How to Make Reverse Mortgages More Common in Japan

Toshiro Kojima
Senior Analyst
Nomura Institute of Capital Markets Research

I. Introduction

On 28 May 2012, the Financial System Council's working group on the longer-term future of Japan's financial industry released a report entitled "The Japanese Financial Industry: Desirable State in the Medium- and Long-Term (Present State and Future Outlook)." Discussing the financial circumstances of the elderly, the report noted that "although they possess considerable assets, including bank deposits, postal savings, the right to receive pension benefits, and real estate, they tend not to own a sufficient amount of liquid assets. This suggests that the elderly, in addition to wealth management aimed at growing or disposing of assets as well as trust and estate-related services, have a need for financial instruments that make it possible to use their assets to generate cash. In addition, it is becoming increasingly important to be able to take advantage of the flexibility offered by trusts, especially with their wealth management function." In this, they referred to the possibilities offered by reverse mortgages.

In this paper, we analyze the current state of the reverse mortgage market in Japan and consider the challenges involved in increasing their use while drawing comparisons with the US market.

II. The current state of reverse mortgages in Japan

1. Why a reverse mortgage?

According to the Survey of Household Economy (2011) conducted by the Ministry of Internal Affairs and Communications (MIC), the average one-person non-working household headed by a person aged 60 and over has a monthly income shortfall of ¥30,696, and for senior two-person non-working households (with the husband at least 65 and the wife at least 60, with neither working) that shortfall is ¥42,950. This income shortfall has existed for a long time, and we assume has been covered by drawing down financial assets.

MIC's National Survey of Family Income and Expenditure indicates that the household assets owned by the average senior household include approximately ¥18 million of financial assets and ¥30 million of residential real estate (land and building) assets (Figure 1). Keep in mind that the distribution of household assets is heavily skewed. Because the minority of households with a large amount of assets pushes the average (mean) value higher, two-thirds of the total number of households has less than the average amount of household assets, while the median level of household assets is about two-thirds of the average level. Accordingly, it is possible to exclude the distortion caused by a minority of households with a large amount of assets and get a more realistic picture of the typical senior household by using the median (about two-thirds of the mean), which is roughly ¥12 million in financial assets and ¥18 million in real estate. With interest rates now at virtually zero, ¥12 million of financial assets drawn down at a rate of ¥50,000 a month would be used up in 20 years. Given that the average life expectancy[1] of a 65-year-old is 18.96 years for men and 23.69 years for women, this level of financial assets is not enough to feel secure during retirement. This is why reverse mortgages are attracting attention, because they provide a way to leverage the other major asset owned by households, which is the home and the land it sits on.

2. What is a reverse mortgage?

As noted above, because the typical senior household has a shortage of income, in most cases their credit would not be strong enough to qualify for a loan if they wanted to offset that shortage by borrowing. Although they could obtain funds by selling their home, they would then no longer have a place to live. A reverse mortgage is a financial product for seniors that provides a loan using the home (the house and land it sits on) as collateral, but there are no loan payments during the period of the loan, and

Figure 1: Household assets by age of head of household

(Units: ¥ thousands)

	Household assets	Financial assets	Real estate assets			Durable consumer goods assets
				Home	Land	
Average	35,880	9,470	25,140	5,230	19,920	1,270
Below 30	8,540	-380	7,760	2,650	5,120	1,160
30s	14,000	-2,620	15,320	5,730	9,600	1,300
40s	23,950	740	21,900	6,540	15,360	1,310
50s	37,100	9,270	26,430	5,400	21,030	1,400
60s	49,250	17,850	30,040	5,070	24,970	1,360
70 and up	50,240	18,600	30,690	3,800	26,890	950

Source: Nomura Institute of Capital Markets Research, based on the 2011 National Survey of Family Income and Expenditure from the Ministry of Internal Affairs and Communications.

1 We do not think there is much of a difference between the average and the median longevity, and thus half the population lives longer than average.

when the borrower passes away the home is sold in order to pay back the loan. Because those with a mortgageable home are able to take out a loan even if their income is low, and because unlike if they sell the home outright, they can receive cash while still living in the home, this is a financial product aimed at seniors.

The maximum loan is determined by the appraised value of the home being mortgaged, and as long as this limit is not exceeded it is normally possible to either draw the necessary funds on demand or receive a predetermined loan disbursement periodically, similar to a pension. In the US, there are also products available that provide annuities. In contrast with a regular loan in which the principal balance starts out at its highest and is gradually reduced over time, in a reverse mortgage the loan balance is initially at its smallest, and then gradually increases over time as additional loan funds are disbursed and interest is added to the principal. The loan balance moves in the reverse direction of a normal loan, thus the name "reverse mortgage."

3. Advantages of a traditional reverse mortgage

Probably the most traditional form of a reverse mortgage is what is known as a home equity conversion mortgage (HECM)[2]. The advantage of an HECM is that it is nonrecourse, can provide lifetime tenure payments, and requires no repayment during the term of the loan. Because the term of a reverse mortgage is not established ahead of time, there is a risk that either the interest incurred and amount of life tenure payments made will be more than expected and push the loan principal higher than the initial limit set, or the property value will decline below the amount of the loan as a result of changes in the real estate market (collateral risk). Under an HECM, this collateral risk is underwritten by government insurance, thereby satisfying the three conditions of non-recourse, lifetime tenure, and no repayments during the term. Thus if the borrower meets certain conditions, including paying a property tax, no repayments will be required for the rest of the borrower's life, and even if the financial institution is unable to recover the full amount of the loan after disposing of the collateral property, the heirs will not have to repay the remaining debt. Thus the peace of mind provided by these three conditions of non-recourse, lifetime tenure, and no repayments during the term are critical elements of a reverse mortgage.

In addition, the government also assists the financial institution in funding the reverse mortgage[3], making it easier for mortgage bankers without the same access to funding as a bank to participate in the reverse mortgage market.

---

2 For details, see Toshio Kojima, *Ribaasu Mougeeji ni motomerareru Seifu no Yakuwari—Beikoku Houmu Ekuiti Konbaajon Mougeeji (HECM) no Tanjou no Keii to Igi* (The government's role in reverse mortgages: the history and significance of home equity conversion mortgages (HECM) in the US), Nomura Capital Market Review, Summer 2012 issue (in Japanese).

3 In the US, the securitization market is a source of funding, and the government-sponsored enterprise Ginnie Mae provides principal and interest guarantees for securitized products.

4. Progress in Japan thus far

The reverse mortgage market was launched in Japan in 1981 with the establishment of a welfare financing business by Musashino City, a Tokyo suburb. Later, two different methods were developed, the direct method whereby the local government directly provided the loan, and the indirect method whereby the local government would partner with a financial institution to provide the loan. The program was not much used, however, and in 2002 the Ministry of Health, Labor and Welfare launched, via the prefectural social welfare councils, a program of real estate-backed loans for living expenses, then in 2007 launched another version of the program targeted at households requiring long-term care, with the purpose of adjusting the conditions for receiving welfare benefits[4]. Consequently, most local governments have suspended their own programs. Because when a government agency is the lender the purpose is to cover this shortfall in daily income, normally the loan is disbursed in tenure payments, similar to a pension.

In the private sector, the Shokusan Bank (now the Kirayaka Bank) began handling reverse mortgages in June 1999[5]. Chuo Mitsui Trust and Banking (now Sumitomo Mitsui Trust Bank) and Tokyo Star Bank started handling them in 2005, and Gunma Bank and Seibu Shinkin Bank are also now in the market.

5. Characteristics and challenges of reverse mortgages in Japan

One notable characteristic of Japan's reverse mortgage products is that they nearly all exclude condominiums from eligibility (Figure 2). In the private sector, only Tokyo Star Bank allows condominiums as collateral, but just for limited locations and if certain conditions are met[6], otherwise it only allows single-family homes. Even in the case of a single-family home, only the land can be used as collateral, and none of the products take into account the value of the house itself. In comparison with the US, where the loan is written on the land and building as a single unit, in Japan the house is excluded from the financing, and thus loan amounts are lower than in the US. This may be a major reason why reverse mortgages are not very widespread in Japan (more on this later).

A second characteristic is that only lines of credit and term-certain tenure are available, and lifetime tenure payments are not an option. Accordingly, with the term-payment reverse mortgage[7], there is a possibility that the mortgage will reach maturity and loan fund disbursements will end while the borrower is still living. There used to be products where there was an option to take the loan in a lump sum and then use

4 Because individuals with a certain level of assets are ineligible for welfare assistance, the program provides a mechanism for reducing assets (house and land) via a loan for living expenses, enabling the borrower to eventually become eligible for that assistance.

5 The bank is not currently offering reverse mortgages.

6 Condominiums need to have been constructed within the past 14 years, be within 10 minutes of the nearest station, and have at least 50 m² of living space.

7 The term-payment reverse mortgage is fixed monthly loan payment for a specific period of time.

Figure 2: Overview of reverse mortgage products in Japan

Financial institution, etc.	Name		Age	Annual income	Condominiums allowed?	Minimum required appraisal	Limits	Method of borrowing	Payment of interest	Mid-term repayment required in the event of surplus loan disbursements	Frequency of property appraisal	Trust	Reverse mortgages written
Tokyo Star Bank	Jyujitsu Jinsei		Between 50 and 80	At least ¥1.2 million	○	—	Between ¥5 million and ¥100 million (¥50 million for a condominium)	Line-of-credit type	Monthly	Yes	Annually	△	FY 2011 570 RMs for about ¥6.2 billion
Sumitomo Mitsui Trust Bank	Sumitomo Mitsui Trust Reverse Mortgage		Between 60 and 83	—	×	¥80 million (¥40 million through March 2012)	Up to 50% of land's appraised value (10% of land's appraised value for those between 60 and 64)	･Between 60 and 64: line-of-credit type (credit card loan) ･Between 65 and 79: once a year or line-of-credit type ･Between 80 and 83: lump-sum type	Final lump-sum	No	Every three years	○ Estate trust	—
Gunma Bank	Yume no Tsuzuki		Between 60 and 85	Pension and other income	×	—	Up to 60% of land's appraised value up to ¥100 million	Fixed amount annually	Monthly	No	Every three years	○ Estate trust	—
Seibu Shinkin Bank	Iki Iki Life	Interest-payment type	At least 55 and less than 80	Has income	×	—	Up to 70% of land's appraised value and between ¥50 million and ¥100 million	Line-of-credit type (credit card loan)	Monthly	Yes	From changes in property value	○ Land trust	—
		Interest and principle-added type	At least 65 and less than 80	Has income	×	¥30 million	Up to 35% of land's appraised value, between ¥10 million and ¥100 million	Line-of-credit type (credit card loan)	Final lump-sum	Yes	From changes in property value	○ Land trust	—
Ministry of Health, Labor and Welfare	Fudousan Tanpougata Seikatsu Shikin		At least 65	Either exempt from local government tax or income low enough to qualify for capitation tax	×	As a rule ¥15 million	About 70% of land's appraised value	Fixed amount four times a year	Final lump-sum	No	Every three years	×	FY 2009 127 RMs for ¥2.1 billion
		For households requiring welfare	At least 65	Individuals who would require welfare without it	○	¥5 million (Land and building)	About 70% of land's appraised value 50% in the case of multi-family housing	Fixed amount four times a year	Final lump-sum	No (Transfer to welfare)	Every three years	×	FY 2009 244 RMs for ¥1.57 billion
US	Home Equity Conversion Mortgage (HECM)		At least 62	—	○	—	If 62 and a 5% interest rate, maximum requested insurance amount is 50-55%	･Monthly for a specified period of time ･Monthly for life ･As needed ･A combination of the above	Final lump-sum	No	Only initially	×	FY 2011 73,093 RMs

Source: Nomura Institute of Capital Markets Research, based on various data sources

those funds to purchase a life annuity but it appears that no provider is offering that option anymore.

A third characteristic is that there are some products for which interest must be paid every month, even while the borrower is living. As the name implies, the principal on a reverse mortgage increases cumulatively. Because the interest that must be paid increases as the loan balance increases, in the case of a term-payment reverse mortgage the amount of usable funds (disbursement of loan funds less interest) declines over time. Another point to be wary of is that if interest payments become overdue, it may trigger the acceleration clause in the loan agreement.

Fourth, there are some products that require repayment of principal during the loan term if a decline in land prices causes the loan amount to exceed the property value. Although it will depend on the degree to which land prices change, in some cases a fairly substantial repayment of principal could be required, and as is the case with interest payments, an inability to repay the principal may trigger the acceleration clause.

Fifth, few of the products clearly indicate that they are nonrecourse loans. We think this is probably because there are usually a number of mechanisms including to effectively eliminate the need for recourse, including limiting the amount of the loan to a level that can be recovered from disposition of the property and reducing the amount loaned by requiring monthly interest payments and/or the redemption of surplus loan disbursements during the loan term.

Sixth, all of the private-sector products except for Tokyo Star Bank's require use of a trust[8]. This is because reverse mortgages are exposed to the risk of heirs filing objections when it comes time to dispose of the property, and the use of a trust by will or a trust to administer or dispose of property makes it easier to deal with such issues. In addition, if the borrower dies leaving a spouse behind, the agreement would otherwise require disposition of the home and repayment, but the use of a trust makes it possible for the surviving spouse to continue using the reverse mortgage[9].

As the above description makes clear, Japan's reverse mortgages do not meet the three conditions required of HECM in the US: non-recourse, lifetime tenure, and no repayments during the term. To ensure no misunderstandings, it is probably best to say that Japan does not really offer true reverse mortgages. This is because although using a reverse mortgage in Japan temporarily eliminates a shortage of funds, the possibility that interest payments or, if the loan goes "underwater," principal repayments will be required during the borrower's lifetime creates anxiety over a possible shortage of funds in the future. We think this is another major reason why reverse mortgages are not very common.

III. Toward a full-fledged reverse mortgage market

1. The government's involvement is needed

Creating a full-fledged market for reverse mortgages necessitates meeting the three requirements of non-recourse, lifetime tenure, and no repayments during the term, and we think the private sector's unwillingness to accept the collateral risk explains why these three conditions are not met in Japan. This suggests that the only way to seriously broaden the use of reverse mortgages is to have the government underwrite the collateral risk that the private sector will not, as is done in the US. In addition, we think this must be in the form of a private-public partnership in which private-sector financial institutions actually write and administer the loans.

Although just an idea, it may also be worth considering establishing a government-sponsored enterprise to purchase reverse mortgages from private-sector financial institutions as one way to achieve such a private-public partnership in Japan. Since the

---

8 Tokyo Star Bank offers a trust as an option.

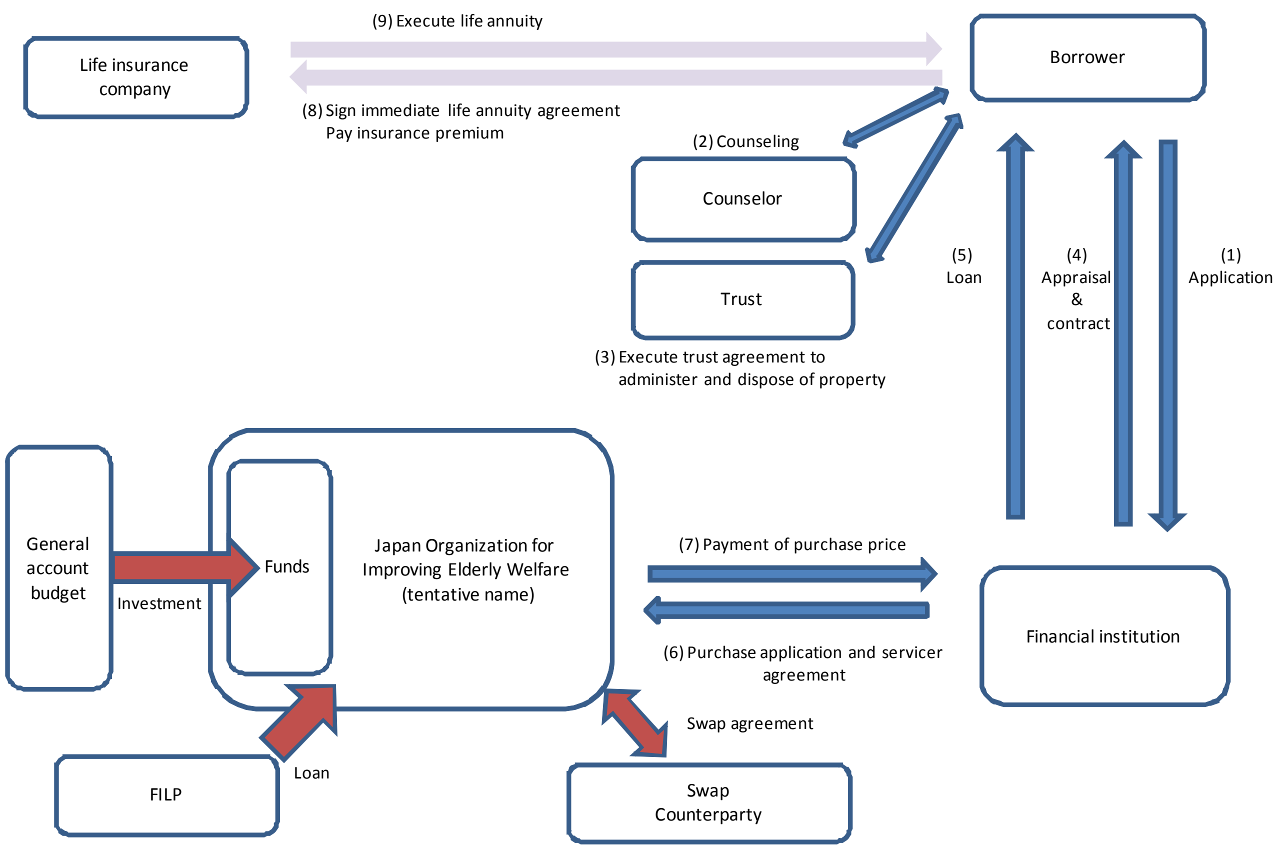
9 If a trust is used, ownership rights are transferred to the trust, and the original owner gets the beneficiary interest. Because ownership is transferred with the estate, the house and land are not included in the estate property, which makes it easier to dispose of the property. A spouse who is included as a beneficiary can continue living in the home after the borrower's death based on her beneficiary interest.

organization would be aimed at improving the lives of seniors, for now we will call it the "Japan Organization for Improving Elderly Welfare." In the US, the insurance function and the liquidity supplying function are handled by separate organizations, but the GSE we propose would bear the collateral risk as the lender and also be the supplier of funds to private-sector financial institutions.

2. Scheme overview

The seniors who wish to apply would fill out an application with the financial institution and receive counseling prior to entering into an agreement ((1) and (2) in Figure 3). The purpose of this counseling would be to ensure more adequate understanding of how the reverse mortgage is structured and how it will be repaid, and also, in light of the advanced age of the applicants, to ensure the application is filled out in accordance with the applicants' intent. Next, a trust agreement is executed ((3)), in order to simplify the administrative procedures for clearing the debt as well as ensure that the surviving spouse can continue to use the reverse mortgage. Only after the trust agreement is executed is a reverse mortgage agreement entered into with the financial institution and the loan actually written ((4) and (5)). The loan rate would be an adjustable rate to allow the GSE to avoid exposure to interest rate risk. Because

Figure 3: Overview of reverse mortgage scheme from the Japan Organization for Improving Elderly Welfare (tentatively named)



Source: Nomura Institute of Capital Markets Research there are no repayments until the borrower dies, it follows that the impact of a rise in interest rates on the ability to make payments is irrelevant. The borrower receives loan disbursements while still alive, and the GSE sells the property and recovers its funds after the borrower dies.

The GSE purchases the loan from the financial institution, allowing the financial institution to recover its funds while still acting as the servicer of the reverse mortgage. Many financial institutions would be able to participate if funding were made easy, which in turn should lead to growth in the reverse mortgage market ((6) and (7)).

The loan could take the form of either a term-payment reverse mortgage, which would offer a stream of periodic payments at a fixed amount, or a line-of-credit reverse mortgage in which funds could be tapped as needed, but those borrowers wanting to annuitize their loan should have the option of using their loan funds to purchase a life annuity from an insurance company ((8) and (9)).

The collateral risk underwritten by the GSE would in principle be covered by a fee collected from the borrower in the form of an insurance premium[10], but the GSE would receive a contribution from the government (including through the general account) to guard against unexpected risk and as a way to reduce the borrower's premium. The need for the government to underwrite collateral risk needs to be debated further, but when considering that reverse mortgages cover a portion of continuously rising social welfare costs by helping seniors draw cash out of their own homes, which are a place to sleep as well as an asset, they should help to lower the government's overall spending obligations.

In addition, although the idea is for the GSE to eventually get its funding from the market, we envision this scheme initially taking advantage of the Fiscal Investment and Loan Program (FILP). The US government, which is heavily involved in providing liquidity, provides a precedent for this, not to mention that use of the FILP would allow for funding at a lower interest rate than market funding, thereby lowering the interest costs for borrowers. Because FILP funding is at a fixed rate, swaps would be used to enable repayment of the adjustable-rate funds.

IV. Leveraging homes as an asset

1. Insufficient asset values

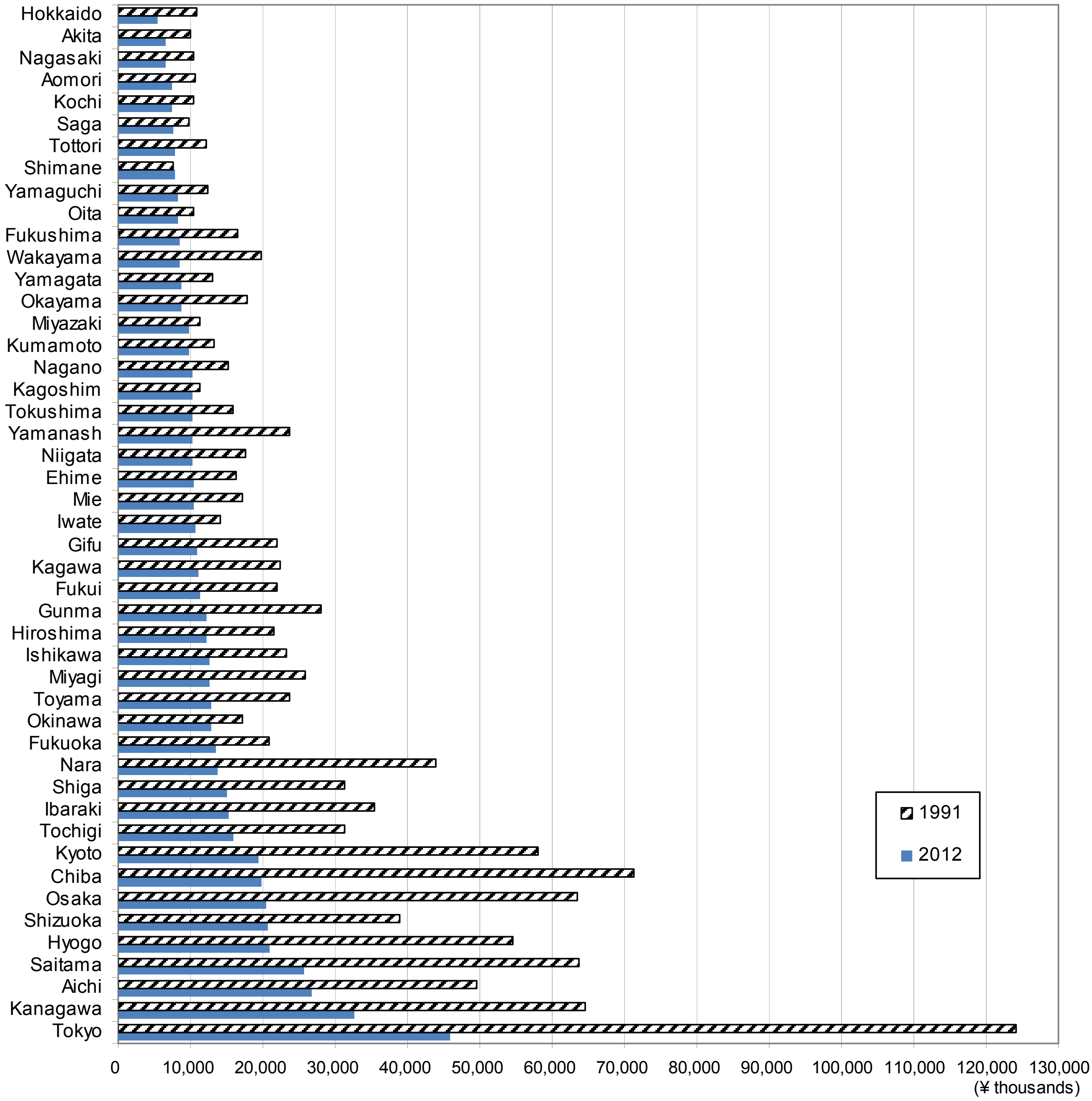
As noted in the introduction, the average nonworking elderly two-person household has a monthly funds shortage of ¥42,950. We run here a simple calculation to determine the value of real estate required to be able to cover this shortfall with a reverse mortgage. We assume a loan period of 25 years, roughly the same as the average life expectancy (23.89 years) for a 65-year-old female, and an interest rate of 3%. For simplification, we just omit the other factors, such as fees and insurance

[10] In fact, this is collected in the form of additional interest, and like the principal is settled upon the borrower's death.

premiums. To receive ¥50,000 monthly would require a property (land) with an appraised collateral value of ¥22.3 million, and assuming a loan-to-value (LTV) ratio of 70%, this would require a property value (land market value) of ¥31.86 million. Likewise, to receive ¥40,000 monthly would require a property value of ¥25.49 million.

Next we estimate the average price for a residential plot in each prefecture (Figure 4). We do this by multiplying the average size of a single-family residential plot in

Figure 4: Average price for a residential plot by prefecture



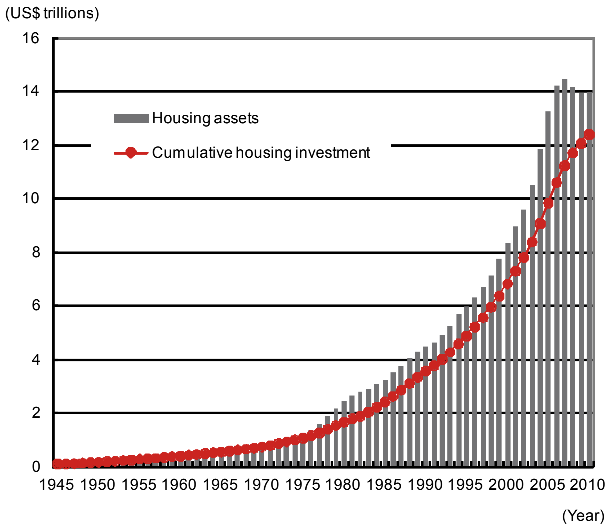
Source: Nomura Institute of Capital Markets Research, based on the 2008 Housing and Land Survey from the Ministry of Internal Affairs and Communications and the 2012 Land Price Survey by Prefectures from the Ministry of Land, Infrastructure, Transport and Tourism each prefecture from the MIC's Housing and Land Survey (2008) by the average unit price for residential land as reported in the Ministry of Land, Infrastructure, Transport and Tourism's Land Price Survey by Prefectures (2012). Based on these calculations, the only prefectures in which the owners of an average-sized plot could generate ¥50,000 monthly from a reverse mortgage are Tokyo and Kanagawa prefecture. Lowering the requirement to ¥40,000 monthly would only add Aichi and Saitama prefectures to the list, which means that in the vast majority of Japan's prefectures, a reverse mortgage generating ¥40,000 monthly is out of reach for owners of an average-size residential plot. The lightly shaded bar graph shows average residential land prices in 1991, the peak of the bubble, but even then only 23 prefectures had an average residential land plot valued at over ¥20 million. In the majority of Japan's prefectures, the owner of an average-size residential site would be unable to cover a monthly shortfall of ¥40,000 by taking out a reverse mortgage on only the value of the land.

2. Housing investment is consumed in Japan

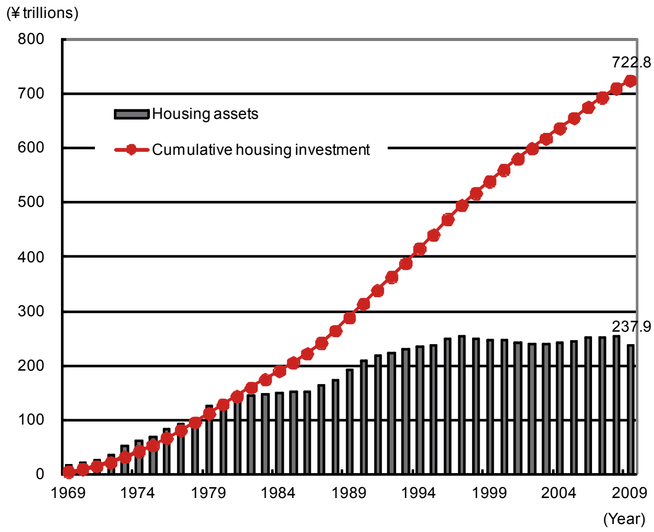
Figure 5 compares cumulative housing investment using SNA data (the dotted line) with housing assets (the bar graph). In the US, housing assets are higher than cumulative housing investment. This appears to be the result of housing asset prices having increased via repairs and improvements by more than their amount of depreciation. In Japan, housing asset prices are only about one third of cumulative housing investment. One way to look at this is that in the US, housing is used as an asset, whereas in Japan it is consumed as a durable good. If homes held their value

Figure 5: Cumulative housing investment versus housing assets

(1) US



(2) Japan



Source: Nomura Institute of Capital Markets Research, based on data from the US Department of Commerce and Federal Reserve Bank like they do in the US, it is likely that reverse mortgages could be taken out based on the value of the home itself. Assuming an average home price in Japan of approximately ¥29 million[11], if that value held like it does in the US, residential properties on an a plot of average size are worth more than ¥31 million, and would be able to generate a monthly reverse mortgage payment of ¥50,000, in all prefectures[12]. This suggests that one of the keys to the increased use of reverse mortgages is raising the value of the home itself. Even the LDP, which was returned to power by the general election that was held on 16 December 2012, included in its platform, under the heading "255. Raise home prices and promote living styles commensurate with peoples' stage in life," a call to "treat housing, which has positive ripple economic effects on numerous industries, as an important component of national wealth, and strive, via comprehensive housing tax policies, financing and other support mechanisms, and deregulation, to achieve a "stock society" in which housing is retained as an asset." We expect to see measures implemented that encourage valuing homes as an asset. For homes to be valued as an asset, measures must be implemented to avoid the consumption of existing stock, and this will necessitate expanding the market for renovations aimed at increasing home values as well as expanding the market for existing homes in a way that properly values those homes. Loans for renovations and purchasing existing homes must be made more attractive, in terms of loan amounts, interest rates, and paperwork, relative to loans for newly built homes, and such changes on the finance side are likely to become important. In any case, utilizing homes as an asset will directly add to national wealth, and should be an effective method of enriching not only seniors but a large swath of the population.

V. Triggering growth of domestic demand

Next we estimate just how large the reverse mortgage market might become. According to the 2008 Housing and Land Survey, there were 7.08 million households nationwide that were owner occupied by either singles or couples aged 65 and up. Assuming that these households have an average home value of ¥29 million and land value of ¥16 million[13], for a total residential property value of ¥45 million, that the LTV is 70%, and that the penetration rate is about 2%, the same as in the US, Japan's reverse mortgage market would currently be worth about ¥4.5 trillion. Although this market will become even larger as the population gets older, Japan had home loans outstanding of approximately ¥180 trillion at end-FY 2011, so even if the reverse mortgage market were to double, they would only amount to about 5% of the residential mortgage market overall. Accordingly, the direct economic benefits from the reverse mortgage market may be limited.

---

11 The average construction cost for custom-made homes mortgaged by a Flat 35 loan from the Japan Housing Finance Agency in FY 2011 was ¥28.59 million.

12 This assumes an interest rate of 3% and loan term of 25 years.

13 The 2011 National Survey of Family Income and Expenditure reported average residential land assets for households 60 years and older of around 25 million, and we use two-thirds of that figure.

Even if the direct effects are small, however, there is a possibility that the secondary effects will be substantial. This is because if the reverse mortgage market becomes more widely used by seniors as a last resort to obtain funds, financial assets socked away to deal with future uncertainty will start to play less of a role. In other words, if the option of a reverse mortgage eliminates anxiety over future funding shortages, there will be less need for "just in case" savings, and these funds may wind up being spent. With approximately 60% of Japan's over 1,500 trillion yen of financial assets apparently owned by households aged 60 and up, we think there is a good probability that the impact from senior households starting to spend a portion of their savings would eclipse any impact from the home loan market. Although a decline in domestic demand brought by a shrinking and aging population is a concern, creating a market for reverse mortgages may be just the catalyst needed for domestic demand to grow.