excluding Social Security and Interest^{1/2/}

(In percent of GDP, 2015)

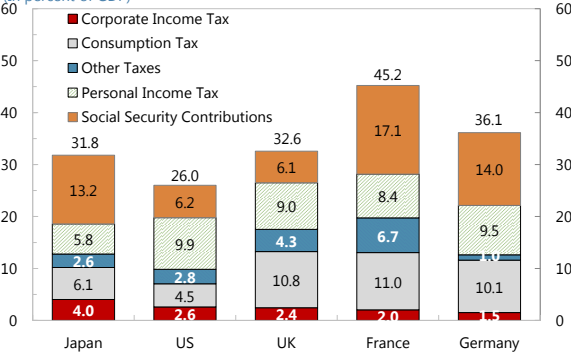


Source: IMF WEO database.
1/ OECD countries with missing data (e.g., Italy) are not reported here.
2/ General government basis.

Revenues are comparatively low...

General Government Tax and SS Revenue, 2014

(In percent of GDP)

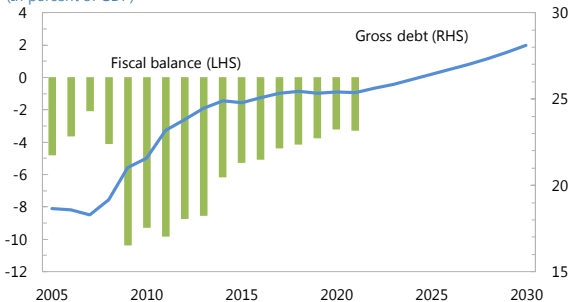


Sources: OECD; and IMF WEO database.

Debt is not sustainable under the current policies.

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.

Table 1. Japan: Selected Economic Indicators, 2011–17

Nominal GDP: US\$ 4,124 Billion (2015)

Population: 127 Million (2015)

GDP per capita: US\$ 32,480 (2015)

Quota: SDR 15.6 Billion (2015)

	2011	2012	2013	2014	2015	2016	2017
						Proj.	
Growth (percent change) 1/							
Real GDP	-0.5	1.7	1.4	0.0	0.5	0.5	0.3
Domestic demand	0.4	2.6	1.7	0.0	0.1	0.5	0.4
Private consumption	0.3	2.3	1.7	-0.9	-1.2	0.7	1.2
Gross Private Fixed Investment	4.3	3.6	1.1	1.5	0.8	2.1	2.6
Business investment	4.1	3.7	-0.5	3.1	1.5	1.8	2.2
Residential investment	5.1	3.2	8.4	-5.3	-2.5	2.9	4.2
Government consumption	1.2	1.7	1.9	0.1	1.2	1.1	-1.7
Public investment	-8.2	2.7	8.0	0.4	-2.5	-5.3	-7.6
Stockbuilding 2/	-0.2	0.2	-0.2	0.2	0.5	-0.2	0.0
Net exports 2/	-0.8	-0.8	-0.2	0.3	0.4	-0.1	-0.2
Exports of goods and services 3/	-0.4	-0.2	1.2	8.3	2.8	0.1	2.0
Imports of goods and services 3/	5.9	5.3	3.1	7.2	0.3	0.6	3.5
Output Gap	-3.3	-2.0	-1.1	-1.6	-1.5	-1.6	-1.7
Inflation (annual average)							
CPI 4/	-0.3	0.0	0.4	2.7	0.8	0.2	0.6
CPI excluding VAT	-0.3	0.0	0.4	1.2	0.3	0.2	0.6
Core Core CPI excluding VAT 5/	-0.8	-0.4	-0.2	0.7	0.9	...	...
GDP deflator	-1.9	-0.9	-0.6	1.7	2.0	0.6	0.4
Unemployment rate (annual average)							
	4.6	4.3	4.0	3.6	3.4	3.2	3.3
Government (percent of GDP)							
General government							
Revenue	30.8	31.1	32.1	33.6	34.1	33.9	34.0
Expenditure	40.6	39.8	40.6	39.8	39.3	38.9	38.2
Overall Balance	-9.8	-8.8	-8.6	-6.2	-5.2	-5.0	-4.2
Primary balance	-9.0	-7.9	-7.8	-5.6	-4.9	-5.0	-4.4
Structural primary balance	-7.7	-7.0	-7.5	-5.2	-4.5	-4.6	-4.0
Public debt, gross	231.6	238.0	244.5	249.1	248.0	250.4	252.9
Macro-financial (percent change, end-period, unless otherwise specified)							
Base money	22.2	19.3	60.3	36.7	29.1	22.6	18.3
Broad money	3.6	2.8	4.0	3.0	3.1	2.7	2.7
Credit to the private sector	-0.6	3.1	5.5	1.5	2.6	2.3	2.4
Non-financial corporate debt in percent of GDP	191.3	196.3	225.6	238.2	234.4	234.0	236.1
Household debt in percent of disposable income	128.3	127.1	128.5	129.3	129.3	130.3	131.8
Interest rate							
Overnight call rate, uncollateralized (end-period)	0.1	0.1	0.1	0.1	0.0	...	...
Three-month CD rate (annual average)	0.3	0.3	0.2	0.2	0.2	...	...
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.)	1.1	0.9	0.7	0.6	0.4	-0.1	0.0
Balance of payments (in billions of US\$)							
Current account balance	129.8	59.7	45.9	36.4	135.6	157.7	142.0
Percent of GDP	2.2	1.0	0.9	0.8	3.3	3.5	3.0
Trade balance	-4.5	-53.9	-90.0	-99.9	-5.3	17.6	-0.5
Percent of GDP	-0.1	-0.9	-1.8	-2.2	-0.1	0.4	0.0
Exports of goods, f.o.b.	790.8	776.0	695.0	699.4	621.9	622.8	651.6
Imports of goods, f.o.b.	795.3	829.9	784.9	799.3	627.2	605.2	652.1
Energy imports	242.8	272.2	257.4	241.7	133.7	115.2	133.0
FDI, net (percent of GDP)	2.0	2.0	2.9	2.6	3.2	2.5	2.4
Portfolio Investment, net (percent of GDP)	-2.8	0.5	-5.7	-0.9	3.2	3.3	3.4
Terms of trade (percent change)	-9.0	-1.8	-2.5	-1.0	14.0	0.8	-0.5
Change in reserves	177.3	-37.9	38.7	8.5	5.1	9.5	10.0
Total reserves minus gold (in billions of US\$)	1258.2	1227.2	1237.3	1231.0	1207.1	...	...
Exchange rates (annual average)							
Yen/dollar rate	79.8	79.8	97.6	105.9	121.0	110.7	108.0
Yen/euro rate	111.0	102.6	129.6	140.8	134.3	122.9	120.8
Real effective exchange rate (ULC-based) 6/	118.5	119.7	96.7	88.8	85.0	...	...
Real effective exchange rate (CPI-based) 7/	101.7	100.6	80.4	75.2	70.2	...	...
Demographic Indicators							
Population Growth	0.2	-0.2	-0.2	-0.2	-0.1	-0.3	-0.3
Old-age dependency	36.4	37.8	39.8	41.8	43.6	44.9	46.2

Sources: IMF, Competitiveness Indicators System; OECD, and IMF staff estimates and projections as of June 23, 2016.

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, 2011–17

	2011	2012	2013	2014	2015	2016	2017
						Proj.	
<i>(In trillions of yens)</i>							
Monetary authority							
Net foreign assets	4.0	6.3	5.0	3.9	2.3	2.0	2.0
NDA	121.1	132.2	196.9	272.0	353.9	434.5	514.5
Net domestic credit	130.5	143.5	210.8	291.3	374.6	455.3	535.3
Net credit to non-financial public sector	77.0	96.1	159.2	222.0	288.6	371.6	451.6
Credit to the private sector	5.9	8.5	11.7	13.9	17.8	15.4	15.4
Net credit to financial corporations	47.5	38.9	39.8	55.4	68.3	68.3	68.3
Other items net	-9.3	-11.3	-13.9	-19.3	-20.8	-20.8	-20.8
Monetary base	125.1	138.5	201.8	275.9	356.1	436.5	516.5
Monetary survey (depository corporations)							
NFA	90.5	101.5	104.3	100.3	121.3	112.8	116.7
NDA	1,037.2	1,050.2	1,086.5	1,126.2	1,144.5	1,178.2	1,209.2
Net domestic credit	1,088.1	1,124.8	1,165.3	1,215.4	1,226.6	1,265.3	1,301.3
Net credit to nonfinancial public sector	464.3	482.4	527.7	562.3	570.6	596.1	618.5
Credit to the private sector	501.1	516.5	544.9	553.3	567.5	580.6	594.3
Net credit to other financial institutions	122.7	125.9	92.7	99.8	88.6	88.6	88.6
Other items net	-50.9	-74.6	-78.8	-89.2	-82.1	-87.1	-92.1
Broad money	1,121.9	1,146.3	1,184.2	1,219.7	1,257.3	1,290.9	1,325.9
Currency in circulation	80.0	83.1	85.3	88.2	93.6	96.7	99.9
Current deposits	461.3	477.7	504.7	530.7	553.3	577.8	603.6
Other deposits	580.7	585.5	594.2	600.8	610.4	616.4	622.4
<i>(In percent of GDP)</i>							
Credit to the private sector	106.3	108.7	113.7	113.6	113.7	115.1	117.0
Net credit to other financial institutions	26.0	26.5	19.4	20.5	17.7	17.6	17.4
Credit to the private sector from depository corporations	106.3	108.7	113.7	113.6	113.7	115.1	117.0
Corporate debt (includes loans and securities other than shares)	191.3	196.3	225.6	238.2	234.4	234.0	236.1
Household debt in percent of net disposable income	128.3	127.1	128.5	129.3	129.3	130.3	131.8
<i>(Y-o-Y growth in percent)</i>							
Base money	22.2	19.3	60.3	36.7	29.1	22.6	18.3
Broad money	3.6	2.8	4.0	3.0	3.1	2.7	2.7
Credit to the private sector from depository corporations	-0.6	3.1	5.5	1.5	2.6	2.3	2.4
Credit to the corporate sector from depository corporations for fixed investments 1/	1.2	1.0	2.7	2.8	1.0	1.1	2.0
Housing loans 2/	2.0	2.2	2.3	1.8	2.4	1.8	3.2
Credit to the private sector from all financial institutions	-2.9	2.6	7.1	2.1	4.6	1.5	2.4
Memorandum items:							
Velocity of broad money	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Money multiplier	9.0	8.3	5.9	4.4	3.5	3.0	2.6
Loan-to-deposit ratio (percent) 3/	59.8	60.4	58.0	57.2	57.0	56.2	56.0
Leverage ratio (capital to assets)							
CAR (percent of RWA)	13.8	14.2	15.2	15.6	15.5	15.3	15.2
CET1 ratio (percent of RWA)	11.3	11.7	12.1	12.4	12.5	12.3	12.3
Return on equity (percent)	4.8	5.7	9.1	7.8	6.3	6.2	6.2
Return on assets (percent)	0.2	0.3	0.4	0.3	0.3	0.3	0.3
Gross impaired assets (percent of total loans)	2.4	2.4	2.3	1.9	1.6	1.6	1.6

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

1/ Projections were made using the correlation between lending and non-residential investment in the 2008–14 period.

2/ Projections were made using the correlation between lending and residential investment in the 2004–14 period.

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

Table 3. Japan: Medium-Term Projections, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
	Projections							
	<i>(Percent change)</i>							
Real GDP	0.0	0.5	0.5	0.3	0.5	0.8	0.1	0.6
Private final consumption	-0.9	-1.2	0.7	1.2	0.8	1.0	-0.3	0.9
Government consumption	0.1	1.2	1.1	-1.7	-0.2	0.1	0.2	0.0
Gross Private fixed investment	1.5	0.8	2.1	2.6	1.7	2.3	-0.2	1.1
Government consumption	0.1	1.2	1.1	-1.7	-0.2	0.1	0.2	0.0
Public investment	0.4	-2.5	-5.3	-7.6	-3.6	-0.2	-0.9	-1.4
Stockbuilding (contribution to growth)	0.2	0.5	-0.2	0.0	0.0	0.0	0.0	0.0
Exports	8.3	2.8	0.1	2.0	2.1	2.1	2.9	1.8
Imports	7.2	0.3	0.6	3.5	2.9	3.7	1.5	2.2
Total domestic demand	0.0	0.1	0.5	0.4	0.6	1.0	-0.2	0.7
Net exports (contribution)	0.3	0.4	-0.1	-0.2	-0.1	-0.2	0.3	0.0
Real GDP per Capita	0.1	0.7	0.7	0.6	0.9	1.2	0.5	1.1
Private final consumption per Capita	-0.7	-1.1	1.0	1.5	1.2	1.4	0.1	1.4
Unemployment rate (percent)	3.6	3.4	3.2	3.3	3.3	3.3	3.3	3.3
Headline CPI inflation (average)	2.7	0.8	0.2	0.6	0.6	1.1	1.7	1.2
<i>memo item: without planned consumption tax increases</i>	1.2	0.3	0.2	0.6	0.6	0.8	1.0	1.2
Output gap (in percent of potential output)	-1.6	-1.5	-1.6	-1.7	-1.6	-1.3	-1.7	-1.4
	<i>(In percent of GDP)</i>							
Overall fiscal balance	-6.2	-5.2	-5.0	-4.2	-3.9	-3.6	-2.9	-3.0
Primary balance	-5.6	-4.9	-5.0	-4.3	-4.2	-3.9	-3.1	-3.0
General government debt								
Gross	249.1	248.0	250.2	252.6	254.4	253.5	252.5	251.8
Net	126.2	128.0	130.4	132.9	134.8	133.8	132.8	132.2
External current account balance	0.8	3.3	3.5	3.0	3.0	2.8	3.1	3.1
National savings	22.6	25.3	25.1	24.8	24.8	24.8	25.0	25.0
Private	20.7	22.5	22.4	21.6	21.5	21.2	20.8	20.9
Public	2.0	2.8	2.7	3.3	3.5	3.8	4.5	4.3
National investment	21.8	22.0	21.6	21.7	21.7	22.0	22.0	22.0
Private	16.9	17.3	17.2	17.6	17.8	18.1	18.1	18.3
Public	4.9	4.7	4.4	4.1	3.9	3.9	3.8	3.8

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

Table 4. Japan: General Government Operations, 2011–17

	2011	2012	2013	2014	2015	2016	2017
					Est.	Proj.	
Total revenue	30.8	31.1	32.1	33.6	34.1	33.8	33.9
Taxes 1/	16.6	16.8	17.3	18.5	18.9	18.6	18.7
Social security contributions	12.5	12.8	13.0	13.2	13.2	13.3	13.4
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	1.7	1.6	1.7	1.8	1.9	1.9	1.8
o/w interest income	1.4	1.3	1.5	1.6	1.6	1.6	1.6
Total expenditure	40.6	39.8	40.6	39.8	39.3	38.9	38.1
Expense	36.1	36.1	36.3	35.9	35.6	35.4	34.9
Compensation of employees 2/	6.3	6.1	5.9	6.0	...	...	...
Use of goods and services 2/	3.8	3.8	4.0	4.0	...	...	...
Consumption of fixed capital	3.0	3.0	3.0	3.0	3.0	2.9	2.9
Interest	2.1	2.1	2.1	2.0	1.8	1.6	1.3
Grants 2/	0.1	0.1	0.2	0.1	...	...	...
Social security benefits	20.5	20.6	20.9	20.6	20.4	20.4	20.7
Other expense	0.2	0.2	0.2	0.1	...	...	...
Net acquisition of nonfinancial assets	1.5	0.8	1.3	0.8	0.7	0.5	0.3
Acquisitions of nonfinancial assets	4.5	3.8	4.3	3.8	3.7	3.5	3.2
o/w public investment	3.1	3.2	3.5	3.6	3.4	3.2	2.9
o/w land acquisition	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Consumption of fixed capital	-3.0	-3.0	-3.0	-3.0	-3.0	-2.9	-2.9
Net lending/borrowing (overall balance)	-9.8	-8.8	-8.6	-6.2	-5.2	-5.0	-4.2
Excluding social security fund	-9.0	-8.0	-8.1	-6.5	-5.2	-4.7	-4.0
Primary balance	-9.0	-7.9	-7.8	-5.6	-4.9	-5.0	-4.3
Structural balance 3/	-8.5	-7.9	-8.2	-5.8	-4.8	-4.7	-3.8
Structural primary balance 3/	-7.7	-7.0	-7.5	-5.2	-4.5	-4.6	-4.0
Financing	9.8	8.8	8.6	6.2	5.2	5.0	4.2
Net issuance of debt securities	10.2	8.2	6.6	3.1	...	...	...
Other	-0.4	0.6	2.0	3.1	...	...	...
Stock positions 4/							
Debt							
Gross 5/	231.6	238.0	244.5	249.1	248.0	250.2	252.6
Net	127.2	129.0	124.2	126.2	128.0	130.4	132.9
Net worth	-3.7	-8.2	0.1	-2.8	...	...	...
Nonfinancial assets	123.4	120.9	123.2	123.5	...	...	...
Fixed assets (excluding land)	97.3	95.3	98.1	99.1	...	...	...
Land	25.7	25.1	24.6	24.0	...	...	...
Other	0.4	0.5	0.6	0.4	...	...	...
Net financial worth	-127.2	-129.0	-123.2	-126.2	...	...	...
Financial assets	104.5	109.0	120.4	122.9	...	...	...
Currency and deposits	16.5	16.2	16.6	19.3	...	...	...
Loans	6.8	7.2	7.5	6.4	...	...	...
Securities other than shares	26.2	25.8	24.0	18.4	...	...	...
Shares and other equities	23.5	25.2	32.1	32.9	...	...	...
o/w shares	8.8	10.5	17.5	18.7	...	...	...
Financial derivatives	0.0	0.0	0.0	0.0	...	...	...
Other financial assets	31.5	34.6	40.2	45.8	...	...	...
Liabilities	231.6	238.0	243.6	249.1	...	...	...
Loans	34.8	34.4	34.3	33.7	...	...	...
Securities other than shares	186.1	192.6	198.9	204.2	...	...	...
Equities	5.1	5.1	5.1	5.0	...	...	...
Financial derivatives	0.0	0.0	0.0	0.0	...	...	...
Other liabilities	5.7	5.9	5.3	6.2	...	...	...
Memorandum item :							
Nominal GDP (trillion yen)	471.6	475.3	479.1	486.9	499.2	504.9	508.6

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: Financial Soundness Indicators (FSI), 2010–15

	2010	2011	2012	2013	2014	2014	2015
	<i>(In percent)</i>						
Capital adequacy							
Regulatory capital to risk-weighted assets 2/3/	13.3	13.8	14.2	15.2	15.6	15.3	15.5
Regulatory tier 1 capital to risk-weighted assets	9.9	10.7	11.3	11.7	12.1	12.1	12.5
NPL net of provisions/capital 2/4/	22.7	22.2	21.4	19.2	16.2	14.3	12.8
Asset quality							
Non-performing loans (NPL) to total loans ratio 2/4/	2.5	2.4	2.4	2.3	1.9	1.7	1.6
Sectoral distribution of loans 4/5/							
Residents	94.8	94.0	93.8	92.5	91.0	90.6	89.9
Deposit-takers	6.4	6.3	6.9	7.1	5.2	5.1	5.5
Central bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financial corporations	10.0	9.3	9.5	9.3	9.0	9.0	8.9
General government	7.2	7.8	8.1	8.3	8.6	8.6	8.6
Non-financial corporations	36.4	35.7	35.1	34.1	33.8	33.5	33.0
Other domestic sectors	34.7	34.8	34.3	33.6	34.3	34.4	34.0
Non-residents	5.2	6.0	6.2	7.5	9.0	9.4	10.1
Earnings and profitability							
Return on assets 2/4/	0.2	0.2	0.3	0.4	0.3	0.4	0.3
Return on equity 2/4/	5.5	4.8	5.7	9.1	7.8	9.4	6.3
Interest margin	1.5	1.5	1.5	1.4	1.3	1.2	1.2
Net interest income to gross income 2/4/	72.8	74.1	69.2	61.0	64.2	63.4	62.9
Non-interest expenses to gross income 2/4/	62.2	65.8	63.3	57.0	60.8	60.6	60.6
Personnel expenses to non-interest expenses 2/4/	...	...	...	44.2	44.8	n.a.	44.1
Liquidity							
Liquid assets to total assets 2/4/	23.2	25.6	26.3	26.1	26.4	26.6	26.9
Liquid assets to short-term liabilities 2/4/	46.6	49.1	49.0	48.0	47.6	48.1	48.1
Non-interbank loans-to-customer-deposits 2/4/	77.3	74.9	74.5	75.3	75.5	76.4	75.7
Other							
Capital-to-total assets 2/3/	4.4	4.7	4.7	5.5	5.5	5.5	5.8
Risk-weighted assets to total assets	49.1	45.3	43.0	29.0	29.4	29.7	29.7
Gross derivative asset to capital 2/4/	70.7	61.4	54.2	51.2	38.4	46.4	47.4
Gross derivative liability to capital 2/4/	65.3	56.6	52.0	50.5	38.2	47.7	48.6







Sources: IMF, Financial Soundness Indicators (FSI) database; and IMF staff estimates.
1/ Data for these series are for Q1 of each year.
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.

Table 6. Japan: External Sector Summary, 2011–17 1/

	2011	2012	2013	2014	2015	2016	2017
						Proj.	
Balance of payments							
	<i>(In billions of U.S. dollars)</i>						
Current account balance	129.8	59.7	45.9	36.4	135.6	157.7	142.0
Trade balance (goods)	-4.5	-53.9	-90.0	-99.9	-5.3	17.6	-0.5
Exports of goods	790.8	776.0	695.0	699.4	621.9	622.8	651.6
Imports of goods	795.3	829.9	784.9	799.3	627.2	605.2	652.1
Imports of goods, Oil	182.5	196.9	184.9	167.5	75.8	87.5	90.2
Services balance	-35.0	-47.8	-35.7	-28.7	-14.0	-14.4	-15.2
Credits	140.9	136.8	135.3	163.2	167.5	172.8	178.4
Debits	175.9	184.6	171.0	192.4	180.9	187.0	191.7
Income balance	183.1	175.6	181.6	184.1	170.8	170.2	173.5
Credits	233.9	229.6	241.3	255.1	241.8	237.4	242.4
Debits	50.8	54.0	59.7	71.0	71.0	67.1	68.8
Current net transfers	-13.8	-14.2	-10.0	-19.0	-16.0	-15.8	-15.8
Capital account	0.5	-1.0	-7.7	-2.0	-2.2	-3.2	-3.1
Financial account	175.5	47.2	-62.5	24.5	157.1	91.4	73.9
Direct investment, net	117.8	117.5	144.7	118.2	131.0	112.5	114.5
Portfolio investment, net	-162.9	28.8	-280.6	-41.9	131.5	151.4	159.3
Other investment, net	43.4	-61.1	34.8	-60.3	-110.5	-182.0	-210.0
Reserve assets	177.3	-37.9	38.7	8.5	5.1	9.5	10.0
Errors and omissions, net	28.1	-4.8	-42.6	24.1	41.5	0.0	0.0
	<i>(In percent of GDP)</i>						
Current account balance	2.2	1.0	0.9	0.8	3.3	3.5	3.0
Trade balance (goods)	-0.1	-0.9	-1.8	-2.2	-0.1	0.4	0.0
Exports of goods	13.4	13.0	14.2	15.2	15.1	13.7	13.9
Imports of goods	13.4	13.9	16.0	17.4	15.2	13.3	13.9
Services balance	-0.6	-0.8	-0.7	-0.6	-0.3	-0.3	-0.3
Income balance	3.1	2.9	3.7	4.0	4.1	3.7	3.7
Global assumptions							
Exchange Rate (¥/US\$)	79.8	79.8	97.6	105.9	121.0	110.7	108.0
<i>(Percent change)</i>	-9.1	0.0	22.3	8.6	14.3	-8.6	-2.4
Oil prices (US\$/barrel)	104.0	105.0	104.1	96.2	50.8	43.9	51.0
<i>(Percent change)</i>	31.6	1.0	-0.9	-7.5	-47.2	-13.5	16.1
<i>Memorandum items :</i>							
Nominal GDP (US\$ billion)	5,913.9	5,956.2	4,910.3	4,595.7	4,124.3	4,559.0	4,703.8
Net foreign assets (NFA)/GDP, US\$ basis	57.7	60.1	64.1	66.3	67.5	62.2	64.1
Return on NFA (in percent), US\$ basis	5.4	4.9	5.8	6.1	6.2	6.0	5.8
Net export contribution to growth	-0.8	-0.8	-0.2	0.3	0.4	-0.1	-0.2

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

Annex I. Risk Assessment Matrix¹

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	Impact and Policy Response
<p>➤ Successful reflation following comprehensive reforms</p> 	<p>Low</p> <p>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.</p>	<p>High. Credible policy frameworks with incomes policies and short-term demand stimulus would quickly raise inflation and growth and restore confidence in fiscal sustainability and medium-term growth prospects.</p> <p><i>Policy response:</i> The BoJ should prepare a credible exit strategy.</p>
<p>➤ Persistently low energy prices</p> 	<p>Medium</p> <p>Supply factors may reverse only gradually and partially, and/or weaker-than-expected aggregate global demand may keep energy prices lower than currently expected under the WEO baseline.</p>	<p>Low. As a net oil importer (windfall gain of 1.6 percent of 2015 GDP), Japan will benefit from higher real incomes of consumers and lower production costs, but actual and expected inflation would fall further reducing wage growth.</p> <p><i>Policy response:</i> The BoJ should ease further to prevent second-round effects, including on wage bargaining, and strengthen its communication framework by clarifying the indicators used to assess whether inflation is on track.</p>
<p>➤ Protracted period of slower growth in Euro Area and Japan</p> 	<p>High</p> <p>Weak demand and persistently low inflation from a failure to fully address crisis legacies and appropriately calibrate macro policies, leading to “new mediocre” rate of growth.</p>	<p>Medium. The output gap would widen and growth potential could be adversely affected complicating efforts to restore public debt sustainability.</p> <p><i>Policy response:</i> 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.</p>
<p>➤ Bond market stress from a reassessment of sovereign risk in Japan</p> 	<p>Medium</p> <p>Abenomics falters, resulting in an eventual return of depressed domestic demand and deflation and leading to bond market stress.</p>	<p>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 years. But such a shock could cause distress in the financial sector with possible knock-on effects on debt.</p> <p><i>Policy response:</i> Fiscal policy will 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. Unorthodox policy measures need to be considered to support growth and inflation momentum.</p>
<p>➤ Sharp growth slowdown and financial risks in China over the medium term</p> 	<p>Medium</p> <p>Insufficient progress with reforms could lead to a continued buildup of vulnerabilities, resulting in a significant slowdown in growth over the medium term.</p>	<p>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.</p> <p><i>Policy response:</i> 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. Unorthodox options to reflate the economy need to be considered.</p>
<p>➤ Uncertainty related to Brexit</p> 	<p>High</p> <p>Elevated financial volatility and uncertainty could lead to contagion and safe-haven appreciation of the yen.</p>	<p>Low. The recovery of exports would stall and safe-haven appreciation would cause a correction in the stock market and sentiment</p> <p><i>Policy response:</i> Fiscal and monetary policy space should be deployed if elevated uncertainty starts to pose deflationary risks.</p>

Overall Level of Concern		
	Likelihood (Over next 1–3 years)	Impact and Policy Response
<p>➤ A severe earthquake hits Japan</p>	<p>Medium Earthquake leads to serious production disruptions, sharp yen appreciation and adjustments in equity markets.</p>	<p>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.</p> <p><i>Policy response:</i> Despite limited policy space, the government should deploy additional fiscal and monetary stimulus to restore growth and inflation momentum and maintain confidence. Fiscal expansion should be deployed together with a credible medium-term fiscal strategy and structural reforms should be accelerated to raise potential growth and increase confidence in the medium-term prospects.</p>
<p>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.</p>		

Annex II. Assessment of Japan's External Sector

	Japan	Overall Assessment
Foreign asset and liability position and trajectory	<p>Background. The net international investment position (NIIP) position has doubled in the last ten years to close to 70 percent of GDP in 2015 (assets: 190 percent; liabilities: 122 percent). In the medium term it is projected to rise close to 75 percent with higher current account (CA) surpluses, before gradually stabilizing due to population aging.</p> <p>Assessment. Vulnerabilities are limited (equity and direct investment comprise a rising share of liabilities, now at 35 percent of total). Assets are diversified geographically and by risk classes. The NIIP generates net annual investment income at around 4 percent of GDP, keeping the current account balance positive amid a narrowing trade surplus.</p>	<p>Overall Assessment: <i>The 2015 external position was moderately stronger than the level consistent with medium-term fundamentals and desirable policies.</i></p> <p>Japan's external position has strengthened moderately relative to 2014, reflecting the reduction in its oil import bill, the REER depreciation, and some pickup in exports. The REER appreciation compared to the average of 2015 has moved the REER towards a level consistent with medium-term fundamentals while it may undermine the effort to lower deflation risks.</p> <p>Going forward, continued easing by the BoJ while the US tightens, combined with the lack of bolder structural reforms and the absence of a credible and specific medium-term fiscal consolidation plan, could further strengthen the external position.</p> <p>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, without overreliance on yen depreciation, and help prevent the external position from moving out of line with fundamentals over the medium term.</p>
Current account	<p>Background. The 2015 CA increased to about 3½ percent of GDP from 0.8 percent of GDP in 2014, due to a significant decline in the energy import bill (by about 2 percent of GDP) and an improvement in the services balance reflecting higher tourism receipts (by ½ percent of GDP). Exports of goods increased by 0.9 percent in volume terms, despite the slowdown in global trade, which reflects strength in the transportation equipment sector driven by a combination of modest recovery in advanced economies, moving of production onshore and the release of new models. Import volumes were weak, with goods imports declining by 1.1 percent.</p> <p>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:</p> <ul style="list-style-type: none"> - EBA estimates the 2015 cyclically-adjusted CA at 2.8 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 get an underlying, cyclically-adjusted CA of 3.1 percent of GDP.^{1/} - EBA estimates the 2015 CA norm at 3.4 percent of GDP. Staff adjusts this estimate to account for factors not captured by EBA - structurally lower exports reflecting production off-shoring and permanently higher domestic demand and imports under structural reforms that would be implemented under complete Abenomics - to get a norm of 1.4-2.7 percent of GDP. ^{2/} <p>The underlying CA in 2015 is therefore assessed to be 0.4-1.7 percent of GDP higher than the norm, and moderately stronger than the level consistent with desirable policies and medium-term fundamentals. ^{3/} The 2016 surplus is expected to rise to about 3.5 percent of GDP under the current policy mix and due to lower oil prices. ^{4/}</p>	
Real exchange rate	<p>Background. The real effective exchange rate (REER) depreciated 6.7 percent between 2014 and 2015, reflecting expansion of monetary easing in Japan and policy normalization in the US. As of June 2016, the REER has appreciated 15 percent relative to its 2015 average, reflecting the safe-haven status of Yen amid heightened risk aversion and the narrowing of the interest rate differential relative to the US due to expectations of a more gradual increase in US interest rates, and despite the introduction of negative rates on marginal excess reserves in Japan.</p> <p>Assessment. The EBA REER Level model estimates the 2015 average REER to be 27 percent weaker (EBA Index REER model: 33 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, temporary speculative short positions against the yen, and the shock requiring higher energy imports - are also not included. Because of these missing factors, the EBA REER model is not used in Japan's assessment. Instead, using the staff-assessed CA gap range as reference, staff assesses a 2015 REER gap midpoint of -11 percent with an indicative range of -4 to -17 percent.</p>	
Capital and financial accounts: flows and policy measures	<p>Background. There has been a pick-up in portfolio outflows as institutional investors have begun to diversify overseas, while FDI outflows also increased. Net short yen positions have eased from their extreme highs of last year and have recently turned into net long yen positions, which could be a driver of the recent exchange rate strengthening.</p> <p>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 QQE to domestic 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</p>	
FX intervention and reserves level	<p>Background. Reserves are about 30 percent of GDP, on legacy accumulation. There has been no FX intervention in recent years.</p> <p>Assessment. The exchange rate is free floating. Interventions are isolated (last in 2011) to reduce short-term volatility and disorderly exchange rate movements.</p>	

	Japan (concluded)	Overall Assessment
Technical Background Notes	<p>1/ Last year, staff adjusted the EBA estimate of Japan's cyclically-adjusted CA to account for factors that temporarily reduced the CA. Those factors were delayed J-curve effects, regional tensions and higher reliance on energy imports after the 2011 earthquake. This year the effects of these factors have dissipated except higher fuel imports. In fact, part of the increase in Japan's CA balance can be attributed to these factors dissipating. Furthermore, staff adjusted the impact of elevated energy imports down to reflect the decline in energy prices.</p> <p>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 and favorable return differential on assets relative to liabilities. Staff makes two downward adjustments to the EBA CA norm: 1) Adjustment to account for the structurally lower exports due to production off-shoring; 2) Adjustment to capture structural policies under complete Abenomics that would permanently raise domestic demand and imports. Although fiscal and monetary policies are captured in EBA, desirable structural policies that would lift domestic demand are not.</p> <p>3/ The uncertainty in the CA gap results from (i) hard-to-quantify implications of Abenomics policies for the norm; and (ii) uncertain effects of structural changes – higher off-shoring, reduced competitiveness of some tradable sectors – on the trade balance.</p> <p>4/ The energy balance deficit is projected to decline from 3.2 percent of GDP in 2015 to 2.5 percent in 2016.</p>	

Annex III. Debt Sustainability Analysis

Japan's public debt is unsustainable under current policies. Although the gross debt-to-GDP ratio is projected to rise only marginally during the WEO projection period (up to 2021) due to an improving primary balance and a favorable differential between interest and growth rates compared to past values, complementary analysis up to 2030 (Figure 6, bottom right chart) shows that the rise in the debt ratio will accelerate after 2020, reaching around 280 percent of GDP in 2030.¹ The debt outlook is vulnerable to various shocks especially when financial sector shocks cause spillovers to growth, the deficit, and the interest rate. Persistent shocks to growth and inflation could also have a significant impact in the long run. Moreover, larger than projected public health spending is an important downside risk. While all the debt profile indicators are below early warning benchmarks, Japan's extremely high financing needs point to vulnerabilities to changes in market perceptions especially over the medium term once the Bank of Japan's purchases of JGBs ends.

Baseline and Realism of Projections

- Assumptions.** The analysis is based on the following key macroeconomic projections and policy assumptions (Table 5): potential growth will trend down from the current 0.5 percent to 0.4 percent by 2021 assuming that moderate gains from currently approved structural policies will partially offset demographic headwinds, with actual growth being somewhat volatile in part due to fiscal policy. Potential growth is estimated to decline further to 0.1 percent by 2030. Monetary policy is assumed to remain accommodative during the entire projection period, with CPI inflation gradually rising to above 1 percent over the medium term. Fiscal policy assumes the rise in the consumption tax rate from 8 to 10 percent in October 2019 with the introduction of multiple rates. However, offsetting measures, including to counter the expiration of the FY2016 supplementary budget, have not yet been announced and therefore are not included. As no hikes in risk premia are assumed in the baseline, long-term interest rates are projected to only gradually pick up, in tandem with rising inflation, to around 1¼ percent on new long-term bond issuances. Because the average maturity of government bonds is about 7 years (including financing bills), the nominal effective interest rate on public debt rises only gradually to 0.6 percent in 2021. This implies a favorable interest-growth differential of -0.8 with a nominal GDP growth rate of 1.4 percent. Thanks to the second stage of the consumption tax hike, the primary deficit will decline to around 3 percent of GDP in 2021.
- Financing Needs.** Japan's gross financing need (defined as the public sector deficit, plus all maturing debt) was 53 percent of GDP in 2015, the highest among advanced economies. Despite the decline in the primary deficit in the next few years, the gross financing needs will remain exceptionally large at around 50 percent of GDP over the medium term. Although the government intends to lengthen the average maturity of JGBs, without specific plans, a similar

¹ The debt ratio in 2030 is lower by around 10 percent of GDP than in the previous Staff Report due to an even more favorable interest growth differential assumption reflecting a recent further reduction in government bond yields.

maturity structure to the one in the FY2016 initial budget is assumed throughout the projection period.

- **Debt Profile.** The debt financing conditions are helped in the medium-term by a number of factors. The 10-year bond yield has been at a record low and its spread against the US is negative at around 190 basis points. The external financing requirement, incorporating the current account surplus, is well below the lower threshold at 5 percent of GDP. This reflects the fact that foreign holdings of JGBs are relatively low at 11 percent. In addition, there are no direct exchange rate risks as all debt is denominated in yen, which is assumed to remain the case in the future.
- **Net Debt.** Given the large financial assets held by the government, net debt is an important indicator for Japan. It should be noted, however, that not all the financial assets are available for debt repayment or easy to liquidate as, for example, they include assets for future pension payments. The financial-assets-to-GDP ratio is assumed to be stable at around 120 percent.²
- **Realism of Baseline Assumptions.**
 - Past assumptions on real growth have been neither too optimistic nor pessimistic compared to peer countries, except for optimistic projections in 2011 when the earthquake hit. Past forecast errors for the GDP deflator indicated a positive bias, but magnitudes were small.
 - Past assumptions on the primary balance have been neither too optimistic nor pessimistic. While underperformance a few years ago stemmed from the response to the global financial crisis and the 2011 earthquake, there has been overperformance since the start of Abenomics. The size of Japan's 3-year adjustment on a cyclically adjusted primary balance (CAPB) basis is close to the top quartile of the historical experience for high-debt market access countries, but the CAPB level is in the lowest quartile due to the large deficit. Fiscal consolidation of around 0.6 percent of GDP in 2017 is assumed in the baseline, but as argued in the main text, staff sees a need for targeting a neutral fiscal stance to maintain growth and inflation momentum.
 - Had it not been for the planned fiscal adjustment, underlying growth would be above potential for the projection period. This is due to a strengthening of the private-sector recovery on the back of supportive monetary policy and declining oil prices. For the fiscal consolidation in the baseline, the average fiscal multiplier is assumed to be 0.5, which is lower than the default value of 1 because (i) about half of the adjustment is coming from revenue measures (mainly the consumption tax increase to 10 percent with a multiplier of about 0.7); (ii) offsetting rate reductions in more distortionary taxes such as the corporate income tax; and (iii) expenditure reductions in areas with relatively lower multipliers such as pension spending.

² Major items include financial assets held by the Social Security Funds (about 47 percent of GDP), foreign currency reserve (about 31 percent of GDP), and shares and other equities held by the central and local governments (about 25 percent of GDP), as of end-2014.

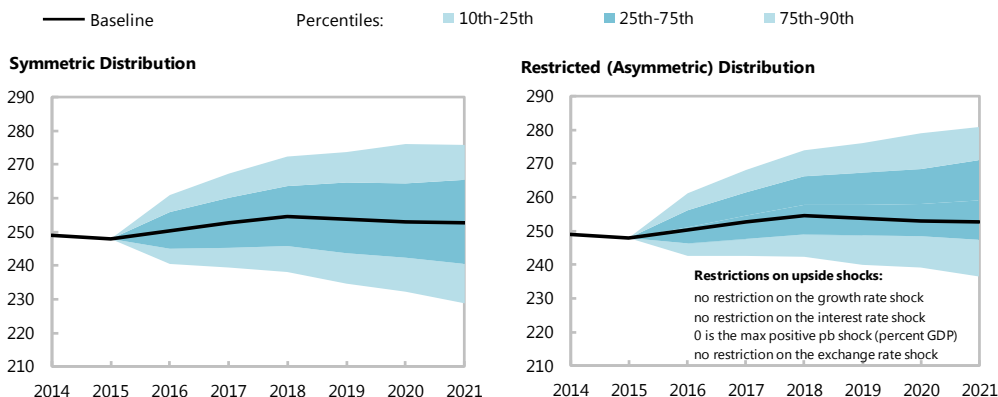
Japan Public DSA Risk Assessment

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

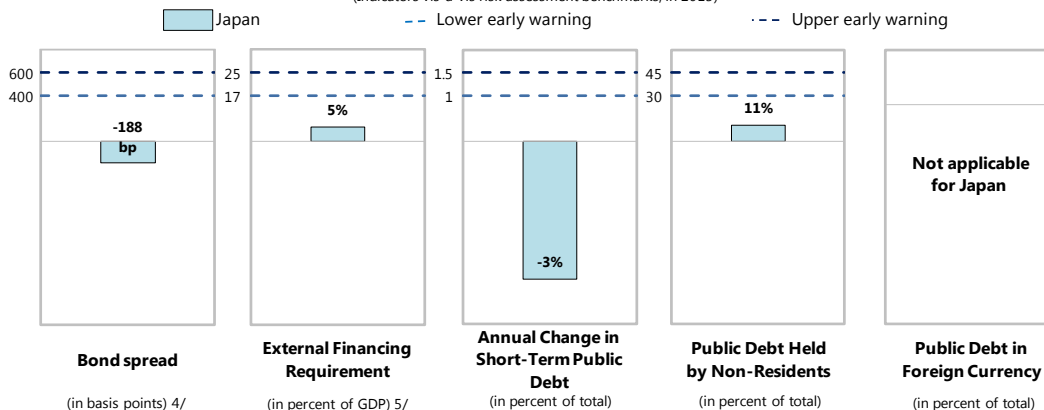
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2015)



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:

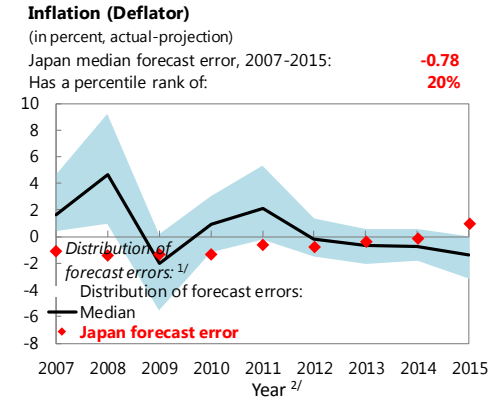
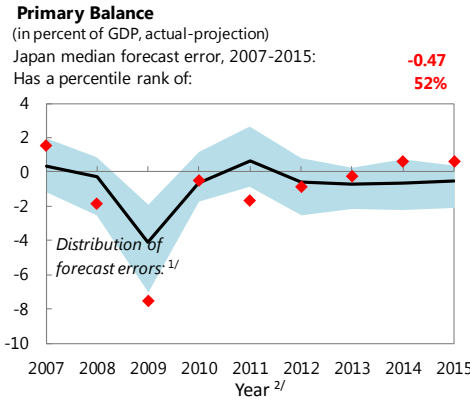
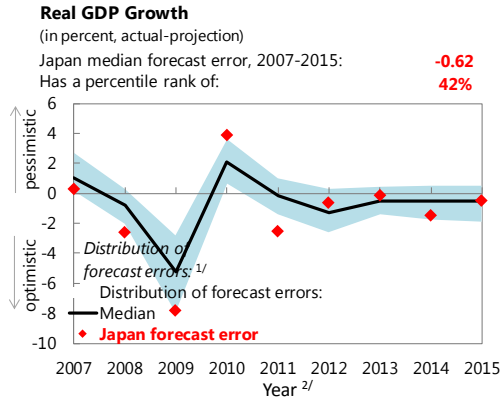
400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 25-Mar-16 through 23-Jun-16.

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.

Japan Public DSA—Realism of Baseline Assumptions

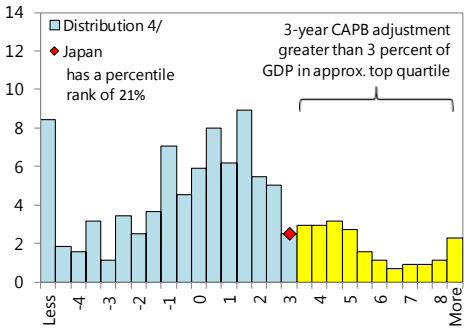
Forecast Track Record, versus all countries



Assessing the Realism of Projected Fiscal Adjustment

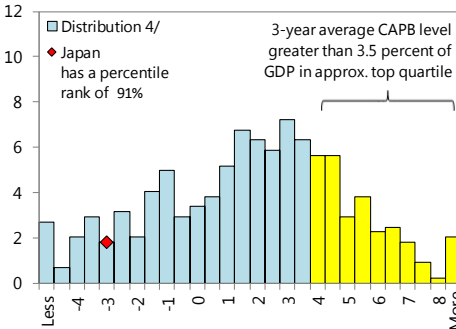
3-Year Adjustment in Cyclically-Adjusted

Primary Balance (CAPB) (Percent of GDP)



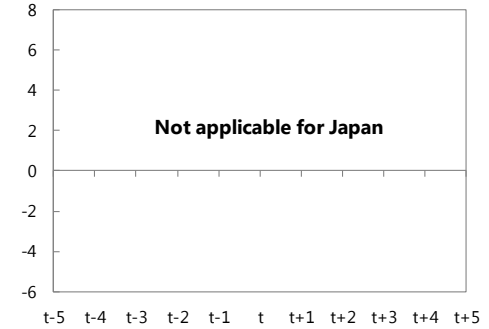
3-Year Average Level of Cyclically-Adjusted

Primary Balance (CAPB) (Percent of GDP)



Boom-Bust Analysis ^{3/}

Real GDP growth (in percent) — Japan



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 observations 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 Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

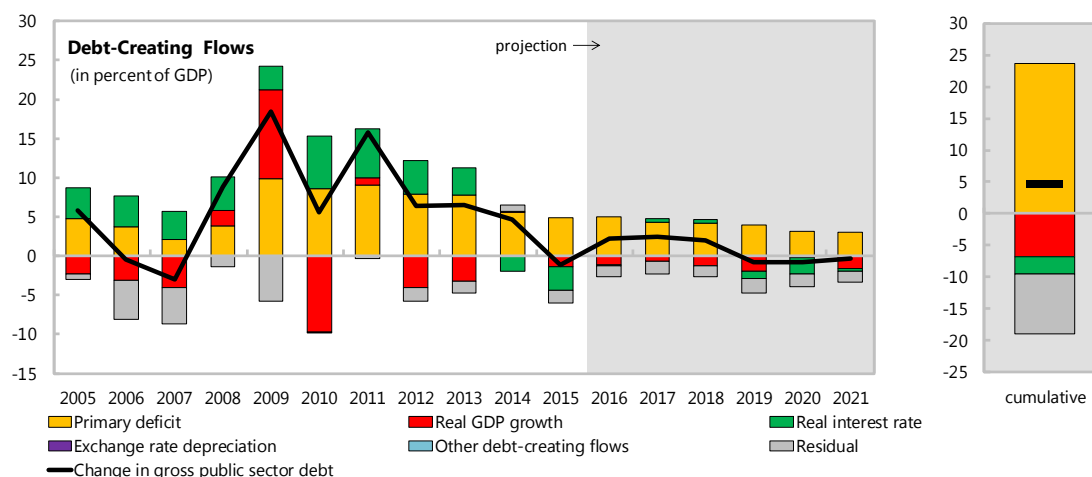
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators ^{1/}

	Actual			Projections						As of June 23, 2016		
	2005-2013 ^{2/}	2014	2015	2016	2017	2018	2019	2020	2021			
Nominal gross public debt	209.7	249.1	248.0	250.2	252.6	254.6	253.8	253.0	252.6	Sovereign Spreads		
										EMBIG (bp) ^{3/}	-187	
Public gross financing needs		52.9	52.6	51.6	50.9	50.7	50.0	49.5	48.4	5Y CDS (bp)		
Net public debt	104.3	126.2	128.0	130.5	133.0	134.9	134.1	133.3	132.9	40		
Real GDP growth (in percent)	0.7	0.0	0.5	0.5	0.3	0.5	0.8	0.1	0.6	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	-1.2	1.7	2.0	0.6	0.4	0.3	0.9	1.4	0.8	Moody's	A1	A1
Nominal GDP growth (in percent)	-0.5	1.6	2.5	1.1	0.7	0.8	1.7	1.4	1.4	S&Ps	A+u	A+u
Effective interest rate (in percent) ^{4/}	1.0	0.8	0.8	0.6	0.5	0.5	0.5	0.5	0.6	Fitch	A	A

Contribution to Changes in Public Debt

	Actual			Projections						cumulative	debt-stabilizing primary balance ^{9/}
	2005-2013	2014	2015	2016	2017	2018	2019	2020	2021		
Change in gross public sector debt	7.1	4.6	-1.1	2.3	2.4	2.0	-0.8	-0.8	-0.4	4.7	
Identified debt-creating flows	9.4	3.7	0.6	3.7	4.1	3.4	1.0	0.9	1.0	14.0	
Primary deficit	6.4	5.6	4.9	5.0	4.4	4.2	3.9	3.1	3.0	23.6	
Primary (noninterest) revenue and gra	29.1	32.1	32.5	32.4	32.5	32.5	32.7	33.5	33.6	197.2	
Primary (noninterest) expenditure	35.5	37.7	37.4	37.3	36.9	36.8	36.6	36.6	36.6	220.8	
Automatic debt dynamics ^{5/}	3.0	-1.9	-4.3	-1.2	-0.3	-0.9	-2.9	-2.3	-2.0	-9.6	
Interest rate/growth differential ^{6/}	3.0	-1.9	-4.3	-1.2	-0.3	-0.9	-2.9	-2.3	-2.0	-9.6	
Of which: real interest rate	4.4	-1.9	-3.0	-0.1	0.4	0.4	-1.0	-2.1	-0.4	-2.8	
Of which: real GDP growth	-1.4	0.1	-1.3	-1.2	-0.7	-1.3	-2.0	-0.2	-1.6	-6.8	
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	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/}	-2.3	0.9	-1.7	-1.5	-1.6	-1.4	-1.8	-1.7	-1.4	-9.4	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

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

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

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+gr)]$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

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

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

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

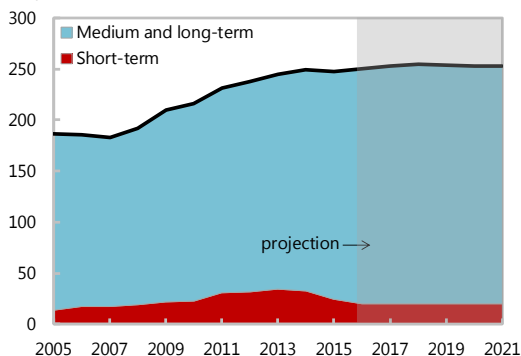
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Japan Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

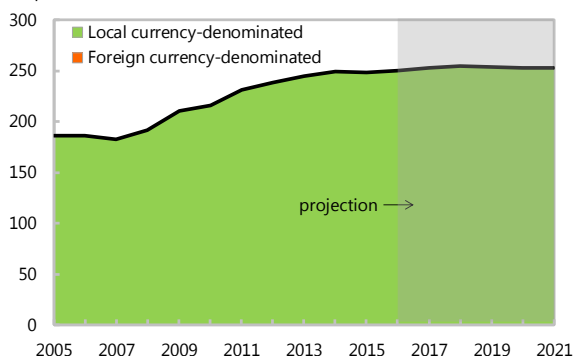
By Maturity

(in percent of GDP)



By Currency

(in percent of GDP)



Alternative Scenarios

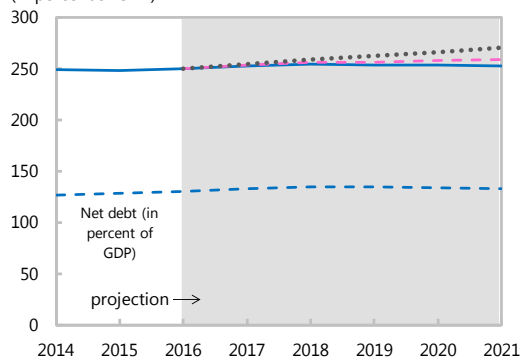
— Baseline

..... Historical

- - - Constant Primary Balance

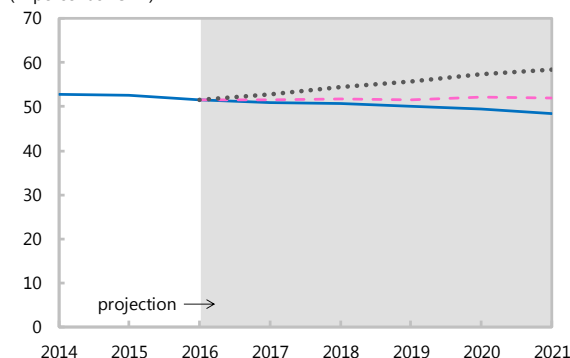
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario

	2016	2017	2018	2019	2020	2021
Real GDP growth	0.5	0.3	0.5	0.8	0.1	0.6
Inflation	0.6	0.4	0.3	0.9	1.4	0.8
Primary Balance	-5.0	-4.4	-4.2	-3.9	-3.1	-3.0
Effective interest rate	0.6	0.6	0.5	0.5	0.5	0.6

Constant Primary Balance Scenario

Real GDP growth	0.5	0.3	0.5	0.8	0.1	0.6
Inflation	0.6	0.4	0.3	0.9	1.4	0.8
Primary Balance	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
Effective interest rate	0.6	0.6	0.5	0.5	0.5	0.6

Historical Scenario

	2016	2017	2018	2019	2020	2021
Real GDP growth	0.5	0.5	0.5	0.5	0.5	0.5
Inflation	0.6	0.4	0.3	0.9	1.4	0.8
Primary Balance	-5.0	-6.3	-6.3	-6.3	-6.3	-6.3
Effective interest rate	0.6	0.6	0.8	0.9	1.1	1.3

Source: IMF staff.

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 risks around the baseline. For example, under the worst quartile case, the debt-to-GDP ratio could reach around 265 percent of GDP in 2021, more than 10 percentage points higher than in the baseline. In addition, when the possibility of positive primary balance shock is ruled out considering recent experience, the debt-to-GDP ratio could be even higher by 5 percent of GDP in 2021.
- *Primary balance shock.* The impact is estimated to be modest. The improvement in the primary balance underperforms by half of the 10-year historical standard deviation of changes in the primary balance, compared to the baseline. Additional borrowing cost of 25 basis points per 1 percent of GDP worsening of the deficit is assumed. The gross debt-to-GDP ratio will be higher by around 4 percent of GDP in 2021 than the baseline.
- *Growth shock.* The impact on the debt ratio is the second largest among the shock scenarios. Real output growth rates are lower by a half of the 10-year historical standard deviation of changes in growth, compared to the baseline, for 2 years starting in 2017. 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 relatively large, bringing the debt ratio to above 260 percent of GDP, around 10 percentage points higher relative to the baseline.
- *Interest rate shock.* The effect becomes larger with the passage of time. A spike in JGB yields is an important medium-term tail risk. A shock of 200 basis points is assumed to happen in 2016 and stay for the rest of the period. Although increasing only gradually due to the average maturity of around 7 years, the effective interest rate is higher by more than 1 percentage point in 2021 than the baseline, with the debt ratio higher by around 10 points. The difference with the baseline does not look very 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 3.5 percent of banking sector assets (approximately 10 percent of regional banks assets) will increase government spending by around 6.0 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 280 percent of GDP in 2021, almost 30 percentage points higher than in the baseline.

Longer-term Projections and Risks. Despite the relatively stable fiscal outlook in the medium term, the gross and net debt-to-GDP ratios are projected to start increasing faster after 2020 and reach around 280 percent and 160 percent of GDP by 2030, respectively. This increase is a reflection of a

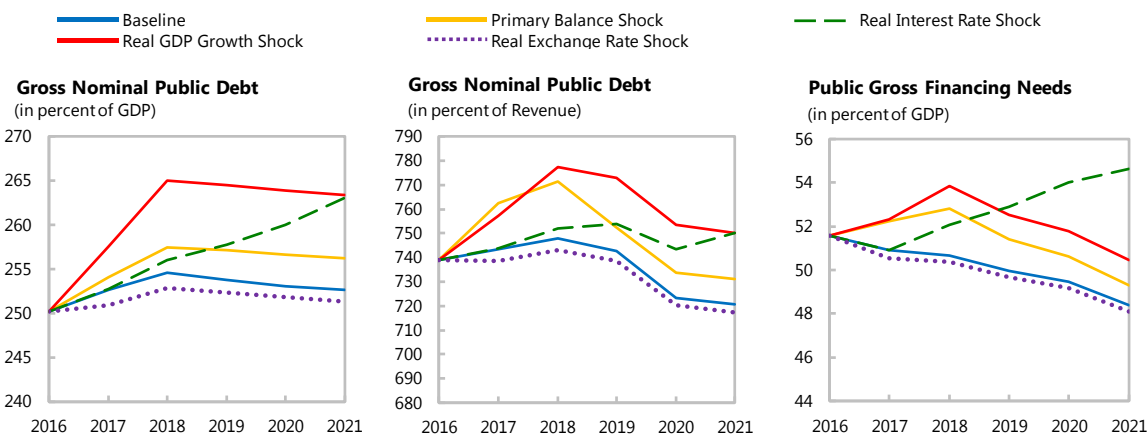
gradual rise in the interest rate-growth differential towards the historical average of 1.¹ Long-term projections are sensitive to macroeconomic and policy assumptions.

One important downside risk is a larger increase in public health spending than assumed in the baseline (Nozaki, Kashiwase, and Saito 2014). Maintaining the same macroeconomic assumptions as in the baseline, this would imply a debt ratio of 295 percent of GDP by 2030, about 15 percentage points higher than in the baseline. Other risks include a less favorable interest rate-growth differential due to disappointing growth or interest rate hikes upon BoJ exit or both, and changes in the investor base towards foreign sources of funding that will demand higher risk premia.

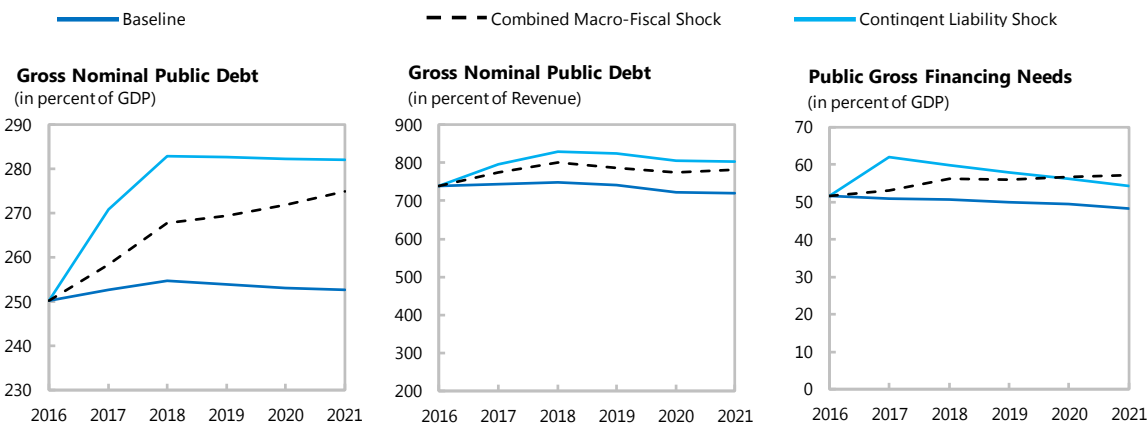
¹ The differential is currently lower than the historical average, estimated at around -0.4 in 2016, partly reflecting exceptional monetary easing. It is assumed at around 0.5 in 2030.

Japan Public DSA—Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions (in percent)

	2016	2017	2018	2019	2020	2021		2016	2017	2018	2019	2020	2021
Primary Balance Shock							Real GDP Growth Shock						
Real GDP growth	0.5	0.3	0.5	0.8	0.1	0.6	Real GDP growth	0.5	-1.1	-0.8	0.8	0.1	0.6
Inflation	0.6	0.4	0.3	0.9	1.4	0.8	Inflation	0.6	0.1	0.0	0.9	1.4	0.8
Primary balance	-5.0	-5.7	-5.6	-3.9	-3.1	-3.0	Primary balance	-5.0	-5.0	-5.5	-3.9	-3.1	-3.0
Effective interest rate	0.6	0.6	0.6	0.6	0.6	0.7	Effective interest rate	0.6	0.6	0.5	0.6	0.6	0.6
Real Interest Rate Shock							Real Exchange Rate Shock						
Real GDP growth	0.5	0.3	0.5	0.8	0.1	0.6	Real GDP growth	0.5	0.3	0.5	0.8	0.1	0.6
Inflation	0.6	0.4	0.3	0.9	1.4	0.8	Inflation	0.6	1.1	0.3	0.9	1.4	0.8
Primary balance	-5.0	-4.4	-4.2	-3.9	-3.1	-3.0	Primary balance	-5.0	-4.4	-4.2	-3.9	-3.1	-3.0
Effective interest rate	0.6	0.6	1.1	1.4	1.7	2.0	Effective interest rate	0.6	0.6	0.5	0.5	0.5	0.6
Combined Shock							Contingent Liability Shock						
Real GDP growth	0.5	-1.1	-0.8	0.8	0.1	0.6	Real GDP growth	0.5	-2.4	-2.2	0.8	0.1	0.6
Inflation	0.6	0.1	0.0	0.9	1.4	0.8	Inflation	0.6	-0.3	-0.3	0.9	1.4	0.8
Primary balance	-5.0	-5.7	-6.1	-3.9	-3.1	-3.0	Primary balance	-5.0	-13.8	-4.2	-3.9	-3.1	-3.0
Effective interest rate	0.6	0.6	1.1	1.4	1.7	2.0	Effective interest rate	0.6	0.6	0.9	0.8	0.7	0.8

Source: IMF staff.

Annex IV. Main Recommendations of the 2015 Article IV Consultation

Fund Recommendations	Policy Actions
Policy Coordination:	
All arrows of Abenomics need to be strengthened to lift Japan out of its entrenched deflationary mindset and enhance growth.	Although Abenomics has intended to fire all three arrows, in reality the third arrow has lagged behind, reducing the effectiveness of monetary and fiscal policies. There remains scope to improve policy coordination.
Fiscal Policy:	
The second consumption tax rate increase in 2017 should be implemented with a single rate structure and its adverse impact on low-income households should be addressed through improving the existing cash transfer mechanism.	The government has postponed the April 2017 consumption tax hike to October 2019, when a reduced rate of 8 percent is scheduled to be introduced.
Planned adjustment for 2015-16 strikes a good balance between reducing fiscal risks and maintaining growth momentum, but mitigating measures of about 0.3 percent is necessary in 2017 given the planned consumption tax hike.	<ul style="list-style-type: none"> • FY2015 supplementary budget was approved by the Diet in January 2016, which is expected to boost growth in FY2016 by about 0.5 percentage point, and help maintain the growth momentum. Together with the FY2016 budget, the envisioned fiscal stance in 2016 is appropriate. With the tax delay no mitigating measures for 2017 are needed. • The authorities formulated FY2016 supplementary budget for the Kumamoto earthquake, and plan to adopt another one to address growth concerns this fall.
Further fiscal consolidation after 2018 is necessary to put debt on a downward path. Consolidation should be balanced in terms of its pace (about ¾ percent of GDP per year) and should comprise both expenditure and revenue measures as outlined in the 2014 Staff Report. A concrete medium-term fiscal plan should use prudent and realistic economic assumptions, adopt a long-term goal of putting debt on a downward path, specify adjustment in terms of structural fiscal balance and identify upfront structural revenue and expenditure measures.	The authorities have identified specific expenditure measures with the aim to improve the efficiency of public spending, especially in the area of social security, but their fiscal impacts are unknown. They are not considering any revenue-side measures.
Stronger fiscal institutions will be necessary to restore fiscal credibility. Rules to curb expenditures, limits on the use of supplementary budgets, and publication of independent assessment of the outlook and budget projections by the FSC should be considered.	The Fiscal System Council has updated in October 2015 its analysis of the long-term fiscal sustainability.
Monetary Policy:	
The BoJ should stand ready to ease further and reiterate that it remains open to all further avenues of easing when and if appropriate by increasing asset purchases, lengthening their duration, broadening their range, and further lowering the deposit rate on excess reserves into negative territory.	In January 2016, the BOJ introduced a negative interest rate on marginal excess reserves to complement QQE.
Enhance communication to focus on achieving 2 percent inflation in a stable manner aided by a more transparent presentation of the BoJ's forecast and underlying assumptions. Clarify the indicators used to assess inflation developments and spell out the criteria for judging whether the inflation target is sustainably achieved, and triggers for additional actions.	<p>The BoJ modified its communication framework in June 2015, which became effective in January 2016:</p> <ul style="list-style-type: none"> • Preparing the Outlook for Economic Activity and Prices on a quarterly rather than a semi-annual basis; • Releasing each board member's forecasts for growth and prices with a risk assessment and extending the forecast period to 4 years; • Issuing the "Summary of Opinions" in about a week after the monetary policy meeting (MPM), providing information about the policy board's debates; and • Reducing the frequency of MPMs to 8 times a year from the current 14 times a year.

Financial Sector Policy:	
Close monitoring of liquidity, especially in the JGB market is essential given the potential spillovers to other financial market segments. Ensuring resilience of the financial sector to higher volatility is critical.	BoJ has taken measures to mitigate the negative impact of the QQE on JGB market liquidity, including (i) the supplementary measures for the QQE announced in December 2015, which allowed for consecutive use of its Security Lending Facility (SLF) for a longer period, and (ii) raising the upper limit on the amount of sales per issue in February 2016. MoF planned to issue additional off-the-run JGBs with remaining maturity of 1–5 years in the Auctions for Enhanced-Liquidity in FY2016 to correct the demand-supply imbalances and enhance market liquidity.
Strengthen risk management and change business models to raise profitability in the banking system. Capital standards for domestically oriented banks need strengthening by including reassessing the treatment of unrealized losses in capital. Insurance companies need to enhance profitability to work through the legacy of guaranteed return products.	FSA announced to conduct a new interview survey to one thousand regional companies (mainly SMEs and other users) on 105 regional banks' lending attitude. This is intended to identify which regional bank is still depending on collateral-based lending, and which bank has improved their business model to borrowers' profitability (growth)-based lending. FSA published the summary of the survey results in August 2015. FSA also approved the Business Strengthening Plans of financial institutions pursuant to the "Act on Special Measures for Strengthening Financial Functions".
Mitigate foreign-exchange funding risks for banks with overseas activities by securing robust funding sources.	FSA encouraged the three megabanks to increase their capital to comply with the implementation of Basel III, and also to reduce cross-shareholdings to prepare for equity price drop. Also, FSA is considering strengthening its regulation on insurance companies by 2020 assuming that large insurance companies will adopt international standards which will be set by FSB and IAIS.
Macroprudential policies should be readied in case financial stability risks arise.	FSA has implemented the countercyclical capital buffer (CCB) but maintained it at zero percent.
Growth Strategy	
Raise labor supply by fully implementing plans to increase the availability of child care, eliminating tax-induced disincentives to work, incentivizing older workers to remain in the workforce and relaxing immigration restrictions in areas with labor shortages.	On September 24, 2015, PM Abe announced a nominal GDP target of 600 trillion yen, and added new arrows focused on social security, child rearing support, and demographic growth. On August 28 th the Diet approved a bill (which took effect on April 1, 2016) to promote the role of women in the workplace. The act requires large companies (with 301 or more employees) to set numerical targets for the employment and promotion of women.
Clarify the legal and regulatory environment surrounding "intermediate" contracts that balance job security and flexibility to reduce labor market duality and raise horizontal mobility.	Amendments to the Worker Dispatch Law were approved by the Diet, ending a requirement for companies upgrade their temporary workers to regular employees after three years (or otherwise terminate the contract). This measure goes in the opposite direction of reducing labor market duality. The amendments also obligate staffing agencies to support the career enhancement of temporary workers by providing training and to work to transition them into permanent employment.
Strengthen the wage growth momentum by raising all administratively controlled wages and prices, calling for a supplementary wage round, the conversion of some of the seemingly permanent bonuses into base wages, and a stronger-than-usual winter bonus round. Also consider higher-than-usual minimum wage increases and strengthening tax incentives for firms that raise wages.	Minimum hourly wage was raised by JPY 18 (15 cents) in 2015 and the government announced a floor of 3 percent on minimum wage increases with a goal to reach 1000 yen/hour (a cumulative increase of 25 percent).

<p>Enhance risk capital provision by focusing on increasing credit to new growth projects, unwind cross-shareholdings and promote consolidation in the financial system, phase-out financial sector support schemes for SMEs that do not invest or hire workers, and promote the expansion of securitization.</p>	
<p>In light of the important changes in GPIF's portfolio allocation, its governance structure can be strengthened.</p>	<p>The government approved GPIF's reform plan to introduce more consensus-based decision-making by establishing an investment committee. GPIF announced to disclose stock holdings for the first time on July 29, when it will report the investment results for fiscal 2015.</p>
<p>To promote further portfolio rebalancing of households, consideration should be given to extending the 5-year term limit of tax-exempt individual savings accounts and raising the maximum contribution limit.</p>	<p>Junior NISA (Nippon Individual Savings Accounts) was introduced in April 2016, where parents and grandparents can set up account for children who are 19 or below with an annual limit of JPY 800 thousand. This is to tempt Japanese households to invest in risk assets and to transfer financial assets to younger generation.</p>
<p>Implement comprehensive corporate governance reform to strengthen firms' governance and potentially unlock corporate savings for more growth effective use. Efforts should focus on including more ambitious requirements for independent directors, greater transparency of beneficial ownership, introducing regulatory limits to discourage excessive cross-shareholdings, removing bottlenecks which prevent takeovers and introducing pre-packaged reorganization plans for bankruptcy procedures.</p>	
<p>Deregulate agriculture and domestic services sectors to raise productivity and encourage inward foreign investment. Eliminate most tariffs and non-tariff and investment barriers. Expedite deregulation in SEZs to help quickly roll out reforms nation-wide.</p>	<p>Twelve countries including Japan and US have struck the Trans-Pacific Partnership (TPP) trade deal on October 5th. Japan will lower tariffs on several agricultural products (e.g. lowering tariff on beef from 38.5 percent to 9 percent in 16 years). Discussions to ratify the TPP are ongoing in the Diet.</p>



JAPAN

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 13, 2016

Prepared By

Asia and Pacific Department (In consultation with other departments)

CONTENTS

FUND RELATIONS	2
STATISTICAL ISSUES	4

FUND RELATIONS

(As of June 30, 2016)

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)	27,111.45	87.97
Reserve Tranche Position	3,709.48	12.04
Lending to the Fund		
New Arrangements to Borrow	5,090.49	

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	12,284.97	100.00
Holdings	12,387.16	100.83

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				
	2016	2017	2018	2019	2020
Principal					
Charges/Interest		0.43	0.43	0.43	0.43
Total		0.43	0.43	0.43	0.43

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 2015 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 2015 Article IV consultation discussions were held during May 8–21, 2015; the Executive Board discussed the Staff Report (IMF Country Report No. 15/197) and concluded the consultation on July 17, 2015. 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, 2016)

	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	Data Quality – Accuracy and reliability ⁸
Exchange Rates	June 2016	June 2016	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	6/10/2016	6/14/2016	Every 10 days	Every 10 days	Every 10 days		
Reserve/Base Money	May 2016	June 2016	M	M	M	LO, LO, LO, LO	O, O, O, O, O
Broad Money	May 2016	June 2016	M	M	M		
International Investment Position	2016Q1	June 2016	Q	Q	Q		
Central Bank Balance Sheet	6/10/2016	6/14/2016	Every 10 days	Every 10 days	Every 10 days		
Consolidated Balance Sheet of the Banking System	April 2016	June 2016	M	M	M		
Interest Rates ²	June 2016	June 2016	D	D	D		
Consumer Price Index	April 2016	May 2016	M	M	M	O, LO, O, O	O, O, LO, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ – General Government ⁴	2014	January 2016	A	A	A	O, LNO, O, O	LO, O, O, O, LO
Revenue, Expenditure, Balance and Composition of Financing ³ – Central Government	2014	January 2016	A	A	A		
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	2016Q1	May 2016	Q	Q	Q		
External Current Account Balance	April 2016	June 2016	M	M	M	O, O, LO, O	LO, O, O, O, O
Exports and Imports of Goods and Services	April 2016	June 2016	M	M	M		
GDP/GNP	2016Q1	June 2016	Q	Q	Q	O, O, O, O,	LO, LO, O, O, LNO
Gross External Debt	2016Q1	June 2016	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.



JAPAN

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION

July 22, 2016

Prepared By

Asia and Pacific Department

This supplement updates the staff report (SM/16/223) and does not alter the thrust of the staff appraisal.

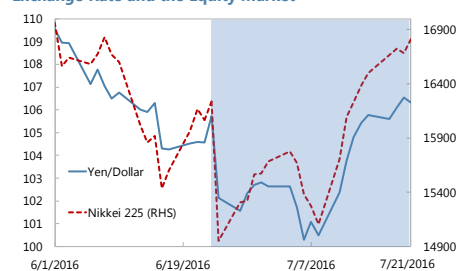
Taking into account weakness in recent high-frequency indicators, financial market volatility and uncertainty associated with the leave vote in the Brexit referendum, staff has marked down the outlook for growth and inflation. Domestically, the Upper House elections strengthened the leading coalition, paving the way for new policy initiatives which remain to be specified. Even though the initial market response may have overshot, subsequent developments point to the anticipation of a policy response. Against this background, the staff's advice remains broadly in line with the "reload" package and the need for supportive fiscal and monetary policies to deal with downside risks.

RECENT DEVELOPMENTS AND REVISED OUTLOOK

Recent economic developments together with the increased uncertainty in the aftermath of the Brexit referendum warrant a downgrading of the outlook.

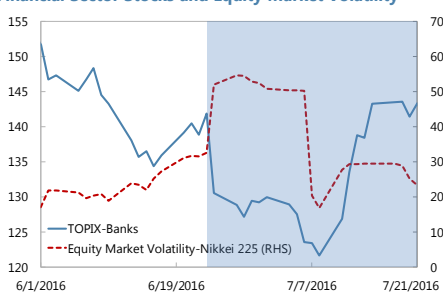
Short-term economic indicators released since the staff report was issued point to softness in economic activity. Recent PMI indicators suggest sustained weakness in manufacturing activity, reflecting sluggish export demand, while the inventory-to-sales ratio in the manufacturing sector has increased and machinery orders data have disappointed. In line with downward revisions to growth in major trading partners, and without taking into account any potential policy response, higher uncertainty following the Brexit vote is expected to contribute to a further drag on growth, especially investment, but also consumption and exports including from the recent volatility in the exchange rate. Although direct trade and financial exposures to the United Kingdom are limited, those to the rest of Europe are relatively large and would, together with domestic confidence effects, constitute the main channel of impact.¹ All combined, compared to the staff report Japan's growth projections for 2016 and 2017 have been revised down by 0.2 percentage points to 0.3 and 0.1 percent, respectively. The outlook for inflation has been reduced by 0.1–0.2 percentage points, reflecting a stronger yen, weaker commodity prices, and softer domestic demand. These projections assume a gradual waning of uncertainty surrounding Brexit but do not factor in any policy response.

Exchange Rate and the Equity Market



Source: Bloomberg, L.P.

Financial Sector Stocks and Equity Market Volatility



Source: Bloomberg, L.P.

Repercussions from the Brexit referendum and expectations of a large policy response caused market gyrations. Financial conditions tightened considerably on impact of the Leave vote: the yen appreciated strongly amid safe-haven effects and expectations of further delays in rate hikes by the U.S. Federal Reserve, and equity prices slumped, led by financial sector stocks.² Short selling in the Tokyo Stock Exchange (as a share of total selling) increased to historical highs in June. Yields on Japanese government bonds (JGBs) declined further, reflecting higher risk aversion and expectations of further monetary policy easing. In particular, the JGB yield curve shifted down and flattened, with the 10-year benchmark rate falling by over 14 bps to -0.29 percent within two weeks after the referendum.³ Moreover, USD funding costs increased sharply, with the 3-month JPY/USD basis swap widening from -55 to -68 bps on the day of the Brexit. The BoJ's provided USD\$1.475 billion on June 28—the largest amount since December 2014, but assurances about availability of USD funding

¹ Japan's exports to the United Kingdom respectively the rest of Europe made up about 2 and 9 percent of its total exports in 2015. Japan's FDI respectively portfolio claims on the United Kingdom are about 7 and 5 percent of Japan's total foreign claims, compared to 17 and 25 percent for the rest of Europe.

² Stocks of banks and insurance companies had fallen by 14 and 13 percent within two weeks after the Brexit referendum, respectively.

³ This is less than the reaction in the U.S., where the 10-year Treasury yield fell about 30 bps.

through a joint statement by Finance Minister Aso and BoJ Governor Kuroda helped stabilize markets. Since the initial response, both the yen and the equity markets have more than retraced their steps, helped by the broad victory of the leading coalition in the Diet Upper House elections and the anticipation of a sizeable package of fiscal support measures. Market volatility has fallen back to pre-referendum levels and equity valuations, including of financial institutions, are significantly above these levels. JGB yields have reversed some of their decline, especially at the long end.

POLICY IMPLICATIONS

The staff advice remains broadly in line with the “reload package” of the staff report and the need for near-term support for the economy to deal with downside risks. The reload scenario should be accelerated as it remains the most effective response to recent developments and uncertainty (¶18 of the staff report). The realization of downside risk justifies a fiscal response, to target a modest positive fiscal stance in 2017, and some further monetary easing to underscore the BoJ’s resolve to achieve its inflation target (¶16):

- *Fiscal policy:* In the near term, fiscal policy should aim for a modest fiscal impulse, using measures with high multipliers. A large stimulus would have merit only as part of the staff’s comprehensive and coordinated “reload” package and support for labor market reforms. To create the necessary near-term space and reduce policy uncertainty, the commitment to fiscal consolidation over the medium-term should be enhanced and fiscal policy frameworks strengthened.
- *Monetary policy:* To create balanced support for the economy and exploit synergies, the fiscal policy response should be complemented with additional easing by the BoJ to loosen financial conditions and underscore its commitment to achieve the inflation target in a sustained and stable manner. All easing options should remain on the table, including lowering of the negative interest rate on marginal excess reserves and increasing annual targets for ETF and corporate bond purchases.

AUTHORITIES VIEWS⁴

The authorities consider that the impact of Brexit on growth is likely to be modest given Japan’s relatively small export exposure to the United Kingdom and the rest of Europe. They felt that the impact of Brexit was highly uncertain, and noted that the initial steep correction in the Nikkei has reversed and that strong appreciation of the yen has moderated. The authorities expected to revise their outlook shortly as the basis for new budget projections and preparation. In terms of policies, they noted that details on the size and composition of the planned stimulus package would be formulated soon and that the BoJ would not hesitate to take additional easing measures, if necessary to achieve the 2 percent price stability target at the earliest possible time, in terms of the three dimensions, that is the quantitative, qualitative, and interest rate dimensions.

⁴ Based on an exchange of views between staff and authorities during July 14–15, 2016.

Table 1. Japan: Selected Economic Indicators, 2011–17

Nominal GDP: US\$ 4,124 Billion (2015)
 Population: 127 Million (2015)
 GDP per capita: US\$ 32,480 (2015)
 Quota: SDR 15.6 Billion (2015)

	2011	2012	2013	2014	2015	2016	2017
						Proj.	
Growth (percent change) 1/							
Real GDP	-0.5	1.7	1.4	0.0	0.5	0.3	0.1
Domestic demand	0.4	2.6	1.7	0.0	0.1	0.4	0.3
Private consumption	0.3	2.3	1.7	-0.9	-1.2	0.6	1.1
Gross Private Fixed Investment	4.3	3.6	1.1	1.5	0.8	1.5	2.1
Business investment	4.1	3.7	-0.5	3.1	1.5	1.1	1.8
Residential investment	5.1	3.2	8.4	-5.3	-2.5	2.5	3.6
Government consumption	1.2	1.7	1.9	0.1	1.2	1.1	-1.6
Public investment	-8.2	2.7	8.0	0.4	-2.5	-5.3	-7.5
Stockbuilding 2/	-0.2	0.2	-0.2	0.2	0.5	-0.2	0.0
Net exports 2/	-0.8	-0.8	-0.2	0.3	0.4	-0.1	-0.3
Exports of goods and services 3/	-0.4	-0.2	1.2	8.3	2.8	-0.2	1.1
Imports of goods and services 3/	5.9	5.3	3.1	7.2	0.3	0.2	3.0
Output Gap	-3.3	-2.0	-1.1	-1.6	-1.5	-1.7	-2.0
Inflation (annual average)							
CPI 4/	-0.3	0.0	0.4	2.7	0.8	0.2	0.4
CPI excluding VAT	-0.3	0.0	0.4	1.2	0.3	0.2	0.4
Core Core CPI excluding VAT 5/	-0.8	-0.4	-0.2	0.7	0.9	...	...
GDP deflator	-1.9	-0.9	-0.6	1.7	2.0	0.6	0.3
Unemployment rate (annual average)							
	4.6	4.3	4.0	3.6	3.4	3.2	3.3
Government (percent of GDP)							
General government							
Revenue	30.8	31.1	32.1	33.6	34.1	33.8	34.0
Expenditure	40.6	39.8	40.6	39.8	39.3	38.9	38.3
Overall Balance	-9.8	-8.8	-8.6	-6.2	-5.2	-5.1	-4.3
Primary balance	-9.0	-7.9	-7.8	-5.6	-4.9	-5.1	-4.5
Structural primary balance	-7.7	-7.0	-7.5	-5.2	-4.5	-4.7	-4.0
Public debt, gross	231.6	238.0	244.5	249.1	248.0	250.7	254.0
Macro-financial (percent change, end-period, unless otherwise specified)							
Base money	22.2	19.3	60.3	36.7	29.1	22.6	18.3
Broad money	3.6	2.8	4.0	3.0	3.1	2.7	2.7
Credit to the private sector	-0.6	3.1	5.5	1.5	2.6	2.3	2.4
Non-financial corporate debt in percent of GDP	191.3	196.3	225.6	238.2	234.4	234.0	236.1
Household debt in percent of disposable income	128.3	127.1	128.5	129.3	129.3	130.3	131.8
Interest rate							
Overnight call rate, uncollateralized (end-period)	0.1	0.1	0.1	0.1	0.0	...	...
Three-month CD rate (annual average)	0.3	0.3	0.2	0.2	0.2	...	...
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.)	1.1	0.9	0.7	0.6	0.4	-0.1	-0.1
Balance of payments (in billions of US\$)							
Current account balance	129.8	59.7	45.9	36.4	135.6	159.4	143.2
Percent of GDP	2.2	1.0	0.9	0.8	3.3	3.4	2.9
Trade balance	-4.5	-53.9	-90.0	-99.9	-5.3	19.3	0.7
Percent of GDP	-0.1	-0.9	-1.8	-2.2	-0.1	0.4	0.0
Exports of goods, f.o.b.	790.8	776.0	695.0	699.4	621.9	620.5	643.0
Imports of goods, f.o.b.	795.3	829.9	784.9	799.3	627.2	601.2	642.3
Energy imports	242.8	272.2	257.4	241.7	133.7	112.6	130.3
FDI, net (percent of GDP)	2.0	2.0	2.9	2.6	3.2	2.5	2.4
Portfolio Investment, net (percent of GDP)	-2.8	0.5	-5.7	-0.9	3.2	3.3	3.4
Terms of trade (percent change)	-9.0	-1.8	-2.5	-1.0	14.0	1.3	-1.2
Change in reserves	177.3	-37.9	38.7	8.5	5.1	9.5	10.0
Total reserves minus gold (in billions of US\$)	1258.2	1227.2	1237.3	1231.0	1207.1	...	...
Exchange rates (annual average)							
Yen/dollar rate	79.8	79.8	97.6	105.9	121.0	106.9	101.1
Yen/euro rate	111.0	102.6	129.6	140.8	134.3	118.9	112.5
Real effective exchange rate (ULC-based) 6/	118.5	119.7	96.7	88.8	85.0	...	...
Real effective exchange rate (CPI-based) 7/	101.7	100.6	80.4	75.1	70.2	...	...
Demographic Indicators							
Population Growth	0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3
Old-age dependency	36.4	37.8	39.8	41.8	43.6	45.1	46.3

Sources: IMF, Competitiveness Indicators System; OECD, and IMF staff estimates and projections as of July 7, 2016.

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.