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The housing market and housing policies in Japan

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The Housing Market and Housing Policies in Japan

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Abstract

Housing policies in Japan after World War II were focused on the quantitative supply of houses with a wide range of targeted groups and public rental houses. The Japan Housing Corporation (now the Urban Renaissance Agency) and the Government Housing Loan Corporation (now the Japan Housing Finance Agency) have served to address these policy targets accordingly. The restoration of housing stock was successful, but the collapse of the property bubble in the early 1990s caused negative impact on the real economy and created persistent loss of confidence among the Japanese people, which is exacerbated by deflation and negative demographic factors (decrease of the population and aging of society). Enhancement of the quality of houses is an important part of the housing policy in Japan, but, at the same time, there needs to be a balance between new construction and the activation of existing housing stocks. Given the social experiments currently underway, there is need to closely monitor the changes of market trends.

JEL Classification: R14, R21, R31, R38

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1. INTRODUCTION

Housing policies in Japan after World War II were focused on the quantitative supply of houses to address the backlog of 4.2 million units. Japan's housing policy in the latter half of the 20th century comprised three pillars with a wide range of targeted groups: public rental houses, the Japan Housing Corporation (now the Urban Renaissance Agency [UR]), and the Government Housing Loan Corporation (now the Japan Housing Finance Agency [JHF]).

The restoration of the housing stock was successful in that the total number of houses exceeded that of households in the mid-1960s, but the collapse of the property bubble in the early 1990s had a negative impact on the real economy and created persistent loss of confidence among the Japanese people, which was exacerbated by deflation and negative demographic factors (decrease of the population and aging of society).

Enhancement of the quality of houses became an important part of housing policy in Japan in the 21st century, but, at the same time, there needs to be a balance between new construction and the activation of existing housing stocks.

In this paper, we explain the current status of the housing market in Japan, and discuss and evaluate the housing policies in the 20th century. We then explain the challenges of the housing market and housing policies in the 21st century, and draw some implications for other countries, and then conclude.

2. CURRENT STATUS OF THE HOUSING MARKET

The homeownership ratio in Japan was 61.7% in 2013 (Figure 1). The level has been around 60% for nearly the last half century, with minor fluctuations, which is almost the same as the United States (US), (64.0% in 2014), the United Kingdom (UK) (64.6% in 2013), and France (64.3% in 2013), but higher than Germany (52.6% in 2013).[1]

Owner occupancy was not a major form of tenure in Japan before World War II and many people, especially in metropolitan areas, lived in rental properties, although there are no official statistics at the national level. The ratio of the value of land to the national net worth[2] was 30%–40% before the war, but increased to 50%–70% after, which illustrates the strong demand and subsequent increases of land prices after the war (Figure 2).

As of October 2013, there were 60.63 million housing units in Japan, of which 8.20 million were vacant; thus, the vacancy rate was 13.5%. Based on the American Housing Survey,[3] the vacancy ratio for the US was 12.8% in 2013, but the figure for the US includes more second homes than in Japan. The vacancy rate is higher in regions with less population in Japan (Figure 3).

---

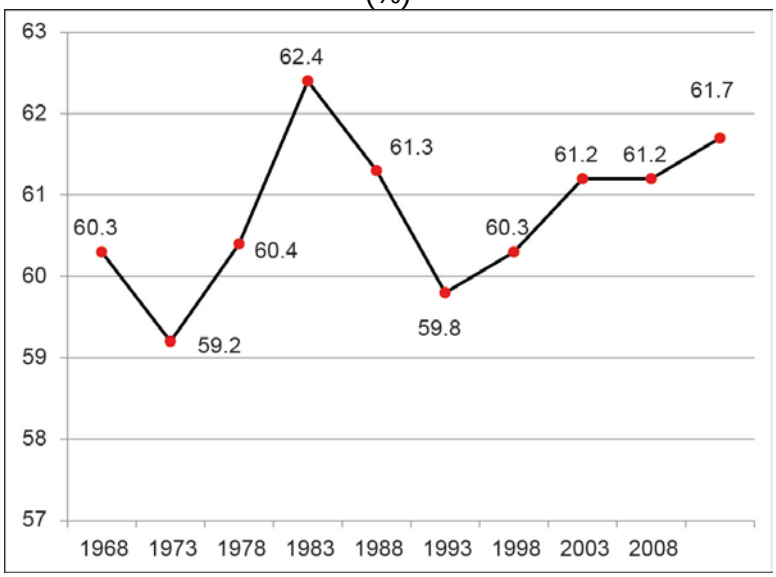
[1] The homeownership rate increased between 2008 and 2012, whereas it dropped in the United States and the United Kingdom after the 2008–2009 global financial crisis. This is partly due to a change in the demographic composition, that is, the share of the elderly population, which usually has higher homeownership rate, has increased. However, the increase of the homeownership rate is minimal or moderate, at best.

[2] The national net worth is the aggregated net worth of the domestic sectors including households, financial, and nonfinancial corporate businesses and the government sector.

[3] Table C-00-AH, American Housing Survey, Seasonal and Vacant Characteristics—All Housing Units, National Summary Tables – AHS 2013, Census Bureau, US Department of Commerce.

Figure 1: Homeownership Rate in Japan

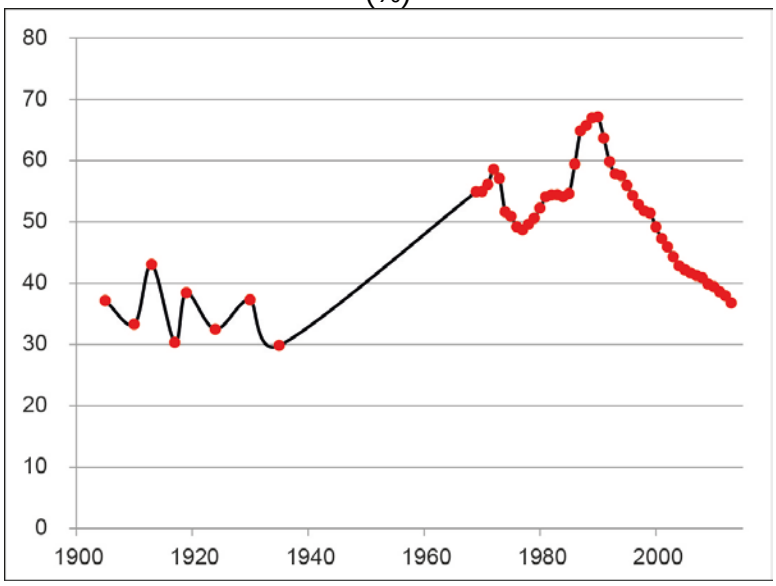
(%)



Source: Government of Japan, Statistics Bureau, Ministry of Internal Affairs and Communications.

Figure 2: Value of Land per National Net Worth

(%)

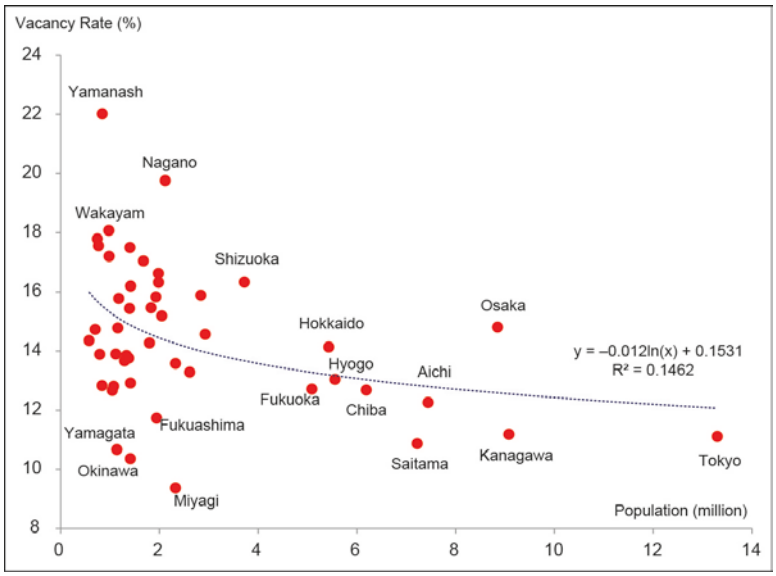


Note: The values before World War II do not include the occupied territories outside Japan as of today.

Sources: Government of Japan, Economic Planning Agency. Survey on National Net Worth before the War; Government of Japan, Cabinet Office. National Accounts for 1998 (68SNA, benchmark year = 1990) (1969–1993), National Accounts for 2013 (93SNA, benchmark year = 2005) (1994–2013).

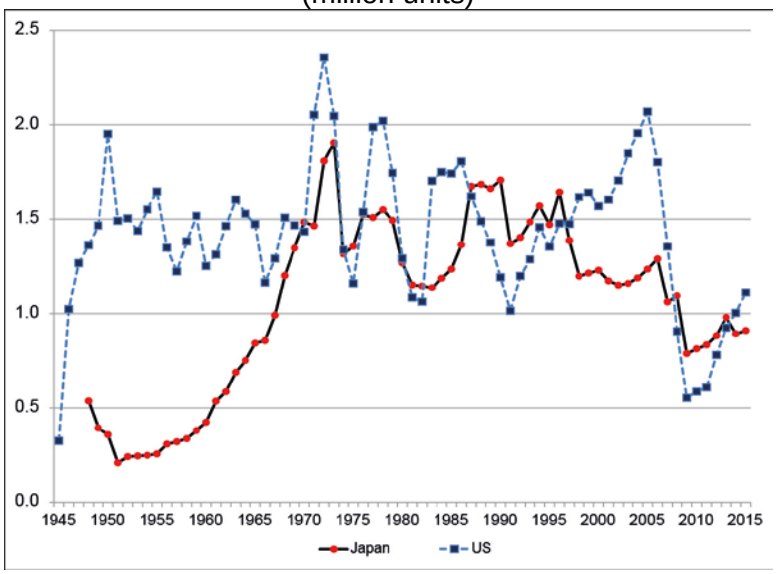
There are discussions whether Japan is constructing too many houses. The number of housing starts in Japan has been above one million units for the 40 years from 1968 to 2008 (Figure 4).

Figure 3: Vacancy Rate in Japan by Prefectures, 2013



Source: Government of Japan; Ministry of Internal Affairs and Communications.

Figure 4: Number of Housing Starts after World War II in Japan and the United States
(million units)



Sources: US Department of Commerce; Federal Reserve Bank of St. Louis;[4] Ministry of Land, Infrastructure, Transport and Tourism.

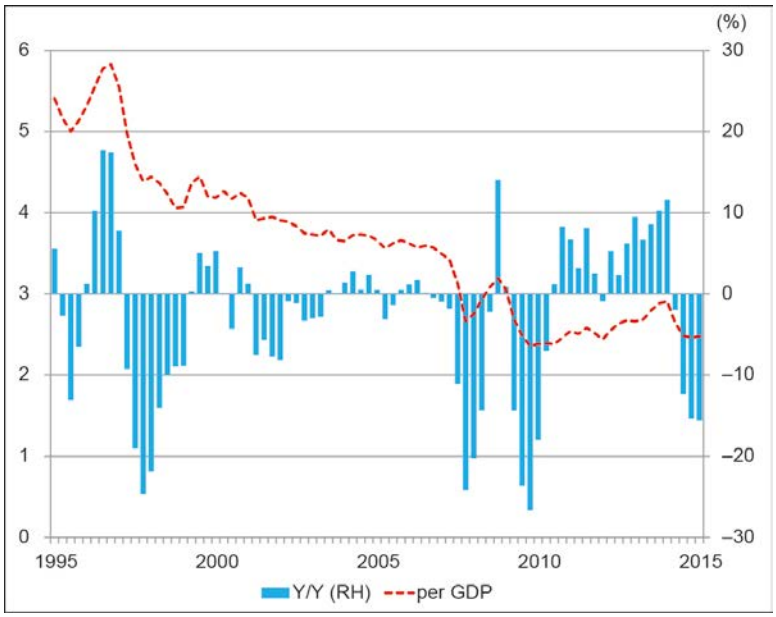
In 2009, the number of housing starts in Japan declined to 0.79 million units because of the global financial crisis and, since then, it has not returned to one million units. In 2013, it was 0.98 million units because of the rush of construction before the consumption tax rate change that was scheduled to be increased from 5% to 8% in April 2014.

[4] Housing starts for the US before 1959 are derived from Federal Reserve Archival System for Economic Research (FRASER). Original source is United States Bureau of the Census. Historical Statistics of the United States: Colonial Times to 1970.

This increased consumption tax rate in April 2014 adversely affected domestic demand, including housing construction, and the number of housing starts declined again to 0.89 million units in 2014. The Government of Japan postponed for 18 months the second phase of the increase of the consumption tax rate from 8% to 10%. To make the economic recovery more sustainable, the government introduced economic stimulus packages, which are discussed in a later section.

Through the mid-1990s to this century, the share of private residential investments per gross domestic product (GDP) declined as well (Figure 5). It used to be above 5% in the previous century, but it is now below 3%.

Figure 5: Private Residential Investments per Gross Domestic Product (GDP) and its Year over Year (Y/Y) Change



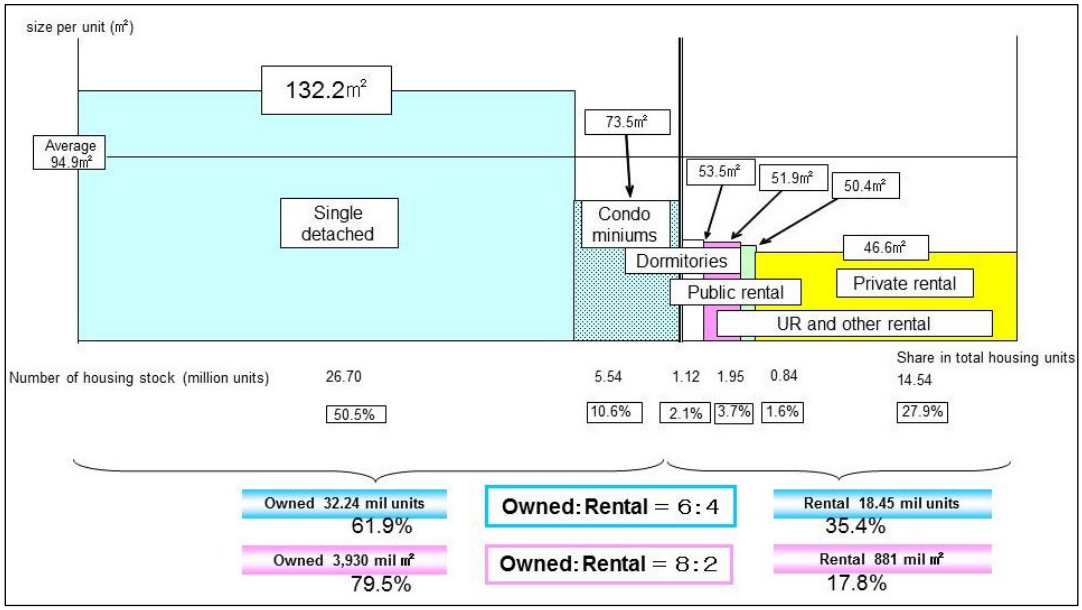
Source: Government of Japan, Cabinet Office.

Although the population of Japan is only 40% of that in the US (127 million in Japan and 316 million in the US in 2013), the number of housing starts used to be comparable. Nonetheless, the share of private residential investments per GDP is almost the same in Japan and the US. This reflects the difference of per unit investment.

The average size of newly constructed, single-family detached houses was 125 square meters (m^2) for Japan and 247 m^2 for the US in 2013. Also the share of multifamily units, which are usually smaller than single-family detached houses, is much higher in Japan than in the US. Owner-occupied houses account for around 60% of the total housing stock, but represents 80% in terms of floor area (Figure 6). Compared with continental Europe, the size of single-family detached houses is almost the same, but the size of rental houses is significantly smaller.

There used to be no national home price index in Japan until recently. The Tokyo Stock Exchange developed a home price index using the repeat sale method similar to the Standard & Poor's/Case–Shiller Home Price Index in the US, computation of which was transferred to the Japan Real Estate Institute in 2015. This index, however, covers only condominiums in the Tokyo Metropolitan Area and goes back to June 1993.

Figure 6: Distribution and Average Size of Houses in Japan by Tenure, 2013



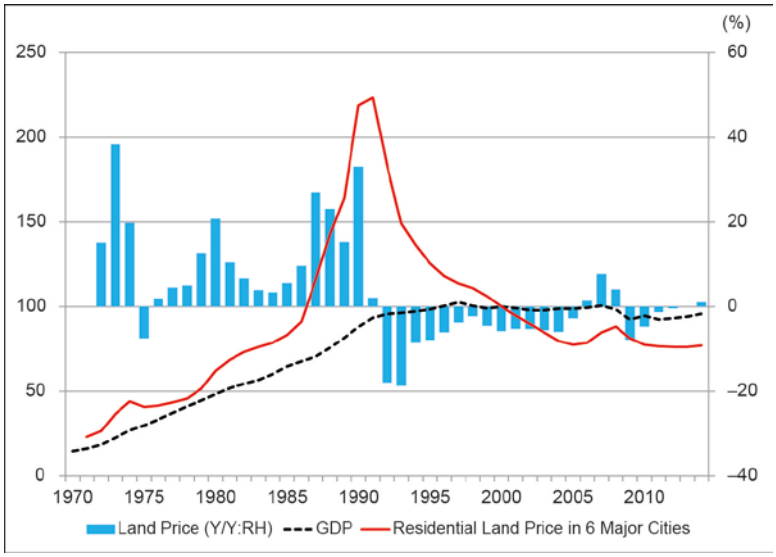
UR = Urban Renaissance Agency.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

Considering that most of the fluctuation of home prices is mainly influenced by the changes of land prices, using the land price index as a proxy to the home price index is justified to some extent in Japan.

The land prices in Japan skyrocketed in the late 1980s, which turned out to be a property bubble in retrospect. The residential land prices in six major cities recorded their peak in 1991 and then started to plummet, resulting in 13 years of continuous declines from 1992 to 2005 (Figure 7).

Figure 7: Land Price and the Real Economy in Japan



GDP = gross domestic product; Y/Y = year over year.

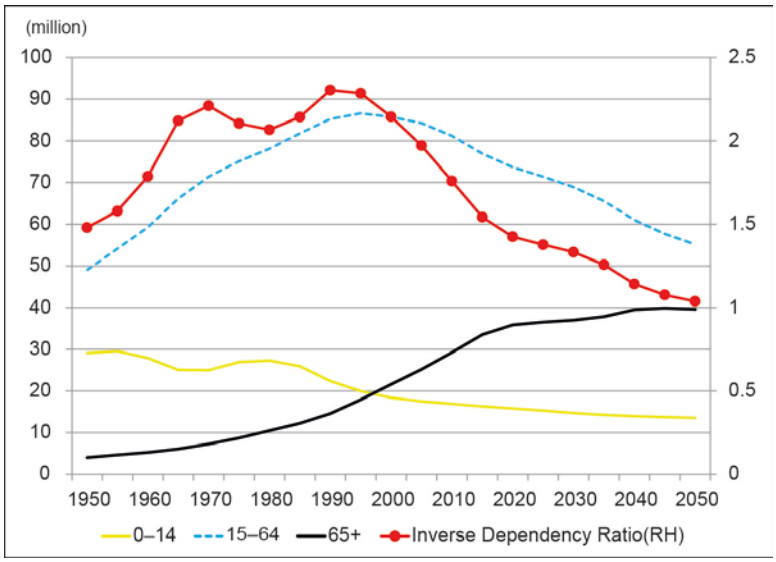
Sources: Japan Real Estate Institute; Government of Japan, Cabinet Office.

In the meantime, the growth of nominal GDP also stagnated and Japan faced notorious "lost decades" amid persistent deflation. The impact of deflation on the housing market is discussed in the next section.

3. CHALLENGES AND RISKS

The most important challenge for the housing market in Japan is the adverse demographic trend. Not only has the population of Japan started to decrease, but also the share of the working-age population against the dependent-age population is declining sharply (Figure 8). There are discussions whether Japan should continue to construct as many new houses as of today, even though there are eight million vacant units.

Figure 8: Population Size in Age Group and the Inverse Dependency Ratio



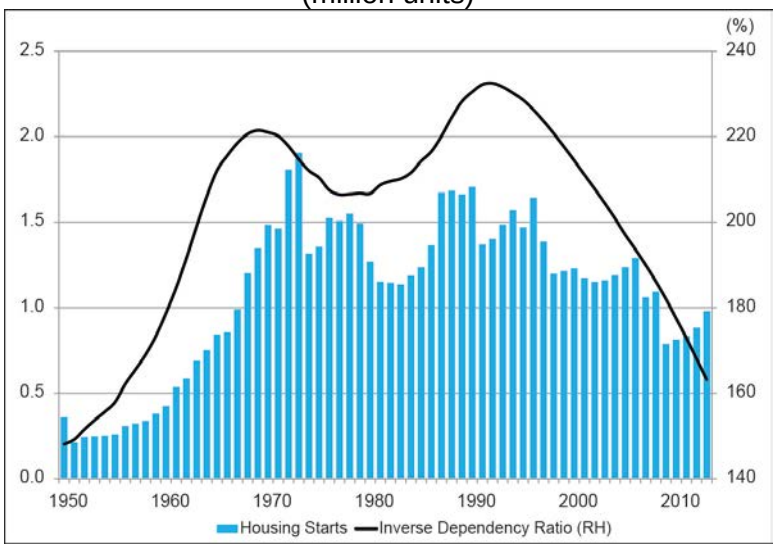
Note: Estimates start from 2015.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, DVD Edition.

The inverse dependency ratio (population aged 15–64 divided by the dependent-age population) has a positive correlation with housing statistics in Japan. There are two peaks of the inverse dependency ratio, one in the late 1960s and the other in the early 1990s, which coincide with the peaks of housing starts (Figure 9).

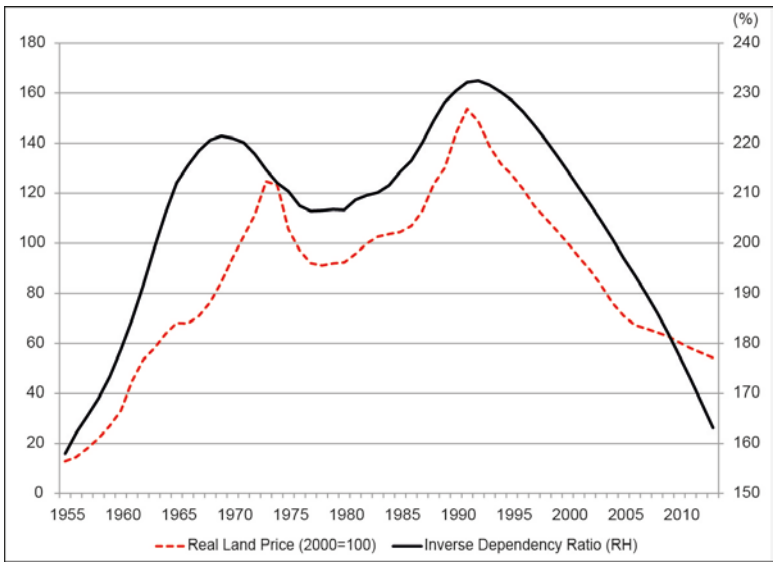
These two peaks of the inverse dependency ratio are eras when baby boomers (called "Dankai [group of mass] generations" in Japan) and the children of baby boomers (called Dankai junior in Japan) reached the working-age bracket and these periods are called "population bonus" periods in Japan. In the first wave of the population bonus, there was also a massive urban migration from rural agricultural areas, which boosted the demand for houses in urban areas. The population bonus period also coincided with the peak of real land prices (denominated by the consumer price index) (Figure 10).

Figure 9: Housing Starts and the Inverse Dependency Ratio
(million units)



Sources: Ministry of Internal Affairs and Communications; Ministry of Land, Infrastructure, Transport and Tourism.

Figure 10: Real Land Price and the Inverse Dependency Ratio



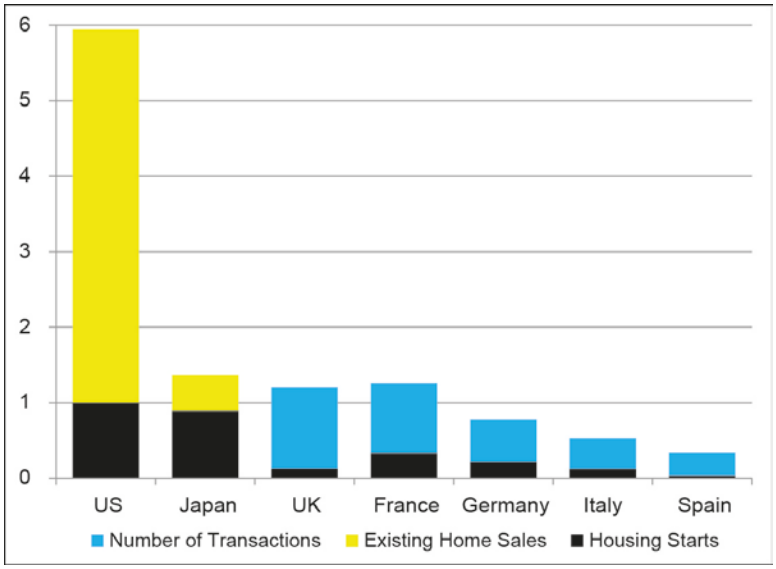
Sources: Ministry of Internal Affairs and Communications; Japanese Real Estate Institute.

Population projection is one of the most reliable social projections and many people in Japan believe that it is difficult to change the current demographic trend, and, if this situation persists, it will be difficult for the Japanese economy to get out of deflation because of the weakening domestic demand.[5]

[5] To try to change this pessimistic view, the Government of Japan and the Bank of Japan released the "Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth" in January 2013 and, subsequently, the Bank of Japan introduced Quantitative and Qualitative Monetary Easing (QQE) in April 2013. With strong monetary accommodation by the Bank of Japan, the inflation rate picked up to be positive in 2014. “Three arrows” comprising extraordinary monetary accommodation, flexible fiscal policy, and growth strategy (often understood as structural reform in a foreign context) is expected to convert the Japanese economy back to sustainable growth. Japan is undergoing a huge social experiment, and this will have many

Compared with relatively large new construction projects, the sales of existing homes are small in Japan relative to the US (Figure 11). There are several statistics that cover the number of existing home sales, and one of the largest figures is the estimate by Fudosan-Ryutu-Keieikyoukai (FRK [The Association of Real Estate Agents of Japan]). The FRK estimates that the number of existing home sales was 473,000 units in 2012. This is almost half of new housing starts in Japan.[6]

Figure 11: Size of the Housing Market in Terms of Number of Transactions
(million units)



UK = United Kingdom; US = United States.

Note: Existing home sales in Japan are for 2012 and estimates by the FRK. "Housing Starts" in Germany is "Housing Completions". Other figures for the US and Japan are for 2014 and for Europe are for 2013. "Number of transactions" includes both new and existing homes.

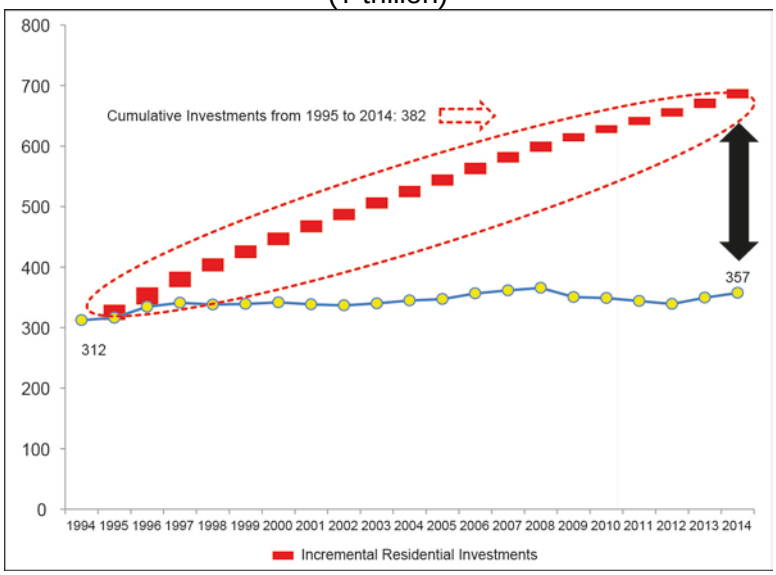
Sources: US Department of Commerce; National Association of Realtors; Ministry of Land, Infrastructure, Transport and Tourism; Association of Real Estate Agents of Japan; European Mortgage Federation.

The low turnover of existing houses is one of the causes of the sharper decline of the value of properties by age. It is inevitable for existing homes to depreciate, but the degree of depreciation in Japan is higher than other developed economies. From 1995 to 2014, the cumulative amount of nominal residential investment was ¥382 trillion. The market value of existing residential structures in 1994 was ¥312 trillion. If automatically added, the market value of existing residential structures in 2013 should have reached ¥694 trillion, but the actual value was only ¥357 trillion (Figure 12).

implications for the European countries that have similar symptoms with Japan and are facing adverse demographics and are on the brink of deflation.

[6] According to the "Survey on Housing Market Trends 2013" by the MLIT, the vast majority of homebuyers who purchased or constructed new houses responded that they did not choose existing homes just because they feel happy with new buildings, while the vast majority of homebuyers who purchased existing homes responded that they bought existing homes because they are less expensive. There is a strong propensity for new houses in Japan, partly due to the difference of quality between new homes and existing homes and that possible structural defects for existing houses are hard to detect.

Figure 12: Value of Residential Investments
(¥ trillion)



Source: Government of Japan, Cabinet Office.

How to enhance the value of existing homes and increase the sales of existing homes is one of the major challenges for the Japanese housing market, and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is launching various policy measures to address this matter (to be discussed later).

Another major challenge for the housing market in Japan is the frequency of natural disasters. It is 5 years since Japan was hit by the Great East Japan Earthquake on 11 March 2011. It is noted also that the western part of Japan was hit by the Great Hanshin–Awaji Earthquake on 17 January 1995. Enhancing the earthquake resilience of residential structure remains an important challenge, which is discussed in the housing policy section.

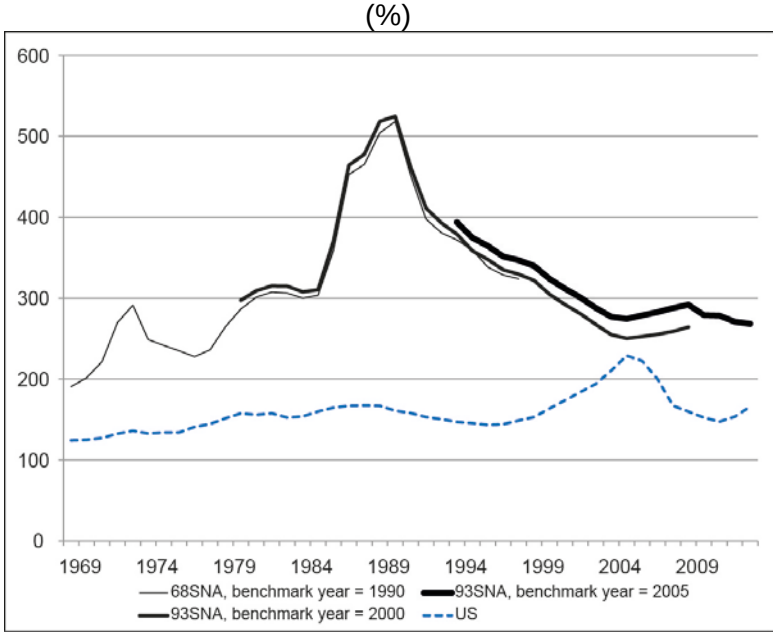
Some people think that Japanese property prices are still high.[7] If we compare the national aggregate of house values (including vacant land because there are no statistics in Japan which are the same as Z1[8] in the US), their ratios to nominal values of GDP remain higher in Japan than in the US (Figure 13).

Nonetheless, the average home price is four to six times the household income and the debt-to-income (debt-service) ratio is around 20%, partly because of the low interest rates (Table 1).

[7] It is to be noted that a major challenge for policymakers in Japan in the late 1980s was how to curb the skyrocketing housing prices and enhance affordability of houses especially in urban areas. The rapid appreciation of property prices turned out to be a bubble that burst naturally. The priority of housing policy regarding house prices has turned 180 degrees since then.

[8] B.101 Balance Sheet of Households and Nonprofit Organizations (1), Financial Accounts of the United States–Z1, Federal Reserve.

Figure 13: Value of Housing Structure and Residential Land per GDP in Japan and the United States



GDP = gross domestic product; SNA = system of national accounts; US = United States.

Sources: Government of Japan, Cabinet Office; US Federal Reserve; US Department of Commerce.

Table 1: Key Housing Statistics in Japan

Survey on Housing Market Trend (2013)

	Built to Order		House for Sale		Existing Home	
	w/o Land	With Land	Detached	Condos	Detached	Condos
Household Income(¥ million)	6.16	6.16	6.75	6.89	5.80	6.13
Home Price(¥ million)	28.82	40.17	36.27	35.83	23.11	22.53
Borrowings(¥ million)	17.80	26.50	24.91	23.69	13.45	11.63
Down Payment(¥ million)	11.02	13.67	11.37	12.13	9.66	10.90
Price to Income Ratio	4.7	6.5	5.4	5.2	4.0	3.7
Loan to Value Ratio	62%	66%	69%	66%	58%	52%

JHF Profile of F35 Borrowers (2013)

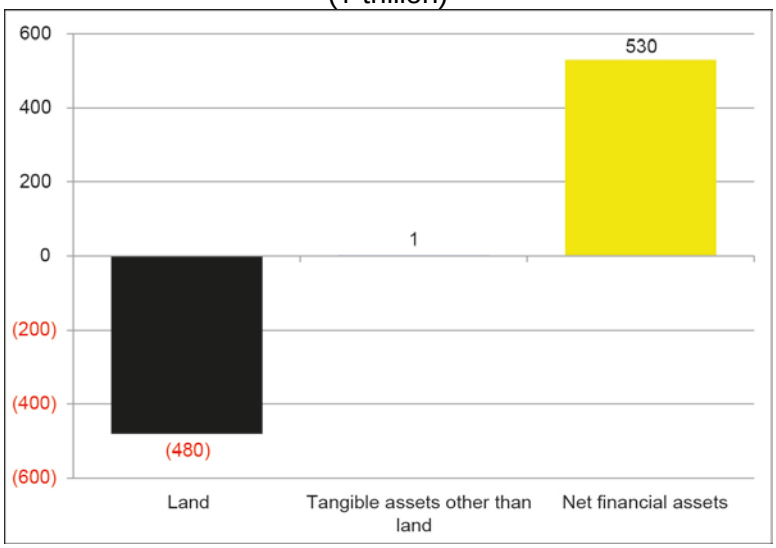
	Built to Order		House for Sale		Existing Home	
	w/o Land	With Land	Detached	Condos	Detached	Condos
Household Income(¥ million)	5.85	5.91	5.77	7.48	5.22	5.99
Home Price(¥ million)	30.15	36.37	33.20	38.62	22.53	25.62
Borrowings(¥ million)	23.75	31.74	27.76	30.11	19.16	21.07
Down Payment(¥ million)	6.40	4.63	5.43	8.50	3.37	4.55
Price to Income Ratio	5.2	6.2	5.7	5.2	4.3	4.3
Loan to Value Ratio	79%	87%	84%	78%	85%	82%

F35 = Flat 35; JHF = Japan Housing Finance Agency; MILT = Ministry of Ministry of Land, Infrastructure, Transport and Tourism; w/o =without.

Sources: Ministry of Ministry of Land, Infrastructure, Transport and Tourism; Japan Housing Finance Agency.

What is interesting is that during the period of 1994 to 2014, the value of land owned by the household sector decreased by ¥480 trillion, but this sector increased the balance of net financial assets by ¥530 trillion (Figure 14).

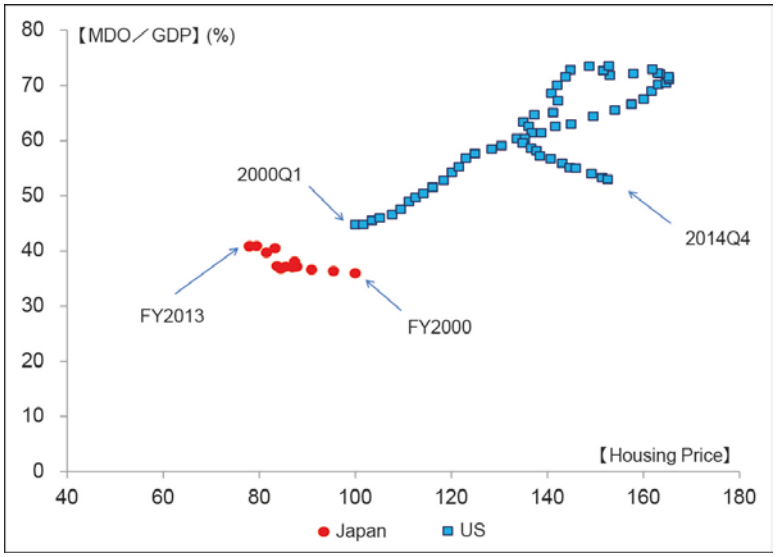
Figure 14: Change of Balance for Households in Japan, 1994–2014
(¥ trillion)



Source: Government of Japan, Cabinet Office.

It is sometimes pointed out that the mortgage debt outstanding (MDO) per GDP in Japan is lower than other developed economies. The MDO/GDP in Japan has remained around 40% since the beginning of the 21st century. It is to be noted that the figure for the US was also below 50% at the beginning of this century. The MDO/GDP in the US increased to 70% amid of the housing bubble in the early 2000s (Figure 15).

Figure 15: MDO/GDP and Housing Prices in Japan and the United States



FY = fiscal year; GDP = gross domestic product; MDO = mortgage debt outstanding.

Sources: Bank of Japan, Government of Japan, Cabinet Office; FHFA = Federal Housing Finance Agency; US Federal Reserve; US Department of Commerce.

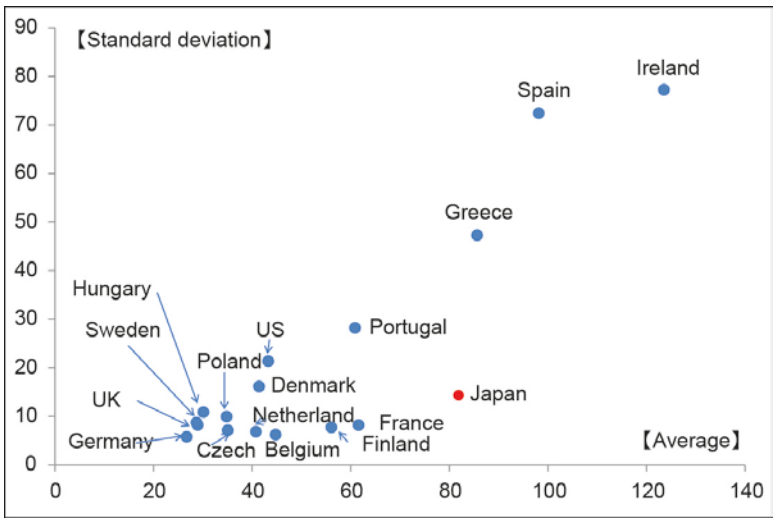
The inflation of the MDO/GDP ratio in the US is, to a large extent, attributable to the appreciation of property values, whereas there was no such phenomenon in Japan. Also, many people in Japan thought it was more advantageous to prepay outstanding

mortgage debts because the interest rate in Japan was extremely low and curtailment (partial prepayment) composed a significant part of prepayment in Japan.[9]

Housing construction was maintained at a high level despite the decreases in housing prices and large vacancies in Japan, partly due to the short life of existing houses to be replaced by new investments, and partly due to the strong demand for new houses with higher quality among homebuyers (which may be amplified by economic stimulus measures to some extent).

It is also noted, however, that although housing starts per capita in Japan are higher than in the US, it is not necessarily too high compared with some European countries (Figure 16).

Figure 16: Housing Starts per 10,000 Capita, 2002–2013



UK = United Kingdom; US = United States.

Note: The value for Germany starts from 2003; the values for Japan, the US and France end in 2014; and the values for Germany, Hungary, the Netherlands, Ireland and Portugal are housing completions instead of housing starts.

Sources: EMF Hypostat 2014; Eurostat; Ministry of Internal Affairs and Communications; Ministry of Land, Infrastructure, Transport and Tourism; National Institute of Statistics and Economic Studies (France); US Department of Commerce.

Ireland, Spain, and Greece had a larger amount of housing construction than Japan, on average, although their markets crashed after the mid-2000s. France, which had a large amount of housing construction, however, had a stable market in terms of housing prices. Also, the UK had small housing supply and this constraint on supply is considered to be one of the causes of high property prices in the UK. However, Germany, which had a similar small housing supply, did not experience the same movement of housing prices as the UK.

[9] There is income tax deduction for mortgages in Japan (to be discussed later), but the incentive to maintain outstanding balances to enjoy tax benefits is not as big as in the US because of the adverse interest rate environment in Japan.

4. HOUSING POLICIES IN JAPAN

4.1 1945–2000

When World War II ended in 1945, there was a shortage of housing in Japan, around 4.2 million units. To address this shortfall, the housing policy priority of the Government of Japan was to increase the quantitative supply of housing and several government agencies were established. First, the Ministry of Construction was established on 10 July 1948. Then, the so-called "three pillars for housing policy" to increase housing units were introduced in the 1950s as follows, in the order of establishment:

1) The Government Housing Loan Corporation (GHLC) was established on 5 June 1950 to assist housing construction financially by providing liquidity to the mortgage markets, which were virtually non-existent previously.
2) The Public Housing Act (Act No. 193 of 1951) was enacted in 1951 to authorize local government units (LGUs) to construct public rental houses for low-income people.
3) The Japan Housing Corporation (JHC) was established in 1955 to promote collective construction of housing and the large-scale supply of residential land for middle-income people, mainly in major urban areas.

The government enacted the Housing Construction Plan Law in 1966 and stipulated the target of housing supply under each Housing Construction Five-Year Program. The amount of housing stock exceeded the number of households in 1968.

4.1.1 Government Housing Loan Corporation (GHLC)

4.1.1.1 Outline of the GHLC

The Government of Japan established the GHLC in 1950 to provide low-interest, fixed-rate mortgages. When established, the GHLC received paid-in capital[10] from the government.

To achieve the massive supply of housing, however, the funding mechanism that was dependent on payment of capital from the government proved to be insufficient both for the GHLC and the JHC. Both these entities borrowed from the Fiscal Investment and Loan Program (FILP) under the Ministry of Finance (Figure 17).

As Figure 17 illustrates, the GHLC was one of the heaviest users of FILP borrowings and, therefore, it is desirable to explain how the GHLC funding worked in the 20th century. Among the three pillars of housing policy, the GHLC made the largest contribution to the supply of houses in terms of quantity[11] (Figure 18).

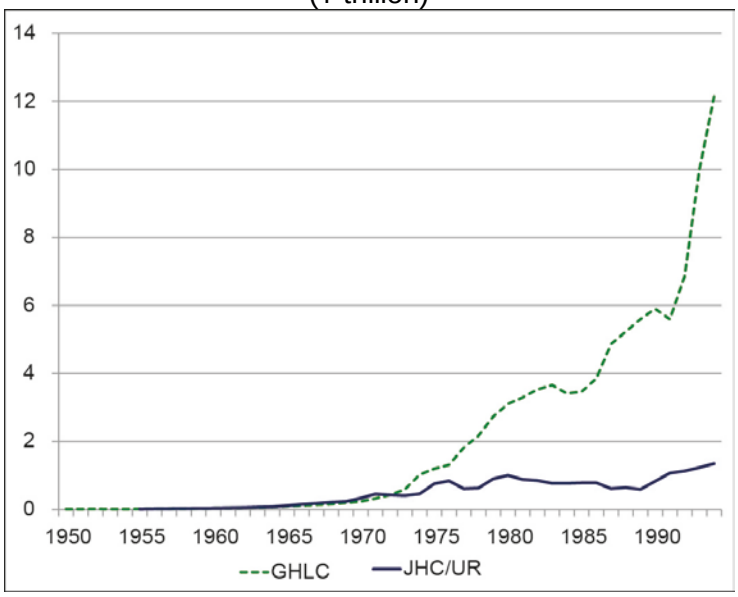
[10] When established, the GHLC received capitalization from a special account of the Government of Japan that used the reversal of the foreign assistance from the US, namely the Government Appropriation for Relief in Occupied Area and the Economic Rehabilitation in Occupied Area. The amount of this appropriation was ¥10 billion and the GHLC also received capitalization from the general account of the Government of Japan amounting to ¥5 billion in 1950. The payment from the Government of Japan to the GHLC to increase the capital continued until 1967. Since then, the capital of the GHLC remained at ¥97.2 billion until 2007 when the GHLC was replaced by the JHF.

[11] Kanemoto (1997) argues that one of the demerits of a GHLC loan was that it did not contribute to the enhancement of the quality of houses because the subsidized loan was available only for small houses (up to 125m^2). However, the average size of GHLC financed houses was not smaller than privately financed houses.

From 1950 to 2007, the GHLC financed 19.41 million housing units. The total housing starts for the same period in Japan were 64.1 million units. The GHLC contributed to nearly 30% of the post-war housing construction.

Figure 17: FILP Gross Borrowing for the GHLC and the JHC/UR

(¥ trillion)

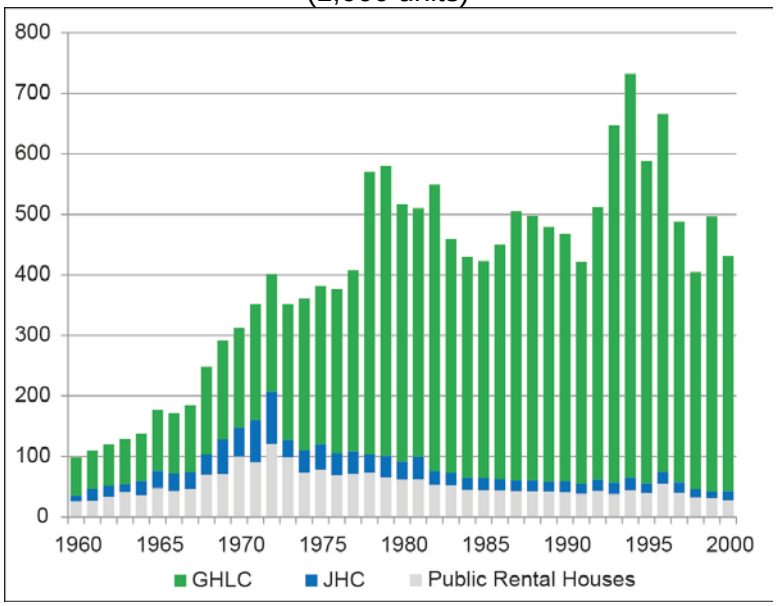


FILP Fiscal Investment and Loan Program; GHLC = Government Housing Loan Corporation; JHC = Japan Housing Corporation; UR = Urban Renaissance Agency.

Source: Ministry of Construction. 50-year History of the Ministry of Construction.

Figure 18: Number of Housing Starts by Source of Funds

(1,000 units)



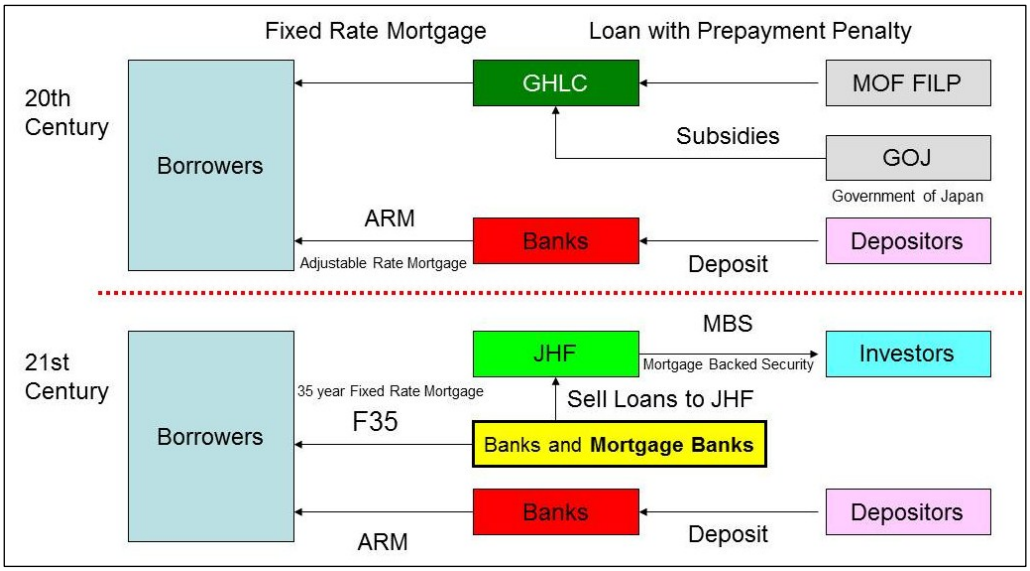
GHLC = Government Housing Loan Corporation; JHC = Japan Housing Corporation.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

To promote homeownership, there was a cap on the lending rate that the GHLC could charge to borrowers. It was set at 5.5% for low-middle income borrowers by GHLC law. Any negative interest margin between the lending rate and the funding cost were

supposed to be reimbursed with subsidies from the general account of the Government of Japan (Figure 19).

Figure 19: Mortgage Market Reform in Japan



ARM = adjustable rates mortgage; F35 = Flat 35; FILP = Fiscal Investment and Loan Program; GHLC = Government Housing Loan Corporation; GOJ = Government of Japan; JHF = Japan Housing Finance Agency; MBS = mortgage backed securities.

Source: Japan Housing Finance Agency.

High-income people were also eligible to borrow from the GHLC, but the interest rate was not concessional. Furthermore, there was a ceiling for the price of the houses, and luxurious house were not eligible for GHLC loans. The GHLC established a proprietary structural standard for houses it financed, in addition to the Building Standard Law that applied to all construction works (with minor exceptions). The GHLC was mandated to enhance the quality of houses in Japan, but allocation of resources was more focused on low- and middle-income borrowers.

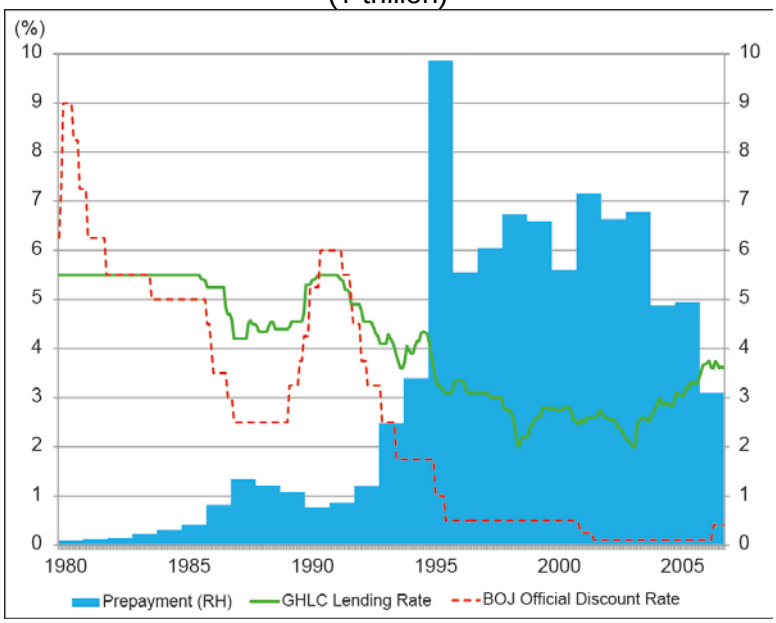
The GHLC was, however, competing with private banks in the primary lending market. For banks that depended on deposits, it was difficult to provide fixed-rate mortgages in the 20th century. After the collapse of the bubble in the real estate market in the early 1990s, banks suffered from non-performing loans and struggled to find business opportunities to restore profitability. The GHLC, on the other hand, was asked by the government to expand its lending program to stimulate the economy.

During the 1990s when the economy was struggling, interest rates continued to decline, partly due to the monetary policies of the Bank of Japan and partly due to the decline of the inflation rate. During this time, the fiscal position of the government deteriorated and the ratio of public debt to GDP increased substantially.

The decline of interest rates triggered prepayment on the outstanding mortgage assets of the GHLC. The amount of prepayment increased to ¥9.9 trillion in fiscal year (FY) 1995 (Figure 20).

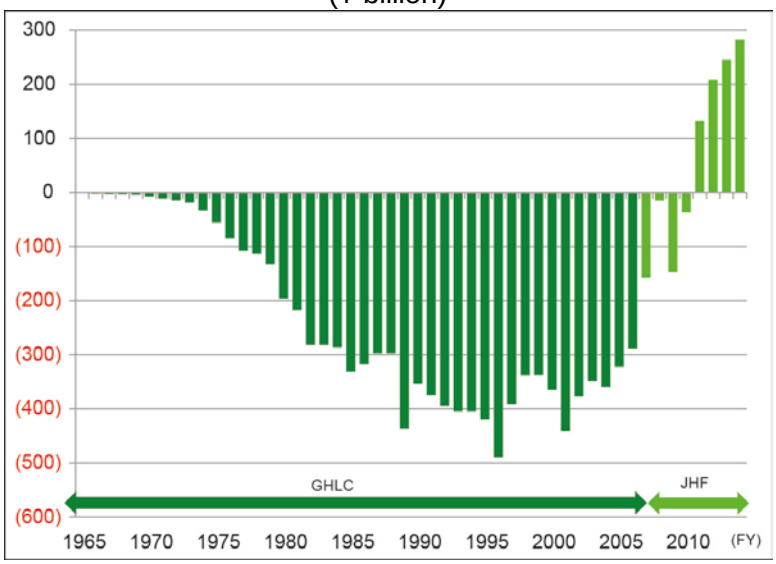
The borrowers of GHLC loans could prepay without penalty, but the GHLC had to pay a penalty to FILP if it were to prepay. The subsidy for the GHLC was around ¥400 billion through the 1990s (Figure 21). Such a fiscal burden became difficult for the government to appropriate and it decided to wind down the GHLC and replace it with another government agency, the Japan Housing Finance Agency (JHF).

Figure 20: Interest Rate and Prepayment on GHLC Loans
(¥ trillion)



BOJ = Bank of Japan; GHLC = Government Housing Loan Corporation.
Sources: Bank of Japan; Japan Housing Finance Agency.

Figure 21: Amount of Subsidy to GHLC
(¥ billion)



GHLC = Government Housing Loan Corporation; JHF = Japan Housing Finance Agency.
Source: Japan Housing Finance Agency.

4.1.1.2 Merits and Demerits of the Housing Policy Related to the GHLC

The most significant merit of GHLC loans was that they enabled the restoration of the housing stock in a very short period of time with simultaneous improvements to the housing quality. Just after World War II, there was a huge shortage of houses and many barracks were built to provide places for people to live. The GHLC established a proprietary structural criteria for its lending, which improved the quality of houses and, at the same time, contributed to securing the collateral value.

Private banks were not willing to originate mortgages during the post-war period and the GHLC established a de facto standard for mortgage documents, underwriting, foreclosure, and other operational practices for housing in Japan. Massive provision of liquidity was enabled by the FILP, which raised funds from the Postal Savings and the National Pensions nationwide, thus, mobilizing unutilized financial resources that otherwise might have been kept in the form of cash.

The GHLC financed 19.4 million housing units from 1950 to 2007. The cost for this funding was the sum of subsidies it received from the general account of the national budget, which was ¥400 billion in the late 1990s. The demerit of a GHLC loan was that it competed with private banks in the primary lending market. As private banks expanded their business, the GHLC was not prepared for the massive prepayment that occurred in the late 1990s.

As the business environment changed, the role of the GHLC needed to be changed. Thus, the government decided to wind down the GHLC in December 2001. The GHLC was replaced by the JHF in April 2007.

4.1.2 Public Rental Housing

4.1.2.1 Outline of Public Rental Housing

The Public Housing Act (No. 193 of 1951) was introduced to promote the construction of public rental houses for low-income people.[12] Under this scheme, the Government of Japan is mandated to extend fiscal assistance for local government units (LGUs) that construct and operate public rental houses. Unlike the GHLC/JHF or the JCH/UR, the implementing entity is not a national agency but LGUs. Fiscal assistance from the Government of Japan to LGUs includes a subsidy for the construction of public rental houses and a subsidy to compensate the operational margins including rent assistance for very low-income renters.

Because of the highly subsidized nature of the program, the beneficiaries are limited to low-income renters and the criteria to select the occupants are established in accordance with a certain formula. Up to 2013, there were 1.96 million public rental houses nationwide.

4.1.2.2 Target Income Group of Public Rental Houses

The average rent for public rental houses is lower than for private rental houses (Figure 22). There is an income limit for eligibility to apply for public rental houses. Furthermore, rent assistance for public rental houses is restricted to the lower 40% of the income bracket.

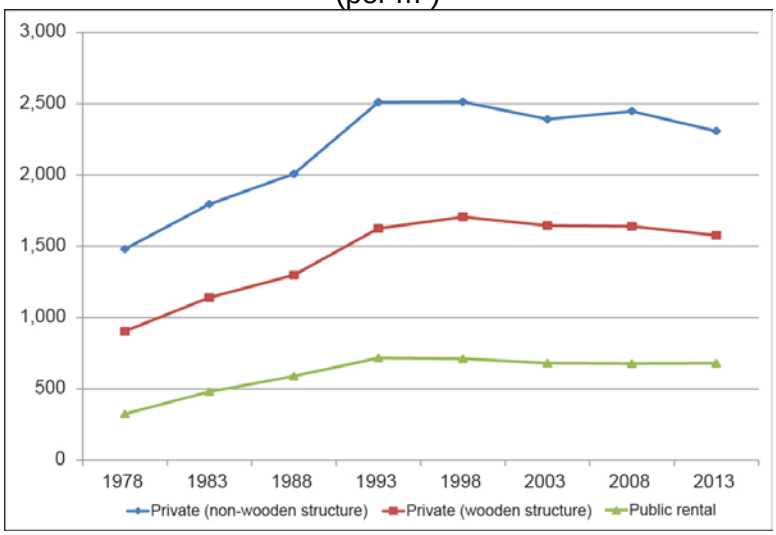
If the income of residents of public rental houses increases above the threshold, the residents are recommended to leave the units, but actual eviction is quite difficult.

4.1.2.3 Merits and Demerits of Public Rental Houses

Public housing was aggressively built in the 1950s and 1960s (Ito 1994). The number of public rental houses reached close to two million units in 1973. It contributed to addressing the needs of low-income people who had difficulty finding affordable houses through the normal market mechanism.

[12] This act is considered to be related to Article 25 of the Constitution that states: “All people shall have the right to maintain the minimum standards of wholesome and cultured living.”

Figure 22: Average Rent
(per m^2)



m^2 = square meter.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

However, due to the advantageous pricing, there was a long waiting list in urban areas, and Kanemoto (1997: 636) notes that "the average number of applicants per unit (was) 35.5 for housing provided by Tokyo prefecture in 1989". There was an inequality among those who won the public lottery selection and those who lost among low-income people.

Another demerit was that the occupants were not willing to return the key to vacate the units even after their income reached above the income threshold. Eviction of those unqualified occupants was a difficult task for the LGUs. (A new framework to substantially increase the rent for unqualified occupants was introduced later.)

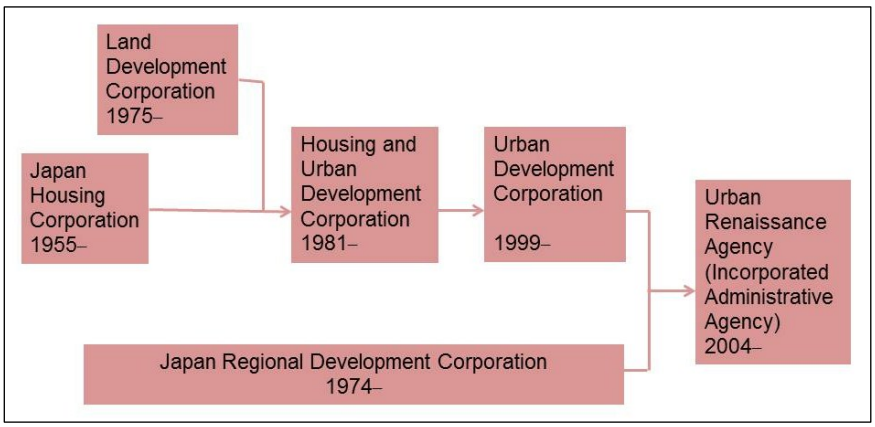
Investment of public rental houses was concentrated in the post-war period. In this regard, "many of the units built in those years are now considered to be too small" (Ito 1994: 224) based on the current status of housing market conditions. Renovation of public rental houses was promoted, but fiscal constraints and the unwillingness of elderly residents remains a challenge for smooth implementation of the renovation of existing public rental housing stock.

4.1.3 Japan Housing Corporation (JHC)

4.1.3.1 Outline of the JHC

The third, but not the least, pillar of post-war housing policies in Japan is the JHC, which was established in 1955 to mainly address the need of people migrating from rural areas to urban areas. The JHC underwent several organizational transformations with other government agencies through mergers. At the end of the 20th century, it was reorganized into the Urban Development Corporation (UDC) (Figure 23).

Figure 23: History of the Transformation from the JHC to the UR



JHC = Japan Housing Corporation; UR = Urban Renaissance Agency.

Source: Urban Renaissance Agency.

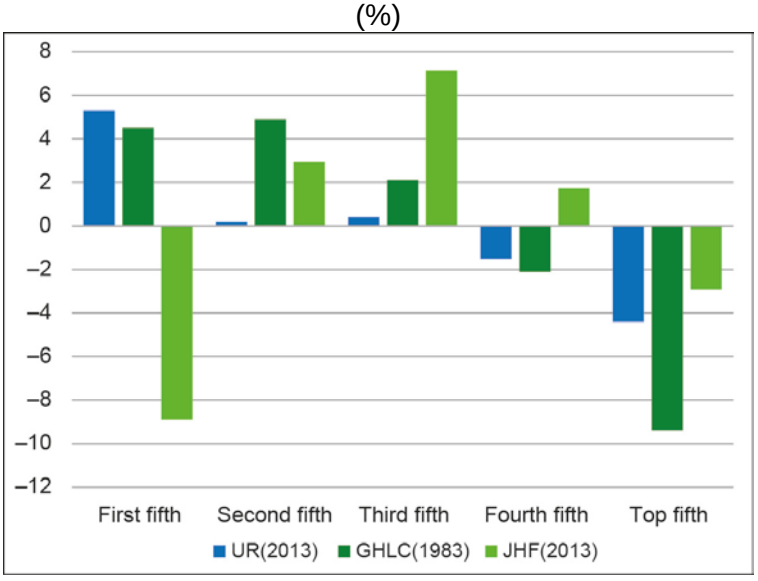
In 2004, the UDC undertook part of the operations of the Japan Regional Development Corporation and reorganized into the Urban Renaissance Agency (UR), which still exists today.

4.1.3.2 Target Income Group of UR and GHLC/JHF

The UR and the GHLC provided assistance to low- to middle-income people. If we take a look at the distribution of the income bracket of the UR in 2013 and the GHLC in 1983, both have a larger share in the lower-income bracket than the overall population but a smaller share in the higher-income bracket. However, the JHF, having a lower share in the high-income bracket, has a lower share in the lowest 20% (Figure 24).

The GHLC used to receive a subsidy from the government whereas the JHF does not. The JHF assists people who have ability to pay, resulting in more focus on the middle-income bracket.

Figure 24: Targeted Group by Income Bracket (difference from benchmark)

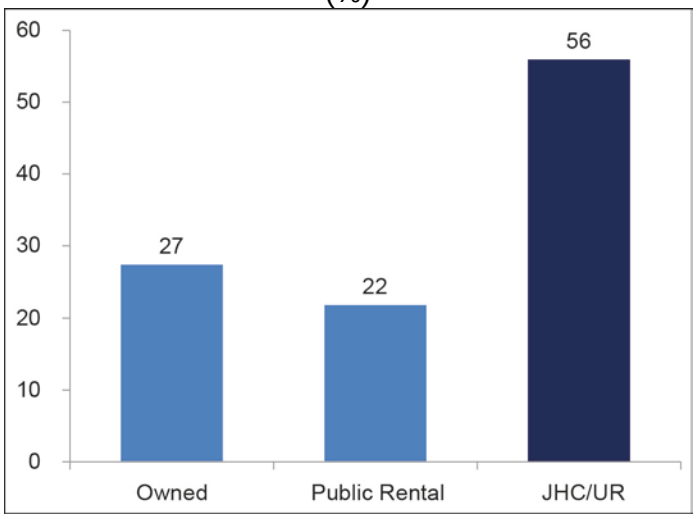


GHLC = Government Housing Loan Corporation; JHF = Japan Housing Finance Agency; UR = Urban Renaissance Agency.

Sources: Japan Housing Finance Agency; Urban Renaissance Agency.

The GHLC used to receive a subsidy from the government whereas the JHF does not. The JHF assists people who have ability to pay, resulting in more focus on the middle-income bracket. The JHC used to provide rental houses as well as houses for sale including condominiums. What was unique for the JHC was that it was mainly focused on the housing problems in urban areas. As of 2013, there were 855,500 housing units administered by the UR, of which 478,300 units are located in the Tokyo Metropolitan Area.[13] This accounts for 55.9% of the total UR houses and shows high geographical concentration (Figure 25).

Figure 25: Share of Tokyo Metropolitan Areas



JHC = Japan Housing Corporation; UR = Urban Renaissance Agency.
Source: Ministry of Internal Affairs and Communications.

4.1.3.3 Merits and Demerits of the JHC

The JHC pioneered the large-scale residential site development known as the "new town development" in Japan. It created Tama New Town in the Tokyo Metropolitan Area and Senri New Town in the Osaka Metropolitan Area, both of which are regarded as templates for the urban development model to be implemented by the private sector. Through these projects, the living style for multifamily residential units was established in urban areas, including housing units that had bathrooms in the units. Such wording "3 DK" (meaning three bedrooms with separate dining room and kitchen) became popular in the 1960s.

However, the advantage of the JHC diminished "as private developers accumulate business know-how and become stronger financially" (Kanemoto 1997: 637).

The government decided to reorganize the UDC in the Cabinet Resolution of 2001, which also decided to abolish the GHLC. It was decided to wind down some of the operations of the UDC including new town development and the construction of new rental properties in general.

The newly established UR has mandates to contribute to urban renewals and the creation of business opportunities for the private sector, among others. The UR, together with the JHF, is extending assistance for the restoration of disaster-affected areas in the Tohoku region after the earthquake on 11 March 2011.

[13] Tokyo, Kanagawa, Chiba, and Saitama prefectures.

4.1.4 Tax Policies Related to Housing Market

4.1.4.1 Property Tax and Stamp Tax

Property tax is a local tax that is charged on the land and structures at 1.4% of the appraised value. City planning tax is also charged on the same property at 0.3%. This appraised value is determined by the local authorities and often lower than the prevailing market value of the properties[14] (Ito 1994). The revenue from property tax was ¥8.489 trillion in FY 2012 (approximately $103 billion equivalent, using the foreign exchange rate in March 2012).

There used to be an exceptional treatment for small residential properties wherein the tax rate on the land is reduced to one sixth of the appraised value if there remains a residential structure on it. This was cited as one of the causes of the high vacancy rate in Japan because, even after the property is not occupied and had better be demolished, the owner of the property had an incentive to leave the property as it is to enjoy a lower property tax rate. (This treatment was amended in 2015, and is discussed later.) Stamp tax is charged to register the title of the property. It is charged to transfer the title of the property as well.

4.1.4.2 Income Tax Deduction for Mortgages

Income tax deduction for mortgages was introduced in the FY 1986 budget in Japan. This is the same year as the tax reform in the US, but the mechanism is different. In Japan, 1% of the outstanding balance of a mortgage is deducted from the amount of income tax. This is different from the mortgage interest payment deduction in the US. In the US, the payment of mortgage interest is deducted from the taxable income and, hence, there is a regressive effect; if the marginal tax rate is higher, the amount of saved tax is higher because the income tax rate is progressive. However, in the Japanese case, the marginal tax rate does not affect the tax benefit because a fixed amount is deducted from the income tax itself and is less regressive than the US.

There are many other tax items on housing-related activities, including stamp tax on contracts, property tax, among others. There are many exemptions for housing-related activities as well, which are too complicated to explain in this paper.

4.1.4.3 Target Income Group of Income Tax Deductions for Mortgages

As of 2015, the maximum income eligible for income tax deduction for mortgages is ¥30 million. On the other hand, the lowest taxable income for a salaried household with husband, wife, and two children in school is ¥2.616 million, according to the Ministry of Finance, and a household earning less does not pay income tax. This level is slightly higher than the 20th percentile of income, which means that the lowest 20% of incomes do not enjoy income tax deductions for mortgages because they do not pay income tax.

[14] According to the Cabinet Office, the value of land of Japan was ¥1,121 trillion (National Accounts for 2013). However, the value of land was estimated at ¥647 trillion and the taxable value is ¥245 trillion for FY 2013 according to the Ministry of Internal Affairs and Communications, which supervises local government units in Japan.

4.2 Japan's Housing Policies in the 21st Century

4.2.1 From the GHLC to the JHF

The main failure of the GHLC was that it did not well anticipate the impact of prepayment on its mortgage portfolio. The GHLC loan was concessional and attractive to borrowers and the management believed such huge prepayments would not occur.

Securitization of residential mortgages started in 1999, but when the government decided to wind down the GHLC, the securitization market for private label securities (PLS) was too small to replace the GHLC lending. There was a strong request from the real estate and housing industries to preserve the 35-year, pre-payable fixed-rate mortgage market in Japan. Based on such background, the government decided to establish the JHF.

The JHF does not originate mortgages in the primary lending markets. Instead, it purchases fixed-rate mortgages originated by private banks and mortgage banks and packages those mortgages into mortgage backed securities (MBS). Instead of competing with private banks in the primary market, the JHF assists private banks to originate fixed-rate mortgages through its secondary market operations. Instead of receiving a subsidy, the JHF recorded net income of ¥282 billion in FY 2014 (Figure 26).

The JHF issues an MBS collateralized by 35-year fixed-rate pre-payable mortgages. If the borrowers prepay on outstanding mortgages, the balance of the MBS is proportionally reduced. This pass-through nature of the JHF MBS is intended to transfer the prepayment risk to MBS investors who have better knowledge of the market environment than public entities. The JHF guarantees timely payment of the principal and the interest to MBS investors. The JHF underwrites the credit risk of the borrower.

Figure 26: Differences between the GHLC and the JHF

	GHLC	JHF
Established	1950	2007
Ownership	100% Owned by the Government of Japan	
Mission	・Provide liquidity to mortgage markets to low and medium income household ・Enhance quality of housing	
Main Products	Fixed Rate Mortgages	
Main Business	Origination in primary mortgage market (Compete with private sector)	Secondary market operation (Support private sector)
Main Funding Source	Borrowing from the Government (MOF FILP)	Mortgage Backed Securities (MBS)
Subsidy	Yes	No (in principle)

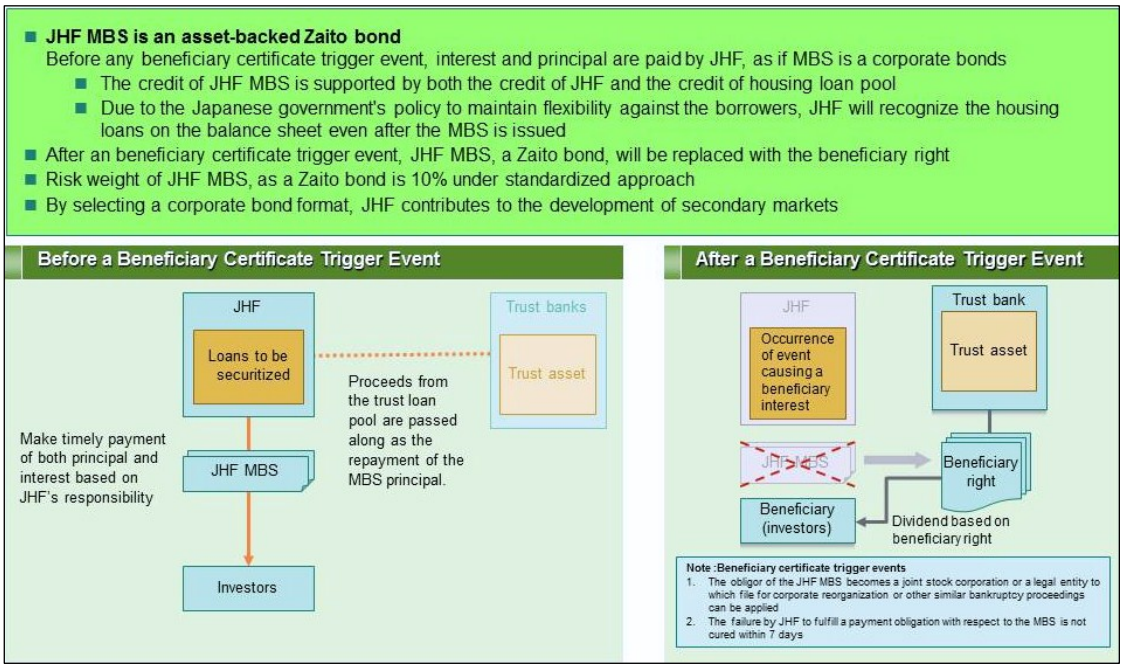
Note: JHF still originates mortgages for such exceptional cases as disaster mitigations. In such cases, JHF still have access to funding from the MOF FILP and subsidies from General Appropriations.

GHLC = Government Housing Loan Corporation; JHF = Japan Housing Finance Agency; MOF FILP = Ministry of Finance Fiscal Investment and Loan Program.

Source: Japan Housing Finance Agency.

The structure of the JHF MBS has some similarities with the European covered bond. The JHF retains mortgage assets on its balance sheet and pledges those assets as collateral for the MBS. If the JHF were to become insolvent or face similar materially adverse situations, the mortgage assets would be immediately segregated from the JHF balance sheet and transferred to a trust,[15] and the custodian would allocate the cash flow from the underlying assets to beneficiaries accordingly (Figure 27). The JHF retains mortgage assets because it is required to extend loss mitigation efforts including modifications of loan contracts for troubled borrowers without limit.

Figure 27: Structure of the JHF MBS



JHF MBS = Japan Housing Finance Agency Mortgage Backed Securities.

Source: Japan Housing Finance Agency.

This structure, which is different from the ordinary structure of securitization that transfers the assets from the originator to special purpose vehicles to achieve bankruptcy remoteness, has proved to work. By retaining assets on its balance sheet and underwriting the credit risk of the borrower, the JHF is vigilant on the quality of mortgage assets and there is no misalignment of incentives or moral hazard that were often criticized in case of US PLS, especially for subprime loans. At the same time, the JHF is immune to prepayment risk. In this regard, the JHF MBS is a hybrid in nature of the US Agency MBS and the European covered bond.

These elaborated structures attract confidence among investors and the JHF MBS has been receiving the reputation as the benchmark in Japanese capital markets. The outstanding balance of the JHF MBS is ¥11.2 trillion whereas that of PLS is ¥7.8 trillion as of June 2015, according to the Bank of Japan.

The 35-year fixed-rate mortgage is available at 1.58% in Japan as of August 2015. The mortgage products that are originated by private lenders under the JHF secondary market operations are called “Flat 35” (interest rate is fixed [flat] for the entire period of the loan for 35 years).

[15] A trust is a legal entity independent of the issuer of the MBS and provides the function of ‘bankruptcy remoteness’ in securitization transactions.

4.2.2 Basic Act for Housing

The replacement of the GHLC with the JHF highlights the changing policy environment in Japan; the initial housing policy after World War II to supply a large quantity of houses was achieved within the 20th century, and the focus of the housing policy has now shifted to the quality of houses. As is mentioned earlier, there has been a drastic change of the demographics in Japan as well, which also forces the agenda of the housing policy to address such changes.

In this context, the Basic Act for Housing was enacted on 8 June 2006. The main pillar of the policy change was the shift from quantity to quality, and the 5-year program was abolished. The Act stipulated the following as the principles of the housing policy:

1) provision of safe, secured, and high-quality housing stock and living environment;
2) establishment of a desirable housing market environment; and
3) establishment of housing safety nets for people having difficulty to secure a house.

The housing policy in Japan is very comprehensive and we are not seeking to explain all of these policy tools. As for the details, please refer to Building Center of Japan (2014). In this paper, we now discuss those policies related to the elderly population, energy efficiency of housing, expansion of existing home transactions, and the recovery work from the Great East Japan Earthquake.

4.2.2.1 Assistance for the elderly

Japan is facing an unprecedented aging society. Elderly people usually have less physical competence than the working-age population, and housing units that accommodate such people must have several different structures in terms of accessibility and others. To address such challenges, the Act on Securement of Stable Supply of Elderly Persons' Housing (Act No. 26 of 2001) was enacted in 2001, but it was amended in 2011 and several programs for the elderly were integrated into the registration system for Housing with Support Services for the Elderly.

Business entities or persons who provide these types of facilities are granted a subsidy for the construction cost, accelerated depreciation for income tax, and reduction of property tax, among others. The JHF also extends mortgages for the construction or purchase of properties for such purposes.

4.2.2.2 Enhancement of energy efficiency of houses

Japan is one of the most energy-efficient economies if measured by consumption of energy per GDP. However, the emission of carbon dioxide has been reduced mainly in the industrial sector and there are more efforts needed in the household sector. Enhancement of energy efficiency has also become more important after many nuclear reactors were shut down following the accidents at the Fukushima power plant by the Great East Japan Earthquake on 11 March 2011.

There are varieties of policy tools introduced to enhance energy efficiency of houses including tax benefits. One of the widely-used tools is “Eco-points” wherein a voucher equivalent to a maximum of ¥300,000 is endowed when people buy or renovate a house to meet certain criteria.

Borrowers of Flat 35S (a special type of Flat 35) who purchase houses which meet energy-efficiency criteria set by the JHF also enjoy an interest rate reduction. The reduction depends on the budgetary support and, as of August 2015, the reduction is 0.6% for the initial 5 years (0.6% is an exceptional case under economic stimulus packages and, in ordinary cases, it is 0.3%). The interest rate for Flat 35S can be as low as 0.98% for the first 5 years and 1.58% for the remaining 30 years as of August 2015.

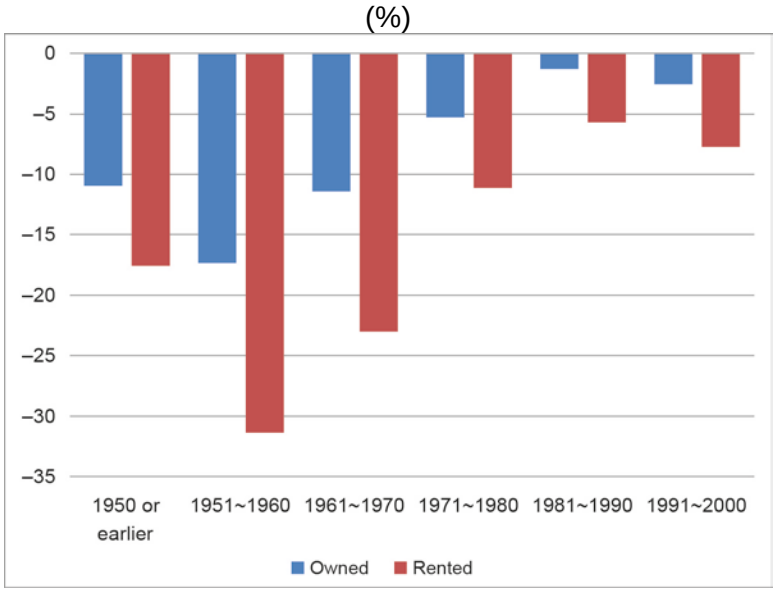
4.2.2.3 Expansion of existing home transaction

As is noted earlier, the market for selling existing homes is smaller (in proportion to new housing starts) than in other developed economies. One of the reasons for this is that the life of a house is shorter in Japan and, hence, new construction works are higher. The average age of houses demolished in Japan is estimated to be less than 30 years. It is noted, however, this does not mean that newly constructed houses have similar durability. Their life could be much longer, maybe for a century or so.

One of the causes for the high rate of demolition is that the share of rental property in Japan is higher than in the US. From 1951 to 2014, there were 69.9 million housing units started in Japan, and 41.0% of these were rental houses. Rental houses have shorter life than owner-occupied houses in Japan (Figure 28). Rental houses are often constructed by the funds of rich elderly people in the context of an inheritance tax strategy by borrowing mortgages. Nearly 70% of rental houses are built by such persons, and only the remaining 30% are constructed by corporations or other entities.

In addition to this, homebuyers have a strong preference for new homes. It is associated with culture, to some extent, and new houses usually have better equipment as technology advances. It is not easy to measure the value of the quality of existing houses and prospective homebuyers may take this for lack of transparency. It is not mandatory in Japan for existing houses to undergo inspection and there used to be no criteria to gauge the quality of existing houses.

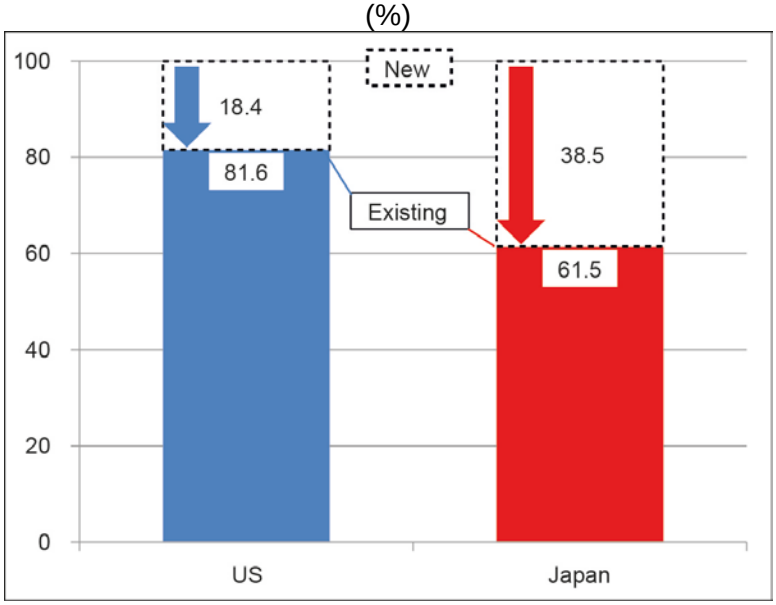
Figure 28: Ratio of Demolished Houses by Year Built (change 2008–2013)



Source: Government of Japan, Cabinet Office.

The prices of existing condominiums are increasing in the Tokyo Metropolitan Area, but undervalued when compared with new condominiums (Figure 29).

Figure 29: Price of Existing Homes Compared with New Homes (average of 2004 to June 2015)



US = United States.

Note: Figures for the US are for single family houses while those for Japan are per m^2 prices of condominiums in the Tokyo Metropolitan Area.

Sources: US Department of Commerce; National Association of Realtors; Japan Real Estate Institute; Real Estate Economic Institute Co., Ltd.

To enhance the buyer's confidence, the MLIT has launched various measures to improve the quality of existing houses and, thus, activate the transaction of them. It may sound contradictory, but Japan may need to accelerate the demolition of unutilized vacant houses, at the same time. There are 8.2 million vacant houses in Japan as of October 2013. Some are vacant because they are used as second houses. However, there are many houses that became vacant after the death of the owner and the heirs left the houses as they remain. Some of these houses have severely deteriorated and are subject to collapse or vandalism or other negative causes for the neighboring communities.

During the 20th century, property tax was reduced for a lot with residential structures. The background for this was to accelerate the high utilization of land by giving an incentive to home construction as well as to assist houses that are the basic and necessary assets for life. However, the situation has changed. Old houses not suited for residential use anymore are left without demolition just because the property tax rate increases if the residential structures are demolished. To remove such poor housing stock, new legislation was enacted in 2014 to accelerate the removal of such vacant houses.

Some radical advocators insist that Japan should limit the amount of new housing construction to increase existing house transactions. However, the quality of existing houses is not necessarily the same as new houses in terms of energy efficiency or earthquake resilience. More than 11 million houses are estimated not to meet the criteria for earthquake resilience. Several policy tools have been introduced to improve the structure of such houses by reforming them, but this may not be enough to cover the entire 11 million units and many of them must be replaced with new housing to some extent.

Considering the historical background that Japan abolished the 5-year housing construction plan to make the housing market more market oriented, it would be quite difficult to control the supply of houses, and such a planned-economy regime may not be welcomed by the industry either, which might have an adverse effect on the other sides of policy implementation.

Japan may shift from promotion of new housing construction to promotion of existing home transactions, but such a transition would progress with some degree of gradualism, with due attention to macroeconomic implications as well as the protection of the lives of the people who live there.

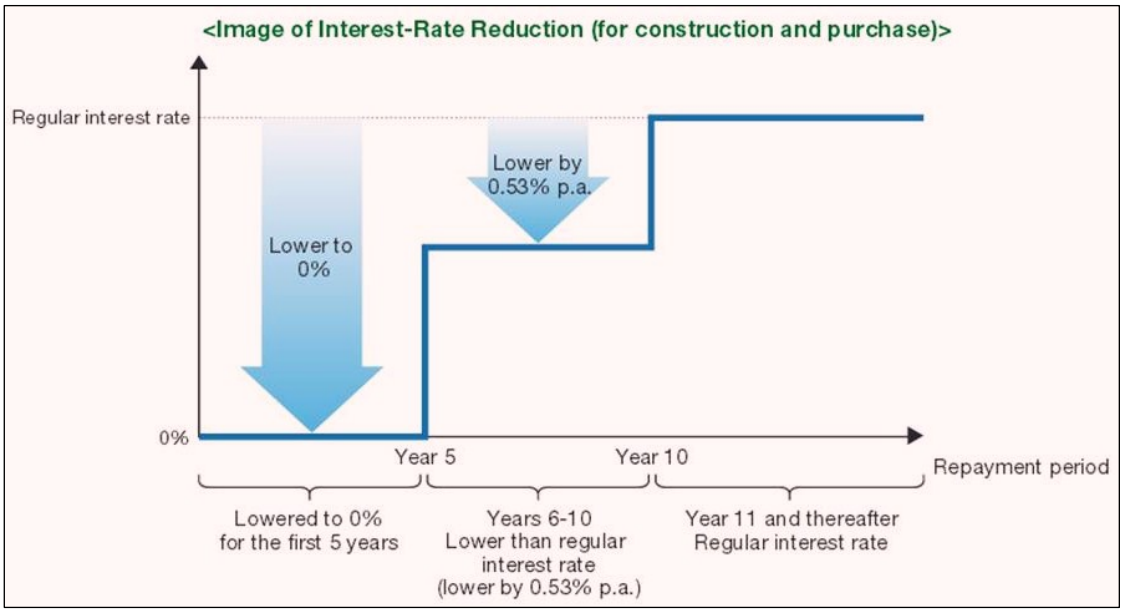
4.2.2.4 Recovery Works from Great East Japan Earthquake

The Great East Japan Earthquake on 11 March 2011 was an unprecedented natural disaster, with a magnitude of 9.0 on the Richter scale, the largest in the record of Japanese history. According to the Fire and Disaster Management Agency, 19,225 people died and 2,614 people are missing as of 1 March 2015. On the same day, 127,830 houses were totally destroyed and more than one million houses were partially damaged. According to the Reconstruction Agency, there were 228,863 evacuees as of 12 February 2015. The recovery from the disaster is the most important policy agenda for Japan.

From the housing perspective, the MLIT immediately acted to accelerate the construction of emergency temporary houses and 53,194 units were completed as of 1 March 2015. Many houses were washed away by the huge tsunami, as high as 130 feet at its highest point, and to avoid a similar disaster, relocation of houses along the seaside to higher place was implemented on a substantial scale.

The JHF is extending consultations to existing borrowers on the possible rescheduling of outstanding mortgages and new special concessional mortgages for those who are going to purchase or construct houses (Figure 30). To reduce the interest rate, the JHF receives a subsidy from the government and receives funding from FILP as an exceptional case.

Figure 30: Assistance for Disaster-affected People



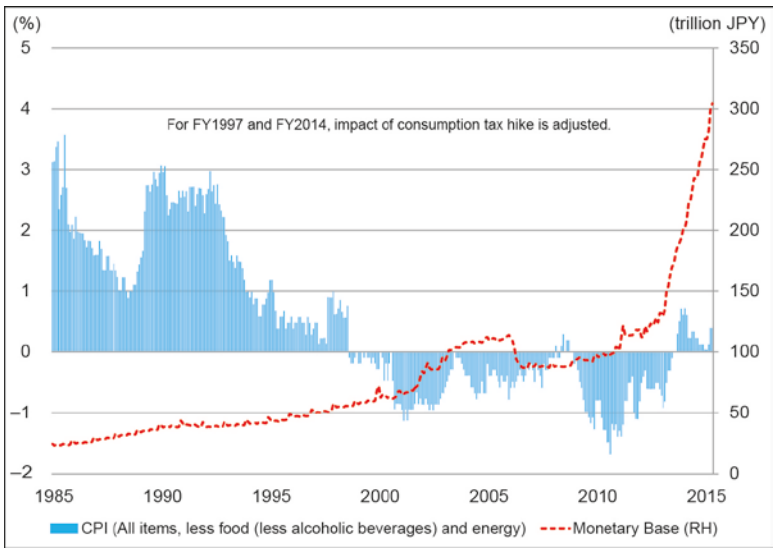
Source: Japan Housing Finance Agency.

5. CHALLENGES FOR THE FUTURE

5.1 Challenges for the Japanese Economy

The Japanese economy is recovering from 15 years of deflation because of the extraordinary monetary policies of the Bank of Japan (Figure 31), but the sustainability of the targeted inflation rate (2%) still remains a challenge. It depends on whether wages are increased to raise demand and the purchasing power of ordinary workers. The Government of Japan is asking industry leaders to proactively address this issue and several blue-chip companies are responding accordingly. But it will take some time for such a movement to spread to small and medium-sized enterprises.

Figure 31: CPI and Monetary Base



CPI = consumer price index; FY = fiscal year.

Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Deflation was the cause of the negative feedback loop in the Japanese economy, and if the efforts are successful to overcome it, the economy will return to the trajectory of sustainable growth. One challenge for this is the persistent belief that it is difficult to get the Japanese economy out of deflation because the population is decreasing. Such a pessimistic view, especially among some academics in Japan, insists that the current recovery of property prices is nothing but a bubble fueled by the massive money supply by the Bank of Japan under its quantitative and qualitative monetary easing policy.

Falling property prices damage the balance sheets of financial institutions, which can cause less lending to the economy, or a credit shortage in the worst case. As the population ages, the importance of reverse mortgages will increase to supplement the national pension system. Reverse mortgages will benefit elderly homeowners who have substantial equity in their homes but don't have enough cash flow. Reverse mortgages will enable such homeowners to enjoy more fruitful lives. But it would be difficult for financial institutions to extend reverse mortgages if property prices continue to fall.

If the private sector alone cannot extend reverse mortgages, there might be some justification for the government to assist their promotion as does the Federal Housing Administration in the US under the Home Equity Conversion Mortgage program. If a

similar program were to be introduced in Japan, there would be some fiscal cost incurred. The beneficiaries of such a program would be subject to fiscal disciplines in Japan as a democratic society.

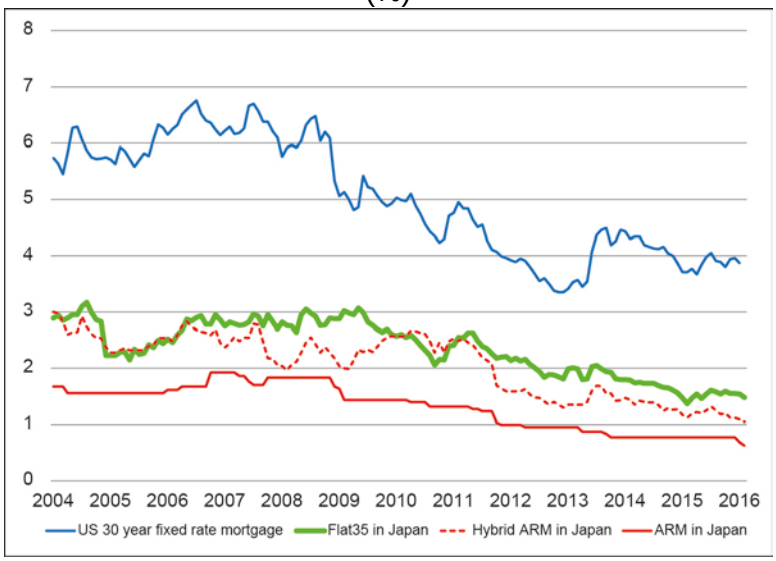
5.2 Challenges for Mortgage Markets in Japan

As of February 2016, the 35-year fixed-rate mortgage is available at the low rate of 1.48% under the platform of Flat 35 sponsored by the JHF. This is much lower than the 30-year fixed-rate mortgage in the US, even discounted by the difference in the inflation rate (Figure 32). However, the fixed-rate mortgage in Japan is not as popular as in the US where the vast majority of borrowers choose fixed-rate mortgages.

It is not easy to predict the future path of interest rates, especially when the current monetary easing policy is removed by the Bank of Japan. The normalization of monetary policy is a challenge for the Federal Reserve in the US too, but it is most likely, according to many market observers, that the Bank of Japan can learn a lot from the Federal Reserve, which lifted the monetary easing policy in December 2015.

Figure 32: Mortgage Rates in Japan and the United States

(%)



ARM = adjustable rates mortgage; US = United States.

Sources: US Federal Reserve; Japan Housing Finance Agency.

One of the causes for the subprime mortgage crisis in the US was the payment shock for hybrid adjustable rates mortgages (ARMs), especially for the 2/28 hybrid ARMs;[16] when many subprime borrowers became delinquent and defaulted.[17] After learning from such an experience, borrowers in the US became more conservative and chose fixed-rate mortgages.[18]

[16] These are mortgage products whose interest rates are fixed for the initial two years (and often lowered to a "teaser rate" to attract unsophisticated borrowers) and adjusted thereafter depending on the prevailing market rate.

[17] The volume of subprime mortgages increased dramatically in 2004 when the Federal Reserve started to increase the target range of the federal fund rate and, in 2006, when the interest rate for 2/28 was to be reset, the prevailing market rate was much higher than when those mortgages originated.

[18] The Consumer Finance Protection Bureau, the newly established regulator in the US, requests lenders to explain more detailed information on the risk of ARMs to borrowers, which also contributed to the

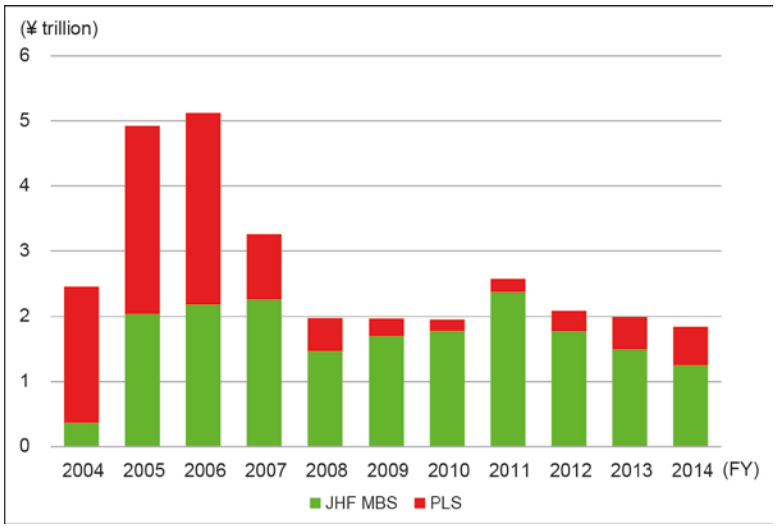
In Japan, extremely low interest rates continued for more than a decade and many people believe that interest rates in Japan will not rise in the near future. Banks in Japan are underwriting mortgages more prudently than in the US. When calculating the debt-to-income ratio, many of them apply higher interest rates than the nominal low interest rate for ARMs. Nonetheless, it is difficult to predict to what extent the market interest rates go up after the Japanese economy gets out of deflation and if the BOJ normalizes its monetary policy.

5.3 Challenges for MBS Markets in Japan

The JHF has been continuously issuing MBS amounting to around ¥2 trillion every year since FY 2006, but the issuance of MBS by the private sector declined significantly since its peak in FY 2006 (Figure 33). This is not because the JHF is crowding out the PLS, but because the regulatory and market environment has adversely changed for the PLS, as is the case in the US.

After the implementation of capital requirement rules under the Basel II Accord, the equity component, the most subordinated class under internal credit enhancement structure of securitization, was required to have the equivalent amount of capital for banks when they apply the standardized approach. This made the securitization transaction less attractive for many banks in Japan because they could no longer use the securitization to increase their profits Most of the banks in Japan have abundant liquidity in the form of deposits and do not face liquidity constraints and, hence, not have incentives to securitize their assets unless they find some merits. One such merit used to be the recognition of profit at securitization, which is no longer available.

Figure 33: Issuance Amounts of MBS



FY = fiscal year; JHF MBS = Japan Housing Finance Agency Mortgage Backed Securities; PLS = private label securities.

Source: Japan Securities Dealers Association.

The other factor negatively affecting the PLS is the bad reputation for securitization after the subprime crisis; securitization served as a transmission mechanism to disperse the credit risk of the poorly-underwritten US subprime mortgages to the global financial market. Many AAA-rated PLS were downgraded and their prices plummeted.

increase of fixed-rate mortgages because lenders are not willing to waste time and money to comply with such requirements.

After the crisis, regulators around the globe are imposing stricter standards for securitization. One such movement is the imposition of a risk retention rule wherein the securitizers are required to retain a certain percent of the credit risk of the underlying assets, which is stipulated in the Dodd-Frank Act in the case of the US. Regulatory details are not yet clear and those who are afraid of being alleged on the breach of representations and warranties are going to other agencies (such as Fannie Mae, Freddie Mac, and Ginnie Mae) because they provide safe harbor.

Investors who incurred losses buying PLS are also reluctant to purchase them because they have to be more diligent to explain to their owners why they have invested in such instruments.

Revitalization of the PLS market still faces significant challenges. To assist private lenders to securitize mortgage assets, the JHF is providing what is called a "guarantee program" wherein the JHF provides insurance on mortgages similar to the Federal Housing Administration in the US guarantees on MBS like Ginnie Mae.

5.4 Covered Bond Legislation

In 2008, one private bank in Japan tried to issue structured covered bonds, but was not able to in the midst of the turbulent financial market. Since then, there have been several efforts to advocate covered-bond legislation in Japan.

Contrary to private securitization where the credit risk of the underlying assets is transferred to investors and the originator is often criticized for moral hazard, covered bonds are issued as a direct obligation of the lender and the lender retains the credit risk of the underlying assets. In this regard, there is better alignment on incentives for lenders to originate mortgages more prudently when they issue a covered bond than when they issue an MBS.

In July 2014, the Financial Services Agency of Japan declined the request from an industry group to enact covered-bond legislation, noting that there is no immediate need to enact such legislation and that the Japanese financial system is sound enough to raise funds even without covered-bond legislation.

6. LESSONS LEARNED FROM THE JAPANESE EXPERIENCE

The most important lesson from the Japanese experience is that policymakers should be vigilant to detect and prevent bubbles in property markets. A financial bubble, by definition, collapses eventually and the consequences are severe damage on to the economy as evidenced by the Japanese case, which was also repeated in the US. However, policy reaction to address the collapse of a bubble is as important as detecting a bubble. Decisive and immediate reaction by the Federal Reserve to provide liquidity to the capital market after the bankruptcy protection filing by Lehman Brothers prevented the US economy from falling into persistent deflation. Many economic indicators in the US including GDP, industrial production, payroll employments, stock prices, among others, have recovered from the pre-Lehman crisis level. This owes much to the extraordinary monetary accommodation by the Federal Reserve, which is contrary to the case in Japan in the early 1990s. Amid the falling property prices, there was strong support of public opinion in Japan to the actions taken by the Bank of Japan to punish bubbles that were already collapsing.

Once caught in deflation, it becomes difficult to get out of it, as is discussed by Bullard (2010) as “unintended steady state”. Many developed economies as well as some emerging economies in Asia are facing similar demographic challenges as Japan. If the housing bubble coincides with a population bonus period, the collapse of a bubble may be followed by a decline of the inverse dependency ratio. In such a case, policy measures to enhance affordability may cause unintended consequences by reinforcing the negative feedback loop of deflation.

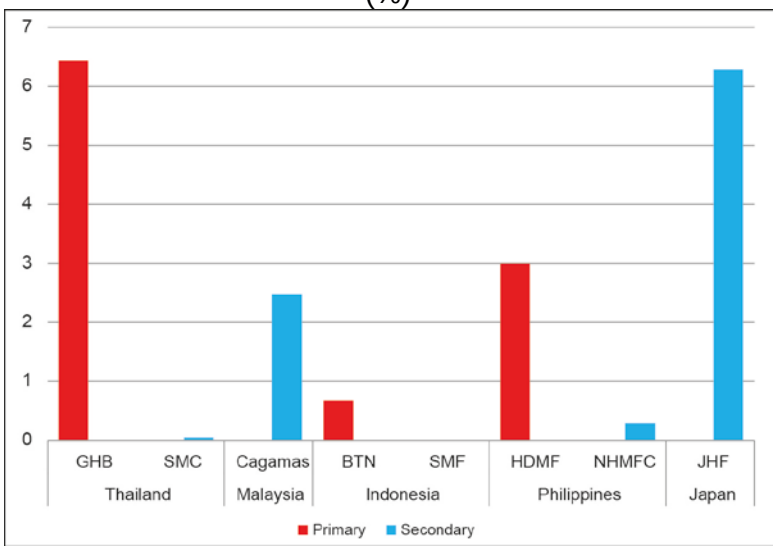
One of the reasons for the increase of tourists to Japan is the various efforts by the government to attract foreigners including the relaxation of visa entry requirements for several countries. Another major reason is the depreciation of the Japanese yen against foreign currencies, especially the US dollar in the last three years. A weaker yen also made the Japanese real estate less expensive for foreign investors and boosted the property prices in large cities, especially in Tokyo.

A lesson for emerging markets is that government financial institutions (GFIs) might work at the initial stage of the mortgage market development, but this is not sustainable indefinitely.

Some Asian GFIs operate in the primary mortgage markets and others operate in the secondary mortgage markets. In several Asian countries, fixed-rate mortgages are available with subsidies, but, in general, most of the mortgage products in Asia are ARMs except for Japan. In countries where primary and secondary GFIs coexist, the presence of the primary GFIs overwhelms the secondary GFIs (Thailand, Philippines, and Indonesia) (Figure 34).

Figure 34: Size of GFIs/GDP in Asian Countries

(%)



GDP = gross domestic product; GFI = government finance institution; GHB = Government Housing Bank; SMC = Secondary Mortgage Corporation; BTN = PT Bank Tabungan Negara (Persero) Tbk; SMF = PT Sarana Multigriya Finansial (Persero); HDMF = Home Development Mutual Fund; NHMFC = National Home Mortgage Finance Corporation; JHF = Japan Housing Finance Agency.

Source: Japan Housing Finance Agency (2014: 9).

In Japan, the GHLC, a primary market GFI, was replaced by the JHF, a secondary market GFI, in 2007. The streamlined transformation of the Japanese mortgage market was successful in that the JHF does not depend on subsidies from the government whereas the GHLC used to receive around 0.1% of GDP equivalent subsidy from the government.

However, the Japanese case may not directly apply to other Asian GFIs. The structure of the mortgage market in the Philippines is similar to that of Thailand. Both countries have dominant primary market GFIs and have secondary market GFIs that are struggling to get market share but are less competitive than the primary market GFIs. For the moment, these primary market GFIs have a good reputation, financial position, and political support and, hence, they are not likely to be wound down, as was the case with Japan where the government decided to wind down the GHLC and replace it with the JHF.

The securitization of mortgage assets remains an ancillary funding source, not only for commercial banks, but also for many GFIs in Asia except for Japan and Malaysia. Covered bonds are attracting attention and several countries are advocating the legislation for covered bonds. Singapore and the Republic of Korea are the forerunners in Asia in this field.

For the secondary market GFIs to expand their presence, it is important to develop proprietary distribution channels of their products that are differentiated from their competitors. The development of capital markets to absorb the MBS will be an integral part of their strategy to extend fixed-rate mortgages with competitive interest rates. There are several options to implement such a strategy, including extending government guarantees on the MBS issued by the GFIs, preferential regulatory treatments on the same, and asking the central bank to accept those MBS as collateral for repurchase agreement transactions or to purchase them outright.

7. CONCLUSION

The housing policy in Japan after World War II was focused on the quantitative supply of houses with a wide range of targeted groups and public rental houses. The Japan Housing Corporation (now the Urban Renaissance Agency) and the Government Housing Loan Corporation (now the Japan Housing Finance Agency) served to address these policy targets accordingly. The restoration of the housing stock was successful, but the collapse of the property bubble in the early 1990s had a negative impact on the economy and created a persistent loss of confidence among the Japanese people, which was exacerbated by deflation and negative demographic factors (decrease of population and aging of society).

Enhancement of the quality of houses is an important part of the housing policy in Japan, but, at the same time, there is need to give attention to new construction and the renovation of existing housing stocks.

Many developed economies, especially those in Europe, will face similar demographic challenges in the near future, and some European countries are at the brink of deflation as of 2016 even after the introduction of negative interest rates on deposit facilities by the European Central Bank in June 2014. The Japanese experience in these fields provides some suggestions, especially from the perspectives of monetary policy.

The transformation of the mortgage market in Japan was drastic as well. The transition from primary markets to secondary markets was streamlined and successful in Japan, not only in the form of a business model, but also in the funding mechanism. Japan is one of the most successful countries to develop MBS markets, other than the US. Japan's experience has implications for emerging Asian countries where there are primary mortgage market GFIs.

Japan is still in the middle of its social experiments and there is need to closely monitor the change of market trends and exchange information to help other parties concerned.

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