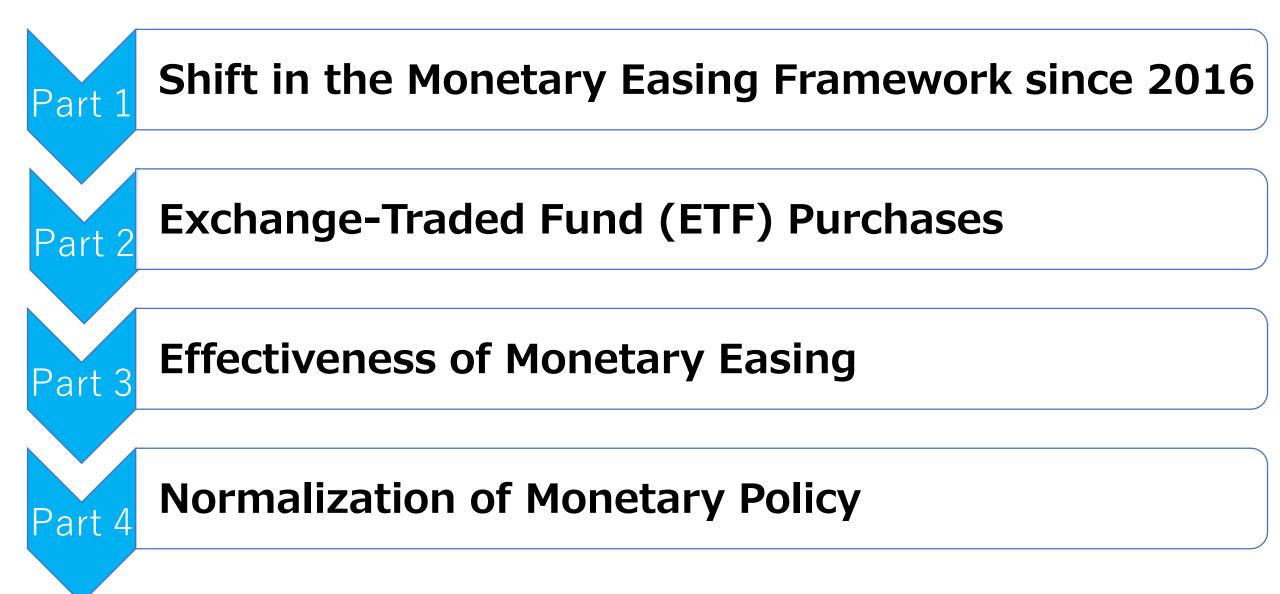
BOJ's Monetary Easing Policy -- Asset Purchases --

Professor of Keio University Visiting Scholar to the ADB Institute Former Board Member of the BOJ

Dr. SAYURI SHIRAI

OUTLONE OF PRESENTATION



PART 1. Shift in the Monetary Easing Framework since 2016

Facing Limit and Steps Toward Normalization?

QQE with a Negative Interest Rate (January 2016):

Did not expand QE But Added a new policy (-0.1%)

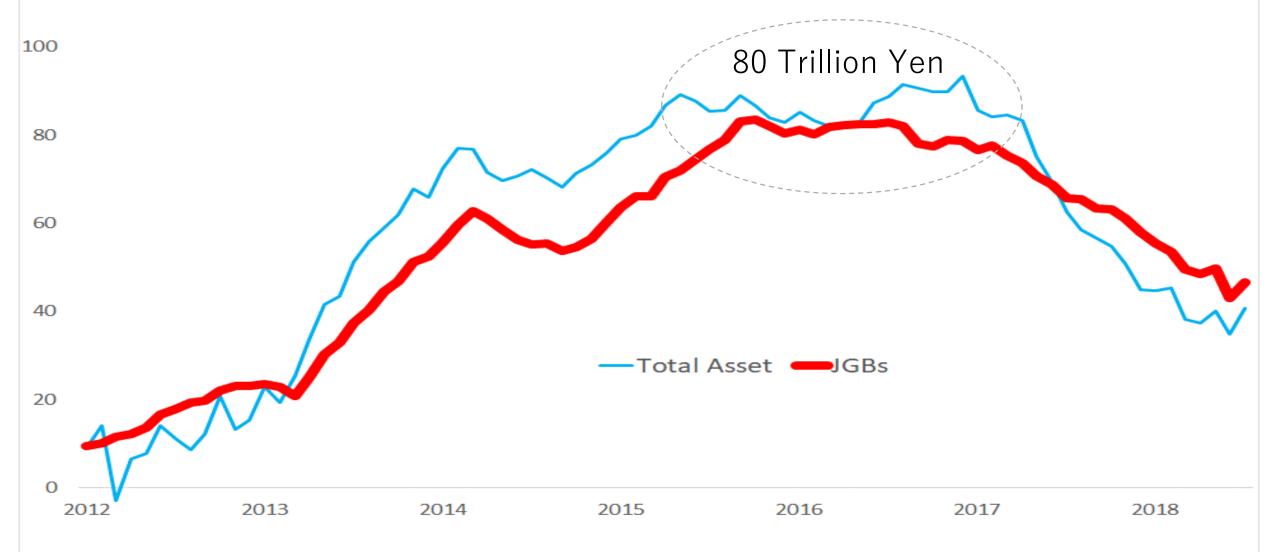
QQE with Yield Curve Control (September 2016):

Shifting from Monetary Base Target to 10-Year Yield Target (0%)

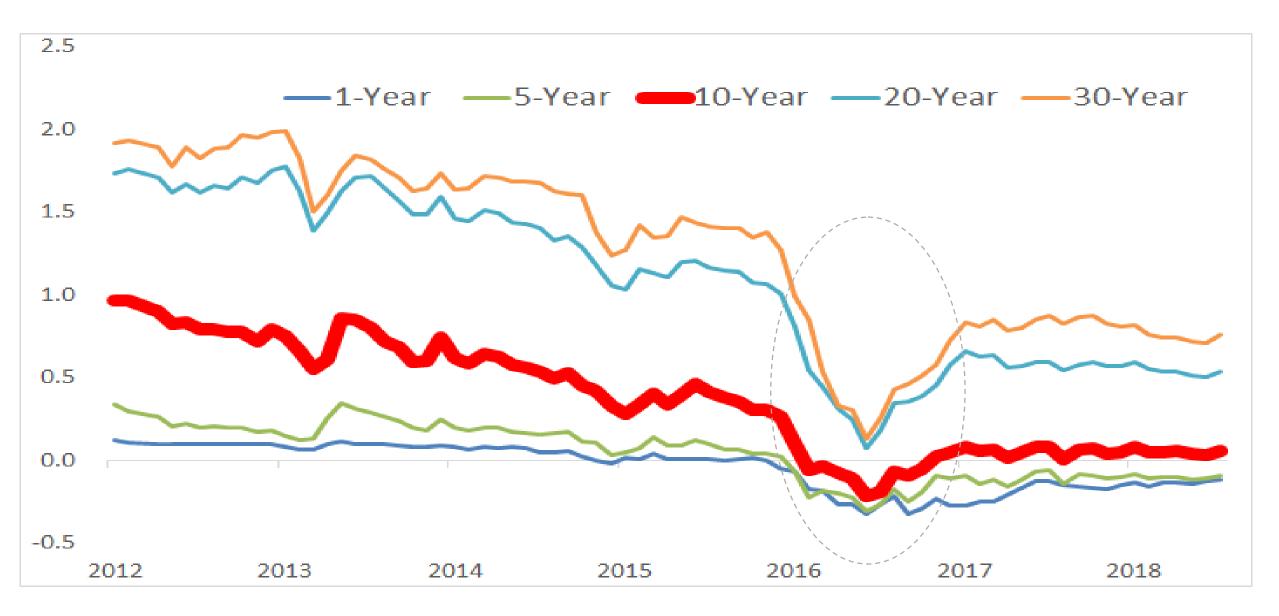
Strengthening of Monetary Easing (July 2018):

Explicit Adoption of 10-Year Target Range and Doubled the Range to $\pm 0.2\%$ (-0.2% to +0.2%)

De Facto Tapering (Difference from the Previous Year)



JGB Yields (%)



PART 2. ETF Purchases

Central Banks' purchases of Stocks for Two Reasons

Monetary Policy

counter-cyclical policy

Reserve Management:

management of foreign reserves held by central banks

BOJ's Stock Purchases from Banks in 2002-04 and 2008-09

- Prudential Policy (to improve Financial System Stability)
- <u>2002-04</u>: To facilitate resolution of banks' NPL problems stemming from (1) the bubble burst, (2) aggressive restructuring efforts, (3) low interest margins, and (4) unrealized losses on the stocks held by banks. The maximum amount of 3 trillion yen.
- <u>2009-10</u>: To reduce banks' large losses associated with stock holdings. The maximum amount of 388 billion.
- In April 2016, the BOJ decided to sell the purchased stocks of about 3 trillion yen over the next 10 years (about 300 billion yen annually) on the mark-to-market value basis.
 - This deposal is associated with a roughly equivalent amount of the increase in ETF purchases under the initiative to promote firms' investment in R&D and human capital.

Stock Market Intervention by the HKMA in 1998

- HKMA simultaneously intervened in the foreign exchange, stock and stock futures, and interbank markets.
- The size of intervention was large (HK\$120 billion, about 6% of market capitalization)
- Purchase conducted for a very short period (about two weeks).
- Thus, this purchase program should NOT be regarded as an unconventional monetary easing tool because of

(1) a short duration and

(2) different objectives (fighting against short-term speculative activities in Hong Kong vis-à-vis achieving aggregate demand and inflation in Japan).

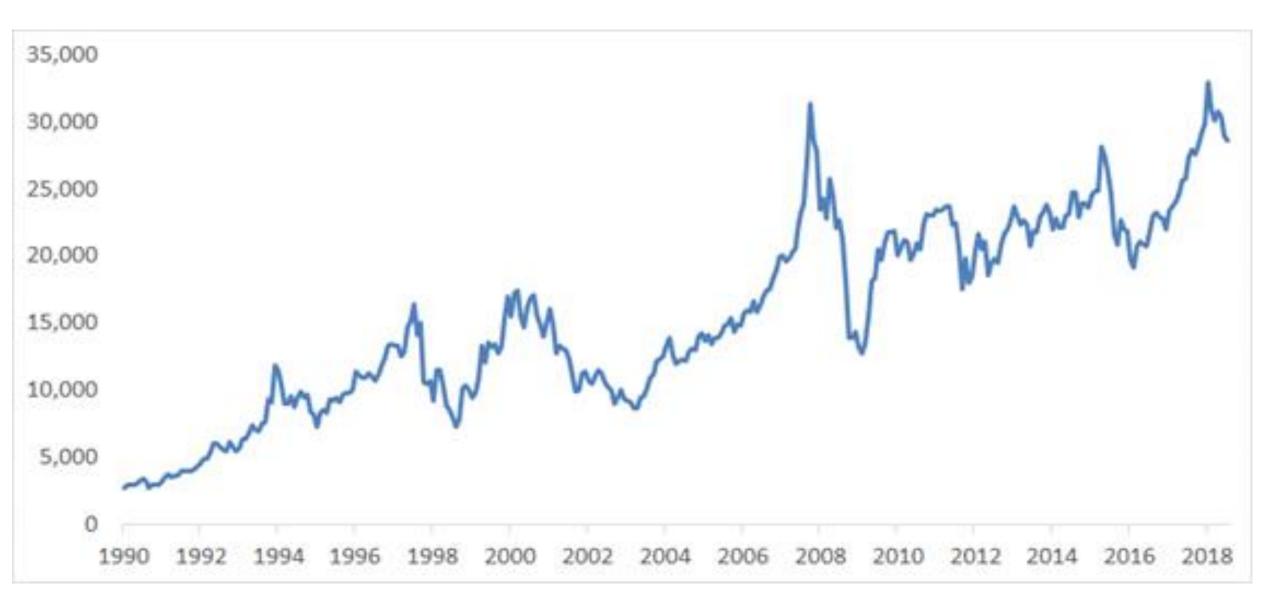
Background Behind HKMA's Action

- The Hong Kong SAR Government decided to intervene in the stock market in the face of speculative attacks over the Hong Kong dollar fixed exchange rate policy under the Linked Exchange Rate System
- The foreign speculators adopted a "double-market play" strategy. They pre-funded themselves with Hong Kong dollars and then used the cash to build up large short positions in the cash and future stock markets and simultaneously sold the Hong Kong dollar in large quantities to drive up inter-bank interest rates.
- Hong Kong stock prices were already underpriced (about 16,000 in August 1997 to about 8,000 in August 1998 and P/E ratio of just 8 times).
- The Government increased concerns about potential losses to shareholders and weakening confidence by the public and market on the sustainability of the exchange rate policy.

Exit Policy by HKMA

- The total amount of about HK\$120 billion spent to purchase stocks.
- The scale of intervention was adequate enough to terminate the speculative attacks by the end of August 1998 as the Hang Seng index rose from 6,700 just before the intervention to 7,800 points successfully.
- In November 1999, HKMA took an exit policy by launching the Tracker Fund, which is an open-ended exchange-traded fund. The disposal of the stocks generated a profit of nearly HK\$100 billion at prevailing stock prices at that time to the HKMA because of higher stock prices.
- HKMA's successful exit from the stock purchase program could be attributable to the short-lived nature of a purchasing intervention in the stock market, thereby generating little distortions on stock prices by HKMA's intervention itself. Moreover, favorable stock market conditions enabled the HKMA to conduct a smooth exit policy and generate a profit.

Hong Kong Hang Seng Index



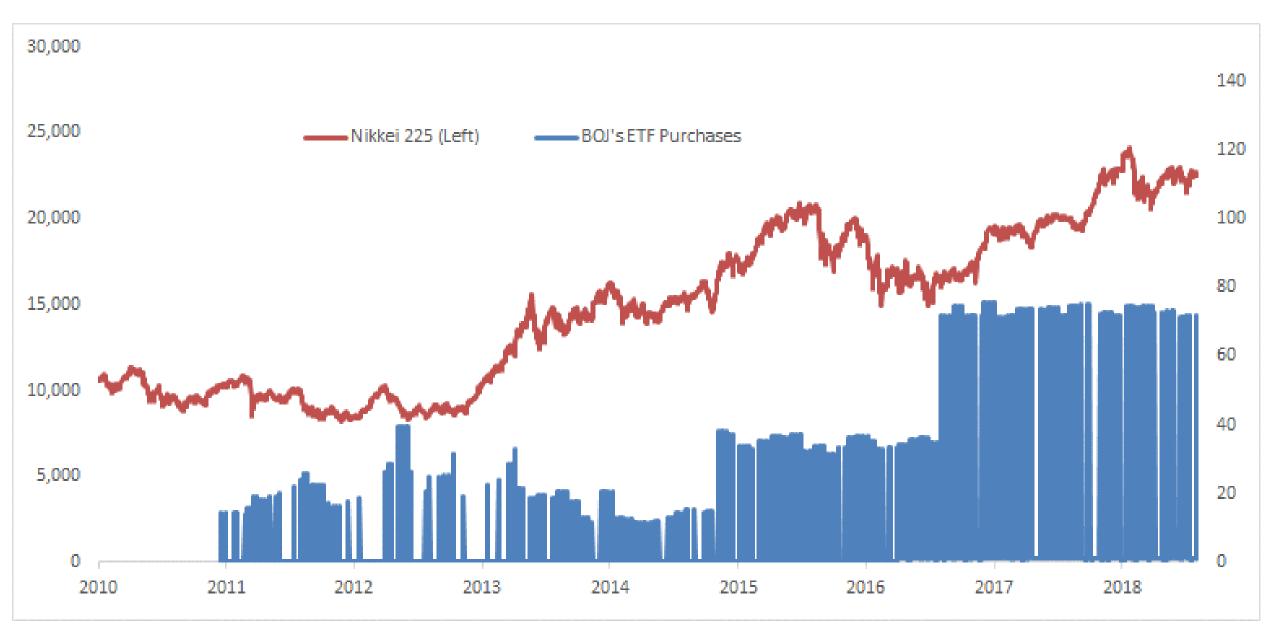
Gov. Bonds As Main Purchased Assets

- JGB yields are the **benchmark** for measuring long-term fixed interest rates related to mortgages, loans, and corporate bonds.
- The decline in the yields will help to raise risk assets (such as stocks) through promoting search for yield due to declined returns on bonds.
- The decline in the yields will help to raise risk assets (such as stocks) through lowering the discount rate and thus higher PV of cash flows.

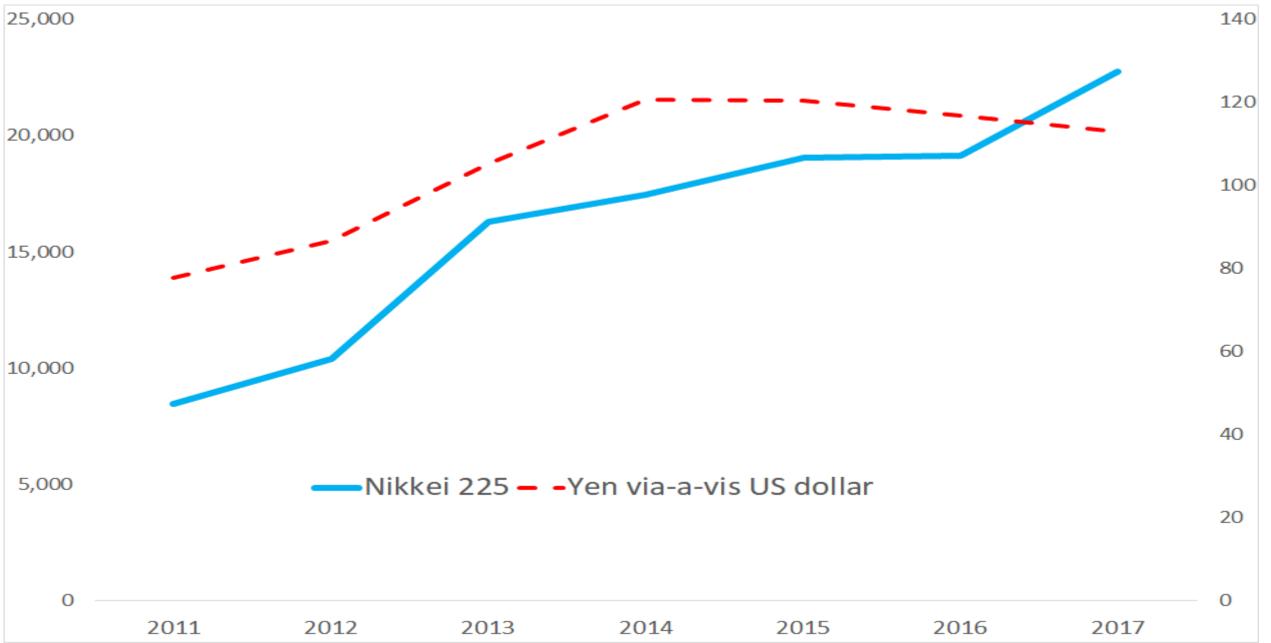
BOJ Directly Purchases ETFS

- Exerting downward pressure directly on the risk premia, thereby supporting stock markets and inducing a portfolio rebalancing effect.
- Promoting a wealth effect directly.
- Generating momentum to correct undervaluation of stock prices speedily.

Stock Price and ETF Purchases



NIKKEI 225 & JPY VIS-À-VIS US DOLLAR



What are the ETFS?

Listed on the stock exchange.

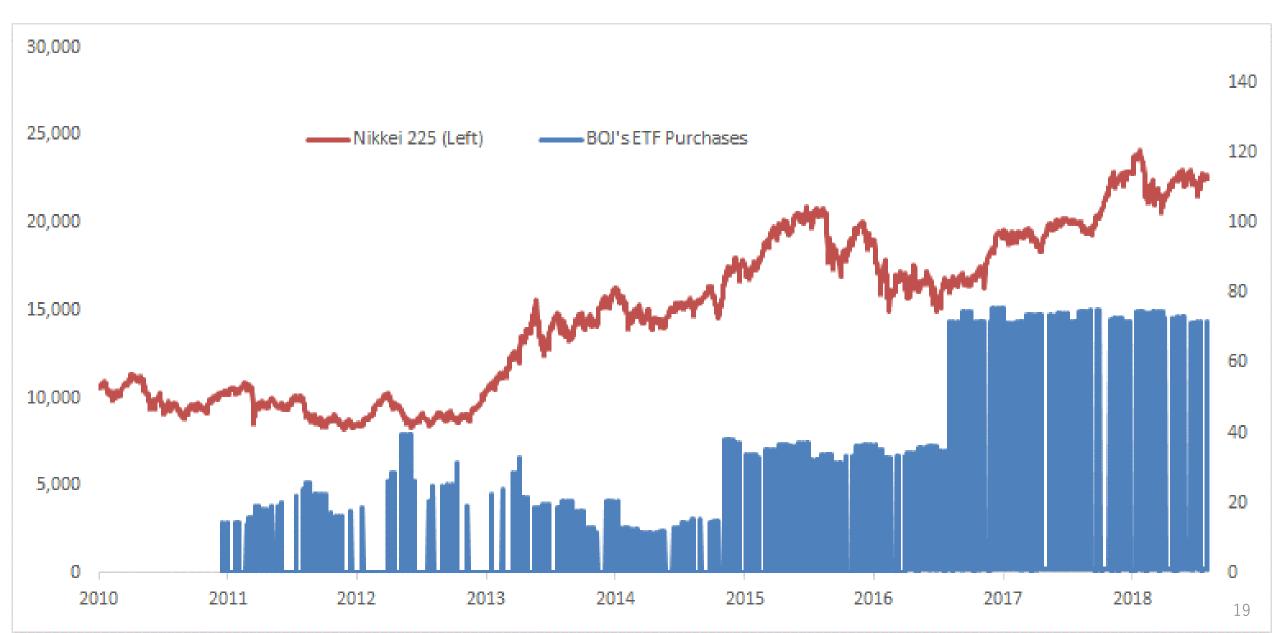
ETFs Track (1) TOPIX, (2) Nikkei 225, (3) JPX-Nikkei Index 40

BOJ indirectly purchases stocks through trust banks.

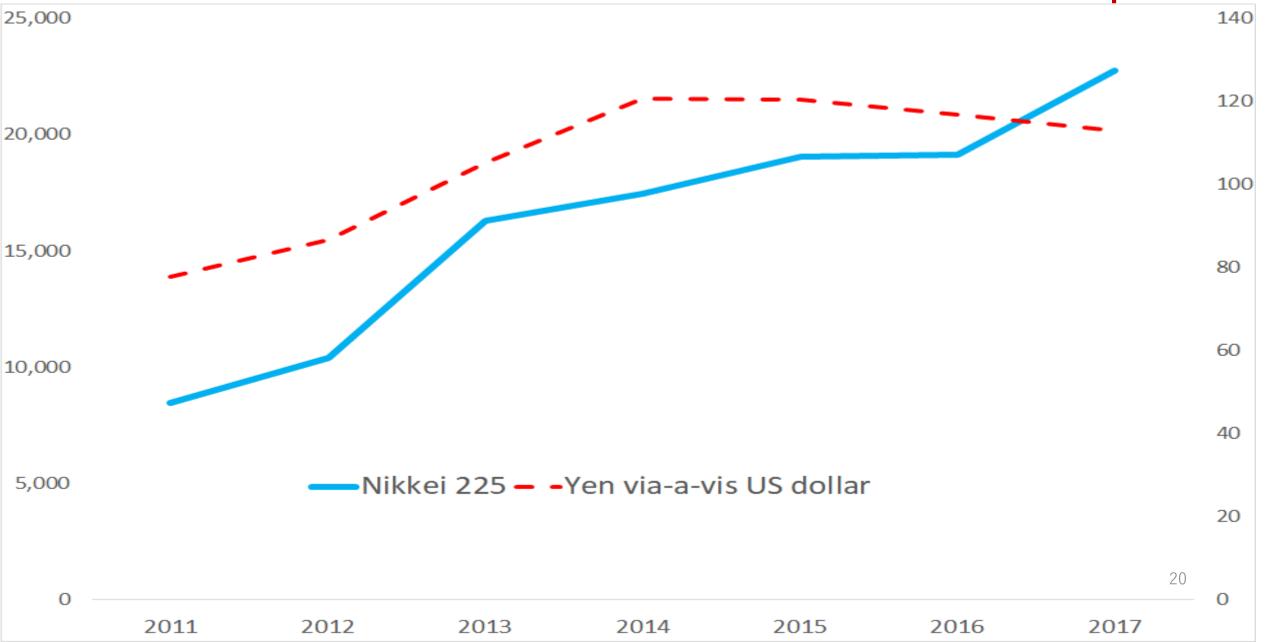
BOJ does not exercise voting rights.

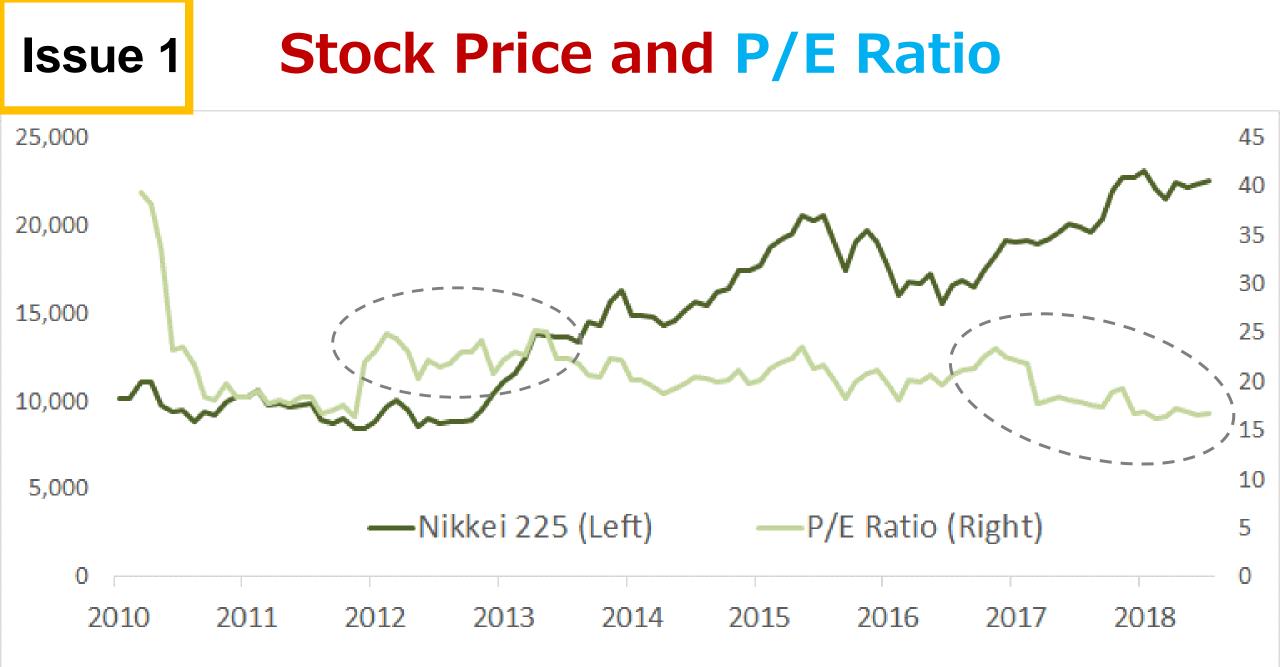
The BOJ purchases about JPY 6 trillion annually.

Stock Price and ETF Purchases

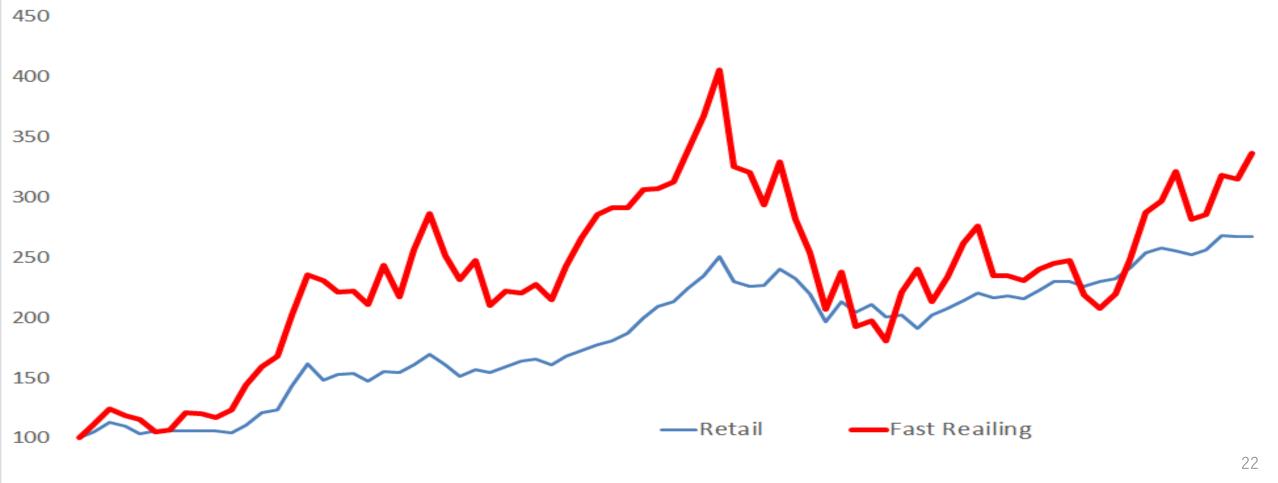


NIKKEI 225 & YEN VIS-À-VIS US\$





Issue 2 Small-Cap Firms' Stocks (Nikkei 225) Might be Overvalued



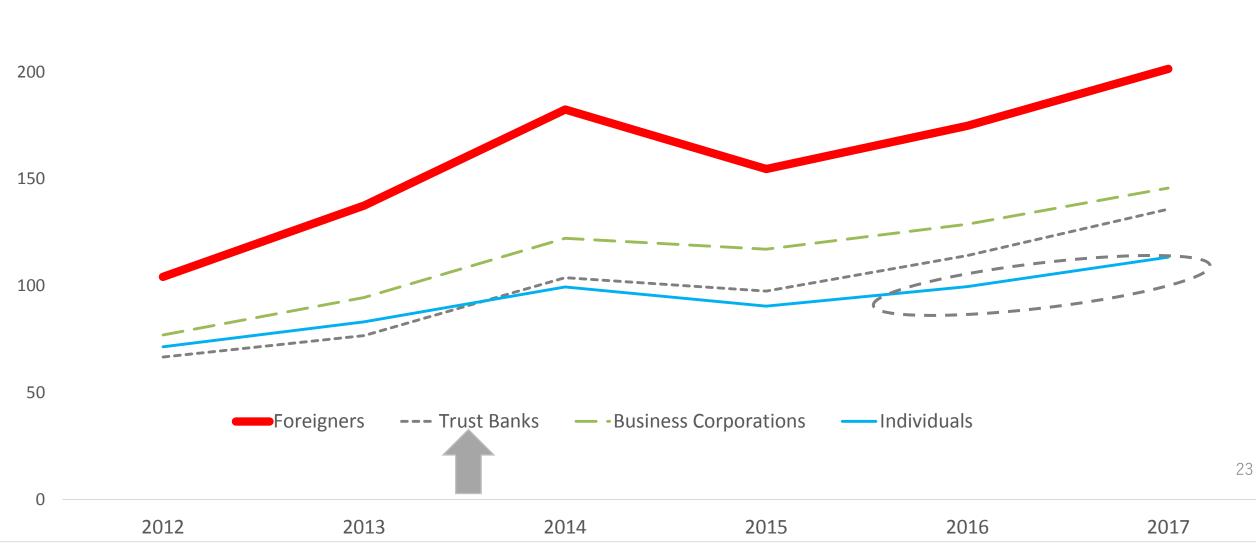
⁵⁰ P/E Ratio: Fast Retailing (38 times); TOPIX (15 times); Nikkei (13 times)

| 0 | | | | | | |
|------|------|------|------|------|------|------|
| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |

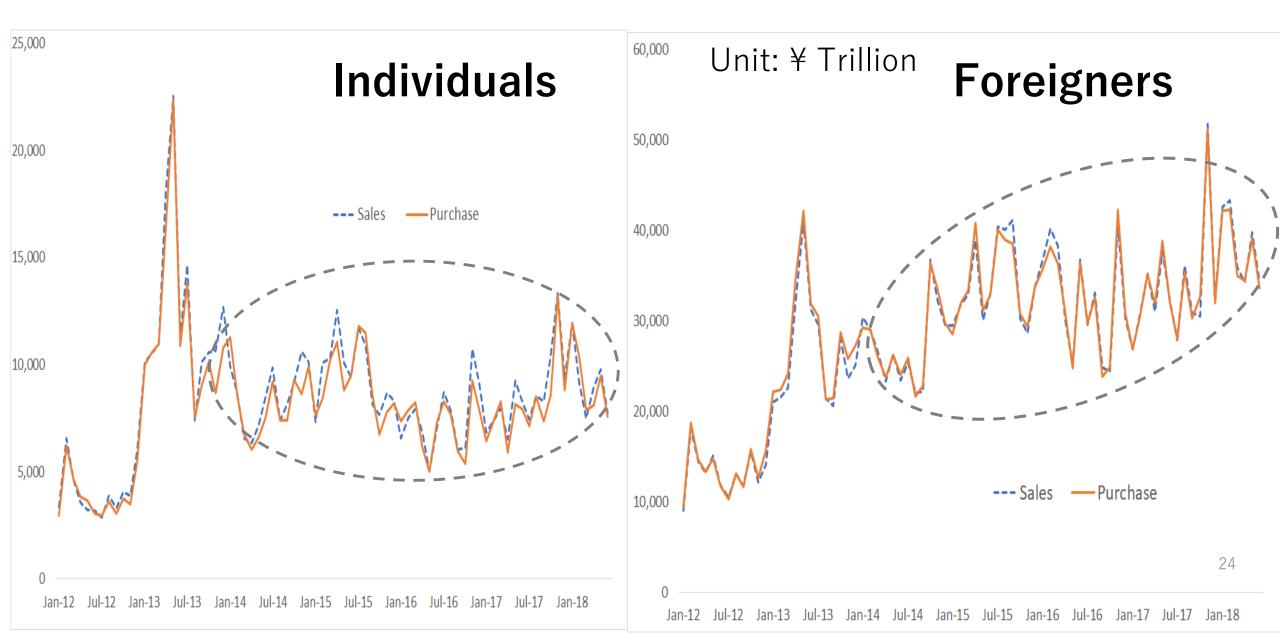
Issue 3 Large Stock Holdings by Foreign Investors

250

Unit: JPY Trillions



Large Stock Transaction by Foreign Investors





BOJ becoming Top Shareholders

| Name of Listed Companies | BOJ's Share (% of Total Stocks Issued) | BOJ's Share (% of Floating Stocks) |
|--------------------------|---|---------------------------------------|
| Advantest | 19 | 43 |
| Fast Retailing | 18 | 70 |
| Taiyo Yuden | 17 | 28 |
| TDK | 16 | 25 |
| Uni • Familiy Mart HD | 15 | 38 |
| Toho Zinc | 15 | 23 |
| Trend Micro | 15 | 27 |
| Comsys | 14 | 31 |
| Nissan Chemical | 14 | 22 |
| Konami HD | 14 | 31 |

Source: Nikkei Newspaper (June 27, 2018)

Issue 5

Complicated Process toward Normalization

OExpanding the Target Range and Raising the 10-Year Yield Target

OReducing JGB Purchases to 20 Trillion JPN

OReducing the JGB and ETF Purchases to ZERO

OEliminating the 10-year Target

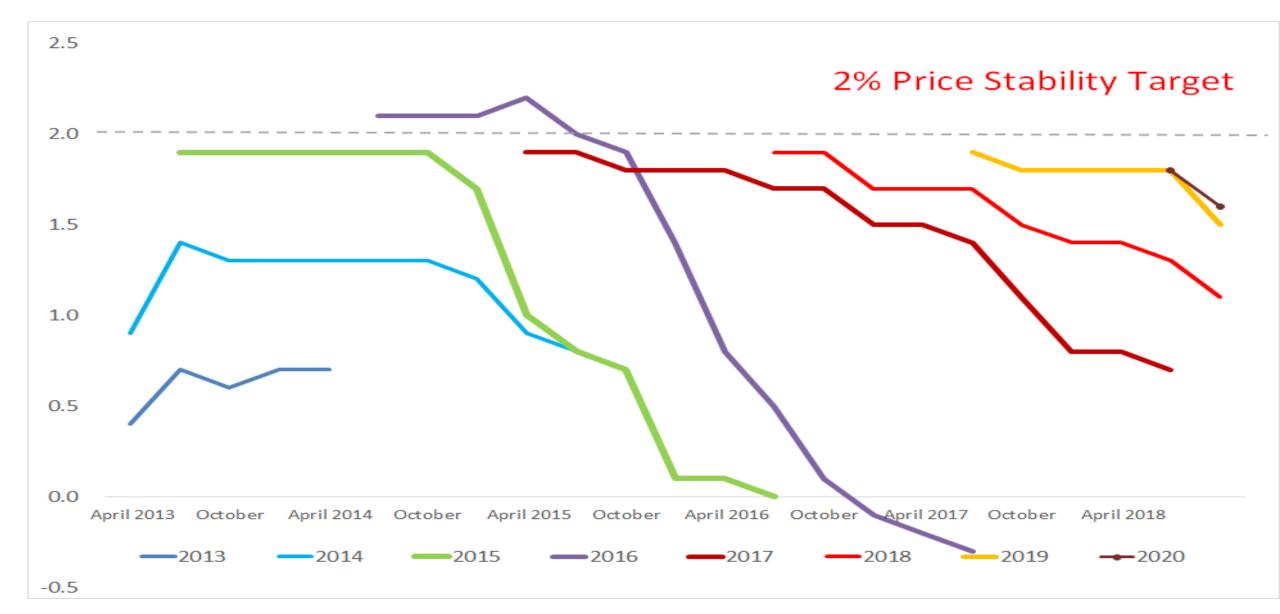
Raising Short-Term Policy Rate

Part 3. Effectiveness of Monetary Easing

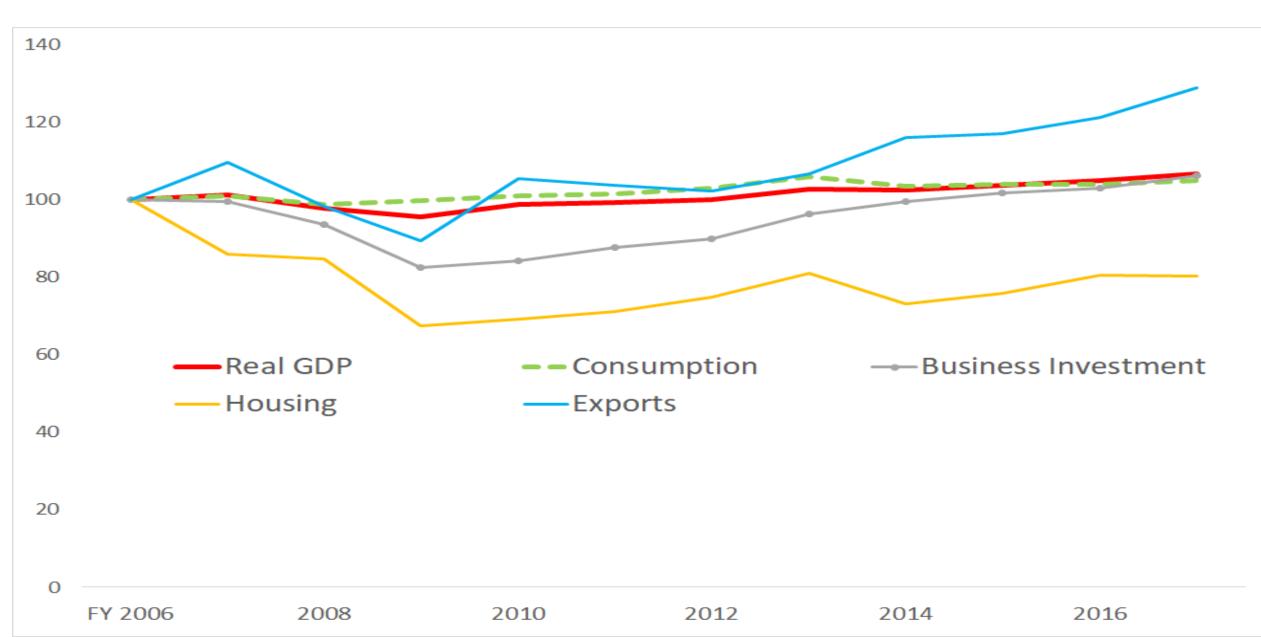
CPI Inflation (exc. tax effect)

| | CPI | Exc. Fresh Food | Exc. Food and Energy |
|---------|------|-----------------|----------------------|
| | | | |
| 2013 | 0.9 | 0.8 | 0.2 |
| 2014 | 0.8 | 0.8 | 0.5 |
| 2015 | 0.2 | 0.0 | 0.7 |
| 2016 | -0.1 | -0.2 | 0.2 |
| 2017 | 0.7 | 0.7 | 0.0 |
| AVERAGE | 0.5 | 0.4 | 0.3 |

BOJ's Inflation Outlook (Median)



Real GDP and Composition (FY 2006=100)



Sluggish Consumption and Housing

- Households DO NOT have deflation mindset.
- Households DO NOT feel that income has risen. They DO NOT expect a higher income.
- A third of population is more than 65 years old (demographics)
- The majority of households worry about the postretirement life (due to insufficient pensions or financial assets)

Wages (Full-Time)

Wages (Part-Time)

