

**The Post-Crisis World:  
Evolution of the Economy, Economics, and Central Banks**

*Keynote Speech at "Nippon no Kakushin-ryoku" (Japan's Innovation) Symposium*

October 25, 2018

**Masazumi Wakatabe**  
*Deputy Governor of the Bank of Japan*

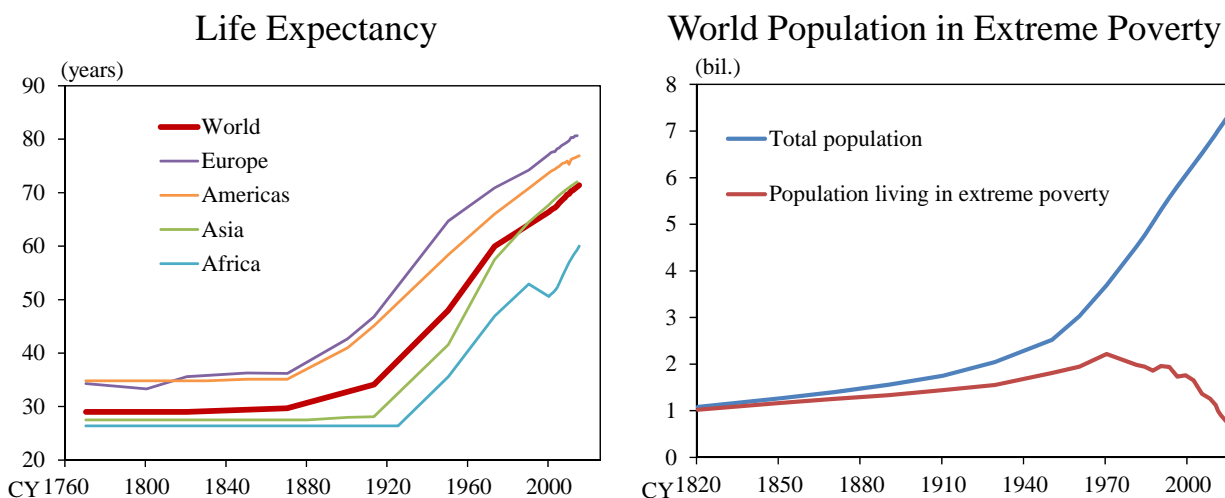
***Leviathan (1651)***

(Chart 1)

**Thomas Hobbes (1588-1679)**

"the life of man, solitary, poore [*sic*],  
nasty, brutish, and short"

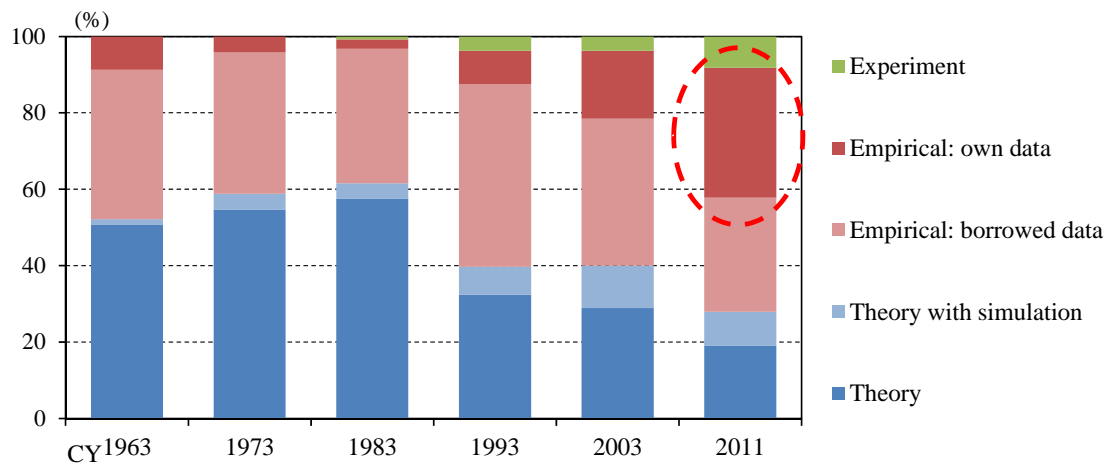
# Progress for Humankind



Source: Our World in Data.

# Evolution of Economics

Percentage Distributions of Methodology of Published Articles in Economics

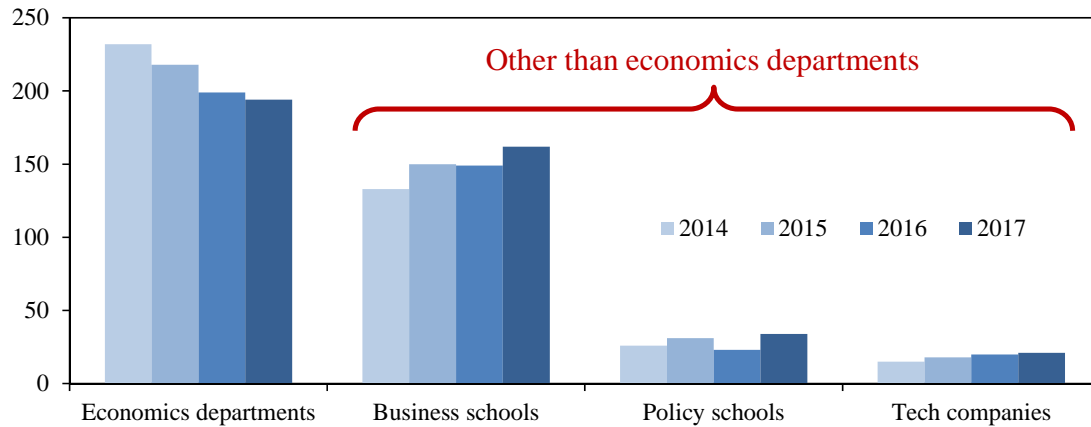


Source: Hamermesh (2013).

# Increased Applications of Economics

(Chart 4)

Number of Positions Available for Ph.D. Economists



Notes: 1. Figures are those for the period from February to the following January.

2. Figures for tech companies represent the number of firms with job postings (each firm may offer multiple positions).

Source: Athey and Luca (2018).

# Establishment of Central Banks

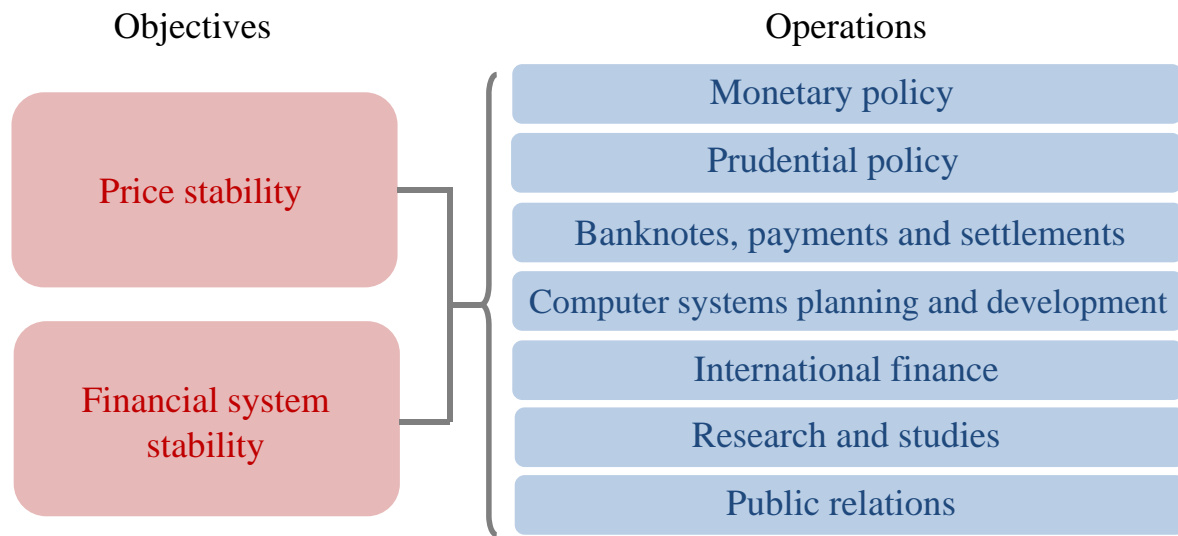
(Chart 5)

	Year		Year
Riksbank (Sweden)	1668	Bank of Japan	1882
Bank of England	1694	Bank of Italy	1893
Banque de France	1800	Swiss National Bank	1907
De Nederlandsche Bank	1814	Federal Reserve System	1913
National Bank of Belgium	1850	Bank of Canada	1934
Reichsbank (Germany)	1876	European Central Bank	1998

Source: Central banks.

# Objectives and Operations of the Bank of Japan

(Chart 6)

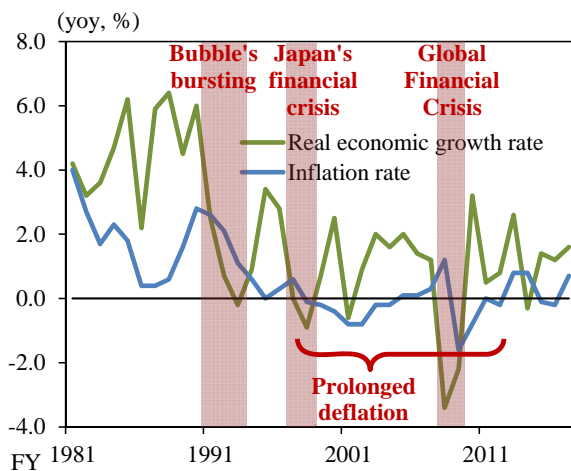


Source: Bank of Japan.

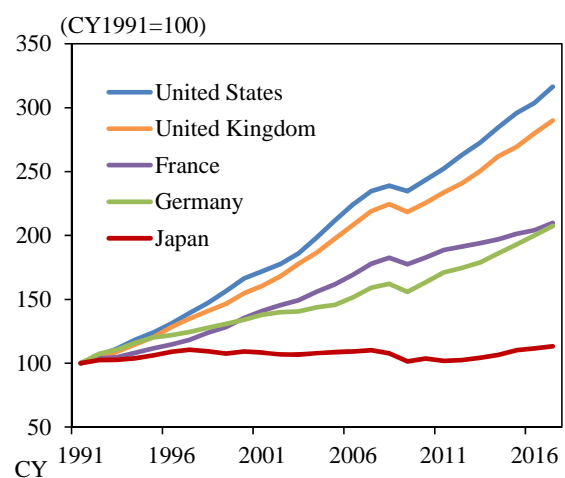
## Japan's Experience

(Chart 7)

Japan's Real Economic Growth and Inflation



Nominal Economic Growth by Country



Note: Inflation rates are based on the CPI (less fresh food, adjusted for changes in the consumption tax rate).

Sources: Cabinet Office; Ministry of Internal Affairs and Communications; International Monetary Fund; Bank of Japan.

# History of the CCFSI

(Chart 8)

## Transition to Meet the Needs of the Times

Year	Name	Characteristics
1952-	Central Council for Savings Promotion	National movements to control inflation after WWII and to promote savings for capital accumulation
1988-	Central Council for Savings Information	Stress on disseminating information relating to savings
2001- Current	Central Council for Financial Services Information	Stress on supporting independent consumers and on promoting financial education at schools, amid financial innovations

Source: Central Council for Financial Services Information.

# Financial Literacy Questions

(Chart 9)

Q1. Suppose you put 1 million yen into a savings account with a guaranteed interest rate of 2% per year. How much would be in the account after 5 years?

Q2. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? More than today, exactly the same, or less than today?

Q3. When compared, a 15-year mortgage typically requires higher monthly payments than a 30-year loan, but the total interest paid over the life of the loan will be less. True or false?

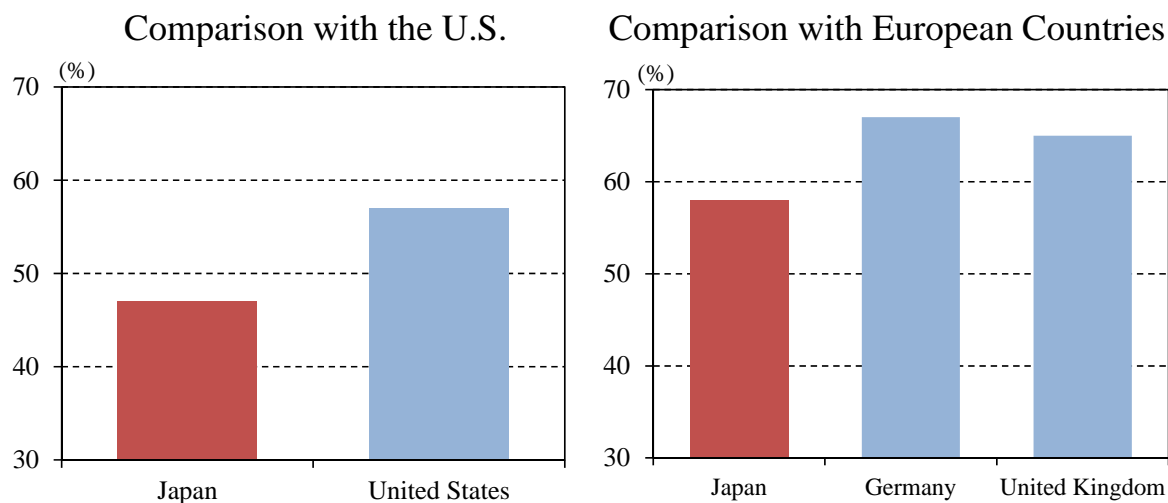
Q4. Buying a single company's stock usually provides a safer return than a stock mutual fund. True or false?

Q5. If interest rates rise, what will typically happen to bond prices? Will they rise, stay the same, or fall?

Source: Central Council for Financial Services Information, "Financial Literacy Survey: 2016 Results."

(Chart 10)

## Percentage of Correct Answers to Financial Literacy Questions



Note: The average percentage of correct answers to five questions. Comparisons with the U.S. and with European countries are based on different sets of questions, respectively (For this reason, the figures for Japan differ).

Source: Central Council for Financial Services Information, "Financial Literacy Survey: 2016 Results."

## Simon (1995)

(Chart 11)

The main fuel to speed the world's progress is our stock of knowledge; the brakes are our lack of imagination and unsound social regulations of these activities. The ultimate resource is people -- especially skilled, spirited, and hopeful young people endowed with liberty -- who will exert their wills and imaginations for their own benefits, and so inevitably they will benefit the rest of us as well.