Japan: Recent Developments

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Deputy Managing Director
International Monetary Fund
Global growth continues to be strong, reflecting sizeable upward revisions in many key advanced and emerging market economies.

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>Advanced Economies</th>
<th>Emerging Market and Developing Economies</th>
<th>U.S.</th>
<th>Japan</th>
<th>Euro Area</th>
<th>China</th>
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<td>2.3</td>
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<td>2.4</td>
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<td>Revision from Oct. 2017</td>
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<td>0.6</td>
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</table>

Japan’s economy is in a relatively good place

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

Source: Haver Analytics.
Driven by a supportive external environment

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

- United States
- Japan
- Euro Area
- Emerging economies

Source: CPB World Trade Monitor.

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

- To World
- To USA
- To Euro Area
- To Asia

Source: Haver Analytics.
...and fiscal and monetary support

10-Year JGB and Monetary Base Expansion

Monetary Base (In trillion Yen)

-10-Year JGB Yield (RHS)

Source: Haver Analytics.
But inflation and wage growth remain stubbornly low....

**Inflation Indicators**
(YoY; in percent)

- Headline w/o VAT
- Core (ex. fresh food) w/o VAT
- Core core (ex. fresh food and energy) w/o VAT

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

Sources: Haver Analytics; IMF staff estimates.
Sources: Haver Analytics; and IMF Staff calculations.
...public debt is high....

Japan: Gross Public Debt1/ 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.
...and macro-financial challenges persist
Risks to the outlook

Upside risks

- Growth and inflation could surprise on the upside

Downside risks

- Loss of confidence in macro policies
- Geopolitical instability
- Low bank profitability
- Fiscal sustainability
Making the Most of Current Tailwinds Through Mutually Reinforcing Strategy
Monetary policy needs to stay the course

**Japan: Natural Rate of Interest**

(In percent)

Sources: Bank of Japan; Haver Analytics; and Fund staff estimates.

Note: The blue line is the actual real discount rate deflated by the inflation expectations estimated from an MA(4) model, and the red line marks the mean posterior estimates of the natural rate of interest from a Bayesian time-varying parameter vector autoregression (TVP-VAR) model following Lubik and Matthes (2015).
Fiscal policy should preserve near-term growth within a credible medium-term framework.
Structural reforms are central to the strategy
Japan faces two major challenges:
  • Achieving a durable exit from deflation
  • Raising productivity to counter demographic headwinds

Abenomics has improved economic conditions, but has not yet achieved its objectives.

Current favorable economic environment is an opportunity to accelerate reforms

To put the economy on a durable growth path
  • Coordinated demand policy and income policy to boost inflation
  • Structural reforms to boost productivity
Can Central Banks & Career Bureaucrats continue to compensate for dysfunctional governments?

Alicia Ogawa
Center on Japanese Economy and Business
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BUSINESS
With Focus On Unemployment, Yellen Led Fed Through Tough Balancing Act

Yellen Has Done a Great Job on Jobs
The economy has come a long way under her management.

Yellen: Good on growth, jobs and financial stability, but not inflation
Redistribution and Social Policy are no longer secondary philosophic/academic issues

- The BoJ and the US Fed may be brilliant, but monetary policy is only one tool to affect economic growth.

- The failure of elected officials to react to the disequilibrium in income distribution resulting from globalization has resulted in the creation of a permanent underclass.

- There has been little forward-thinking about the issue of the new “gig” economy workers in the U.S., and the rise of non-permanent workers in Japan. They hold the key to some of the mysteries of low wage growth and consumption levels.

- Disaffection and lack of trust by the population is/will be reflected in opposition to free trade (NAFTA, TPP), in growing nationalism (Brexit, Tea Party, AfD, Five Star), and growing distrust of government, firms and central banks.
Ranking of Economic Mobility (Europe and NA)

Stanford University Center on Poverty and Inequality, Feb. 2016

1. Finland
2. Norway
3. Australia
4. Canada
5. Germany
6. France
7. United Kingdom
8. Italy
9. Spain
10. United States
Pew Research: Voter Turnout in both Japan and US is low
I don’t trust the Japanese Government, and I REALLY don’t trust the US government!

Source: Edelman Global Trust Barometer 2018
I don’t trust my company to “do the right thing”

Source: 2018 Edelman Trust Barometer
US education system at the heart of many problems of economic mobility

US school performance lags behind
% of 15-year-old pupils achieving low and high levels of mathematics

Source: OECD PISA results
Japan has managed to maintain democracy of education

Across the OECD, one out of four students with socio-economic disadvantages achieves good educational outcomes. Among the G7 countries, the biggest share of these ‘resilient’ students is found in Japan, with 40.4 per cent.
The number of non-regular workers is rising rapidly

Source: Ministry of Health, Labor and Welfare, OECD.
The wage gap between regular and non-regular workers is large

Wage as a percentage of the average wage of regular employees^{1}

1. In June 2015, excluding overtime payments and bonuses.


Columbia Business School
AT THE VERY CENTER OF BUSINESS
Center on Japanese Economy and Business
Living standards and productivity in Japan are well below leading OECD countries (Source: OECD)

1. Per capita GDP using 2010 prices and PPP exchange rates. Labour productivity equals GDP per hour of labour input.

Rising Rates of income Dispersion: The case of Tokyo

Source: Bloomberg
Japan's problem is not only income and gender inequality, but inter-generational inequality

Net transfers from the government as a percentage of lifetime earnings

Source: Suzuki (2014), OECD
Conclusion: Structural reform and more creative fiscal policies needed to address imbalances,

- but is the current level of political leadership up to the challenge?
Demographic pessimism, cash hoarding, questions re:governance = undervalued Japanese business sector

While Japanese companies’ capital ratios are rising, their ROEs are lower than those of other Asian companies.

Fiscal year ends in March
Figures through fiscal 1999 for companies listed on first section of Tokyo Stock Exchange, excluding financial companies, Japan Post Holdings, etc; ROEs unavailable for fiscal 2001 due to losses

Source: QUICK-FactSet
Productivity has diverged across Japanese firms
Small firms are old, pointing to a lack of economic dynamism, as per OECD.
Firm entry and exit rates are low

Source: Ministry of Economy, Trade and Industry (2014), OECD.
Future challenges for US monetary policy

US Economics

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February 2018
Another recession is inevitable

- The current expansion is already one of the longest in US history

When it comes, interest rates are likely to be low

The Fed may face many of the same problems that the BOJ has had to deal with in recent years

* Expansions spanning major wars

Source: National Bureau of Economic Research (NBER) and Nomura Economics
The next recession will be a challenge for the Fed

- Mild recessions in 1991 and 2001 led to 5pp declines in the fed funds rate

- Persistently low “neutral” rates will mean that the Fed will not have that much room next time

- The Fed is already thinking about what its strategy should be
The FOMC may have limited scope to lower interest rates in the next recession.

FOMC funds rate target and FOMC forecasts

Source: Federal Reserve, Bloomberg and Nomura
Markets seem to agree

OIS forwards rates and the FOMC funds rate target

Source: Federal Reserve, Bloomberg and Nomura
When the next downturn comes:

- The first question: How quickly should the FOMC lower rates?
- Next, when (not ‘if’) they get to the lower bound, what then?
  - (Odyssean) forward guidance?
  - Negative rates?
  - Asset purchases?
The Fed is already thinking about these questions

- A debate over the Fed’s inflation-targeting framework has begun. Key options are:
  - Raising the inflation target
  - Switching to some form of price-level targeting

- But this debate seems to presume that other options – negative rates and asset purchases – are not good options
“The problem with QE is that it works in practice, but it doesn’t work in theory.”

Ben Bernanke, January 16, 2014.

• This is a problem

Source: James Saft, “You must be joking, Mr. Bernanke,” Reuters, 16 January 2014 and Nomura Economics
Gagnon (2016) reports results from a range of empirical studies of the impact of asset purchases on long-term interest rates

- 18 event studies
- 6 time series
- 3 structural models

The estimates are broadly consistent and suggest that such asset purchases are effective
A role of the Fed assets purchases in the future

- A recent paper – Kiley (2018) – argues that aggressive QE, when short-term interest rates are at their lower bound, is a good option.

- Kiley’s results suggest that aggressive QE generates results that are:
  - Better than those of a higher inflation target
  - Comparable to those of “commitment strategies” like price-level targeting

- Moreover, QE does not have two of the problems of “commitment” strategies
  - Time inconsistency
  - Communication

- Kiley’s conclusions depend on the judgment that supply affects term premia
  - His simulation results are based on estimates from Li and Wei (2014)

Is the size of the Fed’s balance sheet a constraint on future asset purchases?

Balance-sheet expansion by G4 central banks

What about Yield Curve Control?

During and directly after WWII, the Federal Reserve successfully controlled long-term interest rates, but this episode had essentially no impact on Fed thinking about monetary policy.

- Operation Twist was a Treasury initiative which the Fed later disowned.

Standard thinking was that all the Federal Reserve had to do was control short-term interest rates and possibly use forward guidance.

- This reflected high neutral rates.
- But also the theoretical judgment that the composition of the Fed’s assets simply did not matter.

Japan’s experience with Yield Curve Control may give the Federal Reserve a reason to reassess this option.

The Bank of Japan’s recent experience is likely to be very relevant to the challenges facing the Fed in the next recession.

Source: Nomura Economics
Appendix A-1

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Japan’s Economy and Public Debt Management
Recent Economic Development and Forecast

CPI

(Note) The effects of consumer tax rate change in April 2014 on CPI are eliminated.
(Source) MOF, Cabinet Office, Ministry of Internal Affairs and Communications, BOJ
Labor Market and Output Gap

(Source) Ministry of Internal Affairs and Communications “Labour Force Survey”
Ministry of Health, Labour, and Welfare “Employment Referrals for General Workers”
Wage, Rate of Non-regular Employment and Consumption

Wage and Rate of Non-Regular Employment

(2015 average = 100)

Seasonally adjusted wage indices (LHS)
Rate of non-regular employment (RHS)

Consumption

(CY2011=100)

Consumption Tax Hike
5% → 8% (April 2014)
Consumption Tax Hike
(approved by the Diet)
(August 2012)

Private Consumption
Integrated Estimates
(seasonally adjusted series)

(Source) Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications
(Source) Cabinet Office

(CY, 3 month average)

The New Economic Policy Package (Dec. 8, 2017 Cabinet Decision)

Human Resources Development Revolution

1. Free preschool education
2. Elimination of childcare placement waiting lists
3. Free higher education
4. Substantive free education at private high schools
5. Improvement of compensation for long-term care workers
6. Stable financial resources to realize these measures
7. Relevance to the fiscal consolidation
8. Items to be discussed continually towards next summer
9. Regulatory and institutional reforms, etc.

Productivity Revolution

1. Productivity revolution of SMEs and small-scale entrepreneurs
2. Productivity revolution through improved profitability and investment promotion of corporations
3. Productivity revolution through societal implementation of Society 5.0 and disruptive innovation

Response to current additional fiscal demand
FY2018 Budget: Expenditure and Revenue

(Unit: trillion yen)

General Account Expenditure

- National Debt Service 23.3 (23.8%)
- Redemption of the National Debt 14.3 (14.6%)
- Others 6.2 (6.3%)
- Education and Science 5.4 (5.5%)
- Public Works 6.0 (6.1%)
- Local Allocation Tax Grants, etc. 15.5 (15.9%)
- Social Security 33.0 (33.7%)
- Interest Payments 9.0 (9.2%)
- Primary Expenses 74.4 (76.2%)

General Expenditure*: 58.9 (60.3%)

(*Primary Expenses – Local Allocation Tax Grants, etc.)

General Account Revenue

- Income Tax 19.0 (19.5%)
- Corporation Tax 12.2 (12.5%)
- Consumption Tax 17.8 (18.0%)
- Tax and Stamp Revenues 59.1 (60.5%)
- Others 10.3 (10.6%)

General Account Total Revenues 97.7 (100.0%)

(Note1) Figures may not add up to the totals due to rounding.
(Note2) Social security related expenditures account for 56.0% of the general expenditure.
Fiscal Consolidation has steadily advanced.

Achieved the three-year benchmarks for the general and social security expenditures set out in the Fiscal Consolidation Plan (+¥1.6tn, +¥1.5tn for FY2016-18, respectively);

The amount of planned bond issuance has decreased in six consecutive years since the start of Abe administration (FY2017: ¥34.4tn ⇒ FY2018: ¥33.7tn);

Primary balance in the general account has improved (FY2017: -¥10.8tn ⇒ FY2018: -¥10.4tn)

Implement measures to boost productivity that lead to sustained wage hikes and overcoming deflation.

Promote investments in facilities and human capital by local core enterprises and SMEs;

Implement tax reforms for increasing wages and improving productivity;

Support R&D through industry-government-academia cooperation;

Prioritize public investments in maintaining infrastructures which contribute to enhancing productivity

In view of the era of one hundred-year lifespans, transfer the social security system to a system oriented to all generations and expand investments in human capital.

Expand the capacity of childcare facilities;

Raise wages for childcare and long-term nursery workers;

Make preschool education free of charge in a phased manner;

Increase the allowance provided through scholarships that do not need to be repaid, among others

Fiscal Consolidation

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Achieved the three-year benchmarks for the general and social security expenditures set out in the Fiscal Consolidation Plan (+¥1.6tn, +¥1.5tn for FY2016-18, respectively);

The amount of planned bond issuance has decreased in six consecutive years since the start of Abe administration (FY2017: ¥34.4tn ⇒ FY2018: ¥33.7tn);

Primary balance in the general account has improved (FY2017: -¥10.8tn ⇒ FY2018: -¥10.4tn)

FY2018 Budget: Highlights

FY2018 budget, the budget for final year of the intensive reform period set in the Fiscal Consolidation Plan, continues to pursue both economic revitalization and fiscal consolidation.
Tax Revenue, Expenditure and Bond Issues in General Account

(Note1) FY1975 - FY2016: Settled Figures; FY2017: Based on Supplementary Budget, FY2018: Based on Draft Budget

(note2) Following various bonds are excluded: Ad-hoc Special Deficit-Financing Bonds issued in FY1990 as a source of funds to support peace and reconstruction activities in the Persian Gulf Region, Tax reduction-related Special Deficit-Financing Bonds issued in FY1994 - FY1996 to make up for decline in tax revenue due to a series of income tax cuts preceding consumption tax hike from 3% to 5%, Reconstruction Bonds issued in FY2011 as a source of funds to implement measures for the Reconstruction from the Great East Japan Earthquake, Pension-related Special Deficit-Financing Bonds issued in FY2012 and FY2013 as a source of funds to achieve the targeted national contribution to one-half of basic pension.

(Note3) General Account Primary Balance is calculated by subtracting Primary Expenditure from the sum of Tax Revenue and Other Revenue: It is different from the Central Government Primary Balance on SNA basis.
Equivalent to 15 years of General Account Tax Revenue
(Tax Revenue in FY2018 General Account Budget: ¥59 trillion)

FY2018 Government Bonds Outstanding
¥883 trillion (projected)
↓
¥7.00 million per person
¥27.98 million per family of 4

cf. Average disposable income of a working family 1/
¥5.14 million

1/ Disposable income is based on the "FY2015 Survey of Household Economy" by the Ministry of Internal Affairs and Communications.

Accumulated Government Bonds Outstanding

(Note1) FY1975 - FY2016: Settled Figures; FY2017: Estimated Figures, FY2018: Based on Draft Budget
(Note2) Special Deficit-Financing Bonds Outstanding includes refunding bonds for long-term debts transferred from JNR Settlement Corporation, the National Forest Service, etc., Ad-hoc Special Deficit-Financing Bonds, Tax reduction-related Special Deficit-Financing Bonds and Pension-related Special Deficit-Financing Bonds.
(Note4) The estimate of FY2018 excluding front-loading issuance of refunding bonds is approximately 828 trillion yen.
Households Financial Assets and Aging Population

Trends of the General Government Debt and Households Financial Assets

- Household financial assets (Gross): 1,808 trillion yen
- Household financial assets (Net): 1,491 trillion yen
- Government debt (Gross): 1,270 trillion yen
- Saving rate (right): 2.0%

Aging Population

- 2017: Aging rate (% of 65 years old or over) = 38.4%
- 1950 to 2060:
  - 14 years old and under: 6.3%
  - 15~64 years old: 77.8%
  - 65 years old and over: 5.8%


(Sources) Bank of Japan, Cabinet Office
JGB Yields

2013/1/22 Joint Statement
2013/4/4 QQE
2014/10/31 QQE2
2016/1/29 QQE with Negative Interest Rate
2016/4/4 QQE
2016/9/21 QQE with YCC

(Source) Japan Bond Trading Co.
Breakdown by JGB and T-Bill holders
(Mar.2013 → Sep.2017(Preliminary Figures))

**Increased**
- Bank of Japan  +317.2 trillion yen
- Foreigners      +37.7 trillion yen

**Decreased**
- Banks, etc.     -196.5 trillion yen
- Public Pensions -22.2 trillion yen

(The end of Mar.2013)

(Unit: trillion yen)

Total 974.8 trillion yen

The end of Sep.2017 (Preliminary Figures))

(Unit: trillion yen)

Total 1,087.1 trillion yen

Source: Bank of Japan “Flow of Funds Accounts (Preliminary Figures)”

Note1: “JGB” includes “FILP Bonds.”

Note2: “Banks, etc” includes “Japan Post Bank”, “Securities investment trust” and “Securities companies.”

Note3: “Life and Nonlife insurance, etc” includes “Japan Post Insurance.”
The MOF issues JGBs
• Under the basic objectives of the debt management policy
  - Implement secure and smooth issuance of JGBs
  - Minimize medium to long term financing costs
• Based on market demands
• Through the dialogue with the market participants

Excessive response to temporary demands

• Predictability of the market participants
  ↓
• Funding cost
  ↑
• Distortions in the market

More stable and predictable issuance of JGBs from the view point of mid- and long-term market demands
Highlights of FY2018 JGB Issuance Plan

- Market issuance amount by normal auctions: 134.2 trillion yen (reduced by 7.0 trillion yen in total, in addition to above reduction)

- Issuance amounts by maturity types are to be reduced in well-balanced manners, including 30-Year and 40-Year bonds, which had increased in recent years.

- Liquidity Enhancement Auction (additional issuance of off-the-run JGBs based on market demand) is increased to 12.6 trillion yen, the largest amount since this auction introduced in FY2006.

*(Breakdown by Legal Grounds)*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Changes from FY2017 (trillion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newly-issued bonds (Construction Bonds and Special Deficit-Financing Bonds)</td>
<td>33.7</td>
</tr>
<tr>
<td>Reconstruction Bonds</td>
<td>1.0</td>
</tr>
<tr>
<td>FILP Bonds</td>
<td>12.0</td>
</tr>
<tr>
<td>Refunding Bonds</td>
<td>103.2</td>
</tr>
<tr>
<td>Total</td>
<td>149.9</td>
</tr>
</tbody>
</table>

*(Breakdown by Financing Methods)*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Changes from FY2017 (trillion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JGB market issuance</td>
<td>144.1</td>
</tr>
<tr>
<td>Market issuance by normal auctions</td>
<td>134.2</td>
</tr>
<tr>
<td>Non-Price Competitive Auction II and others</td>
<td>9.9</td>
</tr>
<tr>
<td>Sales for Households</td>
<td>3.3</td>
</tr>
<tr>
<td>BOJ rollover</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>149.9</td>
</tr>
</tbody>
</table>

*(Market Issuance Plan by JGB types)*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Changes from FY2017 (trillion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-Year</td>
<td>2.4</td>
</tr>
<tr>
<td>30-Year</td>
<td>8.4</td>
</tr>
<tr>
<td>20-Year</td>
<td>12.0</td>
</tr>
<tr>
<td>10-Year</td>
<td>26.4</td>
</tr>
<tr>
<td>5-Year</td>
<td>24.0</td>
</tr>
<tr>
<td>2-Year</td>
<td>25.2</td>
</tr>
<tr>
<td>TBs (1-Year)</td>
<td>21.6</td>
</tr>
<tr>
<td>Total</td>
<td>134.2</td>
</tr>
</tbody>
</table>

※ Non-Price Competitive Auction II is an additional issuance for the JGB Market Special Participants after the normal auction. Additional revenue from issuance at a price above par value is also included.
BOJ’s Monetary Policy

Kazushige Kamiyama
The Bank of Japan
Japan's Economy

Note: The CPI figures are adjusted for changes in the consumption tax rate.
Sources: Ministry of Internal Affairs and Communications; Cabinet Office.
Potential Growth Rates

Note: For Japan, for the period when no target interest rate was adopted, figures for the policy rate are the interest rate applied on excess reserves. Sources: Bank of Japan; Federal Reserve; European Central Bank; Haver; Bloomberg.
Short-Term Policy Interest Rates

Note: For Japan, for the period when no target interest rate was adopted, figures for the policy rate are the interest rate applied on excess reserves.
Sources: Bank of Japan, Federal Reserve, European Central Bank; Haver; Bloomberg.
## Transition of BOJ's Monetary Policy

<table>
<thead>
<tr>
<th>Date</th>
<th>Operating target</th>
<th>Target of short-term interest rates</th>
<th>(1) Affecting longer-term interest rates</th>
<th>(2) Affecting risk premiums</th>
<th>(3) Applying a negative interest rate to the current accounts</th>
<th>(4) Affecting inflation expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 1999</td>
<td>Zero Interest Rate Policy</td>
<td>Uncollateralized O/N call rate</td>
<td>&quot;As low as possible&quot; (virtually 0%)</td>
<td>Policy duration effect (forward guidance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug. 2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 2001</td>
<td>Quantitative Easing Policy</td>
<td>Current account balances at the BOJ</td>
<td>Around 0%</td>
<td>Policy duration effect (forward guidance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 2010</td>
<td>Comprehensive Monetary Easing Policy</td>
<td>Uncollateralized O/N call rate</td>
<td>0 to 0.1% (virtually 0%)</td>
<td>JGB purchases / Fixed-rate fund-supplying operation</td>
<td>Purchases of risk assets (CP, corporate bonds, ETFs, J-REITs)</td>
<td>&quot;Price stability target of 2%&quot; (since Jan. 2013)</td>
</tr>
<tr>
<td>Apr. 2013</td>
<td>Quantitative and Qualitative Monetary Easing (QQE)</td>
<td>Monetary base</td>
<td>Around 0% ↓ Negative territory (since Jan. 2016)</td>
<td>Large-scale JGB purchases</td>
<td>Purchases of risk assets</td>
<td>Negative interest rate (since Jan. 2016)</td>
</tr>
<tr>
<td>Apr. 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep. 2016</td>
<td>QQE with Yield Curve Control</td>
<td>Short- and long-term interest rates</td>
<td>Negative territory</td>
<td>Yield curve control (operating target: 10-yr JGB yields)</td>
<td>Purchases of risk assets</td>
<td>Negative interest rate</td>
</tr>
</tbody>
</table>

Central Bank Assets

Note: Figures for Japan and the euro area for 2017/Q3 are calculated using their nominal GDP figures for 2017/Q2.
Sources: Bank of Japan; Federal Reserve; European Central Bank, etc.
Japan's Yield Curve

10-year Government Bond Yields in Selected Advanced Economies

Source: Bloomberg.
**Yield Curve Control**

BOJ facilitates the formation of a yield curve that is considered most appropriate for maintaining the momentum toward achieving the price stability target of 2 percent, taking account of developments in economic activity and prices as well as financial conditions.

**Inflation-overshooting Commitment**

BOJ will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI exceeds 2 percent and stays above that level in a stable manner.
Natural Rate of Interest and Real Interest Rate


The shaded area indicates the 95 percent confidence interval for the natural rate of interest.

Sources: Consensus Economics Inc., "Consensus Forecasts"; Bloomberg; Bank of Japan, etc.
Japan's economy

Output Gap and Prices

Corporate Profits

Unemployment Rate

Notes: 1. The output gap is based on BOJ staff estimations.
2. The CPI figures are adjusted for changes in the consumption tax rate. The figure for 2017/Q3 is the July-August average.
3. Figures for corporate profits are based on the Financial Statements Statistics of Corporations by Industry, Quarterly. Excluding "finance and insurance."
Sources: Bank of Japan, Ministry of Internal Affairs and Communications, Ministry of Finance.
Consumer Prices

Note: Figures are adjusted for changes in the consumption tax rate. Source: Ministry of Internal Affairs and Communications.
Inflation Expectations

Notes: 1. Figures for firms are those for "Outlook for General Prices" in the Tankan survey (all industries and enterprises, average).
2. Figures for households are from the Opinion Survey on the General Public's Views and Behavior, estimated using the modified Carlson-Parkin method.
Sources: Bank of Japan; Consensus Economics Inc., "Consensus Forecasts."
BOJ’s Monetary Policy Stance

As for the conduct of monetary policy, the Bank will continue with "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control," aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner. The Bank will make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions, with a view to maintaining the momentum toward achieving the price stability target.

Corporate Governance in Japan and Fidelity International’s Approach to Engagement

Japan Securities Summit
February 7, 2018

Judy Marlinski
President, Fidelity Institutional Asset Management®
Increased focus on corporate governance & capital efficiency in Japan

- Prime Minister Shinzo Abe, the ministries, the stock exchanges as well as shareholders are pushing hard for positive change in corporate governance and improving capital efficiency in Japan, leading to higher shareholder returns
- Positive momentum in these reforms is tangible

What has changed?
- The Government Pension Investment Fund’s (GPIF) focus on ESG integration and stewardship by external asset managers
  - GPIF’s size and focus on ESG integration from external managers is having a material impact on investor stewardship and engagement with ESG
- Stewardship Code (February 2014)
  - improve and foster investee companies' corporate value and sustainable growth through constructive engagement
- Corporate Governance Code (June 2015)
  - primary purpose is to stimulate healthy corporate entrepreneurship, support sustainable corporate growth and increase corporate value over the mid to long-term

Impact of reforms
- More dividends and buybacks
  - More than 80% increase in dividends and buybacks from 2012 to 2017
- Unwinding cross-shareholdings
  - mega-banks alone are on track to meet targets to unwind US$28bn of “strategic” shareholdings in 2018-21
- Increasing investor engagement
  - Japanese Stewardship Code had 214 signatories at end-2016
- Improving board structure and performance linked compensation
  - 80% of companies with at least two independent external directors in 2016 vs 22% in 2014
  - 2X more companies with equity-linked compensation for CEOs in 2015-16

Source: Fidelity International. Data as of 31 March 2017..
New codes introduced to encourage change

- **Stewardship Code** (responsibility of investors)
  - Encourage companies to achieve sustainable growth, with the aim to deliver growth in medium and long-term returns to beneficiaries
  - Institutional investors commit to clear policies, disclosure of conflict of interests, drive engagement with companies, disclosure of voting etc.
  - Enacted in February 2014, revised in May 2017
  - 214 signatories (institutional investors) as of end 2016

- **Corporate Governance Code** (responsibility of companies)
  - Aims to achieve “proactive governance” by encouraging companies to make speedy and bold decisions which are transparent and fair, including the accountability to various stakeholders
  - Disclosure of cross-shareholdings policy, appropriate disclosure of financial and non-financial information, roles & responsibilities of board of directors, appointment of independent external board director, constructive dialogue with shareholders, development and disclosure of management strategy and business plans
  - Applicable for listed companies since June 2015

Source: Fidelity International. Data as of 31 December 2017.
Growing profits, rising cash holdings and increasing shareholder returns

Net profits and cash holdings at Japanese companies (TSE1 companies, Ytrn)

Shareholder returns (TSE1 companies, consolidated base, Ytrn)

Dividend payout and share buybacks
Corporate Governance Code boost shareholder returns

Shareholder returns

<table>
<thead>
<tr>
<th>Year</th>
<th>Total dividends</th>
<th>Share buyback costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3.6</td>
<td>1.1</td>
</tr>
<tr>
<td>2007</td>
<td>4.2</td>
<td>1.5</td>
</tr>
<tr>
<td>2008</td>
<td>3.4</td>
<td>0.6</td>
</tr>
<tr>
<td>2009</td>
<td>5.6</td>
<td>5.5</td>
</tr>
<tr>
<td>2010</td>
<td>6.6</td>
<td>6.1</td>
</tr>
<tr>
<td>2011</td>
<td>1.1</td>
<td>7.2</td>
</tr>
<tr>
<td>2012</td>
<td>5.7</td>
<td>3.0</td>
</tr>
<tr>
<td>2013</td>
<td>5.6</td>
<td>3.0</td>
</tr>
<tr>
<td>2014</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>2015</td>
<td>10.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Total return ratio & dividend payout ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>US total return ratio</th>
<th>Japan total return ratio</th>
<th>Dividend payout ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>72%</td>
<td>44%</td>
<td>29%</td>
</tr>
<tr>
<td>2011</td>
<td>82%</td>
<td>57%</td>
<td>29%</td>
</tr>
<tr>
<td>2012</td>
<td>87%</td>
<td>49%</td>
<td>33%</td>
</tr>
<tr>
<td>2013</td>
<td>88%</td>
<td>35%</td>
<td>34%</td>
</tr>
<tr>
<td>2014</td>
<td>99%</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>2015</td>
<td>118%</td>
<td>51%</td>
<td>39%</td>
</tr>
</tbody>
</table>

※Total return ratio: Japan – TOPIX companies (includes loss making companies), US - S&P500 companies (includes loss making, CY)
※Dividend payout ratio: Japan – TOPIX companies , US - S&P500 companies (companies with 10 year data, excludes loss making companies)
Source: The Life Insurance Association of Japan
Data: as of March 21, 2017
Rise in awareness
Increasing number of companies setting management goals, taking action

Disclosure of ROE/shareholder return targets

Comparison of companies by ROE level

Notes:
Actual, excludes loss making companies etc., all listed companies
Source: eol, The Life Insurance Association of Japan
Data: as of May 29, 2017

Desirable ROE level for investors 10.9%

Corporate Governance Code June 2015

% of companies with ROE target

% of companies publicizing shareholder return targets

Source: The Life Insurance Association of Japan
Data: as of March 21, 2017
Companies vs. Investors
While companies are making progress, a gap still exists between investors

What companies disclose as medium-term management plan goals vs what investors consider important

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales, sales growth</td>
<td>63.6%</td>
<td>58.5%</td>
<td>60.8%</td>
<td>20.9%</td>
<td>14.3%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Profit, profit growth</td>
<td>69.6%</td>
<td>66.5%</td>
<td>64.3%</td>
<td>38.4%</td>
<td>27.4%</td>
<td>31.2%</td>
</tr>
<tr>
<td>ROE</td>
<td>39.7%</td>
<td>52.3%</td>
<td>56.9%</td>
<td>93.0%</td>
<td>79.8%</td>
<td>78.5%</td>
</tr>
<tr>
<td>ROA</td>
<td>16.1%</td>
<td>16.8%</td>
<td>17.0%</td>
<td>26.7%</td>
<td>32.1%</td>
<td>32.3%</td>
</tr>
<tr>
<td>ROIC</td>
<td>3.1%</td>
<td>3.5%</td>
<td>4.1%</td>
<td>29.1%</td>
<td>34.5%</td>
<td>39.8%</td>
</tr>
<tr>
<td>FCF</td>
<td>7.8%</td>
<td>8.3%</td>
<td>8.9%</td>
<td>25.6%</td>
<td>35.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Dividend payout ratio</td>
<td>24.9%</td>
<td>29.5%</td>
<td>34.9%</td>
<td>54.7%</td>
<td>40.5%</td>
<td>40.9%</td>
</tr>
<tr>
<td>Total return ratio</td>
<td>3.9%</td>
<td>9.0%</td>
<td>7.8%</td>
<td>43.0%</td>
<td>48.8%</td>
<td>39.8%</td>
</tr>
</tbody>
</table>

Efforts made by companies to improve capital efficiency vs investor expectation

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Companies FY 2016 survey</th>
<th>Investors FY 2016 survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in business scale, market share</td>
<td>43.7%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>57.9%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Competitive products and services</td>
<td>56.5%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Emphasis on profitability in investments</td>
<td>32.2%</td>
<td>41.9%</td>
</tr>
<tr>
<td>Select and focus (align business with management vision)</td>
<td>32.9%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Use of profitability and efficiency KPIs (as management KPIs)</td>
<td>26.9%</td>
<td>48.4%</td>
</tr>
</tbody>
</table>

Source: The Life Insurance Association of Japan
Data: as of March 21, 2017
What is ‘Engagement’?

How Fidelity engages with potential investee companies

1. Engagement counterparts
   - Corporate executives (representative executive officers, executive officers), management supervisors (board of directors, external directors), first point of contact is Investor Relations
   - Top management are able to share visions for the longer term (beyond disclosed medium-term plans) and strategic challenges

2. Important Engagement consideration
   - Have a shared agenda and two way dialogue with investee company

3. Steps of Engagement

   - **Share agenda**
     - Confirm if the company has legitimate reason for the investor’s concern

   - **Solution**
     - Propose/explain the investor’s solution and expected effect, request the company to consider

   - **Share examples**
     - Share case studies and common solutions
     - Respond to further questions
     - Company responsible for review and decision making

   - **Confirm outcome, monitor progress**
     - Company conclusion can only be confirmed when publicized
     - Monitor progress through publicized KPIs and actions

Source: Fidelity International. Data as of 31 December 2017.
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• This material is prepared by FIL Investments (Japan) Limited (hereafter totally called “FIJ”) based on reliable data, but FIJ is not held liable for its accuracy or completeness.

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Optimizing the Investment Chain: How environmental, social, and governance investment could change Japan’s market and economy

Japan Securities Summit
7 February 2018

Naoko Nemoto
Financial Economist
Asian Development Bank Institute
Outline

1. Role of environmental, social, and governance (ESG) investment in Japan’s economy

2. Development of corporate governance in Japan
ESG scores of Japanese corporations—low in developed markets but with great potential

Source: MSCI, Average score of corporations comprising All Country World Index. December 2017

Source: FTSE, Average score of corporations comprising FTSE Developed Index
As a universal asset owner with a long-term investment horizon, GPIF believes negative externalities (e.g., environmental and social issues) must be minimized.

ESG indices solicited by GPIF

**Broad ESG Index**
- FTSE Blossom Japan Index
- MSCI Japan ESG Select Leaders Index

**Themes Index**
- Environment
- Society
- Governance
  - MSCI Japan Empowering Women Index
ESG investment expected to optimize investment chain, contribute to Japan’s growth strategy

- Stewardship Code
- Corporate Governance Code
- Investors
  - GPIF
  - Pension fund
  - Insurance
  - Foreign Investors
  - Individuals
- Asset Management Co.
- Corporate
  - Improvement of Corporate Value
  - Boost Japan’s Potential Growth
- High Returns
ESG—Good fit with Japan’s corporate culture

*Omi* merchants—the forerunners of Japan’s large corporations in Edo era—were guided by *sanpo yoshi* or “benefits for all three sides”: customer, society, and vendor.

Various corporations have adopted sustainability initiatives and reshaped their strategies.
Japan’s corporations lagging in return on equity

Corporate governance reform to enhance board effectiveness and change management

Comparison of ROE

Portion of listed firms with more than 2 independent directors

Source: S&P Capital IQ data

Source: TSE