

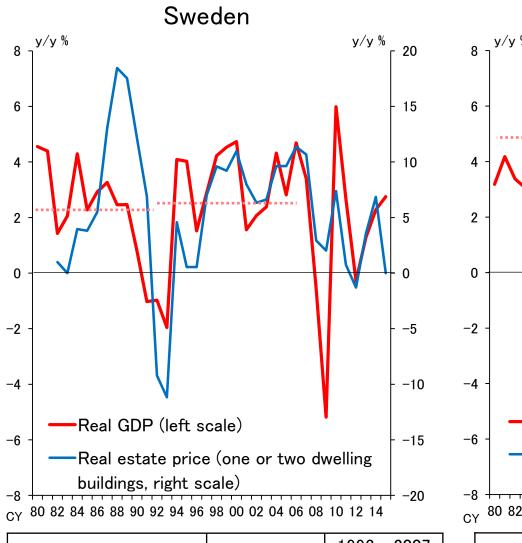
# Challenges toward Financial Stability and the Policy Frontier

March 21, 2016
Speech at the IVA-JSPS Seminar in Stockholm

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# Chart 1. Economic growth after bursting of financial bubble



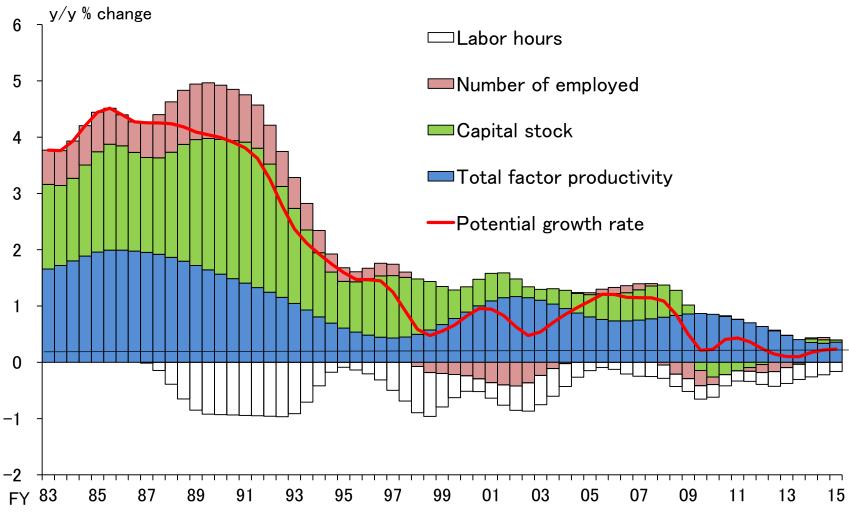
	1980~1992	1993~2007 (bursting of bubble~ the Lehman shock)
Real GDP (average)	2.2%	2.6%

Japan			
8 7 9/9 %	<sup>%</sup>		
6 -	- 20		
	- 15		
4	- 10		
	- 5		
	<b>/</b> 0		
-2 -	5		
-4 -	10		
—Real GDP (left scale)	15		
-6 - Land price (overall average, national -20			
average, right scale)			
CY 80 82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14			

	1980~1990	1991~2007 (bursting of bubble~ the Lehman shock)
Real GDP (average)	4.5%	1.3%

Sources: IMF; Japan Real Estate Institute; Statistics Sweden.

## Chart 2. Potential growth rate of Japan

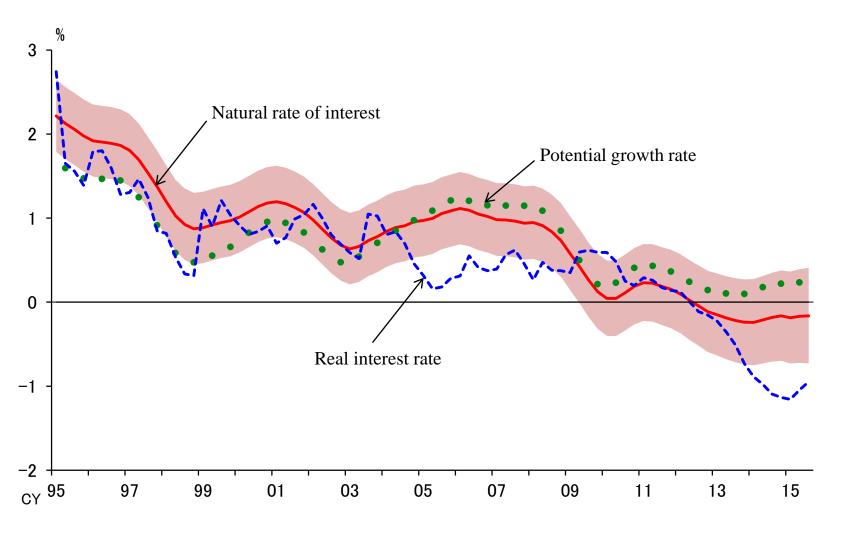


Notes: The potential growth rate is estimated by the Research and Statistics Department, Bank of Japan.

Sources: Bank of Japan; Cabinet Office; Ministry of Internal Affairs and Communications; Ministry of Economy, Trade and Industry;

Ministry of Health, Labour and Welfare; Research Institute of Economy, Trade and Industry.

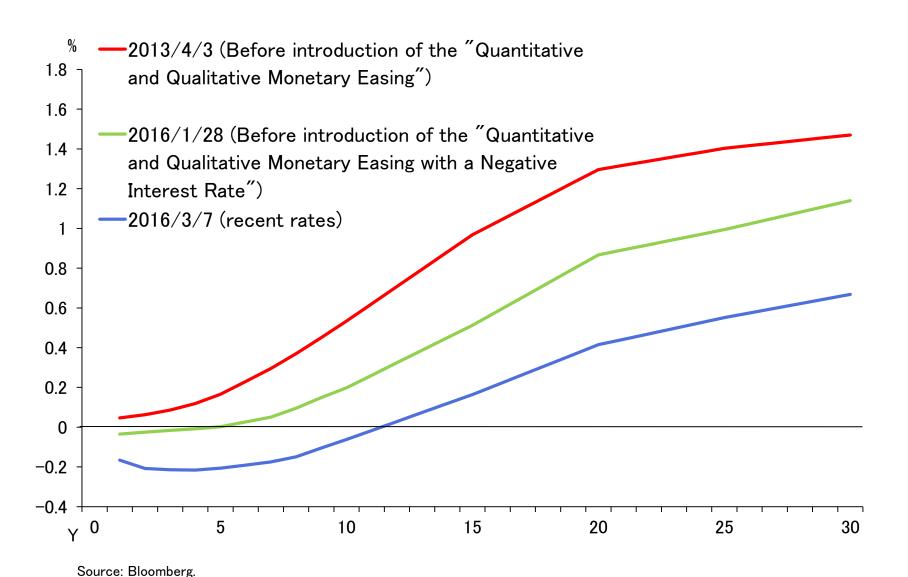
#### Chart 3. Natural rate of interest and real interest rate



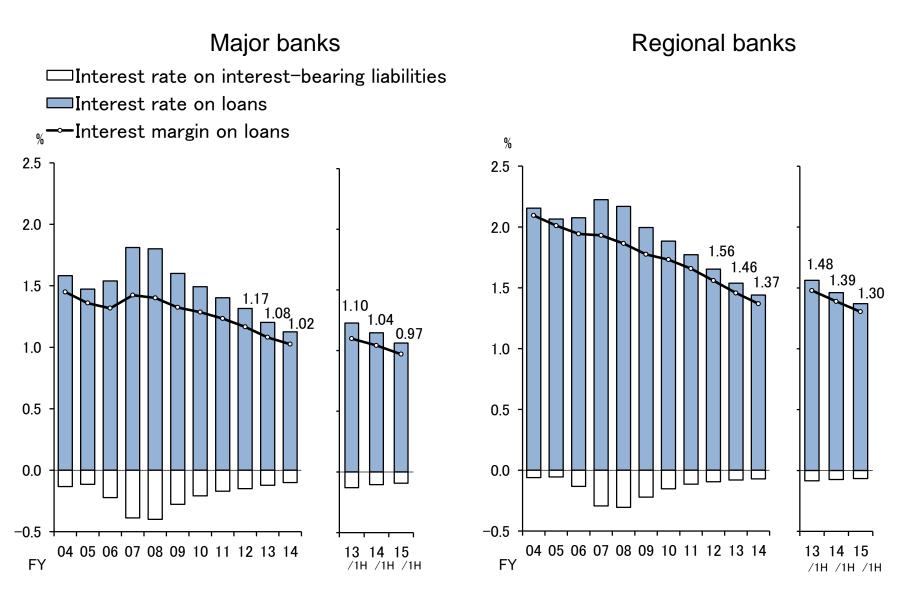
Notes: 1. The natural rate of interest and real interest rate are calculated based on 10-year government bond yields.

- 2. The shaded area indicates the 95 percent confidence interval for the natural rate of interest.
- 3. For details of the estimation procedures, see Imakubo et al. (2015), "The Natural Yield Curve: Its Concept and Measurement," Bank of Japan Working Paper Series, 15–E–5, and Hara et al. (2006), "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006–E–3.

## Chart 4. Yield curve rates of JGBs



#### Chart 5. Interest margin on loans in the domestic business sector

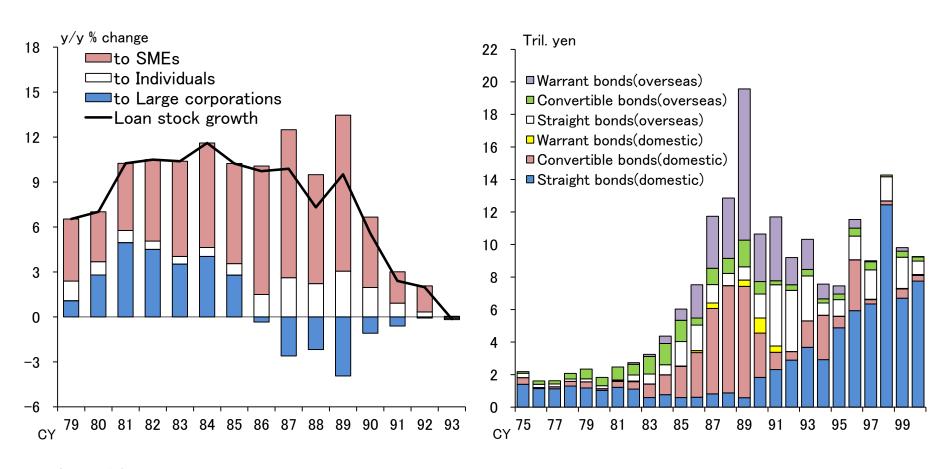


Note: Interest rate swaps are subtracted from funding costs. Domestic business sector. Source: BOJ.

#### Chart 6. Bank lending and corporate finance during the bubble economy

# Distribution of borrowers of bank loans

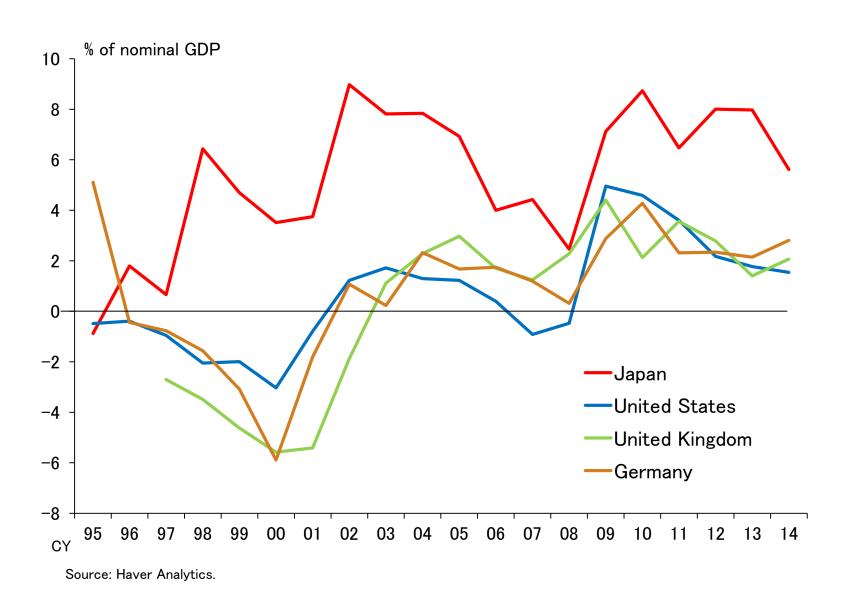
# Bond issuance by listed companies



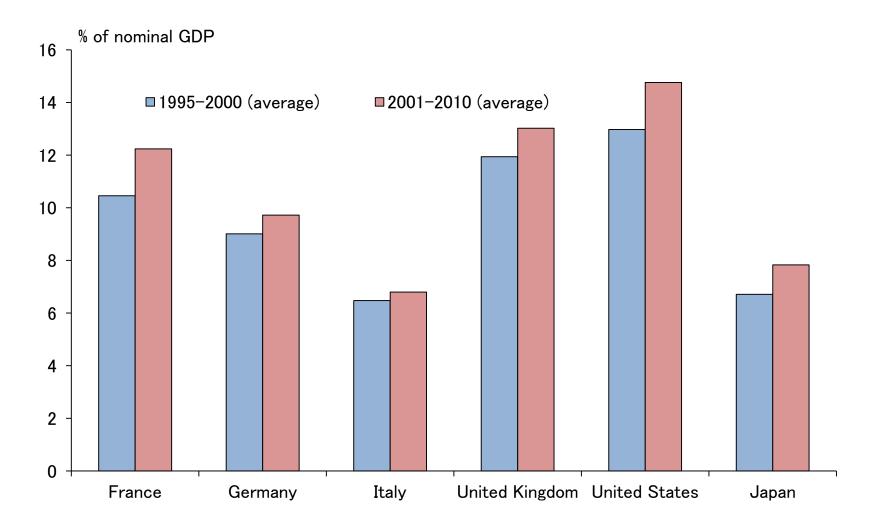
Source: BOJ.

Source: Tokyo Stock Exchange.

# Chart 7. Savings surplus by corporate sector



## Chart 8. International comparison of intangible asset investments



Sources: Cabinet Office; INTAN-Invest Database; Research Institute of Economy, Trade and Industry.