
Proposal to Offer Reverse Mortgages for Condo Reconstruction

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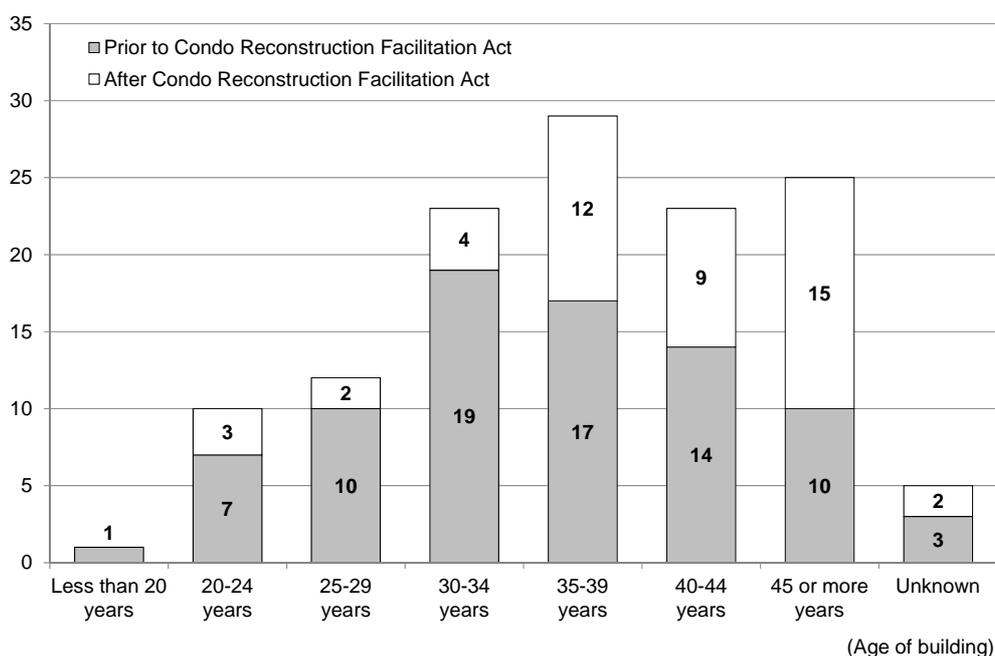
I. Condominiums beset with double aging

1. The aging of the structures

Condominiums started being built in Japan in the 1950s in areas near the center of Tokyo, and after that the Japan Housing Corporation (now the Urban Renaissance Agency) and private sector developers started supplying the market with a large number of mid- to high-end condos. According to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), as of end-2012, there was total stock nationwide of 5.897 million condominium units, inhabited by approximately 14.5 million people, more than 10% of Japan's population. Since the failure of Lehman Brothers, about 100,000 condominium units have been supplied to the market annually, and the total stock is set to exceed 6 million units by end-2013. We expect the supply of condominiums to increase, primarily in urban areas, and according to the data on FY2012 housing starts, condominiums accounted for 52.5% of total owner-occupied housing starts (owner built and built-for-sale residences) in Metro Tokyo. Condominiums, the supply of which began in the 1950s, are not just an accepted way to live in big cities, they have become the predominant way, and we expect them to become increasingly important moving forward.

Growth in the stock of condominiums means an increase in the number of older condominiums. As of end-2012, there were 1.185 million condominium units built 30 or more years ago (including 1.061 million built before the new earthquake resistance standards were introduced in 1981), and we expect this number will continue to grow. This is the first of the two types of aging we refer to. Not only condominiums but all homes can have their useful life extended with the proper maintenance and repairs, and the reinforced concrete construction used to build many condominiums is physically durable enough to be used for 100 years with the proper maintenance. In that sense, the rebuilding of Japan's condominiums could be considered a problem for the future, although in Japan the biggest reason for reconstruction is not physical deterioration but rather functional deterioration. Functional deterioration means the lack of facilities now considered as a given or the aging of facilities. Examples include buildings without an elevator, with a small living space, or without insulation. Of the condominiums built by 1970, units with less than 50 m² of living space account for 36% of the total, while mid-to low-rise condominiums (4–5 floors) with an

Figure 1: Age of buildings before completion of reconstruction



Notes: 1. When construction spans several years, the last year is used for calculations.
2. We use the age of the building when reconstruction is complete.

Source: Nomura Institute of Capital Markets Research, based on Real Estate Companies Association of Japan, *Manshon Tatekae Sokushin ni kansuru Kenkyuhokokusho* (Research report on promoting condominium reconstruction) (in Japanese)

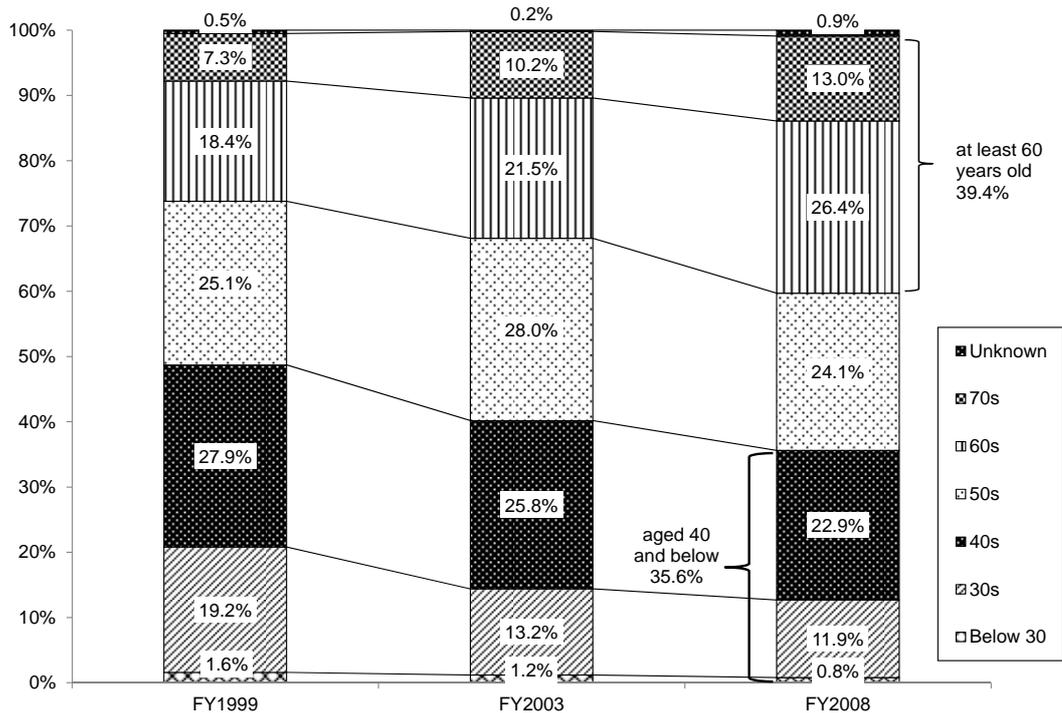
elevator only account for a mere 6%; thus many have less functionality than the condominiums being built today. It has become particularly important to inspect and either modify or rebuild those structures built prior to the new earthquake resistant standards going into effect. An analysis of rebuilding projects in a research report (in Japanese, published in July 2011) by the Real Estate Companies Association of Japan (RECAJ) on policies to promote the reconstruction of condominiums found that the most common age of a building when reconstructed was between 35 and 39 years, followed by buildings 45 years or older, and about 80% of reconstruction projects were of buildings at least 30 years old. Condominiums in Japan seem to cross a major threshold once they reach 30 years of age (Figure 1).

2. The aging of the inhabitants

According to General Research on Condominiums (2008), a survey taken by MLIT, the heads of households living in condominiums continue to age. The share of condominium households headed by a person at least 60 years old increased roughly fivefold between FY1980 (7.9%) and FY2008(39.4%), while the share aged 40 and below declined by more than half during that same period, from 73.9% to 35.6%(Figure 2).

Possibly owing to this aging demographic, condominiums are increasingly seen as a permanent home. Only 21.7% of inhabitants thought they would be living in their

Figure 2: Age of head of household



Source: Nomura Institute of Capital Markets Research, based on the *Manshon Sougou Chousa* (General Survey on Condominiums) (FY2008) from the Ministry of Land, Infrastructure, and Transport (in Japanese).

condominium permanently in FY1980, but that number shot up to 49.9% in FY2008, meaning that roughly half of all occupants thought the condominium they were living in would be their last home.

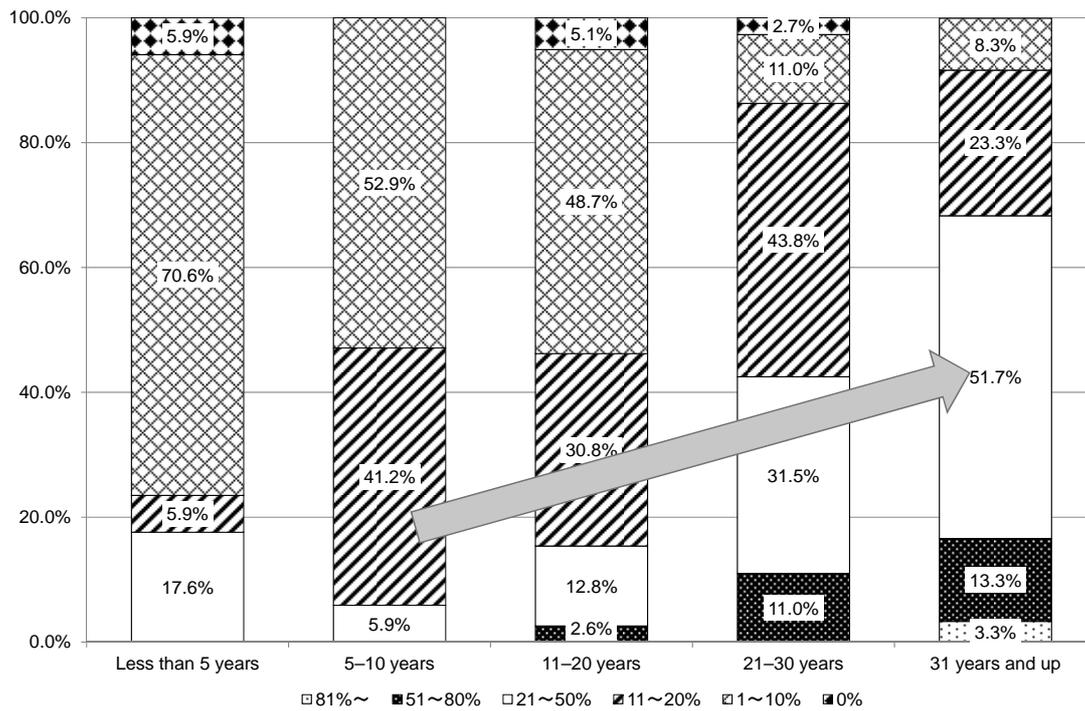
Of course, when a person stays in the same condominium, both the building and the occupant become a year older every year. Older condominiums are therefore likely to have a higher percentage of elderly occupants than newer condominiums. According to a survey conducted in 2008 by the not-for-profit Condominium Management Center, the older the condominium, the more likely it is to have an elderly occupancy rate (percentage of household heads aged at least 65) of at least 21%. One surprising finding was that 3.3% of all condominiums at least 31 years old had an elderly occupancy rate of at least 81% (Figure 3). What this means is that the greater a condominium's need to be rebuilt, the higher is its percentage of elderly occupants.

II. Two barriers to condo reconstruction

1. Efforts by the government

Because of the continued increase in Japan's stock of condominiums, the government has devised various measures out of the need to promote condo reconstruction. The Act on Unit Ownership, etc. of Buildings was revised in 2002,

Figure 3: Elderly occupancy rates



Note: The elderly occupancy rate is the percentage of households headed by a person at least 65 years old.

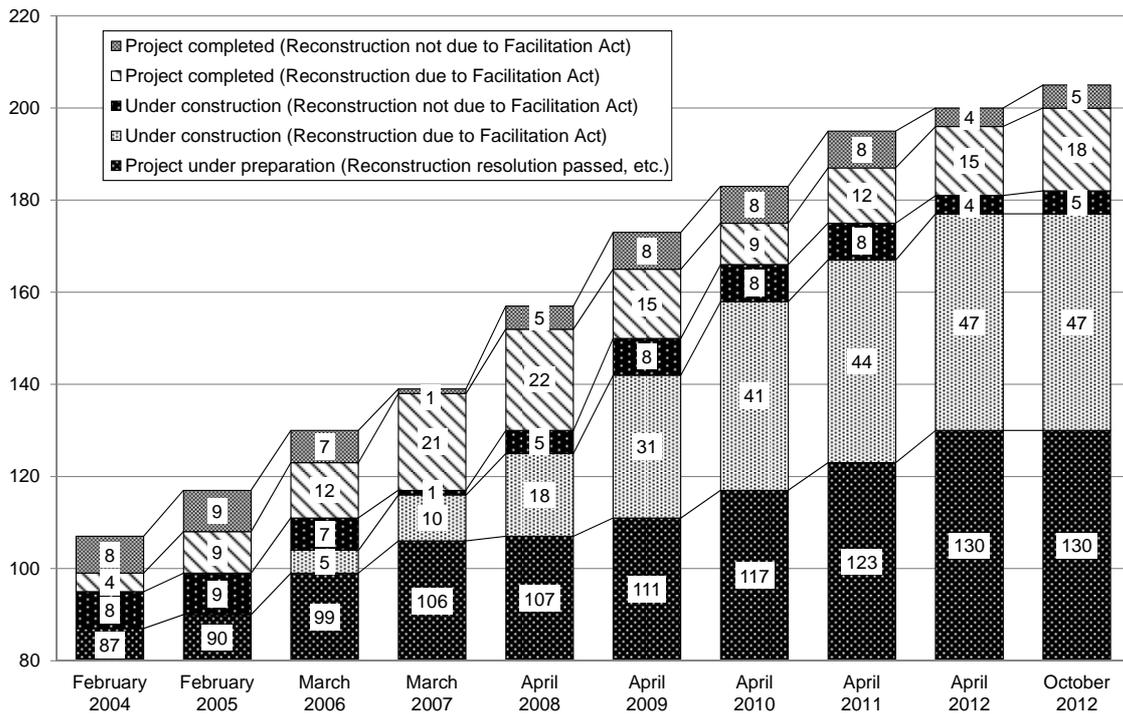
Source: Nomura Institute of Capital Markets Research, based on Condominium Management Center, *Manshon Kanri no Aratana Wakugumizukuri ni kansuru Chousahoukoku Kentousho* (Survey and case study on creating a new framework for managing condominiums).

making it possible to rebuild with the agreement of 4/5 of owners, replacing the previous requirement that all owners agree. In addition, the Act on Facilitation of Reconstruction of Condominiums implemented in 2002 made it possible for (1) the condominium owners who agree to rebuild to establish a condominium reconstruction association with corporate status upon approval of the prefectural governor, (2) private-sector business operators to participate in the association as members, and (3) the association to demand that condominium owners who do not agree to the reconstruction sell their ownership interest at the market price. The government has assisted with these efforts in a variety of ways, including through the provision of instruction manuals and technical advice, and has also provided tax breaks and an aggressive set of subsidies to cover survey, design, and planning costs, land preparation costs, and the building of common facilities, for those projects that meet certain conditions, but thus far there has been little to show for it all.

2. Condominium reconstruction thus far

According to a MLIT report on the status of condominium reconstruction projects updated as of 1 October 2012, there have only been a total of 200 such projects, 177 completed and another 23 still underway (Figure 4). Why are so few condominiums being rebuilt? The REACJ report noted two fundamental issues standing in the way of condominium reconstruction.

Figure 4: Condominium reconstruction projects



Note: The number of reconstruction projects resulting from the Great Kobe earthquake in 1995 (a total of 109) excludes one reconstruction project based on the Act on Facilitation of Reconstruction of Condominiums.

Source: Nomura Institute of Capital Markets Research, based on data from the Ministry of Land, Infrastructure, Transport and Tourism.

The first concerns the way that agreements on condominium reconstruction are put together. In the case of a single-family detached home, a single owner makes the decision on whether to go through with reconstruction and if so the scope of the project and how much will be spent, with all decisions being governed by the laws and regulations concerning construction. In contrast, portions of a condominium building are separately owned by many different people and other portions are jointly owned. This means that individual owners cannot make the reconstruction decision independently, but must gain the agreement of at least 4/5ths of all owners in the condominium. Reaching such agreement is said to be extremely difficult, given the complex differences among condominium owners in their world view and core values, as well as in the way they use their condominium unit¹. The onerous procedures that must be followed to forge an agreement also create a barrier to getting a project off the ground, since the terms of the agreement must be set in accordance with the Act on Unit Ownership, etc. of Buildings, which requires that a general meeting be convened and a resolution formally passed, with all discussions and procedures during that process meeting the requirements of objectivity, transparency, and fairness.

¹ There are a number of different reasons to own a condominium other than as a primary residence, including as an investment, to have a second home, and for use as an office.

The second challenge relates to the cost of reconstruction. In addition to the cost of demolishing the old building and building a new one, reconstruction costs also include the cost of temporary lodging during the construction phase and the cost of two different moves. If the floor area ratio (FAR)² of the condominium to be rebuilt is not already at its legal maximum, extra floor area beyond the existing structure can be built to create additional units for sale, and the proceeds from those sales can be put toward reconstruction cost, potentially greatly reducing the costs to each condominium owner. Evidently one of the biggest reasons for the successful condo rebuilds thus far has been the effective use of unused FAR allowances to build additional floor area and reduce the costs to each owner. Analyzing the examples presented in the REACJ report, the average increase in floor area from reconstruction projects was about 3X³. Additionally, the lower the FAR prior to rebuilding the higher was the floor area increase, and many of the condominiums with a large unused FAR allowance were rebuilt at a considerable increase in that ratio. While many of the properties built from the late 1950s to the early 1960s have significant unused FAR allowances, most of the properties built since then have used most all of that allowance. In buildings without any unused FAR, condo owners must stump for all of the reconstruction costs. Each condo owner has unique economic circumstances and is in their own stage in life, however, and thus their capacity to bear reconstruction costs is also varied. This seems to provide a particularly good explanation of why the elderly and low income individuals feel compelled to oppose reconstruction.

3. Deciding whether to reconstruct a condominium

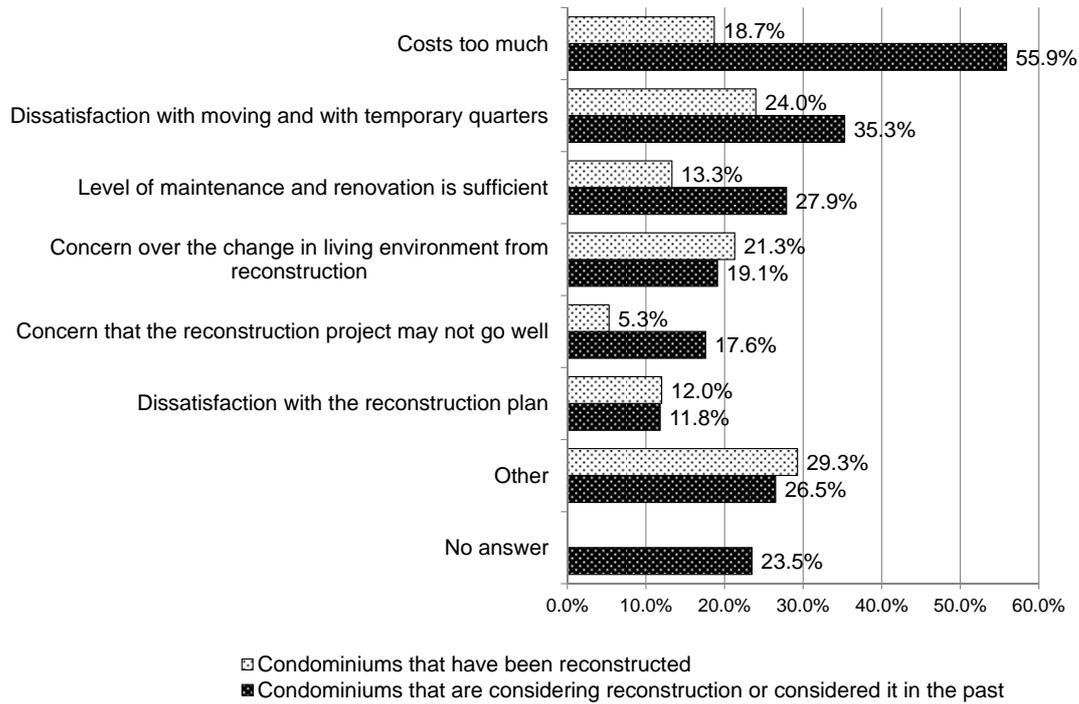
The Cabinet Office, Ministry of Justice, and MLIT jointly ran a survey inquiring about deliberations to reconstruct condominiums in 2008. According to this reconstruction survey, the majority (55.9%) of the condominium associations that answered either "we are now considering reconstruction" or "we considered it before, but are not going forward at this point" cited costs as the top reason given by condo owners for voting against reconstruction. When asking the builder who actually performed the condo reconstruction why some people voted against it, 24.0% said "dissatisfaction with the move and with temporary quarters," 21.3% "concern over the change in living environment," and 18.7% "costs too much." Thus the number of people citing costs as a reason for voting against was only one third as high as it was in the condominium associations that did not opt for reconstruction, suggesting that efforts to alleviate reconstruction costs reduced the level of opposition (Figure 5).

The MLIT also cites the existence of unused floor area ratio as one reason for the success of condo reconstruction, and cites high costs as a reason for why reconstruction does not take place (Figure 6).

² The ratio of that unit's floor area to the building's total floor area.

³ The increased floor area multiple is the total floor area after construction divided by the total floor area before reconstruction.

Figure 5: Reasons for not agreeing to condo reconstruction



Source: Nomura Institute of Capital Markets Research, based on a survey jointly conducted by the Cabinet Office, Ministry of Justice, and MLIT inquiring about deliberations to reconstruct condominiums in 2008.

Figure 6: Factors leading to the success or failure of reconstruction projects

	Factors for success	Reasons for failure
Location	<ul style="list-style-type: none"> Favorable location Unused floor area ratio or relaxation of floor area ratio and height restrictions Neighboring property owner purchased/cooperated or able to transfer to neighboring property owner Rebuilding Association was able to acquire land leasehold rights 	<ul style="list-style-type: none"> Unfavorable location Site restrictions (floor area ratio, height, and setback restrictions) Building footprint reduced by pre-existing disqualifications Unable to secure enough floor space to make project profitable (unable to get cooperation on the project)
Cooperation of condo owners	<ul style="list-style-type: none"> Accommodation was reached with those unable to pay for reconstruction (including careful treatment of the elderly) Favorable community (track record of self-management, existence of leadership) 	<ul style="list-style-type: none"> Trouble dealing with individuals opposed to reconstruction
Cost burden/ approach	<ul style="list-style-type: none"> Borrowed initial funding Construction costs subsidized Support for those cooperating with the project Consultants were dispatched 	<ul style="list-style-type: none"> High costs are a problem

Source: Nomura Institute of Capital Markets Research, based on Ministry of Land, Infrastructure, Transport and Tourism, Report No. 4 from a subcommittee on condominium Policy within the residential building and land working group under the Committee on Social Capital Improvements.

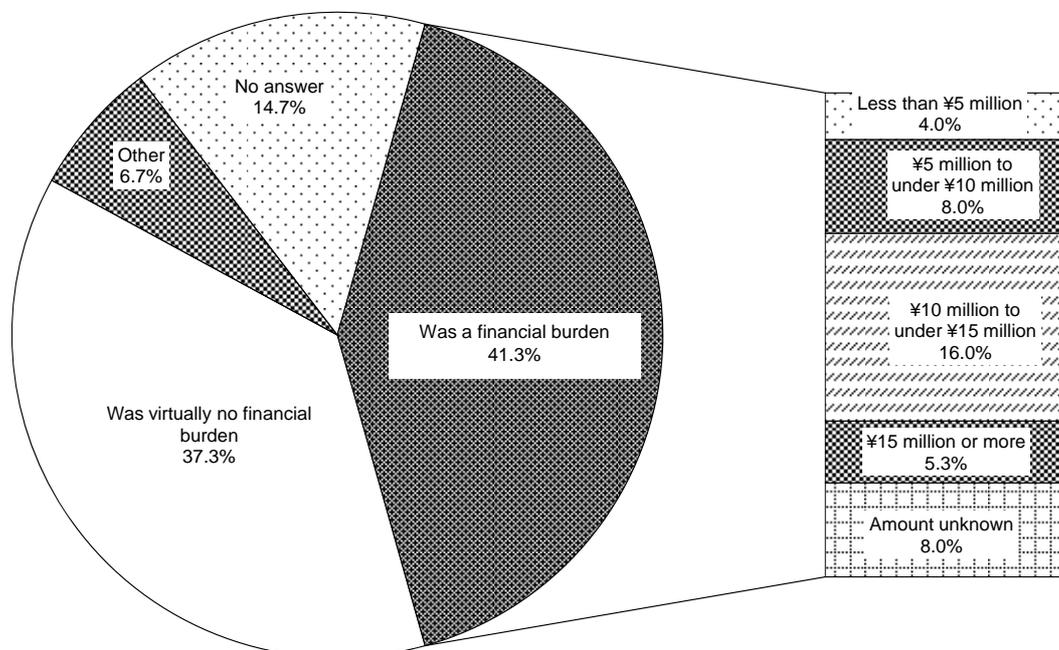
III. Proposal: reverse mortgages for condo reconstruction

1. Current financial burden

According to the reconstruction survey, 37.3% of respondents said that they incurred virtually no financial burden from the reconstruction project, and a larger number, 41.3%, said they did. Asked about the amount of that financial burden, the most common answer, from 16.0% of all respondents, was "from ¥10 million to just under ¥15 million," and 5.3% answered "¥15 million or more," thus more than half of those who incurred a financial burden said the burden was at least ¥10 million (Figure 7). These numbers are from condo associations that actually did the reconstruction, and thus were probably in a position to ameliorate some of the costs by using unused FAR allowances. Without such amelioration, the burden would probably be higher.

Over ¥10 million is a significant financial burden for the elderly. In a survey on the intentions of inhabitants of condos built 25 or more years ago taken by Haseko Community in 2005, 65% of heads of households who were at least 65 years old were either living alone or as couple. This percentage is likely higher the older the condominium is. The income for many of the elderly singles and couples probably comes largely from pensions, making it very unlikely that they would qualify for a regular home loan.

Figure 7: Financial burden from reconstruction



Source: Nomura Institute of Capital Markets Research, based on a survey jointly conducted by the Cabinet Office, Ministry of Justice, and MLIT inquiring about deliberations to reconstruct condominiums in 2008.

Meanwhile, the median amount of financial assets held by elderly households is estimated to be about ¥12 million, which means that reconstruction costs would wind up absorbing nearly all of their financial assets. The typical elderly household is thought to not have enough income to cover its expenses and is therefore in the process of drawing down its financial assets, a situation that would probably make it impossible to use a majority of those assets to cover the cost of reconstruction.

2. Special repayment rules for the elderly

The Japan Housing Finance Agency has a program offering special repayment terms for elderly individuals who purchase a reconstructed condominium to live in themselves. Under this program, mortgage payments are interest only, with the principal due in a lump sum once the borrower passes away. The monthly payment for a regular 10-year, 2.25%, ¥10 million home loan would be ¥93,137 per month (principal & interest), but the monthly payment would be reduced to ¥18,749 (interest only) under this program. Individuals 60 years of age and older are eligible to apply, and the loan comes without the usual mortgage restriction requiring that all repayments be completed by the age of 80, making it a product designed specifically for the elderly.

The program is not ideal for borrowers and could use further improvements, however, given that (1) monthly payments are still required, (2) the loan is recourse, such that if the property's value drops below the amount of collateral the heirs may have to make up the difference, and (3) the maximum amount that can be borrowed is ¥10 million.

3. Using reverse mortgages for condominium reconstruction

In the US, the elderly can purchase a home using a reverse mortgage that is nonrecourse and requires no repayments during the loan period⁴, [4] and as long as the borrower meets certain conditions, including being current in paying property taxes, no payments need to be made while the borrower is living and the heirs incur no obligation even if the value of the property drops below the amount of collateral. This is the kind of reverse mortgage that Japan needs. A reverse mortgage that could be used to procure funds to reconstruct a condominium, a "condo reconstruction reverse mortgage," would likely impart huge momentum to condominium reconstruction efforts.

Many of Japan's reverse mortgage products do not meet the basic requirements of non-recourse, lifetime tenure, and no repayments during the term. We attribute this to the existence of collateral risk, the risk that a decline in housing prices and increase in interest payments will cause the amount of the loan to exceed the collateral value of the home. In the case of a reconstruction reverse mortgage, however, the amount of

⁴ For more on reverse mortgages, see Toshio Kojima, "How to make reverse mortgages more common in Japan," Spring 2013 edition of *Zaikai Kansoku* (in Japanese).

the loan is set at the outset, which greatly reduces collateral risk. Evidence of this comes from the fact that even Japan has products that are very close to being nonrecourse with no repayment during the loan period, but without the lifetime tenure.

The next problem is that there are virtually no reverse mortgages written for condominiums in Japan. We think a major reason for this is the uncertainty over the value of a condominium in the future. Unlike a single-family home, when the building is taken down what remains is the common ownership of the land, which can only be put to use upon the agreement of the condominium owners, and this creates uncertainty over the value. Conversely, however, if the condominium owners can reach an agreement, the usage value of the land can be increased significantly by making best use of the site.

What makes a lender more likely to offer a reverse mortgage used for the reconstruction of a condominium as opposed to a normal reverse mortgage is that (1) there is already an agreement among the condominium owners to reconstruct the condominium into a property with a higher value, (2) the property to be mortgaged will be of new construction with a long useful life, (3) the loan amount covers only the cost of construction and thus the LTV, i.e., the amount of the loan relative to the collateral value (appraised value of the building and land), is low, and (4) the amount of the loan is fixed at the outset.

Condo reconstruction reverse mortgages could be a very effective way to promote condominium reconstruction, because they provide the elderly, who have difficulty qualifying for loans, a source of funding as well as the peace of mind of not having to make any monthly repayments during their lifetime. It would also serve the purpose of providing lenders with an attractive alternative to the home loan market, which is expected to shrink as a result of the decline in number of households.

IV. Conclusion

It would of course be difficult to meaningfully promote reconstruction merely by making it easier for the elderly to get loans. A working group on entrepreneurship established within the government's Regulatory Reform Council has made it a priority to ease floor area ratio restrictions, revise the comprehensive design system provisions⁵, and loosen the requirements for passing resolutions under the Act on Unit Ownership, etc. of Buildings as a way to make it easier to reconstruct outdated condominiums. More specifically, the working group is apparently considering whether there is a need to ease FAR requirements and revise the comprehensive design system, whether the requirement to rebuild fractionally owned properties within housing complexes all at once and the voting requirements for rebuilding condominiums should be revised, and whether a resolution in favor of reconstruction

⁵ Rules that allow for a moderation of the Building Standards Act under special circumstances to deal with restrictions imposed by urban plans.

should be identified as a justifiable cause when applying for the right to cancel or refuse renewal of a lease under the Act on Land and Building Leases.

In addition, reverse mortgages were also mentioned by the Council on Economic and Fiscal Policy as a way to help with the diversification of asset portfolios and an important tool to deal with aging demographics.

The higher the appraised value of land, the easier it becomes to use a condo reconstruction reverse mortgage to cover all of the reconstruction costs without taking advantage of unused FAR allowances, but if a comprehensive set of measures, including an easing of these restrictions, is implemented, it will probably increase the number of condominiums for which the entire cost of reconstruction can be paid for with a condo reconstruction reverse mortgage. Assuming half of the condos that were at least 30 years old as of end-2012 (about 590,000 units) were to be reconstructed, that alone would create new demand⁶ of approximately ¥15 trillion, an amount that could be expected to increase every year. Additionally, knock-on effects from the purchase of a home are expected to result in increased demand for such consumer durables as curtains, lighting, and air-conditioners⁷, and thus bring economic benefits to industries other than construction and real estate. Allowing for condo reconstruction reverse mortgages would promote the formation of a healthy condominium stock and give the elderly greater peace of mind in retirement. Furthermore, if condo reconstruction reverse mortgages were to increase awareness of and trust in reverse mortgages in general, it would probably create a major incentive for the wider adoption in Japan of full-scale reverse mortgages that meet the three basic conditions of non-recourse, lifetime tenure, and no repayments during the term.

⁶ This assumes construction costs of ¥25 million per unit.

⁷ According to a FY2011 survey on consumption by the Japan Housing Finance Agency, the average consumer durable purchase for each newly constructed condominium unit was ¥1.184 million.