

Demand and Demographics:
Challenges and Opportunities for Housing and Housing Finance Markets

Third session:

The demographic impact on demand for housing and housing finance:

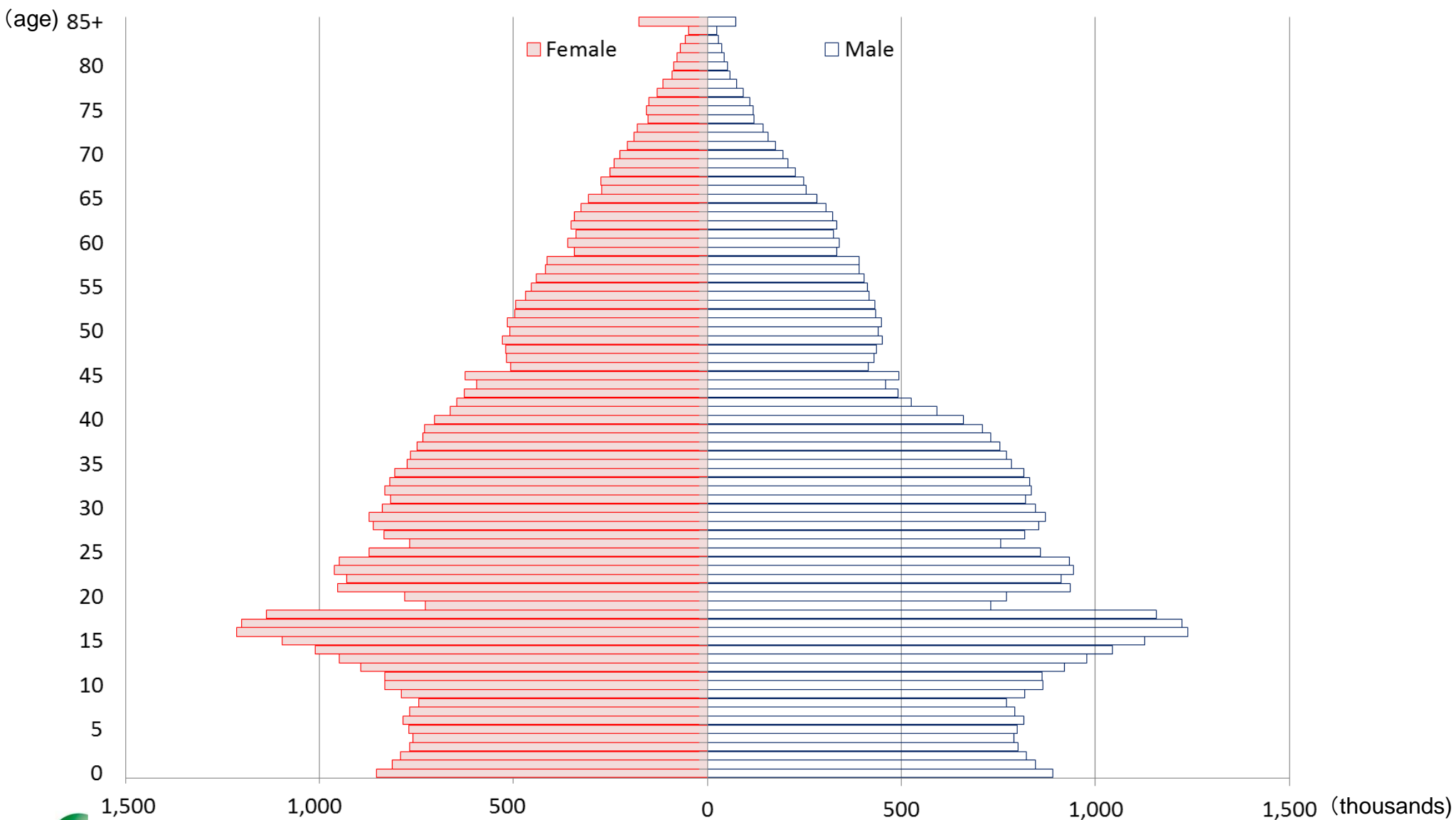
Experiences in Japan

Masahiro Kobayashi

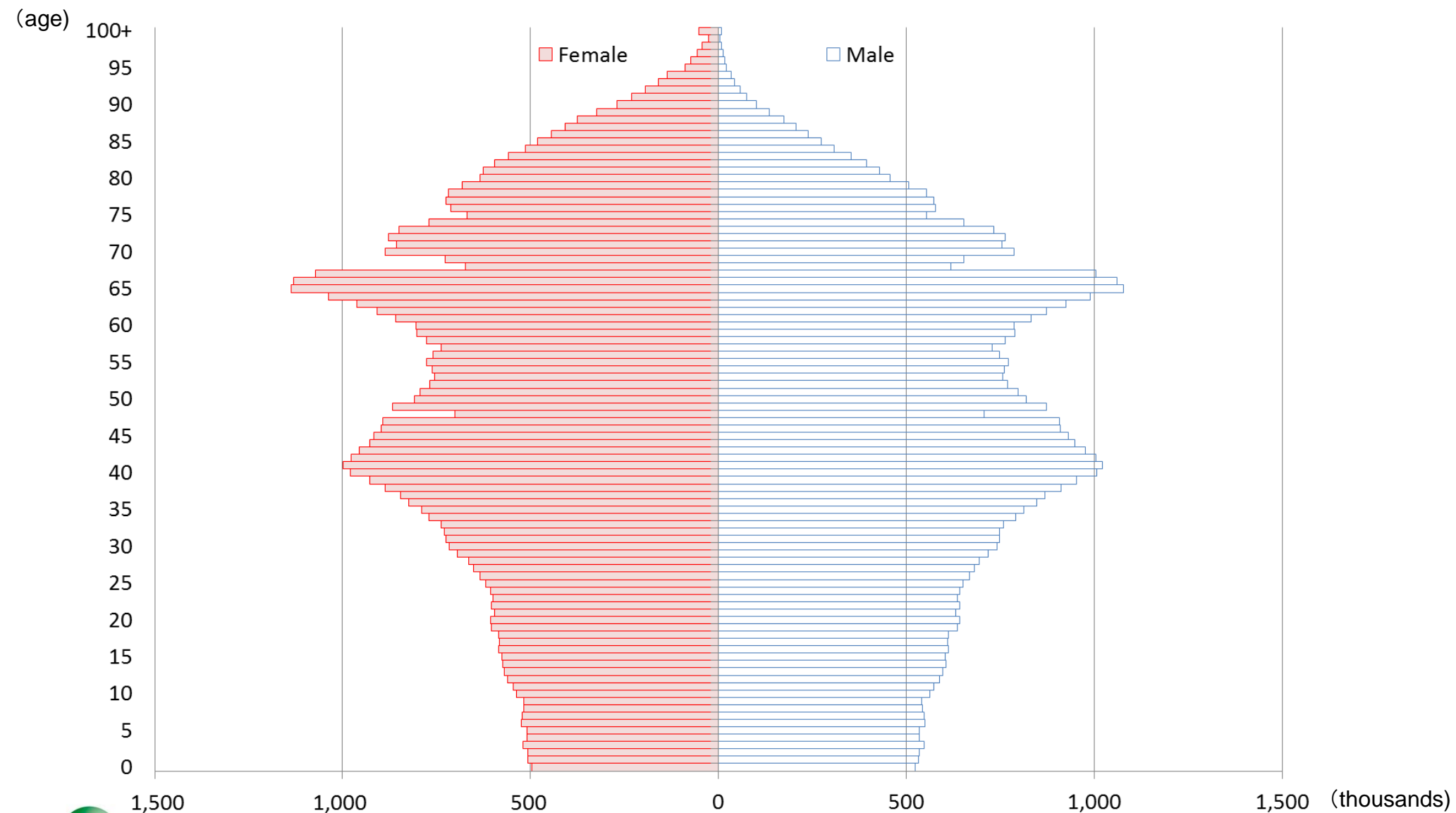
Director General for Global Market, Research and Survey Department, and
Director General for International Affairs, Corporate Strategy Department



Population pyramid in Japan as of 1965

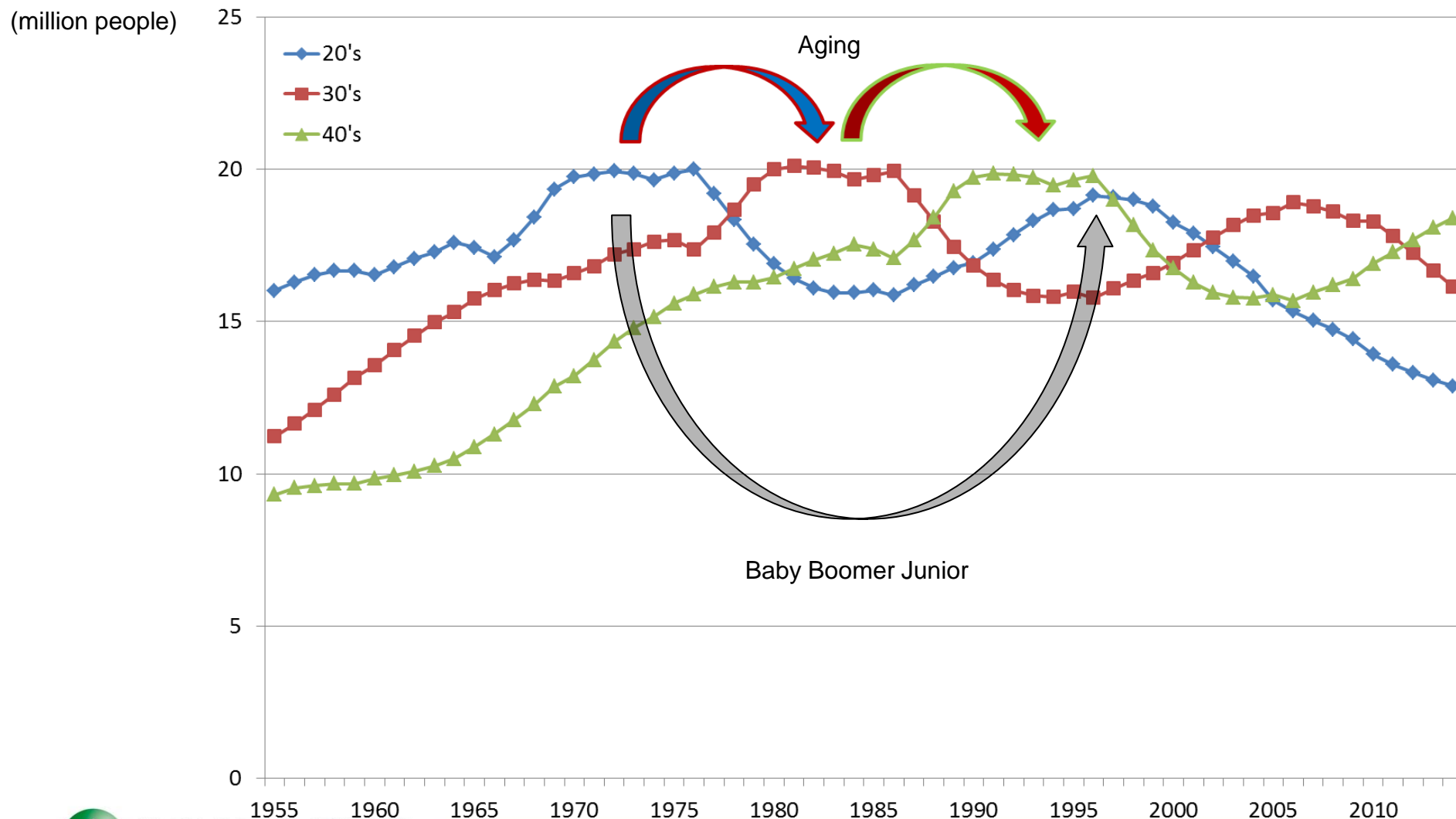


Population pyramid in Japan as of 2014



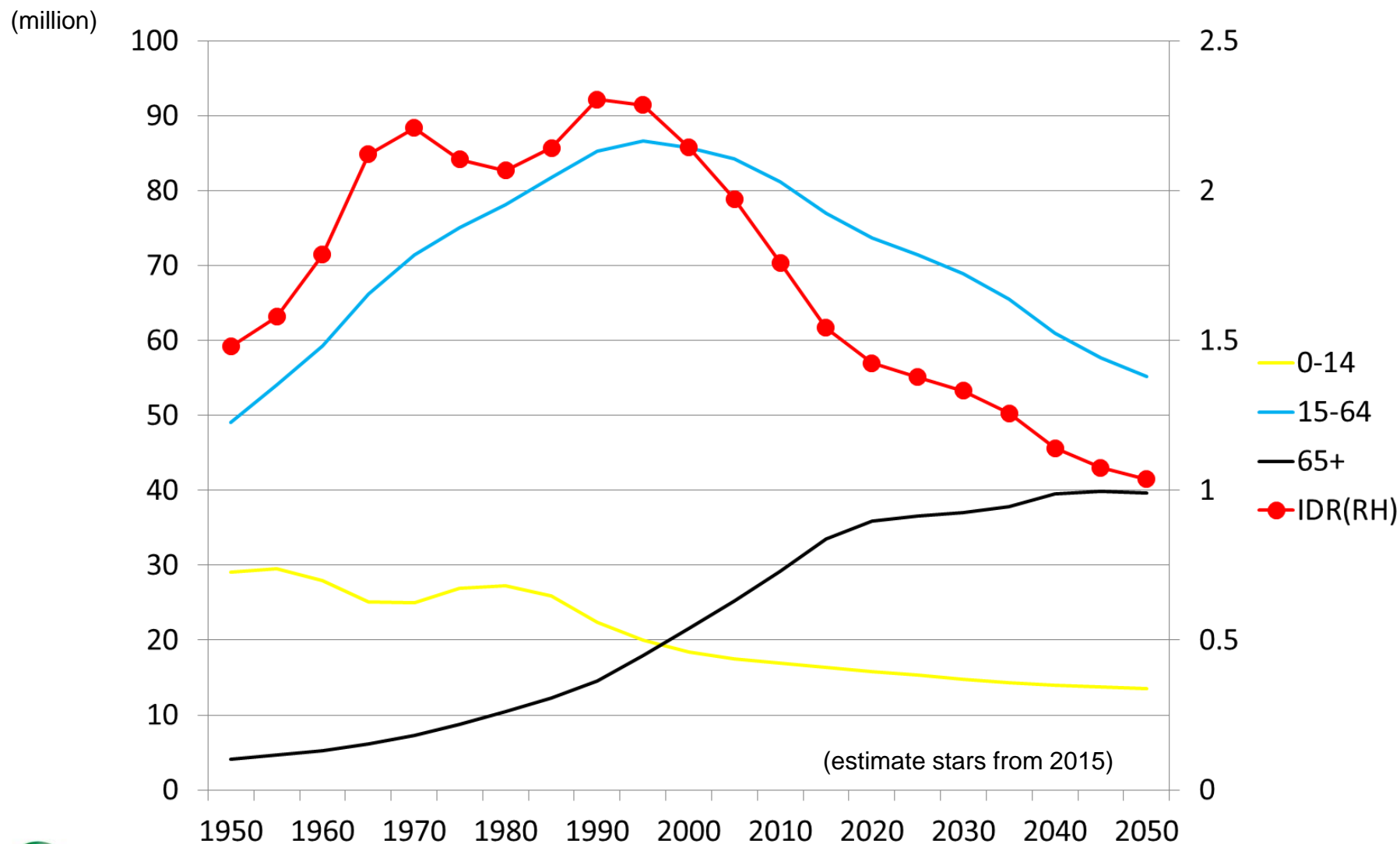
Baby boomers [Dankai Generation] in Japan

Post-War baby boomers have significant impact on the dynamism of Japanese society.



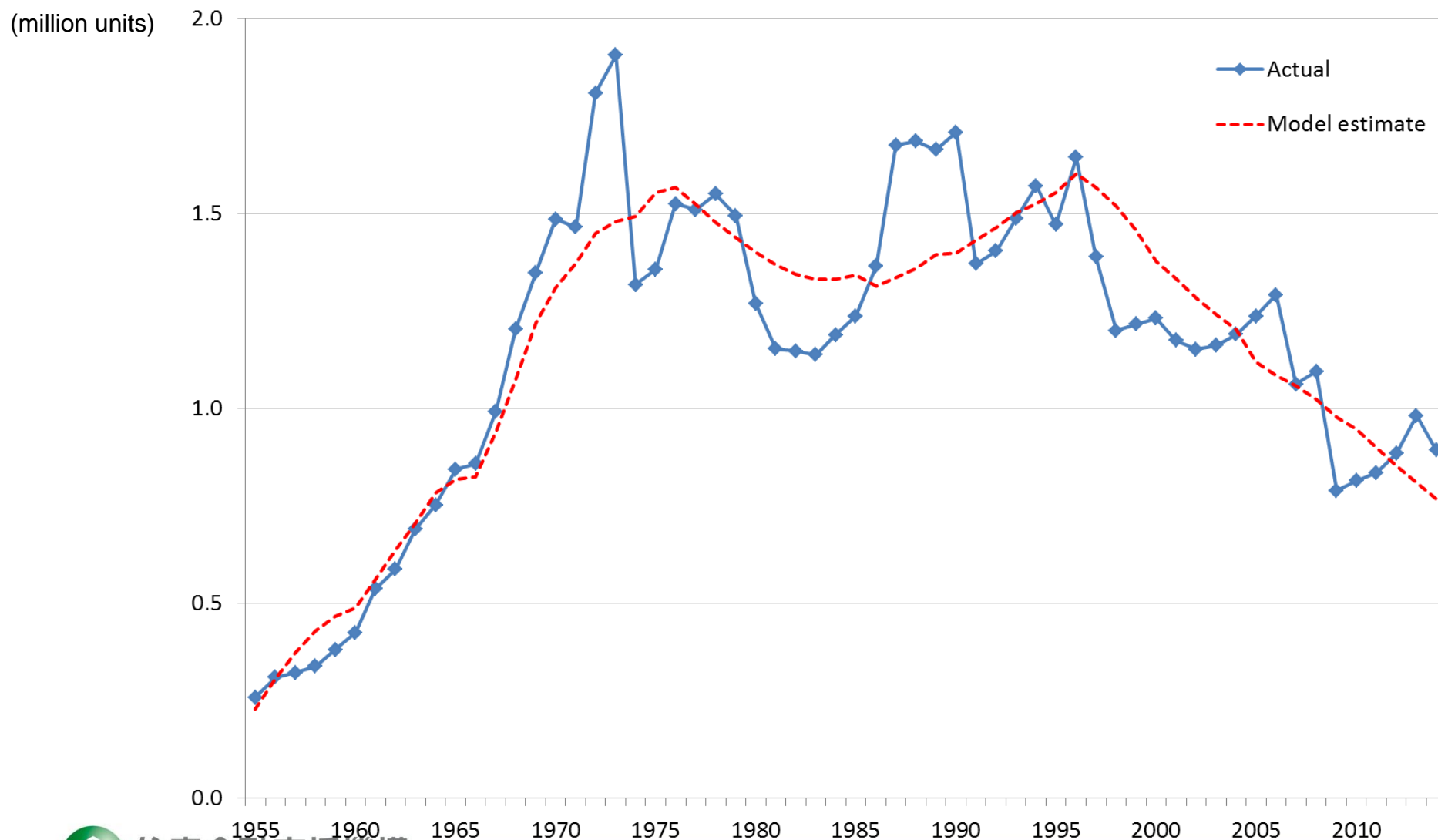
Strong headwind for Japan

Will demographic trend negatively affect housing markets in Japan?



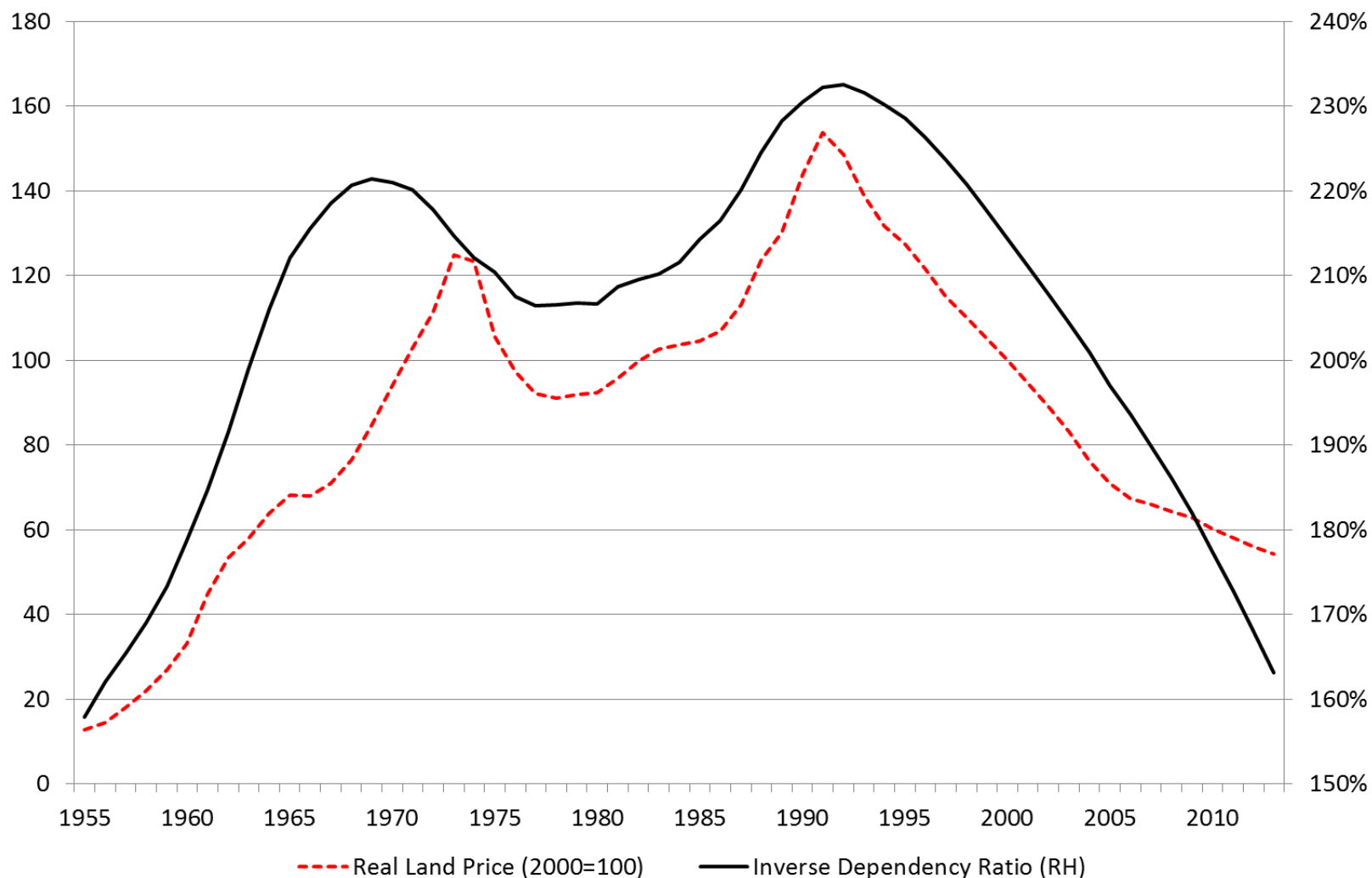
Housing starts and estimate by model based on demography in Japan

Housing starts in Japan has strong correlation with core working age populations.



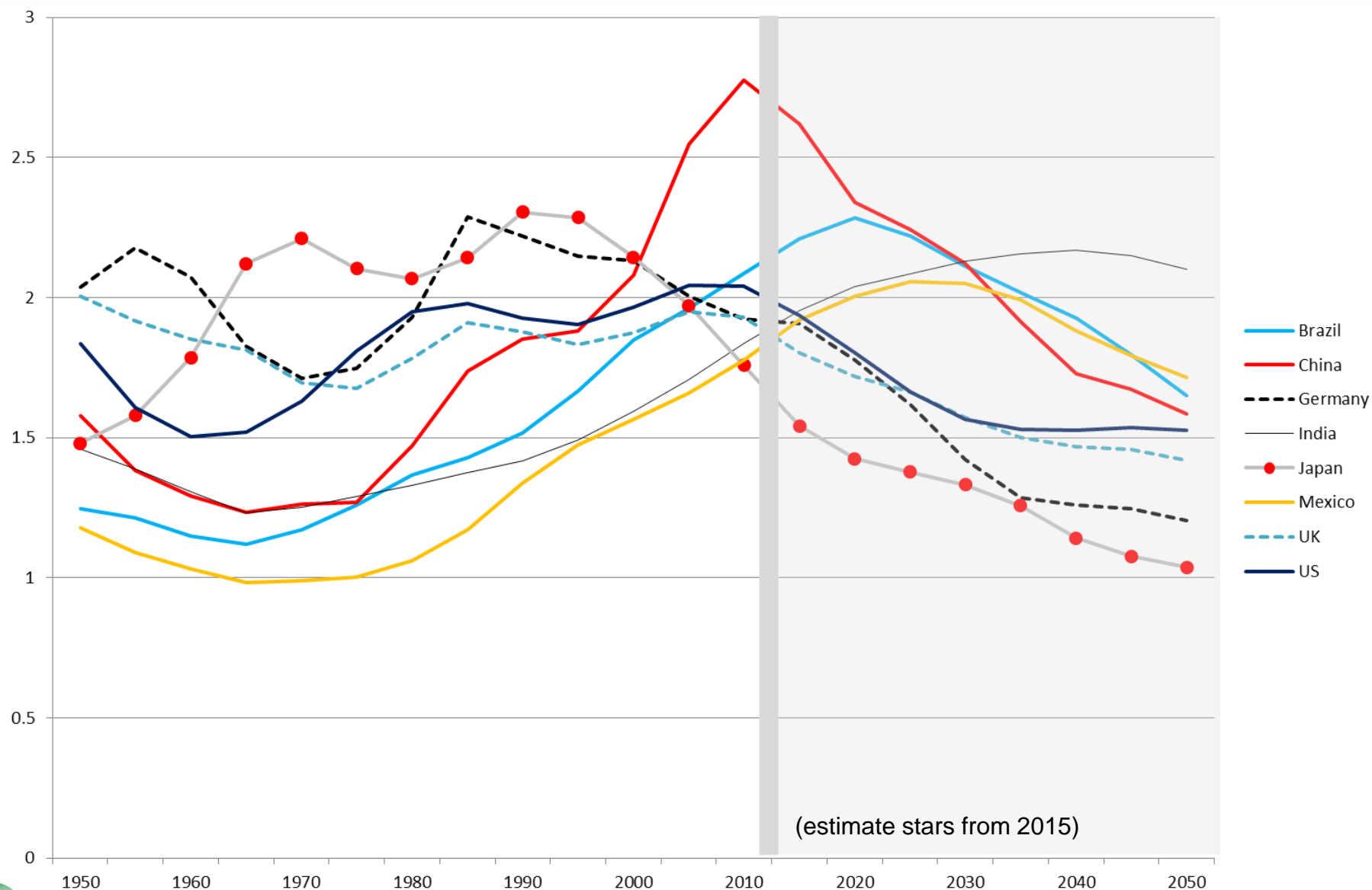
Real land price and inverse dependency ratio

Not only housing starts, but property price also had strong correlation with demographics in Japan.



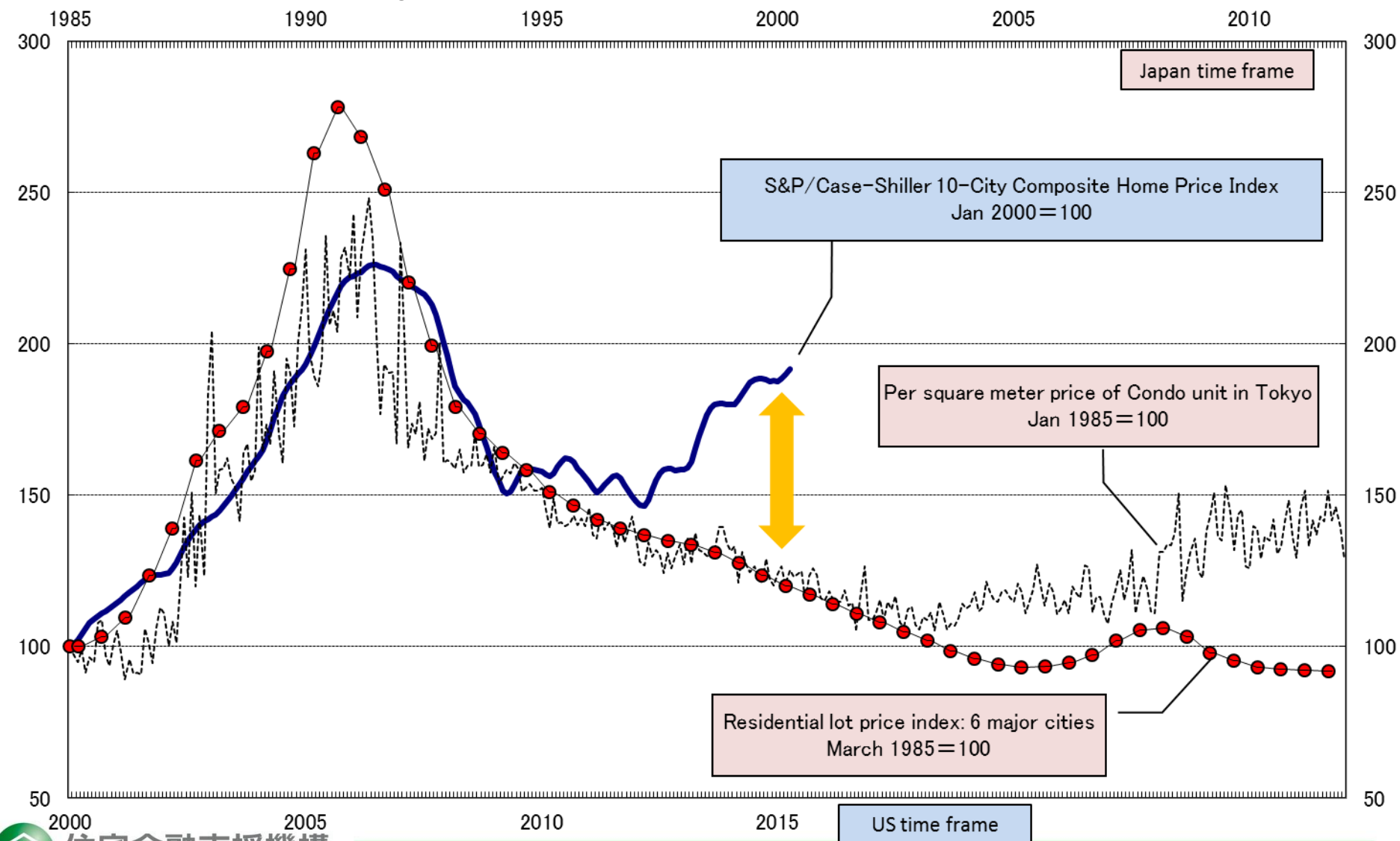
(Note) Real land price is national average discounted by CPI (All items, less imputed rent) and extrapolated before 1969.

Inverse dependency ratio of major economies



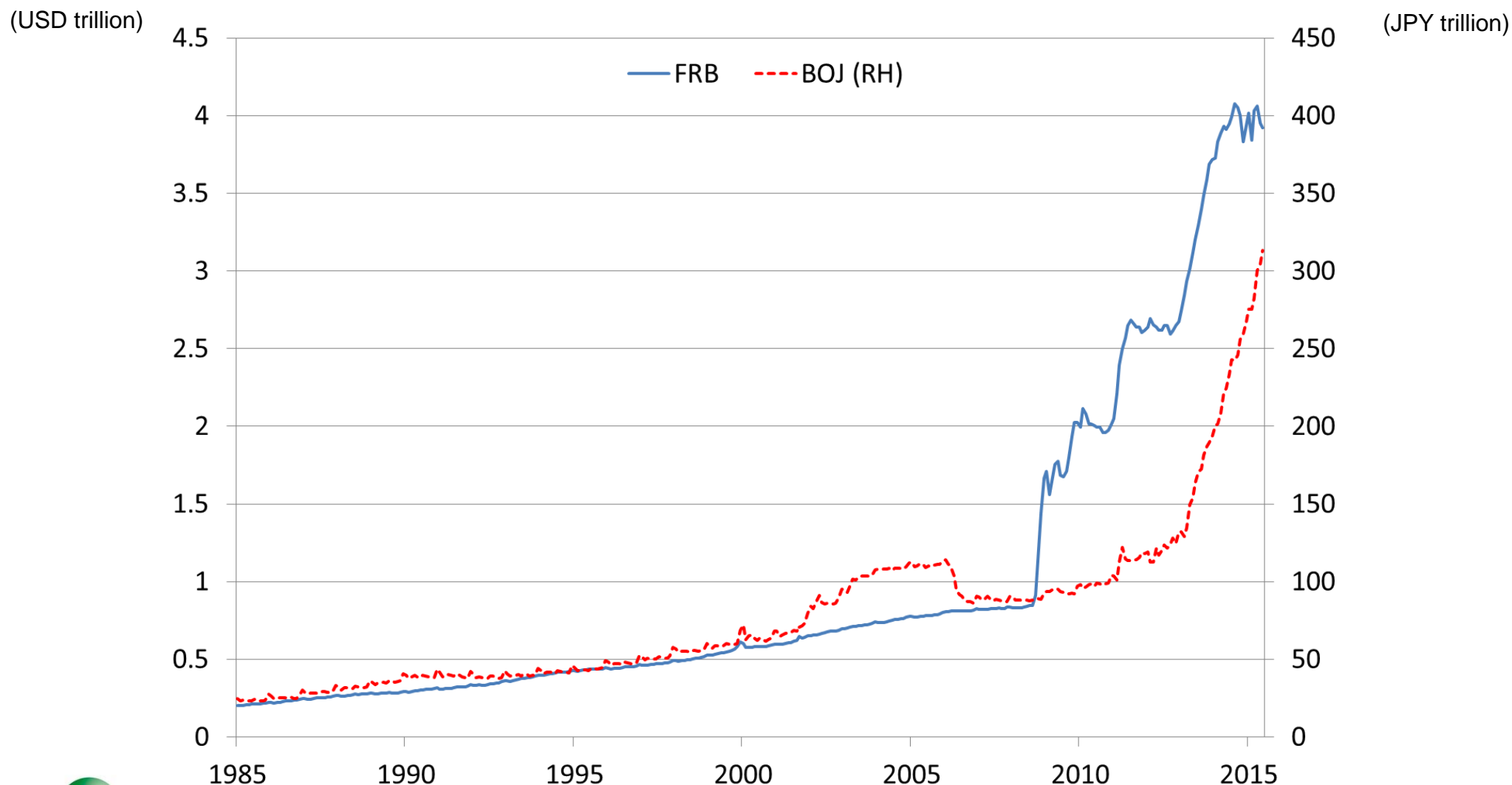
Housing bubble in the US and Japan

After the collapse of housing bubble, Japan faced persistent decline while US averted it.



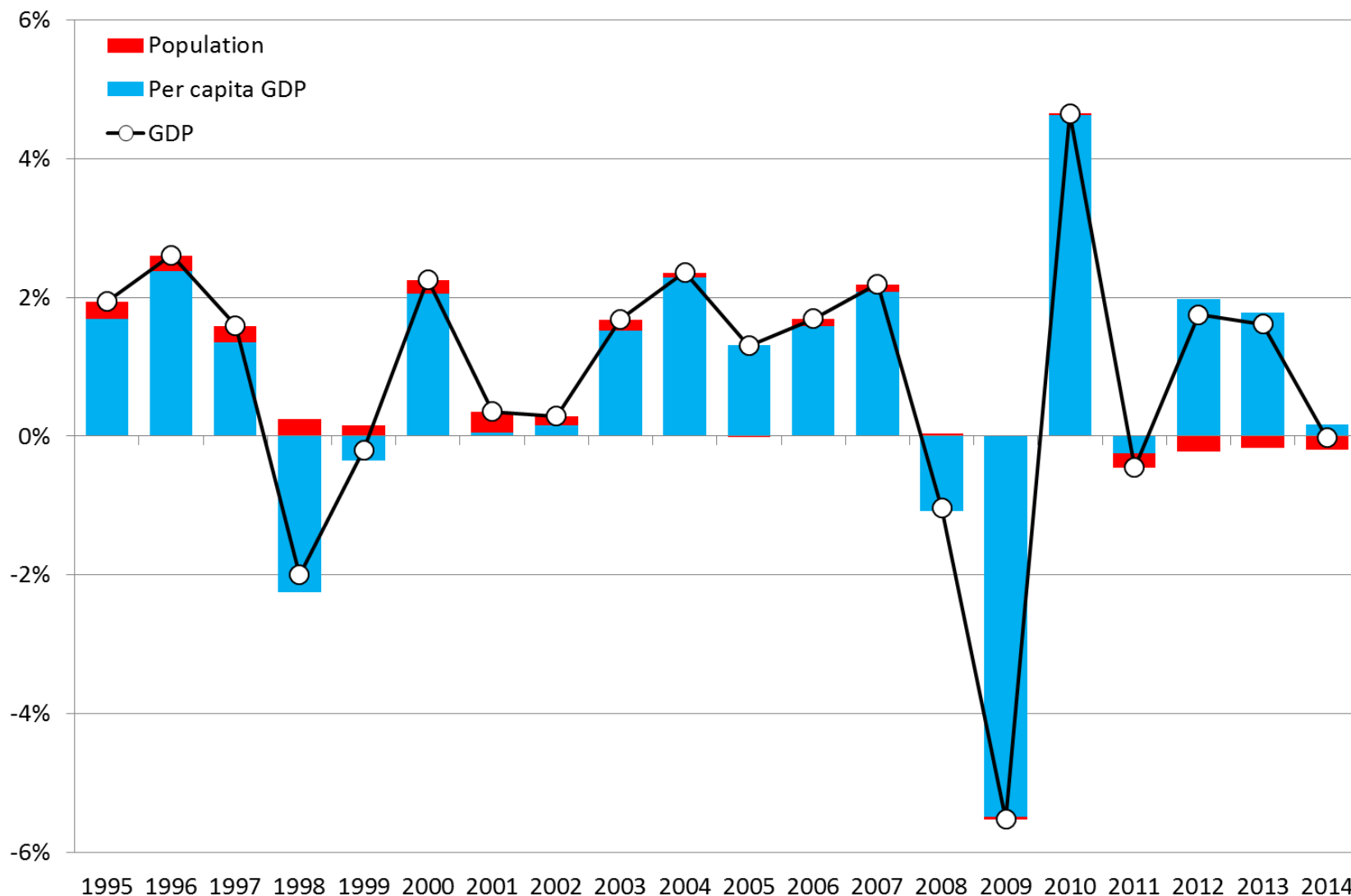
Monetary base in the US and Japan

Aggressive monetary accommodation by Fed prevented US economy falling into “lost decades”.



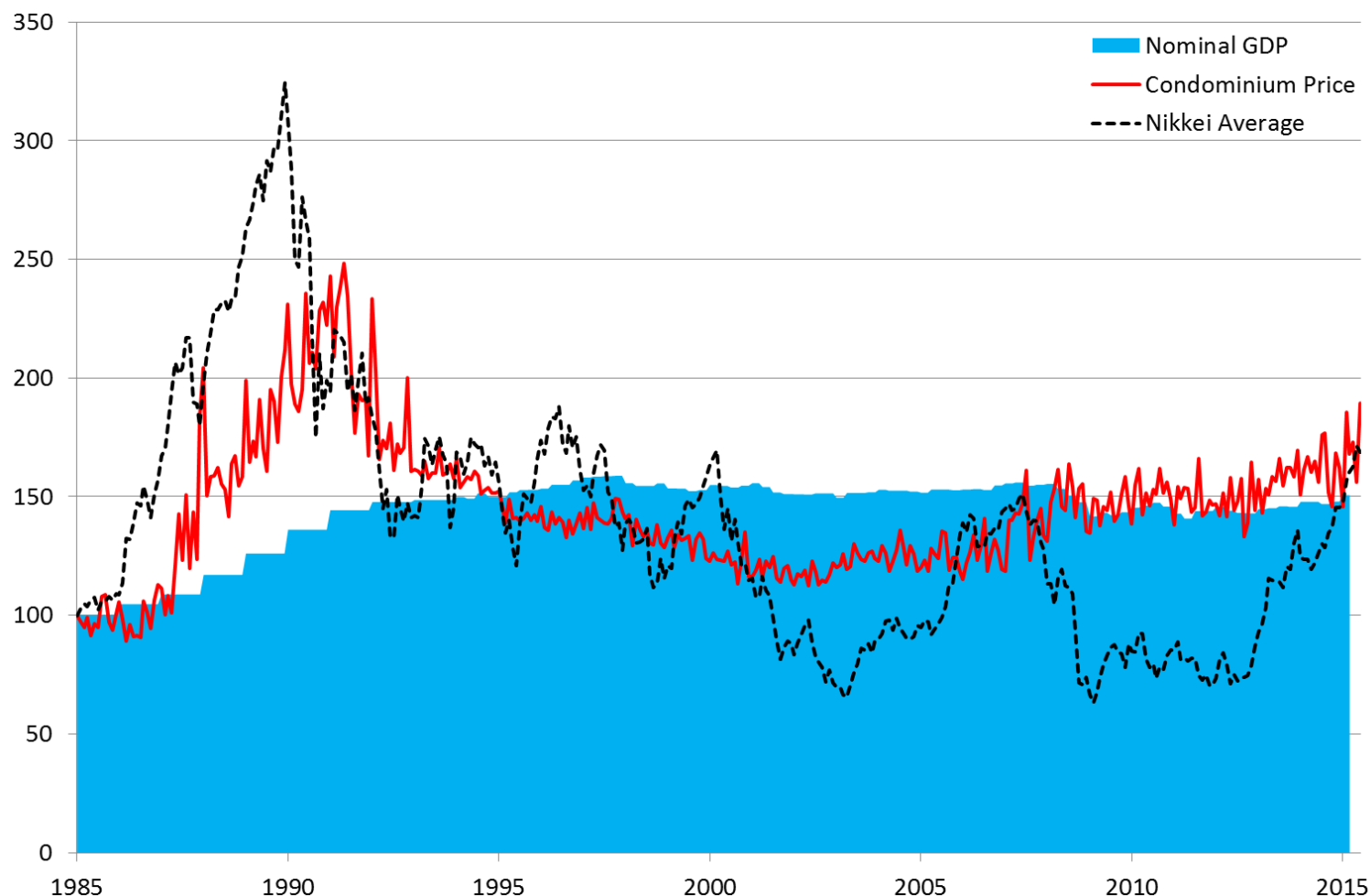
Real GDP growth rate and its components

Population accounts only a fraction of change of economy, but people were very pessimistic.



Housing price, stock price and GDP (Jan 1985 = 100)

After 30 years, property prices (housing and stock) have regressed to fundamentals (GDP).

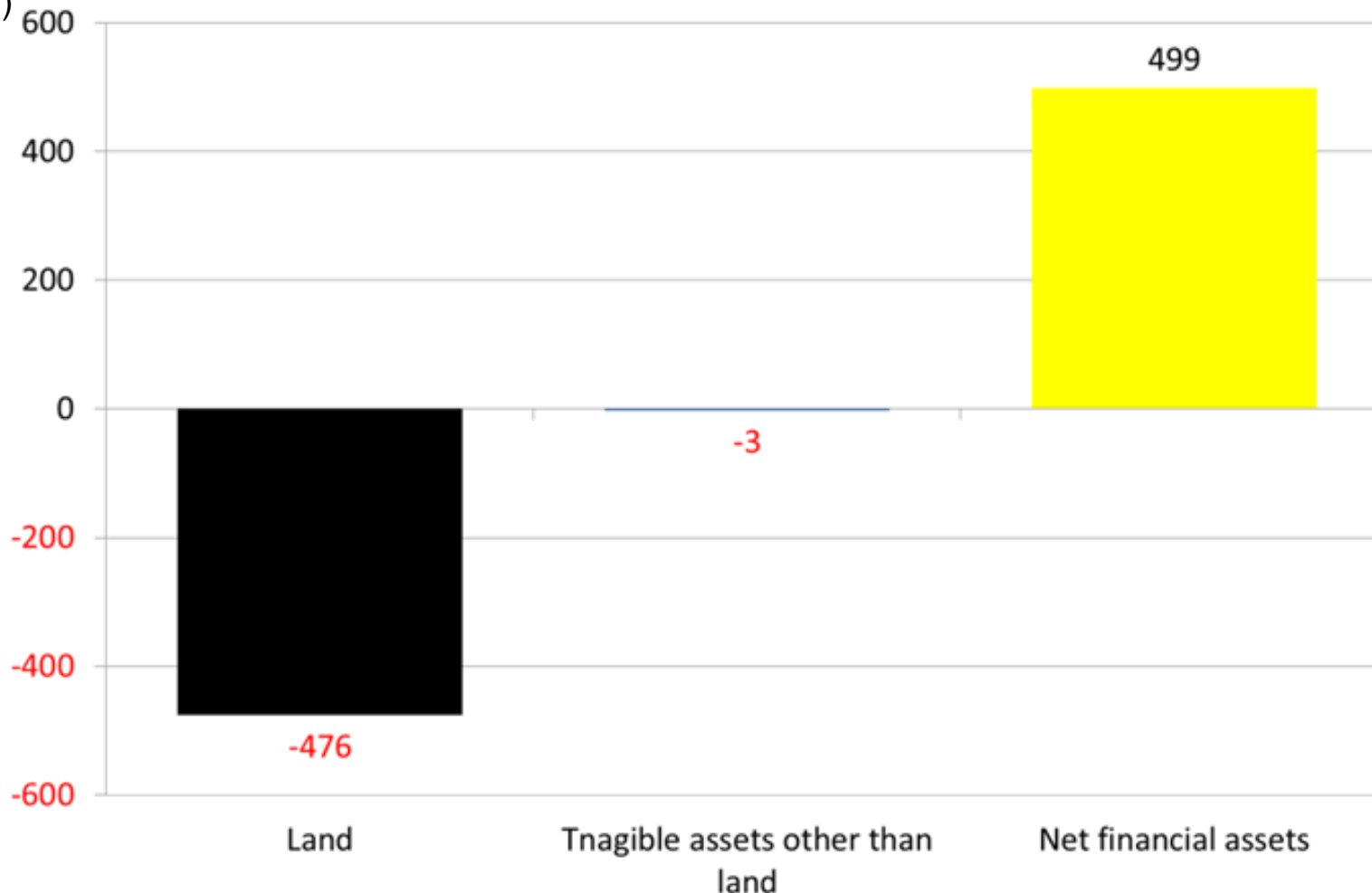


(Note) "Condominium Price" represents per square meter price of condominium unit in Tokyo Metropolitan Region. Current series of "Nominal GDP" starts from 1994 and figure here is seasonally adjusted annual rate at quarterly base. Figures before 1993 are author's estimates of annual value by chaining the previous series at 1994. "Nikkei Average" is the value at the end of month except for May 2015.

Change of balance for household in Japan from 1994 to 2013

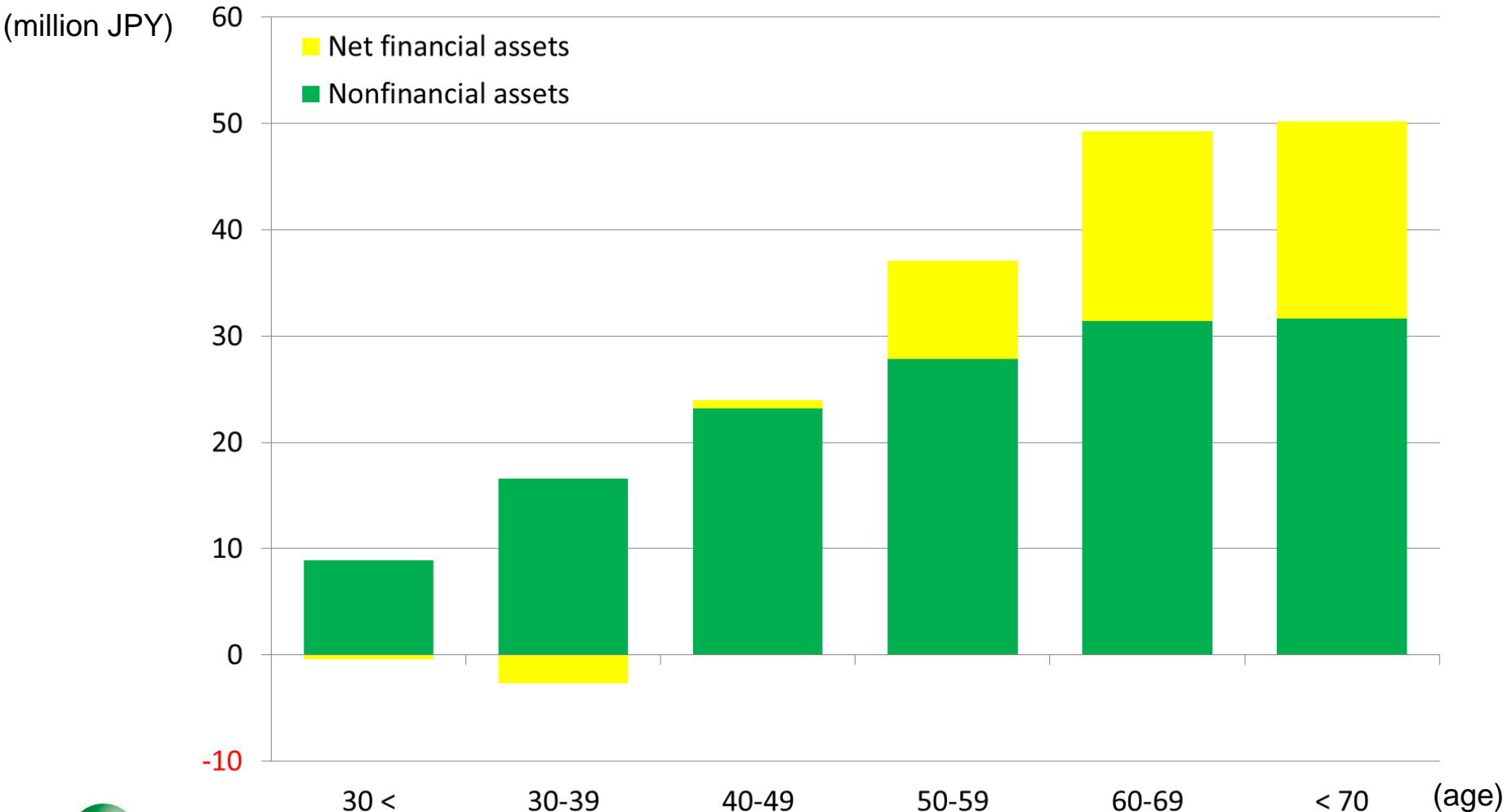
During the asset disinflation period, household sector hoarded equivalent amount of financial assets and restrained personal consumption.

(trillion JPY)



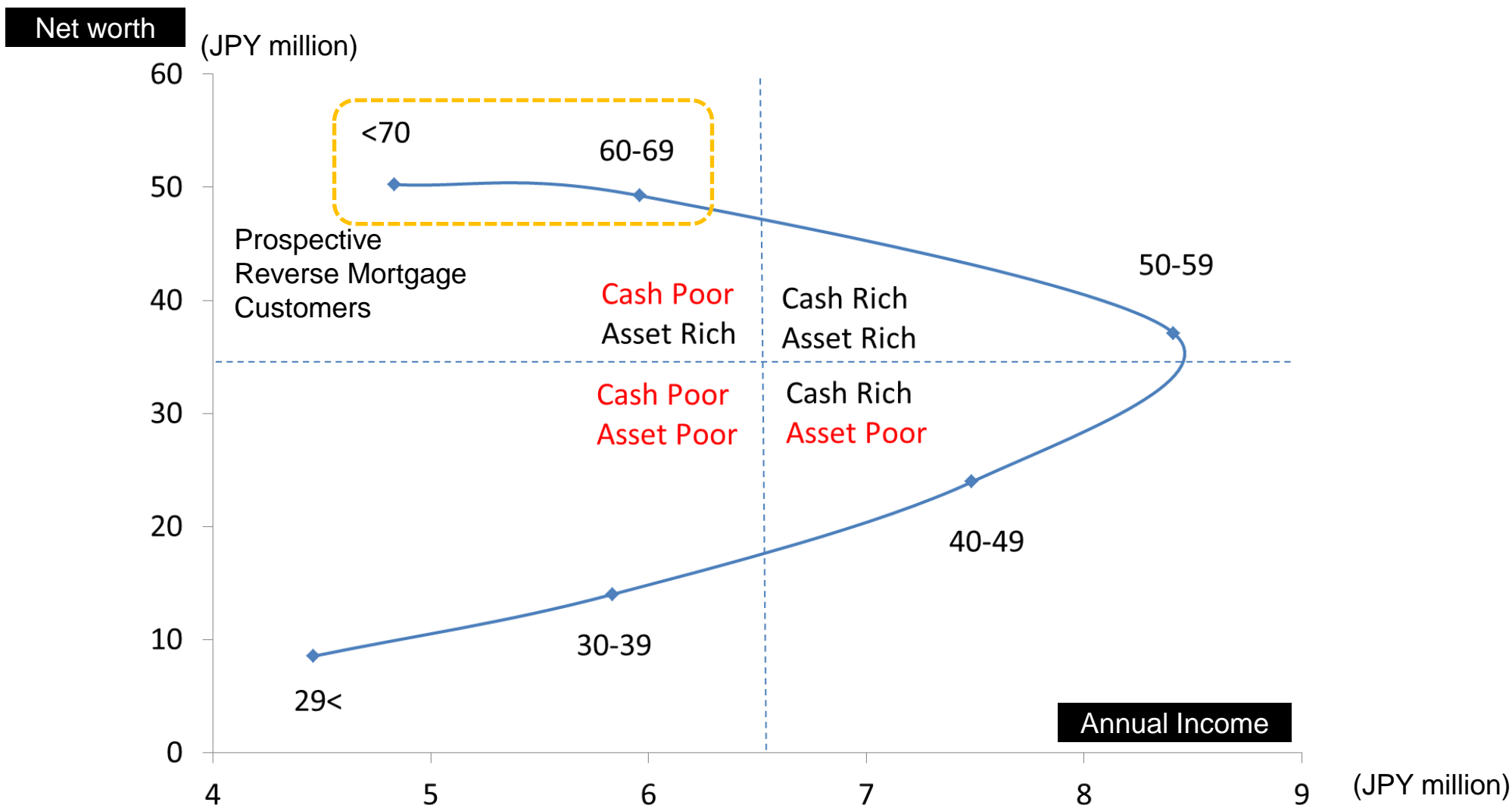
Assets of household by age group

Elderly population has more net financial assets as well as nonfinancial assets (mainly owned house). Payment of lump sum retirement benefits is one of the major causes.



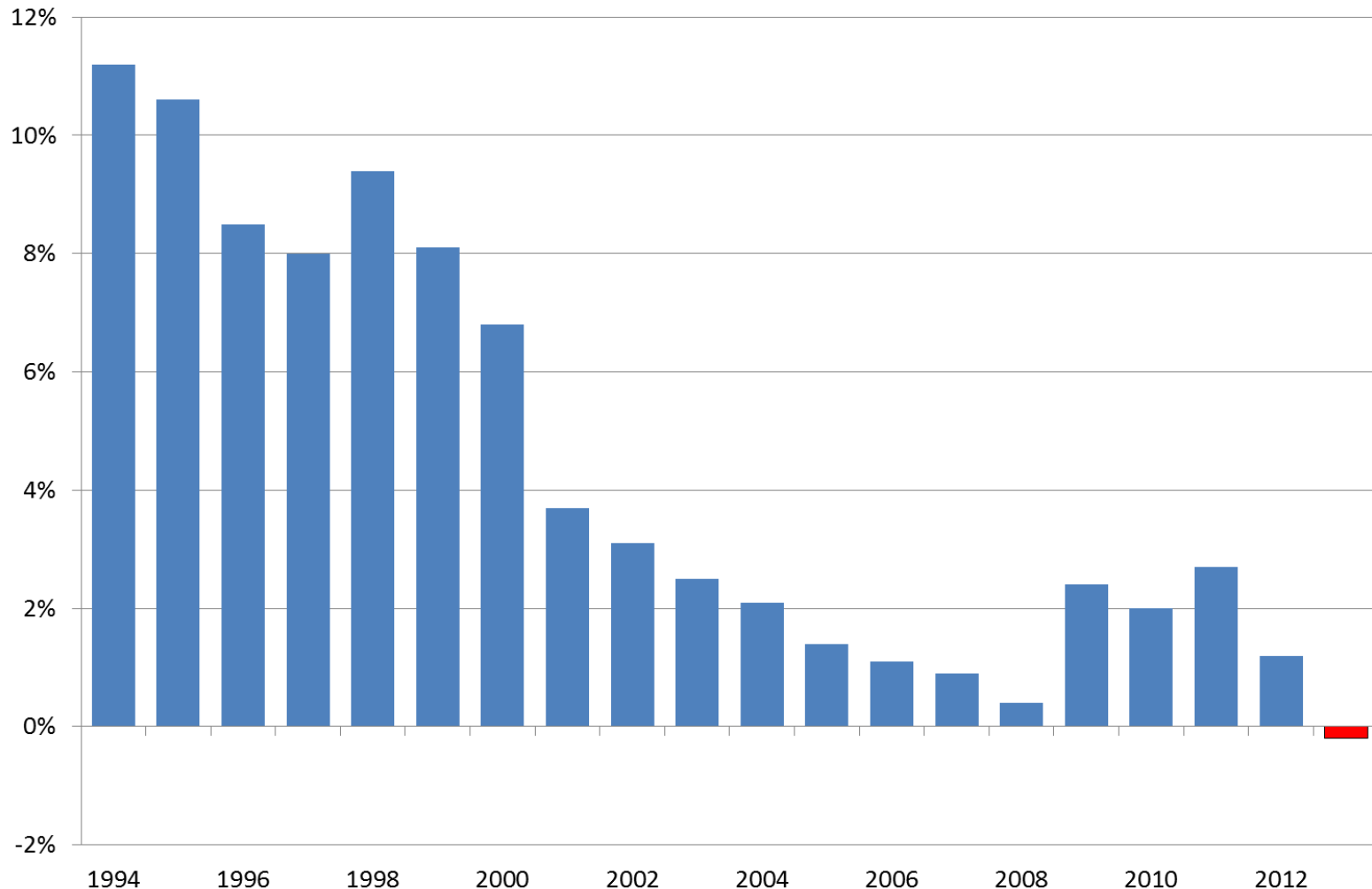
Income and net worth of household by age group

There are possibilities for reverse mortgage market in Japan, but challenges remain.



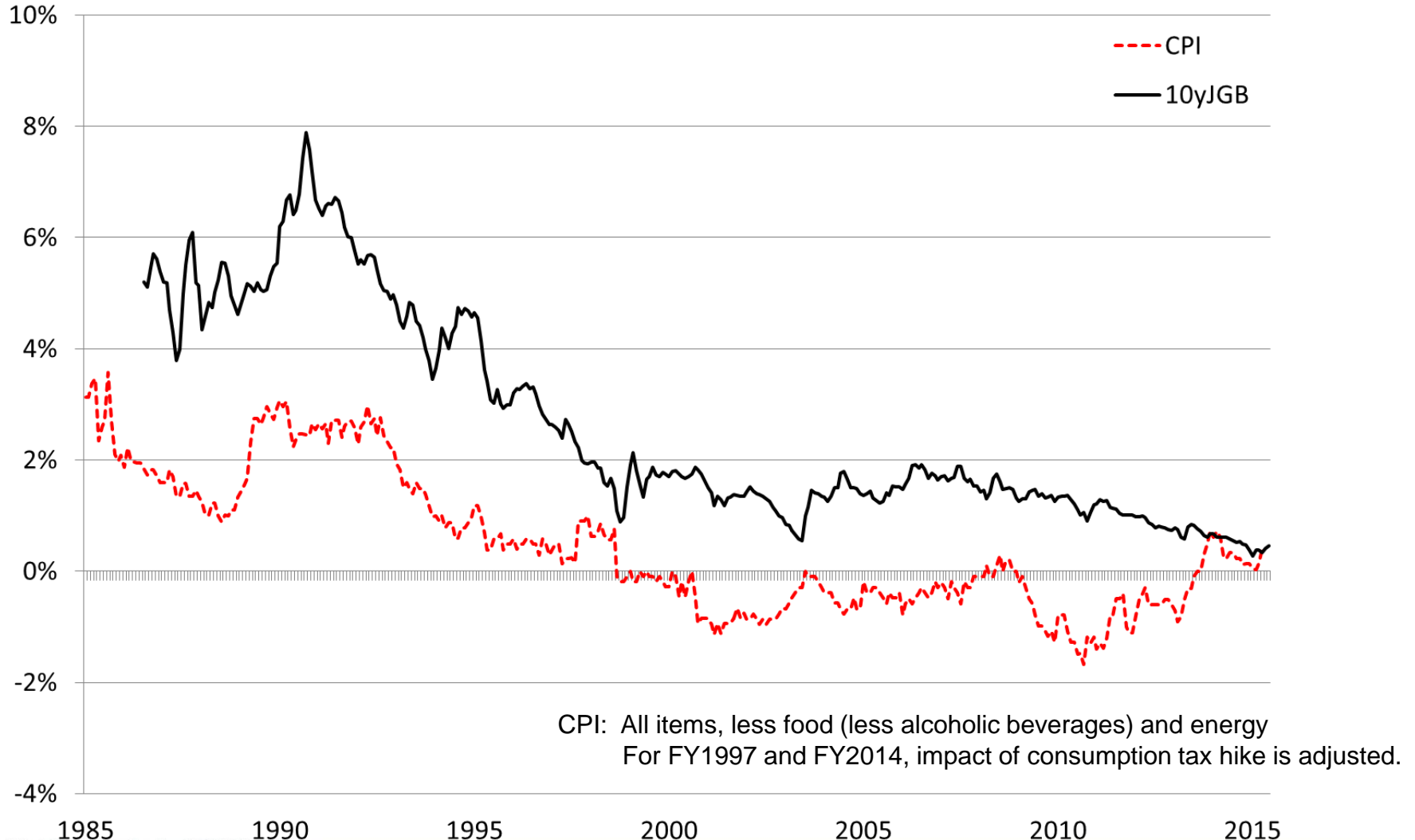
Savings rate turned into negative in 2013

Elderly people are rich in financial assets, but do not have enough cash flow. As population ages, the macroeconomic savings rate continued to decline and turned into negative in 2013.



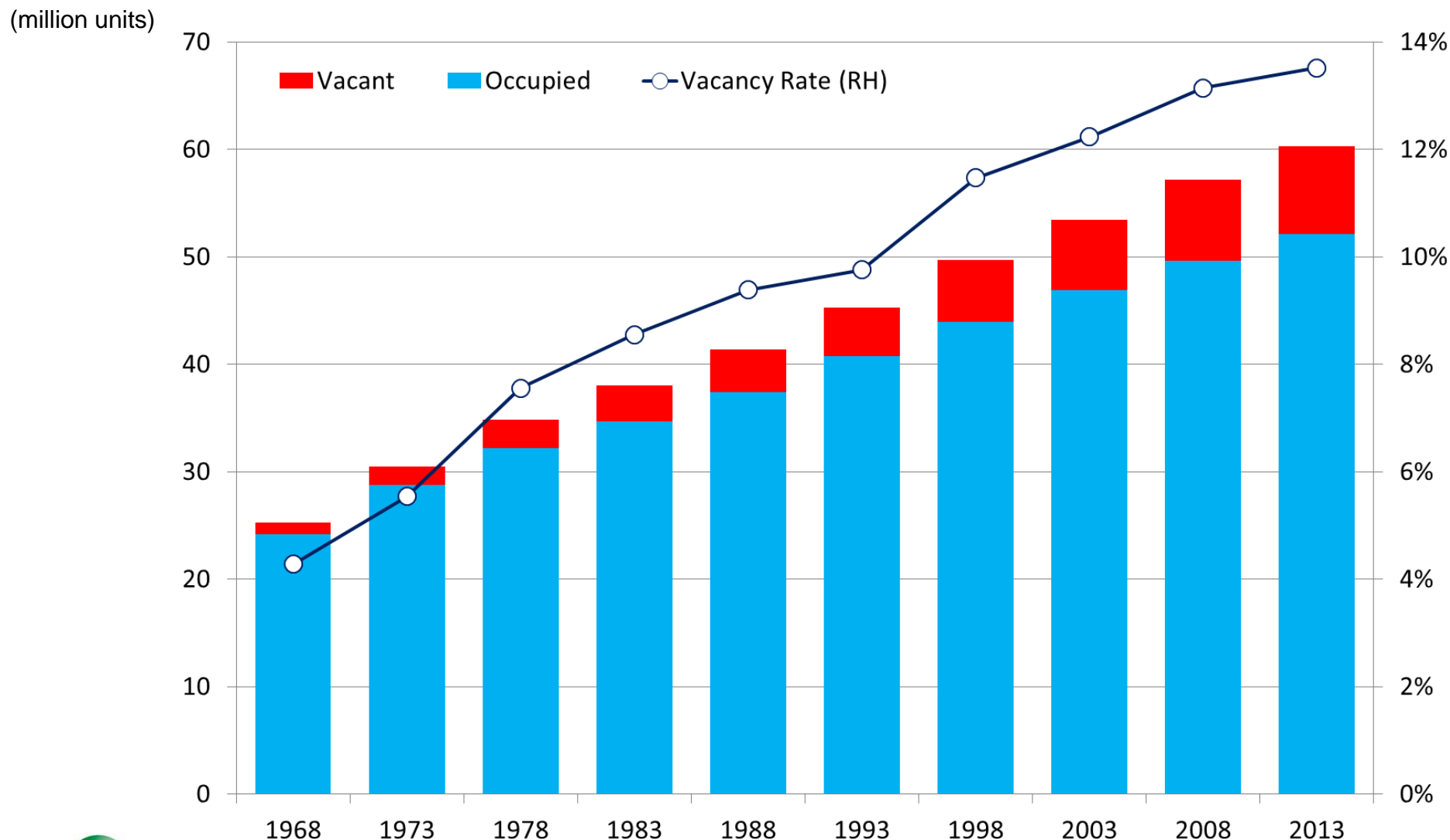
Inflation and interest rate

So far, long term interest rate is anchored. Inflation rate is picking up, but remains below 2% objective. Will such low interest rate environment last even after more elderlies retire?



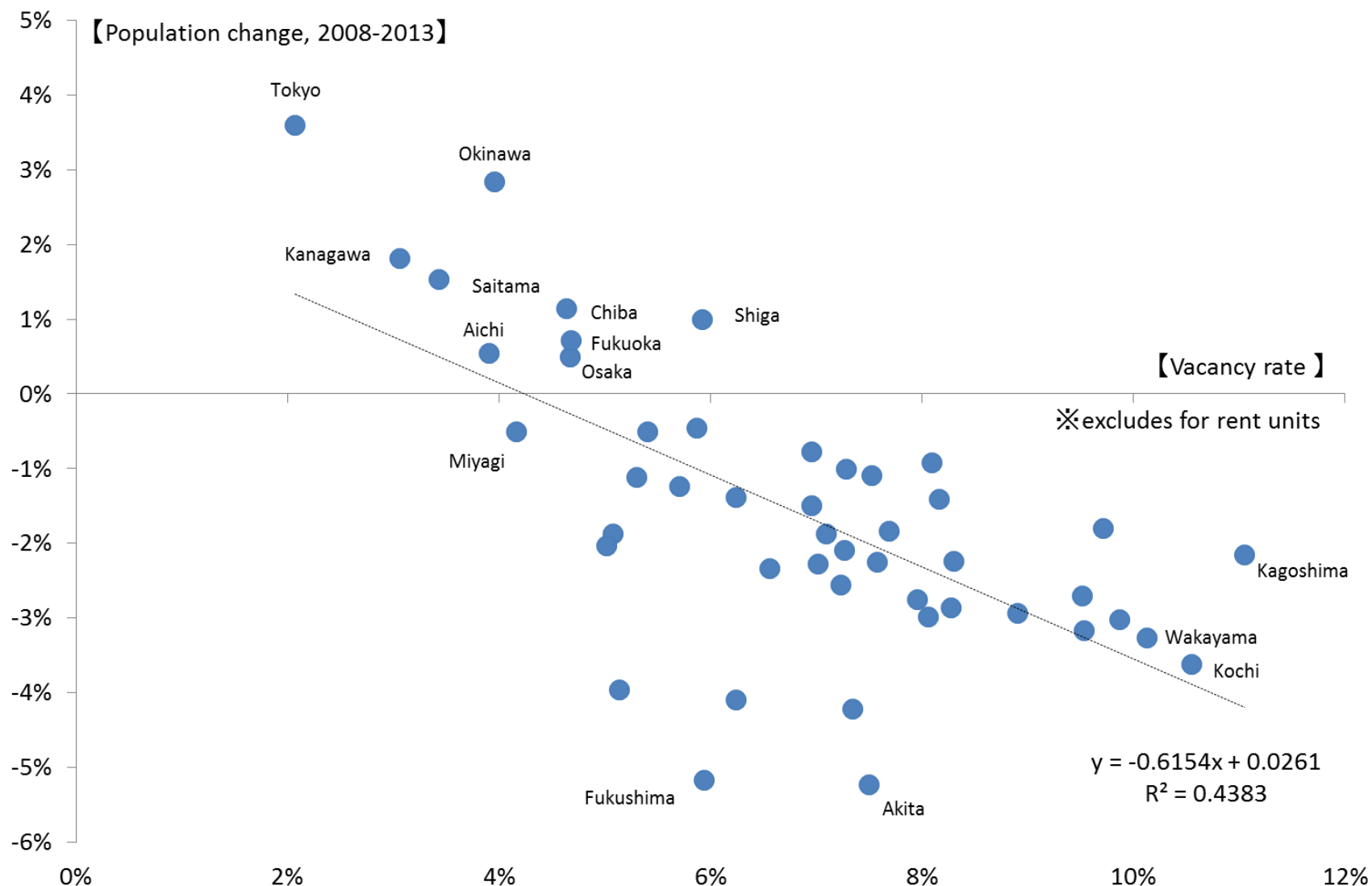
Number of housing stock in Japan as of 2013

There are 8.20 million vacant houses, 13.5% of total housing stock of 60.63 million units.



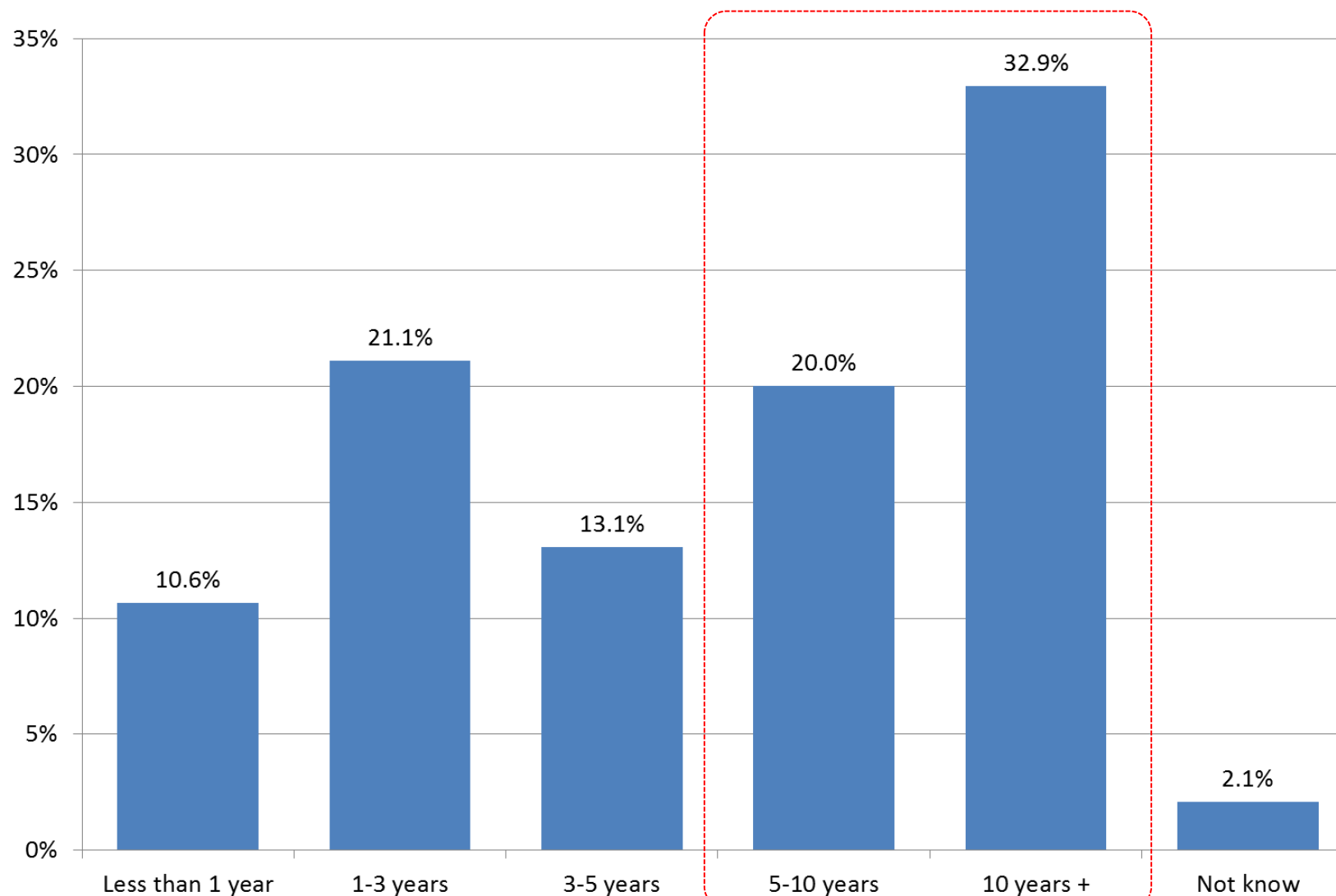
Vacancy rate and population in Japan by region

Vacancy rate is higher in regions with declining population.



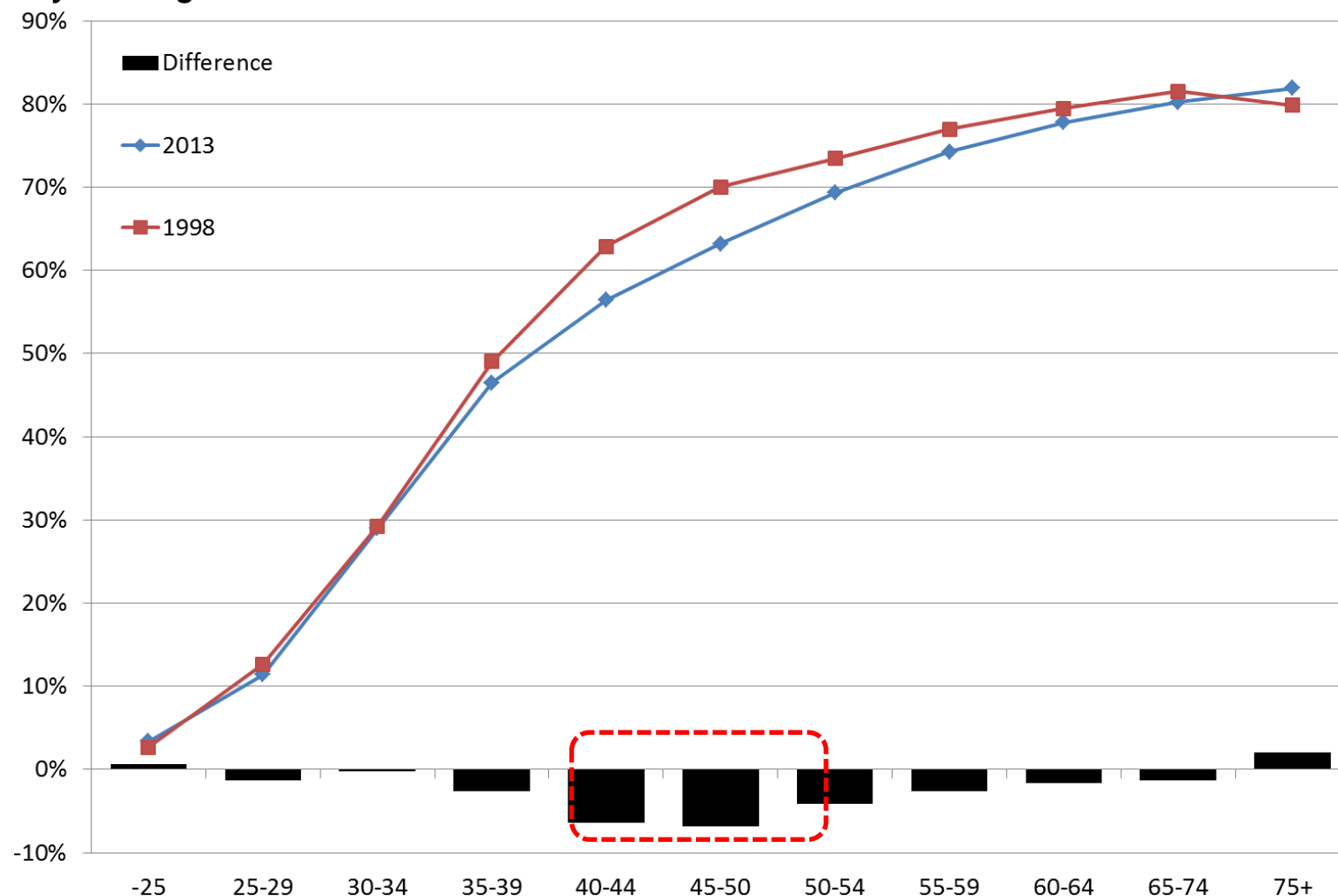
Duration of Vacancy

More than half of the vacant units are vacant for more than 5 years.



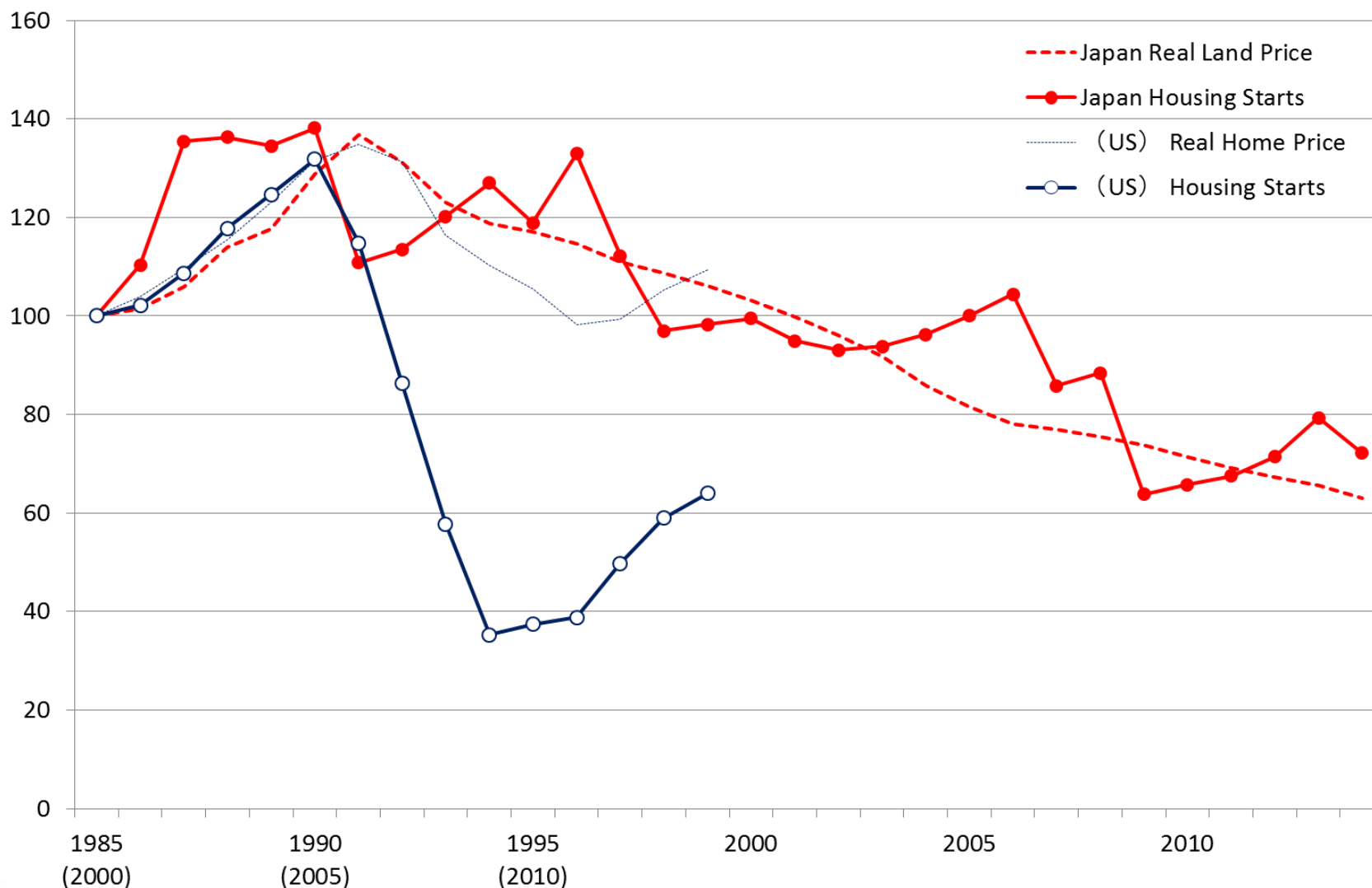
Homeownership rate by age group

Homeownership rate is high among elderly cohort. Aging society, however, does not warrant automatic rise of homeownership. Homeownership rate has declined among many age group, especially among those in 40's.



Impact of burst of bubble in housing markets in Japan and the US

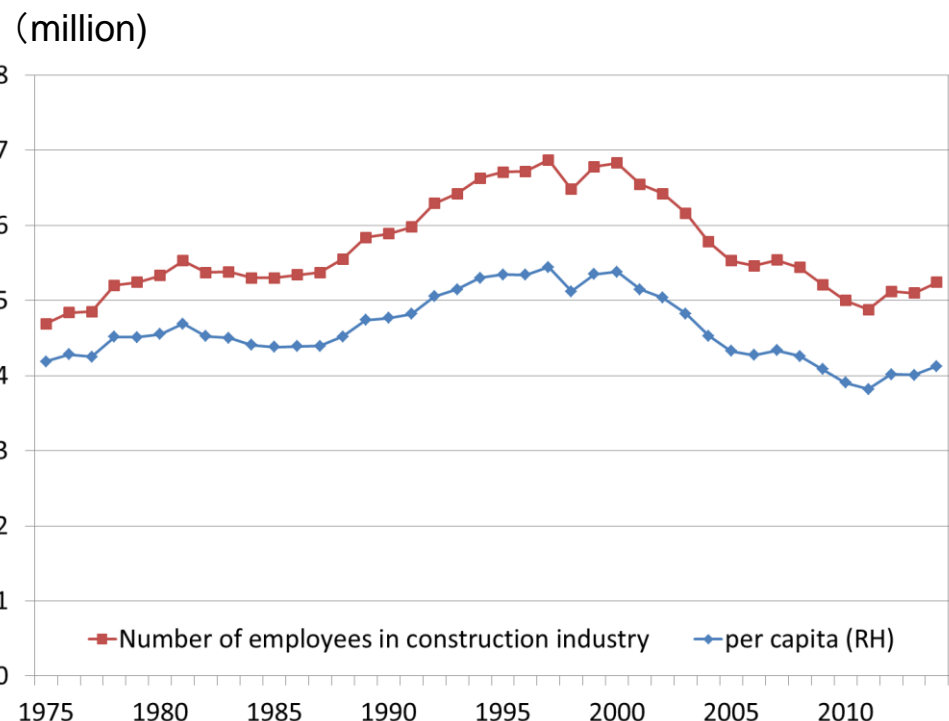
US home price recovered more quickly due to some extent by drastic decline of supply of houses.



Number of employees in construction industry

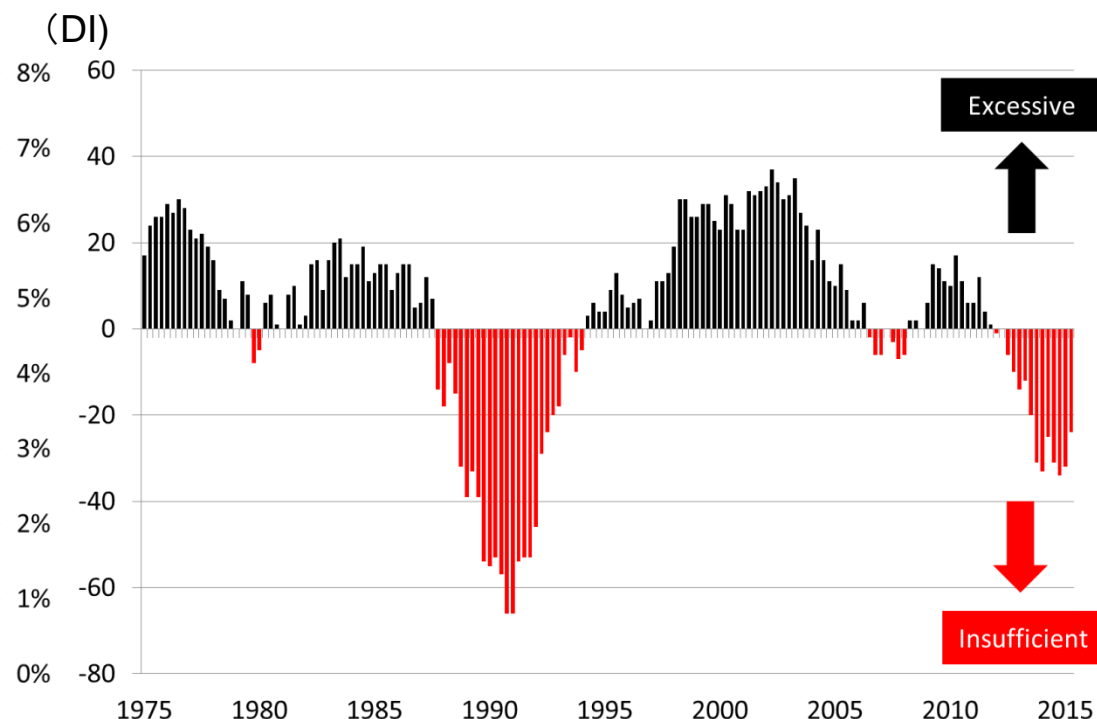
Number of employees in construction industry has been declining faster than total population, and insufficient construction workers can be a constraint to the industry for some time.

Number of employees in construction industry
And its ratio to the total population



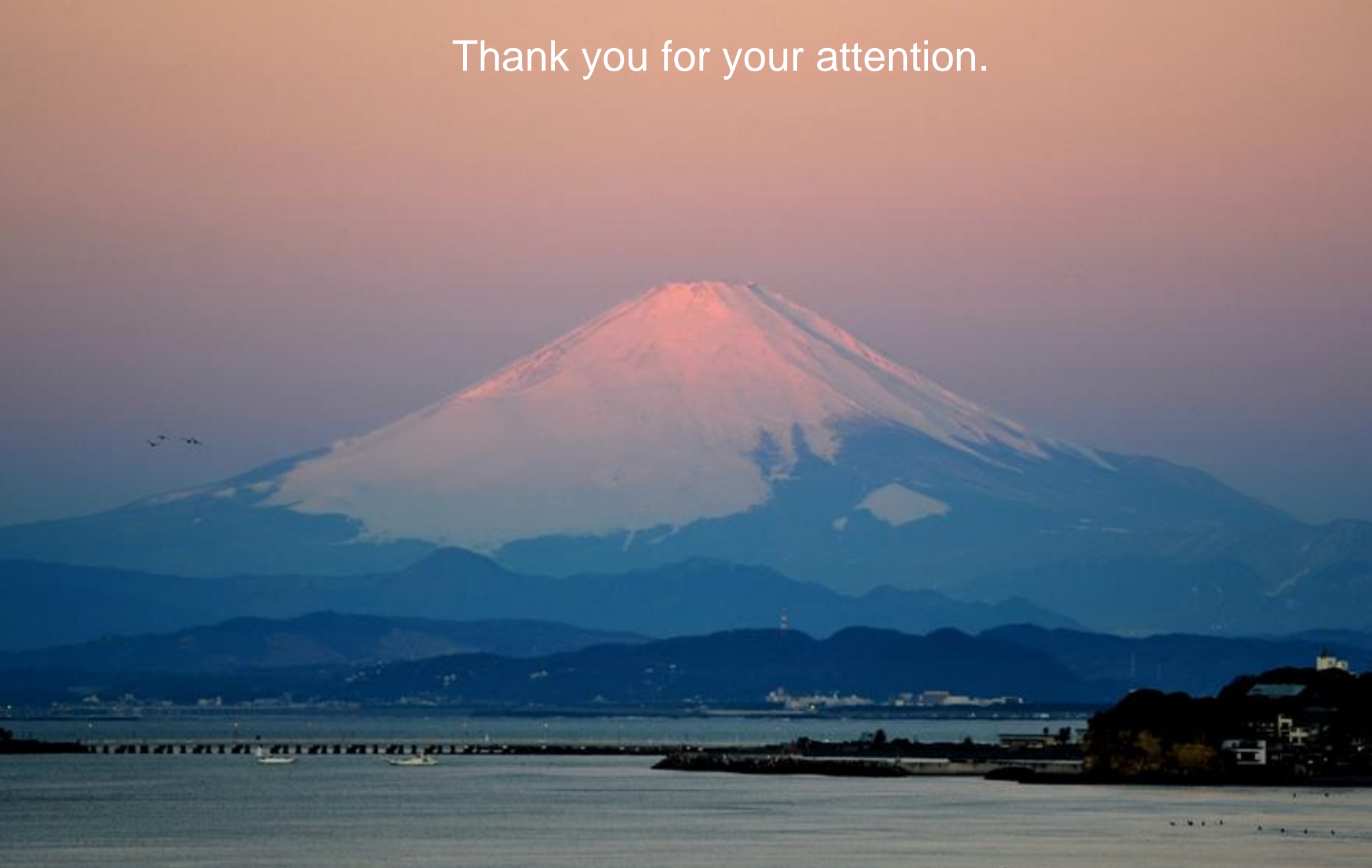
(Source) MIAC

Employment Conditions (Diffusion index of "Excessive Employment" minus "Insufficient Employment")



(Source) Bank of Japan

Thank you for your attention.



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