
The Japanese Real Estate Investment Market 2018

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Population movements in Japan

Macro fundamentals of Japan

Overview of real estate investment market in Japan

Office market

Residential market

Retail property market

Logistics property market

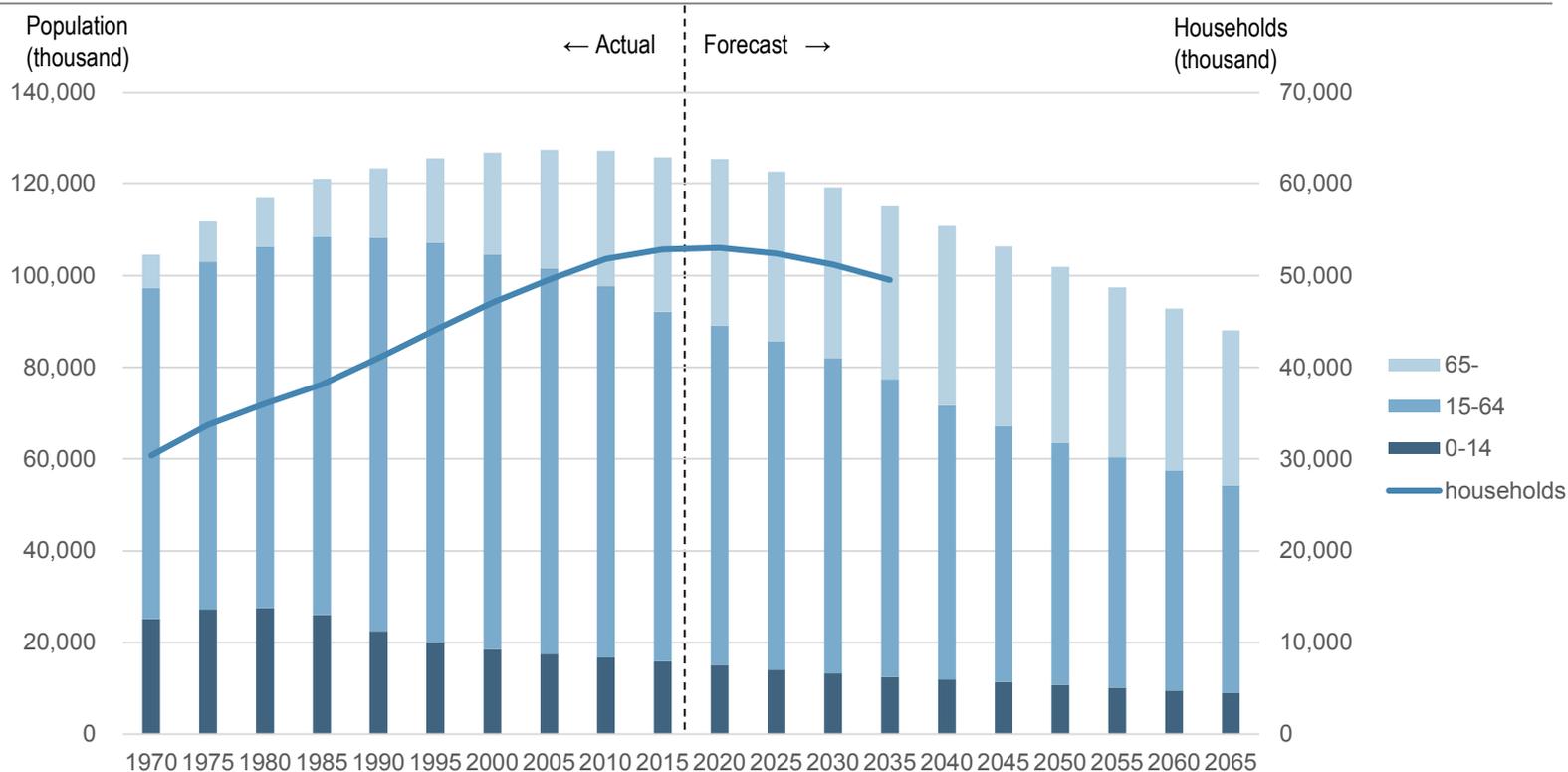
Hotel market

Real estate investment products

In 2015, depopulation was observed for the first time in Japan, based on the national census.

- The decline in number of households was not confirmed by the national census in 2015; hence, the rise is expected to continue.
- The population of people 65 years or older is expected to level off in 2025 and head downwards from 2040.

Population and households in Japan



Source: National Institution of Population and Social Security Research and MIC "Population Census"

Note 1: Population forecast is based on the data of population census in 2015.

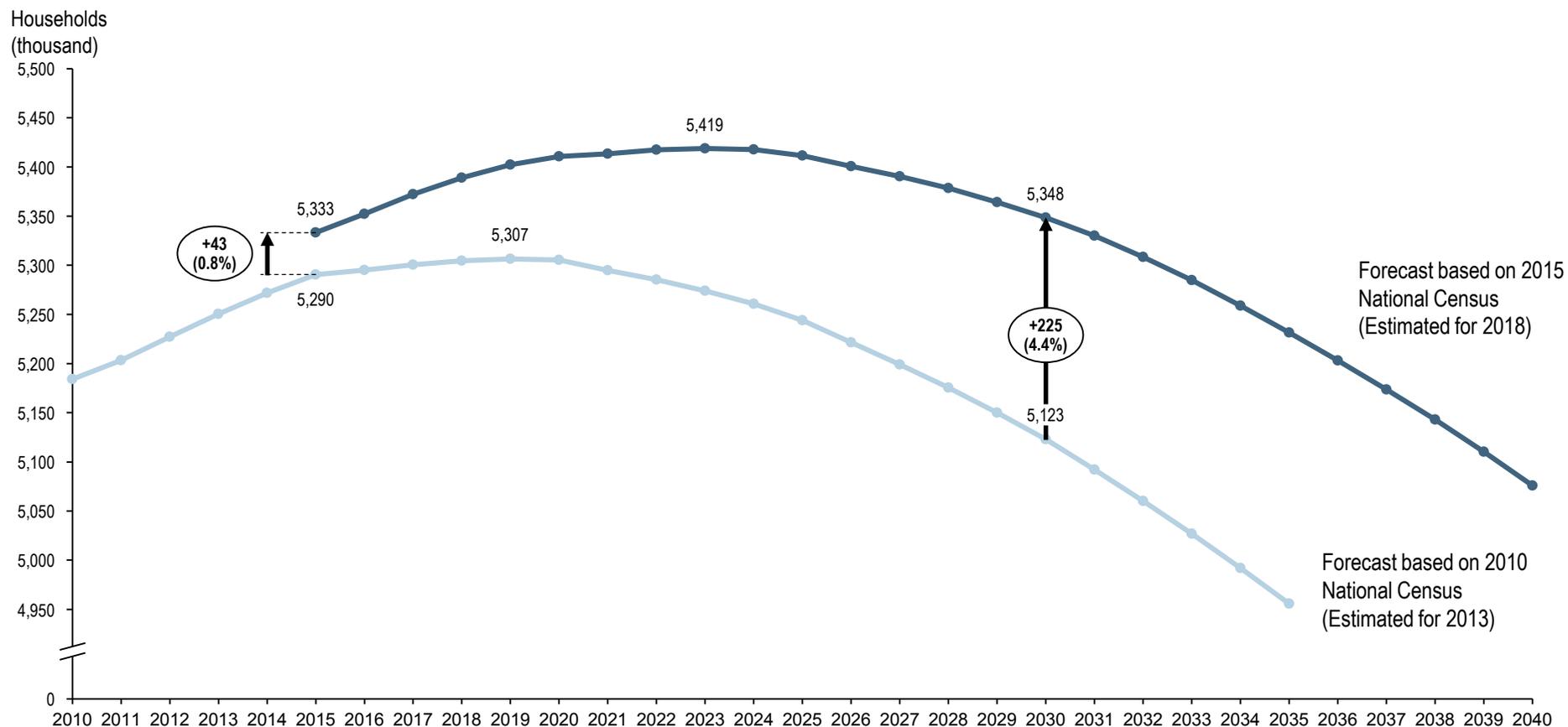
Note 2: The solid line shows the actual households based on the population census and dotted line shows the predicted households based on the population census in 2010.

Note 3: Median-fertility (median-mortality) projection is used in population and household forecast.

Population movements in Japan

Compared to the forecast on number of households based on the 2010 National Census, the peak will shift from 2019 to 2023 and number of households will increase by 2.25 million in 2030 (National Institute of Population and Social Security Research)

Forecasted and actual number of households

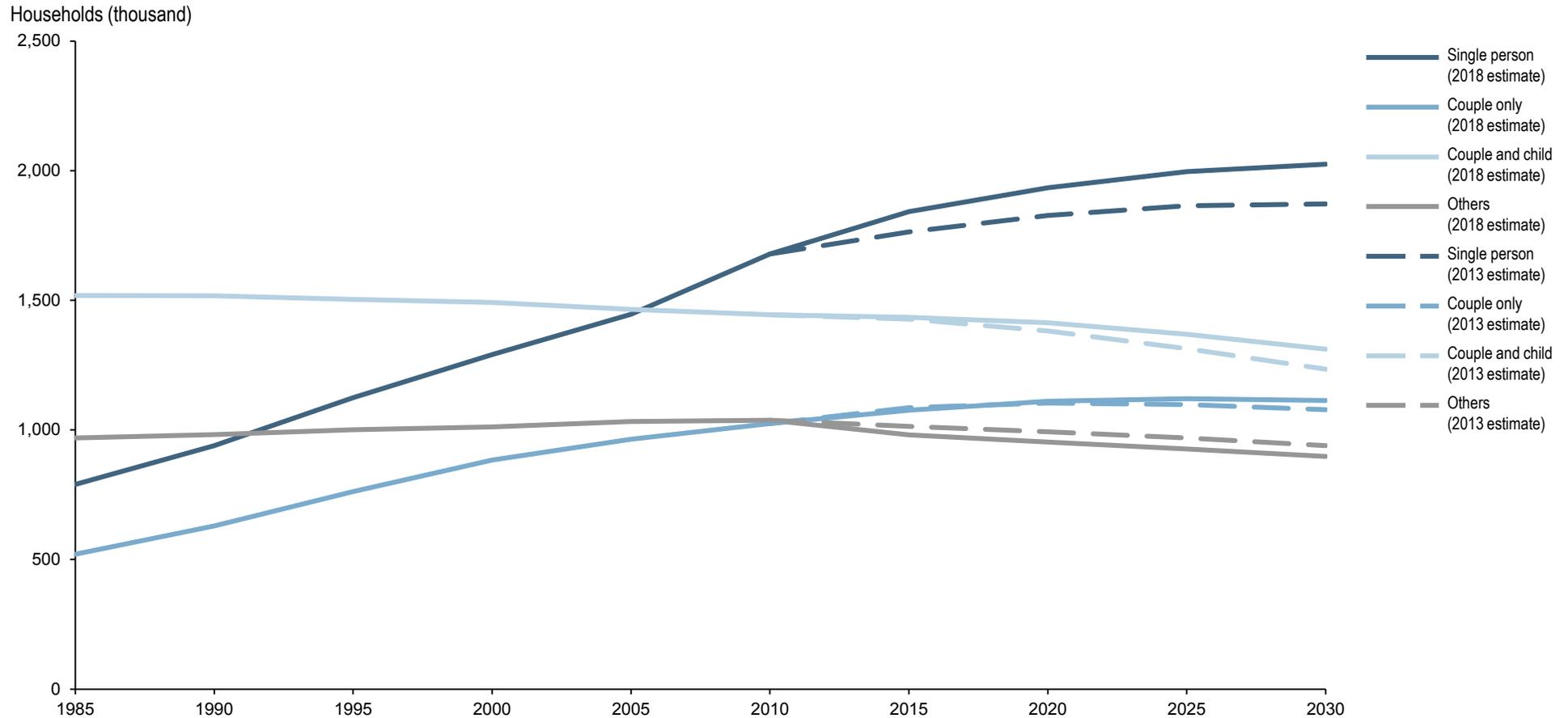


Source: National Institution of Population and Social Security Research and MIC "Population Census"

Population movements in Japan

Single-person households have been holding the major share since 2010 and cross 20 million after 2030. Couple and child households will continue to decrease, whereas couple-only households will continue to increase.

Forecasted and actual number of households (by family type)



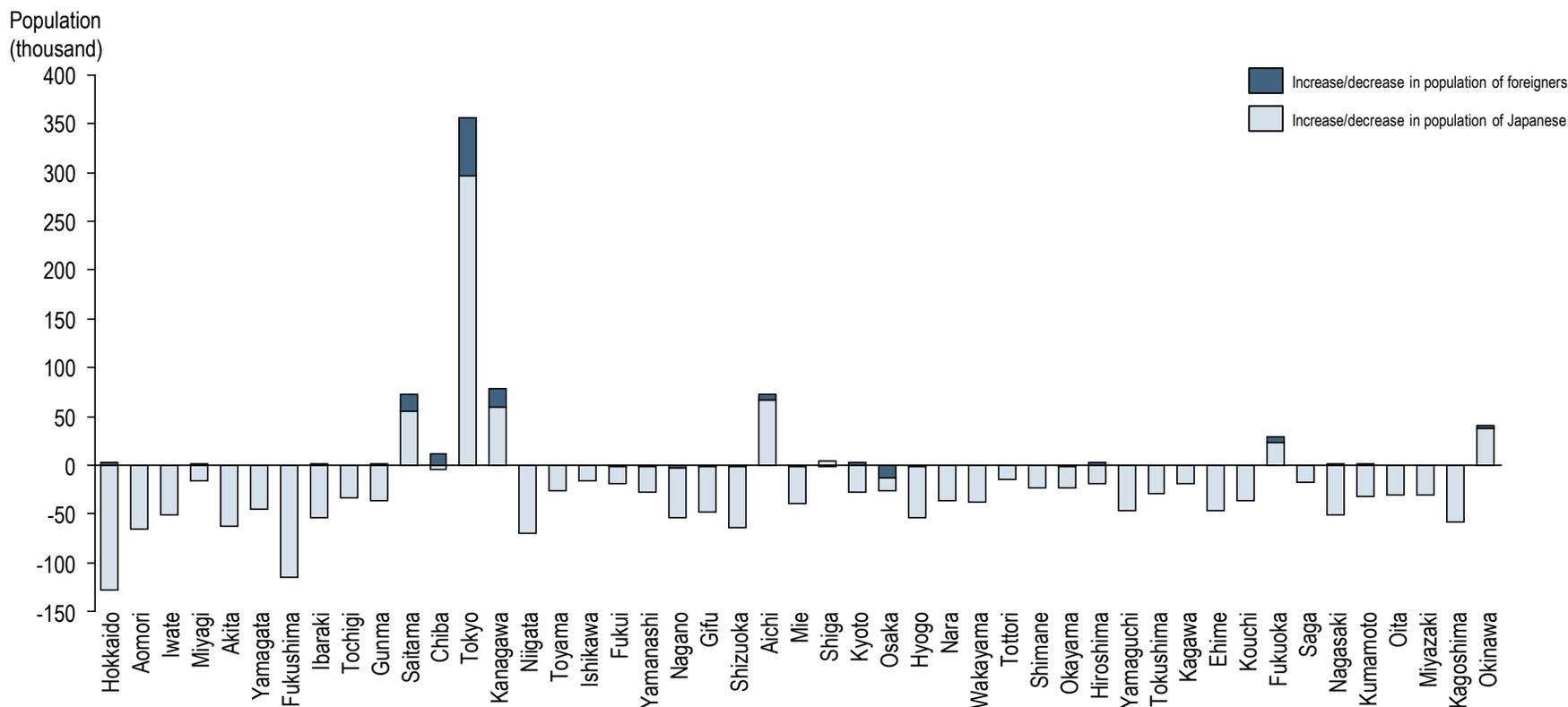
Source: National Institution of Population and Social Security Research and MIC "Population Census"

Population movements in Japan

The population is increasing only in Greater Tokyo, Aichi prefecture, Fukuoka prefecture and Okinawa prefecture. The same tendency can be seen in the increase/decrease of foreigners population.

- The population of foreigners is drastically increasing in Greater Tokyo and slightly increasing in the Aichi prefectures and prefectures with regional core cities.

Increase/decrease in population of each prefecture from FY 2010 to 2015.



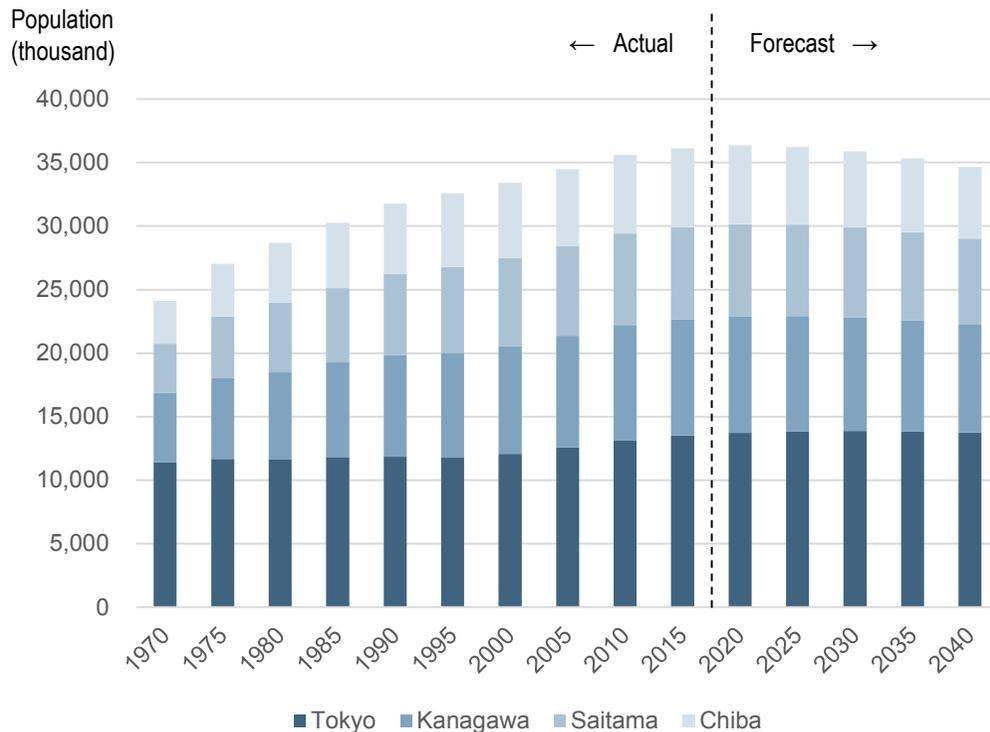
Source: National Institution of Population and Social Security Research and MIC "Population Census"

Population movements in Greater Tokyo

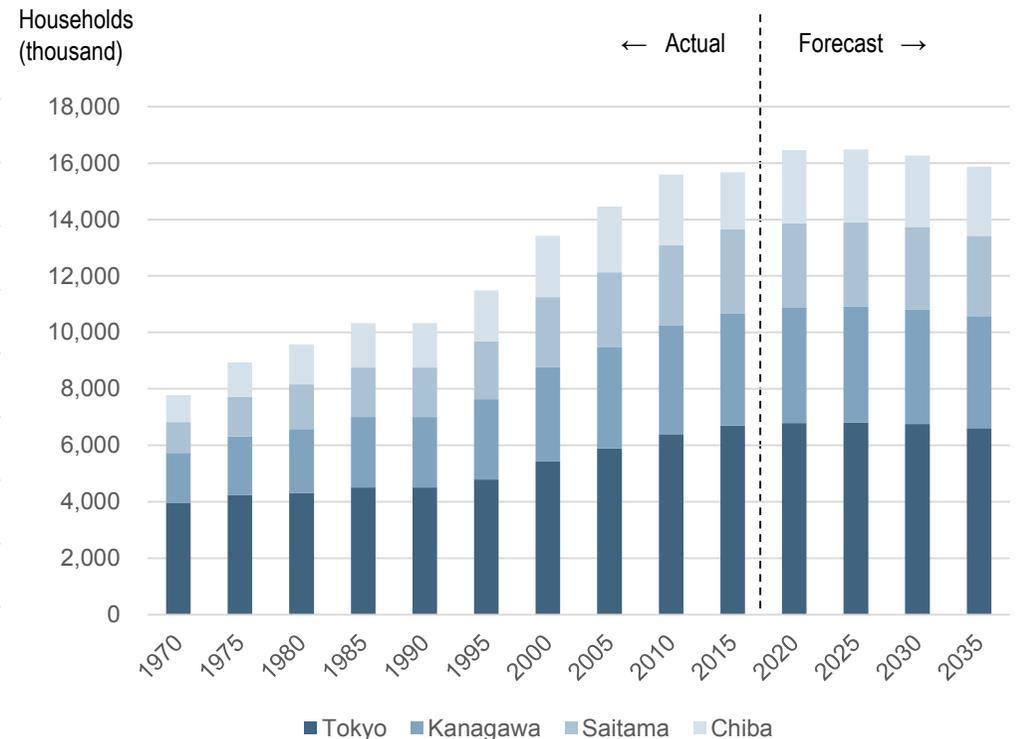
The population and number of households in the Greater Tokyo will continue to rise together, and it is expected that they would reach their peak in 2020 and 2025 respectively.

- It is anticipated that the population in the Greater Tokyo will continue to rise till 2020.
- On the other hand, the number of households is projected to increase until 2025.

Population of Greater Tokyo



Number of households in Greater Tokyo



Source: National Institution of Population and Social Security Research and MIC "Population Census"

Note 1: Median-fertility (median-mortality) projection is used for population forecast.

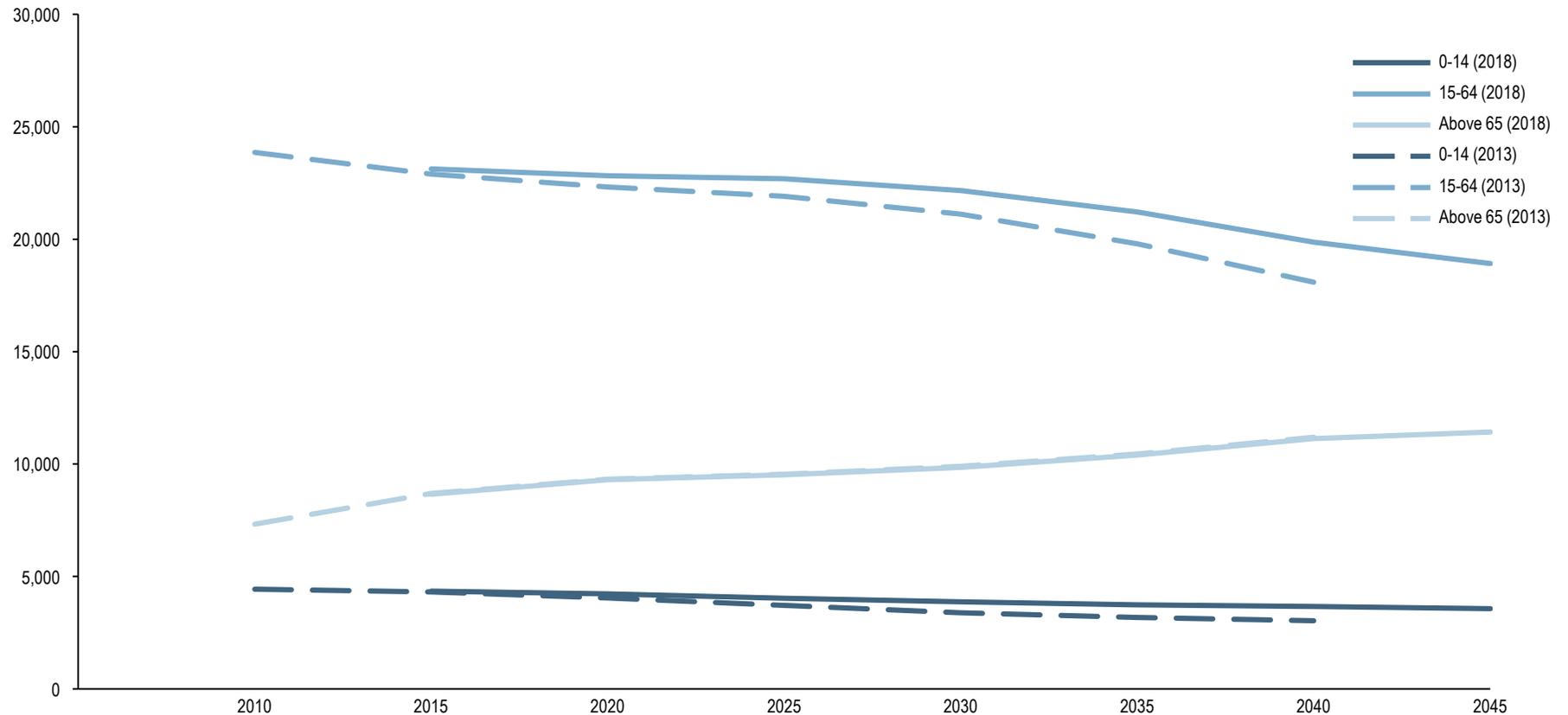
Note 2: Forecast of population and the number of households are based on the "Population Census" in 2010. However, the data of 2015 is based on the population census in 2015.

Population movements in Japan

Although there is no change in the forecast and actual population of the elderly in 2013, young and working age population is rising.

Comparison on age-wise population forecast of the Tokyo area

Households (thousand)



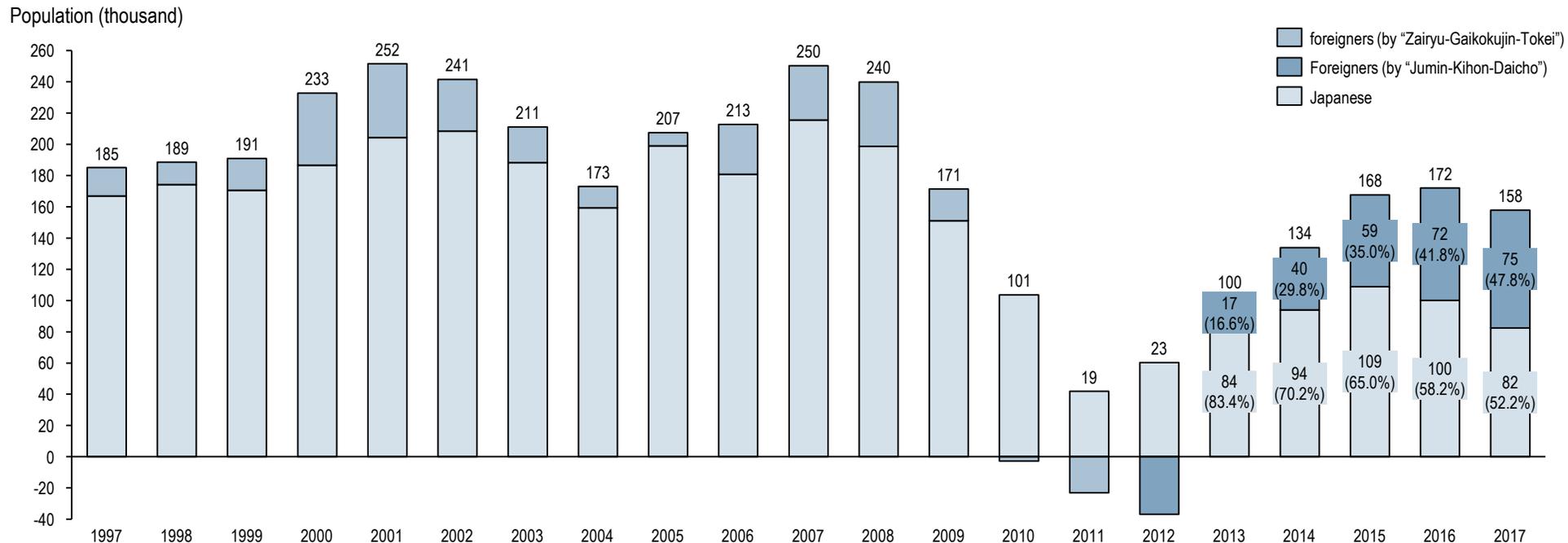
Source: National Institution of Population and Social Security Research and MIC "Population Census"

Population movements in Greater Tokyo

The population of Greater Tokyo area is rising, but a little less than 50% of the increased population is accounted to foreigners. In the future, it seems that the population growth of Greater Tokyo will be supported by the foreigners.

- The foreign population dipped temporarily due to the global financial crisis and aftermath of the 2011 earthquake, but has been rising in line with economic recovery.
- Foreigners accounted for 38.6% of the population growth in this area.

Incremental population growth of foreign and Japanese residents in Greater Tokyo



Sources: "Statistics on Foreign national residents" compiled by Ministry of Justice and "Basic resident registers" compiled by Ministry of Internal Affairs and Communications

Note 1: The population of foreign national is based on the Statistics on Foreign national residents till 2011. In 2012 and later, population is based on the Basic resident registration.

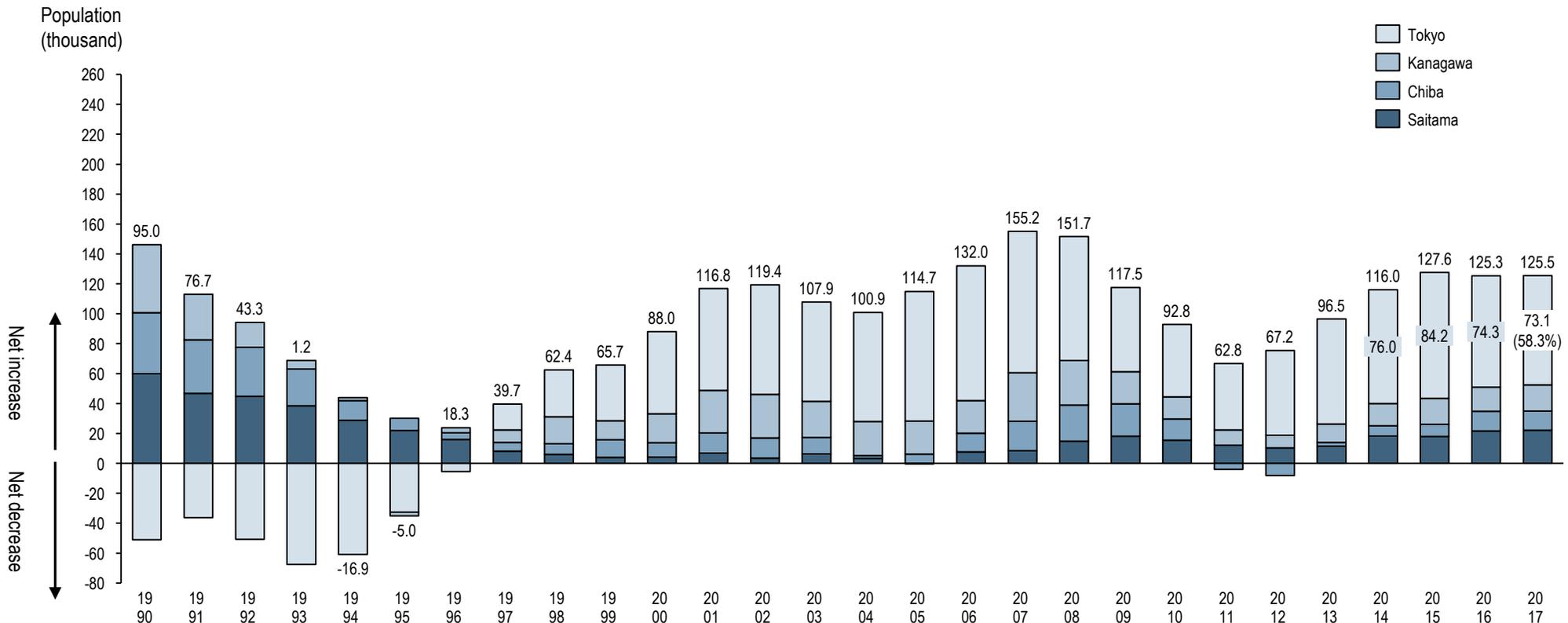
Note 2: The statistics of Foreign nationals used the data as of the end of December. Till 2012, the Basic resident registration used the data as of March 31 of the year. Since 2013, it uses the data of population as on January 1 of the following year.

Population movements in Greater Tokyo

Population inflow to Tokyo has been decreasing continuously since 2016, whereas population in the Greater Tokyo area is increasing owing to population inflow to three peripheral prefectures in 2017.

- The number of net inflows in 2017 recovered to the level of 2005 or 2006.
- The inflow is projected to continue.

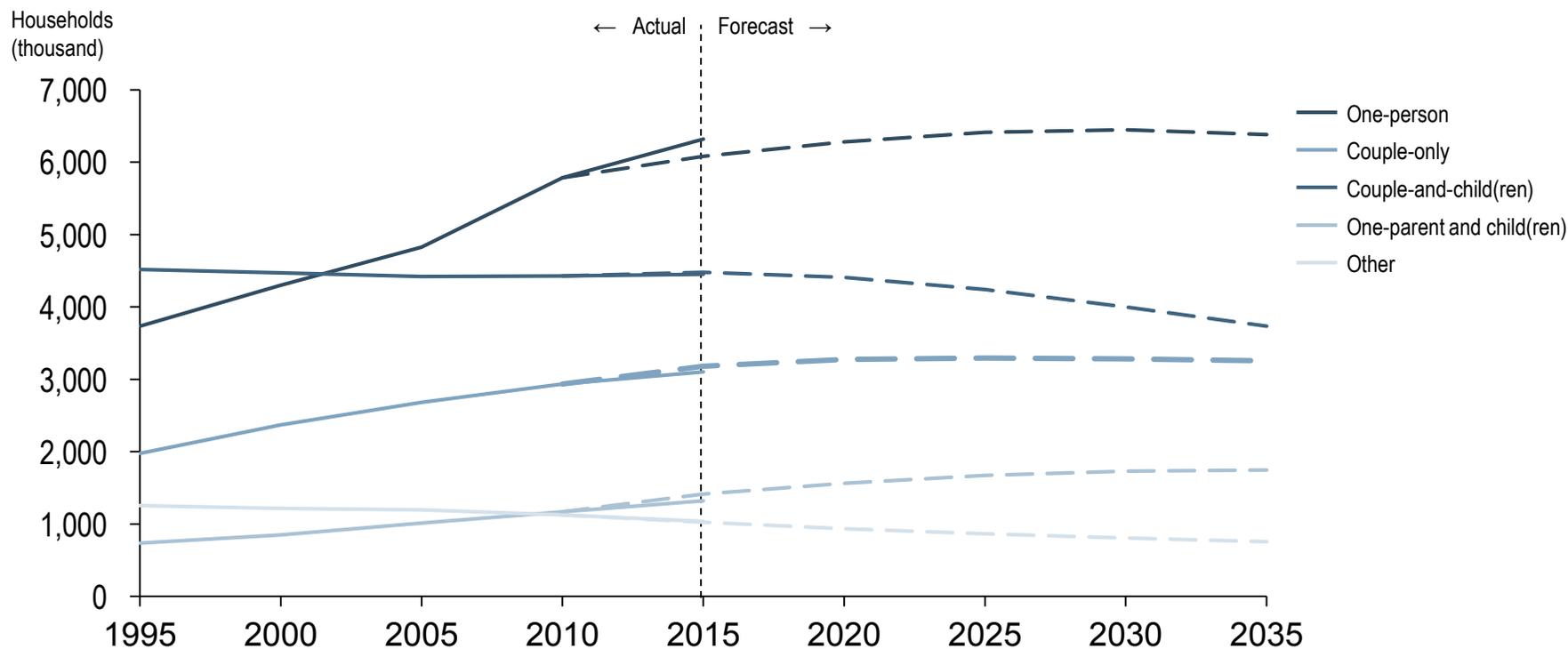
Net inflows of people to Greater Tokyo



Amongst the number of households in Greater Tokyo, the tendency of single-person household to occupy higher ratio is expected to continue in the future.

- However, the number of single-person households is expected to peak out in 2030.
- Households of couple with children will reduce from 2020, while the households of only couple or children with single parent will slightly increase.

Number of households by family composition in Greater Tokyo



Source: National Institution of Population and Social Security Research and MIC "Population Census"

Note 1: The solid line shows the actual value based on the population census. The dotted line shows the predicted value based on the data of population census in 2010.

Note 2: Median-fertility (median-mortality) projection is used for household forecast.

Population movements in central Tokyo

Out of the 8 wards among the 23 wards of Tokyo, the population is projected to rise by more than 10% over the next 30 years

- In 2045, only Adachi is expected to have a decrease in population by more than 10% compared to 2015.
- It is expected that population will continue to rise over the next 30 years in 18 wards excluding Nakano, Kita, Edogawa, Katsushika and Adachi.

Population growth trends in the 23 wards of Tokyo (assuming the population of each ward is 100 in 2010)

| Ward | ← Actual | | Forecast → | | | | | |
|------------|----------|-------|------------|-------|-------|-------|-------|-------|
| | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Chuo | 87.0 | 100.0 | 110.4 | 118.7 | 125.2 | 129.9 | 133.1 | 134.9 |
| Minato | 84.3 | 100.0 | 111.0 | 119.4 | 125.8 | 130.2 | 132.9 | 134.4 |
| Chiyoda | 80.7 | 100.0 | 111.3 | 120.0 | 126.2 | 130.0 | 132.1 | 132.8 |
| Koto | 92.5 | 100.0 | 105.6 | 109.8 | 112.9 | 115.0 | 116.2 | 116.7 |
| Taito | 88.8 | 100.0 | 104.6 | 108.6 | 111.9 | 114.3 | 115.8 | 116.4 |
| Shinagawa | 94.4 | 100.0 | 104.5 | 108.2 | 110.9 | 112.8 | 113.8 | 114.2 |
| Bunkyo | 94.0 | 100.0 | 105.1 | 108.8 | 111.3 | 112.9 | 113.5 | 113.3 |
| Nerima | 99.2 | 100.0 | 103.8 | 106.5 | 108.4 | 109.8 | 110.3 | 110.1 |
| Itabashi | 95.4 | 100.0 | 103.7 | 106.1 | 107.8 | 108.7 | 109.0 | 108.6 |
| Shibuya | 91.1 | 100.0 | 102.6 | 105.1 | 107.0 | 108.2 | 108.6 | 108.3 |
| Meguro | 96.7 | 100.0 | 103.1 | 105.3 | 106.9 | 108.0 | 108.4 | 108.2 |
| Arakawa | 95.8 | 100.0 | 102.8 | 104.9 | 106.5 | 107.5 | 108.0 | 107.9 |
| Sumida | 96.6 | 100.0 | 102.0 | 103.7 | 104.8 | 105.4 | 105.6 | 105.4 |
| Suginami | 97.4 | 100.0 | 101.6 | 103.3 | 104.7 | 105.3 | 105.2 | 104.6 |
| Ota | 96.7 | 100.0 | 102.4 | 104.1 | 105.0 | 105.4 | 105.2 | 104.6 |
| Shinjuku | 97.8 | 100.0 | 102.0 | 102.9 | 103.3 | 103.2 | 102.5 | 101.3 |
| Setagaya | 97.1 | 100.0 | 101.2 | 101.9 | 102.5 | 102.6 | 102.1 | 101.2 |
| Toshima | 97.8 | 100.0 | 100.2 | 100.6 | 101.0 | 101.5 | 101.5 | 100.9 |
| Nakano | 95.9 | 100.0 | 100.2 | 100.1 | 100.1 | 100.2 | 100.0 | 99.2 |
| Kita | 98.4 | 100.0 | 100.7 | 101.0 | 100.9 | 100.4 | 99.7 | 98.6 |
| Edogawa | 99.7 | 100.0 | 99.4 | 98.0 | 96.3 | 94.6 | 92.9 | 91.0 |
| Katsushika | 99.9 | 100.0 | 99.1 | 97.8 | 96.2 | 94.5 | 92.8 | 91.0 |
| Adachi | 102.0 | 100.0 | 98.2 | 96.0 | 93.7 | 91.5 | 89.5 | 87.4 |

Source: National Institution of Population and Social Security Research and MIC "Population Census"

Note 1: Forecast of population is based on the data of "Population Census" in 2015. Median-fertility (median-mortality) projection is used for population forecast.

Population aging in central Tokyo

In 2015, the whole 23 wards of Tokyo had become super-aged society, and in 2040, all the wards will turn into a super-aged society

Population aging by ward

| | 1990 | 1995 | 1800 | 2005 | 2010 | ← Actual 2015 | Forecast→ 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | | |
|------------|-------|-------|-------|-------|-------|------------------|-------------------|-------|-------|-------|-------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 23 wards | 11.2% | 13.7% | 16.4% | 18.6% | 20.0% | 21.8% | 22.1% | 22.1% | 22.9% | 24.6% | 27.0% | 28.6% |  >30%  21-30% | } Super-aged society |
| Nerima | 9.5% | 12.2% | 15.4% | 20.3% | 19.3% | 22.1% | 23.9% | 25.5% | 27.7% | 30.3% | 33.0% | 34.9% | | |
| Suginami | 11.8% | 14.4% | 16.8% | 18.8% | 23.1% | 22.6% | 23.6% | 24.2% | 25.6% | 27.7% | 30.6% | 32.9% |  17.5-21%  14-17.5% | } Aged society |
| Setagaya | 11.1% | 13.4% | 16.1% | 17.3% | 18.3% | 21.5% | 22.5% | 23.4% | 25.2% | 27.6% | 30.3% | 32.2% | | |
| Adachi | 9.3% | 11.9% | 15.9% | 19.9% | 22.2% | 25.1% | 25.7% | 25.4% | 26.0% | 27.7% | 30.2% | 31.4% |  7-14% | } Aging society |
| Katsushika | 10.6% | 13.2% | 16.6% | 19.9% | 22.0% | 24.6% | 25.1% | 24.9% | 25.7% | 27.3% | 29.5% | 30.5% | | |
| Shibuya | 12.6% | 15.2% | 16.9% | 18.5% | 19.6% | 20.6% | 21.3% | 21.7% | 23.0% | 25.1% | 27.8% | 29.9% | | |
| Itabashi | 10.0% | 12.7% | 16.3% | 19.3% | 21.3% | 23.4% | 23.9% | 23.7% | 24.3% | 25.6% | 27.9% | 29.5% | | |
| Nakano | 12.1% | 14.6% | 16.3% | 18.2% | 19.9% | 21.2% | 21.9% | 22.3% | 23.3% | 24.9% | 27.1% | 28.9% | | |
| Taito | 15.9% | 18.8% | 21.1% | 23.1% | 23.6% | 23.8% | 23.0% | 22.0% | 22.1% | 23.7% | 26.5% | 28.6% | | |
| Ota | 11.6% | 14.1% | 16.3% | 18.4% | 20.4% | 22.5% | 22.7% | 22.5% | 23.1% | 24.7% | 26.9% | 28.3% | | |
| Edogawa | 8.1% | 9.9% | 12.8% | 15.4% | 18.1% | 20.7% | 21.1% | 20.9% | 21.9% | 23.9% | 26.3% | 27.3% | | |
| Toshima | 12.8% | 15.7% | 18.4% | 21.1% | 19.3% | 20.0% | 20.4% | 20.5% | 21.3% | 22.8% | 25.1% | 26.9% | | |
| Kita | 12.7% | 16.0% | 19.3% | 21.6% | 24.0% | 25.8% | 25.4% | 24.2% | 23.7% | 24.1% | 25.6% | 26.7% | | |
| Koto | 9.4% | 12.2% | 15.2% | 17.3% | 19.1% | 21.3% | 21.1% | 20.4% | 20.6% | 22.2% | 24.9% | 26.7% | | |
| Arakawa | 13.7% | 16.5% | 18.9% | 20.8% | 21.9% | 23.4% | 22.8% | 21.8% | 21.7% | 22.6% | 24.5% | 26.0% | | |
| Minato | 13.7% | 16.3% | 17.9% | 17.8% | 17.2% | 17.6% | 17.2% | 17.3% | 18.6% | 20.8% | 23.7% | 26.0% | | |
| Bunkyo | 13.9% | 16.4% | 17.9% | 18.3% | 18.9% | 19.8% | 19.5% | 19.3% | 20.1% | 21.7% | 24.0% | 25.8% | | |
| Shinagawa | 11.6% | 14.5% | 17.4% | 18.0% | 19.4% | 20.9% | 20.5% | 19.9% | 20.2% | 21.6% | 24.0% | 25.8% | | |
| Chiyoda | 16.6% | 20.2% | 20.4% | 20.2% | 19.2% | 18.1% | 17.4% | 17.2% | 18.2% | 20.2% | 23.1% | 25.3% | | |
| Sumida | 13.1% | 15.5% | 18.1% | 20.2% | 21.4% | 22.9% | 22.4% | 21.3% | 21.1% | 22.0% | 23.9% | 25.2% | | |
| Meguro | 12.5% | 14.8% | 17.4% | 18.6% | 19.6% | 20.0% | 19.5% | 19.1% | 19.8% | 21.1% | 23.1% | 24.7% | | |
| Shinjuku | 12.6% | 15.3% | 17.1% | 18.7% | 19.1% | 20.1% | 19.7% | 19.3% | 19.7% | 20.9% | 22.9% | 24.4% | | |
| Chuo | 15.4% | 17.6% | 18.3% | 16.3% | 15.9% | 16.1% | 15.4% | 15.0% | 16.0% | 18.1% | 21.0% | 23.3% | | |

Source: National Institution of Population and Social Security Research and MIC "Population Census"

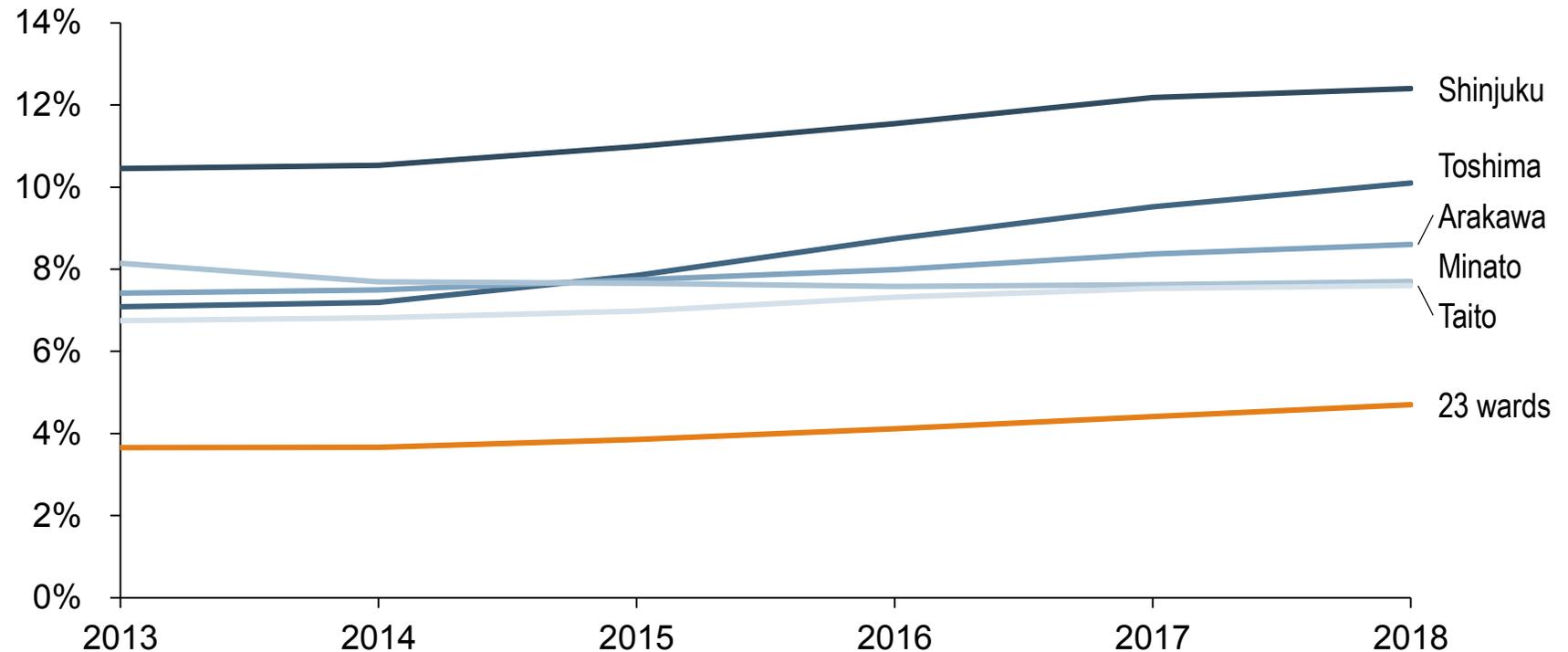
Note 1: Forecast of population is based on the data of "Population Census" in 2015. Median-fertility (median-mortality) projection is used for population forecast.

Percentage of foreigners in central Tokyo

The percentage of foreigners in Tokyo are increasing, and there is a ward where the ratio is over 10%.

- The percentage in Shinjuku (over 10%) is the highest in Tokyo, and the percentages of Toshima and Arakawa are over 8%.
- In the other hand, the 23 wards as a whole have foreigners as 4.2% of their total population, indicating that the situation of each ward is quite different.

Percentage of foreigners in the 23 wards of Tokyo (top 5)



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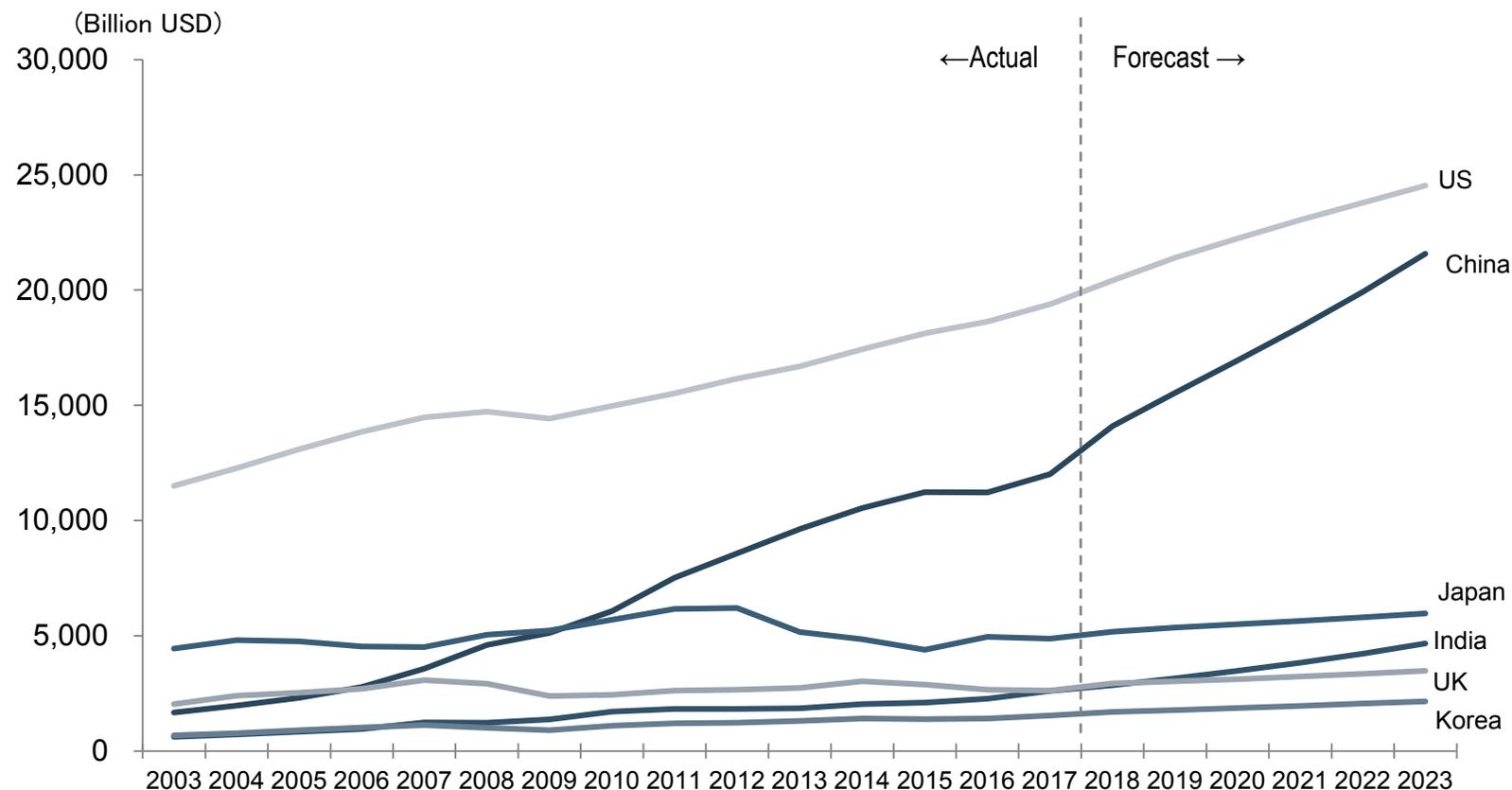
Hotel market

Real estate investment products

Japan remains one of the largest economies in the world and should not be ignored as an investment target

- Entering the 2020s, Japan will remain at third place globally in nominal GDP, ahead of developing countries such as India.

Nominal GDP of major countries

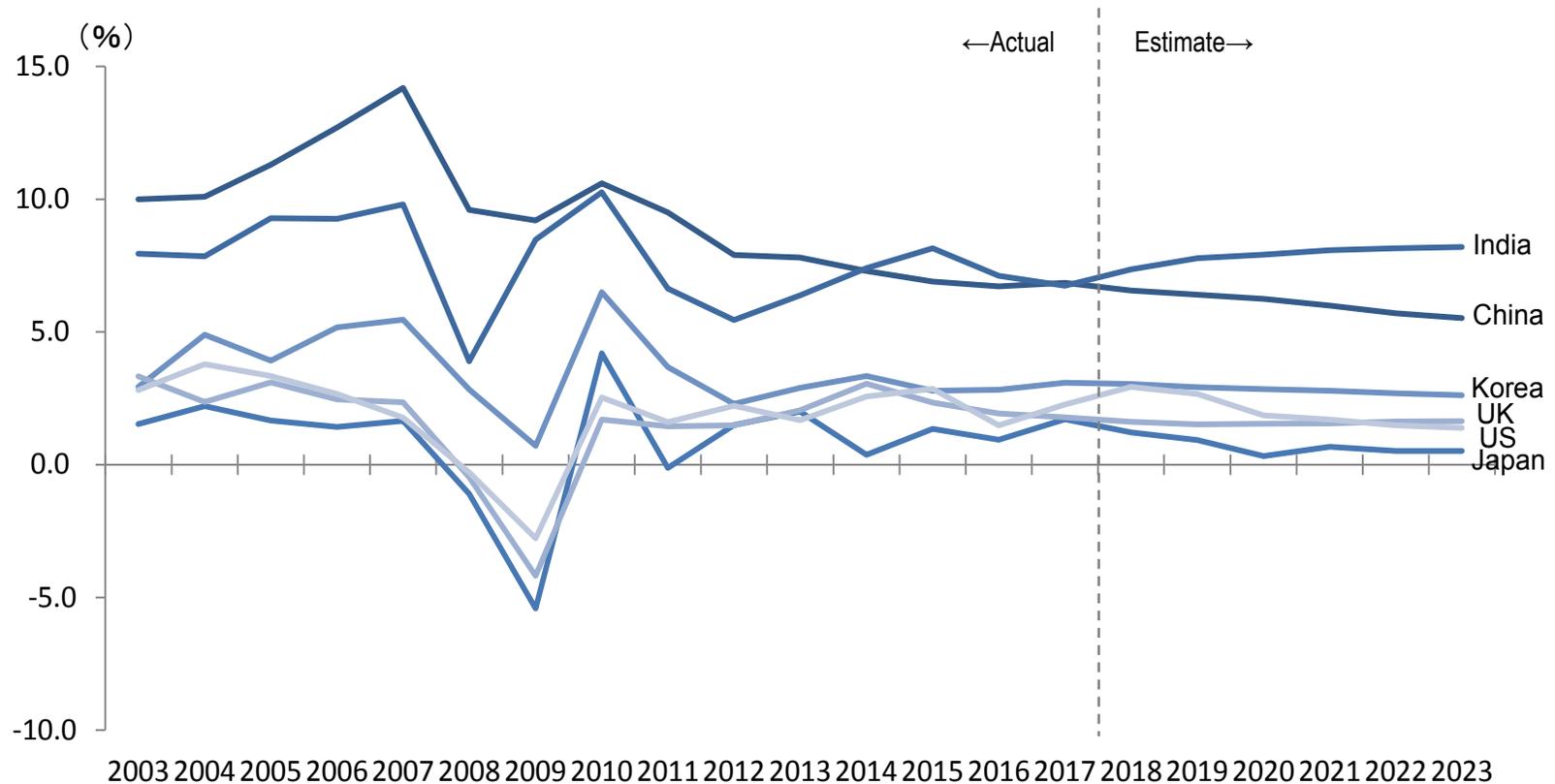


Source: Compiled by NRI from IMF "World Economic Outlook Database (2017 Apr.);" data

Japan's economic growth is low compared to other major economies and high growth going forward looks unlikely

■ IMF forecasts estimate Japan's GDP growth rate at around 0.5% for the next 5 years .

Real GDP growth rate of major economies

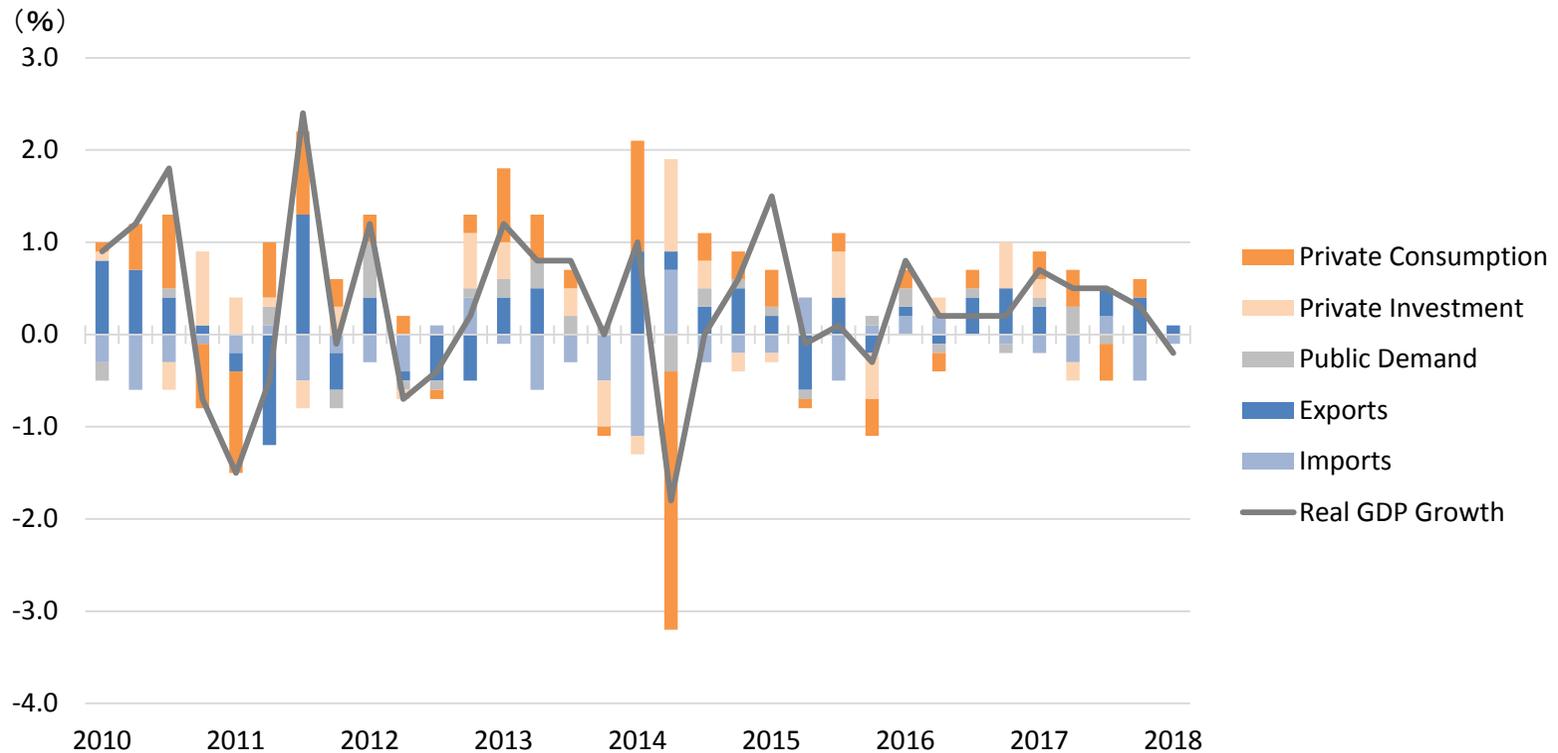


Source: Compiled by NRI from IMF "World Economic Outlook Database (2017 Apr.)" data

There has been a positive growth for past two years, but most recently it has turned negative.

- Main factor is that domestic demand, including personal consumption, capital investment and housing investment is poor.

Quarterly real GDP growth and contributions to changes (seasonally adjusted series, YoY)

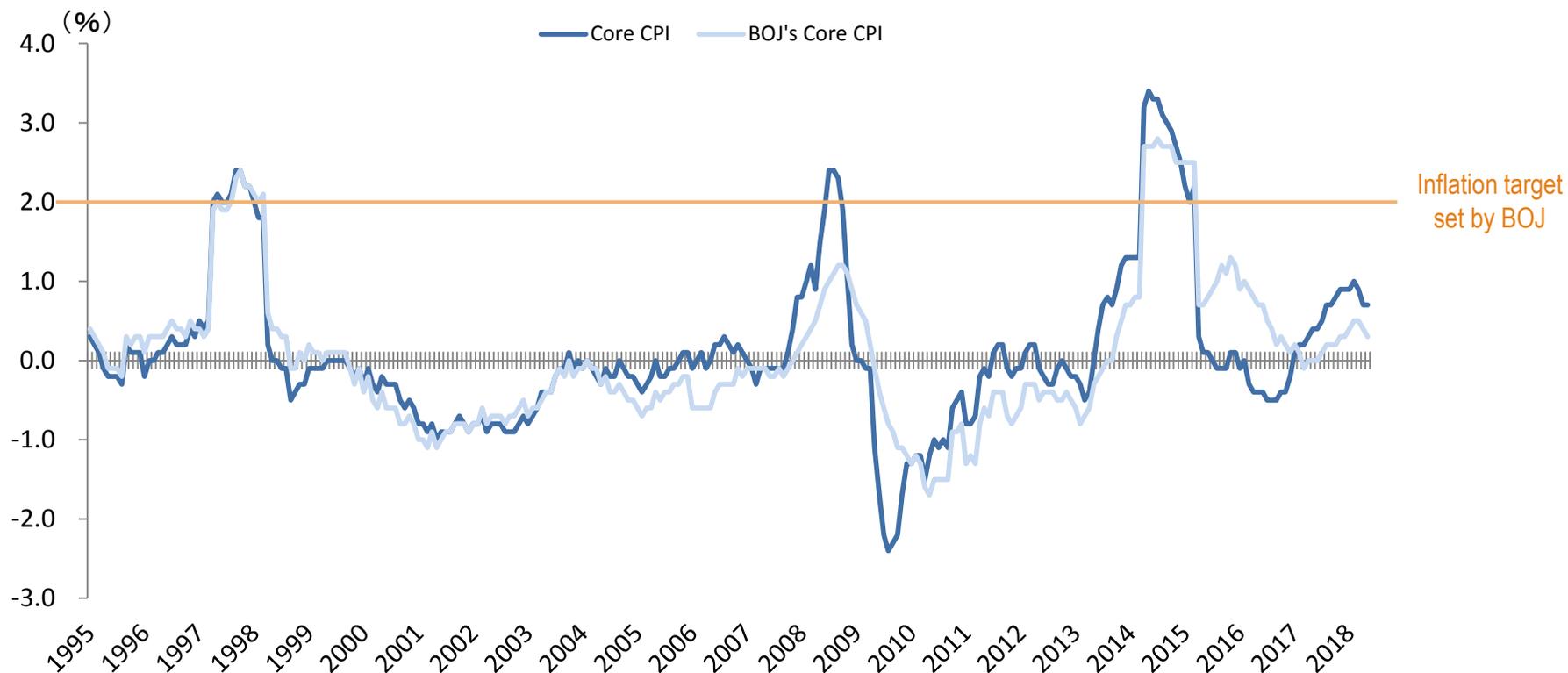


Source: Compiled by NRI from Cabinet Office "SNA (National Accounts of Japan)" data

Inflation rate has become stagnant and prices are rising slowly.

- Although the core CPI turned positive from a year earlier, Bank of Japan core CPI excluding the fresh foods and energy continues to decline. Most recently, it shifted to negative territory.

Year-on-year comparison for the same month of the consumer price index

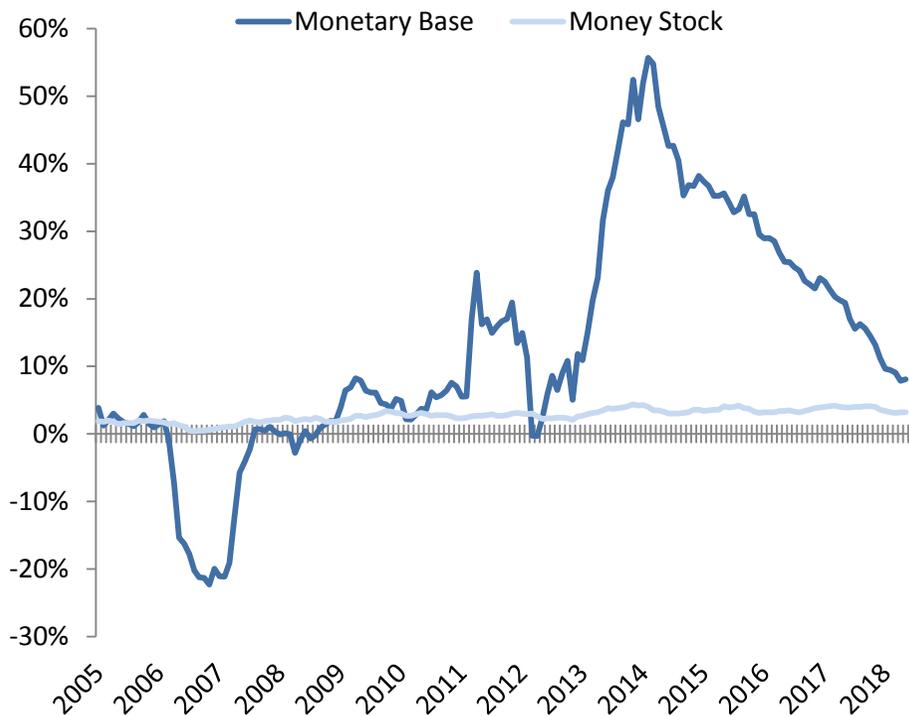


Sources: Compiled by NRI from Ministry of Internal Affairs and Communications "Consumer Price Index (CPI)"

The Bank of Japan continues a large-scale qualitative and quantitative accommodating policy.

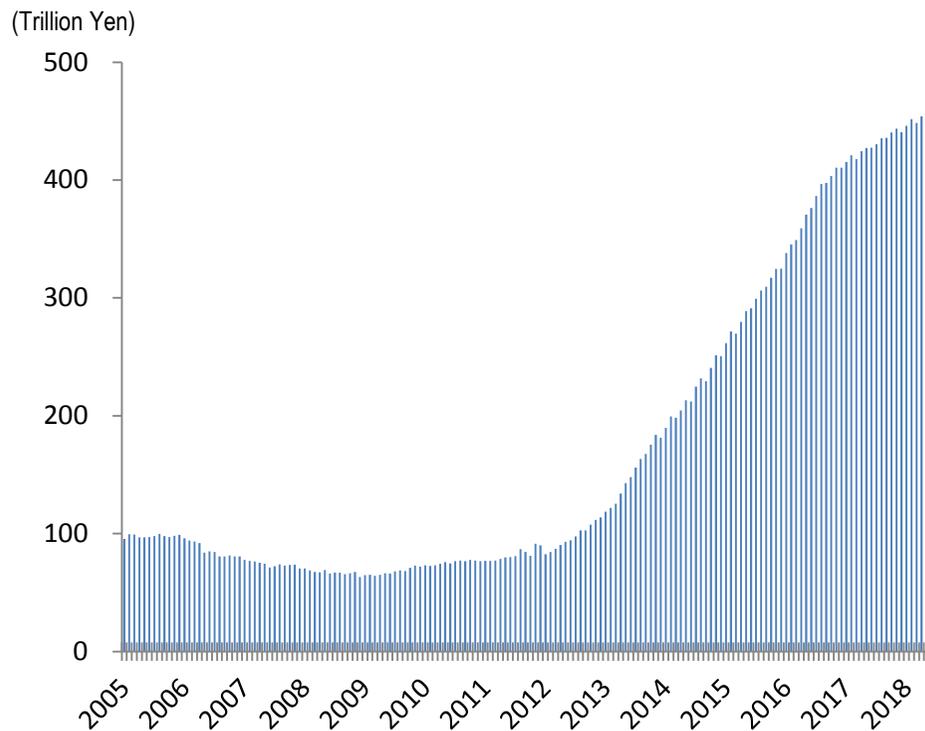
■ However, growth in money supply has slowed and JGB purchases by the BOJ is showing a downward trend.

YoY change of money supply (Average balance)



Source: Compiled by NRI from Bank of Japan "Monetary Base" data

BOJ's holdings of JGBs

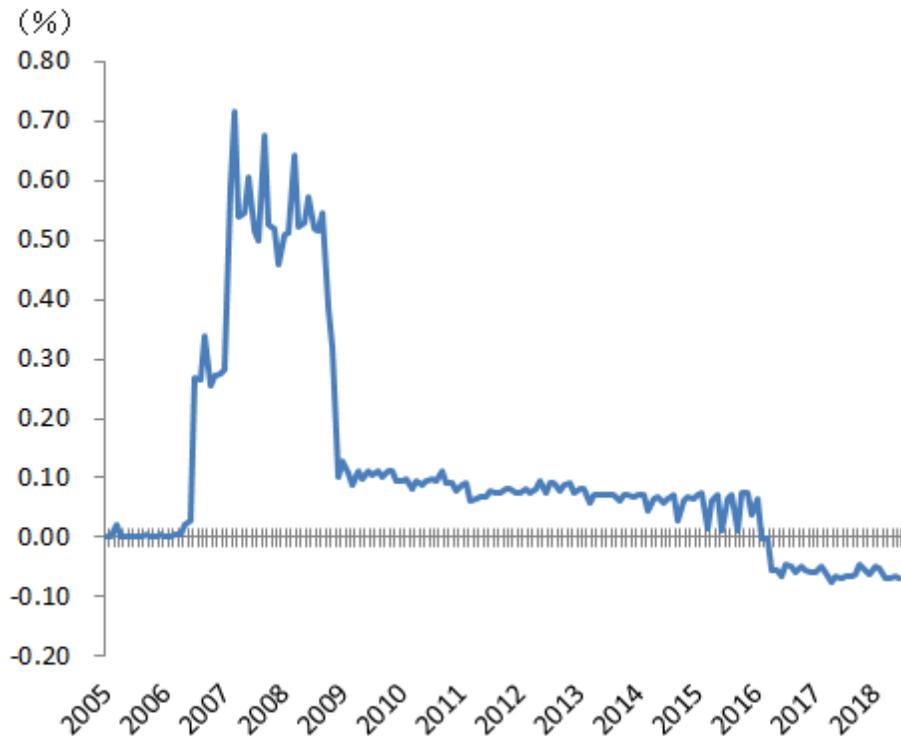


Source: Compiled by NRI from Bank of Japan "BOJ Accounts" data

Although the short-term interest rates are still negative, the long-term interest rates are shifting towards positive territory.

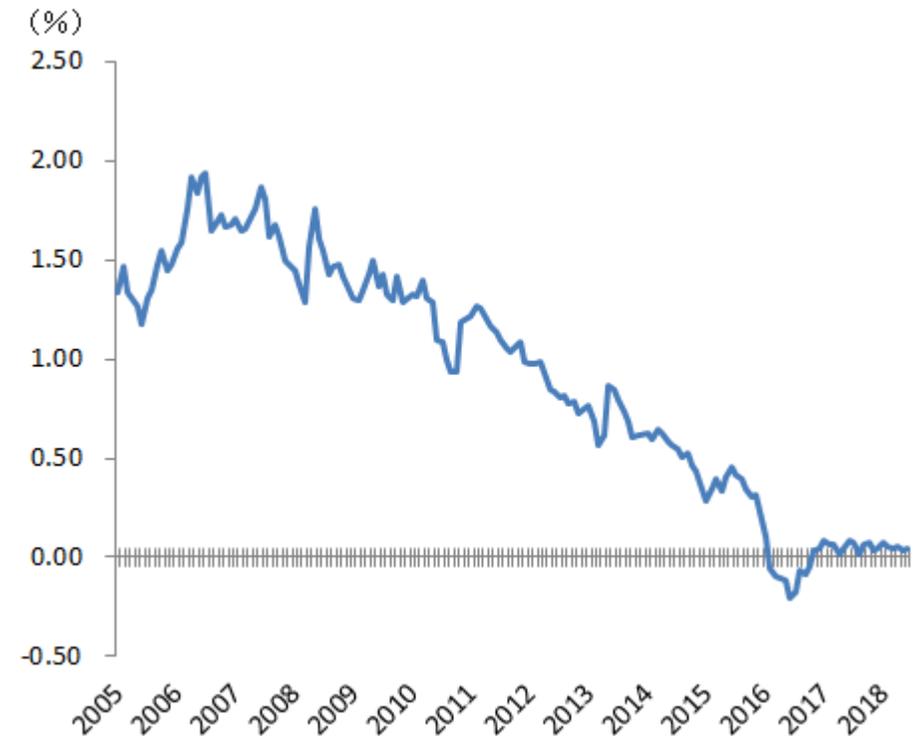
- In continuation of the negative interest rate policy of January 2016, the Bank of Japan introduced a long-term interest rate policy on September 2016 and announced a policy to buy long-term bond that shifts the long-term interest rate to 0%.

Short-term interest rate (unsecured call rate) (Each end of the month)



Source: Compiled by NRI from Bank of Japan "Short-term Money Market Rates" data

Long-term interest rate (10y-JGB) (Each end of the month)

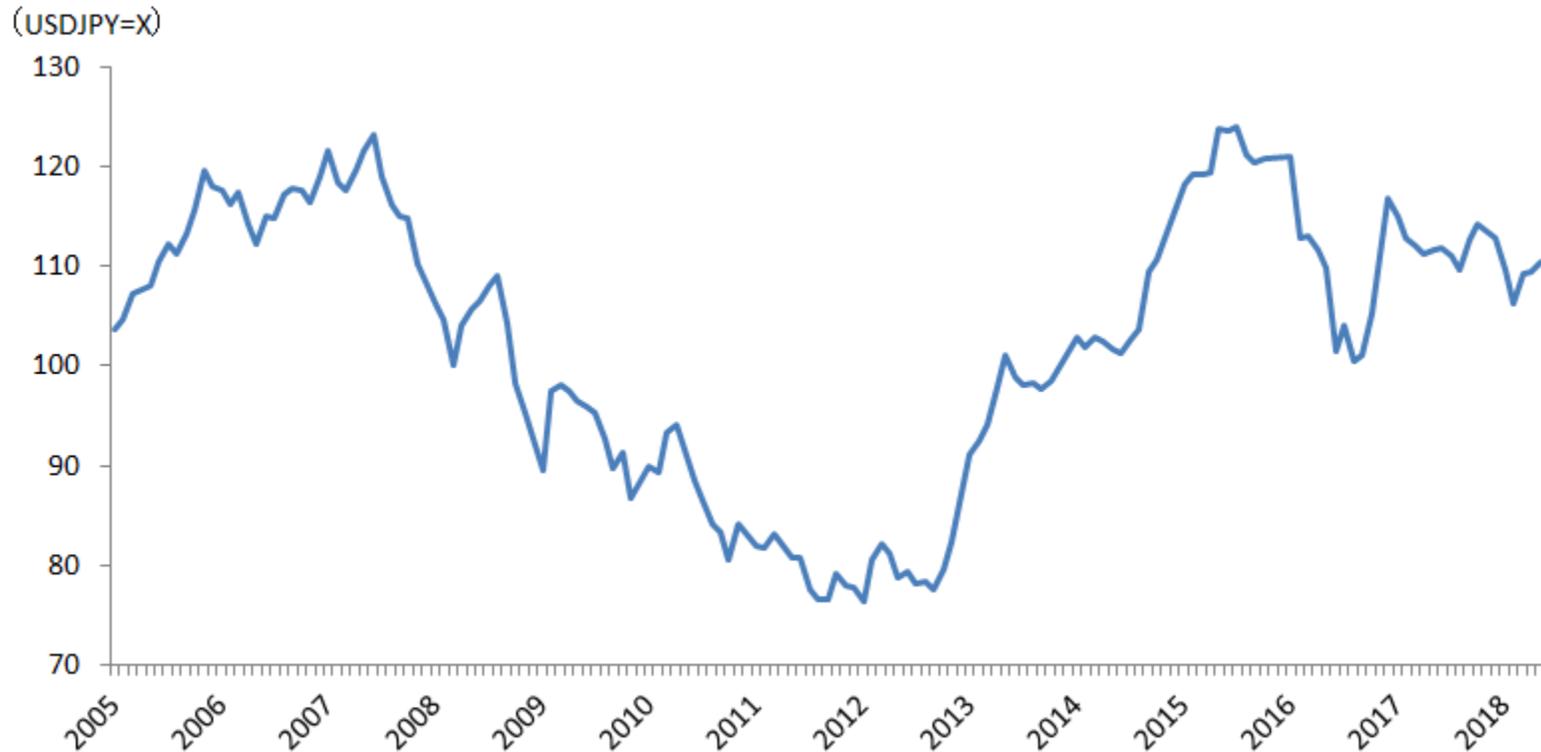


Source: Compiled by NRI from MOF "JGBs Interest Rate" data

In the middle of 2018, the exchange rate of yen is continuously moving without any sense of direction.

- Recent yen strength reflects mainly fading perceptions of a US rate hike, a risk-off mode by investors, and a Japanese current account surplus

Yen-dollar exchange rate (each end of the month)

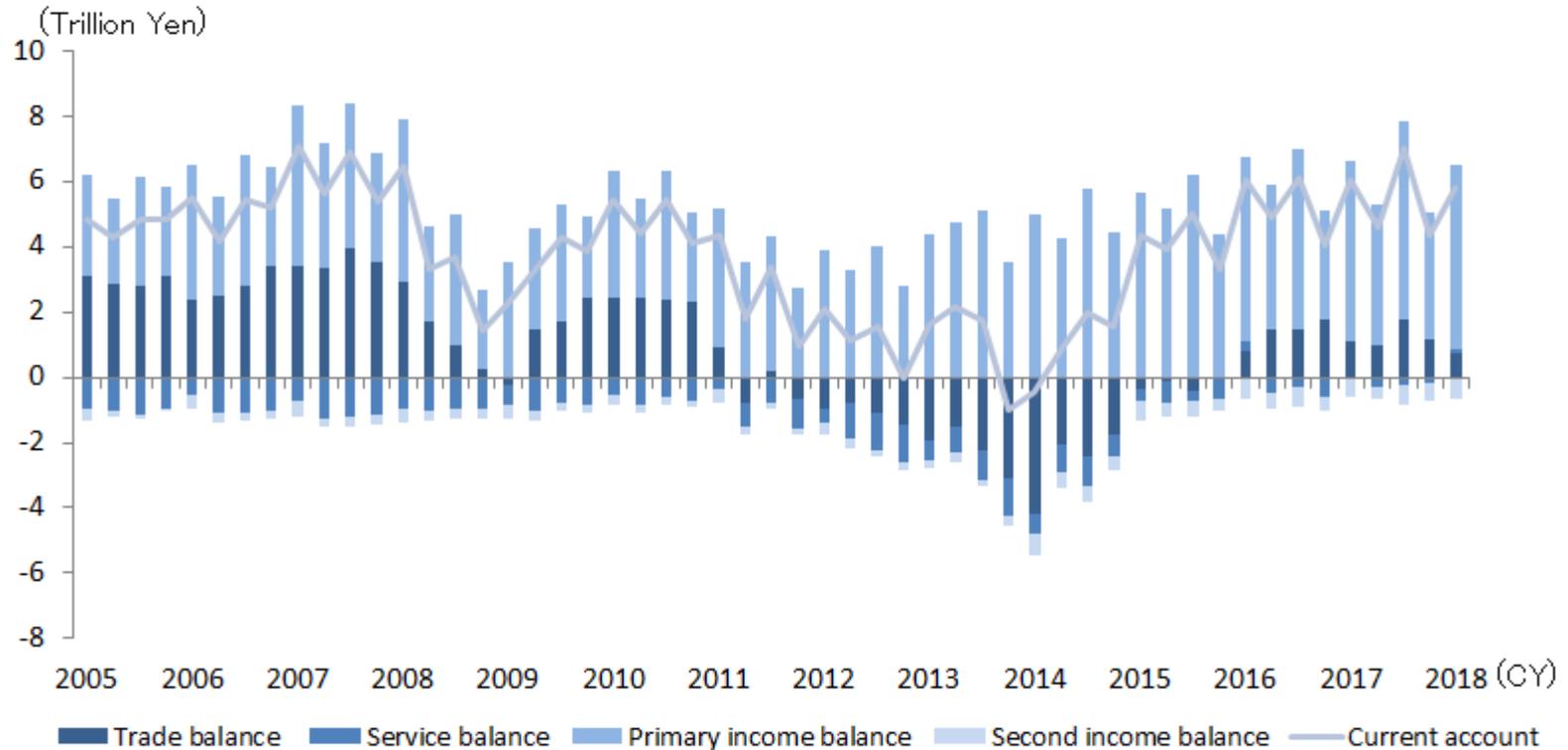


Source: Compiled by NRI from IMF "Exchange Rate Data" data

Trade balance return to its basic profitable tendency and the current account surplus tends to expand.

- Current account surplus continues to be at a high level.

Current account balance

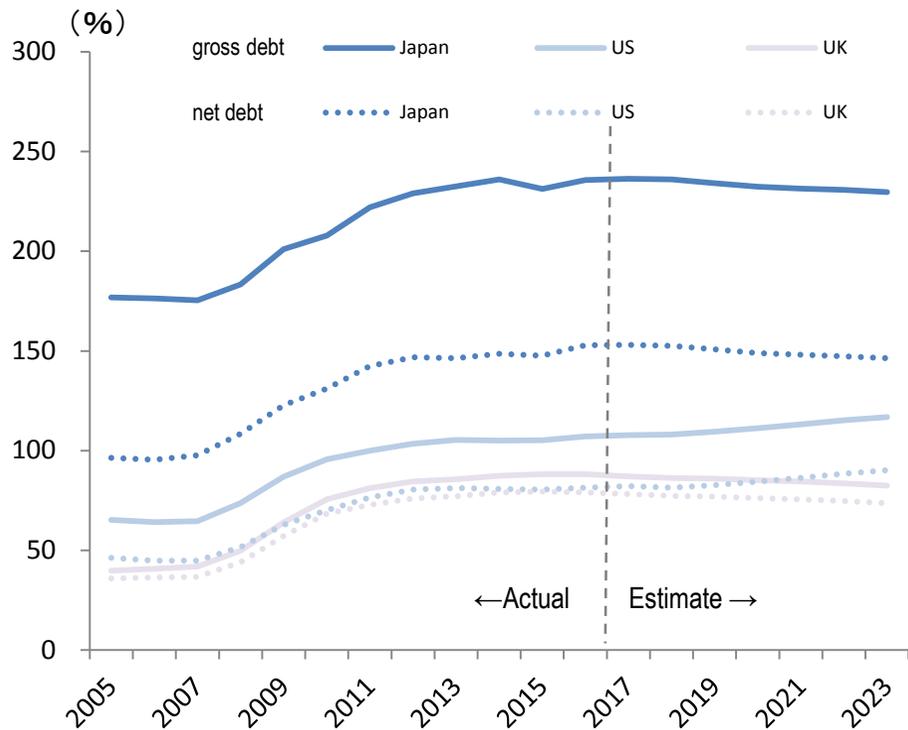


Source: Compiled by NRI from MOF "Balance of Payments" data

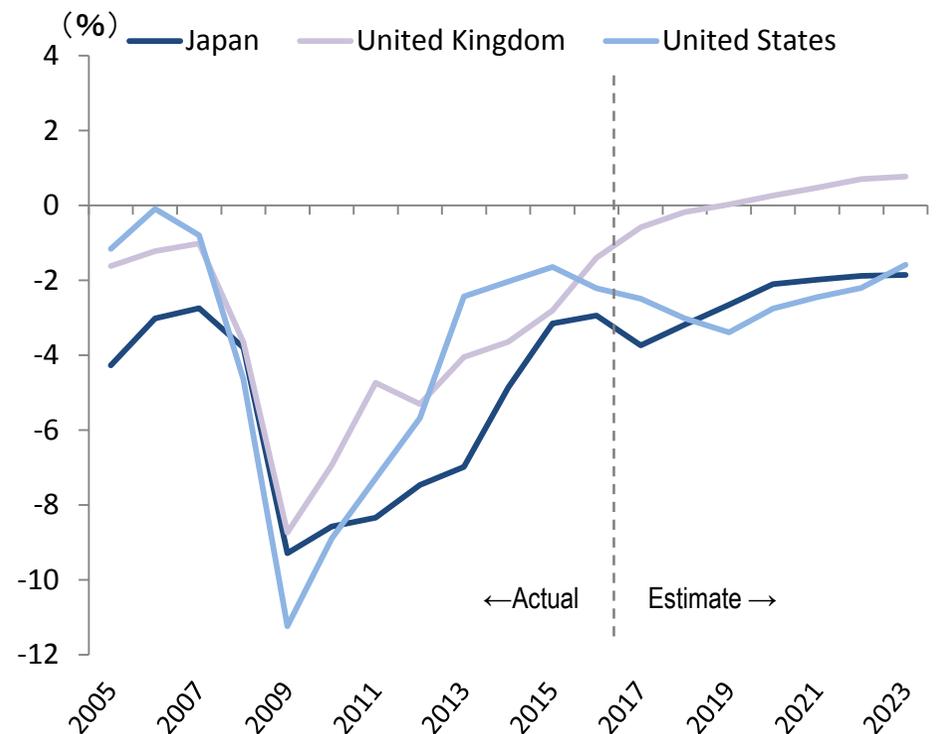
Government debt has plateaued at high level, while a primary fiscal balance surplus is not in sight.

- The government debt to GDP ratio has becoming flat in recent years due to a reduction in the primary balance deficit and restraint of interest payments due to monetary easing as well as the increase in nominal GDP that is the denominator of the ratio.

Government debt to GDP ratio



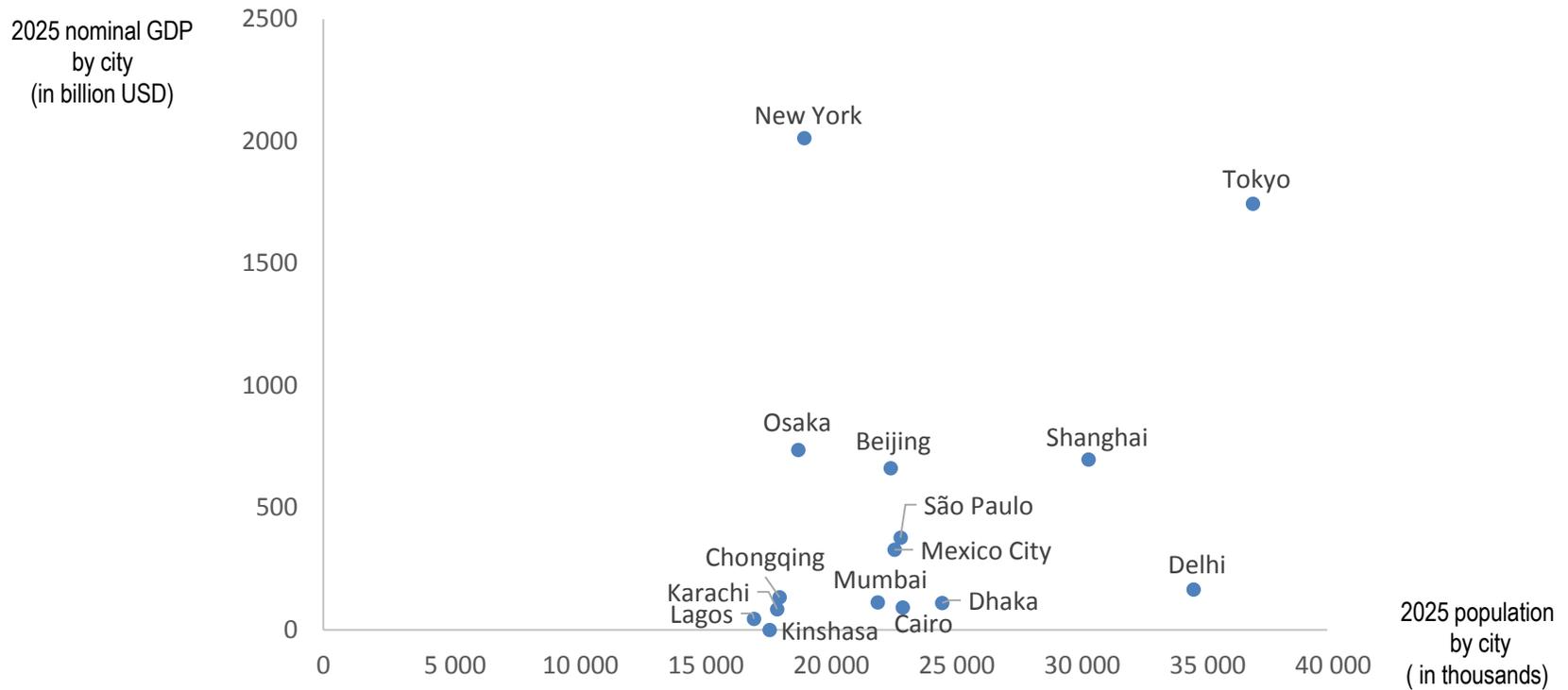
Primary balance to GDP ratio



Source: Compiled by NRI from IMF "World Economic Outlook Database (2017 Apr.);" data

Tokyo continues to be the world's largest city in terms of population and GDP.

Population/GDP forecast for 2025 (Top 15 cities in terms of population or GDP)

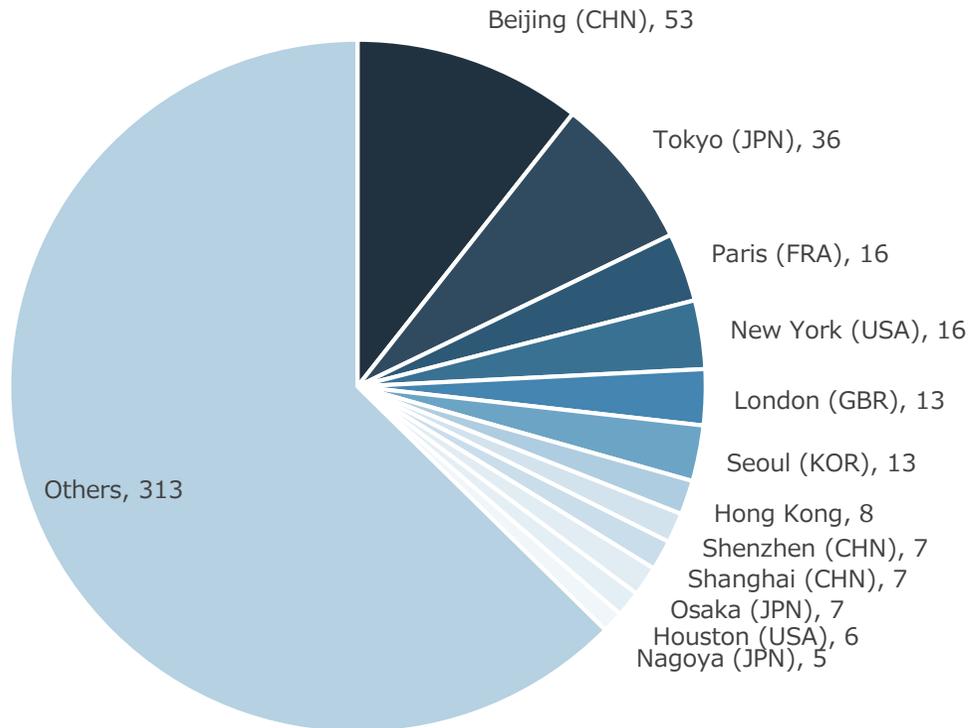


*No data for GDP of Dhaka and Kinshasa

Source: Compiled by NRI based on UN "World Urbanization Prospects" and Euromonitor data.

Tokyo has the second largest concentration of world-class enterprises.

Number of HQ of Fortune Global 500 companies by city (2018)



Fortune Global 500 companies in Tokyo (within top 200)

| Rank | Company | Revenue (Mil. USD) |
|------|------------------------------------|--------------------|
| 30 | Honda Motor | 138,646 |
| 45 | Japan Post Holdings | 116,616 |
| 55 | Nippon Telegraph & Telephone (NTT) | 106,500 |
| 79 | Hitachi | 84,559 |
| 85 | Softbank Group | 82,665 |
| 97 | Sony | 77,116 |
| 99 | JXTG Holdings | 76,629 |
| 129 | Mitsubishi | 68,301 |
| 130 | Marubeni | 68,057 |
| 145 | Dai-ishi Life Holdings | 63,522 |
| 177 | Mitsubishi UFJ Financial Group | 54,769 |
| 179 | Seven & I Holdings | 54,217 |
| 186 | Tokyo Electric Power | 52,809 |
| 192 | Sumitomo Mitsui Financial Group | 52,026 |
| 198 | Nippon Steel & Sumitomo Metal | 51,164 |

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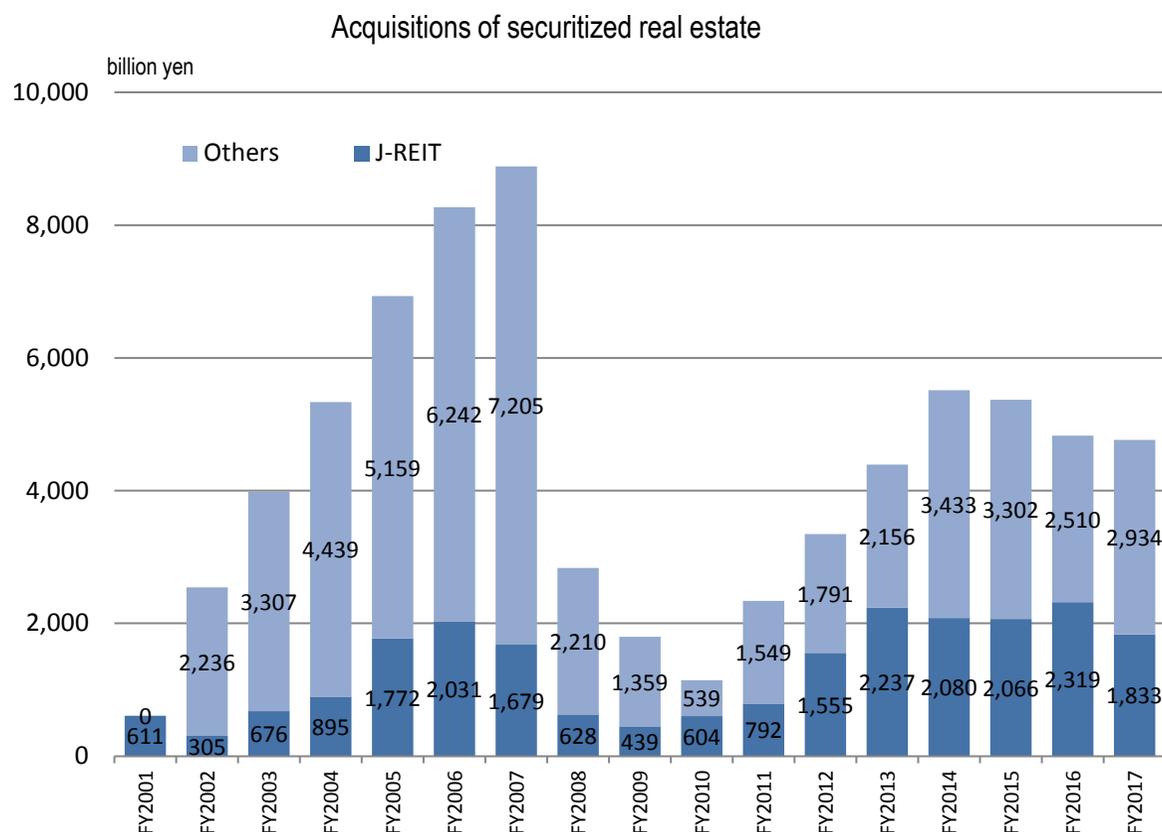
Logistics property market

Hotel market

Real estate investment products

Acquisitions of securitized real estate decreased in three consecutive years.

- Although it was on a recovery trend after the bankruptcy of Lehman brothers, the complexity level of acquisition was going up along with the rise in prices of real estate, and it seems that it turned to a declining trend.



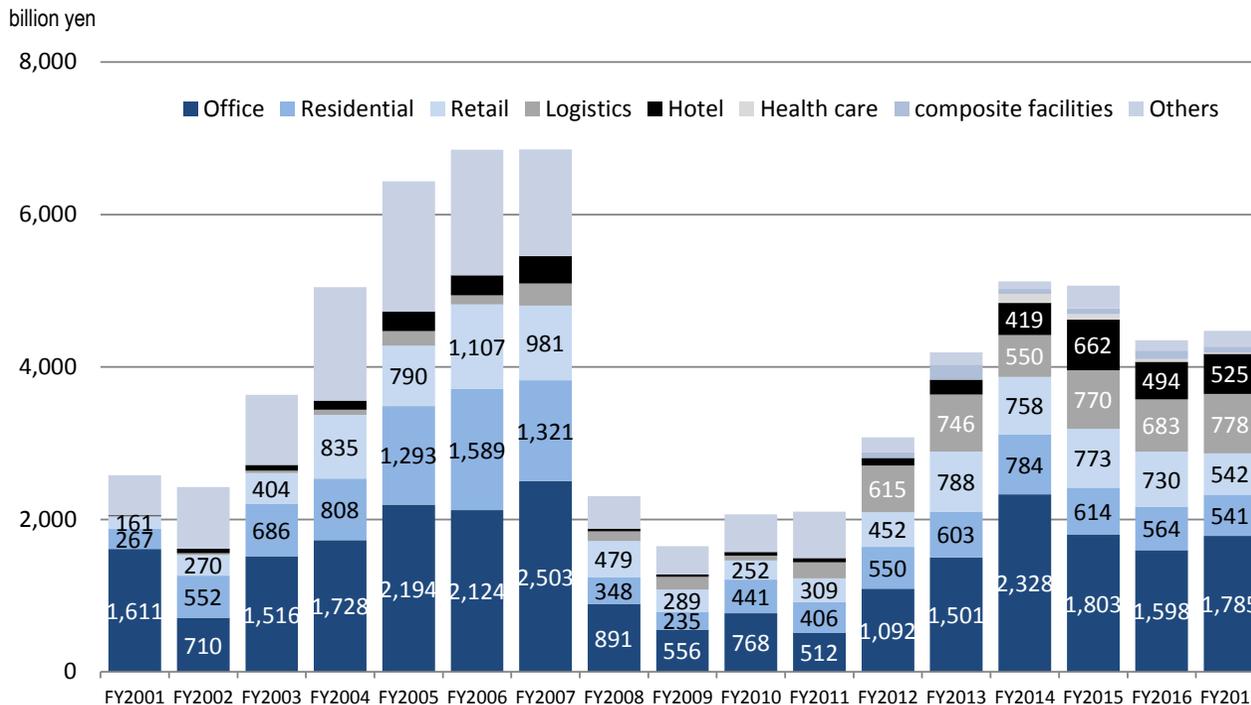
Source: Compiled by NRI from MLIT "Real Estate Securitization" data

Overview of real estate investment market in Japan

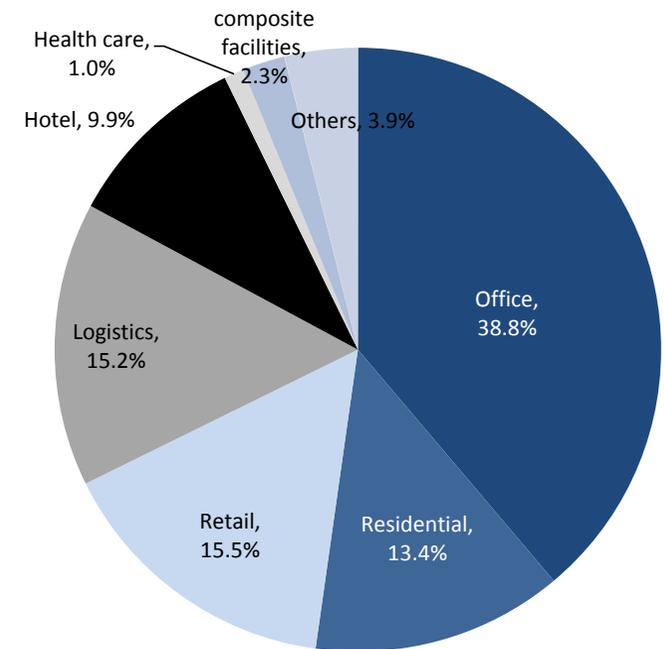
Structure in which office, residential, commercial and logistics occupy the 80% of transaction value will continue.

■ Because of the sudden increase in the inbound marketing, the hotel investment is also becoming popular as one of the main objectives.

Acquisitions of securitized real estate by asset class



Allocation of securitized real estate by asset class in the past 5 years



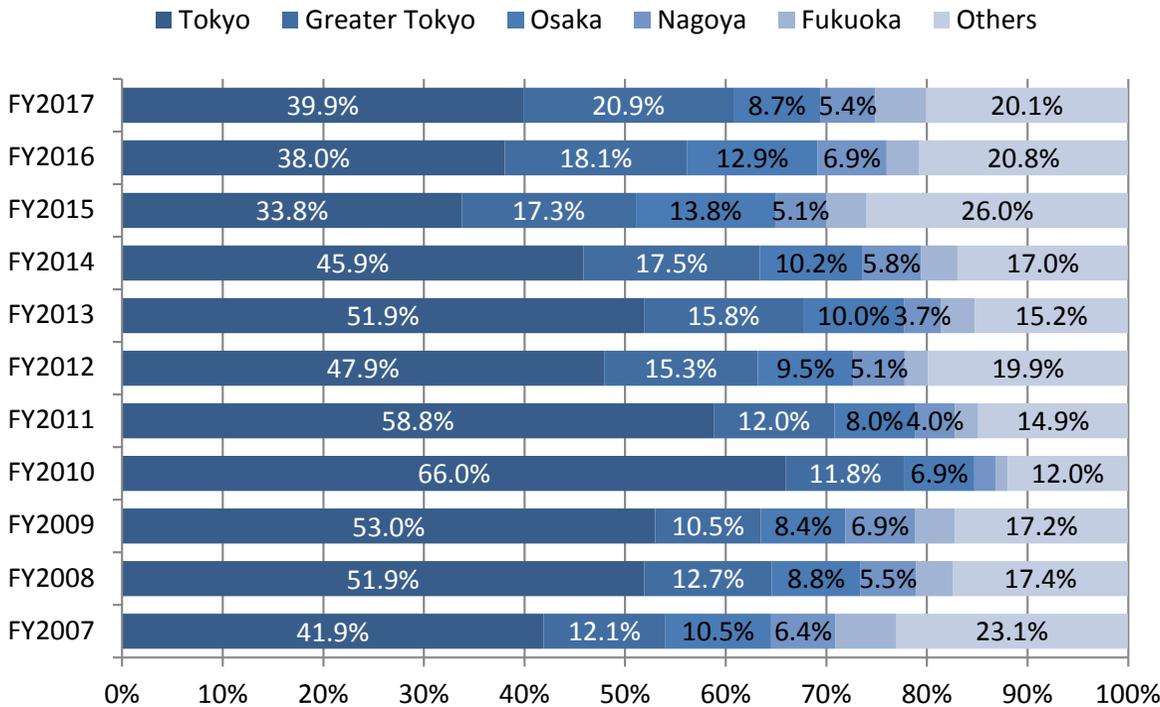
Source: Compiled by NRI from MLIT "Survey of the Current State of Real Estate Securitization" data

Note: Because the usage of securitizations that require actual TMK is unclear, they have not been included after 2001. Because of this, the yearly totals and amounts will not match up with the documents cited for this entry.

The ratio of Greater Tokyo area was on a declining trend after FY2010. However, it has increased its number after FY2016.

- About the two-third of securitized properties focused on Greater Tokyo in FY 2010. However, it declined to about the one third of it in FY 2015.
- Composition ratio of Tokyo reversed in FY 2016 and has gone up by 4%, and the ratio of Tokyo increased in FY 2017 also.

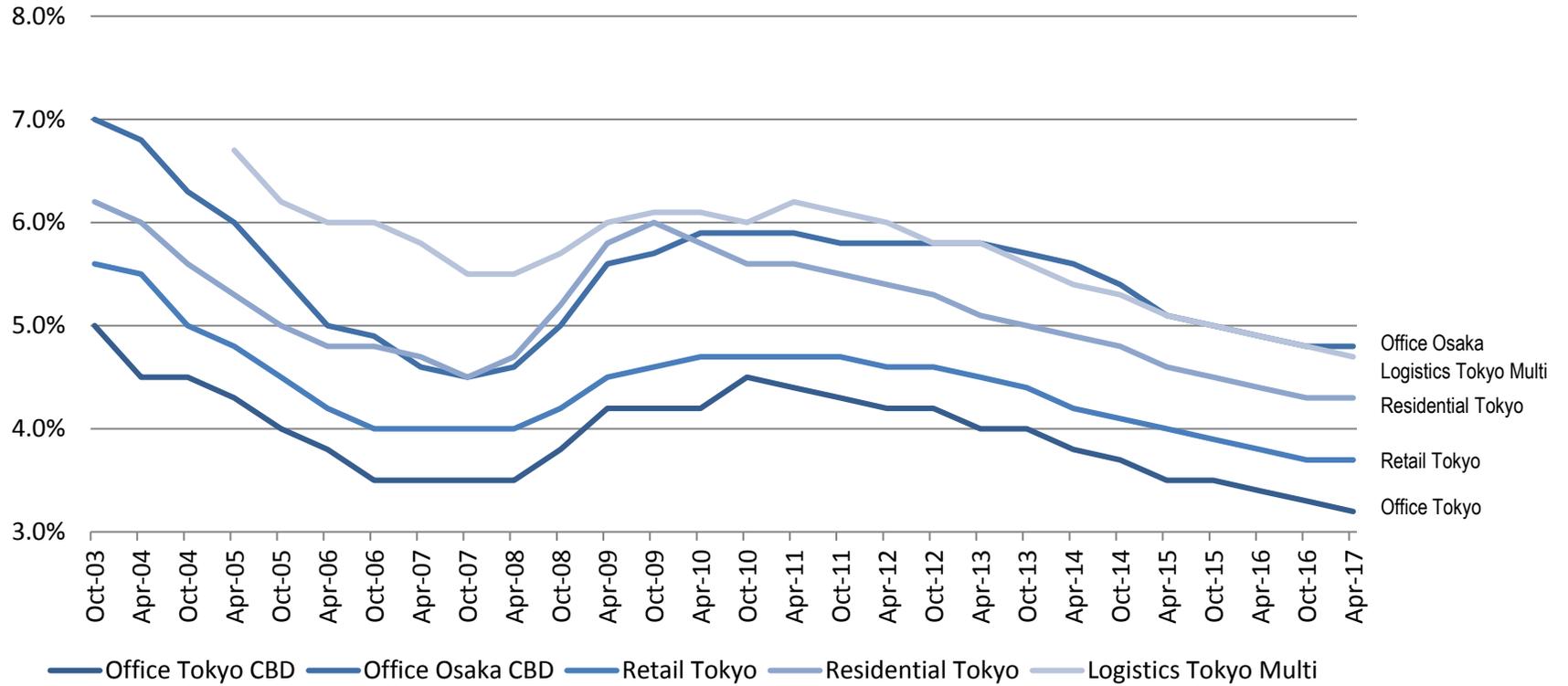
Number of properties securitized by region



Source: Compiled by NRI from MLIT "Survey of the Current State of Real Estate Securitization" data
 Note: Securitization of TMK properties is not included because their use is unknown.

Cap rate is continuously declining

Cap rates in Japan for major investment areas

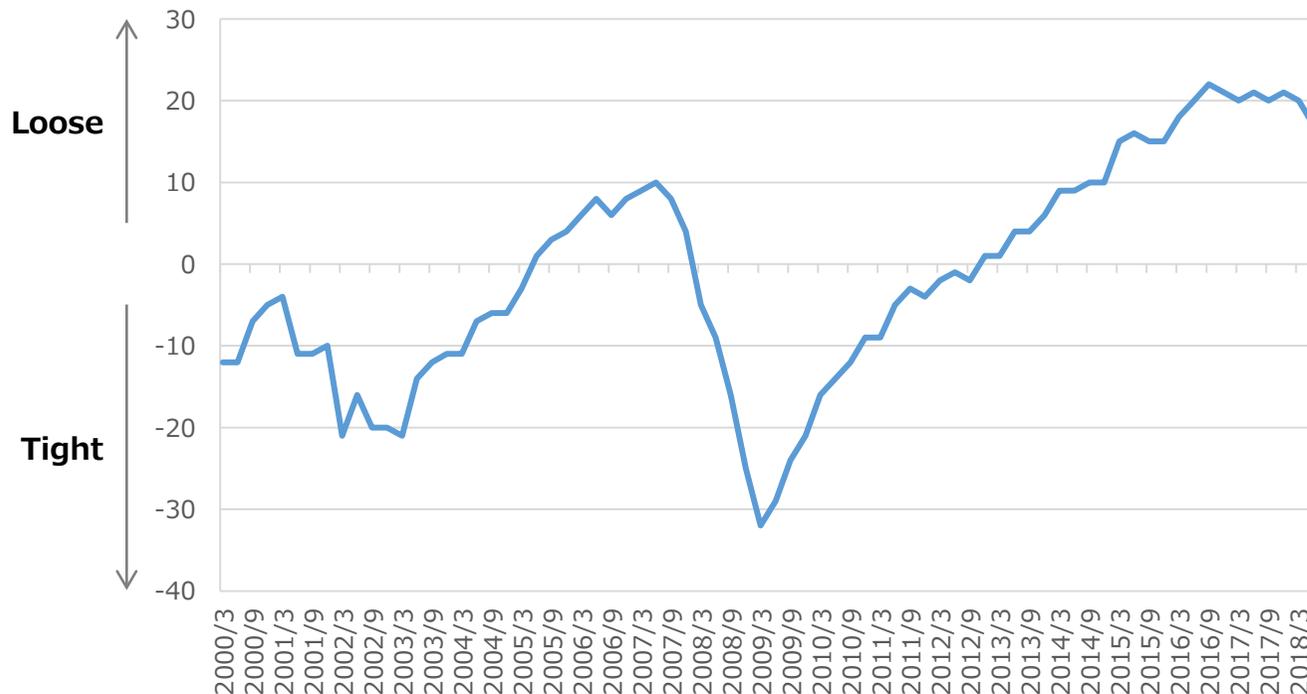


Source: Compiled by NRI from Japan Real Estate Institute "Japanese Real Estate Investor Survey" data.

Fierce competition among commercial banks continues to help boost prices.

- Banks' lending attitude toward the real estate industry is the most lenient since 2000 and the standard of the time of the global financial crisis in 2007 is exceeded. Many people in Japan believe there are too many banks, and spreads continue to fall with covenants loosening.
- Along with mega-banks and other major banks, regional mid-tier banks are entering the market, so conditions look unlikely to change over the near term.

Financial institutions' lending attitude DI toward the real estate industry



Source:
Compiled by NRI from BOJ
"TANKAN (Figures by Industry)" data.

Population movements in Japan

Macro fundamentals of Japan

Overview of real estate investment market in Japan

Office market

Residential market

Retail property market

Logistics property market

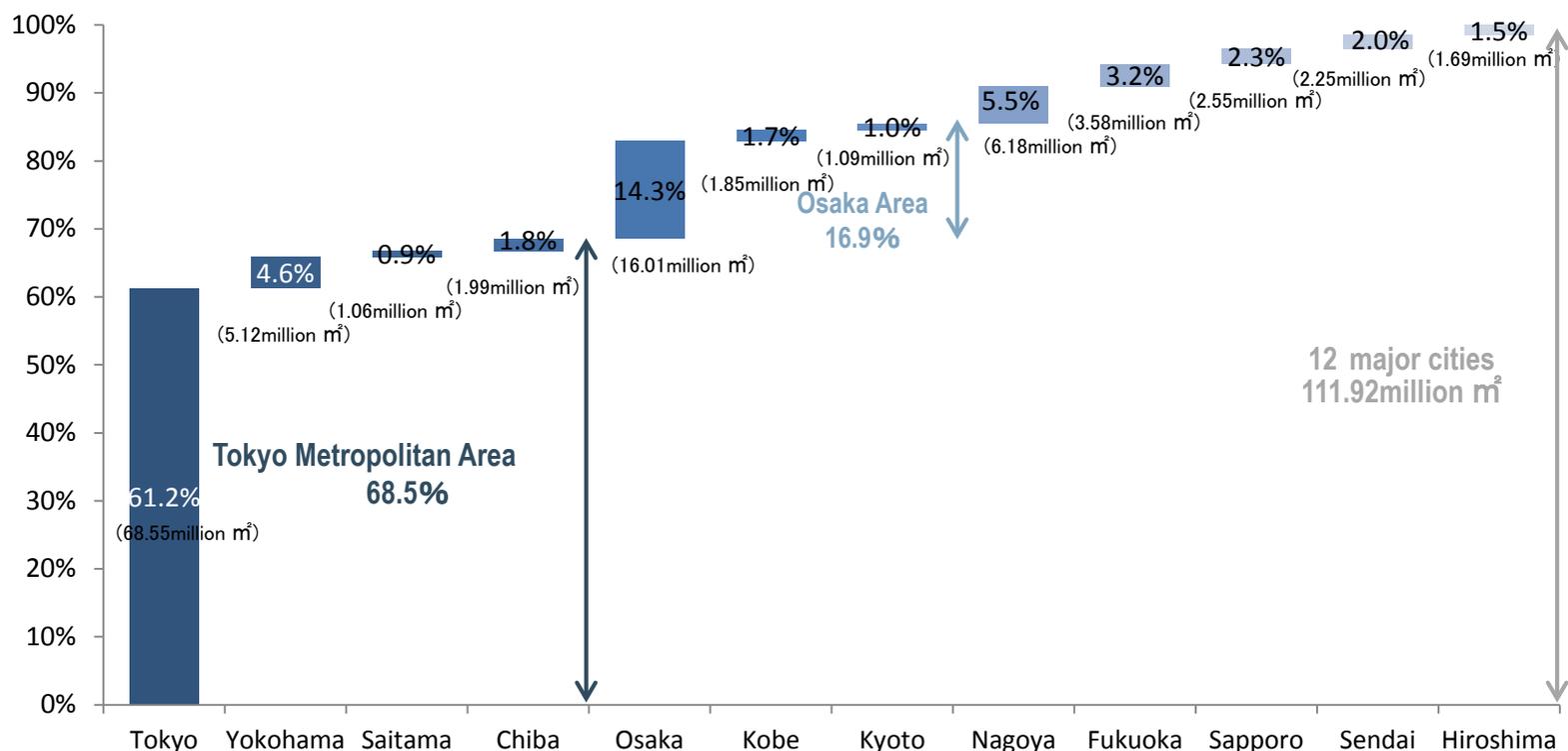
Hotel market

Real estate investment products

Tokyo area holds 61% of Japan's office rental market.

- Japan has a stock of around 106 million m² of available office rental space. The Tokyo area holds an overwhelming share of the market at 64 million m², comprising 61% of the total.

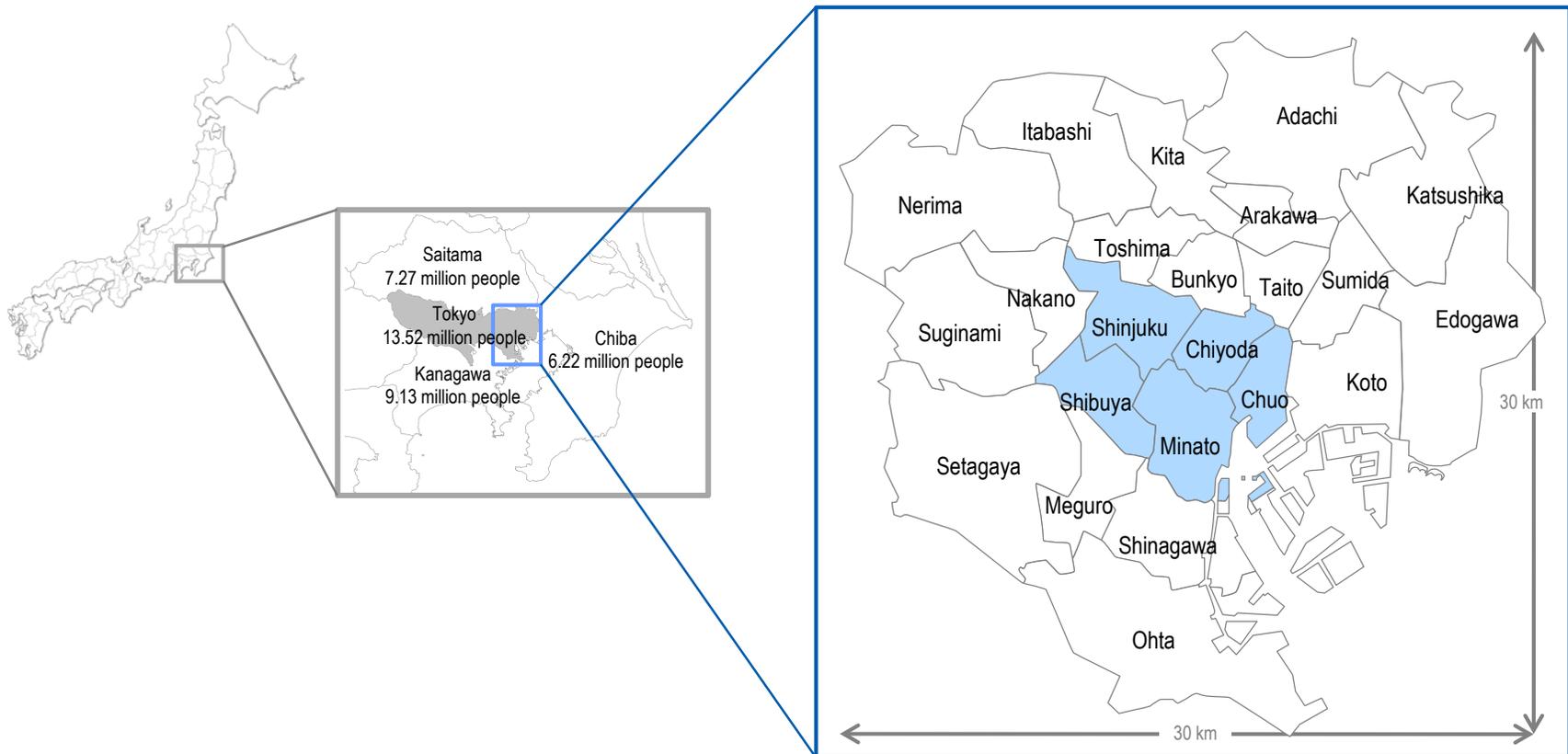
Office floor space shares by major region



Source: JREI "The Annual Japanese Office Buildings Survey"
 Note: Data is as of January 2016.
 Note: The survey focuses on the central area of each city.
 Note: Properties less than 3,000 square meters are excluded.

Tokyo's Central Business District (CBD) is concentrated in five wards

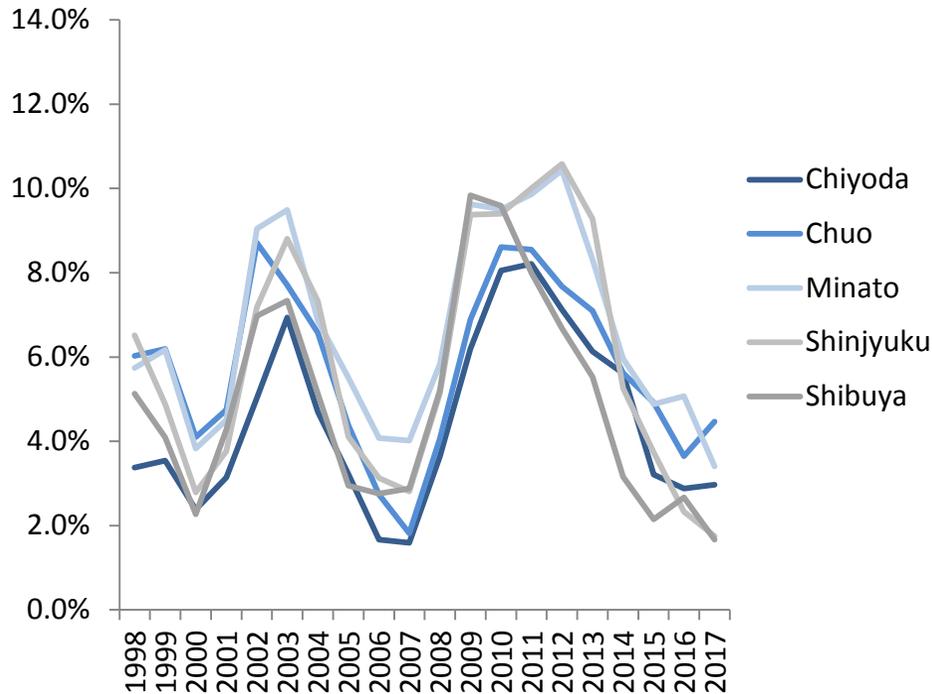
- Tokyo's CBD has an accumulation of office buildings and is concentrated in an area of 5km square, concentrated in Chiyoda, Chuo, Minato, Shibuya, and Shinjuku wards.



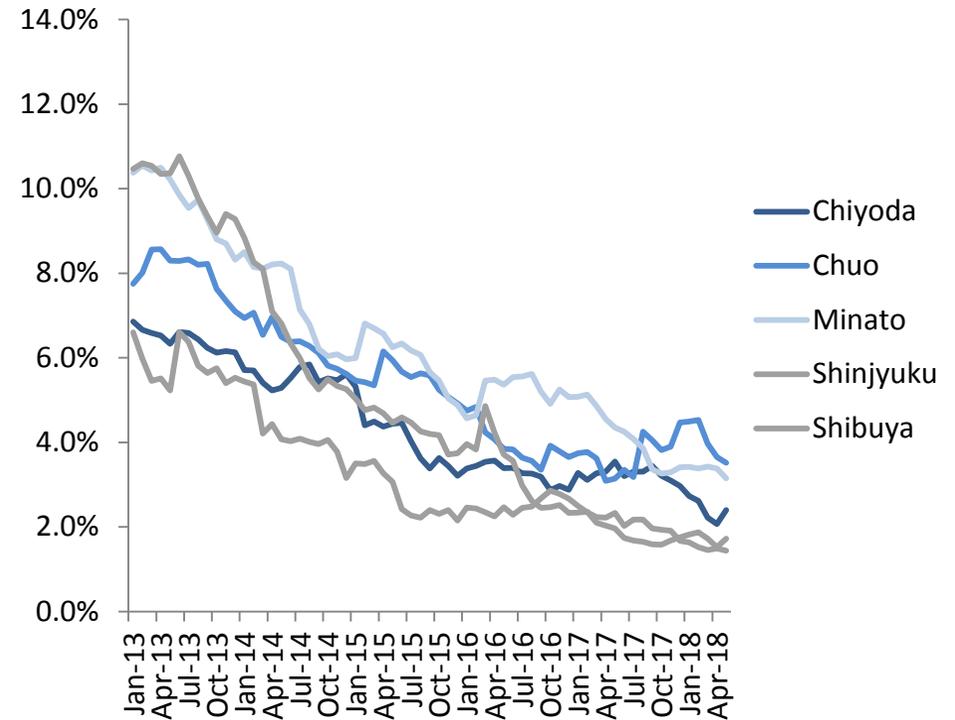
Vacancy rates in the Tokyo office market have been improving for more than five consecutive years.

Vacancy rate movement in Tokyo CBD

Yearly (1998 - 2017)



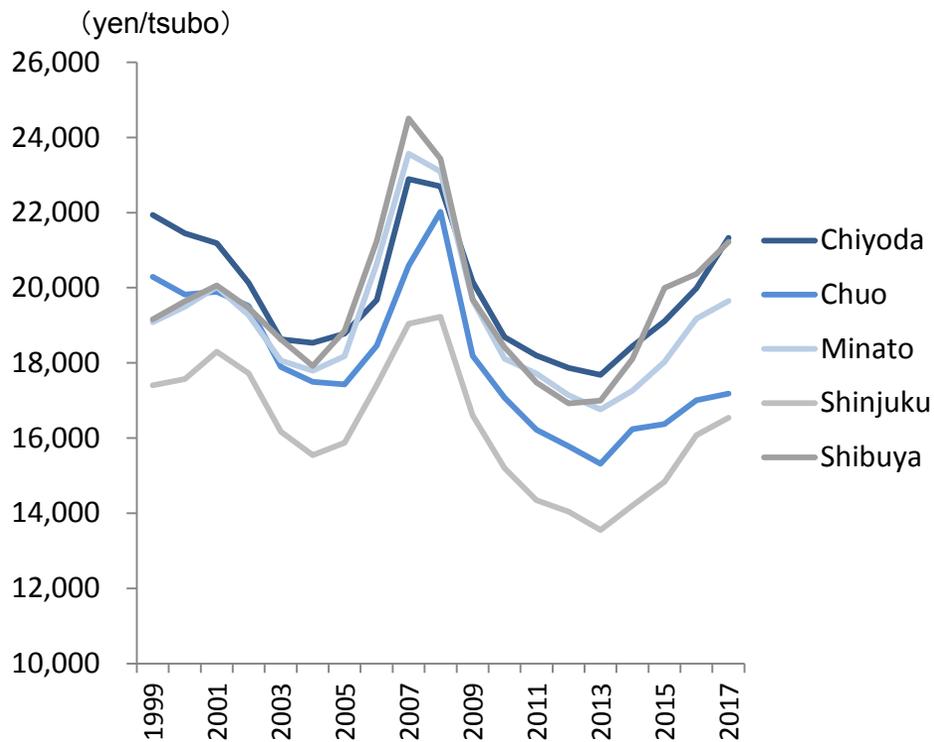
Monthly (Jan 2013 – May 2018)



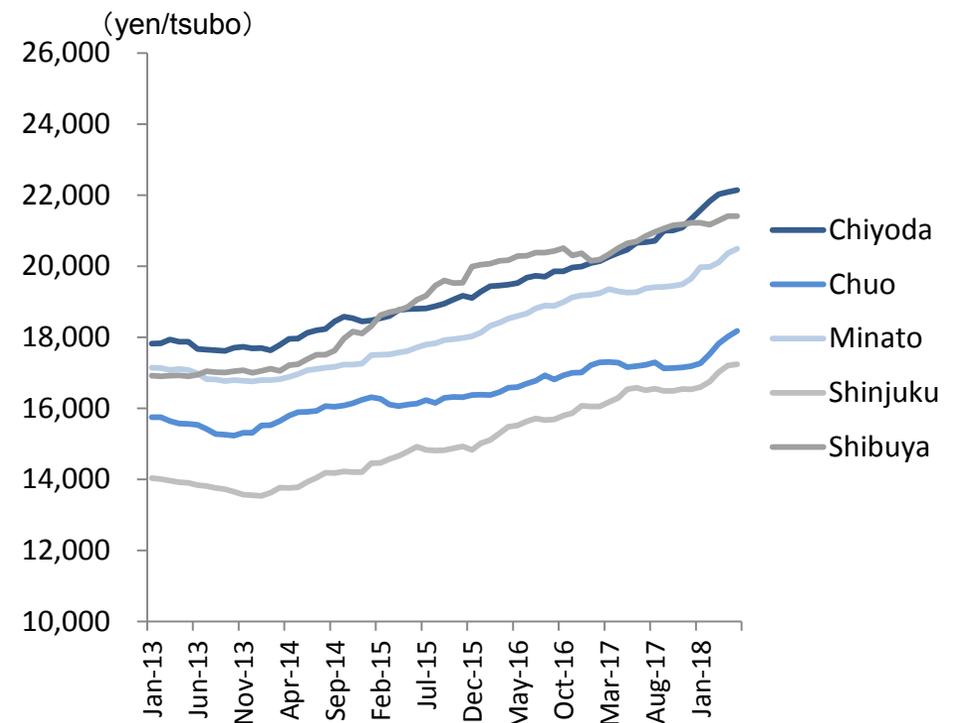
Rents entered an upward phase from around 2013 in all 5 Tokyo wards.

Rent trends in Tokyo CBD (yen/tsubo per month)

Yearly (1999 – 2017)



Monthly (Jan 2013 – May 2018)

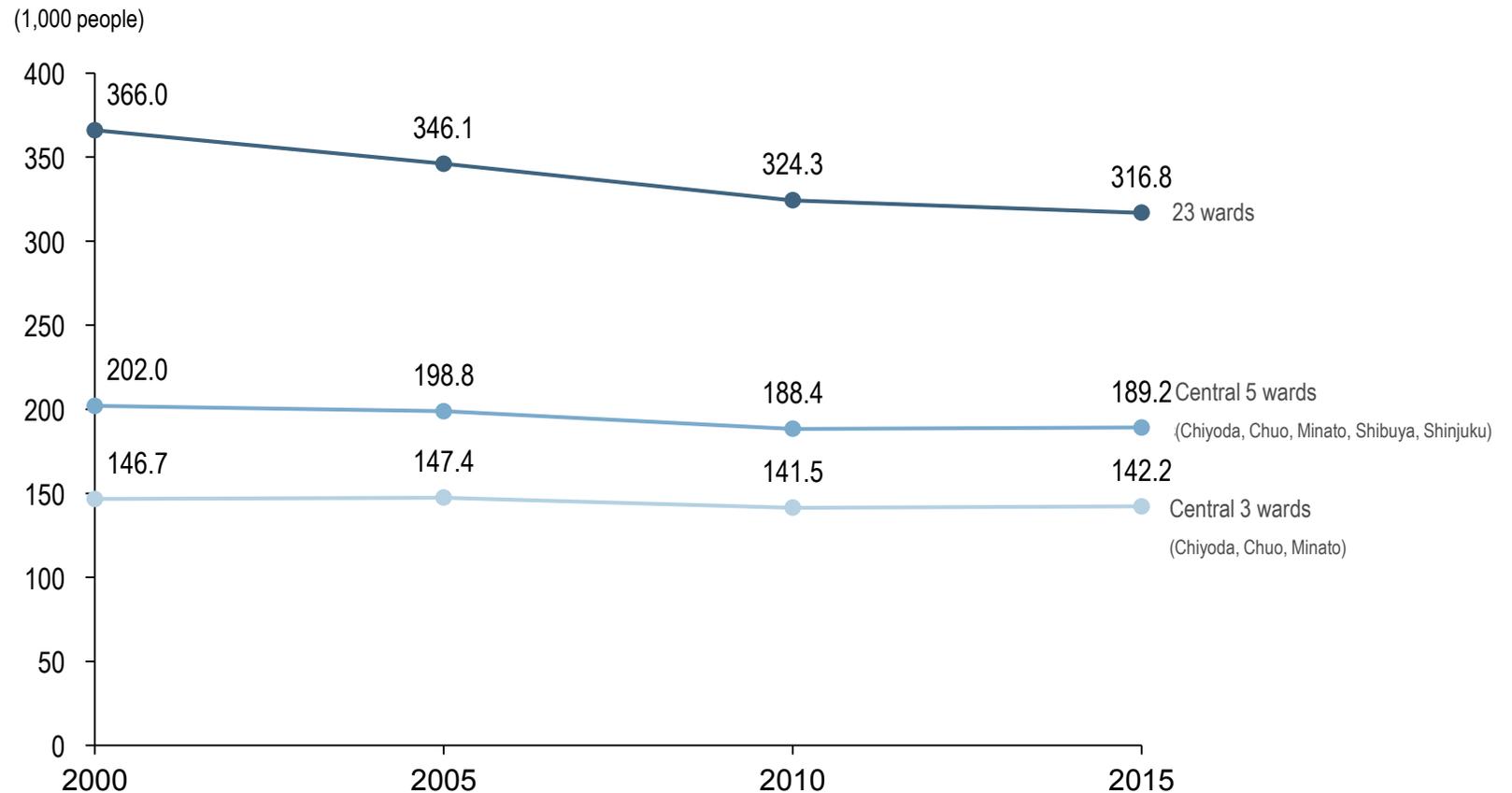


Source: Miki Shoji Co., Ltd.

Note: One tsubo is 3.3 square meters.

From 2010 to 2015, the office workers decreased in 23 wards, whereas they slightly increased in 5 or 3 wards

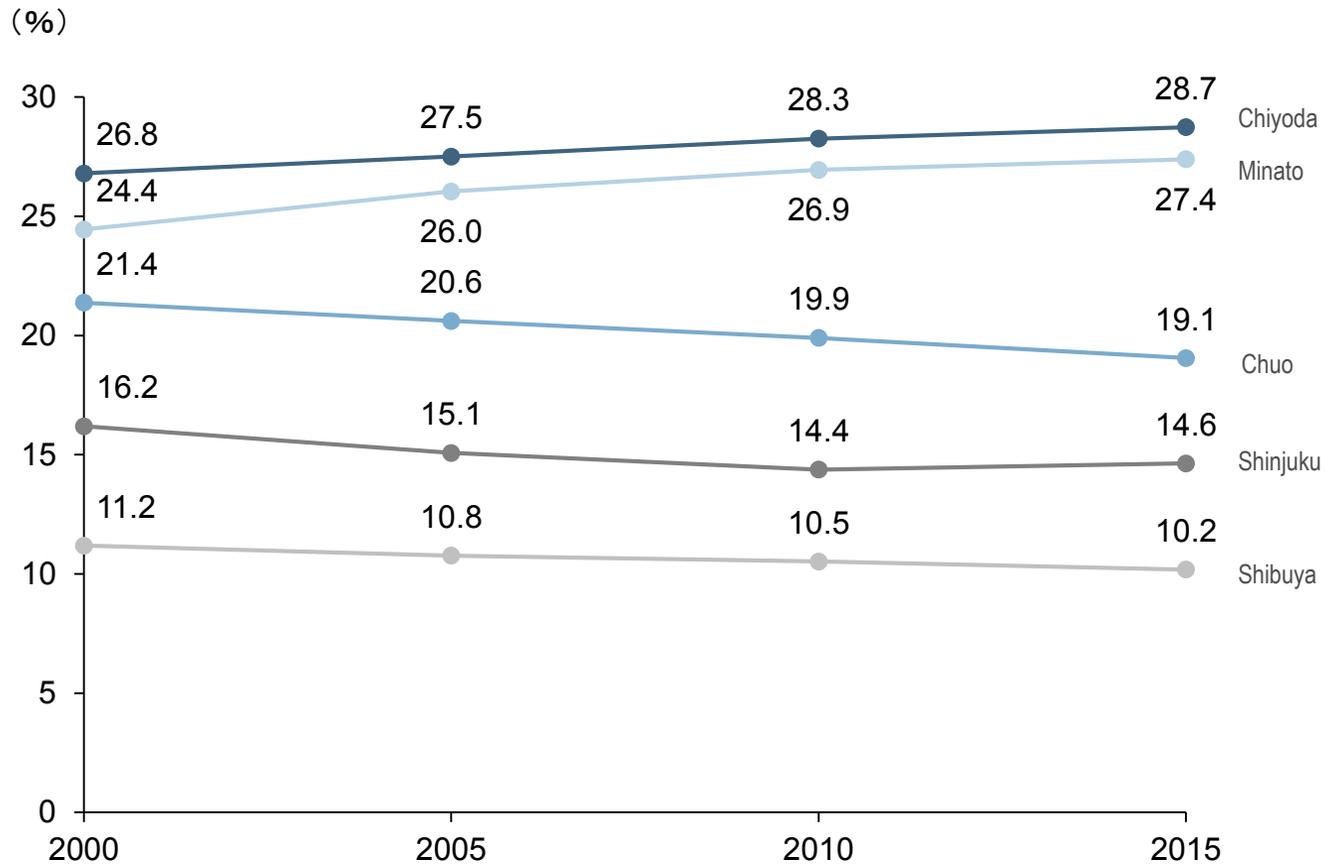
Trend and forecast of office worker numbers in Tokyo



Source: MIC "Population Census"

Since 2000, Chiyoda and Minato have been increasing their share of office workers.

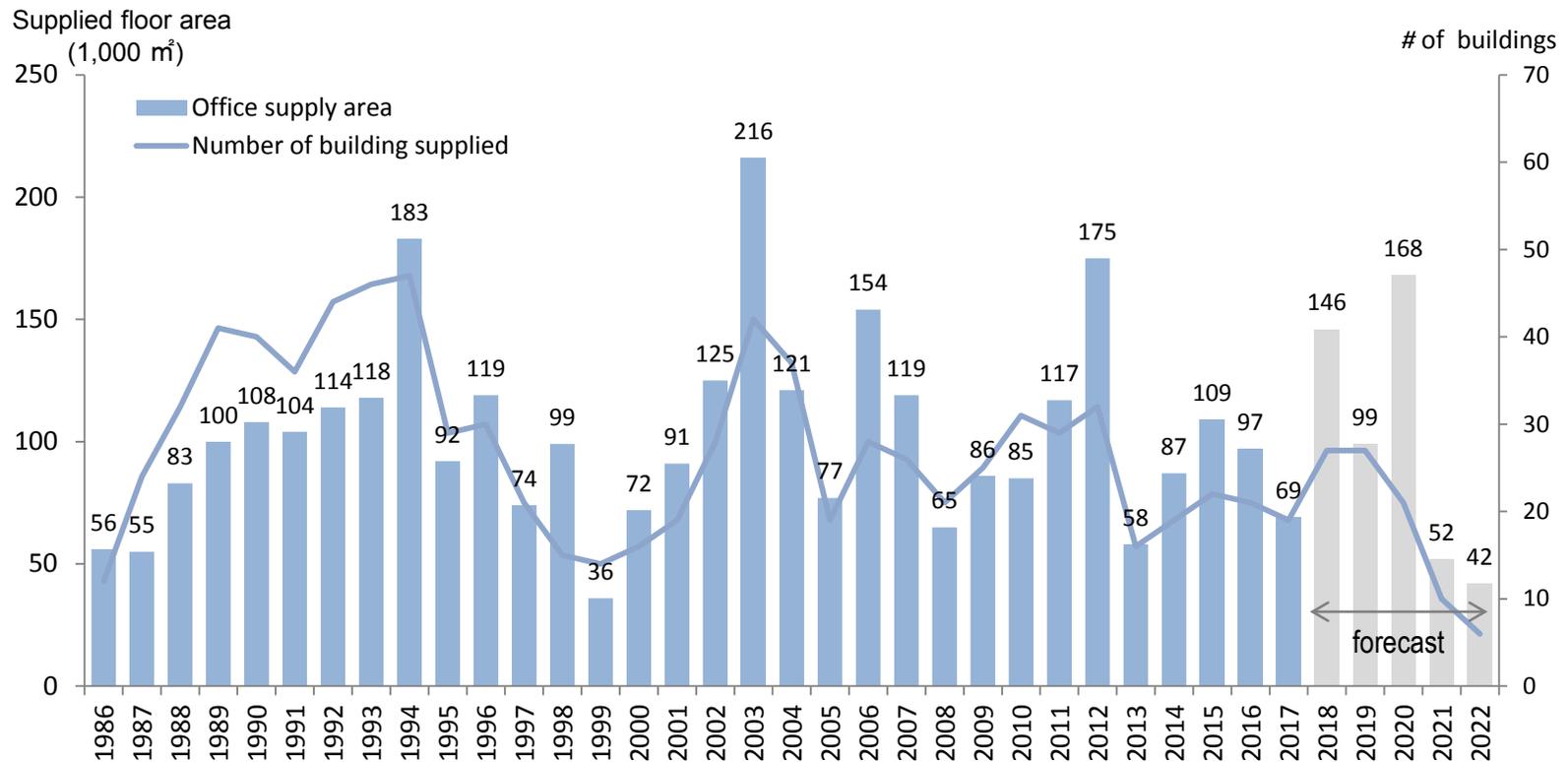
Trend of office worker share in Tokyo's CBD (23 wards = 100%)



Source: MIC "Population Census"

Despite the dwindling number of office workers, new office supply will likely continue to grow.

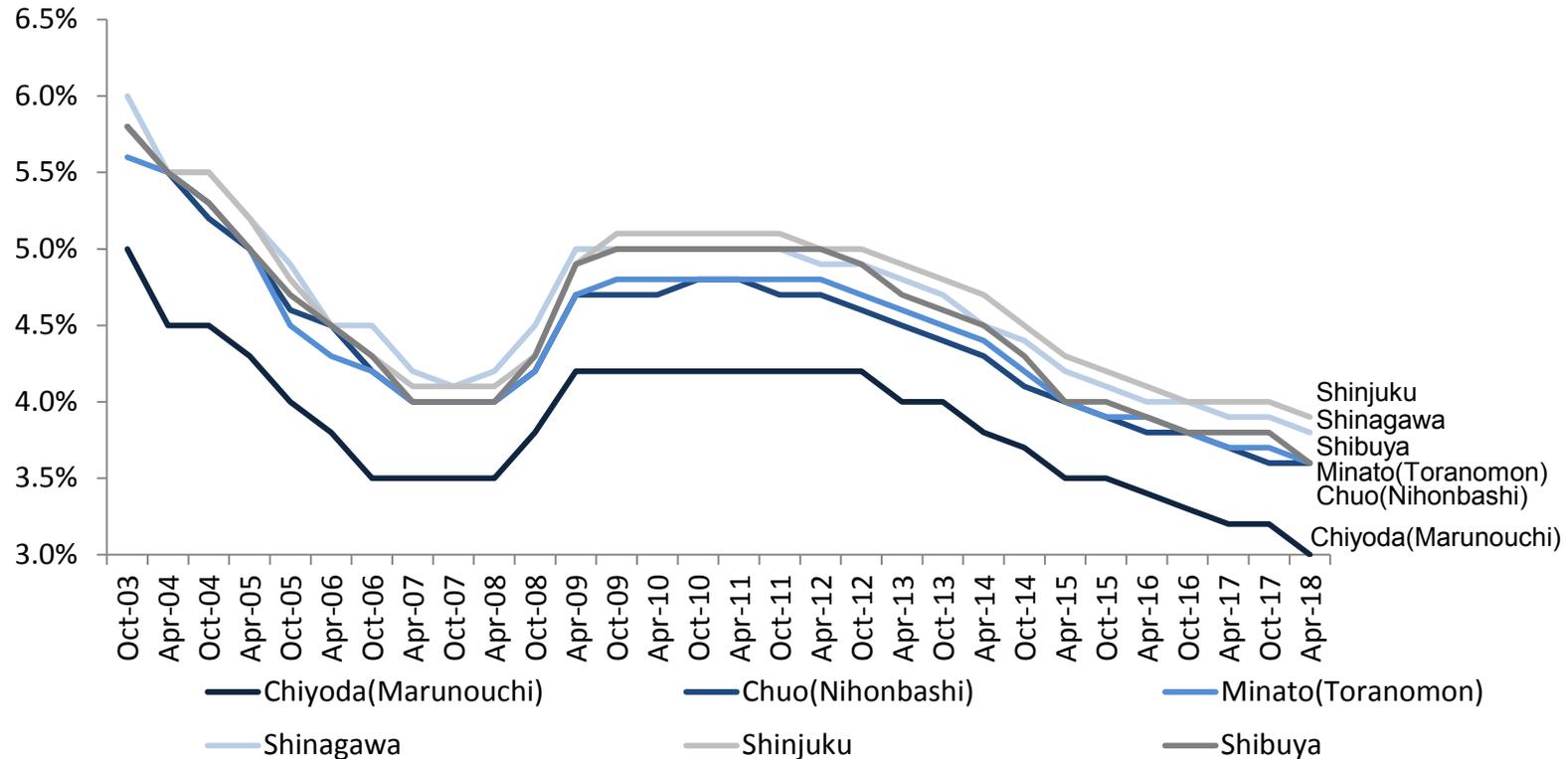
Office space supply in Tokyo's 23 wards



Source: Mori Building Company "Market Trend Survey of Large-Scale Office Buildings in Tokyo's 23 Wards"

The cap rates have continuously been declining since 2012, and it is currently at its lowest level.

Tokyo office market cap rate trend

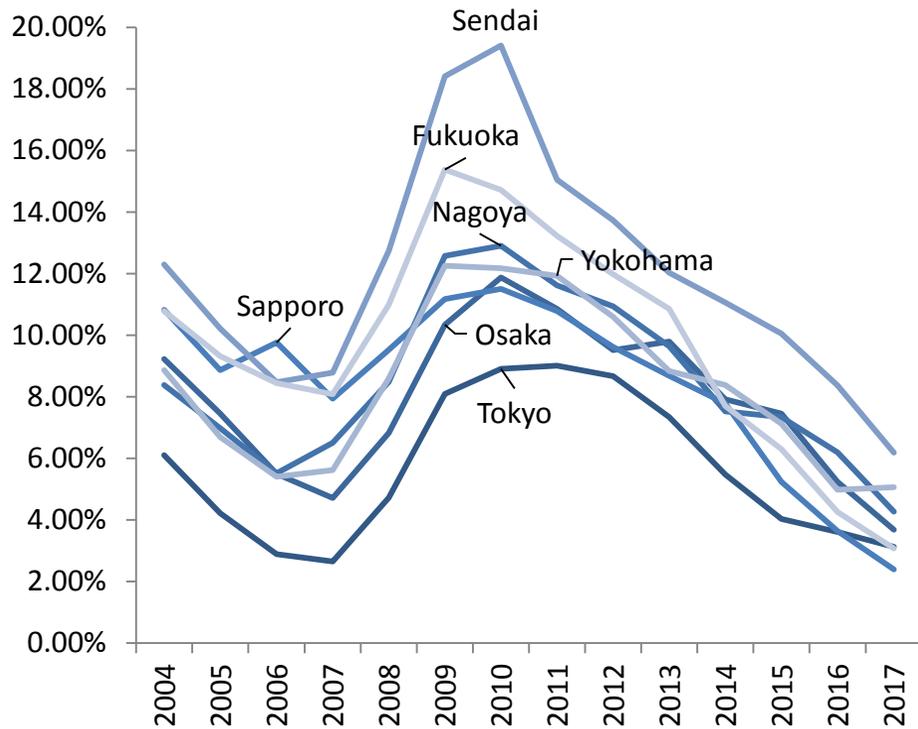


Source: Japan Real Estate Institute "Real Estate Investor's Survey"

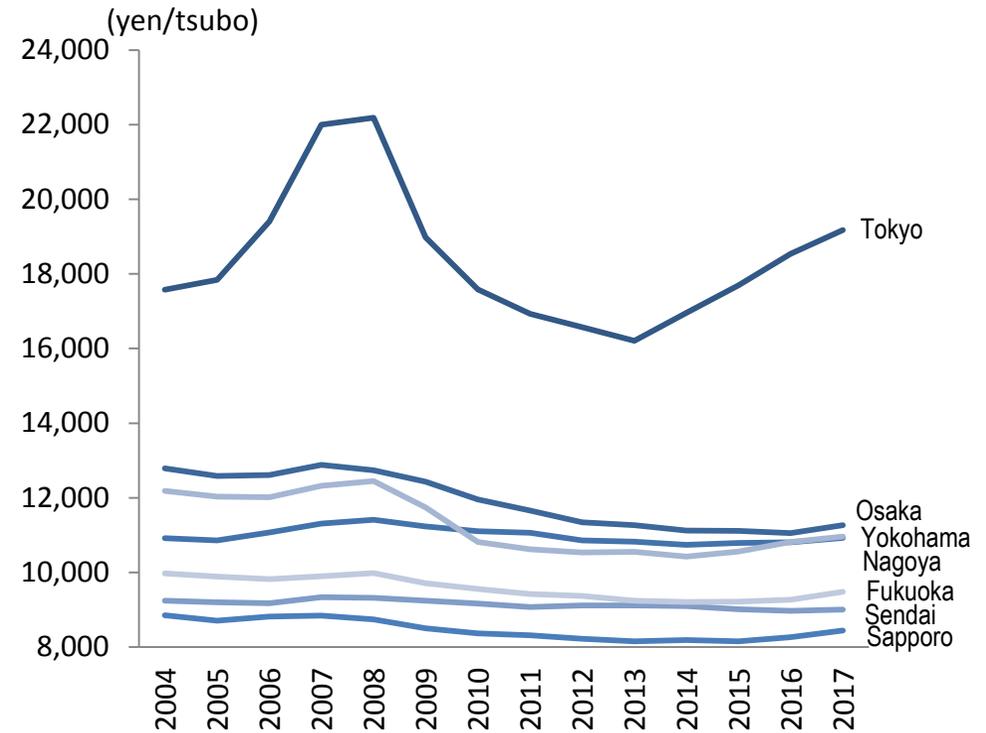
Office market

The vacancy rates have also been recovering in the local office market and the rent has started rising.

Office vacancy trend in ex-Tokyo market



Office rent trend in ex-Tokyo market



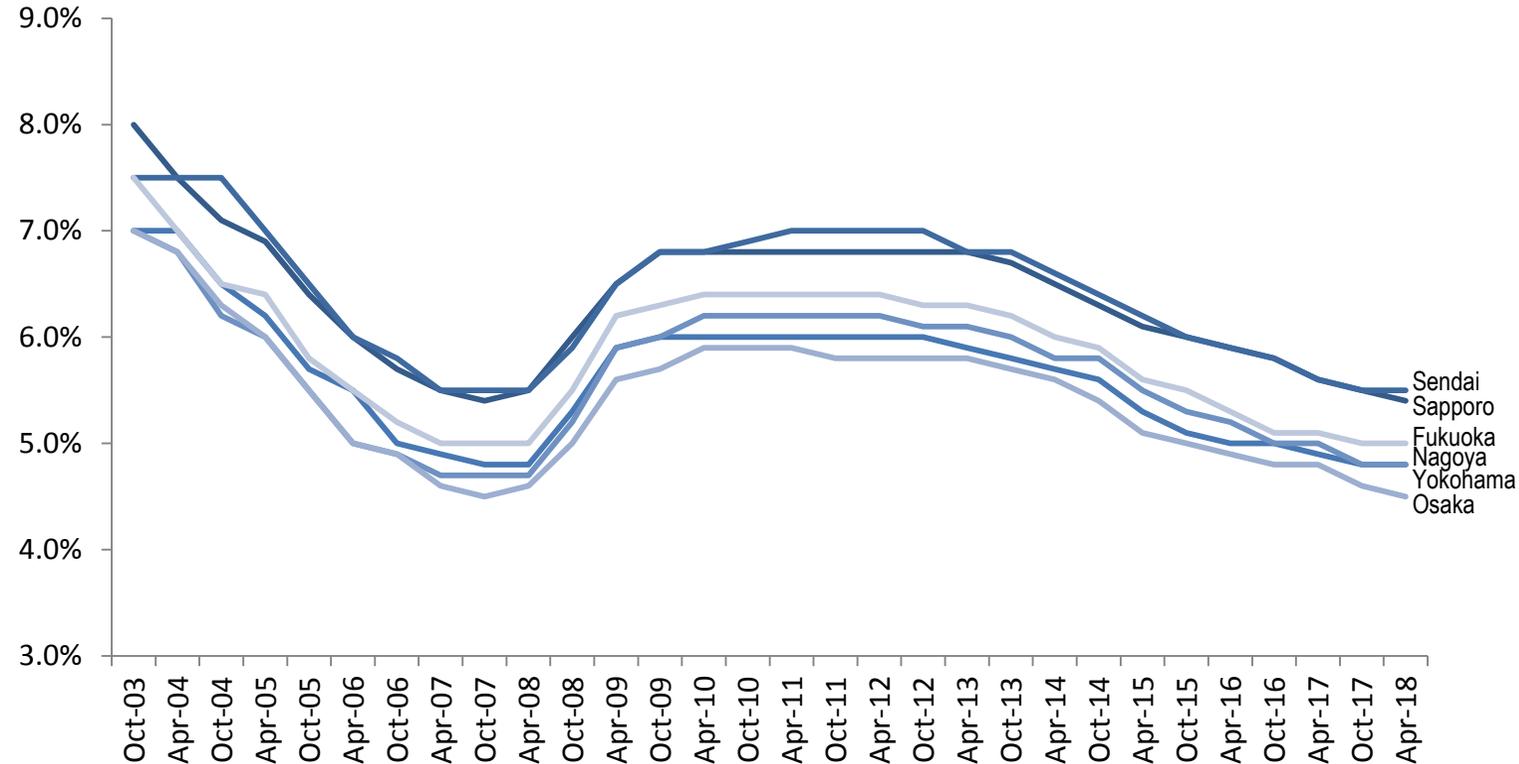
Source: Miki Shoji Co., Ltd.

Office market

Liquidity is growing in ex-Tokyo as well as the real estate investment market rises and becomes overheated.

- As property acquisition becomes more difficult in Tokyo, investment money must look to regional markets.

Ex-Tokyo office market cap rate trend



Source: Japan Real Estate Institute "Real Estate Investor's Survey"

Population movements in Japan

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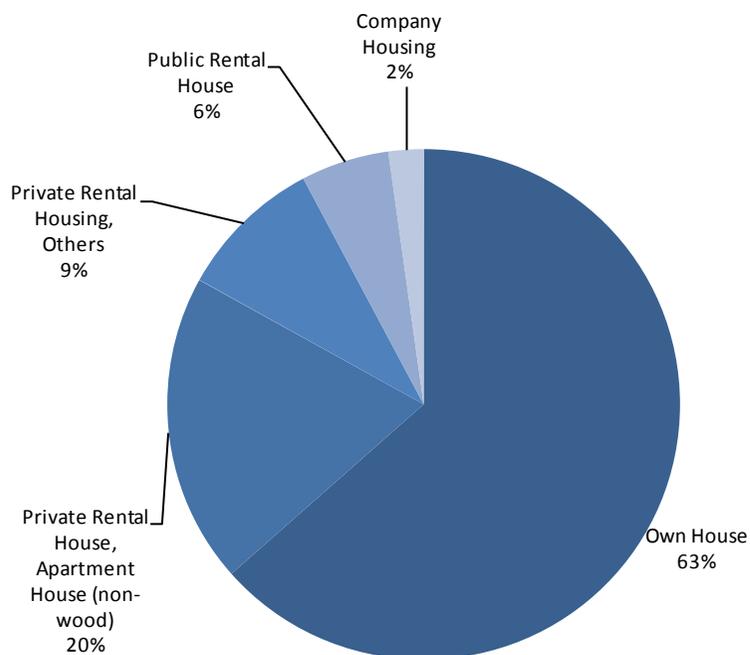
Real estate investment products

Residential market

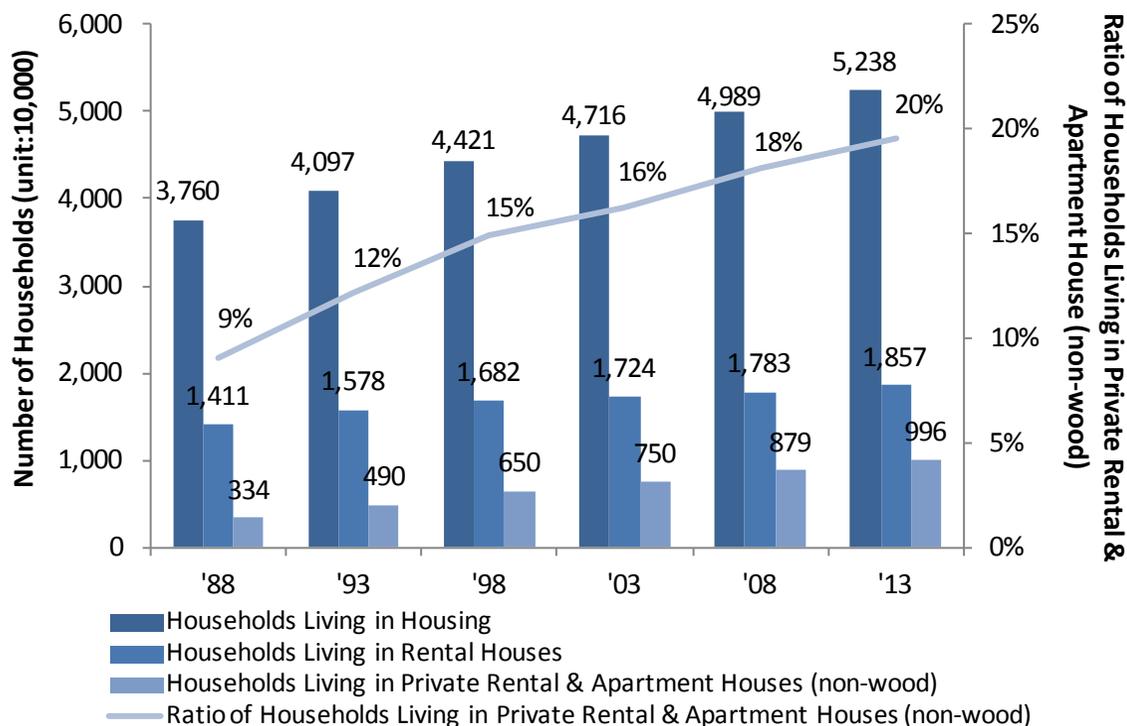
About 20% of all households in Japan are living in non-public rental apartments, and the percentage is trending upwards.

- Households living in non-public rental apartments (excluding wooden apartments; hereafter the same in this section), which numbered 3.34 million in 1988, increased by about 2.6 times to 9.96 million (about 20% of all households) in 2013.

Breakdown of all households by housing type (2013)



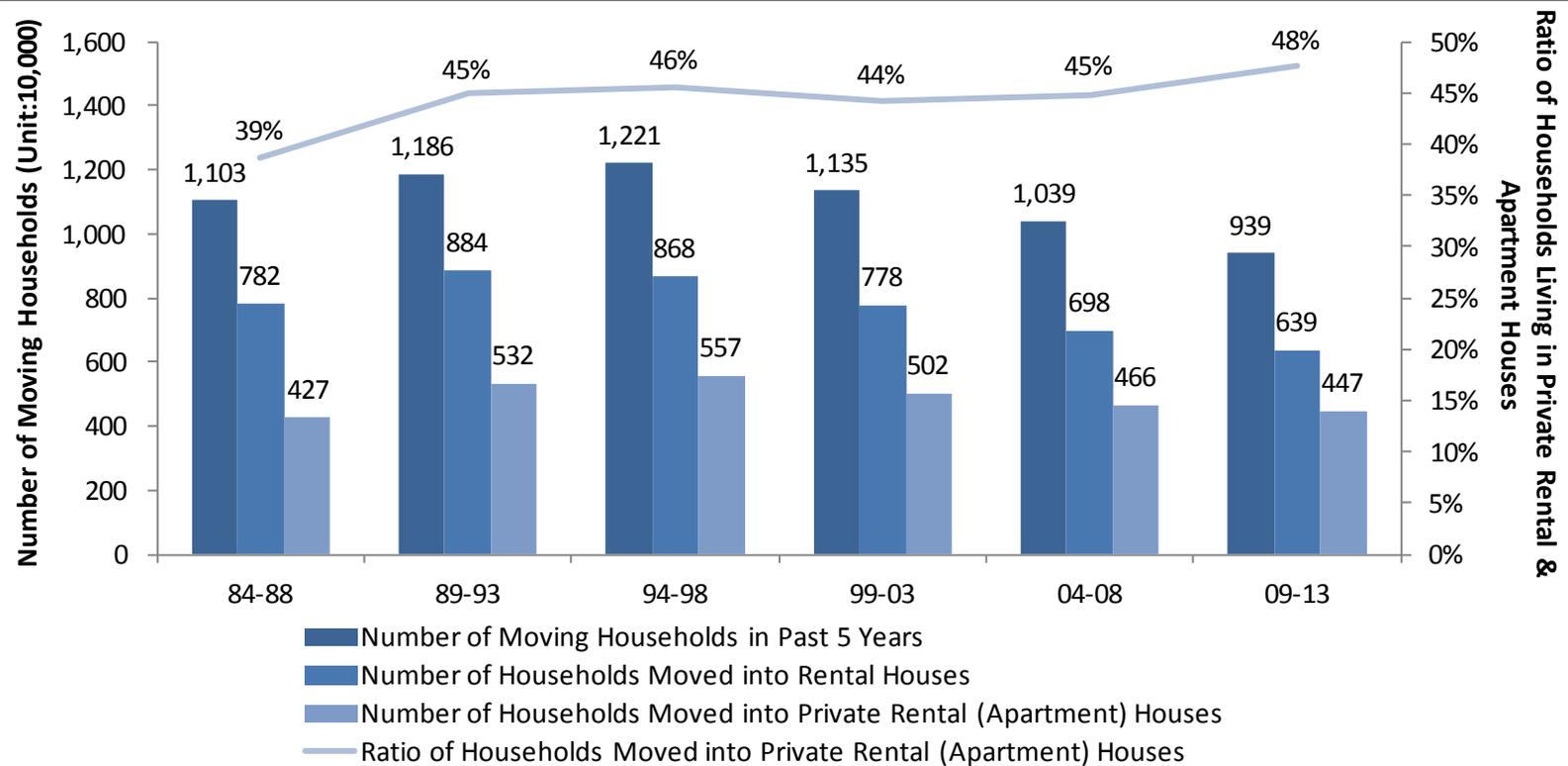
Number of households by housing type 1988 - 2013



The total number of moving households has decreased, but the ratio of households moving to non-public rental apartments is trending upwards.

- The number of moving households peaked out in 1994-98 and decreased to about 77% of the peak-time level in 2009-13 .
- The number of households moving to non-public rental apartments is also on a decreasing trend, although its ratio to the total number of moving households is trending upwards.

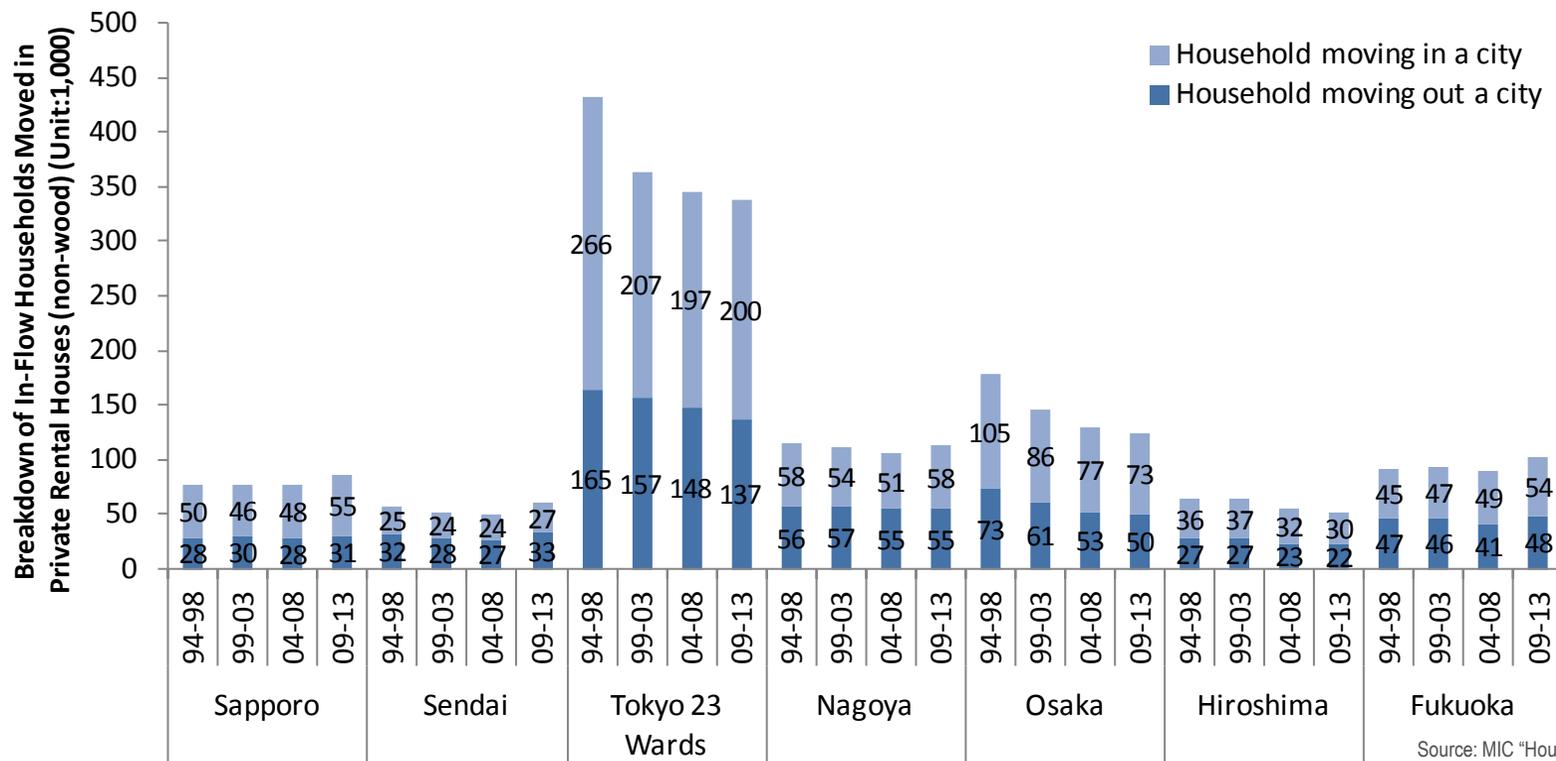
Housing choices of moving households 1984 - 2013



The majority of households moving to non-public rental apartments moved within the same city.

- Looking at the former locations of households moving into non-public rental apartments in seven major cities, those that moved within the same city were greater in number than those that moved in from outside the city.
- Tokyo's 23 wards and Osaka saw a decline in households moving into non-public rental apartments from outside the city, while major regional cities saw no change.

Location choices of moving households

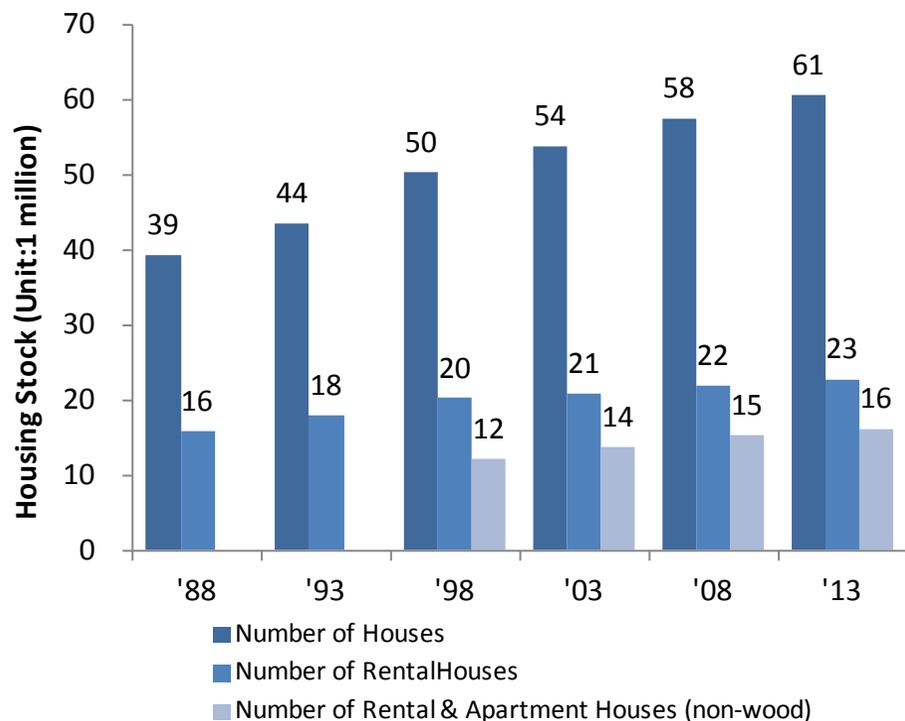


Source: MIC "Housing and Land Survey"

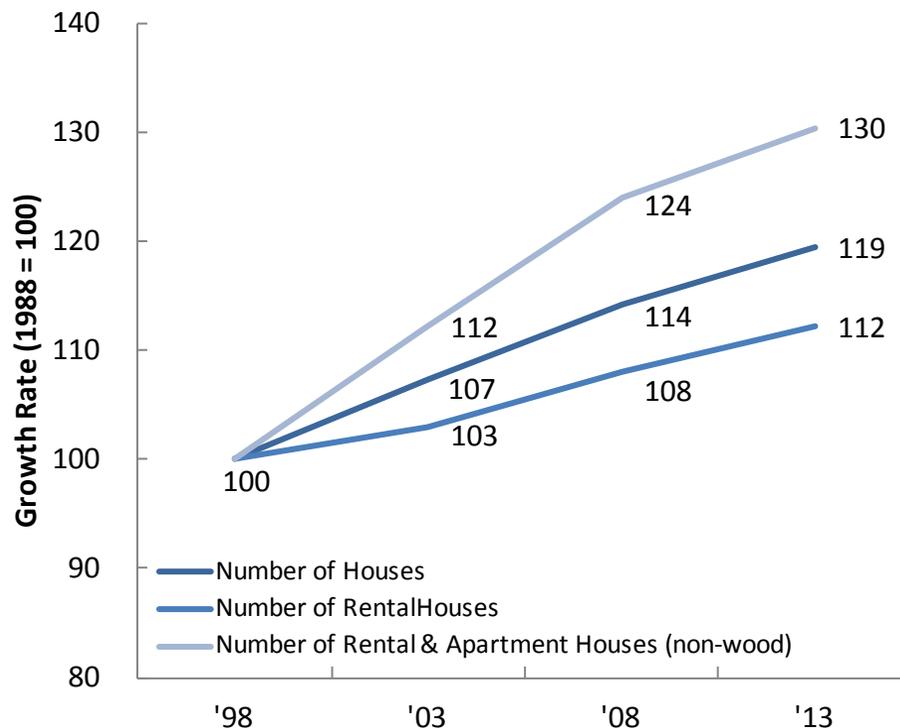
The supply of non-public rental apartment units has increased more sharply than total housing stock.

- The growth of rental apartments (public and non-public combined) outpaced the growth of overall housing as well as the more modest rise of rental housing in general.
- As a result, the ratio of rental apartments to total rental houses increased from 60 to 70%.

Housing stock by type 1988-2013



Housing growth rates by type

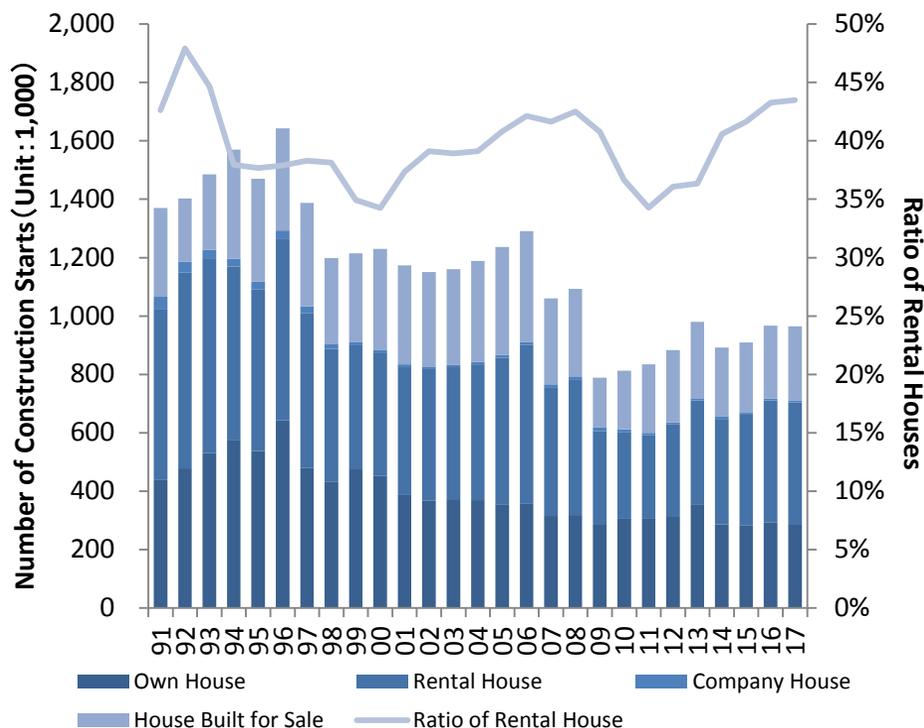


Source: MIC "Housing and Land Survey"

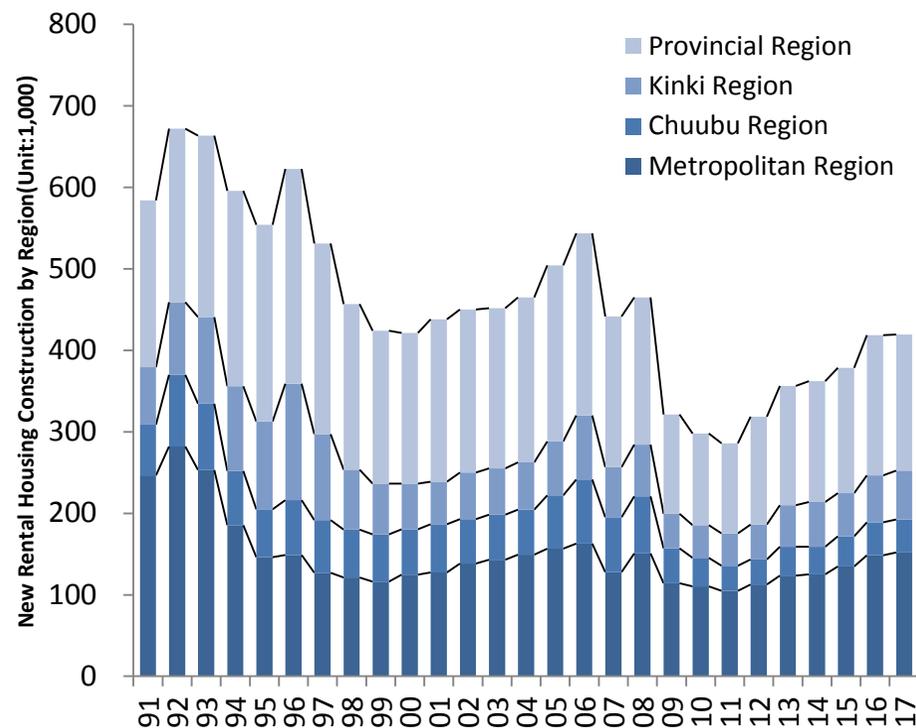
The number of new constructions for rental houses remained high until 2017.

- In 2017, the number of new constructions decreased by 3,000 houses since 2016 and reached to a level of 960 thousand houses.
- The number of new constructions for rental houses is 420 thousand, which remained at the same level as in 2016.

New housing supply trend: 1991-2017



Breakdown of new rental housing construction by region



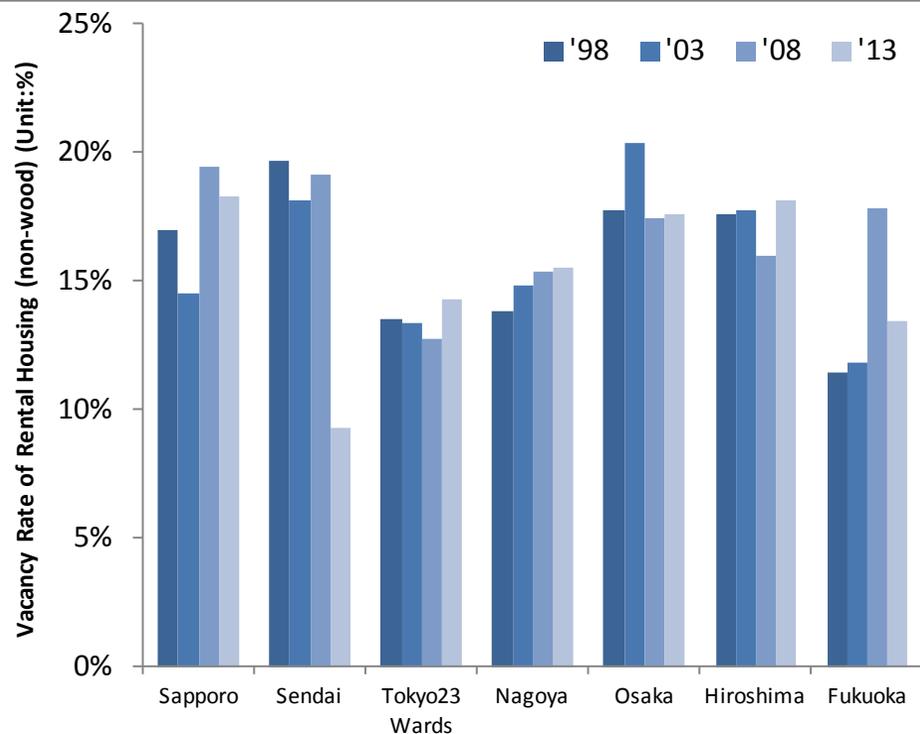
Source: MLIT "Survey of Construction Work Started"

Residential market

Since 2015, the vacancy rates in Kanagawa prefecture have gone up suddenly.
From the end of 2016, the vacancy rates are rising in Tokyo as well.

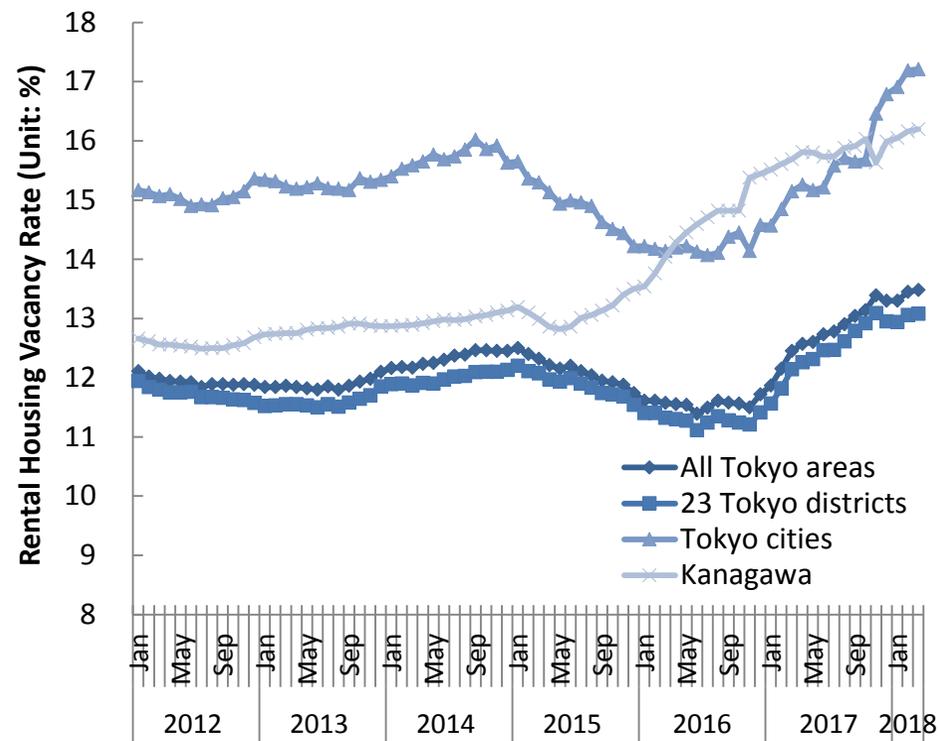
- The construction of rental apartment increased for avoiding tax with the basic deduction's of an inheritance tax being reduced from January, 2015.
- Because of number increasing in apartment supply due to the factors besides the actual demand, vacancy rates increased suddenly centering on the suburb part with the high apartment ratio occupied in a rental apartment.

Vacancy Rates of Rental Housing (non-wood) in Major Cities



Source: MIC "Housing and Land Survey"

Vacancy Rates of Rental Housing in Tokyo Metropolitan Area

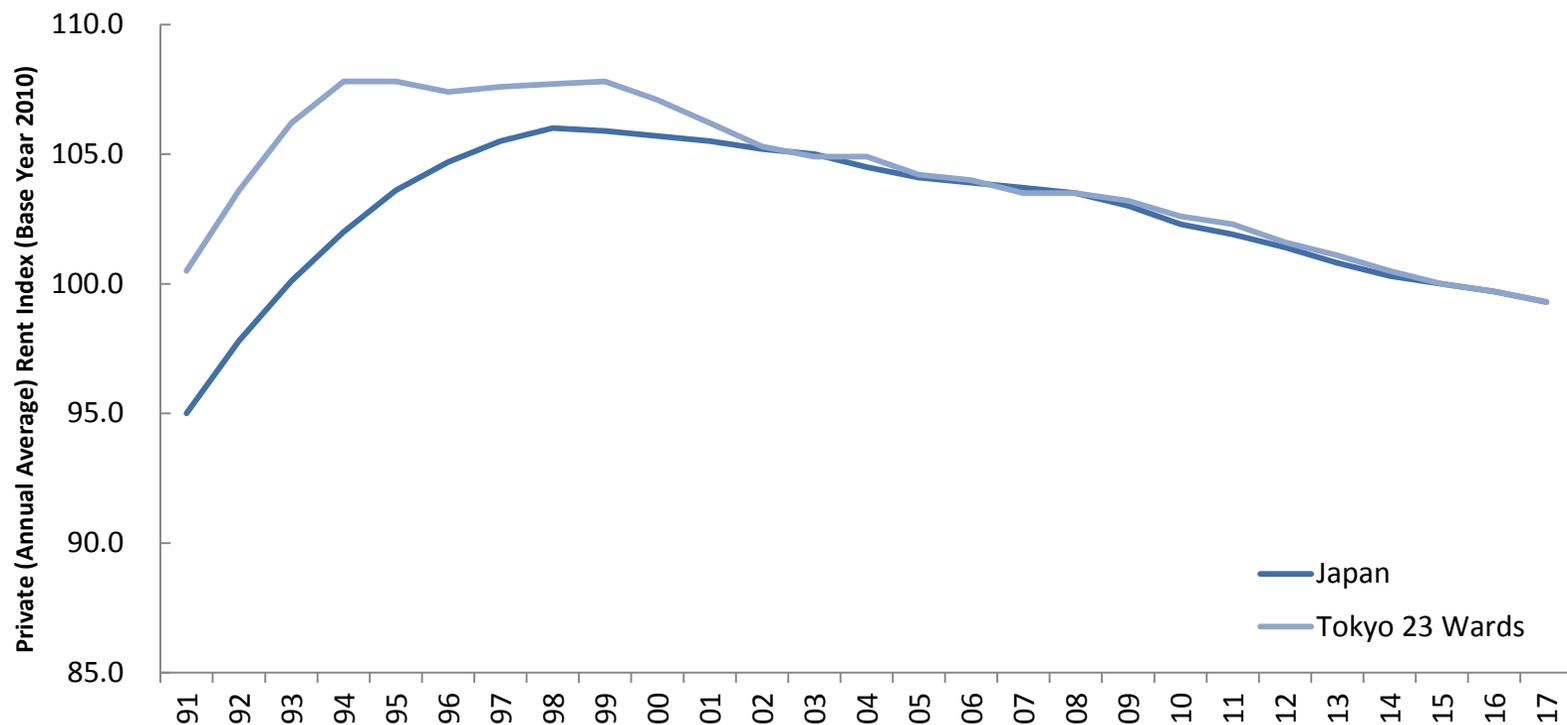


Source: TAS Corp. and At Home Co., Ltd. "Report on Rental Housing Market"

Rent standard is still on a declining trend.

- The rent level of non-public rental housing rose steadily from 1990, after which it gradually declined since 2000. This trend has continued not even changed recently.

Rents in the private sector (annual average) – nationwide and central Tokyo



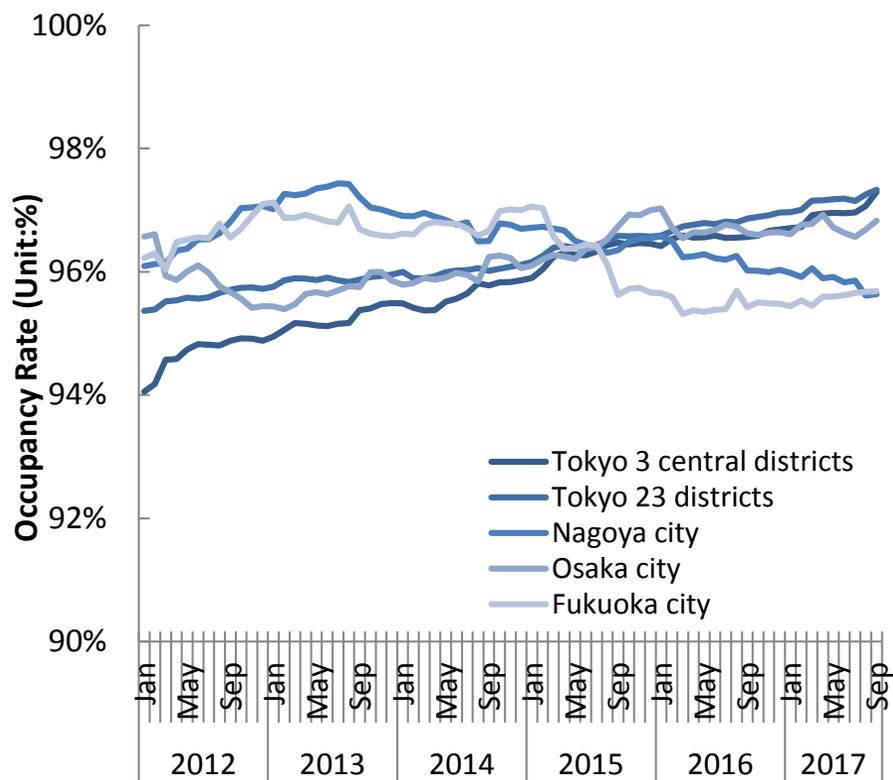
Source: MIC "Consumer Price Index"

Residential market

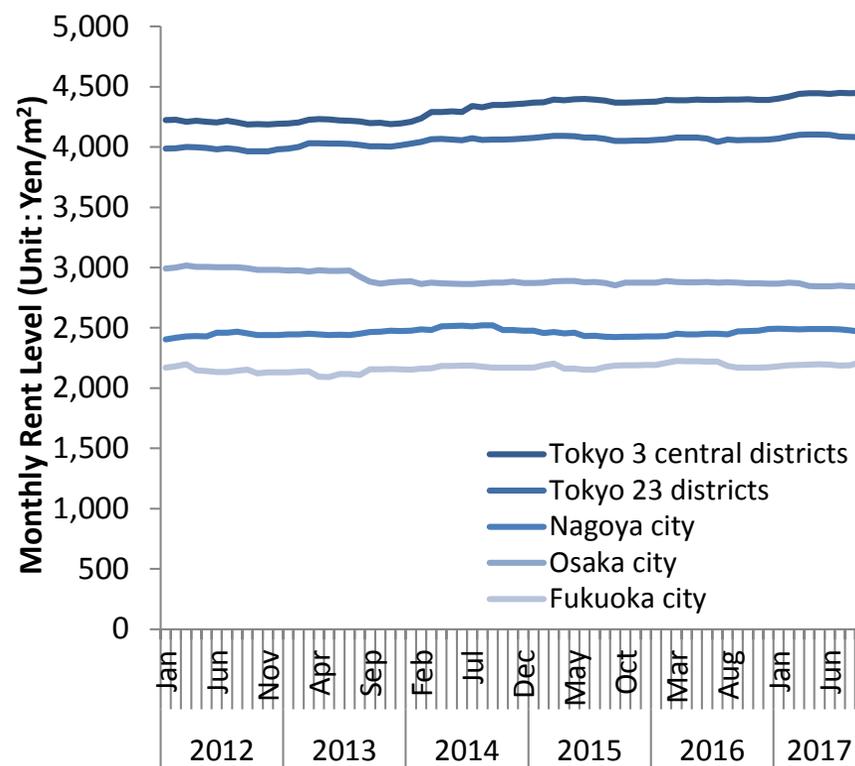
The operating ratio of REIT case housing and the private placement fund has been at the highest level, and the rent standard in downtown 3 ward and Tokyo 23-ku's has continue to rise slowly.

- The operating ratio of Nagoya city and Fukuoka city hits the ceiling. The rent standard remains stable or decrease

Occupancy rates of REIT-owned and private fund-owned properties



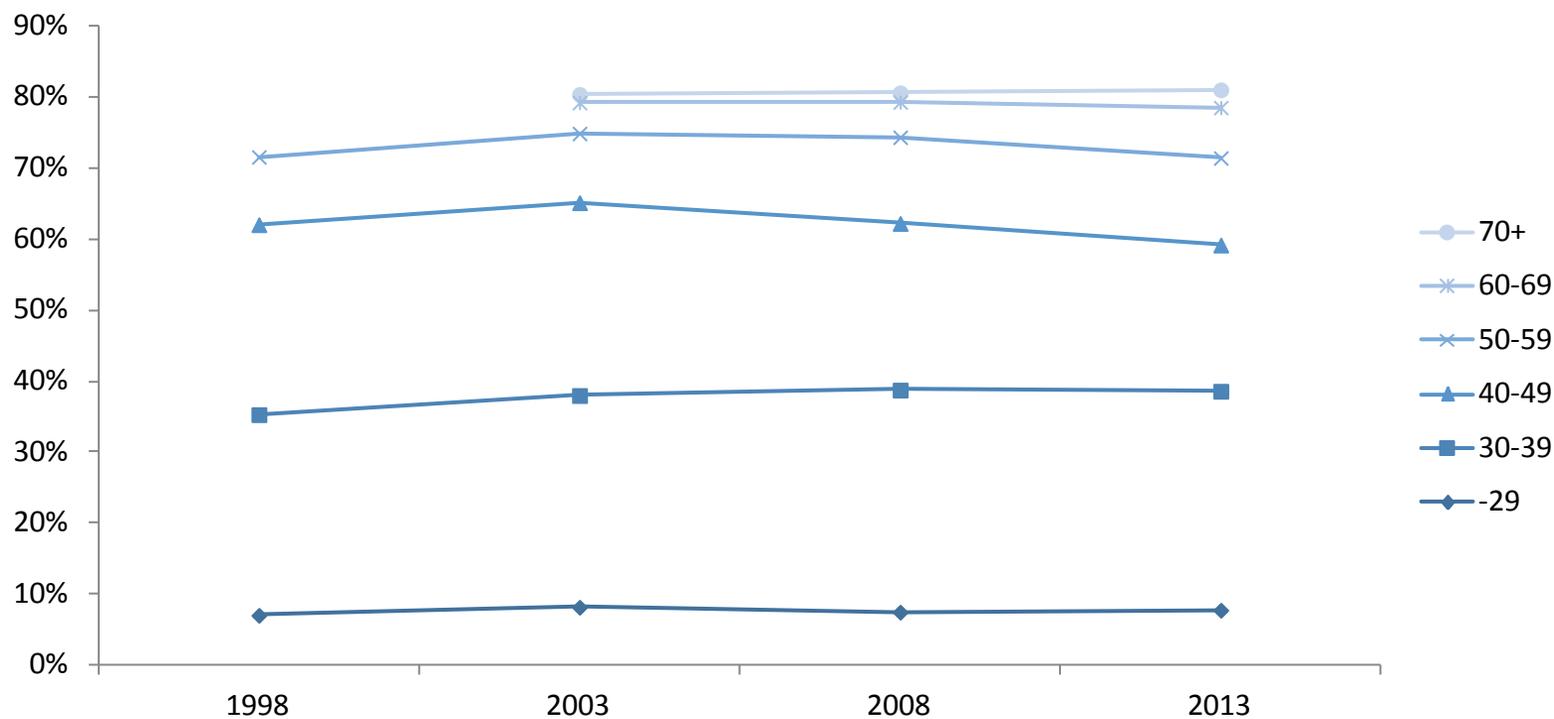
Monthly rents of REIT-owned and private fund-owned properties



Source: Association for Real Estate Securitization of Japan "ARES Japan Property Index"

The rate of housing ownership, which has a negative impact on rental housing demand, has shown a downward trend with the 40-49 age group.

Housing ownership rate in Japan by age group



Source: MIC "Housing and Land Survey"

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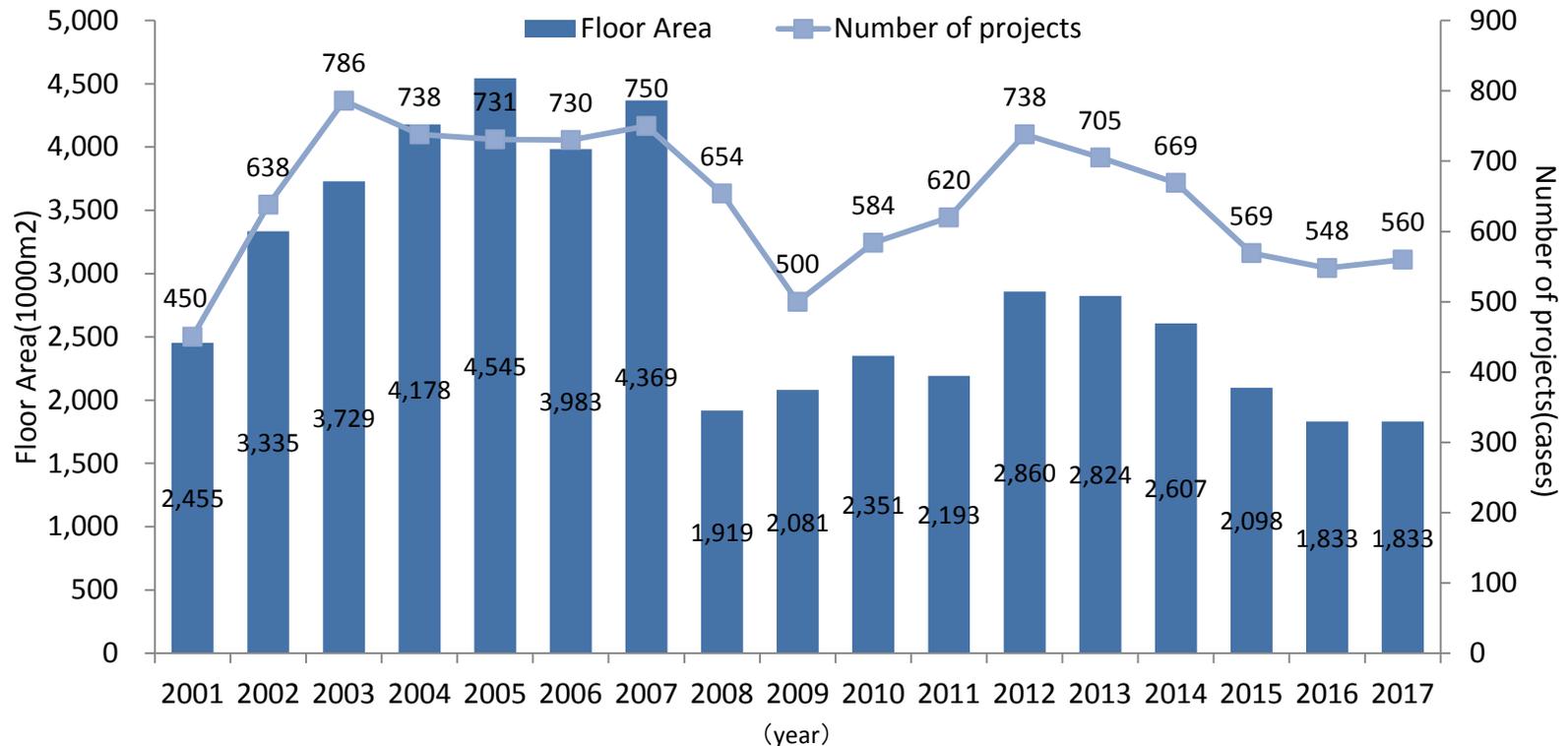
Logistics property market

Hotel market

Real estate investment products

The number of locations for large stores has been on a downtrend in recent years.

New retail space supply vs. number of development projects

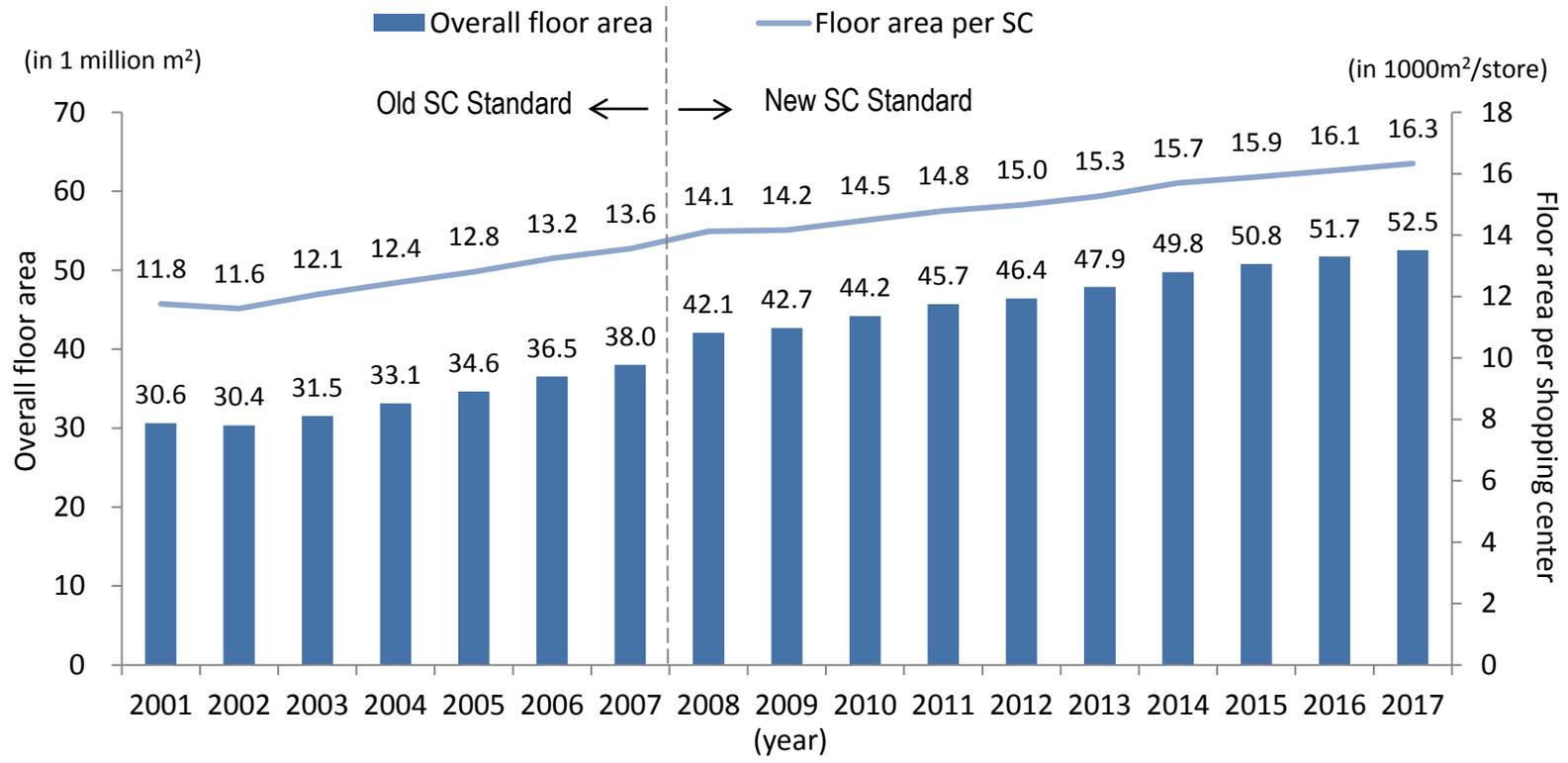


Source: METI "Large-scale Retail Chain Site Expansion Report"

Note: The reported numbers for the fiscal years 2002 and 2008 include stores without floor space indication.

For shopping centers, the total floor area for all stores and the floor area per store are both on the rise.

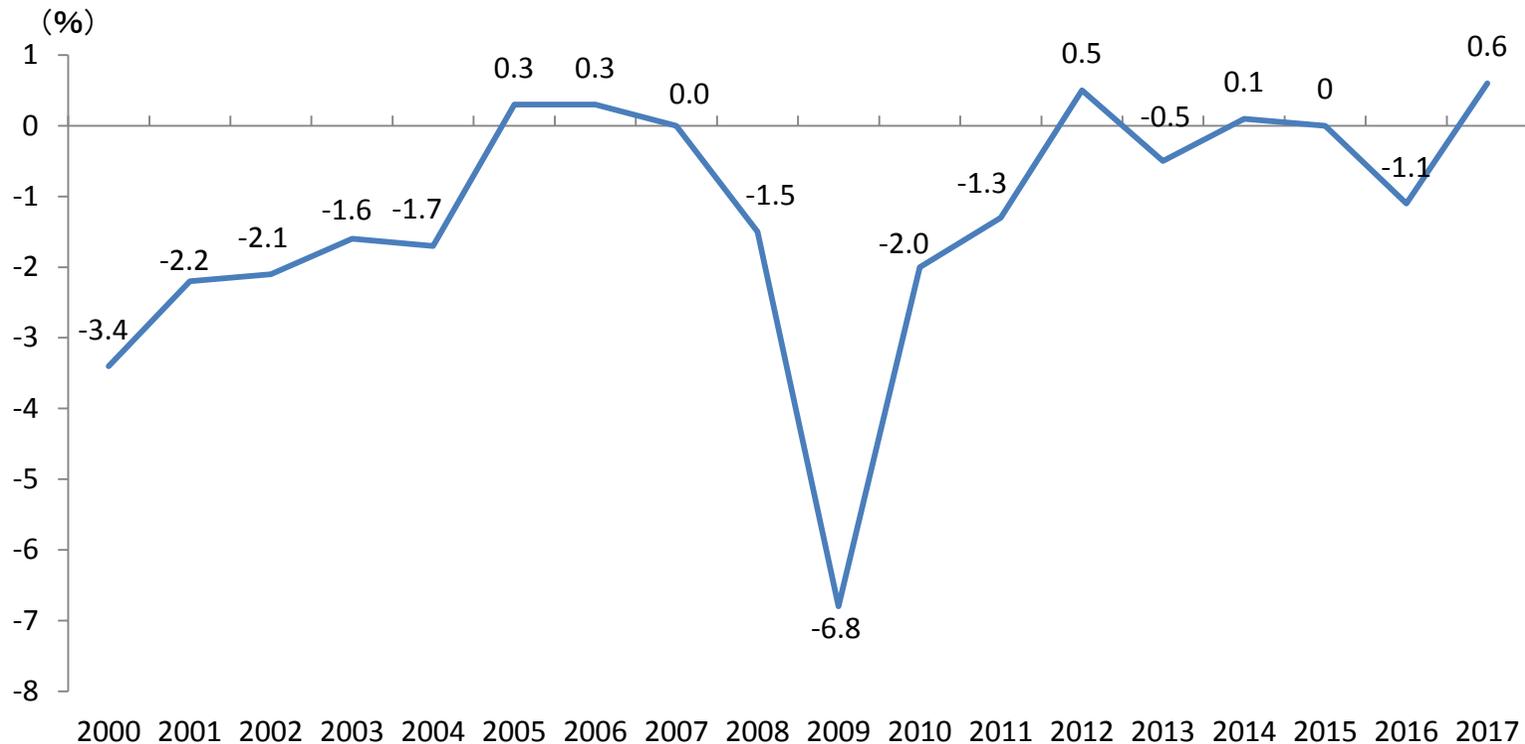
Overall floor area and per-store floor area for shopping centers



Source: Council of Shopping Centers "SC White Book"
 Note: In the old SC standard, only shopping malls with more than 10 retail tenants were considered.
 In the new SC standard, the shopping center must have more than 10 tenants including food stalls, service centers and retail outlets.
 On the same note, the shopping center must have more than 1,500 m² retail space.

In 2017, the annual sales of existing shopping centers increased by 0.6% compared to the previous year.

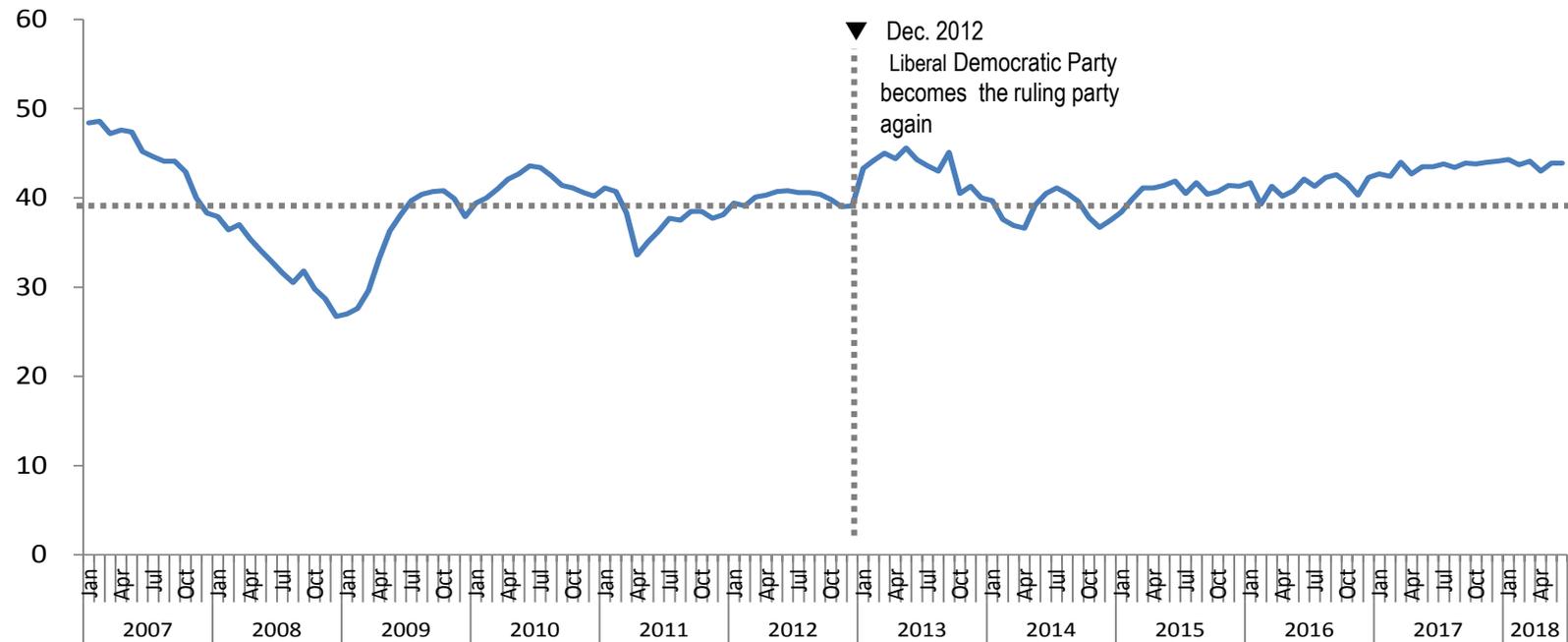
YoY comparison of existing shopping centers' annual sales



Source: Council of Shopping Centers "Overall Sales Statistics Report"

Abenomics has not changed consumer outlook dramatically.

Consumer outlook index chart



Note: Consumer outlook index calculation methodology:

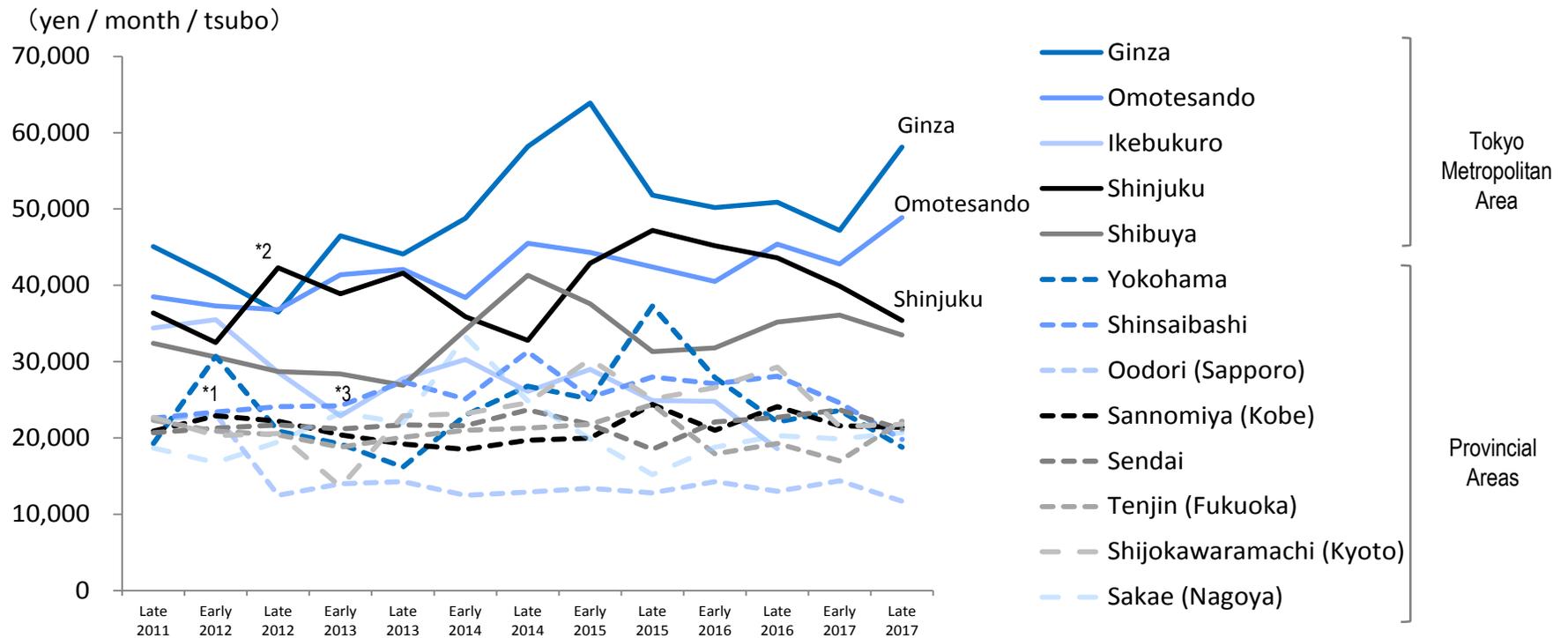
Consumers are asked to rate their outlook for the next 6 months for the following 4 categories: "Lifestyle", "Income", "Job environment" and "Determining when to purchase consumer durables" using a 5-scale index.

Each of the 5 scales is assigned a value: +1 for "Will get better," +0.75 for "Will get somewhat better," +0.5 for "Won't change," +0.25 for "Will get somewhat worse," and +0 for "Will get worse". This numerical index is used to provide a component ratio for each of the answers, from which the results are calculated.

To illustrate, a value of 50 will be produced if all participants answer "Won't change" for all available items.

Compared to other areas, rent levels in Ginza and Omotesando are still high.

1st floor rent ranking in 13 principal business areas (yen/month/tsubo)



Source: Japan Real Estate Institute, BAC Urban Projects, and Attractors Lab "Retail Chain Rental Trends"

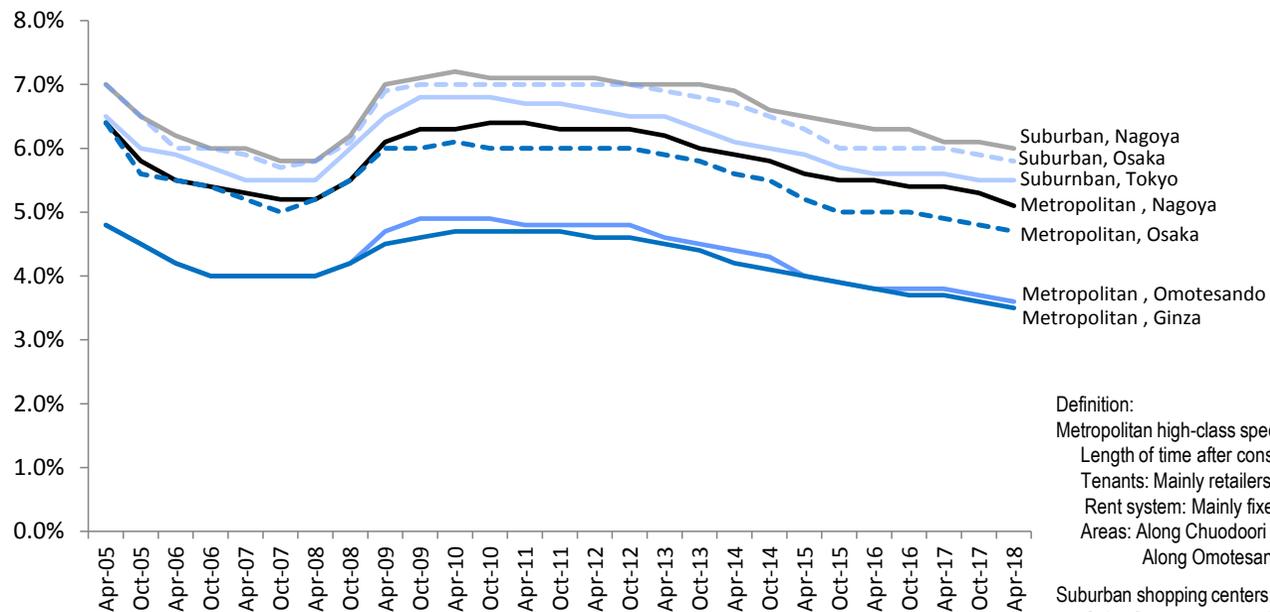
Note 1: Rent in Yokohama is shown to have spiked in the early half of 2012, but this can be attributed to the extremely small sample size

Note 2: Rent in Shinjuku is shown to have spiked in the late half of 2012, but this can be attributed to a sample bias toward small, high-rent properties

Note 3: Rent in Ikebukuro is shown to have dipped in the early half of 2013, but this can be attributed to a sample bias toward low-rent properties in unfavorable locations

Cap rates have been falling from around 2011, and hit a record low in all regions.

Commercial establishment cap rates (expected yield)



Definition:
 Metropolitan high-class specialty stores:
 Length of time after construction -or- large-scale repair/improvement: less than 5 years
 Tenants: Mainly retailers of high-class brands.
 Rent system: Mainly fixed-term, variable rental schemes based on the revenue.
 Areas: Along Chuoodoori in Ginza's Chuo district.
 Along Omotesando in Shibuya's Omotesando district.

Suburban shopping centers:
 Sales floor area: around 20,000m²
 Key tenants: Prominent general merchandise stores (GMS)
 Rent system: Mainly fixed-term, fixed-charge rental schemes
 Areas: Along main thoroughfares within about an hour from metropolitan Tokyo.

Stores for areas outside Tokyo follow similar locational conditions as above.

Population movements in Japan

Macro fundamentals of Japan

Overview of real estate investment market in Japan

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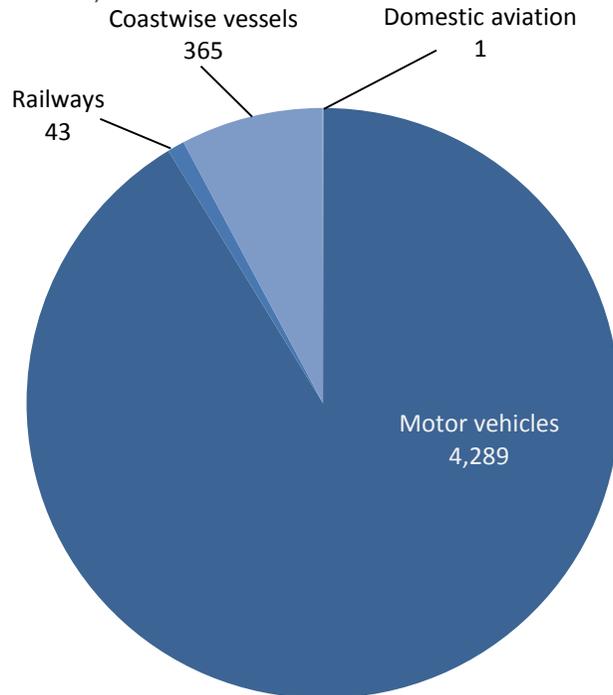
Real estate investment products

The truck-based transport volume (in tons), which forms the bedrock of Japan's cargo industry, has continued to decline in recent years.

- Truck-based (automobile) transport is the primary transport method that constitutes a large share of Japan's freight traffic.
- In recent years, the volume of cargo transported via automobile has declined due to the downturn in the quantity of trucks sold for private use.

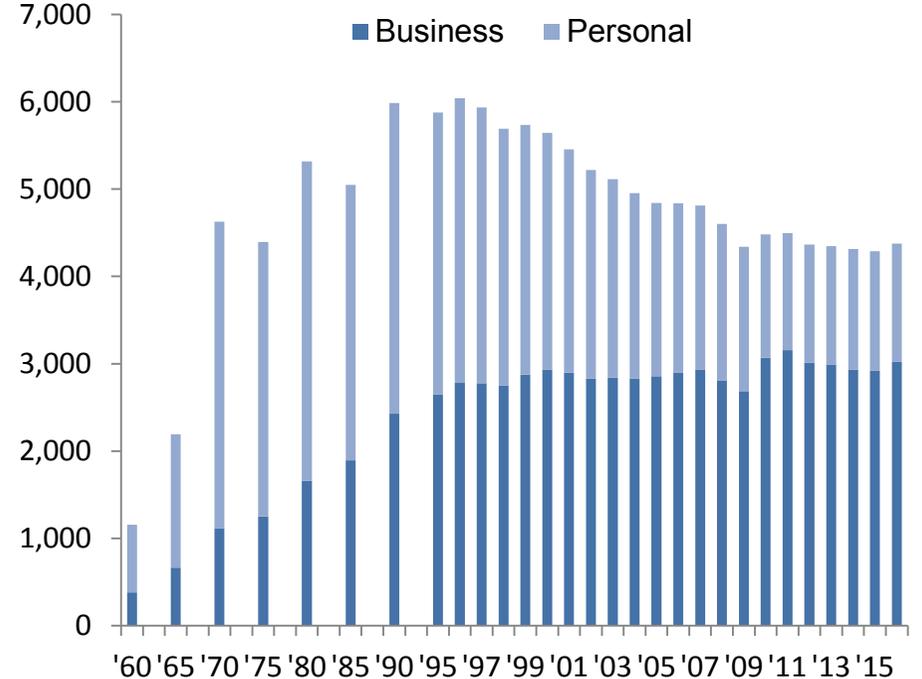
Cargo quantity by transport method (FY2015)

(Unit: 1 million tons)



Automobile cargo quantity movement

(1 million tons)



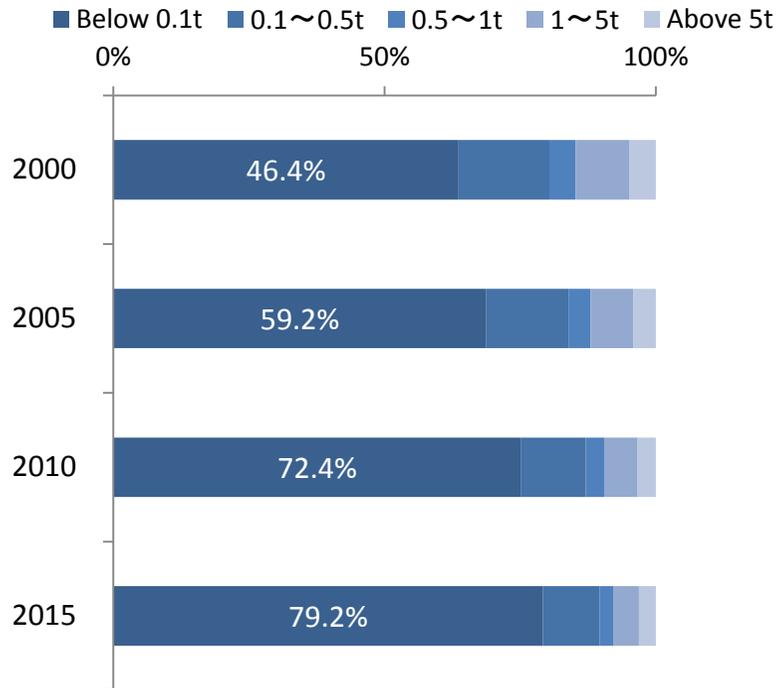
Source: MIC "Transport quantity by transport method" and MLIT "Automobile Transport Statistics Survey"

Note: The chronological continuity of data from prior to 2009 could not be guaranteed due to the changes made to the tallying methodology in the middle of 2010.

As the movement to smaller logistics lots progresses, the quantity distributed in such lots appears to be in upward trend based on the number of instances.

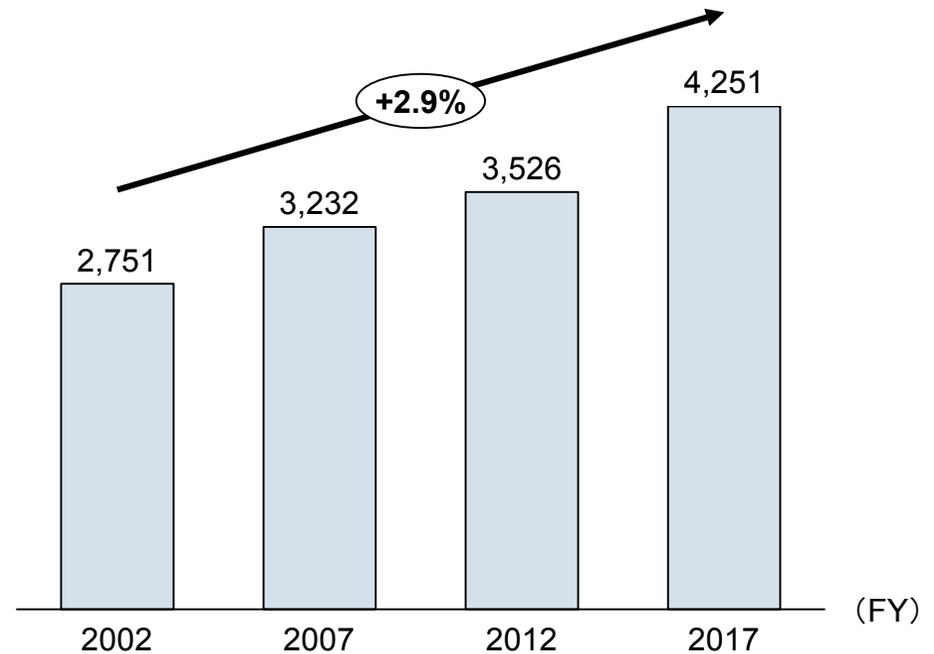
- The movement to smaller logistics lots progresses across the whole industry.
- The number of home delivery service handled has increased by an average of approximately 3% per year, and reaching 4.2 billion in FY2017.

Industry-wide distribution quantity by lot size



Source: MLIT "Logistics Census"

Number of home deliveries (million)



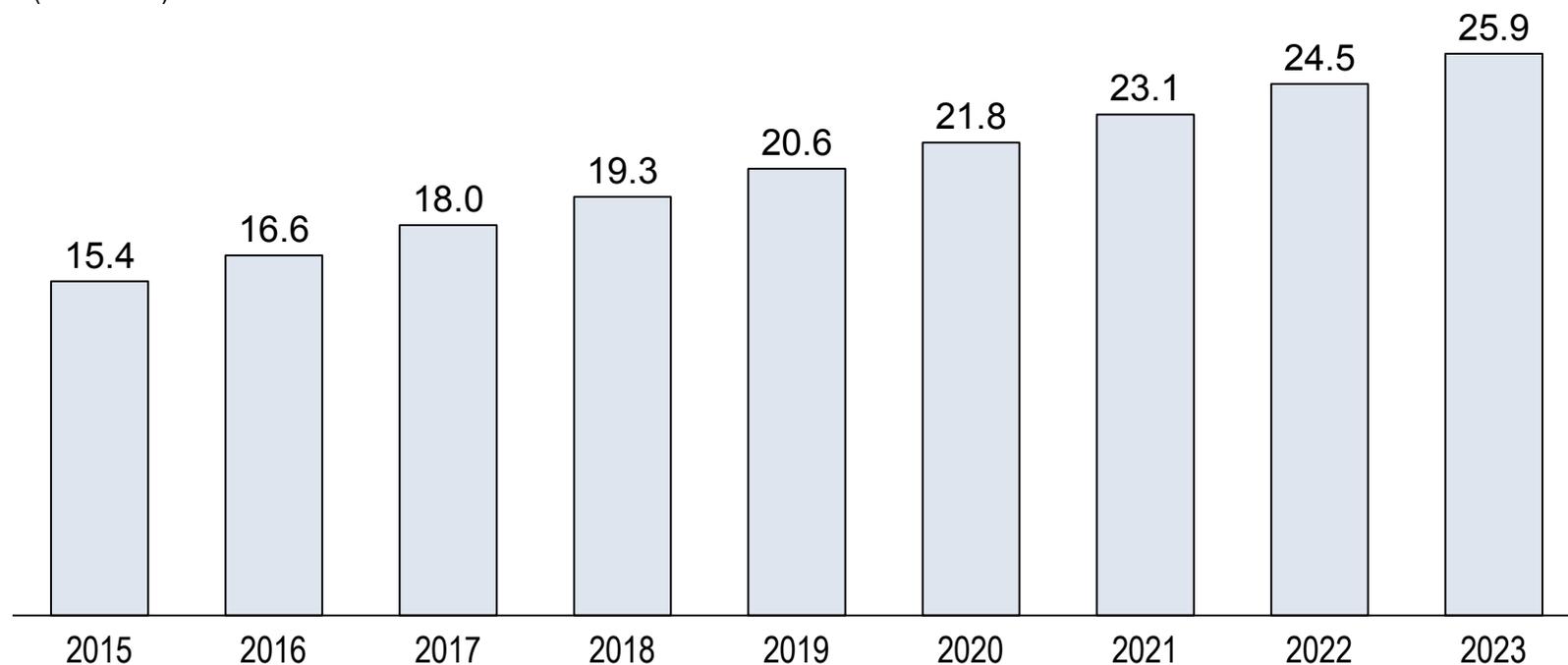
Source: MLIT "Release of Reports on the Number of home deliveries"

Small-lot consignments increase, due partly to the expansion of e-commerce, which is expected to continue growing hereafter.

- Market size of Business-to-Consumer e-Commerce is expected to surpass 20 trillion yen in 2019.

Market size of B-to-C e-Commerce

(trillion JPY)



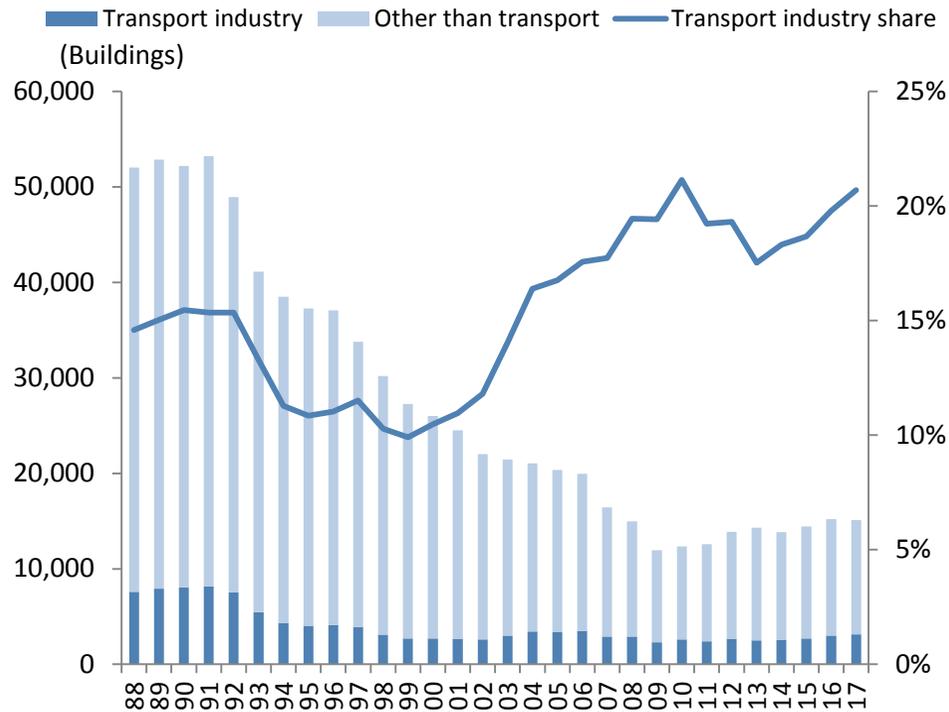
Source: NRI

Note: Business -to-consumer e-commerce: sale of products and services to consumers in general via the Internet

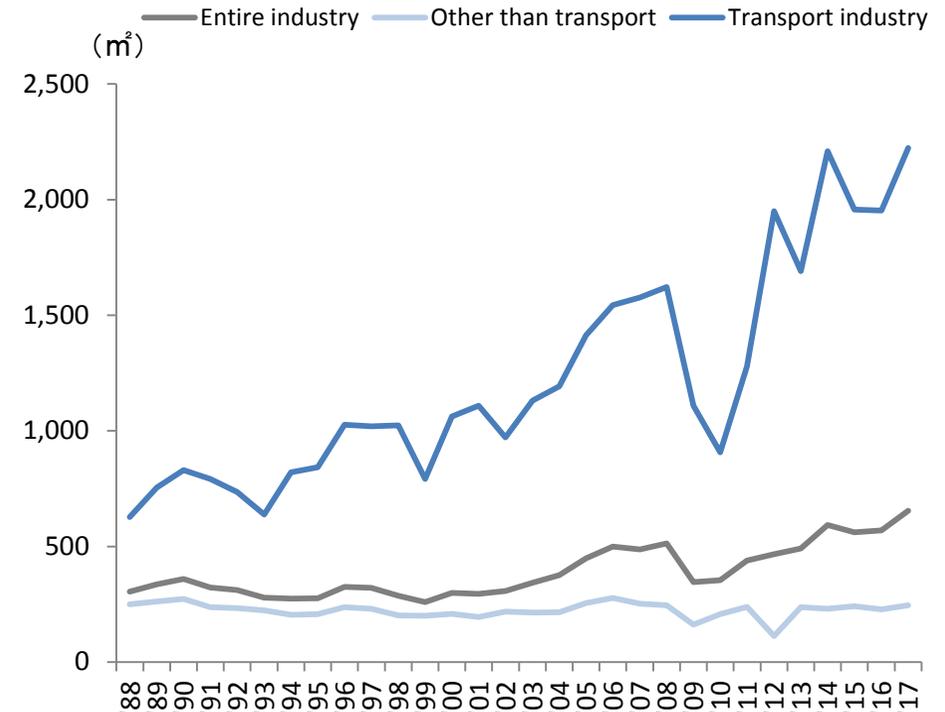
While new supply has stopped dwindling, facilities are growing larger due to businesses consolidating their logistics capabilities.

- The number of supplied warehouse buildings fell to roughly 23% of the peak level in 1991 (12,000 buildings/year) which has stabilized in recent years.
- The number of supplied warehouse buildings for the transport industry is dwindling at a more relaxed pace compared to the rest of the industry (see figure below left), but the floor space per building is on an upward trend (below right).
- This explains the increased need for SCM support for generic enterprises and new/large-scale logistics facilities for logistics consolidation.

Nationwide number of supplied warehouses including warehouses for transport and transport industry share

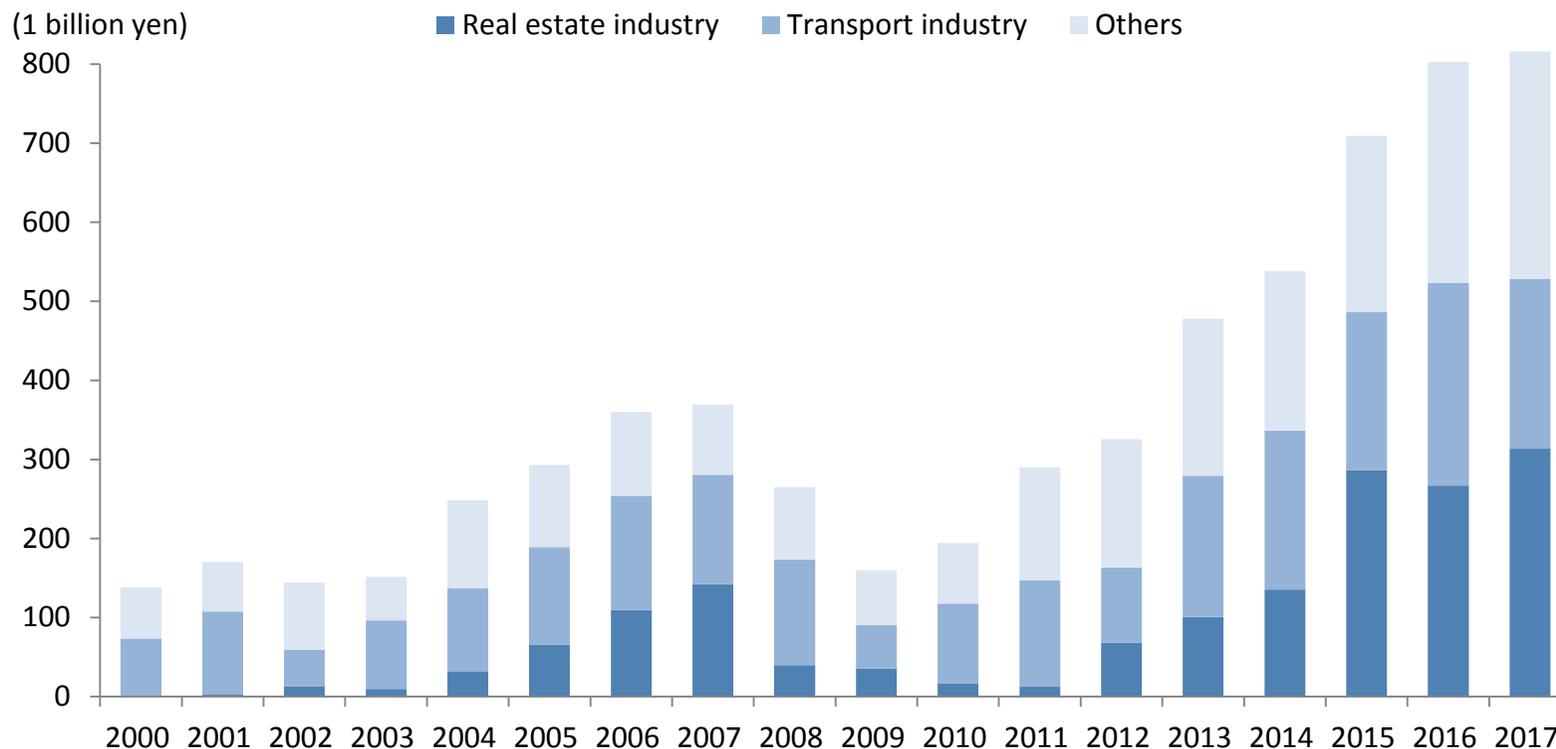


Floor space per warehouse building



In response to the growing demand of logistics used by e-commerce, the volume of order to build warehouses/logistics facilities has been increasing.

Order volume for construction of warehouses/logistics facilities by ordering industry



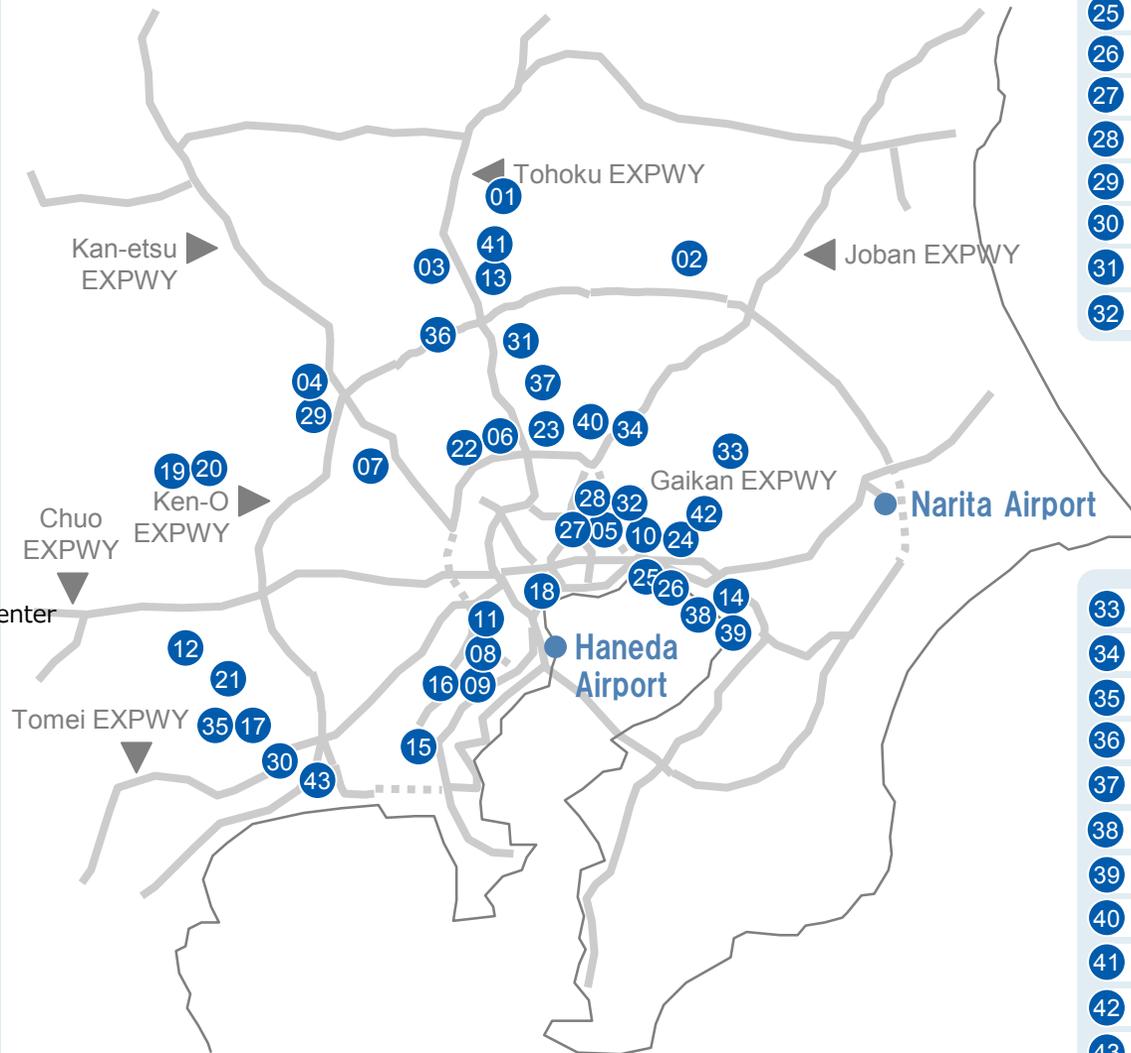
Source: MLIT "Construction Order Trends, Statistics and Survey"
Note: Only contracts worth 500 million yen and above are included

Logistics property market

Major foreign-based logistics property players and Japanese real estate developers are gearing up for roadside development ahead of new expressway construction.

No. Project

- 01 PROLOGIS Park hurukawa3
- 02 PROLOGIS Park Tsukuba1
- 03 ESR KUKI Distribution Center
- 04 MFLP Prologis Park Kawakoshi
- 05 ESR ICHIKAWA Distribution Center
- 06 MFLP Kawaguchi I
- 07 GLP Niiza
- 08 MFLP Haneda
- 09 MFLP Kawasaki I
- 10 MFLP Hunabashi II
- 11 Tokyo Rail Gate EAST
- 12 GLP Sagamihara Project
- 13 DPL Satte
- 14 Chibashi Wakamatutyou Logistics Center
- 15 Logicross Yokohama Kouhoku
- 16 Logiport Kawasaki Bay
- 17 Logicross Atsugi II
- 18 Landport Shinonome
- 19 Landport Oume I
- 20 Landport Oume II・III
- 21 Landport Atsugiakawamachi
- 22 Landport Kawaguchi
- 23 Landport Koshigaya
- 24 Landport Higashinarashino



- 25 Landport Narashino
- 26 DPL Shinnarashino
- 27 MCUD Ichikawa I
- 28 MCUD Ichikawa II
- 29 SOSiLA Kawakoshi
- 30 SOSiLA Ebina
- 31 SOSiLA Kasukabe
- 32 I Missions Park Ichikawashiohama

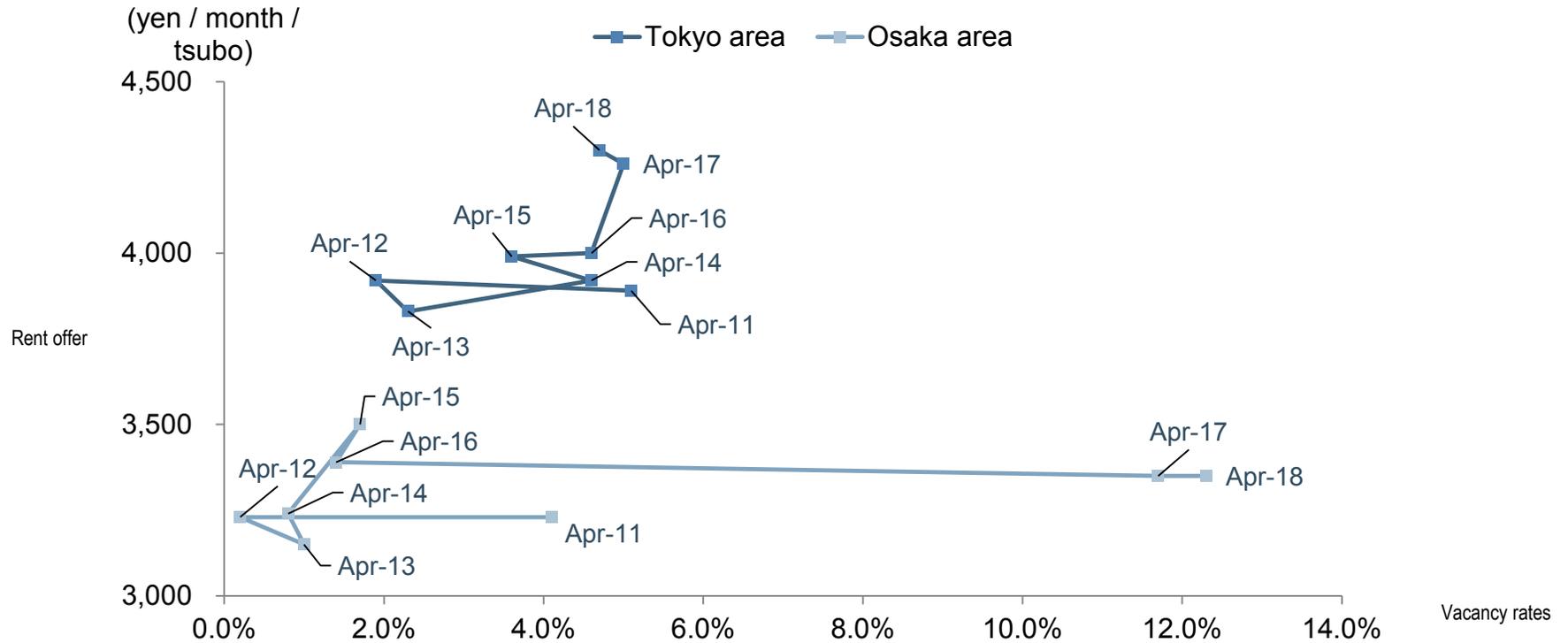
- Expressway
- - - Expressway (planned)
- New devts

- 33 I Missions Park Inzai2
- 34 I Missions Park haku2
- 35 Atsugi II Logistics Center
- 36 Hasuda II Logistics Center
- 37 Matsubushi Logistics Center
- 38 PROLOGIS Park Chiba1
- 39 PROLOGIS Park Chiba2
- 40 GLP Nagareyama III
- 41 GLP KenouGoka
- 42 GLP Yachiyo II
- 43 GLP Twin City PRJ(Atsugi III)

| # | Name of Project | Name of Developer | Map No. | Completion | Scale (Total floor area) |
|----|----------------------------------------|------------------------------------------------|---------|-------------|--------------------------|
| 1 | PROLOGIS Park Hurukawa3 | PROLOGIS | 1 | 2018.8 | 31,256㎡ |
| 2 | PROLOGIS Park Tsukuba1 | PROLOGIS | 2 | 2018.8 | About 70,000㎡ |
| 3 | I Missions Park Haku2 | ITOCHU Corporation | 34 | 2018.8 | Unknown |
| 4 | Atsugi II Logistics Center | ORIX | 35 | 2018.8 | 32,909㎡ |
| 5 | ESR KUKI Distribution Center | ESR | 3 | 2018.9 | 155,853㎡ |
| 6 | MFLP Prologis Park Kawakoshi | Mitsui Fudosan/PROLOGIS | 4 | 2018.10 | About 130,800㎡ |
| 7 | GLP KenouGoka | GLP | 41 | 2018.10 | 140,031㎡ |
| 8 | Landport Oume I | NOMURA REAL ESTATE DEVELOPMENT | 19 | 2018.11 | 61,121㎡ |
| 9 | DPL Shinnarashino | Daiwa House Industry | 26 | 2018.11 | 14,084㎡ |
| 10 | ESR ICHIKAWA Distribution Center | ESR | 5 | 2019.1 | 229,715㎡ |
| 11 | Hasuda II Logistics Center | ORIX | 36 | 2019.1 | 26,073㎡ |
| 12 | SOSiLA Kawakoshi | SUMITOMO CORPORATION | 29 | 2019.1 | 21,823㎡ |
| 13 | GLP Yachiyo II | GLP | 42 | 2019.1 | About 54,000㎡ |
| 14 | GLP NagareyamaIII | GLP | 40 | 2019.2 | 91,440㎡ |
| 15 | I Missions Park Inzai2 | ITOCHU Corporation | 33 | 2019.3 | Unknown |
| 16 | SOSiLA Kasukabe | SUMITOMO CORPORATION | 31 | 2019.3 | 52,900㎡ |
| 17 | Matsubushi Logistics Center | ORIX | 37 | 2019.3 | 77,326㎡ |
| 18 | GLP Niiza | GLP | 7 | 2019 Spring | About 31,000㎡ |
| 19 | MFLP Kawaguchi I | Mitsui Fudosan | 6 | 2019.4 | About 54,100㎡ |
| 20 | Logiport Kawasaki Bay | MITSUBISHI ESTATE | 16 | 2019.5 | 296,799㎡ |
| 21 | MFLP Haneda | Mitsui Fudosan | 8 | 2019.6 | About 84,400㎡ |
| 22 | Logicross Yokohama Kouhoku | MITSUBISHI ESTATE | 15 | 2019.6 | About 16,400㎡ |
| 23 | Landport Kawaguchi | NOMURA REAL ESTATE DEVELOPMENT | 22 | 2019.6 | 19,742㎡ |
| 24 | Landport Higashinarashino | NOMURA REAL ESTATE DEVELOPMENT | 24 | 2019.7 | 74,725㎡ |
| 25 | I Missions Park Ichikawashiohama | ITOCHU Corporation | 32 | 2019.8 | Unknown |
| 26 | Logicross Atsugi II | MITSUBISHI ESTATE | 17 | 2019 Summer | About 34,700㎡ |
| 27 | MFLP Kawasaki I | Mitsui Fudosan | 9 | 2019.9 | About 41,500㎡ |
| 28 | PROLOGIS Park Chiba1 | PROLOGIS | 38 | 2019.9 | 146,805㎡ |
| 29 | MFLP Hunabashi II | Mitsui Fudosan | 10 | 2019.10 | About 225,000㎡ |
| 30 | GLP Twin City PRJ (Atsugi III) | GLP | 43 | 2019.10 | About 42,000㎡ |
| 31 | Landport Shinonome | NOMURA REAL ESTATE DEVELOPMENT | 18 | 2019.12 | Unknown |
| 32 | PROLOGIS Park Chiba2 | PROLOGIS | 39 | 2019 | About 66,000㎡ |
| 33 | Landport Narashino | NOMURA REAL ESTATE DEVELOPMENT | 25 | 2020.1 | 142,742㎡ |
| 34 | SOSiLA Ebina | SUMITOMO CORPORATION | 30 | 2020.2 | 76,568㎡ |
| 35 | Landport Atsugaiakawamachi | NOMURA REAL ESTATE DEVELOPMENT | 21 | 2020.3 | 93,428㎡ |
| 36 | Landport Oume II・III | NOMURA REAL ESTATE DEVELOPMENT | 20 | 2020.6 | Unknown |
| 37 | Landport Koshigaya | NOMURA REAL ESTATE DEVELOPMENT | 23 | 2020.6 | 31,981㎡ |
| 38 | Tokyo Rail Gate EAST | Mitsui Fudosan | 11 | 2021.10 | About 161,000㎡ |
| 39 | GLP Sagamihara Project | GLP | 12 | From 2022 | 655000㎡ |
| 40 | DPL Satte | Daiwa House Industry | 13 | Unknown | 115,600㎡** |
| 41 | Chibashi Wakamatutyou Logistics Center | ITOCHU Corporation | 14 | Unknown | About 10,478㎡ |
| 42 | MCUD Ichikawa I | Mitsubishi Corporation Urban Development, Inc. | 27 | Unknown | About 17,300㎡** |
| 43 | MCUD Ichikawa II | Mitsubishi Corporation Urban Development, Inc. | 28 | Unknown | About 3,300㎡** |

While the supply of logistics properties is increasing, vacancy rates are rising since 2016. On the other hand monthly rent offers are also rising in Greater Tokyo.

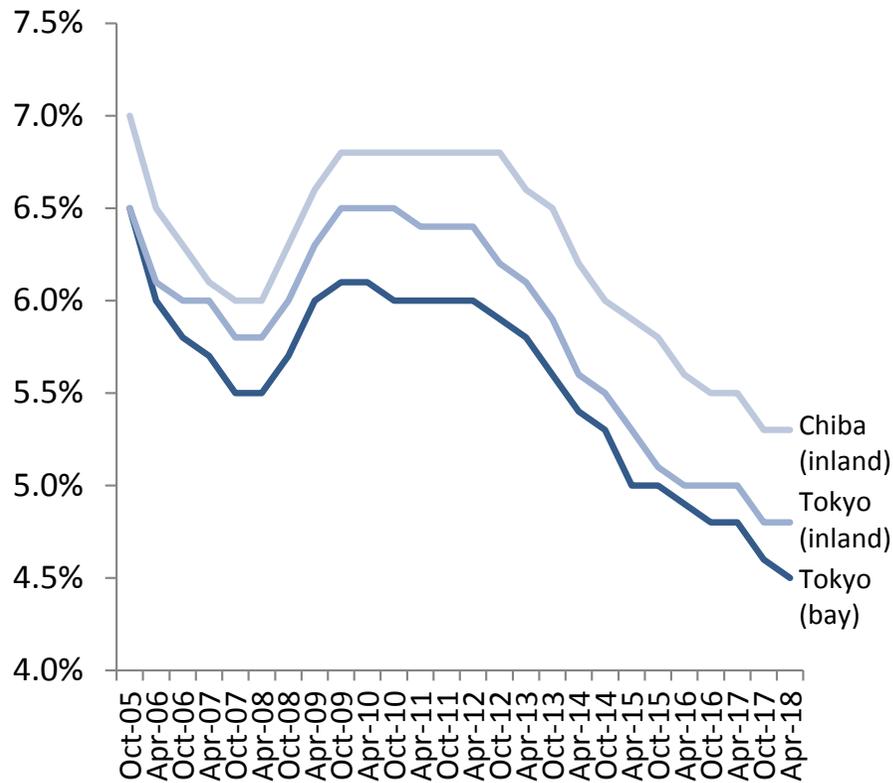
Monthly rent offers and vacancy rates of logistics properties



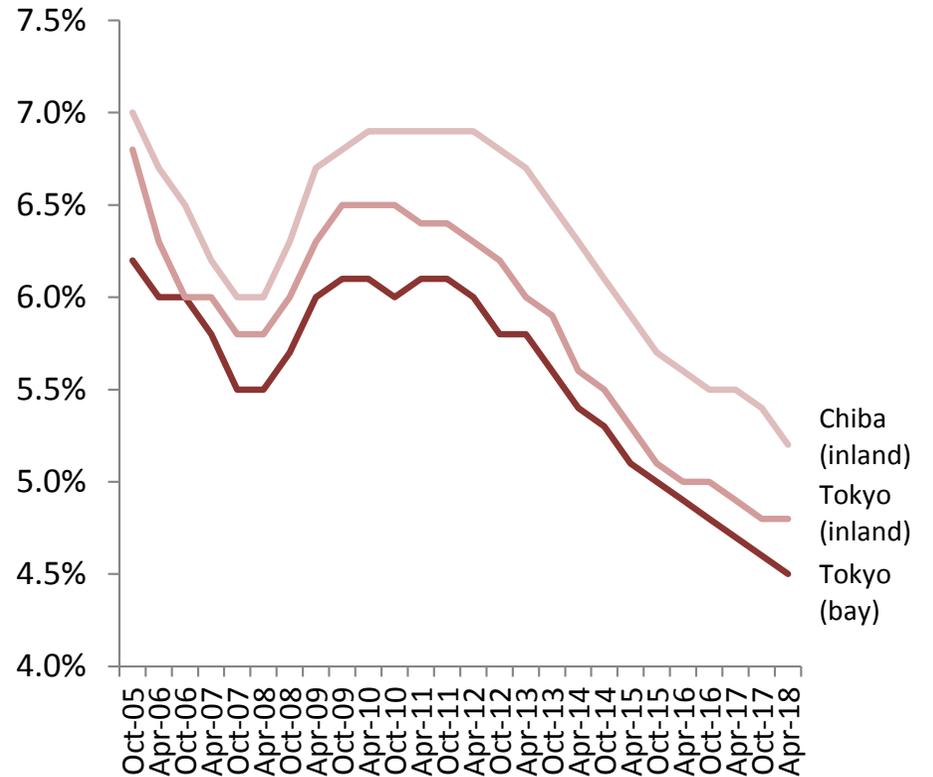
Source: Ichigo Real Estate Information Service "Survey on the Logistics Facilities Rental Market"
 Note: Logistics facilities which have a total lot area or total floor area of 10,000m²

Cap rates have been falling since 2012, with Tokyo hitting all-time low.

Single tenant



Multi-tenant



Source: Japan Real Estate Institute "Real Estate Investor's Survey"
 Note: Single tenant: 2-3 floors; total floor area of around 10,000m²
 Multi-tenant: 3-4 floors; total floor area of around 50,000m²

Population movements in Japan

Macro fundamentals of Japan

Overview of real estate investment market in Japan

Office market

Residential market

Retail property market

Logistics property market

Hotel market

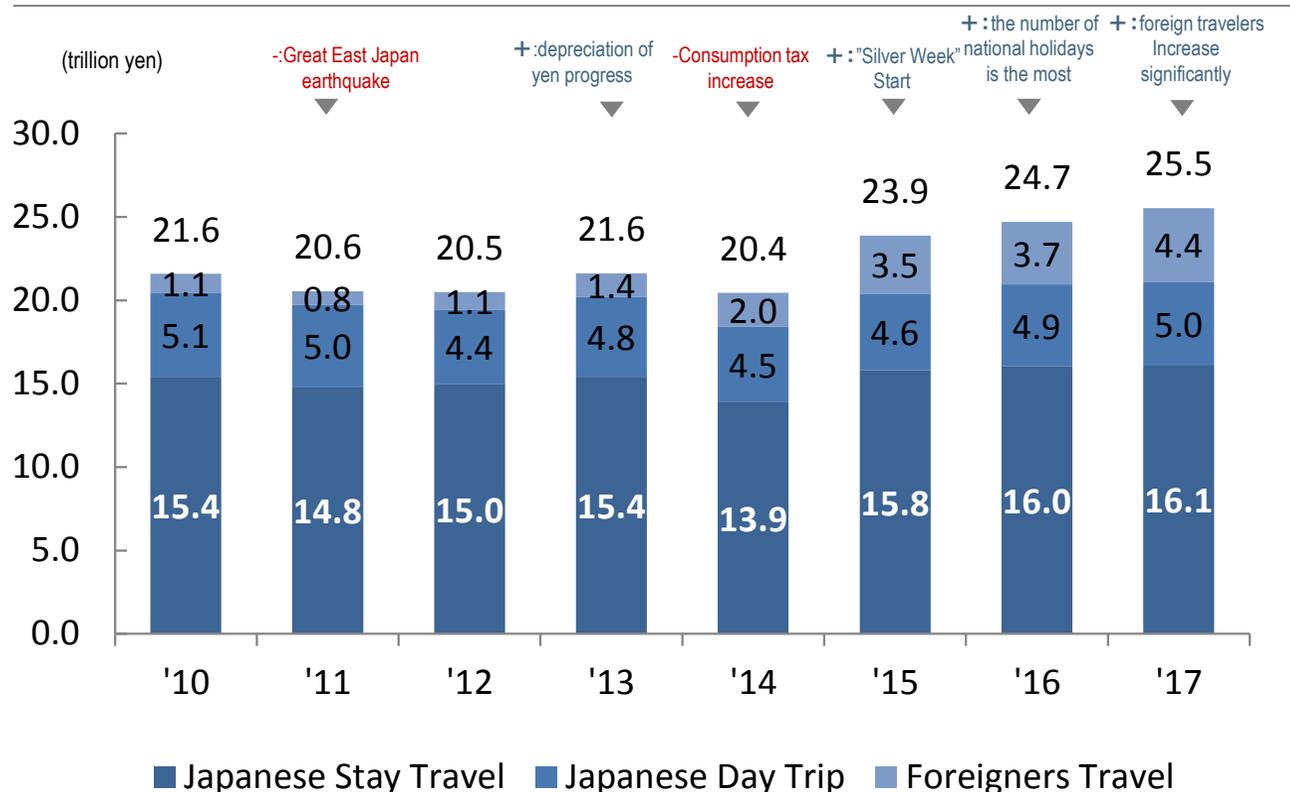
Real estate investment products

Hotel market

Domestic travel expenditure in 2017 was the largest in the last 7 years, driven by an increased number of foreigner travelers to Japan.

- Foreign travelers in 2017 accounted for 17% of total domestic travel expenditure

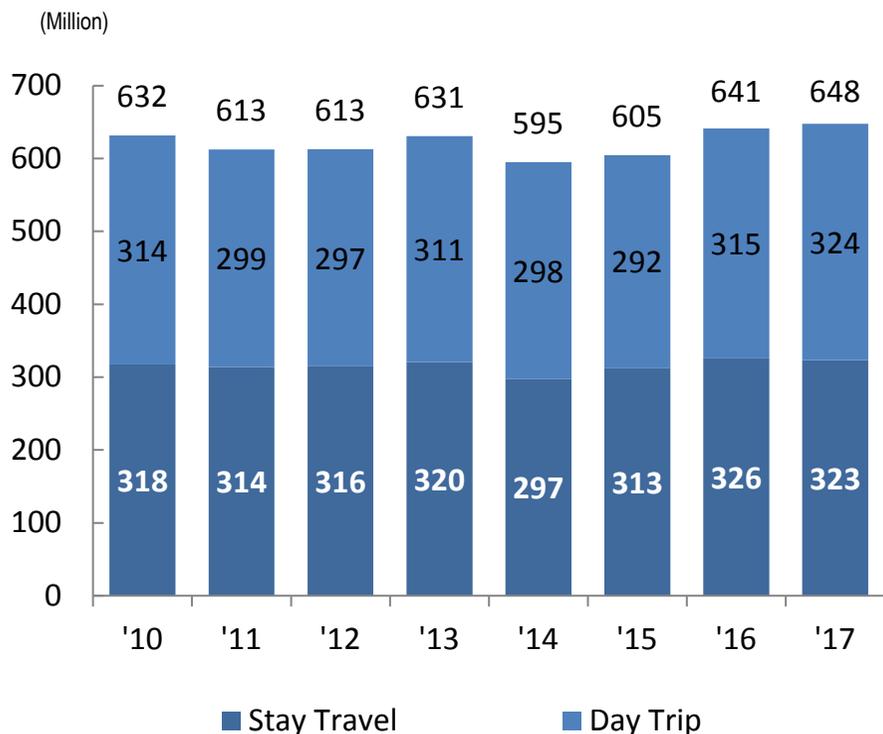
Trends in domestic travel expenditure



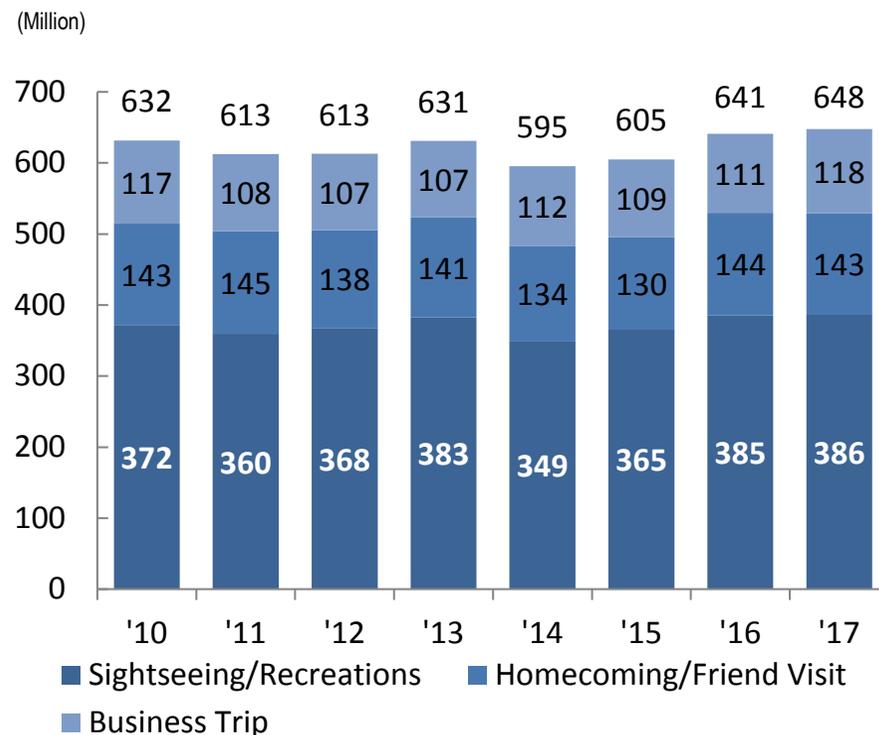
Sources: Compiled by NRI from Japan Tourism Agency "Ryokou・Kankou Sho-hi Doukou Chosa" and "Consumption Trend Survey for Foreigners Visiting Japan" data

The number of travelers among Japanese residents has edged sideways.

Cumulative domestic traveler numbers
(Overnight Travel/Day Trip)



Cumulative domestic traveler numbers
(by trip objective)



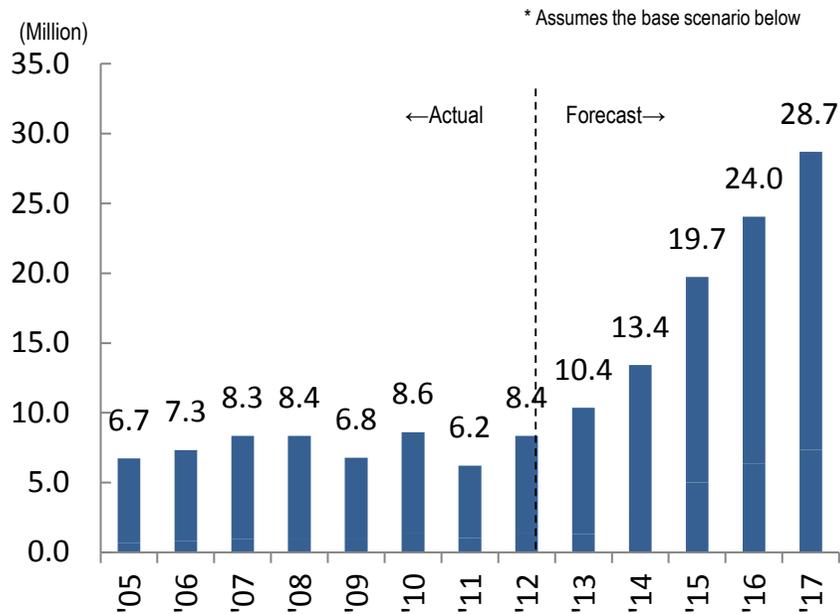
Source: Compiled by NRI from Japan Tourism Agency "Ryokou · Kankou Sho-hi Doukou Chosa" data
Note: Cumulative domestic traveler numbers do not include foreign travelers to Japan.

Hotel market

Conversely, the number of travelers to Japan increased rapidly and reached about 28.7 million, thanks to the weak yen and relaxed visa criteria. It accounts for approximately 75% of the four neighbouring Asian countries/regions.

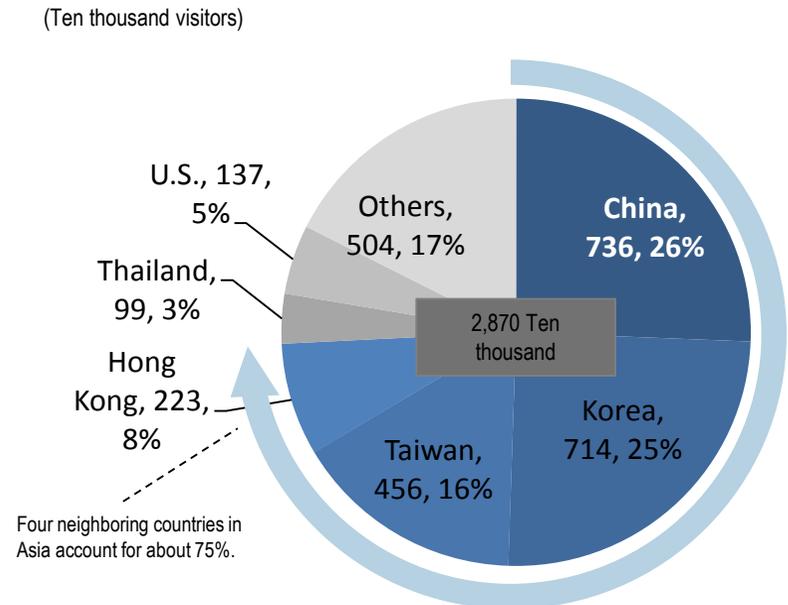
- Measured by departure country, Chinese visitors will account for about 53% of the total in 2030.

No. of foreigner travelers to Japan



Sources: Compiled by NRI from (Actual numbers) JNTO

No. of foreigner travelers to Japan by departure country (2016)

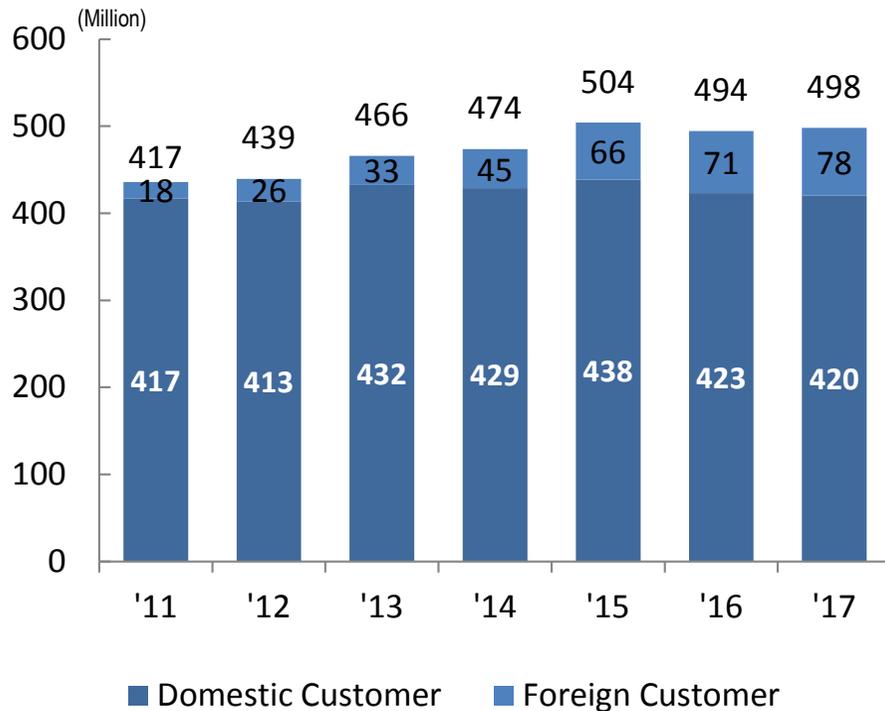


Source: Compiled by NRI from JNTO data

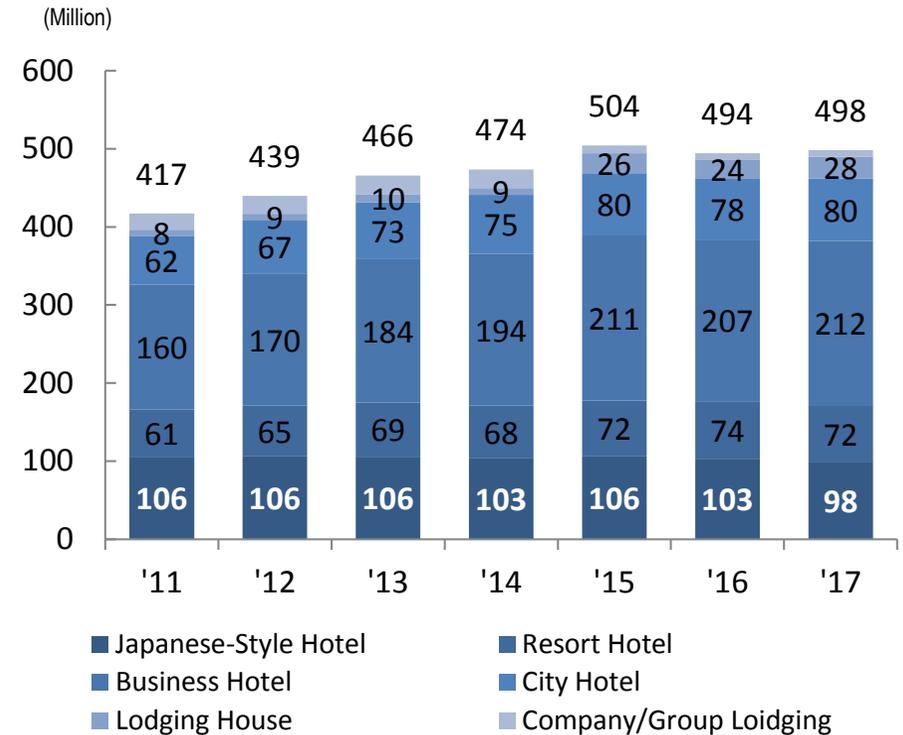
The ratio of foreign nationals to the number of accommodation is rising and was 15.7% in 2017.

■ Viewed by facility type, the rise in foreign travelers is impacting growth in business hotels.

Domestic accommodation
(Domestic/Foreign)



Domestic stays (by accommodation type)

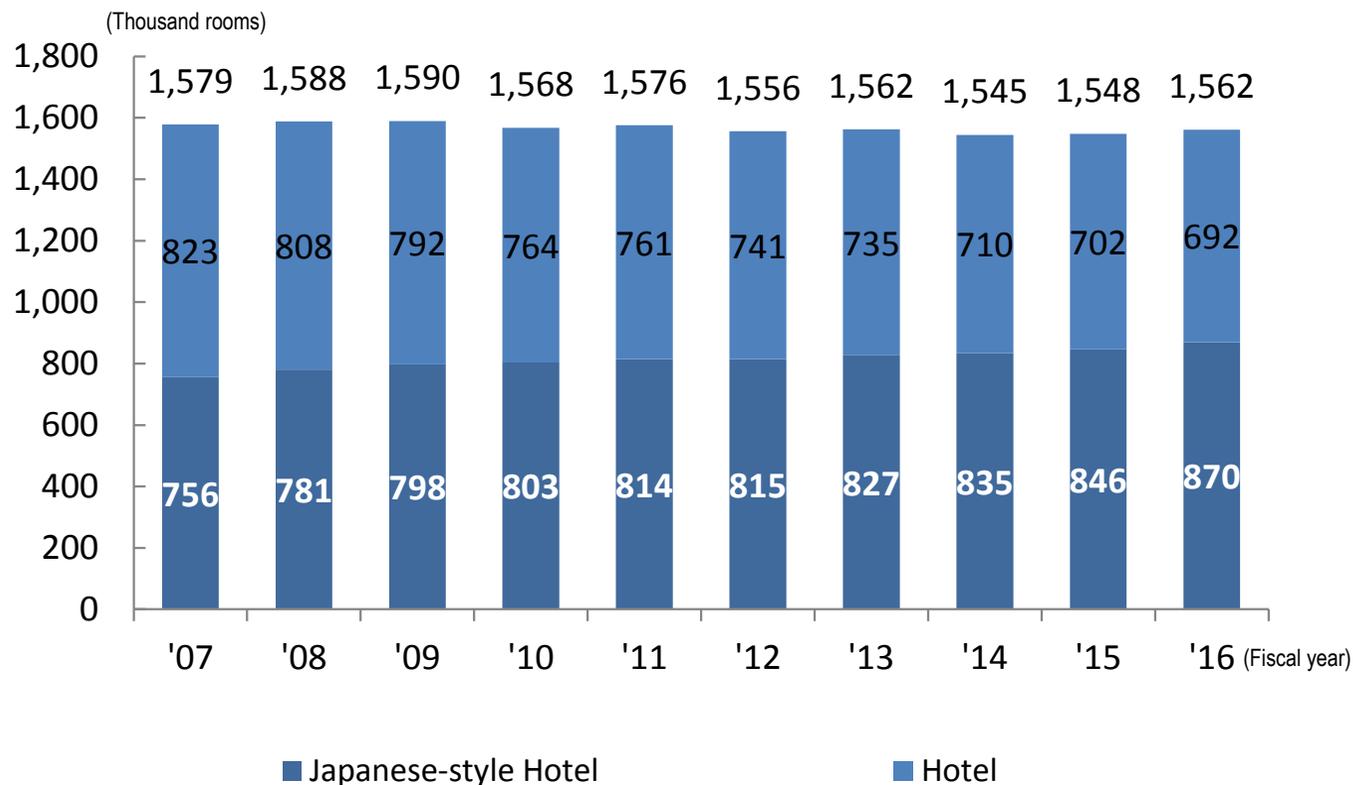


*Business Hotel : Budget Hotel

Source: Compiled by NRI from Japan Tourism Agency "Syukuhaku Ryokou Toukei" data

The total number of the accommodation facilities remains stable.
By type, however, the proportion of hotels continues to rise

Trend in number of guest rooms



Source: Compiled by NRI from MHLW "Report of Health Administration and Services" data

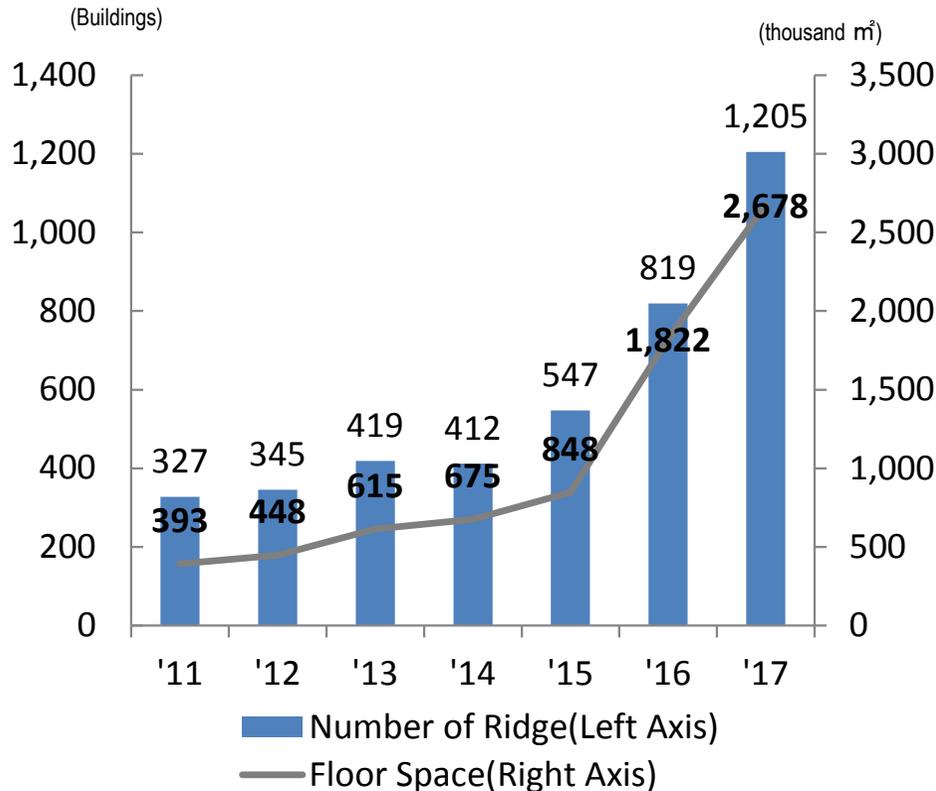
Hotel market

The number of accommodation facilities and area of floor space continues to expand owing to a stable economic environment and growing demand for accommodations.

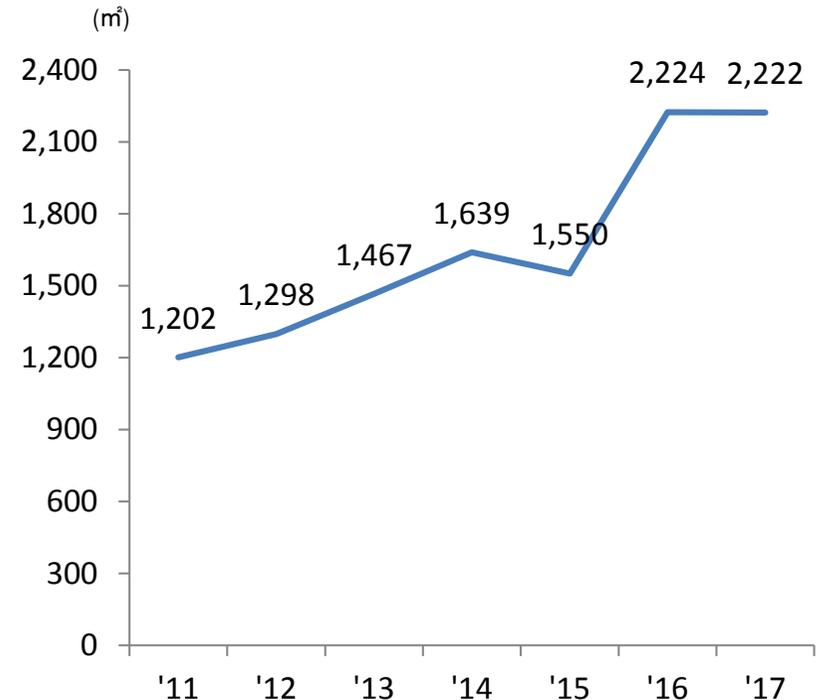
- Floor space per building is 1.25 times higher than 2011, as large buildings are being built

Accommodation facilities*

No of buildings and floor space



Accommodation facilities * Floor space per building



*Accommodations assume a hotel.

Surveyed buildings are those built with steel framed reinforced concrete, ferroconcrete and steel frame

Source: Compiled by NRI from MLIT "Statistics on Construction Undertaken" data

Hotel market

c13,000 rooms are expected to open in Tokyo over the next 3 years

Main new hotel development projects in Tokyo* 1/2

| Operator | Area | Opening year | Number of rooms |
|---------------------------|----------------------|--------------|-----------------|
| APA Group | Shintomicho | 2018 | 141 |
| | Shinjuku | 2018 | 176 |
| | Akasaka | 2018 | 306 |
| | Nihonbashi-Bakurocho | 2018 | 193 |
| | Ayase | 2019 | 170 |
| | Ueno | 2019 | 129 |
| | Otuska | 2019 | 613 |
| | Komagome | 2019 | 184 |
| | Shinjuku | 2019 | 166 |
| | Shinjuku | 2019 | 217 |
| | Nagatacho | 2019 | 500 |
| | Nihonbashi-Bakurocho | 2019 | 281 |
| | Roppongi | 2019 | 875 |
| | Higashi-Shinjuku | 2020 | 565 |
| | Nihonbashi-Bakurocho | 2020 | 281 |
| | Ryogoku | 2020 | 1111 |
| Roppongi | undecided | 670 | |
| Kyoritsu Maintenance | Ginza | 2019 | undecided |
| Keikyu EX Inn | Hamamatsucho | 2019 | 111 |
| | Nihonbashi-Kayabacho | 2020 | 142 |
| JR Kyushu Railway Company | Shinbashi | 2019 | 267 |

| Operator | Area | Opening year | Number of rooms |
|---------------------------------|----------------|--------------|-----------------|
| JR East Japan Railway Company | Shinkiba | | 189 |
| | Akihabara | 2019 | 196 |
| | Gotanda | 2020 | 166 |
| | Takehiba | 2020 | 200-300 |
| JR West Japan Railway Company | Iidabashi | 2018 | 295 |
| | Nihonbashi | 2019 | 240 |
| Daiwa Royal | Shinbashi | 2018 | undecided |
| | Ariake | 2018 | undecided |
| | Kyobashi | 2019 | about 200 |
| Daiwa House Industry | Toyosu | 2019 | 330 |
| Tokyu Hotels | Shibuya | 2018 | 180 |
| Toyoko Inn | Shinjuku-Gyoen | 2018 | undecided |
| | Inagi | 2018 | 263 |
| | Akabane | 2019 | 220 |
| Hankyu Hanshin Hotels | Kyobashi | 2019 | 270 |
| | Ginza | 2019 | 238 |
| Four Seasons Hotels and Resorts | Otemachi | 2020 | 190 |
| Fujita Kanko | Asakusa | 2018 | 125 |
| | Hamamatsucho | 2019 | 190 |
| | Asakusa | 2020 | undecided |

Source: Compiled by NRI from Ohta Publications Co., Ltd. "Weekly HOTERES" data
 Note: A hotel development project is chosen as the area where weekly HOTERES investigated.

Hotel market

c13,000 rooms are expected to open in Tokyo over the next 3 years

Main new hotel development projects in Tokyo* 2/2

| Operator | Area | Opening year | Number of rooms |
|---------------------------------|----------------------|--------------|-----------------|
| Prince Hotels | Ebisu | 2020 | 82 |
| | Shiomi | 2020 | 605 |
| Hotel Keihan | Tsukiji | 2018 | 300 |
| | Ginza | 2019 | undecided |
| Hotel Livemax | Ueno | 2018 | - |
| | Takadanobaba | 2018 | - |
| | Asakusabashi | 2018 | - |
| | Okachimachi | 2018 | - |
| | Akabane | 2018 | - |
| | Shintomicho | 2018 | - |
| | Ayase | 2019 | - |
| Marriott International | Yaesu | 2022 | 98 |
| Mitsui Fudosan Hotel Management | Kanda | 2018 | 191 |
| | Gotanda | 2018 | 370 |
| | Nihonbashi-muromachi | 2018 | 260 |
| | Ginza | 2019 | 338 |
| Mitsui Fudosan | Kasumigaokamachi | 2019 | undecided |
| | Roppongi | 2019 | 260 |
| | Toyosu | 2020 | 200 |
| | Otemachi | 2020 | 190 |
| | Yaesu | 2022 | 98 |
| Resorttrust | Nihonbashi-hamacho | 2019 | 223 |

Source: Compiled by NRI from Ohta Publications Co., Ltd. "Weekly HOTERES" data
 Note: A hotel development project is chosen as the area where weekly HOTERES investigated.

Over 6,000 rooms are expected to open in Osaka as well over the next 3 years

Main new hotel development projects planned in Osaka prefecture*

| Operator | Area | Opening year | Number of rooms |
|--------------------------------------------------|-------|--------------|-----------------|
| APA Group | Osaka | 2018 | 193 |
| | Osaka | 2019 | 917 |
| | Osaka | 2019 | 161 |
| | Suita | 2019 | 119 |
| AB Hotel | Osaka | 2019 | 168 |
| | Sakai | 2019 | 125 |
| Candeo Hospitality Management Global Headquarter | Suita | 2018 | 111 |
| Kuretakeso | Osaka | 2018 | 141 |
| | Sakai | 2018 | 122 |
| JR West Japan Railway Company | Osaka | 2018 | 400 |
| | Osaka | 2018 | 88 |
| | Osaka | 2019 | 220 |
| Sotetsu Inn | Osaka | 2018 | 176 |
| | Osaka | 2018 | 276 |
| Daiwa Royal Hotel City | Osaka | 2019 | undecided |
| Daiwa House Industry | Osaka | 2019 | undecided |
| Tokyu Hotels | Osaka | 2019 | 360 |

| Operator | Area | Opening year | Number of rooms |
|------------------------|-----------|--------------|-----------------|
| Toyoko Inn | Osaka | 2018 | undecided |
| | Osaka | 2018 | 542 |
| Hankyu Hanshin Hotels | Osaka | 2019 | 250 |
| Hotel Keihan | Osaka | undecided | undecided |
| Hotel Monterey Group | Osaka | 2018 | 345 |
| Unizo Holdings | Osaka | 2019 | 291 |
| | Osaka | 2021 | 487 |
| Hotel Livemax | Osaka | 2019 | undecided |
| | Osaka | 2019 | undecided |
| Marriott International | Osaka | 2020 | 288 |
| | Osaka | 2021 | 337 |
| Route Inn Japan | Kishiwada | 2019 | 210 |

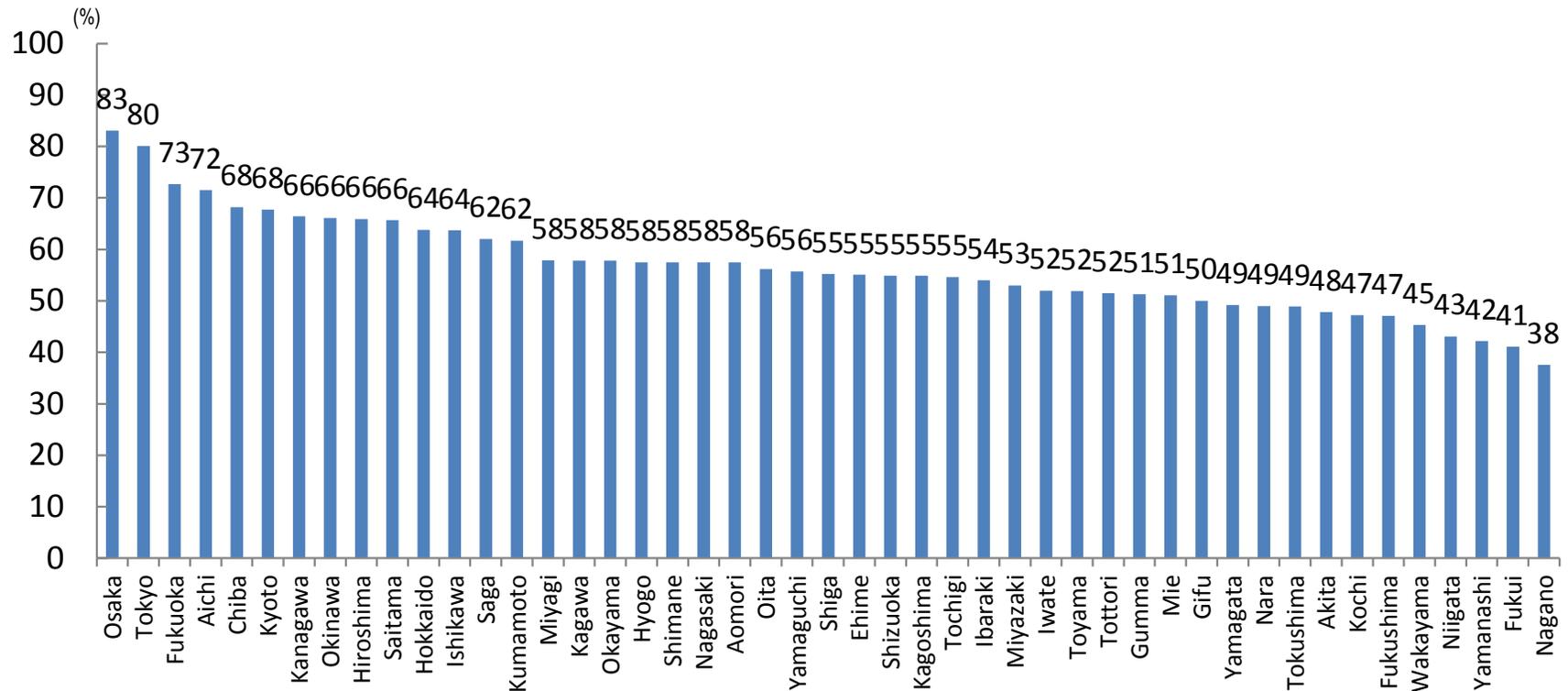
Source: Compiled by NRI from Ohta Publications Co., Ltd. "Weekly HOTERES" data

Note: A hotel development project is chosen as the area where weekly HOTERES investigated.

Guest room occupancy rates vary widely by prefecture

■ Occupancy rates at hotels in Osaka and Tokyo have risen to c80% are approaching full capacity.

Average occupancy rate by prefecture

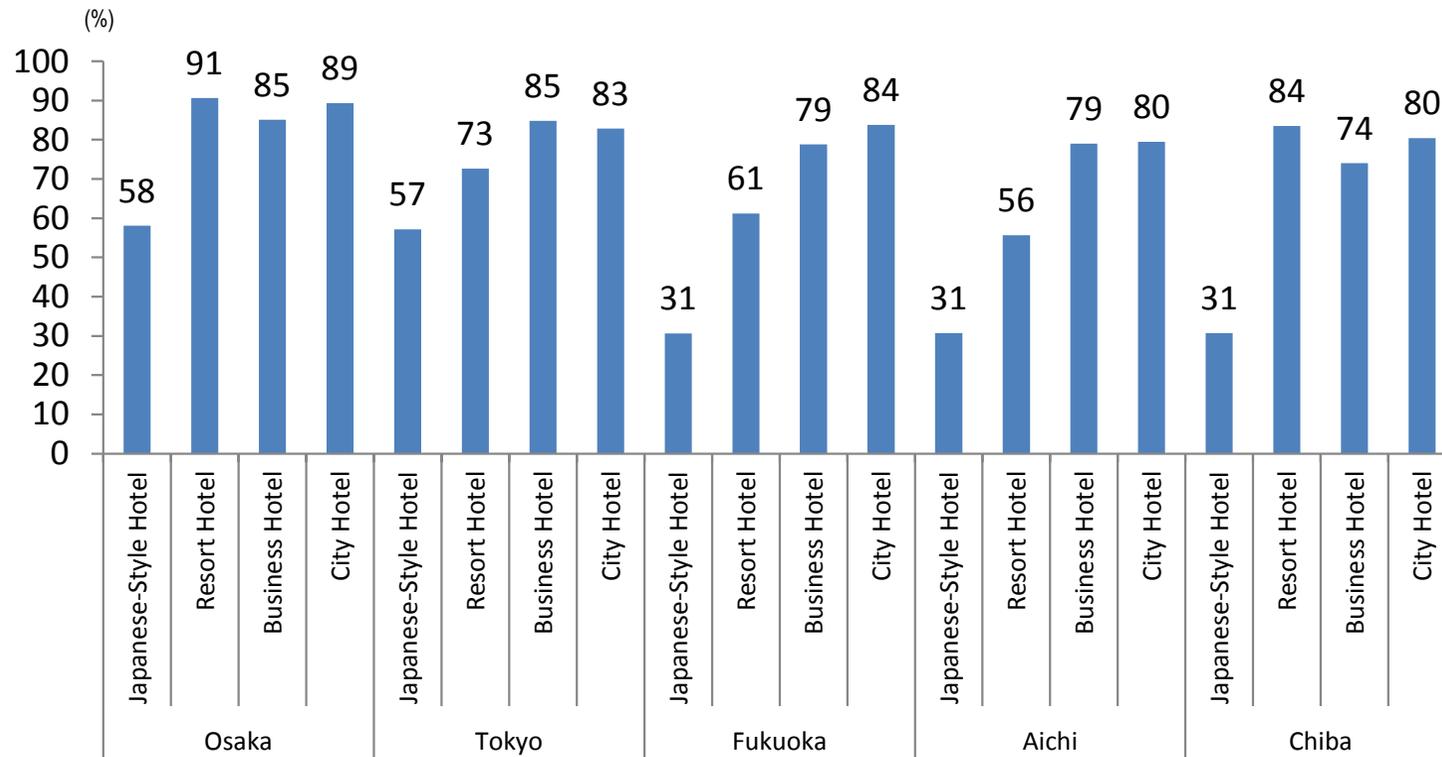


Source: Compiled by NRI from Japan Tourism Agency "Syukuhaku Ryokou Toukei" data

Hotel market

Looking at the type of accommodation in the top 5 prefectures, the occupancy rates in hotels often exceeds 70%. On the other hand, the occupancy rates of Japanese-style inns is less than 50% excluding the Tokyo area.

Average occupancy rate in top 5 prefectures (by type of accommodation)

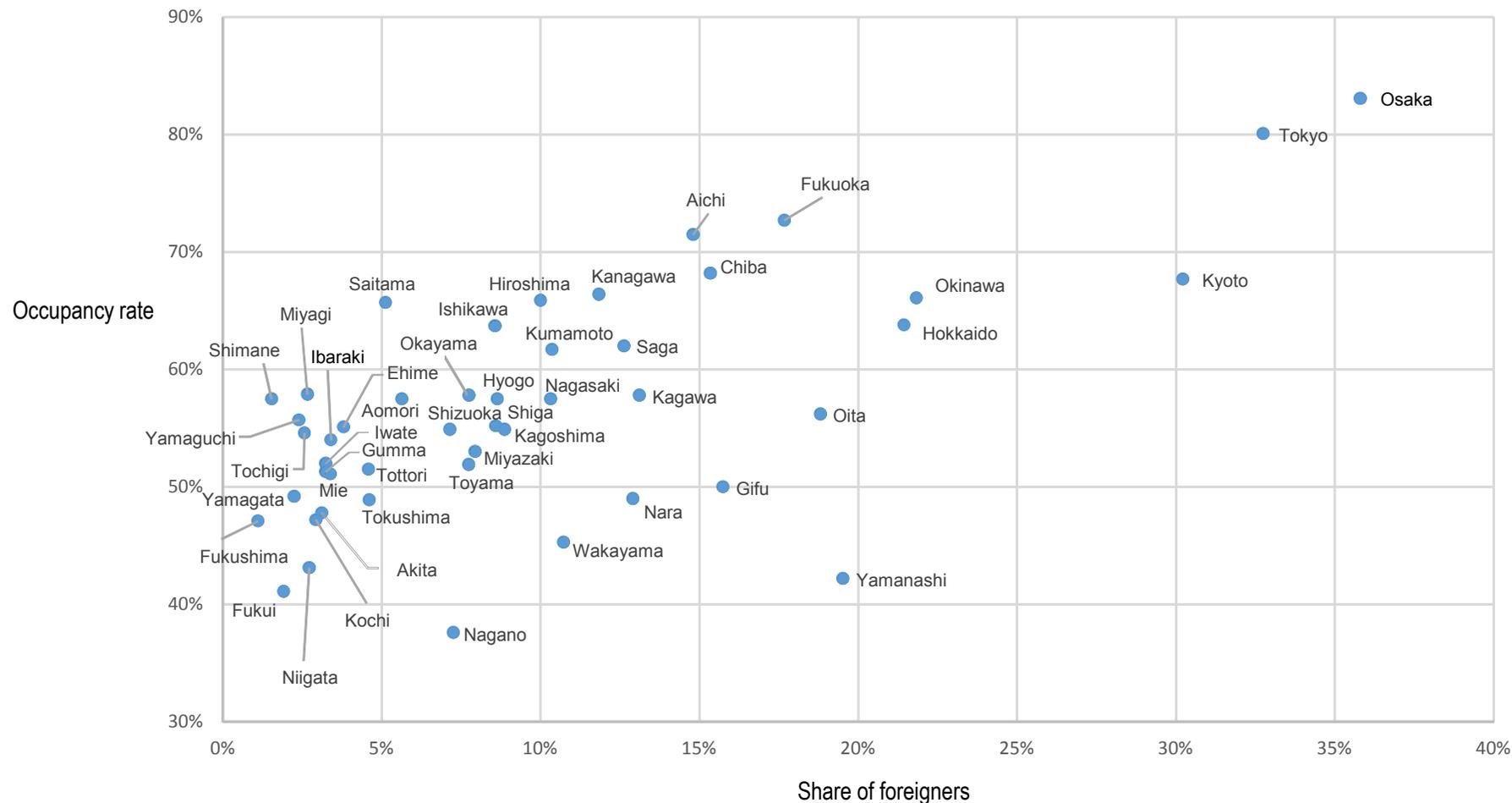


Source: Compiled by NRI from Japan Tourism Agency "Syukuhaku Ryokou Toukei" data

Hotel market

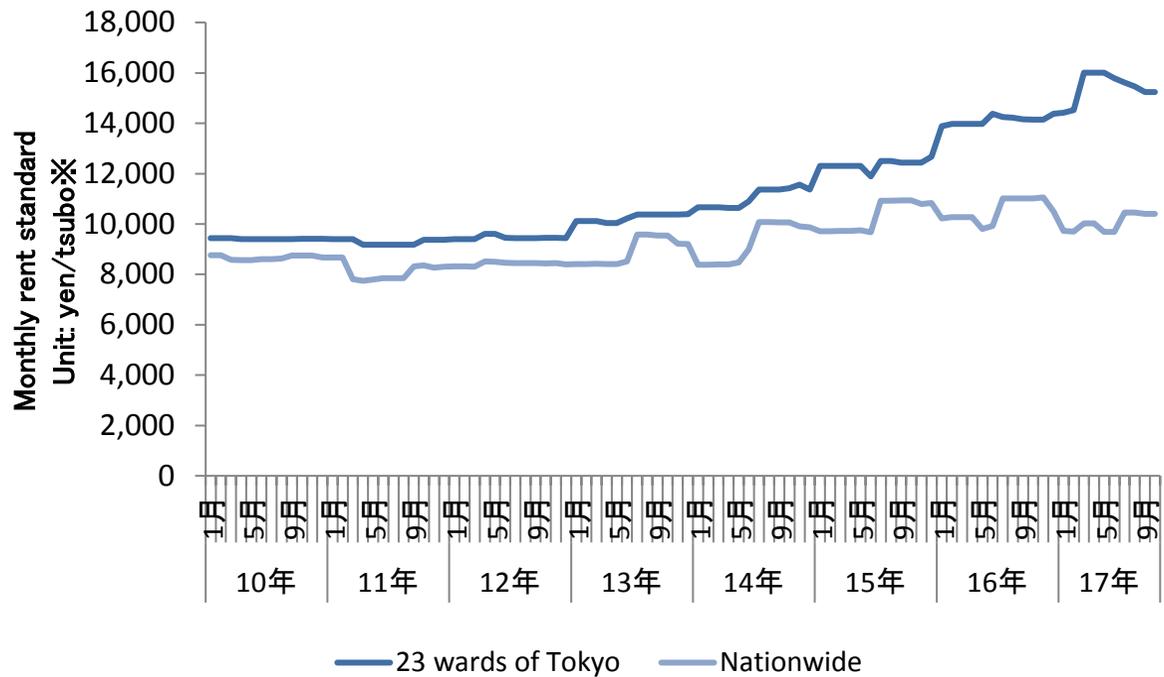
Besides Tokyo, Osaka and Kyoto, we are capturing foreign demand in Hokkaido and Okinawa, which are tourist spots. In Oita, Gifu and Chiba, it is expected that there would be demand seeping in from large cities.

Room occupancy rate by prefectures and share of foreigners in total number of guests (2017)



Hotel REIT earnings are expanding due to high occupancy rates

Rents at hotel REITs



Source: Compiled by NRI from ARES "J-REIT Property Database" data.

Note: 1tsubo=About 3.3m²

Population movements in Japan

Macro fundamentals of Japan

Overview of real estate investment market in japan

Office market

Residential market

Retail property market

Logistics property market

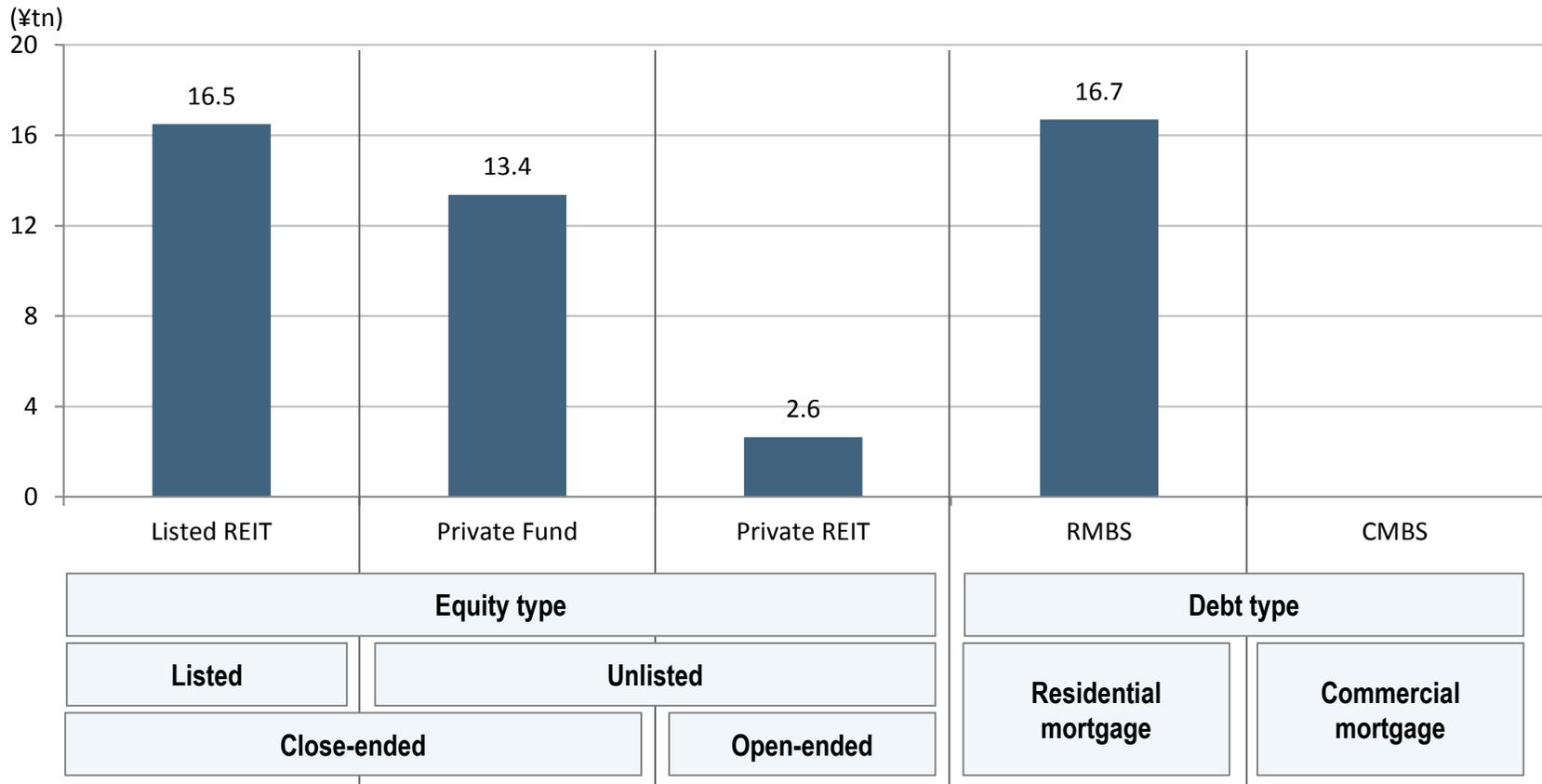
Hotel market

Real estate investment products

An overall perspective of the Japanese real estate market

■ Unlisted open-ended private REITs were offered in November 2010, and the size of the private REITs market is growing rapidly.

Overview of real estate investment instruments in Japan and AUM



Sources: Compiled by NRI from Association for Real Estate Securitization, Sumitomo Mitsui Trust Research Institute Co., Ltd., and the Japan Securities Dealers Association data

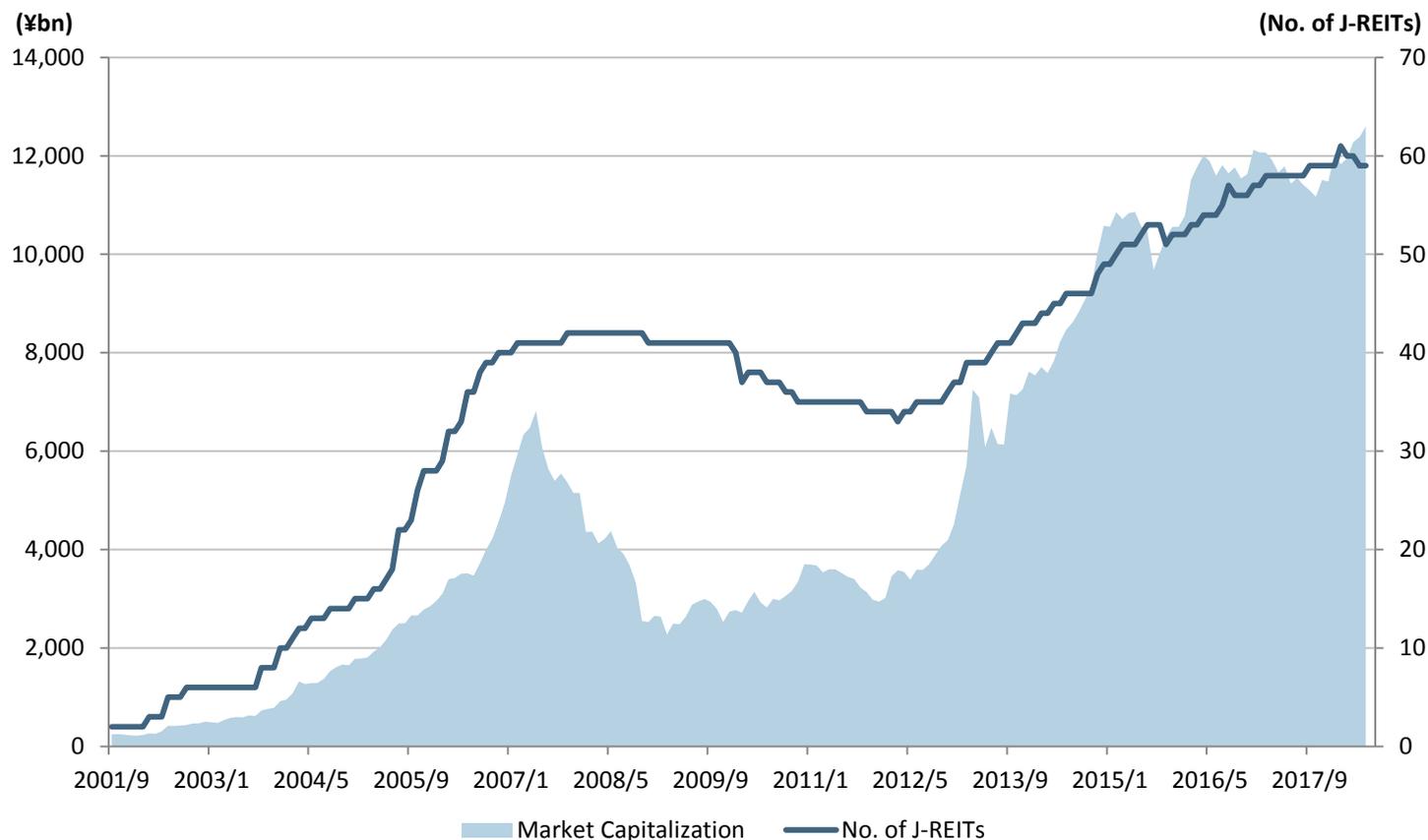
Note: Listed REIT figure is updated as of end of Dec 2017, private fund figure is updated as on end of Dec 2017, private REIT figure is updated as of end of Mar 2018, RMBS/CMBS figure is updated as of end of Mar 2018

Real estate investment products

Launched in September 2001, J-REIT market capitalization has reached approximately 13 trillion yen.

- J-REITs began trading on the stock market in September 2001 with two companies and a market capitalization of 250 billion yen.
- As of end of August 2018, there were 59 J-REITs traded worth approximately 12.6 trillion yen.

J-REIT market cap and number of J-REITs

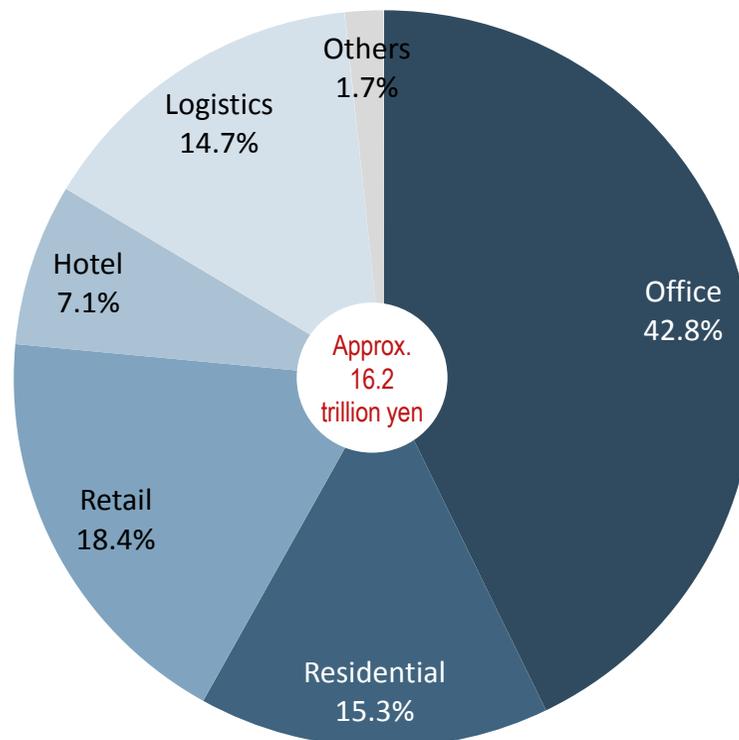
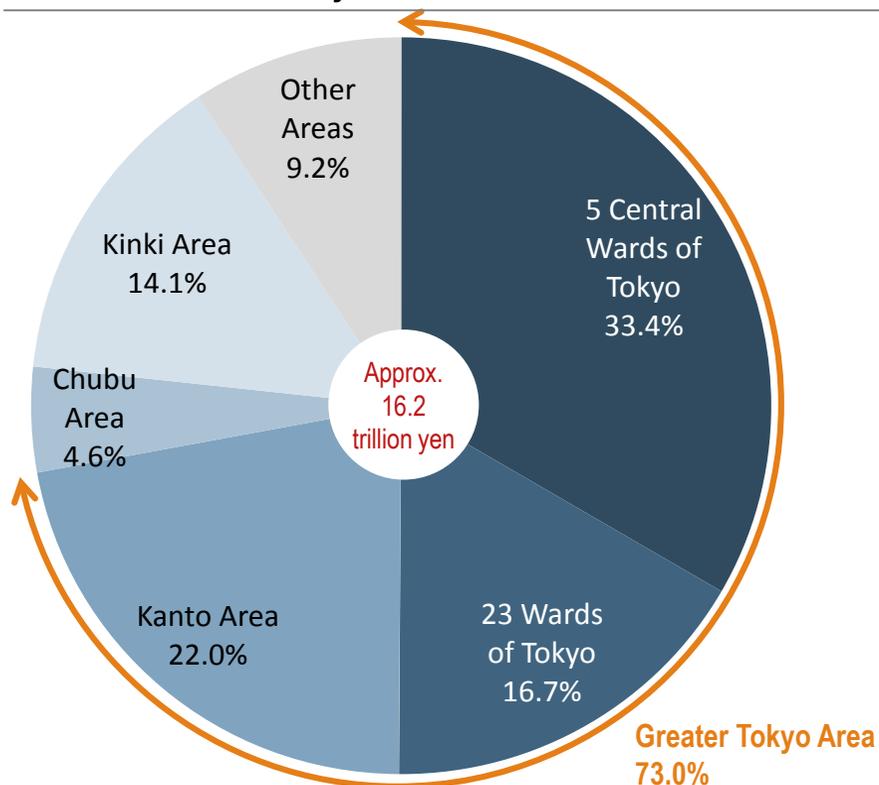


Real estate investment products

c73% of J-REIT assets are located in the Tokyo metropolitan area and 43% are portfolios of office properties.

- c73% of real estate owned by J-REITs is in the Tokyo metropolitan area.
- In recent years, J-REITs have become more diversified in type of property owned, and a healthcare REIT was launched in November 2014.

Asset mix of J-REITs by area and asset class



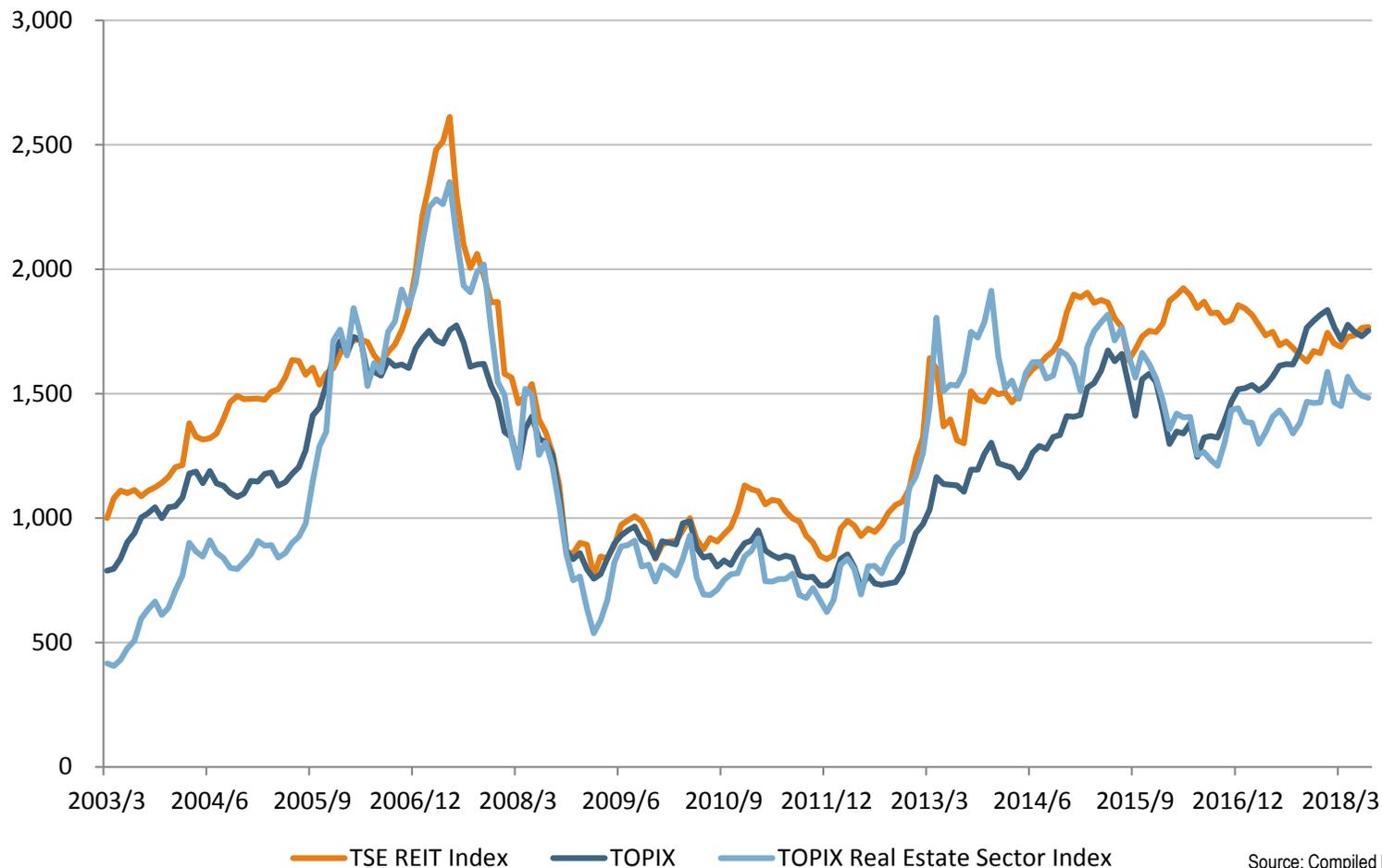
Source: Compiled by NRI from ARES data

Note: As of the end of June 2018

The TSE REIT index surged in late 2012 and remain firm.

- The TSE REIT index dropped sharply from its peak in May 2007, but has recovered rapidly from late 2012.

TSE REIT Index, TOPIX, and the TOPIX Real Estate Sector Index



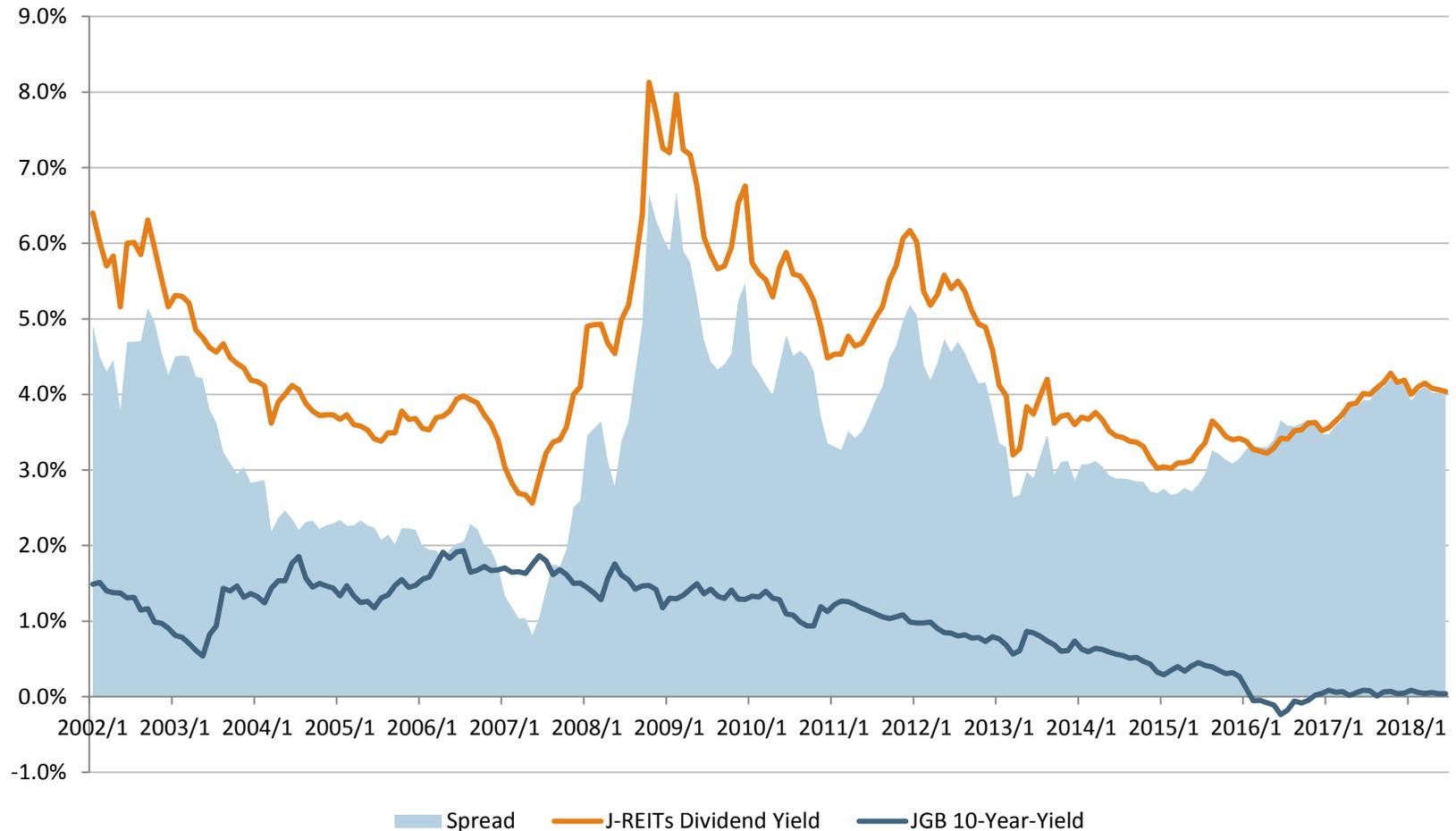
Source: Compiled by NRI from Thomson Reuters data

Real estate investment products

J-REIT dividend yields rapidly increased to around 8%, but are currently down to around 4%.

■ Yield spreads are currently around 4%

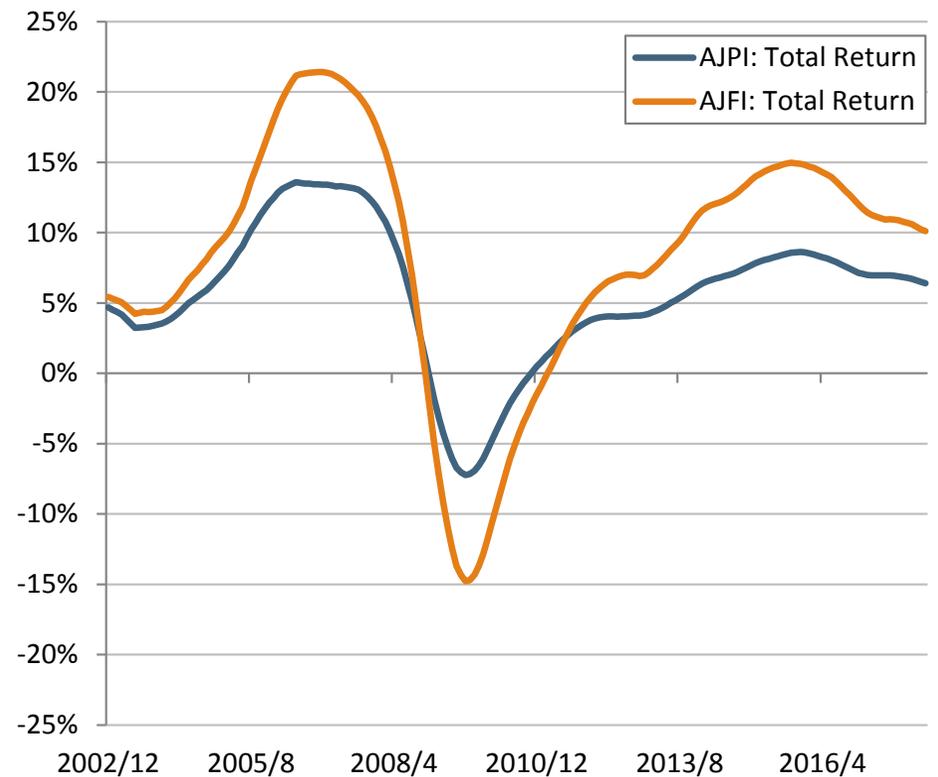
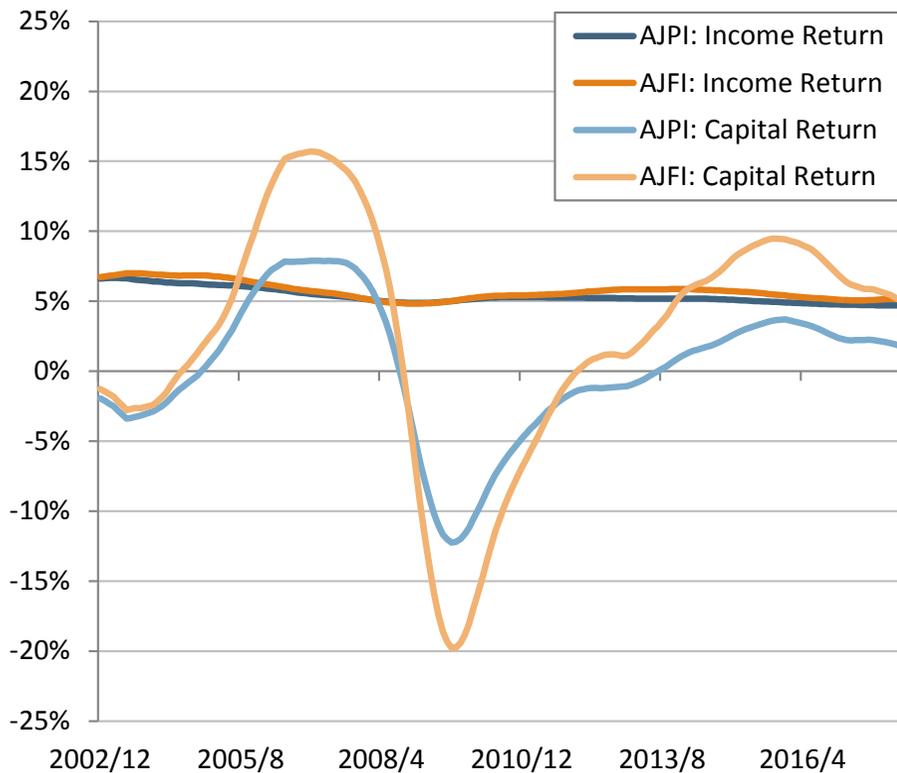
J-REIT dividend yield and JGB 10-year yield



Capital return is firm.

- According to the index based on actual performance of core funds invested in domestic real estate, the performance of real estate investments in Japan recovered to positive territory in terms of capital return and has been firm since.

ARES Japan Property Index (AJPI) and ARES Japan Fund Index (AJFI)



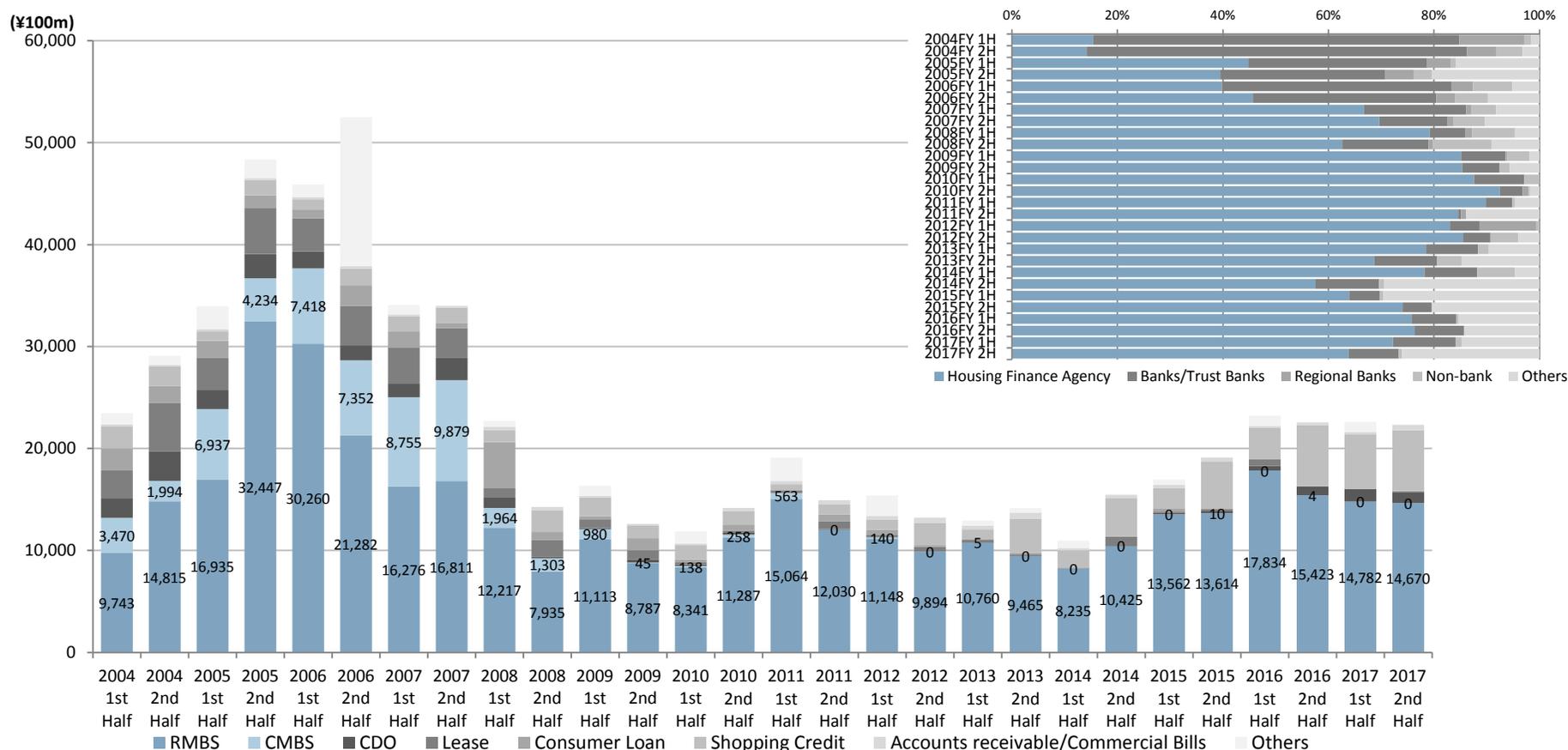
Sources: Compiled by NRI from ARES "ARES Japan Property Index" and "ARES Japan Fund Index" data.

Real estate investment products

CMBS issuance has decreased drastically since 2008, and at present only RMBS are issued on an ongoing basis.

- Most recently, about 64% of residential mortgage-backed securities were originated by the Japan Housing Finance Agency.

Asset backed securities breakdown by type of backing and RMBS breakdown by originator



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未来創発

Dream up the future.