

WAS THE EXPANSION OF HOUSING CREDIT IN JAPAN GOOD OR BAD?

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THE BACKGROUND OF THIS PAPER

- Professor Olivia Mitchell of the University of Pennsylvania and Professor Annamaria Lusardi of George Washington University have been very concerned that Americans will not have sufficient savings to finance their living expenses during retirement because they have excessive debt due, in large part, to the subprime mortgage crisis so they held an international conference at the University of Pennsylvania in May 2019 on the topic of “Remaking Retirement: Debt in an Aging Economy.”
- They asked me to present a paper at this conference on the case of Japan, and the paper I will present today is a revised version of the paper I presented at this conference.

I. INTRODUCTION

IS THE EXPANSION OF HOUSING CREDIT GOOD OR BAD?

- The expansion of housing credit is generally regarded as being a good thing because it relaxes borrowing constraints facing households, making it easier for them to purchase housing and enabling them to purchase housing at a younger age, but...
- The overexpansion of housing credit can cause serious problems for individual households as well as for the economy as a whole, as the subprime mortgage crisis of 2007-10 in the United States showed.

THE SUBPRIME MORTGAGE CRISIS IN THE U.S.

- Financial institutions greatly expanded their supply of subprime mortgages (housing loans to borrowers with low credit ratings) starting in the late 1990s →
- Together with the collapse of housing prices, this caused a surge in defaults and foreclosures, which triggered the financial crisis of 2007-08 and the subsequent Great Recession (2007-09).
- Also led many Americans to approach retirement with significant amounts of debt, which threatens their retirement security, as pointed out by Olivia Mitchell and Annamaria Lusardi.

THE OBJECTIVE OF THIS PAPER

There was a similar expansion of housing credit in Japan, especially after 2000.

Did it cause or is it expected to cause a crisis akin to the subprime mortgage crisis in the U.S.?

The purpose of this paper is to shed light on

- (1) The extent of the expansion of housing credit in Japan
- (2) What benefits and costs the rapid expansion of housing credit conferred on Japanese households
- (3) Whether the rapid expansion of housing credit was good or bad, on balance, for Japanese households

II. THE HISTORY OF HOUSING CREDIT IN JAPAN

GOVERNMENT HOUSING LOAN CORPORATION (GHLC)

- In 1950, the Japanese Government established the Government Housing Loan Corporation (GHLC, in Japanese, *Juutaku Kin'yuu Kouko*, 住宅金融公庫), a government agency similar to the Federal Housing Authority in the US whose purpose was to provide long-term fixed- and low-interest rate loans to households wishing to purchase or construct housing.

HOUSING CREDIT OF PRIVATE FINANCIAL INSTITUTIONS

- In the early postwar years, the GHLC was the primary source of housing loans, but private financial institutions began offering housing loans in the 1970s and 1980s.
- In 1994, the Ministry of Finance liberalized the housing loan market and allowed private financial institutions to freely set the terms and interest rates of housing loans. This led to an expansion in the amount of housing credit provided by private financial institutions, and it came to be felt that there was no longer a need for the government to supply housing credit.

JAPAN HOUSING FINANCE AGENCY (JHF)

- It was decided in 2001 that the GHLC would be abolished in 2007 and replaced by the newly created Japan Housing Finance Agency (JHF, in Japanese, *Juutaku Kin'yuu Shien Kikou*, 住宅金融支援機構).
- In its final years, the GHLC scaled back its provision of housing loans and shifted its focus to securitizing and guaranteeing private-sector housing loans.
- The GHLC started its securitization operations in 2003, and these operations were taken over by the JHF following the abolition of the GHLC in 2007.

JAPAN HOUSING FINANCE AGENCY (JHF) (continued)

- Whereas the primary role of the GHLC had been to provide housing loans directly to households, the JHF's primary role is to help private financial institutions to provide housing loans by securitizing and guaranteeing a type of long-term fixed-rate housing loan offered by private financial institutions called Flat 35 (a fixed-rate housing loan with a maturity of 35 years).
- The government decided to assume the role of securitizing and guaranteeing private housing loans because, although the securitization of housing loans started in 1999, the securitization market for private label securities was too small to replace GHLC lending.

SUMMARY

- The end result of these reforms is that the housing finance system was greatly liberalized, with the role of private sector expanding relative to that of the government sector and with the choices available to households broadening to include not only fixed-rate loans but also variable-rate loans and elective-period fixed rate loans, a hybrid product whose interest rate is fixed for a pre-determined number of years before becoming variable.

SUMMARY (continued)

- Recent reforms of the housing credit system have not only increased the supply of housing credit available to households but have also increased the choices available to them.
- In conjunction with the low interest rates that have prevailed in recent years, these reforms have made it easier for households to purchase a home and enabled them to purchase a home at a younger age than before.

III. DATA SOURCE

DATA SOURCES

- Flow data: Family Income and Expenditure Survey 家計調査
- Stock data: Family Savings Survey 貯蓄動向調査 (until 2001), Family Income and Expenditure Survey (since 2002) 家計調査(貯蓄・負債編)
- Both surveys are conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan 総務省統計局
- Sample: Two-or-more-person salaried worker households
- Time period: 1970-2019 (2018 for stock data)

IV. THE EXPANSION OF HOUSING CREDIT IN JAPAN

TABLE 1: DEBT-TO-INCOME RATIO

- To confirm the extent to which the liberalization of the housing loan market increased the availability of housing credit, we look at data on the ratio of the outstanding balance of housing-related debt to household disposable income (the debt-to-income ratio).
- The debt-to-income ratio was low (11-14%) in all age groups in 1970 but increased sharply in all age groups thereafter, especially in the 30-39 age group and especially after 2000 (to as high as 239%).
- This suggests that there was a sharp increase in the availability of housing credit after 2000 and that primarily those in their 30s took advantage of it.

Table 1: Ratio of Housing-related Liabilities to Household Disposable Income (percent)				
Year	Full sample	30-39 age group	40-49 age group	50-59 age group
1970	11.7	11.2	14.3	11.1
1975	23.2	27.1	26.1	20.1
1980	37.5	43.1	42.7	28.8
1985	51.6	62.9	58.3	40.2
1990	58.4	63.7	73.0	45.5
1995	72.4	86.1	80.9	60.4
2000	92.2	103.3	133.0	72.7
2005	106.0	140.4	134.7	78.1
2010	121.9	171.8	154.2	84.1
2015	136.1	200.7	183.0	92.7
2018	139.3	234.7	176.8	95.7
Average change per year (percentage points)				
1970-2000	2.68	3.07	3.96	2.05
2000-2018	2.62	7.30	2.43	1.28
1970-2018	2.66	4.66	3.38	1.76
Notes: The figures show the ratio of housing-related liabilities to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

V. THE BENEFITS OF THE INCREASING AVAILABILITY OF HOUSING CREDIT IN JAPAN

INTRODUCTION

- In the previous section, we provided evidence that housing credit has become increasingly available especially after 2000 and especially for the 30-39 age group.
- In this section, we attempt to shed light on what impact the increasing availability of housing credit has had on household behavior.
- One possibility is that the increasing availability of housing credit has allowed households to purchase housing with a smaller down payment, making it easier for households to purchase housing and enabling them to do so at a younger age than previously, and we present various types of evidence in support of this working hypothesis.

TABLE 2: LOAN-TO-VALUE RATIO

- The ratio of new housing loans to housing purchases (the loan-to-value ratio) was relatively low (10-40%) in all age groups in 1970 but increased sharply thereafter, especially in the 30-39 age group and especially after 2000 (to as high as 85%).
- This suggests that the increasing availability of housing credit enabled households, especially young households, to purchase housing with a lower and lower down payment.

Table 2: Loan-to-Value Ratio (percent)				
Year	Full sample	30-39	40-49	50-59
		age group	age group	age group
1970	36.9	43.3	37.2	11.0
1975	29.4	32.7	41.8	7.8
1980	39.6	39.5	46.9	15.6
1985	50.7	56.4	52.5	42.7
1990	44.1	55.1	22.1	72.1
1995	65.4	69.9	57.6	66.4
2000	52.1	45.3	47.0	52.9
2005	44.7	65.7	36.3	11.7
2010	56.9	73.5	0.6	33.4
2015	83.4	80.7	89.9	81.8
2019	66.57	80.16	73.24	0.00
Average change per year (percentage points)				
1970-2000	0.51	0.07	0.32	1.40
2000-2019	0.76	1.84	1.38	-2.79
1970-2019	0.61	0.75	0.73	-0.22
Notes: The figures show the loan-to-value ratio, defined as the ratio of new housing loans to land/housing purchases (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 3: HOMEOWNERSHIP RATE

- The homeownership rate rose in all age groups after 1975 (except until 2000 in the 30-39 age group) but the increase was especially rapid in the 30-39 age group after 2000 (from 44.2% in 2000 to 62.2% in 2017).
- This suggests that the increasing availability of housing credit led to increases in the homeownership rate, especially for those in their 30s.

Table 3: Homeownership Rate (percent)				
Year	Full sample	30-39 age group	40-49 age group	50-59 age group
1975	56.4	47.9	64.6	75.5
1980	61.2	48.9	70.3	83.4
1985	65.0	46.9	73.8	85.8
1990	66.0	42.4	73.7	81.4
1995	64.1	39.1	67.8	82.0
2000	68.5	44.2	75.6	84.6
2005	68.8	46.2	72.3	84.2
2010	71.2	51.8	73.8	83.7
2015	76.0	58.3	77.1	85.1
2019	79.8	66.3	79.9	85.3
Average change per year (percentage points)				
1975-2000	0.48	-0.15	0.44	0.37
2000-2019	0.59	1.17	0.23	0.04
1975-2019	0.53	0.42	0.35	0.22
Notes: The figures show the homeownership rate (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 4: HOUSING PURCHASE TO INCOME RATIO

- The ratio of housing purchases to household disposable income rose sharply in the 30-39 age group after 2000 (from 3.7% to 7.5%) but declined in the 40-49 and 50-59 age groups.
- This suggests that the increasing availability of housing credit made it easier for those in their 30s to purchase housing.

Table 4: Ratio of Land/Housing Purchases to Household Disposable Income (percent)				
Year	Full sample	30-39 age group	40-49 age group	50-59 age group
1970	2.2	2.5	1.6	2.9
1975	3.4	4.0	2.5	3.8
1980	3.9	4.7	5.3	1.8
1985	3.3	3.3	3.4	2.5
1990	2.3	2.9	2.3	2.1
1995	4.4	6.9	4.9	3.1
2000	2.9	3.7	2.0	3.0
2005	3.2	1.9	2.4	3.0
2010	1.9	6.4	0.5	0.9
2015	2.8	7.5	2.6	1.8
2019	1.5	5.0	1.3	0.3
Average change per year (percentage points)				
1970-2000	0.02	0.04	0.01	0.00
2000-2019	-0.07	0.07	-0.04	-0.14
1970-2019	-0.01	0.05	-0.01	-0.05
Notes: The figures show the ratio of land/housing purchases to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 5: DEBT-TO-INCOME RATIO BY BIRTH COHORT

- The life cycle pattern of the ratio of the outstanding balance of housing-related liabilities to household disposable income (the debt-to-income ratio) peaks in the 50-59 age group for birth cohorts born in 1936-45 or earlier but peaks in the 40-49 age group for birth cohorts born in 1946-55 or later.
- This provides further corroboration that the increasing availability of housing credit enabled households to borrow and to purchase housing at a younger age.

Table 5: Ratio of Housing-related Liabilities to Household Disposable Income by Birth Cohort (percent)

Birth years of cohort	Age group		
	30-39	40-49	50-59
1916-25			20.1
1926-35		26.1	40.2
1936-45	27.1	58.3	60.4
1946-55	62.9	80.9	78.1
1956-65	86.1	134.7	92.7
1966-75	140.4	183.0	
1976-85	200.7		

Notes: The figures show the ratio of housing-related liabilities to household disposable income (percent).

Source: Table 1

TABLE 7: RENT TO INCOME RATIO

- The rent to income ratio was relatively low throughout for the 40-49 and 50-59 age groups but rose sharply until 2000 (from 3.5% in 1970 to 6.2% in 2000) and declined after 2000 (from 6.2% in 2000 to 4.9% in 2017) in the 30-39 age group.
- The decline after 2000 in the 30-39 age group is presumably due to the increase in the homeownership rate in this age group during this period, which reduced the rent burden of this age group.

Table 7: Ratio of Rent to Household Disposable Income (percent)				
Year	Full sample	30-39	40-49	50-59
		age group	age group	age group
1970	2.5	3.5	1.4	1.2
1975	2.2	2.7	1.3	1.0
1980	2.3	3.1	1.5	1.0
1985	2.3	3.6	1.5	1.0
1990	2.4	4.2	1.7	1.0
1995	3.2	5.9	2.3	1.5
2000	3.3	6.2	2.2	1.5
2005	3.5	6.5	2.7	1.8
2010	3.3	5.7	2.7	1.9
2015	3.0	5.3	2.6	1.8
2019	2.4	4.1	2.2	1.6
Average change per year (percentage points)				
1970-2000	0.03	0.09	0.03	0.01
2000-2019	-0.05	-0.11	0.00	0.00
1970-2019	0.00	0.01	0.02	0.01
Notes: The figures show the ratio of rent to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

OTHER REASONS FOR THE INCREASE IN HOUSING PURCHASES

I have presented a variety of data suggesting that the rapid expansion of housing credit led to a sharp increase in housing purchases and an increase in the homeownership rate.

However, I should emphasize that the increase in housing purchases and homeownership were not due entirely to the rapid expansion of housing credit.

For example, ...

OTHER REASONS FOR THE INCREASE IN HOUSING PURCHASES (CONT'D)

- (1) Tax breaks for housing purchases
- (2) Expansionary monetary policy (zero interest rate policy)
- (3) The reduction in company housing and rent subsidies
- (4) The decline in the construction of public housing
- (5) The decline in land prices
- (6) The trend toward nuclear families
- (7) The relaxation of restrictions on floor-area ratios (容積率), making it possible to build higher rise condominiums.

VI. THE COSTS OF THE INCREASING AVAILABILITY OF HOUSING CREDIT IN JAPAN

INTRODUCTION

- We have so far shown that the increasing availability of housing credit has been beneficial to households, making it easier for them purchase housing and enabling them to do so at a younger age than previously.
- However, we now wish to consider whether the increasing availability of housing credit has imposed any offsetting costs on households.
- One possibility is that increased purchases of housing at younger ages has increased the debt burden of households and reduced their standard of living.

TABLE 6: HOUSING LOAN REPAYMENT TO INCOME RATIO

- The housing loan repayment burden was low in all age groups in 1970 (1-2%) but rose sharply thereafter, especially in the 40-49 age group during the 1970-2000 period (from 1.3 % to 10.1%) and in the 30-39 the group during the 2000-17 period (from 7.4% to 9.5%).
- This suggests that the increasing availability of housing credit increased the housing loan repayment burden of households, especially of those in their 40s before 2000 and those in their 30s after 2000.

Table 6: Ratio of Housing Loan Repayments to Household Disposable Income (percent)				
Year	Full sample	30-39 age group	40-49 age group	50-59 age group
1970	1.2	1.4	1.3	0.8
1975	2.1	2.4	2.5	1.4
1980	3.9	3.9	5.0	3.3
1985	5.4	5.3	6.5	5.0
1990	5.2	4.6	6.7	5.0
1995	6.1	5.8	7.3	6.2
2000	7.3	7.4	10.1	6.3
2005	7.4	7.9	9.2	6.7
2010	8.8	8.7	10.9	8.6
2015	8.7	9.6	10.7	8.2
2019	7.9	9.9	9.7	7.5
Average change per year (percentage points)				
1970-2000	0.21	0.20	0.29	0.18
2000-2019	0.03	0.13	-0.02	0.06
1970-2019	0.14	0.17	0.17	0.14
Notes: The figures show the ratio of housing loan repayments to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 8: THE RATIO OF HOUSING-RELATED EXPENDITURES TO INCOME

- The ratio of housing-related expenditures (the sum of rent and housing loan repayments) to household disposable income increased in all age groups until 2000 (due largely to the increasing burden of housing loan repayments).
- However, this ratio leveled off after 2000, especially in the 30-39 age group, because the increasing burden of housing loan repayments was largely offset by the declining burden of rent payments).

Table 8: Ratio of Housing-related Expenditures to Household Disposable Income (percent)				
Year	Full sample	30-39 age group	40-49 age group	50-59 age group
1970	3.6	4.8	2.8	2.0
1975	4.3	5.1	3.8	2.4
1980	6.2	6.9	6.5	4.4
1985	7.7	8.9	7.9	6.0
1990	7.6	8.8	8.4	6.0
1995	9.4	11.6	9.6	7.7
2000	10.6	13.7	12.3	7.9
2005	10.9	14.4	11.9	8.5
2010	12.0	14.3	13.6	10.5
2015	11.7	14.9	13.3	9.9
2019	10.3	13.9	11.9	9.2
Average change per year (percentage points)				
1970-2000	0.23	0.29	0.32	0.19
2000-2019	-0.02	0.02	-0.02	0.07
1970-2019	0.14	0.19	0.19	0.15
Notes: The figures show the ratio of housing-related expenditures (the sum of rent and housing loan repayments) to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 9: THE NON-HOUSING CONSUMPTION PROPENSITY

- The non-housing consumption propensity (the ratio of non-housing consumption expenditures to household disposable income) was high (about 77 percent) in all age groups in 1970.
- After 1970, the non-housing consumption propensity declined sharply in all age groups, especially the 30-39 age group), and fell to 58% in the 30-39 age group.
- This finding suggests that the increase in the burden of housing loan repayments caused hardship for young households and forced them to lower their non-housing propensity.

Table 9: Non-Housing Consumption Propensity (percent)				
Year	Full sample	30-39	40-49	50-59
		age group	age group	age group
1970	77.2	77.1	77.4	76.7
1975	74.9	74.9	74.6	74.3
1980	75.7	74.5	75.9	76.8
1985	75.1	73.1	75.4	76.1
1990	72.8	68.8	74.3	73.9
1995	69.3	62.8	72.4	70.2
2000	68.9	61.5	68.6	71.7
2005	71.2	62.8	69.4	74.2
2010	70.8	62.6	65.7	74.7
2015	73.8	65.7	69.7	74.1
2019	65.6	58.1	63.9	65.4
Average change per year (percentage points)				
1970-2000	-0.28	-0.52	-0.29	-0.17
2000-2019	-0.17	-0.18	-0.25	-0.33
1970-2019	-0.24	-0.39	-0.27	-0.23
Notes: The figures show the ratio of financial assets net of non-housing liabilities to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 9: THE RATIO OF NET FINANCIAL ASSETS TO INCOME

- The ratio of net financial assets to income increased sharply in all age groups until 2000 but declined in the 30-39 and 40-49 age groups after 2000.
- This suggests that the increasing burden of housing loan repayments has reduced the ability of younger households to accumulate financial assets.

Table 10: Ratio of Net Financial Assets to Household Disposable Income (percent)				
Year	Full sample	30-39	40-49	50-59
		age group	age group	age group
1970	97.9	79.2	97.3	135.8
1975	97.3	78.1	97.1	119.6
1980	125.4	98.6	117.4	163.8
1985	150.2	111.2	137.8	179.3
1990	192.8	137.8	166.3	221.4
1995	212.3	136.4	175.0	251.0
2000	229.0	136.4	192.9	256.1
2005	233.7	136.2	192.9	269.7
2010	231.4	122.5	177.1	270.8
2015	244.2	125.5	172.6	276.5
2018	230.7	105.0	160.8	274.0
Average change per year (percentage points)				
1970-2000	4.37	1.90	3.18	4.01
2000-2018	0.09	-1.74	-1.78	0.99
1970-2018	2.77	0.54	1.32	2.88
Notes: The figures show the ratio of financial assets net of non-housing liabilities to household disposable income (percent).				
Source: Family and Income Expenditure Survey, conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan				

TABLE 10: THE RATIO OF NET FINANCIAL ASSETS TO INCOME BY COHORT

- The increase in the ratio of net financial assets to income from the 30-39 age group to the 40-49 age group has been declining over time: it was 63.8pp for the birth cohort born in 1946-55 (now 64-73), 56.5pp for the cohort born in 1956-65 (now 54-63), and 36.4pp for the birth cohort born in 1966-75 (now 44-53).
- This provides further corroboration that the increasing burden of housing loan repayments has reduced the ability of younger birth cohorts to accumulate financial assets.

Table 11: Ratio of Net Financial Assets to Household Disposable Income by Birth Cohort (percent)

Birth years of cohort	Age group					
	30-39	40-49	50-59	Increase from 30-39 to 40-49	Increase from 40-49 to 50-59	Increase from 30-39 to 50-59
1916-25			119.6			
1926-35		97.1	179.3		82.1	
1936-45	78.1	137.8	251.0	59.7	113.2	172.9
1946-55	111.2	175.0	269.7	63.8	94.7	158.5
1956-65	136.4	192.9	276.5	56.5	83.6	140.1
1966-75	136.2	172.6		36.4		
1976-85	125.5					

Notes: The figures show the ratio of financial assets net of non-housing liabilities to household disposable income (percent).

Source: Table 10

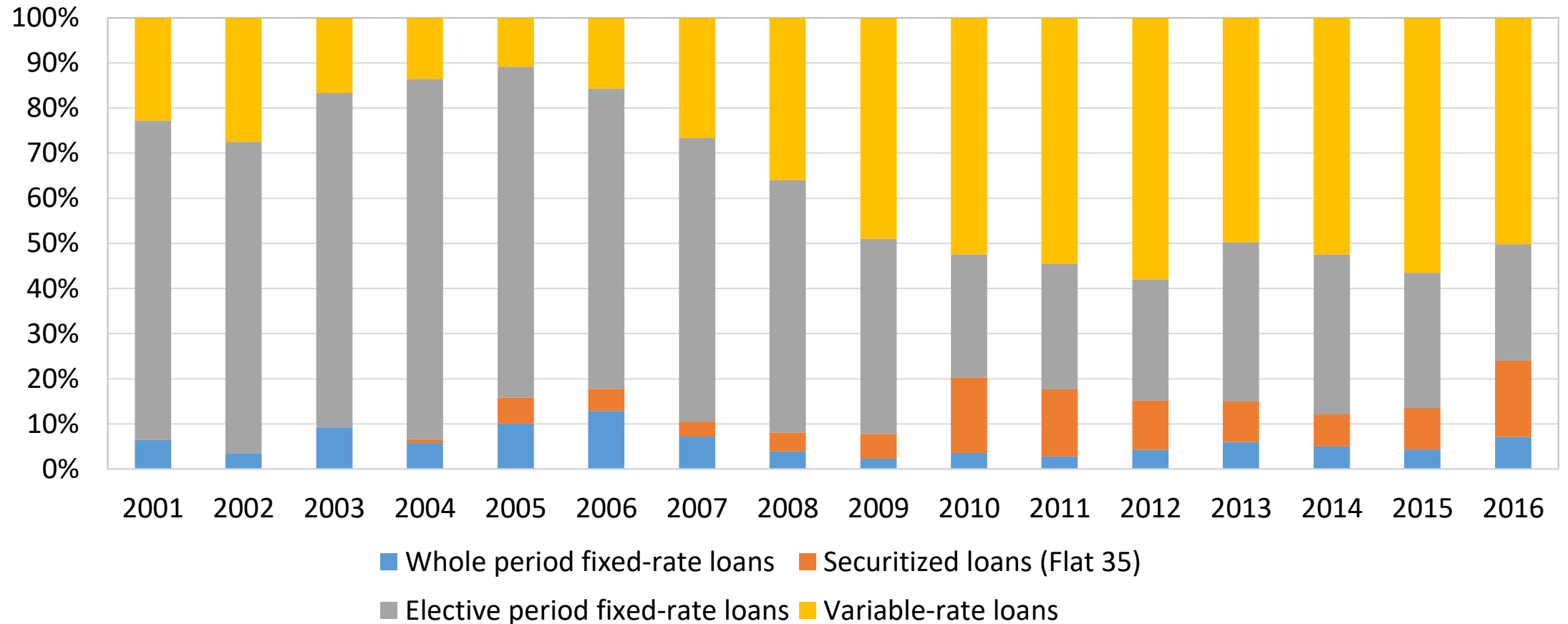
CONCLUSION SO FAR

- Thus, the expansion of housing credit conferred many benefits on households but also conferred many costs on them.
- For example, it increased the burden of housing loan repayments, forced households to reduce their non-housing consumption propensity, and weakened the ability of households to accumulate financial assets.
- Furthermore, there are other causes for concern that I would like to mention.

FIG. 1: THE INCREASE IN THE SHARE OF VARIABLE RATE HOUSING LOANS

- One cause for concern is that the increasing availability of housing credit over the last few decades has been accompanied by a significant shift from fixed-rate to variable-rate housing loans (see Figure 1).
- As long as interest rates are kept low, this should not be a serious concern, but the Bank of Japan is likely to normalize its monetary policy sooner or later, and when it does, interest rates on variable-rate housing loans will increase.

The Share of Various Types of Housing Loans in New Lending

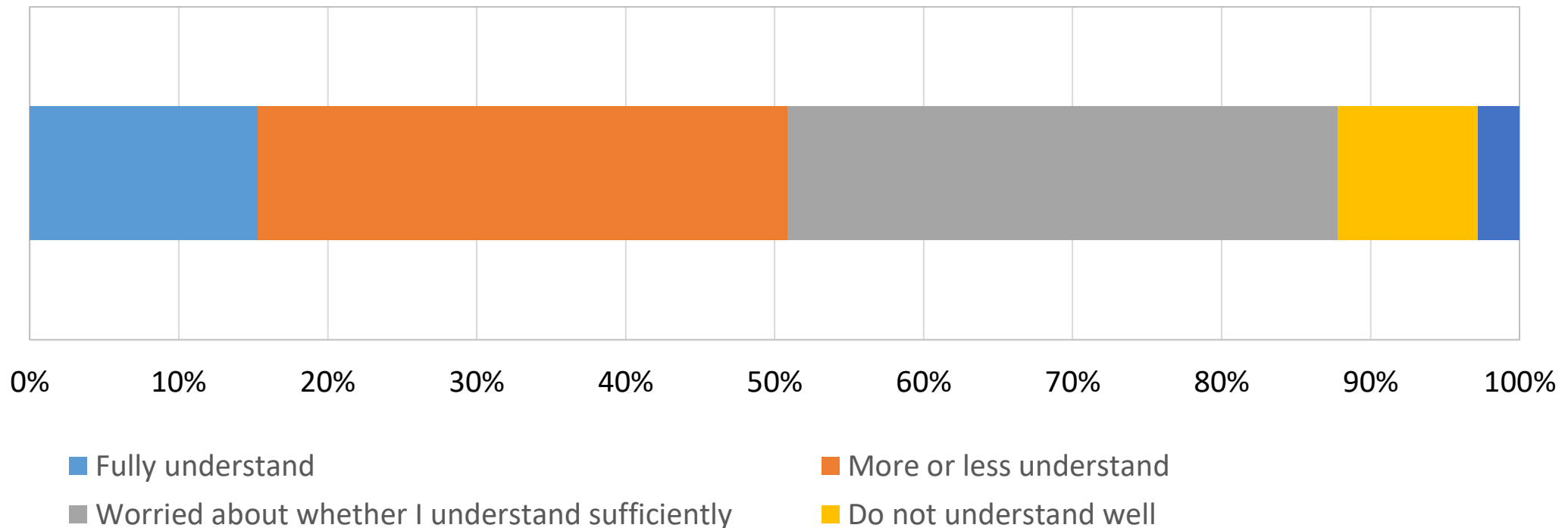


Source: Housing Bureau, Ministry of Land, Infrastructure, Transport and Tourism, various years, *Results Report on the Survey on the Status of Private Housing Loans*.

FIG. 2: THE LOW LEVEL OF FINANCIAL LITERACY (1)

- Moreover, given that interest rates have been kept low for so long in Japan and given the low levels of financial literacy of Japanese households, many Japanese households may not be fully aware of the risks associated with variable-rate housing loans.
- Figure 2, for example, shows that about half of those who have taken out variable-rate housing loans do not fully understand the implications of interest rate increases for loan repayment amounts.

The Level of Understanding About the Impact of Possible Interest Rate Increases on the Loan Repayment Amount

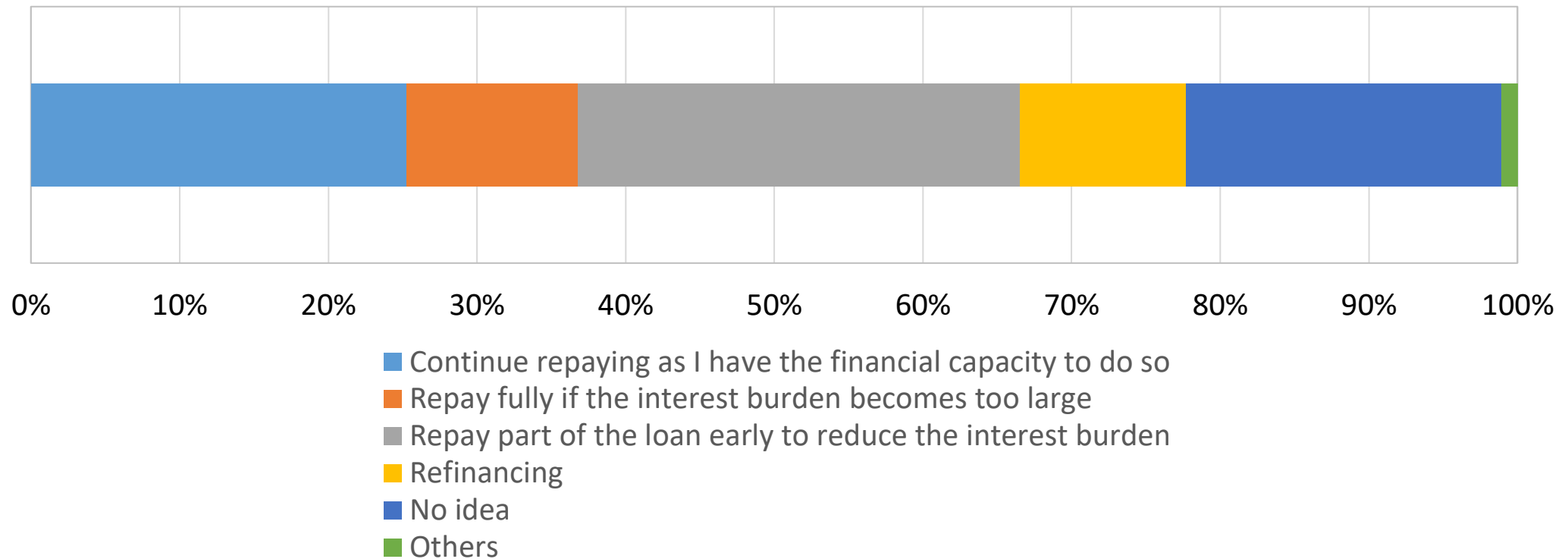


Source: Japan Housing Finance, *2018 Survey on the Status of Private Housing Loan Users*.

FIG. 3: THE LOW LEVEL OF FINANCIAL LITERACY (2)

- Moreover, Figure 3 shows that about one-fifth of those who have taken out variable-rate housing loans do not seem to have thought about possible ways of responding to the increase in the loan repayment amount that will occur if and when interest rates are increased and about 10% plan to refinance their housing loans when interest rates increase, which is the opposite of what they should do.

Planned Response to the Increase in the Loan Repayment Amount in the Event of Interest Rate Increases



Source: Japan Housing Finance, *2018 Survey on the Status of Private Housing Loan Users*.

TENTATIVE CONCLUSION

- Thus, the increasing share of variable-rate housing loans, combined with the low levels of financial literacy and the lack of understanding about the risks of variable-rate housing loans, is a serious additional cause for concern.

VII. SUMMARY, CONCLUSIONS, AND POLICY IMPLICATIONS

THE ANSWER TO OUR QUESTION 1

- Question: By what extent did the supply of housing expand in Japan?
- Answer: By a lot, especially after 2000.

THE ANSWER TO OUR QUESTION 2

- Question: What benefits and costs did the rapid expansion of housing credit confer on Japanese households?
- Answer: It has made it easier for Japanese households to purchase housing and enabled them to do so at a younger age, which in turn has freed them from the burden of having to pay rent. These are significant advantages given Japanese households' strong preference for homeownership.

THE ANSWER TO OUR QUESTION 2

- Question: What benefits and costs did the rapid expansion of housing credit confer on Japanese households? (cont'd)
- Answer (cont'd): However, the rapid expansion of housing credit has, at the same time, conferred costs on Japanese households such as increasing their housing loan repayment burden, which in turn has required them to cut back on their other consumption expenditures and has reduced their ability to accumulate financial assets, which creates the potential for retirement insecurity.

THE ANSWER TO OUR QUESTION 3

- Question: Was the rapid expansion of housing credit good or bad, on balance, for Japanese households?
- Answer: The benefits of the rapid expansion of housing credit to Japanese households were immediate and substantial, whereas none of the costs appear to have been very serious, at least until now, and moreover, the rapid expansion of housing credit in Japan has not produced a crisis as it did in the US, at least not yet.
- Thus, we believe that the benefits conferred by the rapid expansion of housing credit greatly offset the costs thereof and that the answer to our question is a tentative “yes.”

CAUSES FOR CONCERN

- However, there is some danger of a crisis occurring in the future.
- For one thing, the increasing availability of housing credit has been accompanied by a significant shift from fixed-rate to variable-rate housing loans.
- This is cause for concern given the low level of financial literacy that prevails among the Japanese population and the likelihood that interest rates on variable-rate housing loans will be raised sooner or later as monetary policy is tightened.
- And there is also the danger of some households reaching retirement age without sufficient assets.

POLICY RECOMMENDATIONS

- Thus, at the very least, the government should take a number of preemptive measures:
- The government should monitor the debt levels and housing loan repayment burdens of households, especially of households adversely affected by the Covid-19 pandemic.
- The government should provide households with adequate financial literacy so that they fully appreciate the risks inherent in variable-rate housing mortgages.

Thank you very much for your kind attention.

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