

Obstacles to Affluence: Thoughts on Japanese Housing

Richard KOO and Masaya SASAKI

Nomura Research Institute

Obstacles to Affluence: Thoughts on Japanese Housing

Richard KOO and Masaya SASAKI

- I Housing-based Wealth Eludes Japanese Households
- II Homes Become Durable Consumer Goods
- III Why the Value of Japan's Housing Stock Remains Low
- IV The Economic Impact of a House's Life Span
- V Transforming Japanese Houses into Capital Goods

Unlike people living in Western nations, residents of Japan have not benefited from an increase in the value of the nation's housing stock. Houses here last only about 30 years on average, effectively making them a durable consumer good, whereas in Western countries a house is a capital good that will retain its value almost in perpetuity as long as it is properly maintained. The market value of Japanese houses falls even faster than they can be depreciated for tax purposes; after 15 years the typical house is worth nothing.

A number of factors have hindered the development of Japan's housing stock. One is the building regulations that have limited the amount of floor space that can be built on a lot of a given size and forced homebuyers to spend money on the land instead of the building. Another is that quantity was more valued than quality during the nation's period of high economic growth, leading to the supply of relatively small homes with a short lifetime.

In Western countries, stable home prices have allowed home ownership to function as a savings plan. In Japan, meanwhile, owners generally *lose* money when they sell their rapidly depreciating homes and must also set aside funds for rebuilding. This is one reason why cash and deposits have come to account for such a large portion of Japan's personal financial assets.

New investment in Japan will decline as the birthrate declines and the population ages. The nation urgently needs a paradigm shift in its approach to housing that will enable the housing stock to grow in value. To this end, the government needs to deregulate land and housing to keep land prices in check, promote the construction of more durable houses and certify existing houses capable of meeting criteria for durability and other qualities.

I Housing-based Wealth Eludes Japanese Households

1 Japan's Lack of Perceived Affluence

The Japanese economy has slowed this year as external demand has flagged. From a broader perspective, however, the economy was one step short of emerging from the long balance sheet recession that followed the collapse of the Heisei bubble. Thanks to a steady stream of fiscal support from the government, Japan's GDP never dropped below its 1990 peak even though the private sector sought to repair its damaged balance sheet by reining in consumption and investment and paying down debt. This outcome was nothing short of miraculous for a nation that lost so much wealth in the balance sheet recession¹.

Still, the sense of forward momentum and prosperity that characterized the nation before and during the bubble has disappeared. Few Japanese *feel* affluent even though the current GDP exceeds that of the bubble years. Outside of Tokyo and a handful of other major cities, the once-bustling shopping arcades that line the streets around train stations have been largely shuttered, and many small factories have been driven out of business. People have grown steadily poorer.

Meanwhile, those with the opportunity to travel overseas for business or pleasure—particularly to Europe—cannot help but notice that people in these countries enjoy a higher standard of living. Every town has verdant parks, beautiful homes and inviting cafés. What is more, the people seem to be growing *more* affluent over time. Closer to home, the quality of life has also improved substantially in Taiwan and Southeast Asia, and Singapore's per-capita GDP now exceeds that of Japan. China's economy continues to grow at a break-neck pace, and the drastic improvements in the quality of life there—particularly in urban areas—have been amply documented.

By the end of World War II, Germany, like Japan, was reduced to ashes. Yet, now the nation boasts the charming townscapes and scenery characteristic of the prewar era, and people live in beautiful homes.

This stands in great contrast to Japan, where more than 60 years after the end of the war cities remain cramped and bristling with telephone poles, and people live in flimsy houses that must be torn down and rebuilt every few decades. What is responsible for this huge disparity?

Why are the Japanese unable to enjoy the same kind of affluence as Europeans and North Americans? A major part of the answer is that the Japanese system does not allow people to build wealth on top of wealth. Some may disagree, pointing to the nation's ¥1,500 trillion stock of personal financial assets. However, the biggest problem is not with the financial assets but with the

other major household asset and the one that is directly linked to living standards—housing.

2 Still Building 1 Million Houses a Year Despite a Shrinking Population

Houses serve as long-term bases for people's lives. They should be treated as capital—not consumer—goods and should be able to provide many decades of service as long as they are properly maintained. Nevertheless, the typical Japanese house is demolished after just 30 years. It is this transformation of homes into durable consumer goods that has impoverished the nation.

The situation is very different in the US, Europe and, in recent years, even Asia. Outside of Japan, houses are treated as capital goods and used over long spans of time. By steadily adding to the value of the existing housing stock—in effect, by creating wealth on top of wealth—people can enjoy affluent lifestyles despite relatively small flows of labor (productive activity). We begin our investigation by comparing residential real estate transactions and construction volume in Japan and the West.

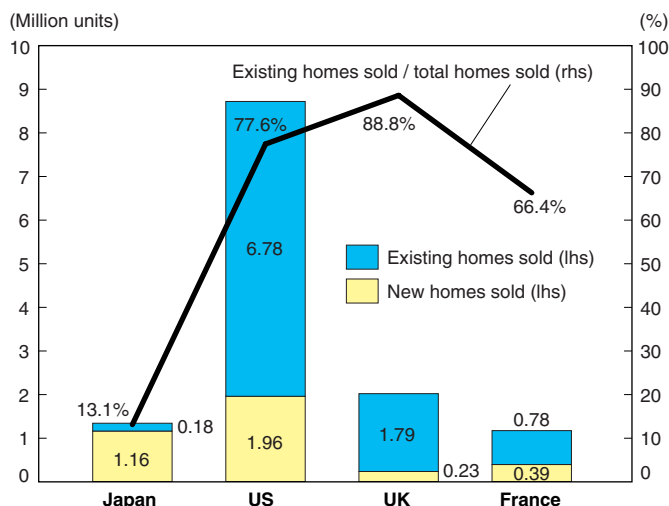
Figure 1 provides a breakdown of the residential real estate markets in Japan, the US, the UK and France. Japan's market is dominated by new homes, with existing homes accounting for just 13.1 percent of total sales. The opposite is true in the three Western nations, where previously owned homes represent anywhere from 66 percent to 89 percent of all sales.

Figure 2 compares new housing starts and population growth in Japan and the US. In the US, where the population is growing by 2.5 – 3.0 million a year, housing starts have hovered in the 1.00 – 1.50 million range except for the bubble period of 2002 – 2006. Japan's population growth, never high to begin with, has fallen steadily over the years and recently turned negative. In spite of that, new housing starts remain at more than 1 million units per year. Although the number of Japanese households is expected to continue to increase until 2015², this number of starts would not be required if so many houses were not torn down or left vacant every year.

The short life cycle of Japanese houses might be expected given the Japanese preference for new homes. Nevertheless, it results in an extremely wasteful system that seems odd to people in the rest of Asia and the West, where properly repaired and maintained older homes continue to satisfy their occupants and where newly built homes add to the value of the existing housing stock.

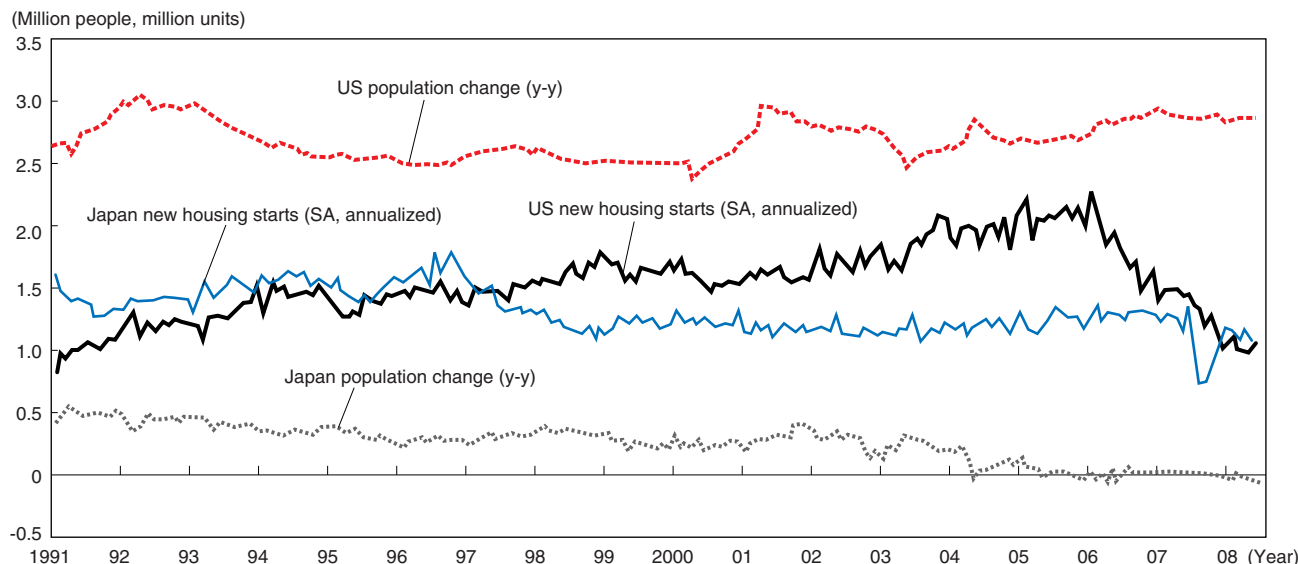
Japan may be a world leader in energy conservation, but in the housing sector it may be the world's most profligate waster of resources. As long as this state of affairs persists, it will be difficult for the Japanese to draw on the existing stock of housing to live more affluent lives in the same way as the residents of other Asian countries and the West.

Figure 1. Japan’s market for existing homes is small compared to those in other developed countries



Source: Housing Policy Division, Housing Bureau, Ministry of Land, Infrastructure and Transport (MLIT), editor, *Housing data collection for FY07 (Japanese)*, Housing Industry News, 2007.

Figure 2. Japanese housing starts remain steady despite shrinking population



Note: Discontinuities in US population data adjusted by Nomura Research Institute.
 Source: MLIT, Ministry of Internal Affairs and Communications (MIC), US Census Bureau, Department of Labor

II Homes Have Become Durable Consumer Goods

We now take a closer look at Japan’s housing stock, which is characterized by tremendous waste, by comparing it with the situation in Europe and the US.

1 A Market Dominated by Recently Built Homes

Table 1 provides an overview of housing stock vintage in Japan, the US, the UK and France. Homes built after 1970 account for 78.1 percent of the housing stock in Japan, with more recent decades accounting for an increasing percentage of the total. When the survey was

conducted in 2003, only 4.7 percent of all homes had been built before 1951.

In contrast, houses built after 1970 represented only 54.3 percent and 49 percent of the US and French housing stocks, respectively. In the UK, just 41.1 percent of homes had been built after 1964. Homes built before 1945 accounted for 39.2 percent of the UK housing stock and 33.0 percent of French homes.

A key reason for the disparity in housing stock vintage is the short lifetime of Japanese homes. The Ministry of Land, Infrastructure and Transport estimates that homes last an average of 30 years in Japan, 55 years in the US, and 77 years in the UK. The repeated tearing down and rebuilding of houses that have exceeded their lifetime results in a predominance of recently built homes. In Western countries, people continue to live in older homes that are periodically

Table 1. Housing stock vintage: a global comparison

Japan (2003): 46.86 million units								
Year built	- 1950	1951 - 60	1961 - 70	1971 - 80	1981 - 90	1991 - 00	2001 -	
% of total	4.7	3.0	9.6	20.4	24.6	27.2	5.9	
US (2005): 124.38 million units								
Year built	- 1929	1930 - 49	1950 - 59	1960 - 69	1970 - 79	1980 - 89	1990 - 99	2000 -
% of total	11.8	11.2	10.5	12.2	20.2	13.2	12.8	8.1
UK (2005): 21.78 million units								
Year built	- 1918	1919 - 44	1945 - 64	1965 - 80	1981 -			
% of total	21.7	17.5	19.7	22.6	18.5			
France (2002): 29.49 million units								
Year built	- 1918	1919 - 45	1946 - 70	1971 - 80	1981 - 90			
% of total	20.0	13.0	18.0	26.0	23.0			

Note: Japanese figures do not total 100 percent because the year of construction is unknown for some homes.

Source: MIC, 2003 Housing and Land Survey of Japan; US Census Bureau, *American Housing Survey 2005*; Communities and Local Government, *English House Condition Survey 2005*; UN Economic Commission for Europe, *Bulletin of Housing Statistics for Europe and North America*.

repaired, producing a more uniform distribution of housing stock vintage.

2 Japanese Homes are Worthless After 15 Years

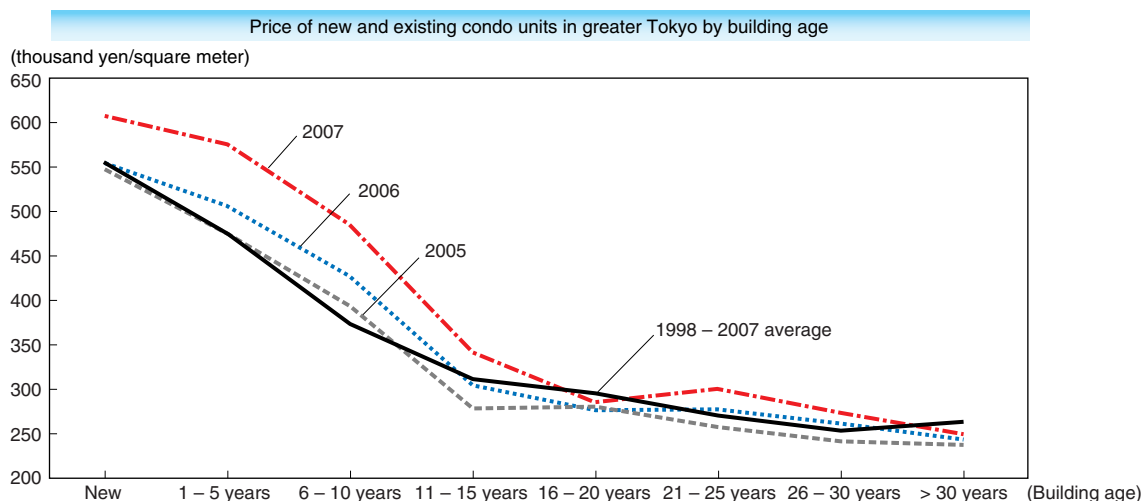
The short life of Japanese houses also has a major impact on their asset value. In the West—except for the period since 2006 because of the collapse of real estate bubbles—buildings that have been fully depreciated for tax purposes are typically worth more on the market than they cost to acquire. In Japan, meanwhile, the market value of buildings declines faster than their book value³. To give readers a better understanding of this phenomenon, we studied changes in the asset value of Japanese houses over time.

Figure 3 breaks down the average sales price of condominiums in the greater Tokyo metro area (including

Kanagawa, Saitama and Chiba prefectures as well as Tokyo) by building age. Taking the average from 1998 to 2007, we found that units selling for 550,000 yen per square meter when new had fallen 44 percent, to 310,000 yen per square meter, 11 to 15 years later. Eventually, prices stabilized in the range between 250,000 yen and 300,000 yen regardless of the building’s age. If we assume this amount to be the (constant) value of the land, the value of the unit itself drops to zero in just 15 years.

We next estimated the decline in the value of single-family homes in the greater Tokyo metro area by building age. Taking the average from 1998 to 2007, houses that sold for 180,000 yen per square meter (after stripping out the land value) when new were worth just 10,000 yen per square meter 11 to 15 years later (Figure 4). After 16 years, houses actually take on a negative value, which we attribute to the cost of repairing or

Figure 3. Japanese homes become worthless after 15 years (1)



Note: The greater Tokyo metro area includes Tokyo and Kanagawa, Saitama and Chiba prefectures.

Source: Compiled by Nomura Research Institute from Real Estate Information Network for East Japan, “*East Japan REINS data yearbook*” and “*Analysis of Tokyo metro area real estate market by building age*” and Real Estate Economic Institute, “*Condominium market trends in greater Tokyo metro area*.”

removing the structure. This is why it is quite common in Japan to see empty lots selling for more than identical lots with houses on them.

The steady decline in market value is also reflected in the values assigned to real estate collateral by Japanese financial institutions.

In his book *Shin kinyu jitsumu tebiki sirizu – fudousan tanpo hyouka*, author Shukuji Tokumitsu recommends that existing condo units built less than three years ago be valued at 90 percent of the new price; those built 6 years ago, at 80 percent; those built 9 years ago, at 75 percent; and those built 12 years or more ago, at 65 percent or less. The value of wood-framed houses also declines over time, but Tokumitsu recommends focusing on market realities rather than the tax code and advises setting a house’s lifetime between 10 and 20 years. In any event, Japanese residential dwellings lose all economic value within 15 years after construction.

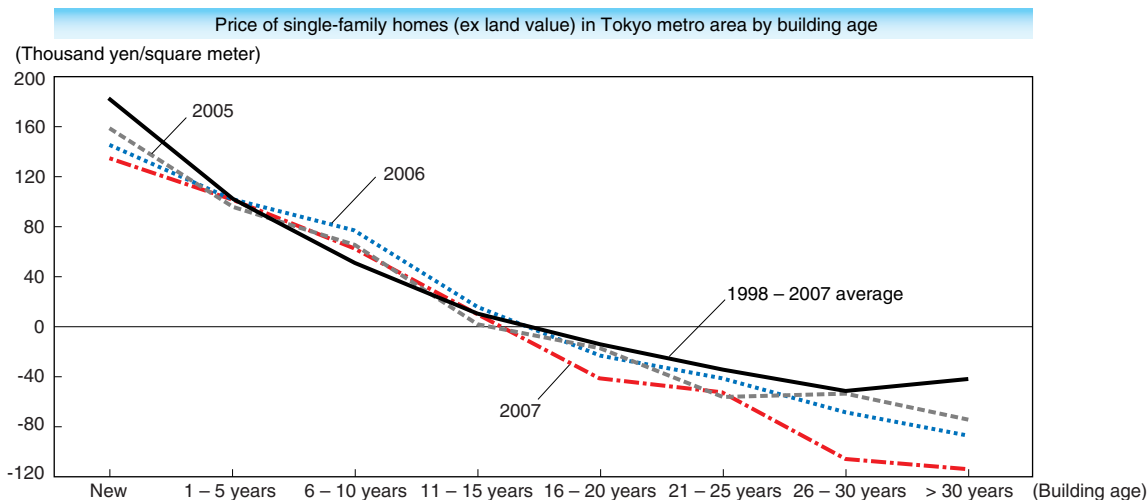
3 Houses in Western Countries do not Depreciate

Unlike in Japan, homes in the West are built on the assumption of semi-permanence. The home of America’s founding father, George Washington, is still in use, and it is quite common for people to be living in homes that are decades, and in some cases, centuries old.

In addition, these buildings do not fall in value as long as they are properly maintained. Until the real estate bubble collapsed in 2006, it was actually far more common for house prices to increase with age. This is exactly the opposite of the situation in Japan.

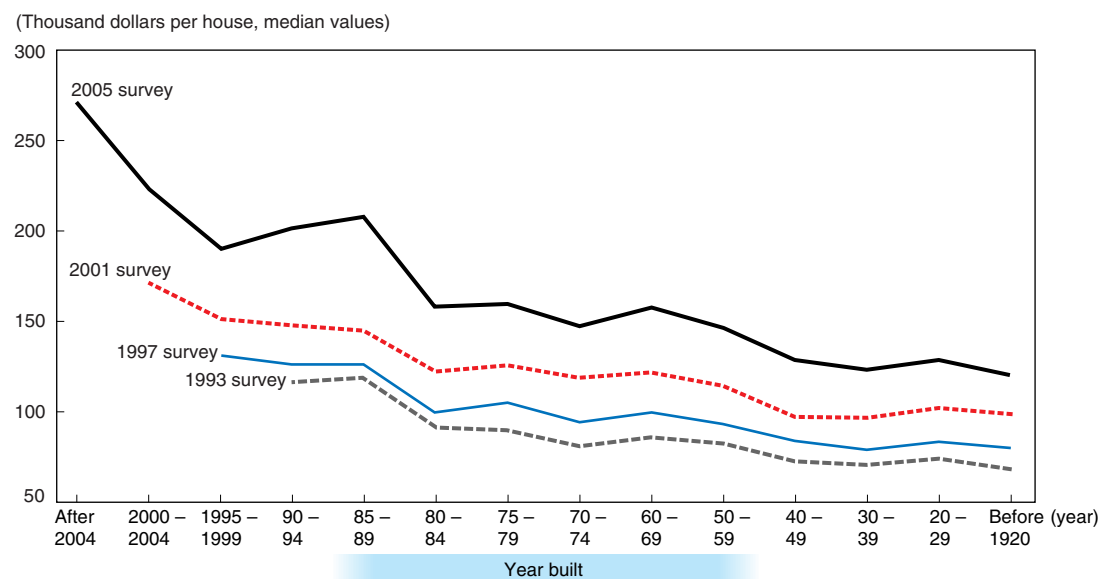
Figure 5 shows trends in US existing home prices (including land) by year of construction⁴. At any point, older homes tend to have lower prices because of higher maintenance costs, etc. Over time, however, even houses built between 1910 and 1920 increase in value. More-

Figure 4. Japanese homes become worthless after 15 years (2)

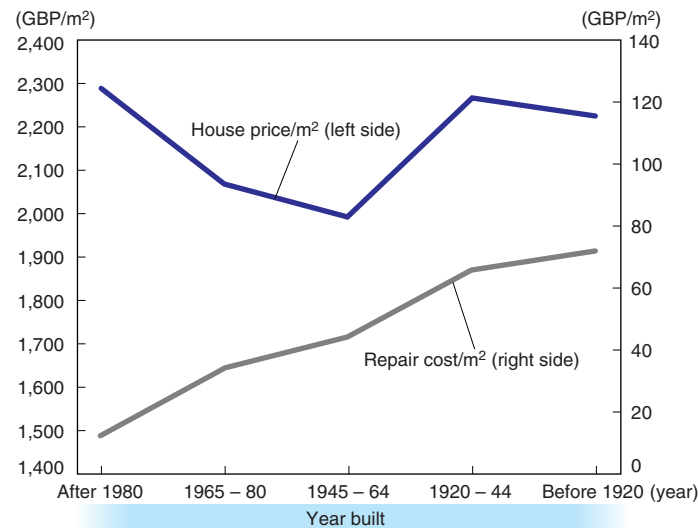


Note: The greater Tokyo metro area includes Tokyo and Kanagawa, Saitama and Chiba prefectures.
 Source: Compiled by Nomura Research Institute from Real Estate Information Network for East Japan, “East Japan REINS data yearbook” and “Tokyo metro area real estate market by building age” and “Tokyo metro area real estate market trends.”

Figure 5. US existing home prices by building age



Source: US Department of Commerce, “American Housing Survey for the United States.”

Figure 6. UK existing home prices by building age (2005 survey)

Source: Communities and Local Government, England, *English House Condition Survey 2005*

over, the rate of increase is almost constant for all homes, regardless of when they were built. Conditions in the US existing home market are effectively a mirror image of those in Japan, where home values tend to fall sharply with age. In the US, houses—no matter how old—typically appreciate in value as long as they are properly maintained. In Britain, homes built before 1945 are valued at almost the same price per square meter as those built since the 1980s, even though they cost six to seven times as much to maintain (Figure 6).

Factors contributing to this phenomenon include the general perception that homes are built to last, the popularity of older homes, which tend to be conveniently located in central urban areas, and a cultural appreciation for older things because of their scarcity.

Residential dwellings in the UK also keep their value if they are properly maintained, and under ordinary market conditions prices actually increase with the age of the home. (Prices in both the US and the UK are currently falling in the wake of burst housing bubbles).

In summary, the value of properly constructed homes in Western markets does not depend on age as long as the neighborhood is not deserted and the home is properly maintained. For homeowners in these countries, houses are a capital good, not a consumer good. That is the most fundamental difference between housing in Japan and the West.

III Why the Value of Japan's Housing Stock Remains Low

1 Relationship Between Construction Costs and Surging Land Costs

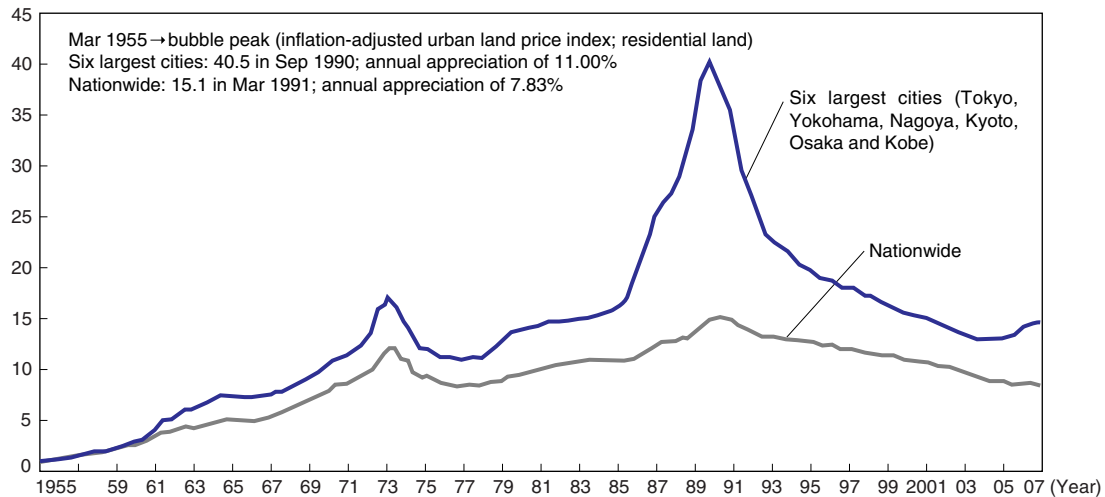
Some people will argue that housing conditions in Japan improved dramatically between the period of high eco-

nomical growth and the bubble era (circa 1955 – 90). This may be true if our basis for comparison is the immediate postwar period, when much of the Japanese population lived in cramped, shabby housing. Since the bubble burst, however, the improvements—gains in affluence, in a sense—have been limited to Tokyo and a handful of other large cities. If anything, economic conditions are now deteriorating in most areas.

The difference in perceived affluence between 1955 and 1990 and the period since then is largely attributable to land prices. Home prices will rise despite annual declines in building value as long as land value increases by even more. The inflation-adjusted price of residential land rose at an annual rate of 11.0 percent in Japan's six largest cities (Tokyo, Yokohama, Nagoya, Kyoto, Osaka, and Kobe) and 7.8 percent nationwide between 1955 and the bubble peak in 1990 (Figure 7). In nominal terms, prices rose 16.4 percent and 13.1 percent a year, respectively, over the same period (Figure 8). With land prices rising this fast, the value of the combined asset (land + home) will increase even if the value of the home itself falls sharply each year. As long as the value of the combined asset is increasing, people will remain optimistic about the future and will be able to increase consumption.

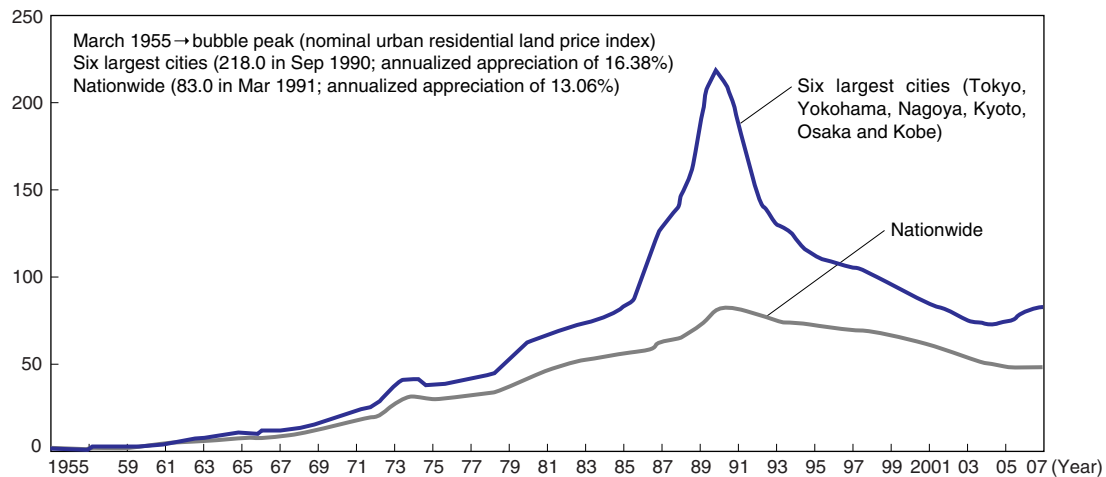
Since the bubble collapsed, however, both land and house prices have fallen, triggering a steep fall in the value of household assets. House prices are still falling. This is the primary reason why, despite continued growth in national income (GDP) in the post-bubble period, the Japanese no longer perceive themselves as being affluent compared with the bubble period or the preceding era of strong growth.

While this discussion may precipitate nostalgia for the era when land prices were moving ever higher, an objective analysis suggests that the rise in land prices through 1990 actually did tremendous damage to efforts to

Figure 7. Inflation-adjusted Japanese land prices surged during the high-growth era

Notes: (1) March 1955 = 1.0. (2) Inflation-adjusted urban land price index = urban land price index / CPI.

Source: Nomura Research Institute, based on Japan Real Estate Institute's *Urban Land Price Index* and Ministry of Internal Affairs and Communications' *Consumer Price Index*

Figure 8. Japanese land prices (nominal) rose sharply during the high-growth era

Note: March 1955 = 1.0.

Source: Japan Real Estate Institute's *Urban Land Price Index*

improve Japanese living standards. As land prices rose relative to personal income, homebuyers were forced to spend an increasing amount of money on land, leaving less for the building itself. With land so expensive, building a beautiful, well-constructed home like those commonly found in Europe or the US became too costly for all but a handful of wealthy individuals. This is a key reason why the average lifetime of a Japanese house is only 30 years.

Rising land prices had a particularly heavy impact on people living in large urban areas. While higher land prices lifted the value of household assets *on paper*, the homes that people could afford did not grow any larger, and those seeking a reasonably large house were forced to move far from city centers. This hardly constitutes an improvement in housing conditions.

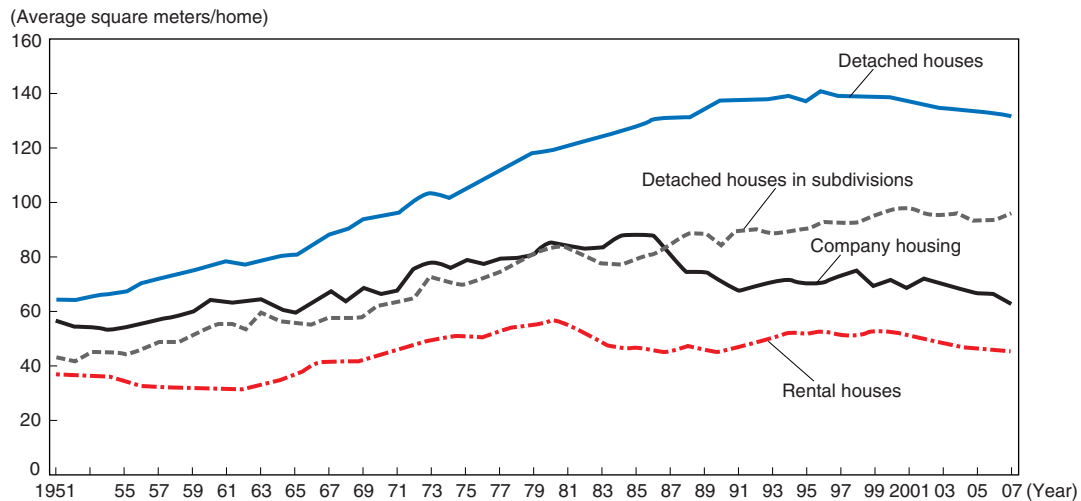
Now, almost two decades after the bubble burst, inflation-adjusted land prices have fallen back to the levels of the mid-1980s (Figure 7). In other words, on paper, peo-

ple's assets have shrunk tremendously. Nevertheless, lower land prices mean that people are able to buy larger or more centrally located houses and condominiums.

For Japan to improve the quality of its housing stock, policies are needed to stabilize land prices and keep them from rising easily.

2 Small Homes and the Distortions Created by Regulation

When the nation's high-growth period kicked off, the floor area of newly built dwellings in Japan increased steadily (Figure 9). Recently, average home sizes have leveled off at 130 – 140 m² for custom-built single-family homes and at 90 – 100 m² for condominium units and ready-built homes. While newer Japanese homes are slightly smaller on average than are those in the US, which averaged 157 m² in 2005, they are on a par with those in Germany (127 m² in 2002) and the UK (95 m²

Figure 9. Average floor area per new dwelling

Note: Calendar year for 1951 – 54; fiscal year for 1955 and beyond.

Source: MLIT, “New Dwellings Started” and MIC “Historical Statistics of Japan, New Edition”

in 2001). Once ridiculed as “rabbit hutches,” Japanese homes would appear to have made substantial gains in terms of floor area.

From a different perspective, however, this implies that homes built during the nation’s high-growth era, when quantity was more important than quality, are becoming increasingly obsolete by today’s standards. They are also significantly smaller than the typical new home and no longer in tune with the needs of homebuyers. Consequently, they are either left vacant or torn down to make way for new homes. This, too, has impeded growth in the value of Japan’s housing stock.

The Japanese government has also established various restrictions on the floor area of residential structures and has curbed the supply of floor area to an extent that would be unthinkable in other countries. The floor area ratio (= total floor area / land area) stipulates the maximum floor area that can be built on a given lot, and the site ratio (= floor area of ground floor / land area) specifies the maximum building footprint. There are rules relating to sunshine rights. Finally, the former Land and House Lease Law helped crimp the supply of homes for rent.

While farms require land, residential dwellings only need floor area, a commodity that can be increased without limit simply by utilizing existing land more effectively. In this sense, floor area is an important substitute for land.

In Japan, the demands for high-quality dwellings increased rapidly during the high-growth period, but the regulations restricting the supply of floor area pushed land prices sharply higher. In other countries, high land prices are offset by high productivity. However, because of these regulations, buildings erected on the world’s most expensive real estate had an average height of just two and a half stories. Japan had fallen into a vicious cycle in which regulation delayed the supply of floor

area, thereby raising the price of land, which in turn reduced the availability of money that could be spent on buildings.

The current Construction Standards Law does not require builders to provide structural calculations for ordinary wood-framed dwellings of one or two stories. Instead, earthquake resistance is measured using a simplified method called wall-length ratio, which is based on wall area and the number of diagonal beams. However, there are reports that many wood-framed houses that passed the wall-length ratio test were later found to be lacking in earthquake resistance once the structural calculations were made. In a country with as much seismic activity as Japan, creating a lasting stock of housing is impossible unless homes are built to withstand earthquakes. In any event, it seems certain that the distortions introduced by various laws and regulations have served to reduce housing quality.

IV The Economic Impact of a House’s Life Span

This section examines the economic impact of the differences in thinking regarding housing in Japan and the West, as described above. We look at the impact on flows (household income) and stocks (household wealth).

1 Impact on Household Income

The annual value of Japanese home construction in nominal GDP terms has been hovering in the 16 – 19 trillion yen range for the past several years⁵. On average, Japanese homes lose all of their value after 15 years. To simplify the discussion, straight-line depreciation will be used, so that a newly built home is assumed to have lost

one-fifteenth of its value after one year, two-fifteenths after two years, and so on. When the loss in value for all homes over the course of a year is added up, we find that that sum is equal to a full year’s residential investment. In other words, annual investments in residential dwellings in Japan do not increase the value of the housing stock. Some 20 trillion yen effectively disappears each year.

Whereas homes built in Western countries add to the value of the housing stock each year, in Japan the money spent on home construction is offset by an equal decline in the value of the existing housing stock. If, for example, there were residential construction of 20 trillion yen each year in Japan and Germany, that would translate into a cumulative difference of 1,200 trillion yen between the two countries over 60 years. This gap is a measure of the difference in the quality of urban landscapes in the two countries and represents a disparity in the real standard of living.

People in Japan think that buildings naturally lose their value over time. However, as noted above, this philosophy entails a huge waste of resources. Japanese families scrimp and save to buy a new home, only to watch it lose one-fifteenth of its value annually. This process has been repeated year after year in postwar Japan.

With Japan effectively throwing away some 4 percent of GDP each year on housing, it is no wonder that affluence remains out of reach for most. When people expect to tear down and rebuild their houses after thirty years, the natural result is poorly built homes in a residential version of Gresham’s Law (“bad money drives out good”).

2 Impact on Household Wealth

Next, what sort of impact does this rapid loss in home value have on the creation of household wealth?

We now turn to the balance sheet and look at the differences over time when two houses, one in Japan and one in a Western country, are purchased at the same time and for the same price (Figure 10). To simplify the example, we assumed that the household’s only asset is its house (land and house are valued together in Europe and the US), that its only liability is a home mortgage and that its capital consists of the down payment on the house. The balance sheets for the two households are identical at the time of purchase. However, in Japan the value of the house shrinks far more rapidly than does the outstanding principal on the loan, even if the land value remains constant. Consequently, an unrealized loss builds up over time (after ‘X’ years in Figure 10). Unless the land underneath the house appreciates by more than the house falls in value—as was the case until the Heisei bubble burst—the combined asset value will drop, generating a loss for the owner when the property is sold.

A questionnaire asked Japanese households purchasing new homes whether they had realized a loss or gain on the sale of their previous residence. Fully 78.6 percent said they incurred a capital loss (Figure 11). The ratio was 71.1 percent even for houses that had been built more than 20 years ago. Furthermore—although admittedly the sample was quite small—every household that sold a home less than six years old said money was lost on the transaction.

In contrast, housing prices in Western countries generally do not fall as long as periodic maintenance is performed. Therefore, even if the value of the home remains constant, the owner has an unrealized gain equal to the value of the mortgage principal payments made (‘2’ in Figure 10). Also, the highly developed markets for existing homes in Western countries facilitate the buying and selling of used residences. Houses effectively function as a substitute for a savings account.

Figure 10. Impact of home ownership on household balance sheets (1)

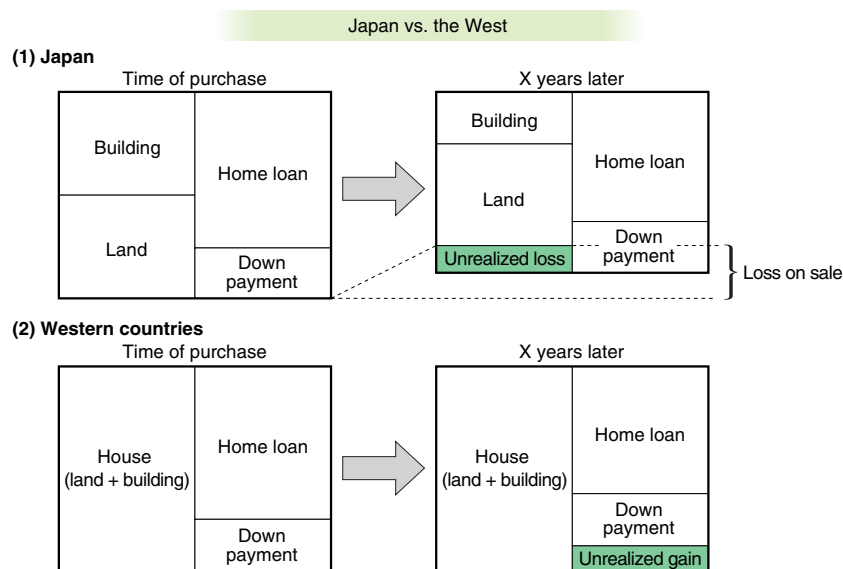
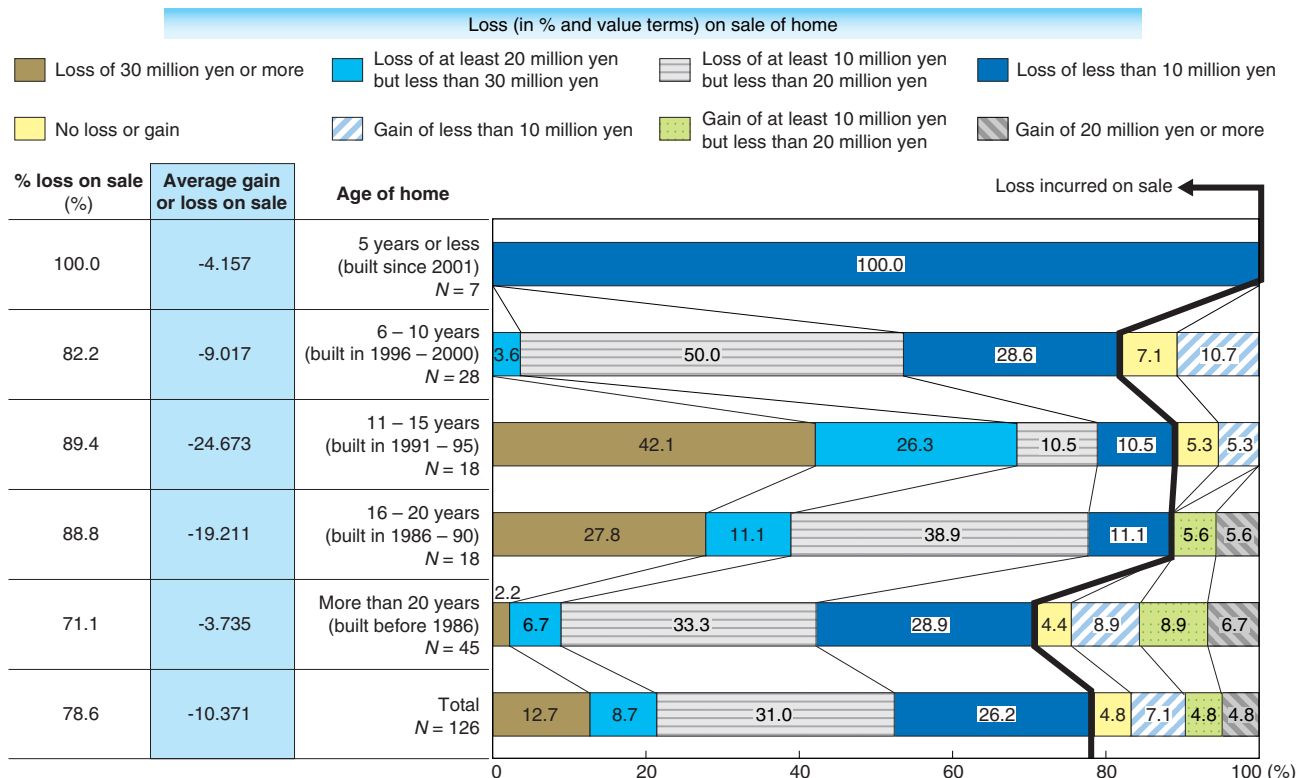
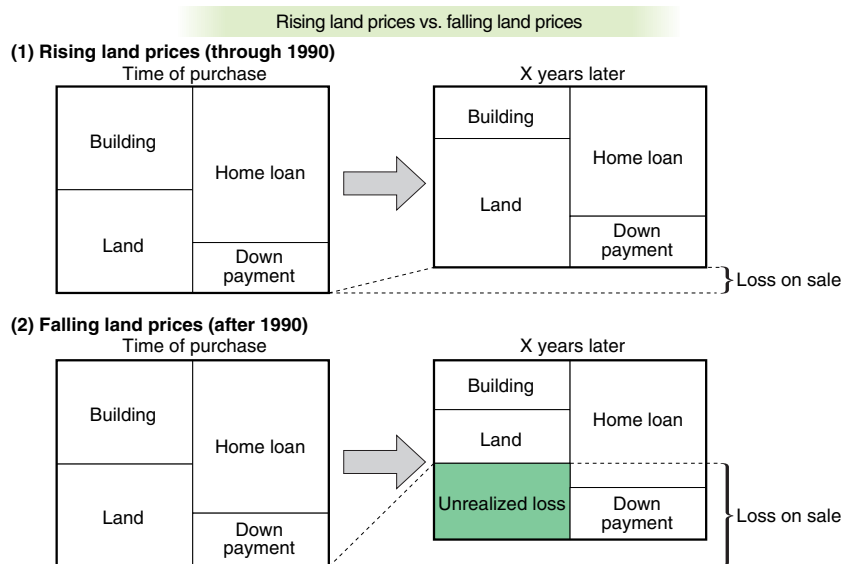


Figure 11. Japanese households lose money when selling homes



Note: Survey participants were households moving into homes purchased between April 1, 2006, and March 31, 2007. Bars show percentage of households incurring a loss on sale of previous residence.
 Source: Association of Real Estate Agents of Japan, "12th survey of consumer trends in real estate industry (FY2007)"

Figure 12. Impact of home ownership on household balance sheets (2)



That is why homeowners try to add value and boost the appraised value of their homes. They rehang the wallpaper, repaint the siding and spend money modernizing kitchen and bathroom fixtures. While economic statistics classify this kind of investment as consumption, it is not wasteful spending because it produces a corresponding return in the form of a higher selling price for the house. In addition, because household members actually live in the home, they receive direct benefits from the improvements.

This also explains the Western enthusiasm for home maintenance. In many parts of the US, where most houses are built of wood, termites are an owner's biggest worry because they have the potential to destroy the owner's most valuable capital good. In any event, this continuous investment in homes drives wealth creation as wealth is built on top of wealth, leading to greater affluence. It is because of this process of wealth accumulation that most Germans now live in attractive homes and German cities are so

beautiful 60 years after the Second World War left the country in ashes.

Land prices in Japan fell for 15 consecutive years after the bubble burst. Before that, unrealized losses on homes were mitigated to an extent by rising land prices, which helped offset the loss of building value. However, this dynamic changed once the bubble’s collapse ushered in an era of falling building *and* land prices, striking a heavy blow to household balance sheets. While households had grown used to falling home prices, the simultaneous decline of land prices proved a double blow that was hard to recover from (Figure 12).

Sales of houses built before 1986 resulted in an average loss of 3,735,000 yen (Figure 11). That figure rose to 19,211,000 yen for houses built between 1986 and 1990 and 24,673,000 yen for houses built between 1991 and 1995. Even those built between 1996 and 2000 generated an average loss on sale of 9,017,000 yen. Obviously, these losses squeezed household finances and weighed on consumption.

Some may think that rising land prices will eventually push property prices higher once again. However, with society in a mature phase and the population shrinking on falling birthrates and an aging society, the kind of land price appreciation seen in the past is no longer realistic. There can hardly be a happy ending now that land prices are stagnant or falling and the prices of homes themselves are sliding ever lower. Hence, the growing preference for renting even though Japanese still have a strong desire to own their own homes.

3 Distortions in the Distribution of Household Assets

Housing is clearly an inefficient asset for Japanese households. In addition to being difficult to buy and sell, it is almost certain to decline in value. These characteristics have had a major influence on wealth creation in Japanese households.

Cash and deposits accounted for 52 percent (775 trillion yen) of the 1,490 trillion yen in household financial assets in Japan at the end of March 2008 according to BOJ flow of funds data. This ratio, which has not changed significantly despite continuing calls for a shift “from savings to investment,” underlines the preference of Japanese households for safe investments. However, not all household assets are financial. When we consider physical assets—primarily houses—as well as financial ones, the high ratio of cash and deposits can be seen in a different light.

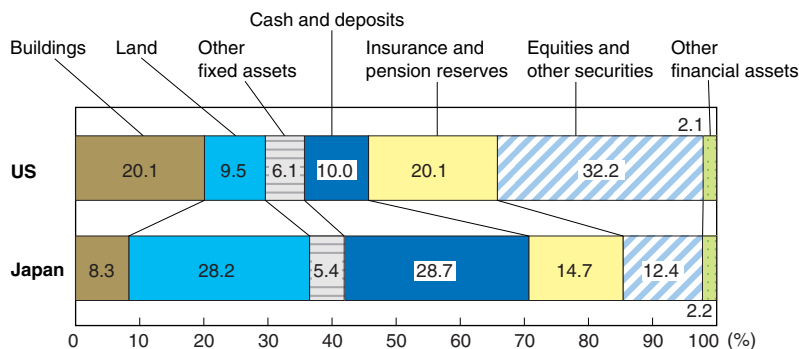
Figure 13 is a breakdown of household assets in the US and Japan. Housing (buildings + land) accounts for 29.6 percent of total assets in the US and a slightly higher 36.5 percent in Japan.

It should be noted that the distribution of financial assets is very different in the two countries. Cash and deposits represent 28.7 percent of financial assets in Japan versus just 10.0 percent (including money market funds) in the US. In contrast, US households hold 32.2 percent of their financial assets in “equities and other securities” (Figure 13), compared with a figure of 12.4 percent for Japanese households.

US homes not only do not depreciate but also generally appreciate as long as they are properly maintained, which means that mortgage payments effectively function as a form of household savings. In addition, the depth of the market for existing homes means homes are also *liquid* assets. Consequently—and with the exception of the period since the housing bubble collapse—housing has traditionally been a relatively safe asset class for US households. That, in turn, has enabled them to invest in risk assets without holding substantial cash and deposits.

In Japan, meanwhile, existing homes are illiquid assets, and the homes themselves steadily fall in value over time. Until 1990, homeowners could at least look forward to rising land values, but today that is no longer the case.

Figure 13. Breakdown of household assets in US and Japan (end of 2006)



Notes: US data include households and non-profit organizations; Japan data include sole proprietorships and households. All assets are assessed at market value. The following adjustments were also made:

US: (1) Land value was estimated by subtracting building value (replacement cost) from the value of all real estate. (2) Real estate owned by NPOs was excluded from the calculations. (3) “Cash and deposits” includes money market funds.

Japan: (1) Because the data include sole proprietorships, “buildings” includes fixed assets owned by sole proprietorships. (2) To facilitate comparison of the two countries, we added “other fixed assets” to the assessed value of durable consumer goods.

Source: *Final Report on National Accounts* by Cabinet Office of Japan and *Flow of Funds Accounts of the United States* by US Federal Reserve Board

In short, a substantial portion of the household balance sheet consists of an asset with high ownership risk and returns that are likely to be not just low but negative, making it difficult for households to take on additional risk. Because homes last only 30 years, households must also save money to prepare for the eventual day of reckoning when the house must be torn down and rebuilt. That is why Japanese households channel their financial assets into safe vehicles and why cash and deposits account for such a high percentage of total financial assets.

While economists tend to attribute this preference for safety to the Japanese character and other cultural factors, clearly one reason for it is the existence of the inefficient asset of housing. The glacial pace of the shift from savings to investment is unlikely to pick up as long as the housing situation remains in its current state. If Japanese households are to transfer their financial assets from cash and deposits to risk assets, the government must first take measures to boost the value of the housing stock and reduce the financial risk involved in owning a home by preventing the value of homes from falling.

V Transforming Japanese Houses into Capital Goods

We have demonstrated how Japan suffers from a lack of high-quality housing and how that has led to a system that prevents homeowners from building wealth on top of wealth. Two things are needed for the nation to break out of this vicious cycle and give its people a more affluent lifestyle based on an adequate housing stock. One is to remove the factors that cause housing demand to put immediate upward pressure on land prices. The other is to promote the construction of high-quality homes.

This paradigm shift in land and housing is an urgent priority and must be implemented in a joint effort by the public and private sectors. The urgency stems from the fact that GDP growth (income flows) will weaken as Japan's population shrinks.

However, if an adequate housing stock can be built up before economic growth slows sharply, people will be able to tap into that stock, and their worries about the future will ease. Merely relieving them of the need to rebuild their homes will take a great load off their shoulders.

1 Promoting Policies to Keep Land Prices in Check

To curb rising land prices, the government must enact policies to increase the aggregate supply of floor area, which is a substitute for land. Japan is no longer an agrarian society, and people need floor space, not land per se. In Western countries, which have built up a large

stock of housing with adequate floor space, land prices are not a major problem.

To overcome this issue, Japan needs to roll back regulation and allow the market principle to function and increase the supply of floor area.

For example, lower interest rates will cause real estate prices to rise, leading to higher profits for real estate developers. That, in turn, will attract new entrants to the sector and prompt active construction of office buildings and residential dwellings, producing more floor area. If this state of affairs persists for two or three years, it will eventually lead to a surplus of floor space, sending rents lower and depressing real estate prices in general. While a handful of real estate developers may close down in the ensuing liquidation, the floor space created in the previous stage will live on as an asset for residents.

Real estate prices may fluctuate in the short term, but a steady increase in aggregate floor area will cause them to stabilize in the long run. That is how Western countries succeeded in stabilizing real estate prices and making people's lives more affluent. Japan, too, needs to take action to stabilize housing and land prices.

The segmentation of land ownership rights is another obstacle to progress regardless of the quality of new construction. To resolve this problem, Japan needs to establish a system that allows higher floor-area ratios for developers that have acquired a number of small lots and put them together to form a single larger lot. They can then use that land to build residences that the next generation will be proud to live in.

2 Building Homes that will Add to the Value of the Housing Stock

As for the second requirement—promoting construction of high-quality homes—the government has finally shifted the focus of its housing policy from quantity to quality and is starting to emphasize the value of the housing stock. The Basic Act for Housing was enacted in 2006 and, in 2008, the Law for the Promotion of Durable, High-Quality Housing, also referred to as the 2008 Housing Law, was submitted to the Diet. At the time of this writing (August 2008), deliberations on the bill had been carried over to the next session.

The mainstay of the bill is a certification system to encourage the building and maintenance of durable, high-quality housing, together with various programs to support that system. Details are presented below.

First, the law would certify as “durable, high-quality housing” new houses meeting certain criteria including (1) durability of the structural framework, (2) earthquake resistance, (3) ease of maintaining and upgrading interior finish and fixtures, (4) a living space that allows layout changes, (5) a lifetime of at least 30 years, (6) a barrier-free design and (7) an energy-saving design. Homes certified under the program will be eligible for a variety of benefits, including lower property taxes and

real estate transfer taxes as well as access to 50-year mortgages.

The plan also calls for owners to compile and keep a “home résumé” that includes the blueprint at the time of certification, the results of periodic inspections, and details of any repairs or maintenance work. By requiring owners to keep this kind of record, the government seeks to facilitate the sale of existing homes.

The certification system is designed to increase the value of the housing stock and revitalize the market for existing homes. In a housing market where information asymmetries allow poor housing to drive out the good, it is to be welcomed.

Given the room for improvement in Japan’s housing situation relative to its high per-capita income, we think the demand for high-quality housing is almost unlimited.

It is therefore important for the private sector to move ahead and build high-quality dwellings capable of satisfying this demand without waiting for the government’s certification program. The resulting demand will also boost domestic demand, which is critical to an economy being rocked by the waves of globalization. In fact, some of Japan’s leading housing manufacturers are already building houses with structural frameworks capable of lasting for 60 years, far longer than today’s typical home.

However, it will take too long if the government waits for homes built according to the new standards to add to the value of the housing stock. One possibility in this regard would be to establish a certification system for existing homes as well, enabling owners to acquire high ratings by making necessary improvements.

In addition to verifying the durability of the house’s structural framework, this system would certify homes meeting a host of criteria, including sound insulation, the placement and volume of ordinary insulation and the ease of maintaining and replacing water pipes. The government should move quickly to establish a system that will support the value of homes receiving high ratings based on the condition of periodic maintenance.

The government already provides tax incentives for home renovation loans. However, the incentives carry a variety of conditions—the loan, for example, must have a term of 10 years or longer. The program was probably designed with large-scale renovation projects in mind, but boosting the value of the housing stock also requires small repairs and maintenance. Stipulations on minimum loan value and repayment period should therefore be relaxed.

3 Creating a Housing Stock that can be Left to Future Generations

Twenty- or thirty-story apartment buildings called “tower condominiums” can now be seen in places like Tokyo’s bayside district. These buildings have the potential to alter the traditional building valuation system in

Japan. They require only a fraction of the land (on a per-unit basis) that historically accounted for such a large portion of housing costs in Japan and cost almost as much to tear down as they do to build.

Therefore, they must be built based on the premise of semi-permanent use. The value of a semi-permanent building is determined by the discounted value of the cash flows it will generate over time. That, in turn, depends on a number of factors including the quality of the building, its location and the sense of community that has developed among residents. That is how real estate prices *should* be determined.

What Japan needs today more than anything else is not simply the construction of tower condominiums but the transformation of all residential dwellings into structures that future generations will be proud to inherit. That will enable the Japanese economy to enter a virtuous cycle in which a completely different form of wealth is built on wealth.

The nations of Europe first saw GDP growth slow sharply in the 1970s, some twenty years in advance of Japan. However, because of the excellent housing and social infrastructure that had been built up in these countries, people are still able to live affluent lifestyles despite low rates of growth. If successful, Japan’s land and housing reforms will greatly increase land use efficiency and improve housing conditions, which remain inferior to those in the West. At last, the Japanese people will be able to enjoy the kind of affluence that is taken for granted in other developed countries.

Notes:

- (1) Richard Koo, *Balance Sheet Recession; Japan’s Struggle with Uncharted Economics and its Implications*, John Wiley & Sons, Singapore 2003, and *The Holy Grail of Macroeconomics; Lessons from Japan’s Great Recession*, John Wiley & Sons, Singapore 2008.
- (2) According to the National Institute of Population and Social Security Research’s Household Projections for Japan (March 2008), the number of Japanese households will increase from 49.06 million in 2005 to a peak figure of 50.60 million in 2015 as the number of one- and two-person households grows.
- (3) Under the Japanese tax code, the depreciable life of wood-framed homes is 22 years. In the US, houses and apartments can be depreciated if they are rental properties, and the life of a wood-framed single-family home for tax purposes is 27.5 years. Tax treatment in the two countries is therefore quite similar.
- (4) In Japan, where scarcity value derives from the land itself, the standard practice is to value building and land separately. In Western countries, land is only valuable once a building has been constructed and put into use. Consequently, land and building are assessed as a single unit. That is why land prices tend to be much more volatile in Japan than in the US or Europe.
- (5) Investment in land does not add to GDP because it merely represents a transfer of income.

Bibliography

1. Housing Policy Division, Housing Bureau, Ministry of Land, Infrastructure, Transport and Tourism, *Jutaku keizai deta-shu 2007 nendo ban* (Housing data collection for FY2007), Housing Industry News, 2007.
2. Japan Federation of Housing Organizations, “Jutaku no chojumyouka ni kansuru kaigaichosa oyobi kentougyomu houkokusyo (Overseas survey and study on extending housing life),” 2007.
3. Ikuo Tagusari and Toshinobu Kanaya, *Ie -, sanbiki no kobuta ga machigatte itakoto* (Homes: why the three little pigs were wrong), Diamond, Inc., 2007.
4. Shukuji Tokumitsu, *Shin kinyu jitsumu tebiki sirizu – fudousantanpo hyouka* (New financial practice guidelines: real estate collateral appraisal), Kinzai Institute of Financial Affairs, Inc., 2006.
5. Richard Koo, *Nihon keizai wo osou futatsu no nami* (The two waves threatening Japan’s economy), Tokuma Shoten Publishing Co., Ltd., 2008.
6. Richard Koo, *Nihon keizai kaifuku eno aojashin* (Blueprint for a Japanese economic recovery), PHP Institute, Inc., 1999.

Richard KOO is chief economist and chief researcher at the Center for Knowledge Exchange and Creation. His specialties include macroeconomics, macroeconomic theory, financial and banking sector regulation, international capital flows and exchange rates and Japanese and Asian security issues.

Masaya SASAKI is an economist at the Center for Knowledge Exchange and Creation. His specialties include macroeconomic analysis and economic policy.

As a leading think tank and system integrator in Japan, Nomura Research Institute is opening new perspectives for the social paradigm by creating intellectual property for the benefit of all industries. NRI's services cover both public and private sectors around the world through knowledge creation and integration in the three creative spheres: "Research and Consulting," "Knowledge Solutions" and "Systems Solutions."

The world economy is facing thorough structural changes led by the dramatic growth of IT industries and the rapid expansion of worldwide Internet usage—the challenges of which require new concepts and improvement of current systems. NRI devotes all its efforts to equipping its clients with business strategies for success by providing the best in knowledge resources and solutions.

NRI Papers present selected works of NRI's 3,000 professionals through its worldwide research network. The mission of *NRI Papers* is to contribute new ideas and insights into business management and future policy planning, which are indispensable for overcoming obstacles to the structural changes in our society.

All copyrights to *NRI Papers* are reserved by NRI. No part of this publication may be reproduced in any form without the prior written consent of NRI.

Inquiries to: Corporate Communications Department
Nomura Research Institute, Ltd.
E-mail: nri-papers@nri.co.jp
FAX: +81-3-6660-8370