Securitization and the Mortgage Business in Japan

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I. The Changing Sources of Mortgage Finance

1. Market share of Government Housing Loan Corporation drops sharply

The Government Housing Loan Corporation ("the Corporation" or "GHLC") has seen its share of the mortgage market drop sharply from its previous level of about 30–40%. Since 2003 the Corporation's share of new mortgages has been less than 10%, and private-sector financial institutions now account for more than 90% of new residential mortgages. The Corporation's share of outstanding mortgages has also declined and now stands at around 30% (Figures 1 and 2).

Figure 1 New Residential Mortgages

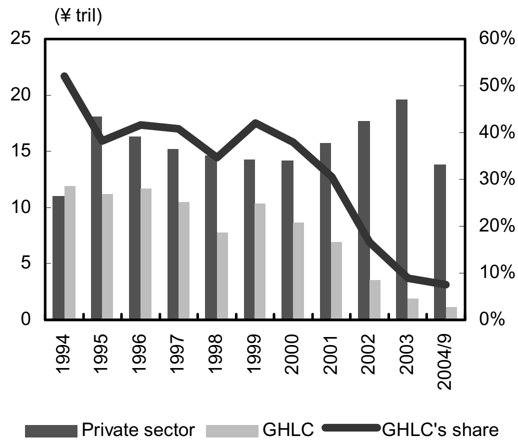
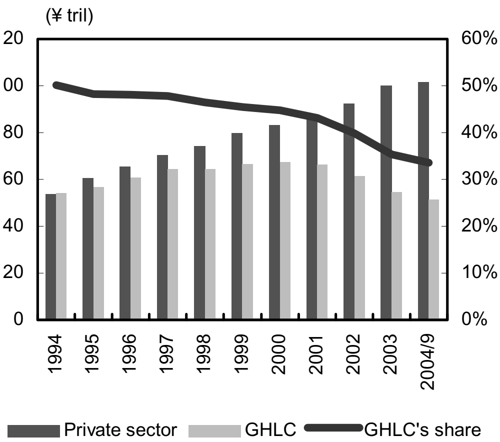


Figure 2 Outstanding Residential Mortgages



Note: "Private sector" refers to the total for the following types of financial institution as defined in the Bank of Japan's "Kin'yu Keizai Tokei Geppo" [Monthly Bulletin of Financial and Economic Statistics]: domestic banks, shinkin banks and Shinkin Central Bank. The data are for the period ending in September 2004.

Source: NICMR, from Bank of Japan, "Kin'yu Keizai Tokei Geppo" [Monthly Bulletin of Financial and Economic Statistics].

This decline is the direct result of the decision taken by the government in 2001 to restructure public corporations ("Reorganization and Rationalization Plan of Special Public Institutions"). According to the Plan, the Corporation must phase out its lending so that it can cease operation within five years.

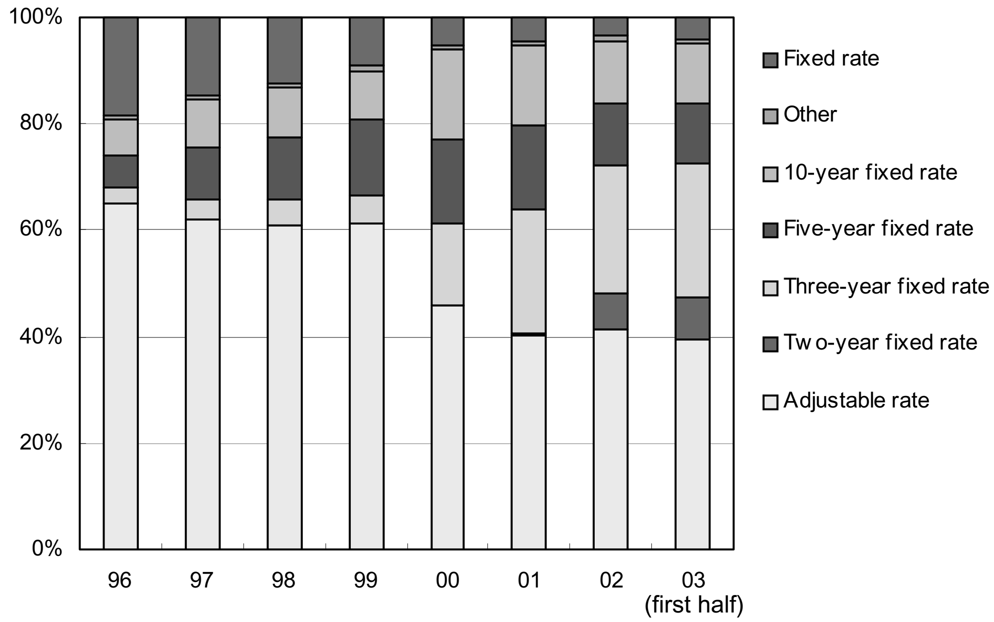
At the same time, private-sector financial institutions have stepped up their retail operations to offset the lack of demand for funds from the corporate sector and low profit margins on commercial lending. As residential mortgages are one of their most important retail products, the banks have invested considerable resources in creating and advertising a wide range of mortgage products.

At any rate, the situation now is very different from what it was only a few years ago, when prospective home owners would turn to the Corporation as their lender of first choice.

The mortgage products themselves have also changed. Whereas most private-sector residential mortgages used to be adjustable-rate mortgages, banks have seized the opportunity offered by a long period of low interest rates to promote short-term fixed-rate mortgages (i.e., mortgages that charge a fixed rate during the first few years) and long-term fixed-rate mortgages. Demand for these products has increased, and they now account for more than half of outstanding mortgages (Figure 3).

These new products have also changed the risk profile of the banks' residential mortgage business.

Figure 3 Breakdown of Private Residential Mortgages by Type of Interest Rate



Note: Because of a change in source, the data up to and including fiscal 1999 and the data for the period since then are discontinuous.
Source: NICMR, from Government Housing Loan Corporation Annual Report and Ministry of Land, Infrastructure and Transport, "Heisei 15nendo Minkan Jutaku Ron no Jittai ni Kansuru Chosa" [Survey of Private-Sector Mortgages Fiscal 2002].

2. Sharp increase in demand for the Corporation's purchase-type mortgages

1) Corporation's securitization assistance scheme

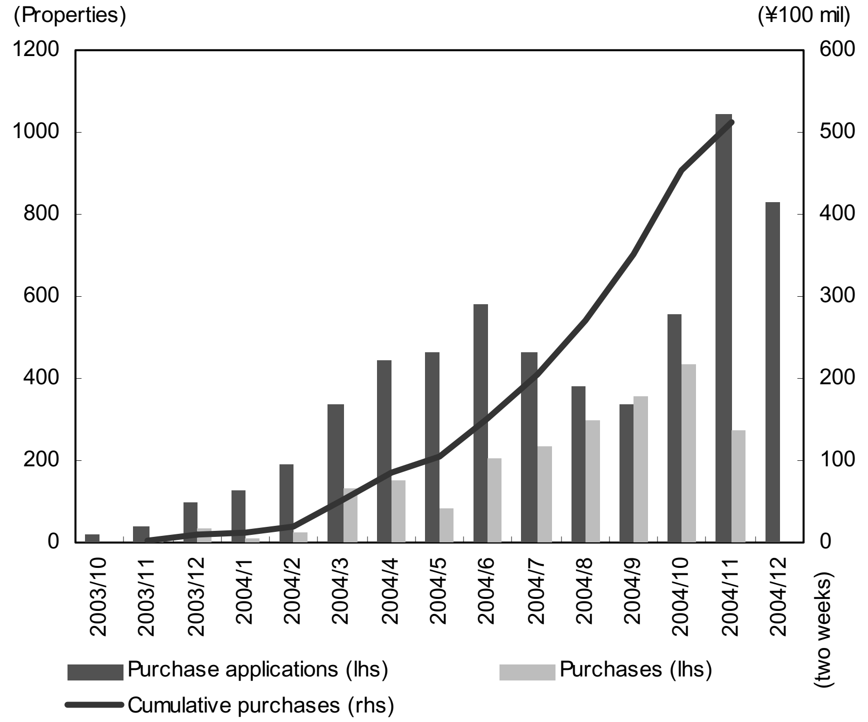
At the same time as its share of the residential mortgage market has declined in line with the plans for it to cease operation, the Corporation has begun a new task—its securitization assistance scheme. Besides the plan for the Corporation to cease operation, the Reorganization and Rationalization Plan of Special Public Institutions envisaged that an independent administrative entity would be established to ensure that private-sector financial institutions were able to provide an adequate supply of long-term fixed-rate residential mortgages. The aim is that the entity will provide the guarantees and regulatory framework[1] to enable private-sector financial institutions to securitize their residential mortgages more easily, thereby reducing their interest rate risk, prepayment risk and liquidity risk, and making it easier for them to provide long-term fixed-rate residential mortgages.

Although the entity is not due to be established until sometime in fiscal 2006, the Corporation has already begun to implement its securitization assistance scheme. The first stage, which started in October 2003, was to securitize residential mortgages purchased from private-sector financial institutions. The second stage, which started in October 2004, was for the Corporation to provide guarantees for mortgage-backed securities issued by private-sector financial institutions.

To date, the Corporation has purchased a total of ¥50 billion in residential mortgages under the scheme—quite a small amount considering that about ¥2 trillion in new residential mortgages is taken out every month. However, the Corporation received 1,044 mortgage purchase applications (an increase of 88% month on month) in November 2004 and 829 applications in the first two weeks of December 2004 alone—a sharp increase in demand (Figure 4).

1 The independent administrative entity will also assume responsibility for managing the Corporation's existing loans and for noncommercial loans (e.g., for disaster repairs).

Figure 4 Mortgage Purchases under the Housing Loan Corporation's Securitization Assistance Scheme



Note: As there is a delay of several months between applications for purchase and actual purchases, there is a lag between the two growth rates.

Source: Ministry of Land, Infrastructure and Transport.

2) More attractive mortgage products and better terms for financial institutions

This upturn in the Corporation's securitization assistance scheme reflects greater efforts by the Corporation itself as well as political pressure (see below). To stimulate demand for mortgages eligible for purchase, which failed to increase as much as had been expected, the Corporation gradually eased the eligibility requirements. For example, in April 2004 it relaxed the criteria on the size of eligible properties to reflect the realities in urban areas, while in October 2004 it lowered the ratio of monthly income to mortgage repayments,[2] which amounted to raising the maximum loan amount. At the same time, it announced that existing homes would also be eligible under the scheme, and in January 2005 it abolished the requirement that existing homes could not be more than 10 years old (Figure 5).

2 The ratio of monthly income to mortgage repayments was lowered from 500%-plus to 400%-plus.

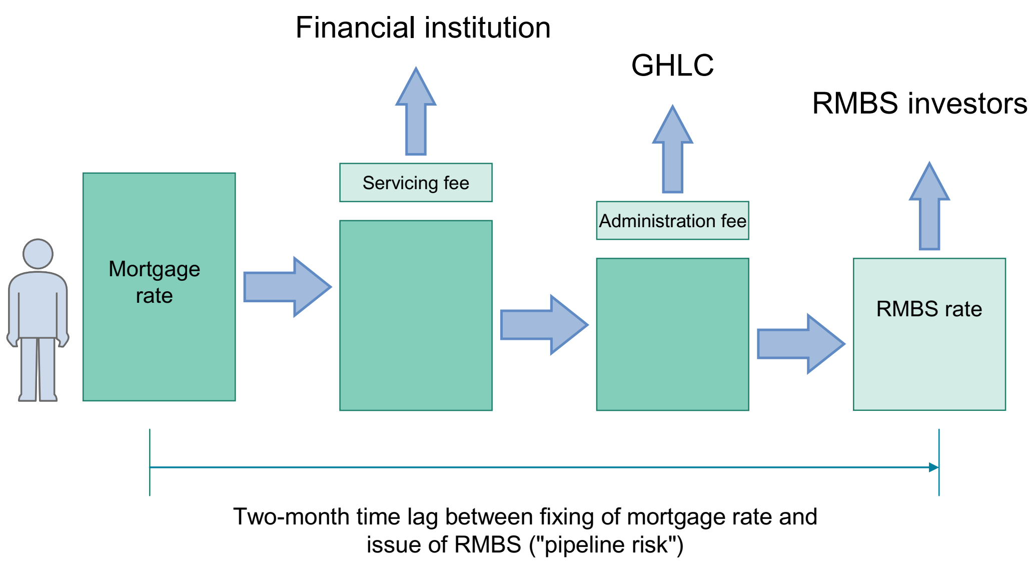
Figure 5 Relaxation of Eligibility Criteria for the Corporation's Purchase-Type Mortgages

1 April 2004	• Plot area requirement (minimum: 100m^2) abolished • Minimum floor space for apartments reduced (50m^2 • 30m^2) • Range of eligible properties extended
1 October 2004	• Existing homes included • Monthly income/repayments criterion relaxed (500%-plus ⇒ 400%-plus)
4 January 2005	• Requirement that existing homes be not more than 10 years old abolished

Source: NICMR, from Government Housing Loan Corporation materials.

However, there was an additional reason why financial institutions were initially lukewarm towards the scheme. The 0.9% administration fee that the Corporation charged to cover its operating expenses was apparently a major disincentive (Figure 6). Although initially extremely reluctant to compromise on this issue, the Corporation has recently been prepared to be more flexible. For example, in April 2004 it announced that it would use part of its administration fee to cover pipeline risk (i.e., the risk that interest rates may rise between the time the interest rate on a mortgage is set and the time the mortgage is securitized), which had previously been borne by each financial institution—in other words, that it was prepared to bear the risk itself. At the same time, it offered to cut its administration fee to 0.8% for those financial institutions that were prepared to continue to bear pipeline risk.

Figure 6 Interest Rate Composition of Mortgages Eligible for Purchase by Housing Loan Corporation



Source: NICMR.

In addition, and in order to stimulate interest in its securitization assistance scheme, the Corporation launched a campaign in which it offered a number of private-sector financial institutions a discount (of 0.20–0.35%) on its administration fee. First of all, in November 2004, it offered to reduce its administration fee for institutions (such as Mizuho Bank, Nippon Housing Loan and Yachiyo Bank) with which it already did a large amount of business; then, in December 2004, it extended this offer to any institution that was prepared to cut its servicing fee.[3] As a result, more than half of the 95 financial institutions with which the Corporation did business became eligible for a reduced administration fee. This proportion increased further in January 2005—probably to about two thirds of the institutions with which the Corporation does business. In turn, the institutions are able to offer their customers long-term fixed mortgage rates of less than 3%—a historically low rate.

The competition in a number of residential mortgage markets is so fierce that institutions are prepared to ignore profit margins and risk in order to offer customers more attractive conditions (e.g., lower mortgage rates and longer rate fixes). The economic recovery has also made consumers increasingly sensitive to the risk that interest rates may rise one day. The sharp increase since last November in demand for mortgages eligible for purchase by the Corporation probably reflects the desire of private-sector financial institutions to take advantage of the Corporation's offer to obtain long-term fixed-rate mortgages that can compete in such a market.

Financial institutions creating and offering their own long-term fixed-rate residential mortgage products have also begun to use the the Corporation's scheme. Goodloan, a member of the Softbank Group that had previously used a securitization scheme operated by Shinsei Bank, has offered its customers mortgages eligible for purchase under the Corporation's scheme since December 2004, while Mitsubishi-Tokyo Financial Group and UFJ, both of which had previously favored their own schemes, have slashed their rates on mortgages eligible for purchase by the Corporation and launched aggressive campaigns to market them. Institutions such as these that previously used private-sector securitization schemes and interest rate swaps to hedge risk would seem to have concluded that their own products, which face cost problems and a shortage of suitable hedging instruments that make it difficult for them to maintain a regular supply, cannot compete with mortgages eligible for purchase by the Corporation at their new reduced rates.

[3] According to Japan Financial News Co. (3 December 2004), the reduction is (1) 0.25% for institutions that reduce their servicing fee to 0.4% or less, (2) 0.35% for institutions that reduce their servicing fee to 0.3% or less, and (3) 0.25% for institutions with a servicing fee of 0.5% or less but which have done at least 100 deals with the Corporation, or 0.35% for institutions which have done at least 500 deals with the Corporation.

II. Housing Policy Reforms That Will Promote Greater Use of Securitization

1. Background to Housing Loan Corporation Reform Bill (2005)

One of the reasons why the Corporation has been so keen since last November to make a success of its securitization assistance scheme is the heated debate that has been going on between the government and coalition parties on the budgetary implications of housing policy before the bill on replacing the Corporation with an independent administrative entity comes before the Diet later in 2005.

On 30 September 2004 the Liberal Democratic Party's Policy Research Council's Research Commission on Housing and Land Policy set up three subcommittees to report, respectively, on (1) how housing finance could be reformed, (2) how the market in existing homes could be stimulated and more done to encourage home improvements, and (3) how social rented housing could be reformed. The three subcommittees reported in November.[4] Then, on 29 September 2004, the Minister of Land, Infrastructure and Transport commissioned the Social Capital Council to report on the regulatory framework that would be needed to implement new housing policies. A sectional committee was set up to draw up basic proposals, and its findings were presented in the form of an interim report on 6 December.[5] On the same day and in response to these reports, the Ministry's Housing Bureau published a report outlining its views on housing reform, while the Ministry and the Corporation published a joint report on how the Corporation could improve its operations during its transition to an independent administrative entity. Together, these reports outline the direction housing policy is likely to take during the next two years (i.e., until the Corporation is replaced by an independent administrative entity).

Those sections of these reports that deal with the residential mortgage market all mention as a current problem the fact that the private sector is now the main provider of residential mortgages and that most of those mortgages are either adjustable-rate or short-term fixed-rate products. Also mentioned is the concern that Japan could face a similar social problem from rising (adjustable) interest rates and ballooning debt as the United Kingdom experienced in the early 1990s, when rising interest rates led to a sharp increase in mortgage arrears and repossessions. Similarly, the reports point out that, while the availability of adjustable rates, short-term fixed rates and fixed rates

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4 "Recommendations of Subcommittee for Reform of Housing Finance: Managing the Transition to a New System of Housing Finance," (19 November 2004); "Recommendations of Subcommittee for Promoting Market in Existing Homes and Home Improvements: Six Proposals for Stimulating Demand for Existing Homes and Home Improvements," (16 November 2004); and "Recommendations of Subcommittee for Social Rented Housing: Five Proposals for Reforming Social Rented Housing" (16 November 2004).

5 Social Capital Council Sectional Committee on Housing and Housing Land, "Intermediate Report on Regulatory Framework for New Housing Policies" (6 December 2004).

offering consumers a wide range of options is in itself a good thing, the question arises whether financial institutions explain the risk of changing interest rates properly to their customers and give them suitable information on long-term fixed-rate mortgages as one of the ways of avoiding that risk.

2. Direction of reform

All the reports mention the need to improve the current securitization assistance scheme and encourage greater use of securitization (i.e., the market function) in order to ensure a steady supply of long-term fixed-rate residential mortgages. They also recommend that the eligibility criteria for existing homes be relaxed to include older properties and that the Corporation's administration fee be reduced. Other proposed reforms include raising the maximum loan from ¥50 million to ¥80 million (from fiscal 2005), securitizing the Corporation's existing loans or issuing more residential mortgage-backed securities,[6] ensuring that consumers are better informed about residential mortgages, and trying to increase the range of mortgage providers to include mortgage bankers and mortgage brokers.

The Liberal Democratic Party's suggestions include a proposal to make refinancing mortgages eligible for inclusion under the Corporation's scheme. If this proposal were adopted, there would probably be a sharp increase in mortgage securitization as home owners switched from their existing private-sector mortgages to mortgages eligible for purchase and securitization under the Corporation's scheme.[7]

At any rate, securitization is likely to play an increasingly important role in Japan's mortgage market as the Corporation's replacement by an independent administrative entity in fiscal 2006 approaches.

[6] The draft budget for fiscal 2005 envisages that the Corporation will issue ¥2,760 billion in Fiscal Investment and Loan Program (FILP) bonds (i.e., mortgage-backed securities), ¥1,500 billion of which will be issued under its securitization assistance scheme and ¥1,260 billion of which will be securitizations of existing mortgages. The main reason for securitizing existing mortgages is to use the proceeds to redeem high-yielding FILP loans before they mature and reduce the subsidies needed to cover the cost of negative spreads. Another reason is to transfer any future prepayment risk to the market. However, the sooner the market in residential mortgage-backed securities expands, the sooner the Corporation's securitization assistance scheme should be able to channel a steady flow of funds into the residential housing market.

[7] As this would have a major impact, there are likely to be major obstacles to implementing it. Recently, however, there has been much talk about the impact on consumers of a rise in interest rates and reluctance of financial institutions to explain the risk to their customers, so it is difficult to predict what direction the debate will take.

III. The Likely Impact of Securitization on the Mortgage Business

1. Securitization set to become the cornerstone of the mortgage business

The aim of the reforms to the mortgage market is to ensure that consumers can choose from a wide range of mortgage products, including long-term fixed-rate mortgages, and that there is a steady supply of such products, largely by means of securitization. The model for these reforms is the US mortgage market, where some 60% of mortgages are securitized.[8] In the United States, the growth of mortgage securitization had a wide-ranging impact on the mortgage business of financial institutions.

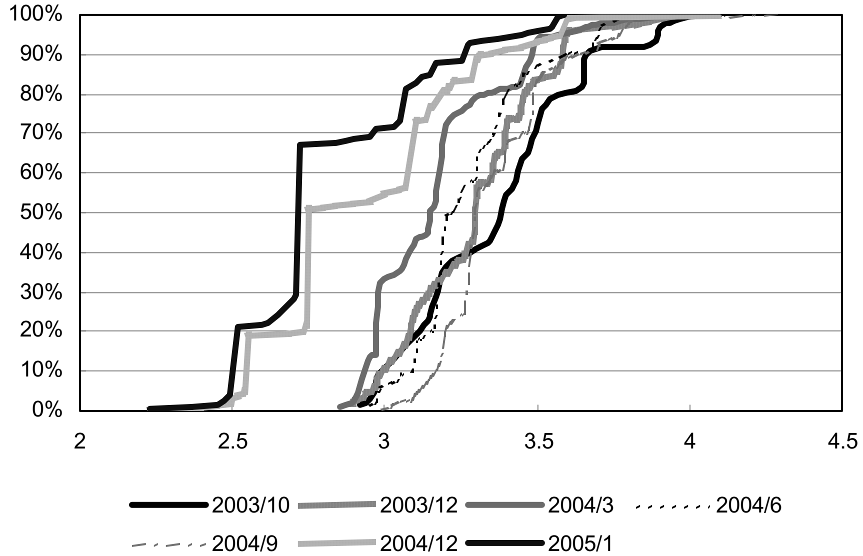
In this section, we will consider the likely impact on Japan's financial institutions of a move towards securitization on a scale similar to that which has occurred in the US mortgage market.

2. Profit margins likely to be squeezed

First, the fact that the mortgages that are securitized have to be standardized makes it difficult for mortgage providers to differentiate their products. As a result, competition is likely to be based mainly on price (interest rates), and profit margins are likely to be squeezed to the bone. Figure 7 shows how the interest rates on mortgages that are eligible for purchase by the Corporation are distributed. Interest rates are plotted on the horizontal axis while the cumulative percentage of financial institutions offering mortgages at each rate is plotted on the vertical axis. The distribution has gradually shifted to the right since the scheme was introduced. In other words, the percentage of low-interest loans has gradually increased. Incidentally, it would appear that the issue rate of the mortgage-backed securities that sets a minimum interest rate for the actual mortgages has virtually never declined during this period, although it did rise at one stage (Figure 8).

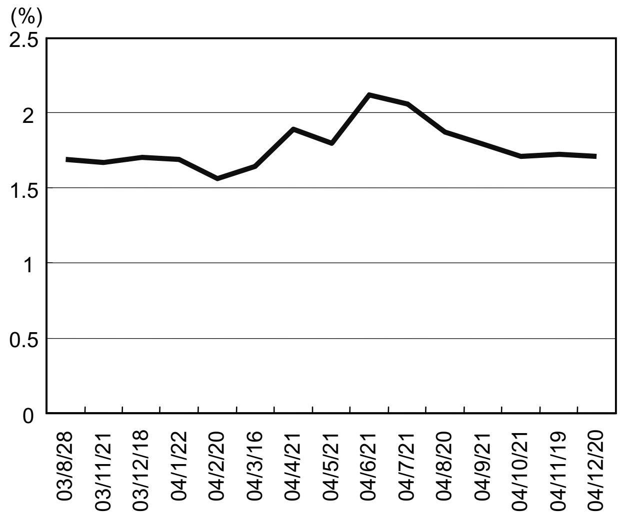
[8] Of the $7,800 billion in mortgages outstanding in the United States as of end-September 2004, $3,400 billion was securitized under government-sponsored entity (GSE) guarantees, while $800 billion was securitized under private-sector schemes. These figures do not include $600 billion in multi-family mortgages.

Figure 7 Distribution of Interest Rates on Mortgages Eligible for Purchase by Housing Loan Corporation



Note: NICMR, from Government Housing Loan Corporation website.

Figure 8 Rate of Housing Loan Corporation Residential Mortgage-Backed Securities



Source: NICMR, from Government Housing Loan Corporation website.

Second, since November 2004 the Corporation has cut its administration fee for those financial institutions with which it does most of its business as well as for those that are prepared to cut their own servicing fee (see above). This is also going to squeeze margins because those institutions that want to offer competitively priced mortgages will first have to cut their own servicing fee in order to be eligible for a lower administration fee.

3. Prepayment risk

Broadly speaking, mortgage providers face three different types of risk: credit risk, interest rate risk (or duration mismatch) and prepayment risk. Of these, prepayment risk has been the one private-sector financial institutions have been least concerned about, but it is likely to become a more significant risk as mortgage providers make increasing use of securitization.

If a mortgage is repaid early, the mortgage provider will face a number of difficulties: it will be unable to recover its origination costs; it will have to reinvest the money; and any hedge transactions it has entered into in order to offset risk will have been unnecessary.[9]

As most private-sector mortgages have traditionally been adjustable-rate products, borrowers have seldom found it necessary to refinance their mortgages with other financial institutions. Similarly, the fact that mortgages from the Corporation have traditionally been for either new properties or first-time buyers has meant that borrowers with private-sector financial institutions could not refinance with the Corporation, either. As a result, they had little need to worry about prepayment risk.[10]

However, the Corporation has now relaxed its eligibility criteria to include existing homes—even those more than 10 years old and previously excluded. Easier access to low-rate mortgages is likely to increase turnover in the market for existing homes. If this then boosts the value of existing homes, owners who had previously refrained from selling because of negative equity may change their mind. A growing number of home owners may therefore repay the mortgages they took out with a private-sector financial institution and switch to a mortgage that is eligible for purchase by the Corporation.

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9 During the period of low interest rates in the 1990s the Corporation was confronted with the problem of prepayment risk. As interest rates declined, borrowers refinanced with private-sector financial institutions. As a result, the Corporation faced a negative spread on its mortgage portfolio and was unable to repay high-yielding FILP loans while the average lending rate on its portfolio continued to decline.

10 Traditionally, new homes account for the bulk of residential property transactions in Japan, and there has been little demand for refinancing from people wanting to move or sell their house. Although differences in useful life as a result of differences in construction methods are partly responsible, the proportion of residential property transactions accounted for by existing homes is extremely low in Japan (12%) compared with the United States (77%), the United Kingdom (89%) and France (71%). Although this is partly a chicken and egg situation, the difficulty of obtaining a mortgage to purchase an old property is considered to have been one of the reasons why the market in existing homes in Japan has failed to take off.

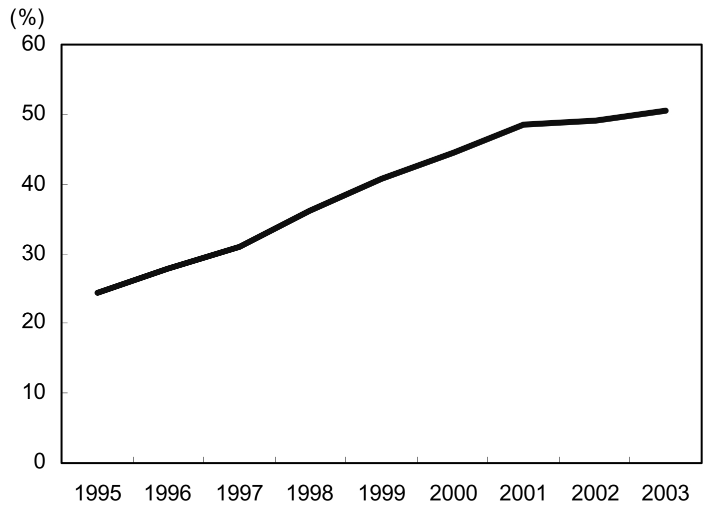
Also, if rising interest rates make it more difficult for borrowers to fulfill their repayment obligations and this threatens to become a social problem, one response could be to extend the range of mortgages eligible for purchase by the Corporation to include refinancing. Depending on what happened to interest rates, this could trigger a wave of refinancing, which could pose a serious risk to those financial institutions that have expanded their mortgage business in recent years.

Although securitization would allow some private-sector financial institutions to pass on their prepayment risk to investors, those financial institutions that also acted as servicers would not be able to pass on all their prepayment risk. This is because their servicing fee is paid out of the borrowers' monthly mortgage repayments and any increase in prepayments would mean a reduction in their future total income from servicing—just as a decline in prepayments would mean an increase in their future total income. In other words, the uncertainty attached to their total income from servicing will remain unchanged.

IV. Future Developments

In the United States, where mortgage securitization is more advanced than in Japan, the response of mortgage providers to lower profit margins and greater risk has been to allow the big players to dominate servicing in order to achieve economies of scale, but to let multi-tier channels develop in origination in order to combine flexibility with efficiency (Figures 9 and 10).

Figure 9 Market Share of Top Ten Servicers in United States



Source: Inside Mortgage Finance: 25 July 2003 (originators) and 1 August 2003 (servicers).

Figure 10 Mortgage Distribution Channels in the United States

	Retail	Wholesale	Correspondents	Direct
Costs	Variable costs: high commission, wages, etc. of sales staff Fixed costs: high outlets, training, fringe benefits, etc.	Variable costs: high Broker commission, etc. Fixed costs: average	Variable costs: low Fixed costs: low	Variable costs: low Fixed costs: low
Product margin	High customers value relationship as well as price	Average have to compete with other purchasers but can differentiate themselves by service to brokers	Low competition with other purchasers is price-driven	High
Productivity per salesperson	Low	Average	High	–
Overall profitability of channel	High fixed costs mean that profitability is sensitive to market conditions	Subject to some refinancing risk, but fixed costs not as high as retail	Subject to some refinancing risk, but volatility is low as fixed costs are low	Volume still low
Cross-selling opportunities	High	Average	Low	High (but passive)

Source: NICMR.

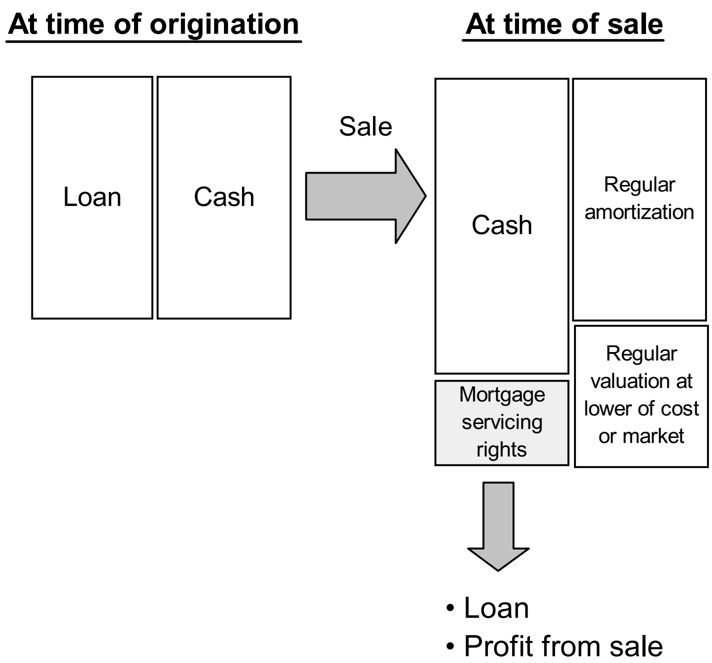
In Japan, servicing rights are almost always retained by the originators. In the case of mortgages eligible for purchase by the Corporation, originators are not even allowed to sell their servicing rights to another institution.[11] If servicing is to become more efficient, provision will have to be made for originators that want to sell their servicing rights to do so.

It is apparently quite difficult to price servicing rights. Furthermore, although Japanese accounting rules allow institutions to treat servicing rights as "mortgage servicing rights" (MSRs) in the same way as in the United States,[12] there is no established method of valuing these rights. In addition, the way they are treated for accounting purposes is different from the way they are treated for tax purposes. As a result, institutions often do not bother to account for them (Figure 11).

11 However, mortgage originators are allowed to outsource so-called "special servicing" (i.e., management and collection of mortgage arrears).

12 Accounting Standards Board of Japan, "Accounting Standards for Financial Products" and "Opinion on Establishing Accounting Standards for Financial Products."

Figure 11 Accounting for Mortgage Servicing Rights



Source: NICMR.

Recently, however, mortgage products have been developed that allow borrowers to pay a lower rate of interest in return for a fee (i.e., a discount point). This basically amounts to calculating the present value of the servicing rights and incorporating this in the price of the product.[13]

Being able to calculate the value of servicing rights will also help investors and regulators to assess the risks and rewards to the financial institutions concerned. Moreover, the kinds of tools that are needed to analyze and hedge against prepayment risk in order to manage mortgage servicing rights are also essential tools for investors. As this technology advances and a wide range of investment tools are developed, the obstacles to investing in residential mortgage-backed securities should be overcome, and the market itself should expand.

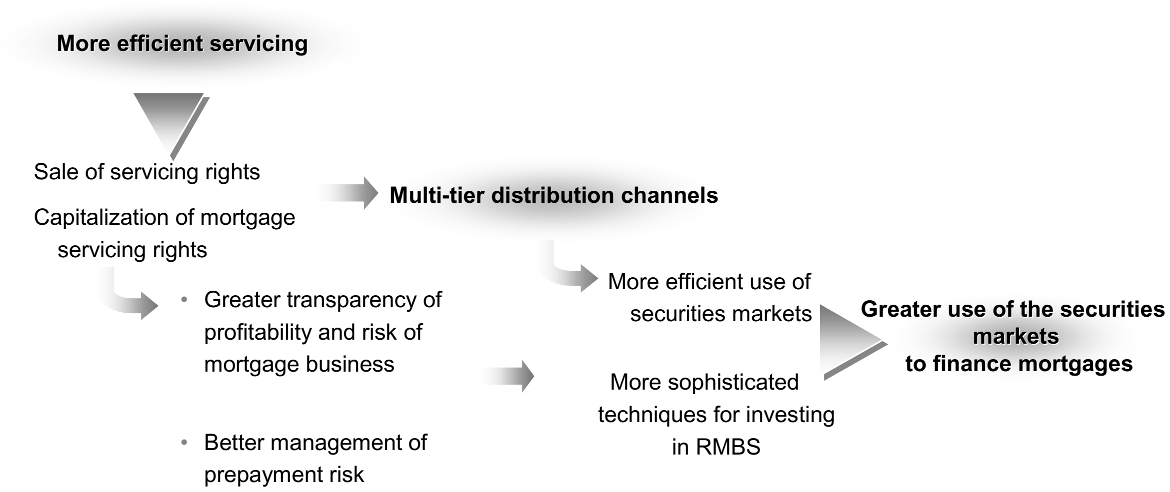
There have been calls for more distribution channels (e.g., in the form of mortgage brokers and mortgage banks). Although the Corporation has started to cut its administration fee for institutions with which it does a high volume of business, the current system does not allow institutions to purchase mortgages from others in order

13 An example of this is the so-called "discount points system" offered by providers such as Goodloan and Nippon Housing Loan.

to resell them to the Corporation. Moreover, it is still rare in Japan for mortgage originators to sell whole loans including servicing rights when these are securitized.[14]

As mortgage securitization becomes more common in Japan, the larger financial institutions are likely to purchase an increasing number of mortgages complete with servicing rights from the smaller institutions, thereby helping to improve intermediation between the mortgage market and the securities markets.

Figure 12 Making Greater Use of the Securities Markets to Finance Mortgages



Source: NICMR.

14 Although there are private securitization schemes (operated, for example, by investment banks) where residential mortgages are purchased from several different private-sector financial institutions, the originators usually hold on to the subordinated portion and the servicing.