# The Current Situation of Japan's Housing Market, and Policy Implications of the Projected Population Decrease

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#### Introduction

The projected decrease in Japan's population over the next 50 years will fundamentally alter Japan's economy and society. This paper examines the implications for residential life and the housing market, and proposes ways to improve housing quality and develop the housing market.

The quality of daily life rests upon the foundation of our family and residential life. Most people derive satisfaction and happiness in life from family interactions as well as private time spent alone. According to the Cabinet Office's *Opinion Survey on National Life (2002)*, people derive the greatest sense of fulfillment in life from family interactions (44.7%) and time spent in relaxation (39.5%). Moreover, such rest and relaxation at home with the family is crucial to powering our work life as well.

Spending time at home, and living in a house, are essentially economic activities. This is true not only in the obvious sense that we consume goods and services at home in daily activities such as eating meals, and engaging in educational or recreational activities at home. By living at home, we are actually consuming housing services provided by the housing and land stock. The cost of such housing services is most apparent in rental housing, in the form of rent.

But the same concept applies to owner-occupied housing if we imagine that the owner is actually renting from himself. Home ownership not only incurs maintenance costs, but also the foregone dividend and interest income from financial assets that could otherwise be held. Thus homeowners, who bear direct and indirect costs of owning their home, must pay themselves rent to compensate these costs. In national account statistics, the rent that homeowners pay themselves is called imputed rent, and explicitly accounted for in household consumption.

Thus the consumption of housing services, whether in the form of rental housing or owner-occupied housing, is subject to income and budget constraints. Moreover, housing services are produced from the stock of housing and land. Thus in terms of both income and stock, housing consumption is affected by changes in society, especially as the population decreases and ages.

We first discuss the present problems of Japan's housing market based on international comparisons. Specifically, rental housing units tend to be much smaller than owner-occupied housing, so that the supply of housing services for renter families is insufficient, while the undeveloped condition of the existing-home market hinders effective use of housing wealth by elderly households. We also note that despite high expectations, reverse mortgages are still uncommon in the U.S. and U.K., and people are instead decumulating housing wealth by moving to less expensive homes.

Next, we show that while the population decrease and aging may cause housing demand to peak out in number of units, demand for higher quality housing will continue to grow. Furthermore, there is a growing emphasis on the goal of efficient utilization rather than ownership.

Finally, in addressing the projected population decrease, we propose improving Japan's housing market by using existing stock more effectively, promoting the spread of land leaseholds, encouraging fixed-term home leasing to convert vacant owned housing into rental housing, invigorating the existing-home market, and facilitating moving activity as a viable way of decumulating housing wealth for elderly households.

## 1. Status of Housing Stock

## (1) International Comparison of Floor Area and Ownership Ratio

According to the *Housing and Land Survey (1998),* conducted every five years by the Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan has 50.25 million dwellings, or 13% more than the total number of households. Moreover, since 12% of dwellings\_are vacant, the housing supply appears to be adequate at least in terms of number of units.

However, with regard to floor area, which is a basic indicator of housing quality, Japan is far behind the U.S., but comparable to European countries.

Moreover, Japan's home ownership ratio conforms to international levels. In general, the ownership ratio is low in the northern part of continental Europe, and high in the south, U.K., and North America. However, ownership ratios appear not to be correlated with floor area (of all housing, rental and owner-occupied).



Figure 1 Number of Households and Dwellings

Figure 2 International Comparison of Floor Area and Home Ownership Ratio



Sources: MPMHAPT, Housing and Land Survey; U.S. Census Bureau, American Housing Survey (2001); Finland Ministry of the Environment, Housing Statistics in the European Union 2001.

Next, when we compare housing costs as a flow variable at the macroeconomic level using the proportion of total rent expenditure in household consumption, Japan is highest.

Of interest here is the imputed rent of owner-occupied homes—the simulated rent paid by homeowners based on market rent evaluation. Although Japan's consumption quantity of housing services per housing unit (whose proxy is floor area) is average by international standards, the ratio of total (imputed and actual) rent payments to consumption is the highest. This means that Japan has the highest market rent per housing unit relative to the general price level (CPI), or the composite unit price for all goods and services consumed by households.<sup>1</sup> Thus rental housing in Japan is expensive by international standards.



Figure 3 International Comparison of Imputed and Actual Rents (1999)

Sources: Cabinet Office, Annual Report on National Accounts; Ministry of Economy, Trade and Industry, Input-Output Tables; OECD, National Accounts.

#### (2) Japan's Conspicuously Small Rental Housing

Using detailed data available for Japan, the U.S., U.K., and Germany, we compared the floor area of owner-occupied and rental housing, and found the following results.

First, in all countries, the floor area of owner-occupied housing tends to be larger than rental housing. Second, the size of rental housing is approximately 60% to 70% of owner-occupied housing except in Japan, where it is under 40%. Third, the average floor area of rental housing in Japan is 45 square meters, which is considerably smaller than in other countries.

Figure 4 International Comparison of Floor Area of Owner-Occupied and Rental Housing

	Overall	Owner- occupied	Rental	Rental/ ower-occ.	Survey year
U.S.	154.2	161.8	116.8	72%	(2001)
Japan	92.4	122.7	44.5	36%	(1998)
German	86.9	113.0	68.9	61%	(1998)
France	86.4	101.4	68.3	67%	(1996)
U.K.	84.0	92.0	65.4	71%	(1996)

Sources: MPMHAPT, *Housing and Land Survey*, U.S. Census Bureau, *American Housing Survey*, Germany GESIS, *Datenreport 2002*; U.K. Dept. for Transport, Local Govt. and the Regions, *English House Condition Survey*.

<sup>&</sup>lt;sup>1</sup> Whether actual rents are high or low relative to the general price level is unrelated to whether rental housing is profitable. The former reflects the high opportunity cost of the rental housing supply, or the high level of user cost of rental housing. For the latter, the correlation with owner-occupied housing is important.

Of course, a comparison of overall averages could be misleading. A small average housing size, for example, could result from a balanced distribution of large and small housing. Thus we also compared the size distribution of housing by room count (Figure 5).

For owner-occupied homes, the difference in room count is not great. The most common room count is six rooms for the U.S., five or more rooms for Germany, and five rooms for Japan and the U.K.

However, for rental housing, the most common room count is five rooms for the U.S., four rooms for Germany and the U.K., and three rooms for Japan. Moreover, the proportion of rental housing with five or more rooms is 38.5% in the U.S., 44.4% in the U.K., 18.4% in Germany, and only 6.3% in Japan. On the other hand, the proportion of rental housing with two or less rooms is 3.8% in the U.S., 8.6% in the U.K., 12.1% in Germany, and 38.2% in Japan.

(No. of rooms) 1		2	3	4	5	6	7	8	9	10+
U.S. (2001)										
Owner-occupied	0.0	0.1	1.4	9.9	23.8	26.6	17.8	10.7	5.0	4.7
Rental	1.1	2.7	22.9	34.8	22.4	10.5	3.5	1.2	0.4	0.5
Japan (1998)										
Owner-occupied	0.1	1.1	4.9	16.7	23.2	20.8	13.5	8.6	4.3	6.6
Rental	19.3	18.9	30.6	24.9	3.9	1.5	0.5	0.2	0.1	0.1
(private)	24.1	21.7	28.9	18.7	3.9	1.7	0.6	0.2	0.1	0.1
Germany (1998)										
Owner-occupied	1.3	3	8.3	23.3			67.	.1		
Rental	12.	1	31.4	38.1			18.	.4		
U.K. (2001)										
Owner-occupied	0.0	0.8	3.0	14.5	25.6	25.4	14.4		16.3	
Rental	0.9	7.7	20.6	26.3	25.1	13.4	3.8		2.1	
(private)	1.9	9.1	17.2	22.5	22.0	15.9	6.6		4.8	

Figure 5 International Comparison of Size Distribution by Room Count (%)

Sources: MPMHAPT, Housing and Land Survey 1998; U.S. Census Bureau, American Housing Survey 2001; Germany GESIS, Datenreport 2002; U.K. DTLR, Housing in England 2000/1.

The average size of Japan's rental housing is small not because of a bipolar distribution between small and large housing units, but simply because most rental housing is small. Germany is next smallest in the room count of rental housing. However, only 8.2% of rental housing in Germany is smaller than 40 square meters in size, compared to 48.8% in Japan. On the other hand, 35.4% of rental housing in Germany is at least 100 square meters in size, compared to 2.8% in Japan.

Using detailed data available for Japan and the U.S. regarding housing units by floor area, we compared the distribution of owner-occupied and rental housing (Figures 6 and 7). The results are obvious. By composition, the distribution patterns for owner-occupied and rental

housing in the U.S. do not vary significantly. But for Japan, the market is clearly divided between owner-occupied homes, which are larger, and rental homes, which are smaller.



Figure 6 Size Distribution of Owner-Occupied and Rental Housing in the U.S.

It is well known that rental housing based on the fixed-term tenancy system (implemented in 2000) is larger than ordinary rental housing, and lower in rent. However, the total supply of such housing is very small. According to the Association to Promote Fixed-Term Tenancy, fixed-term leasing comprised only 2.8% of all new home leases in fiscal 2000 (10.7% of new leases for freestanding homes).





Source: MPMHAPT, Housing and Land Survey 1998.

### (3) Supply Mismatch Between Families and Elderly Households

The above comparisons reveal three hard facts about housing in Japan. First, the average floor area of rental housing is small in absolute terms. Second, large rental housing is almost nonexistent. And third, the disparity between rental and owner-occupied housing is very large.

Of course, if renters were satisfied with the present situation, there would be no problems. However, compared to the U.K., where only 1% of owners and 6% of renters express great dissatisfaction with the present situation, as many as 8% of owners and 16% of renters do so in Japan.

	Japan 1998 Owned Rented		U.K. Owned	2001 Rented
Satisfied	56	4 2	95	80
Satisfied / very satisfied	11	6	67	4 6
Satisfied overall	4 5	36	28	35
Dissatisfied	4 3	5 7	3	14
Somewhat dissatisfied	3 5	4 1	2	8
Very dissatisfied	8	16	1	6
Neither / don't know	1	1	2	5

Figure 8 Satisfaction With Housing in Japan and the U.K.

Sources: Ministry of Land, Infrastructure and Transportation, *Survey of Housing Demand*; U.K. DTLR, *Housing in England 2000/1*.

Even if all households cannot live in large housing, they should at least be able to live in appropriately sized housing. Preferably, we should minimize the number of households in housing that is smaller than their needs.

Looking at family households—consisting of husband, wife and two or more children under age 18—1.3 million of these households live in owner-occupied housing with at least 100 square meters of floor area. On the other hand, at least 1.1 million families live in rental housing with under 60 square meters. Clearly, there is an absolute shortage of adequately sized rental housing. Moreover, considerably more one and two-person elderly households than families live in owner-occupied housing with at least 100 square meters. This situation in which single and two-person households live in larger housing than families is called mismatching.

Of course, there is nothing wrong about one and two-person elderly households living in spacious housing; they worked hard to buy and maintain their home, and deserve what they have. Many elderly persons understandably want to live in their own home, which they are accustomed to. But a problem arises when they want to move elsewhere because of concerns such as home maintenance burdens, proximity to their children's home or the doctor, and

(%)

crime and safety. Many elderly households want to sell their present home and buy a smaller and less expensive home, using the gains to invest in financial assets or pay living expenses.

Meanwhile, many families who want to buy spacious, affordable existing homes cannot do so. Sadly, the fact that potential buyers and sellers exist but cannot complete transactions perpetuates the mismatch.



Figure 9 Living Area by Household Type

Source: MPMHAPT, Housing and Land Survey (1998).

## 2. Possibilities for Housing Wealth

Below we focus on owner-occupied housing, and examine home asset value, liquidity, and home buying and selling activities of households.

## (1) Home Asset Value from an International Perspective

In all countries, homes represent a substantial asset worth many years of disposable income.

Figure 10 Income and Existing-Home Prices in Japan, U.S., and U.K.

	Japan I 1999 22		U.S. 2000		ζ. 1
	¥mil.	\$	¥ mil.	£	¥ mil.
<ol> <li>Existing home price (owned)</li> </ol>	34.93	140,444	17.07	110,297	19.29
② Annual disposable income of working households	4.84	47,994	5.83	27,272	4.77
3 = 1 ÷ 2	7.2	2.9		4.0	

Notes: Includes single person households. Calculated at \$1= $\pm$ 121.5, and £1= $\pm$ 174.9.

Sources: MPMHAPT, National Survey of Family Income & Expenditure; U.S. Dept. of Labor, Consumers Expenditure Survey; U.K. Office for National Statistics, Family Spending. Owner-occupied homes represent a substantial investment, for which much time is needed to accumulate funds for the down payment or purchase. Thus the home ownership ratio is low among young households, and increases with age. This pattern is seen in all countries, including Germany, where the ownership ratio is low overall.<sup>2</sup>

In the U.K., ownership among young households is high by international standards. Following the 1993 Leasehold Reform, Housing and Urban Development Act, there was a sharp increase in land purchases by leaseholders. However, 11% of homeowners are still leaseholders today, and are evenly divided between owning houses and flats (collective housing). Half of these flats are located in London, owned mainly by single persons aged 25 to 44. This helps explains the high ownership ratio of young households. Nonetheless, the ownership ratio does not peak until retirement age.

Figure 11 Home Ownership Ratio by Age in Japan, U.S., and U.K.

	Under 25	25~34	35~44	45~54	55~64	65~74	75 +
Japan	2.7	12.7	49.1	70.0	76.9	81.5	79.9
U.S.	21.3	40.0	68.5	76.9	81.2	82.3	78.3
U.K.	18.0	59.0	75.0	79.0	79.0	74.0	62.0
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Sources: MPMHAPT, Housing and Land Survey; U.S. Census Bureau, American Housing Survey; U.K. ONS, Social Trends.

The liquidation of housing wealth can generate financial assets equivalent to several years of income. Through the process of dissaving, people can tap financial assets and consume beyond their income level in retirement life.

In Japan, however, only savings and accumulation are emphasized. This is attributed to the problem of people's awareness, and to the problem of poor liquidity in the housing market.

## (2) Turnover Rate of the Existing-Home Market, and Moving Activity

Japan's housing market is clearly biased toward new homes. In the housing market for owner-occupied homes, the ratio of existing-home transactions to housing starts is only 0.22 in Japan, compared to 3.8 and 7.5 for the U.S. and U.K. respectively. Moreover, only 0.6% of existing stock is transacted in the market each year, or one-tenth the level of the U.S. and U.K.

 $<sup>^2\,</sup>$  In 1998, the home ownership ratio in Germany was 7.8% for age 29 or less, 42.7% for age 30 to 59, and 47.1% for 60 and over.

	Japan 1998	U.S. 1998	U.K. 2001
① Existing stock (1,000)	26,468	119,117	22,408
② Existing-home transactions (1,000)	156	6,050	1,190
③ = ② ÷ ① (%)	0.59%	5.08%	5.31%
④ Housing starts (1,000)	724	1,603	159
(5) = (2) ÷ (4) (multiple)	0.22	3.77	7.50

Figure 12	Existing-Home	Markets in Ja	apan, U.S.,	and U.K.
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Notes: Existing-home transactions for Japan include only owner-occupied homes (1997-98); data for U.S. and U.K. includes owner-occupied and rental housing.

Sources: MPMHAPT, *Housing and Land Survey*; U.S. Dept. of Commerce, *Statistical Abstract of the United States*; U.K. Inland Revenue National Statistics.

With regard to the moving frequency of households in Japan, 1.6% of owners and 8.3% of renters move each year, which is low compared to other countries. However, the difference is approximately one-third to one-fifth the level in the U.S. and U.K., and thus less than with turnover rates in existing-home market.

Indeed, unlike in other countries, moving activity in Japan is more closely connected with the new home market than the existing-home market. Even taking into account the lower frequency of moves in Japan, existing-home transactions are quite few compared to the U.S. and U.K.

	Japan 1998	U.S. 2001	U.K. 2001
Homeowner households	1.58	7.34	5.39
Owned to owned	0.71	3.79	4.10
Owned to rented	0.86	3.55	1.29
Renter households	8.33	30.1	25.6
Rented to owned	2.67	7.48	6.91
Rented to rented	5.61	22.6	18.7
Total households	5.85	15.7	11.1
To owned	1.69	5.31	4.83
To rented	4.13	10.4	6.27

Figure 13 Household Moving Frequency in Japan, U.S. and U.K.

Sources: MPMHAPT, Housing and Land Survey (1998); U.S. Dept. of Commerce, Statistical Abstract of the United States 2001; U.K. DTLR, Housing in England 2000/1.

The reasons cited for moving can be obtained from survey data. For Japan, according to the *Survey of Housing Demand (FY 1998)*, excluding new households, the main reason cited by owners is that their present home is too small, while renters primarily cite job-related reasons. A similar pattern appears in the U.S. and U.K.

For the U.K., according to the *Housing in England (2001)* survey, owners primarily move because they need larger housing. Interestingly, as many as 30% move into *smaller* housing. This activity is affected by market trends; a market upturn boosts all moving activity, while a downturn increases the proportion of relocations to smaller housing.

(%)

Households who move into rental housing primarily cite work-related reasons such as job change or proximity to workplace. However, since 54% of moves are five miles or less in distance, changes in income appear to play a significant role.

According to the *American Housing Survey (2001)*, the two most common reasons cited by households moving into owner-occupied housing pertain to the housing itself: to seek larger housing, and to seek better housing. But for households moving into rental housing, the top two reasons cited are related to jobs: to live closer to work (or school), and for a new job or job transfer.

Thus in all three countries, moving to rental housing is unequivocally affected by work-related reasons. On the other hand, moving to owner-occupied housing is motivated by reasons related to housing characteristics and to income.

Next, while elderly households in all three countries move less often than other age groups, they are particularly stationary in Japan. The moving frequency in the U.S. is relatively high; 3% of elderly households move every year, which amounts to 15% over a five-year period. For all elderly movers (renters and owners), the primary reason for moving is family and personal related reasons. Moreover, for elderly households moving into rental housing, the second most cited reason is to reduce rent or maintenance costs.

			(/0)
	Japan 1998	U.S. 2001	U.K. 2001
Homeowner households	0.72	2.88	1.64
Owned to owned	0.44	1.82	1.18
Owned to rented	0.26	1.06	0.46
Renter households	3.84	7.86	4.48
Rented to owned	0.69	1.14	1.05
Rented to rented	3.00	6.72	3.43
Total households	1.49	4.31	2.70
To owned	0.57	1.92	0.79
To rented	0.91	2.39	1.49

Figure 14 Moving Frequency of Elderly Households in Japan, U.S., U.K.

Sources: See Figure 13.

For owners who move into rental housing, and owners who move into smaller owned housing, housing wealth is being converted into financial assets. Given the substantial size of housing wealth, even infrequent transactions can be an effective way for elderly households to finance retirement life.

## (3) Reverse Mortgages and the Effective Use of Elderly Housing Wealth

The savings rate of retired elderly households, which is connected to funds for daily living, is

( 0/ )

negative in all three countries. A negative savings rate means that consumption exceeds disposable income, and must be financed by liquidating assets. Whereas elderly persons in Japan rely mainly on financial assets, those in the U.S. rely mainly on housing wealth.

As mentioned earlier, many elderly households in the U.S. relocate. Since the ownership ratio does not decline significantly, we can surmise that elderly households move into smaller, less expensive owned homes as a way to decumulate their housing wealth. This pattern is compatible with data on home values by age group.

	Japan 2001	U.S. 2001	U.K. 2001
Savings rate	-13.3	-4.9	-5.9
Change in net financial assets	-13.8	17.9	n.a.
Change in real assets	0.5	-22.8	n.a.

Figure 15 Savings Rate of Elderly Households in Japan, U.S., and U.K.)

Notes: Data covers non-working households for Japan, retired couples living mainly on public pensions for the U.K., and retired households including single persons for the U.S. Sources: MPMHAPT, *Family Income and Expenditure Survey*, U.S. Dept. of Labor, *Consumers* 

Expenditure Survey, U.K. ONS, Family Spending.

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Under 25	25~34	35~44	45~54	55~64	65+	
\$102,692	\$125,691	\$148,794	\$154,060	\$142,843	\$130,439	
Notes: In dollars. Shows only owner households.						

Source: U.S. Dept. of Labor, Consumers Expenditure Survey.

In the U.K., while no data is directly available on the composition of dissaving, the decline in ownership ratio following retirement suggests that housing wealth is being liquidated (Figure 11). Moreover, "downsizing" or "trading down" is a recognized method for elderly persons to finance their retirement life.

Reverse mortgages have attracted much attention in Japan as a type of lifetime annuity secured with housing wealth. Because of its usefulness, this approach has yet to create any opponents.

In the U.S., the Department of Housing and Urban Development has established Home Equity Conversion Mortgages (HECM) to promote reverse mortgages through measures such as providing insurance through the Federal Housing Authority, and counseling by certified agents. However, only 0.2% of elderly homeowners actually use reverse mortgages.

In the U.K., reverse mortgages are being promoted in the form of a home equity release with the active support of the Council of Mortgage Lenders (CML, which consists of banks, building societies, and insurers). However, according to a CML report released in December 2002, the market amounted to only one billion pounds in 1998, or less than 0.1% of the  $\pounds 2.1165$  trillion of housing stock in the household sector for that year. To make the scheme more attractive, the mortgaged portion can be limited to  $\pounds 30,000$  pounds so that the remainder is left for inheritance purposes. Nonetheless, results have been disappointing.<sup>3</sup>

The questionable success of reverse mortgages in the U.S. and U.K. should be viewed with an objective and critical eye.

		(1,000)
	1997	2001
Total housing units	99,487	106,261
Total homeowners	65,487	72,265
Of which, householders age 65 +	16,493	17,513
Of which, use reverse mortgage	2 9	2 8

Figure 17	Number of Reverse	Mortgages in the U.S.
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Source: U.S. Census Bureau, American Housing Survey.

However, we need not become pessimistic about the concept of reverse mortgages as an effective way to utilize housing wealth. There is another way to do the same thing.

Functionally, reverse mortgages resemble the combination of a futures transaction for housing owned by the elderly, and a lump-sum payment of a lifetime annuity, occurring in a closed market. But if we set aside the idea of using futures transactions in a closed market, there is another way to achieve the same objective: sell the home and buy a smaller one—that is, trade down—and use the gains to pay the premium for a lump-sum lifetime annuity. Elderly persons in the U.S. and U.K. who can use this method do not need a reverse mortgage. The key to its success, however, is the existence of an active market for existing homes. This is precisely what Japan needs to create.

## 3. Impact of Population Decrease and Aging on the Housing Market

Based on the discussion above, we next consider the impact of the projected population decrease and aging over the long term. Since stock building requires time, we must also consider changes in the external environment during the interim.

<sup>&</sup>lt;sup>3</sup> See the Joseph Rowntree Foundation, *Failure: Equity Release*. In Japan, the risk of home value depreciation, risk of interest rate increase, and risk of borrower longevity have been pointed out as obstacles. In the U.S., many researchers emphasize reverse selection related to borrower longevity risk. However, this explanation is weak because if reverse selection were the only dominant factor, the lifetime annuity insurance market would also not be sustained.

## (1) Will the Population Decrease Depress Housing Demand?

The market demand for housing can be separated into a housing quality component (floor area and facilities per housing unit) and a plain volume component (number of units). The quality component is closely connected to income, and the volume component to number of households and population.

In the *Population Projections for Japan: 2001-2050* (January 2002), the National Institute of Population and Social Security Research presents a medium variant projection in which the total population starts decreasing in 2007. This has prompted some observers to argue that as aging advances and fewer children are born, children will become outnumbered by parents, which implies that new demand for housing stock will weaken because each child can expect to inherit a home. However, this view is too simplistic for the following reasons.

First, total population is not synonymous with total number of households. According to the latest available projection for households released in 1998, households will peak in 2015—several years after the population starts to decline. This is because more elderly couples and single persons are living alone, away from their children.

Figure 18 Persons Age 65 and Over Who Do Not Live With Children

			(%)
	Japan 1998	U.S. 1998	U.K. 1998
Married couple & one-person households	45.1		88
Married couple	26.7		51
One-person	18.4	30.9	37

Sources: Ministry of Health, Labor and Welfare, *Comprehensive Survey of Living Conditions of the People on Health and Welfare*; U.S. Census Bureau, *Current Population Report*, U.K. ONS, *People Aged 65 and Over*.

Considering income levels, values and attitudes, and other factors of people who will be the elderly generations of the future, parents will increasingly live alone rather with their children. Even if parents leave their home as an inheritance, their children, who will be in their late 50s, are unlikely to tolerate living in cramped rental housing until then.

Second, even if households start to decline in number, housing demand per dwelling—that is, demand for higher quality housing—is expected to continue growing. The NLI Research Institute's long-term forecast calls for per capita real GDP growth to remain positive until 2050.<sup>4</sup> This sustained per capita and per household real income growth suggests that housing demand per dwelling will also continue to grow—because people will continue to pursue higher living standards by demanding more floor area and better facilities.

<sup>&</sup>lt;sup>4</sup> See T. Ishikawa, "Population Decrease, Aging, and Japan's Long-Term Economic Outlook to 2050," *NLI Research* no. 021118, November 18, 2002 (www.nli-research.co.jp/eng/resea/econo/eco021118.html).

Once households start declining in number, aggregate housing demand will depend on the relative size of growth in housing demand per dwelling. If we suppose that 1% growth in real income leads to 1% growth in housing demand per dwelling, then aggregate housing demand should continue to grow until around 2030, when real GDP growth turns negative.

The coming era of population decrease can be divided into three periods based on the following characteristics: population and household growth, economic growth, and housing demand growth (Figure 19). In developing the housing market in the future, we need to set priorities and deadlines with a keen awareness of the time frame for each period.

Since housing demand refers to the demand for housing services, the housing stock necessary to generate these services will depend on the present housing stock and depreciation rate. As mentioned earlier, while the total housing stock appears to be in surplus, demand is actually not being met because of low housing quality and mismatch between supply and demand. Upgrading housing quality and increasing the stock of large rental housing are urgent issues.

		Real GDP growth rate		Real GDP growth rate H		Hous	ing demand g	rowth
	Population growth rate		Per household	No. of house- holds		Per housing unit	No. of units	
2007~2015	_	+	+	+	+	+	+	
2015~2030	_	+	+	_	+	+	_	
After 2030	_	_	+	_	_	+	_	

Figure 19 Population, GDP and Housing Demand Growth to 2050

## (2) Toward a Use-Oriented Approach

For home asset prices, the economy's growth rate is a critical factor. Land not only combines with housing to produce housing services, but is also a factor of production in the corporate sector. Moreover, real land prices are determined by the productivity of land.<sup>5</sup> Since total land area generally does not increase, the productivity of land—that is, real GDP per unit of land—will grow only if real GDP does. In the future, with no significant growth expected in real GDP, real land prices are likely to stay unchanged or decline. Thus anyone who buys housing with the expectation of earning capital gains is likely to be disappointed.

The significance of home ownership lies simply in using the home effectively; namely, fully consuming housing services produced by owner-occupied houses. For homeowners, imputed rents represent both income from housing wealth and the cost of consuming owner-occupied

<sup>&</sup>lt;sup>5</sup> If the supply side of the macro economy is characterized by a Cobb-Douglas production function containing land as a production factor, marginal productivity will be proportional to average productivity.

housing services as long as they own and live in the residence.

One approach that maximizes the effective use of housing during the period of residence, and leaves nothing when the period has expired, is home ownership with a land leasehold. The leasehold rent corresponds to prepayment for usage rights, and is less expensive than owning land because the right terminates when the lease expires. It is an appropriate approach for the era of population decrease and aging. In fact, in Kobe City and areas of Hiroshima and Okayama prefectures that are depopulating, local governments have begun publicly providing leaseholds for private housing and business use rather than selling conventional lots.

#### (3) Growing Impact of Elderly Households on the Housing Market

In implementing the use-oriented approach, what should someone with a particular financial situation and preferences do if their owned home is inappropriate for some reason? The only available options are either to move to a more preferable home, or to move to a rented home. Depending on one's life stage, the current lifestyle may call for a high quality, expensive home, or perhaps a less expensive, smaller home. Particularly for elderly persons, moving represents an effective way to liquidate housing wealth and finance a comfortable retirement life.

Because of their high home ownership ratio, elderly households aged 60 and over currently account for 46% of the total market value of housing stock. In the future, as elderly households grow, they will no longer be a minority in absolute number either. If conditions were to evolve so that elderly households could use housing wealth more effectively, the housing market as a whole would inevitably improve. That would in turn cause overall household consumption to increase.

Figure 20 Housing Market Composition by Age of Homeowner

Under 30	30~39	40~49	50~59	60~69	70+
2%	9%	18%	25%	26%	20%

Source: MPMHAPT, National Survey of Family Income & Expenditure (1999).

## Conclusion—A Proposal for Developing the Housing Market

In light of the economic environment and changing demand for housing, the core concept in upgrading the quality of housing services consumed consists simply of using the existing housing stock more effectively, and making owner-occupied housing and rental housing closer substitutes that compete with each other. An urgent issue is to expand the supply of large rental housing, while in the long term the main theme is to upgrade overall housing quality. To efficiently pursue these goals, the key lies in improving the liquidity of housing wealth for homeowners. Specifically, we propose the following measures.

First, we must promote land leasehold housing. According to the Council to Promote Land Leaseholding, leasehold houses costs 38% less than ordinary free-standing homes, while the floor area is 27% larger. However, there was a total of only 35,000 such homes at the end of 2001. To increase this number, we need to revise the present land leasehold period of at least 50 years (30 years for leaseholds with the provision to transfer buildings) and allow shorter lease periods. Owner-occupied homes with land leaseholds occupy a position midway between ordinary freehold owner-occupied housing and rental housing, and are expected to invigorate the rental housing market as well.

Second is to convert vacant owned homes into fixed-term rental housing. This is because too much time is needed to expand the supply of large rental housing through new construction alone. The conversion of existing owned homes would increase the supply of large rental housing. In particular, a large latent demand could be addressed by renting homes temporarily vacated due to job transfer of the owner.

One obstacle to this is the disparate tax treatment of owner-occupied housing and rental housing. Whereas purchases of owner-occupied housing with housing loans enjoy an annual investment tax credit up to \$500,000, this tax advantage is lost as soon as the home is put out for rent. Moreover, rent income becomes subject to income tax. Even if interest payments and depreciation costs are deductible, the huge increase in tax burden discourages renting.

We propose reducing the advantageous tax treatment on owner-occupied housing purchased with loans, and at the same time reducing the tax burden peculiar to acquiring and owning both types of housing. <sup>6</sup> Then without changing the total burden on households or government tax revenue, the disparity between owner-occupied and rental housing can be decreased. Of course, obstacles to converting owner-occupied housing to rental housing would also be reduced.

Third, the existing-home market needs to be invigorated. Doing so would increase the availability of homes, and also enhance competition and substitutability between

<sup>&</sup>lt;sup>6</sup> This argument is not limited to converting owner-occupied homes to rental homes. Ideally, taxes should be neutralized on housing and other assets, and the same tax treatment should apply to owner-occupied and rental housing. For both types of housing, the acquisition tax for land and housing, property tax for housing, and consumption tax for existing housing should be abolished. Capital gains should be taxed at the same rate as other assets. Also, the investment tax credit on outstanding housing loans for owner-occupied homes should be terminated, and imputed rent on owner-occupied homes should be subject to income taxation, while interest and depreciation expenses should be deductible from taxable income. Although tax reform must consider more than simply the effect on the housing market, we propose that as a matter of policy, taxes should be simplified as much as possible, and should be neutral and fair with respect to choices.

owner-occupied and rental housing. To alleviate the problem of nonsymmetrical information in existing-home transactions, we must compile objective histories of each home that contain construction method, maintenance and repair records, and so forth. We must also strive to increase penetration of the housing performance label system.

Fourth, we need to promote moving activity that reflects the above improvements. Elderly households trading down to smaller homes not only makes effective use of housing wealth, but also gives families the opportunity to move into large housing. However, moving is not an end in itself, but a way to improve living standards by choosing housing suited to particular life stages.

The important point is for individuals to be able to make free choices, and for society to offer a wide variety of choices. Furthermore, we should be able to choose again and start over when conditions change. Such things represent a form of prosperity that cannot be measured by income level. In that sense, Japan has a long way to go to achieve prosperity.