

# Risk Management in the Russian Housing Finance System

by Victor Mints

It is well known that it is practically impossible to obtain a housing loan in Russia. Understanding that the country badly needs a housing finance system, the Russian government, international donors and foreign financial institutions are actively working on implementing one. Provision of long-term funds continues to be a major issue in establishing a housing finance system in Russia, but it is not the only issue.

It is not clear yet what type of housing finance system should be established in the country. Various models successfully used in other countries were proposed for Russia and attempts have been made to implement several of them simultaneously. This article argues that all these systems face risks that can't be assessed and managed. For that reason, the housing finance system in Russia can't be promoted unless the models are specially adapted to the country's specifics.

## SYSTEM BASED ON A PORTFOLIO-LENDING MODEL

The portfolio system dominates the mortgage market in most European countries. The major feature is that the financial source

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for mortgage loans is deposits in commercial savings or banks. It was calculated that at the end of 1998, deposits funded 67% of the volume of residential mortgage loans outstanding in Europe, of which 62% were retail deposits in commercial banks.<sup>1</sup>

As a portfolio lender, a bank originates, services, funds and keeps mortgage loans in its own portfolio. The major participants in the scheme are banks and depositors. The banks are subject to credit risk, liquidity risk and interest rate risk. Depositors face the risk of a bank default.

### Credit Risk

Assessment of credit risk in Russia is a very complex issue. Referred to in totality as credit risk, there are in fact two risks:

- Risk of mortgagor's default.
- Collateral risk, or the risk that the bank will not be compensated completely (or at all) for its losses by sale of the mortgaged home.

Default risk management is based traditionally on two elements: assessment of the borrower's credit reputation, and of his financial capacity—the wherewithal to repay the mortgage. The local specific is that both elements can't be assessed in Russia. Credit reputation is based on the person's credit

history. The vast majority of Russia's population has no credit history at all. They never received loans, never used credit cards, have no bank accounts, etc. The credit performance of these people is unpredictable.

Assessment of financial capacity is also problematic. It is usually based on calculation of debt-to-income ratios. Income data of the mortgagor must be known for the calculation. Most of the enterprises in Russia try to reduce taxes on employees' salaries by paying a major portion in cash. Because of that, most of the people can't prove their income.

Russian banks developed several methods of assessing and managing default risk. Unfortunately none of these methods have been considered satisfactory. Because of that, most Russian banks refuse to participate in any mortgage program if they must hold credit risk.

Among the banks that agree to hold credit risk and provide mortgage loans, some provide them only to borrowers employed by companies that are clients of the banks. The companies give their guarantee of timely repayment of the mortgage loans. Companies will do it since they know the actual level of the borrowers' (their employees') income. The banks rely on the guarantees since they are able to assess the financial stability of the guarantor.

Unfortunately, the guarantees are usually provided on the condition that they are valid only while the company employs the borrower. If the borrower leaves the company, the loan loses the guarantee.

Some banks thoroughly investigate every applicant. Special investigation departments are established for the purpose. They study personal habits, contacts, and actual sources of income of each applicant. These investigations are very expensive and time consuming. At the same time, the information on credit reputation collected by the departments is qualitative so the risk can't be actually measured. The decisions based on the information are always subjective.

The most popular method is to provide loans only to people able to prove that the monthly loan repayment will be lower than 35% of their official monthly income and who have enough savings to make a 20% downpayment. (This method in most cases is combined with investigation of applicants or with employers' guarantees or both.)

The method is popular because the loans that meet the above mentioned criterion can be funded by The US-Russia Investment Fund (TUSRIF). TUSRIF is the fund financed by the government of the United States. It is managed by Delta Capital Management Inc. Its housing finance program (the one that provides long-term funds for mortgage loans to the banks) is known as Delta Credit program.

Unfortunately, very few people can officially prove that they have enough income to qualify. The minimum size of the loan TUSRIF finances in Moscow is US\$17,000. To receive such a loan a borrower must prove that monthly income of his household after taxation is US\$786. Average monthly wages in Russia in January 2002, according to official statistics, were equal to US\$127. Only a small group of rich (by Russian standards)

people can qualify for the loans. Because of that, funds are used mostly to finance acquisition of rather expensive housing (including the most expensive and prestigious housing in the country developed by the real estate company Penny Lane).

#### Collateral Risk

The situation with collateral risk is also very complicated. Legal experts have different opinions on whether, based on current legislation, a borrower's family could be evicted in case of default. Many agree that in several cases, for example, if the defaulted family has children, eviction would be impossible. There is no court practice, so it is not clear how long it will take to foreclose even if it happens to be possible. Consequently, the loss per default for a lender is unclear.

Banks try to manage collateral risk by substituting a mortgage loan with a lease-purchase agreement. In order to do this, the bank establishes a special homeowner company. The company buys the house and signs a lease-purchase agreement with the "mortgagor." Loan repayment in this case is substituted by lease payments. The mortgagor (borrower) is not permitted to register as a resident permanently living in the "mortgaged" home. He keeps a different official address (in another city, with his parents, with former spouse, etc.) and can have no claim on the property. In case of the "mortgagor's" default, the home remains in the homeowner company's possession. Since the borrower has another permanent home, there is no problem to evict him from the leased one.

This scheme practically eliminates collateral risk for the bank but presents two risks for a mortgagor. One of them is the risk that the bank and, subsequently, the homeownership company default. If this happens, the mortgagor will have no claim on the property since it never belonged to him. Another risk

to the mortgagor is the risk of his own default. In this case, he will not be able to recover even a fraction of prior "lease payments," even if the default happens after he repaid a major portion of his debt.

#### Interest-Rate Risk

Interest-rate risk is the possibility that the value of the mortgage may change based on changes in market interest rates. This risk is very high in Russia, as it is in all volatile economies. In Europe the risk is lower and is managed mostly by usage of variable interest rates (adjustable-rate mortgages).

It is difficult to rely on variable interest rates in countries with unstable financial situations. While eliminating interest-rate risk, this method seriously aggravates credit risk. A sharp increase in monthly payments may result in payment shock. If it happens, the borrower may find out that he has not enough financial capacity to repay the loan and defaults.

Payment shock can be eliminated with the help of dual-indexed mortgages. Monthly payments are recalculated separately with an index indicating changes in the market interest rate and with the index indicating changes in average wages. The payments are adjusted in accordance with the latter. The difference between actual payments and payments required in accordance with the changes in the market interest rates are added to the loan balance. Thus, the loan may become subject to negative amortization.

It is doubtful that dual-indexed mortgages can be utilized in Russia. The method is very complex and ordinary people having no experience with borrowing will not be able to understand it. How they will react when they find out that their debt is increasing in spite of making regular repayment of the loan is hard to predict.

**Liquidity Risk**

Liquidity risk refers to the ability to sell the asset in a timely manner without materially affecting its value. Non-standardized individual mortgage loans are assets that can't be sold quickly. The buyer should be able to readily price the asset. However, with a non-standardized loan the pricing is costly and time consuming. It means that any bank that borrows short and lends long (in Russia as well as in any other country) faces this risk since deposits can be withdrawn quickly and assets (the loans) can't be converted immediately into cash (at least at a reasonable price).

The magnitude of the risk depends on the time and expenses associated with pricing the loan and the ability to find buyers and the underlying volatility of the market. In order to evaluate the price of the loan, both buyers and sellers calculate the present value of the cash flow and add a premium to cover credit risk, interest-rate risk and future liquidity risk (as well as expenses necessary to appraise the risks).

The cost and duration of the evaluation depends on availability of data necessary to assess the risks. As was stressed above, the information necessary to assess risk is practically not available, so the assessment would be very expensive and time consuming. A high level of interest-rate risk and credit risk increase the likelihood of a low pricing of the loans. In total, liquidity risk tends to be extremely high in Russia.

**Risk to Depositors**

Depositors bear the risk of bank default. After the banking crises of 1998, all Russians consider this risk as very high. The law providing government guarantees on deposits is not approved. Knowing that the risk of bank default is very high, the government is also reluctant to take the risk.

The combination of all these risks makes a system based on portfolio lending practically impossible in Russia. Due to high credit risk, banks are unwilling to provide mortgage loans unless they are in a lease-purchase form. Due to the risk of default of homeowner companies and of losing all "lease payments" in case of their own default, mortgagors are unwilling to agree to lease-purchase schemes.

Due to bank default risk, depositors are not making long-term deposits (only three banks now have three-year deposit programs; others accept only one-year deposits). Trying to reduce liquidity risk and interest-rate risk, the banks provide only short-term loans or add high premiums for longer-term loans. If banks provide mortgage loans from their own resources these loans usually are in the form of lease purchase agreements, and have no more than three years term, with rates above 20%.

There is very low demand for these loans. They can't compete with the loans at 15% interest for 10 years that may be obtained in one of the 15 banks receiving long-term funds from TUSRIF under the Delta Credit program.

These loans dominate the market in the two biggest cities of Russia: Moscow, with a population of about 10 million; and Saint Petersburg, with a population of about 5 million. In April 2002, Delta Credit's website of the program [www.deltacredit.ru](http://www.deltacredit.ru) reported that the fund had financed US\$20 million of mortgage loans (approximately 1,000 loans). Since commencing its operations in 1997, practically all loans were provided in Moscow. This constitutes the lion's share of the small Moscow mortgage market. According to Russian statistics published in the newspaper *Vedomosty* #214 (November 21, 2001), the total amount of mortgage loans allocated by banks in Moscow by November 2001 was only 1,236.

If loans are provided under the Delta Credit program, the interest-rate risk and liquidity risk is transferred from the banks to TUSRIF. Risk of the commercial bank default is also transferred to TUSRIF (from depositors). The credit risk remains to be managed by the banks. Since TUSRIF operates with a U.S. government grant, the risks transferred to the fund are actually held by the U.S. government (and tax payers).

In general, it may be said that the system is developing but mostly within the following limits:

- The number of rich people with high official wages that qualify for the TUSRIF (Delta Credit) loans.
- The willingness of the U.S. government to accept liquidity risk and interest-rate risk associated with provision of mortgage loans to these people as well as bank default risk.
- The ability of the banks to assess and hold the credit risk.

**SYSTEM BASED ON A SECONDARY MORTGAGE MARKET MODEL**

Numerous experts advocate a system based on the secondary mortgage model (the system that dominates the U.S. market) as the best possible solution for financing housing in Russia. In accordance with the model, a bank or mortgage company (the lender) originates mortgage loans, then sells them to an institution called a mortgage conduit. The conduit finances acquisition of the mortgage loans either by issuing its debt obligations to investors or securitizing the loans (i.e., bundling them into mortgage-backed securities—MBS) and selling the securities to investors. The conduit may or may not guarantee against the mortgages going into default. The lender services the loans and remits the payments via the conduit to

the investors (minus the lender and the conduit margins).

There are three major groups of participants in the scheme: lenders, conduits and investors.

The major risk lenders hold is pipeline risk. The major component of the risk is that the interest rate required by the conduit may change between the time of offering the conditions of the loan to the homebuyer and shipment of the loan to the conduit. This risk is easy to quantify based on the rules of the conduit (e.g., how long does it lock the rates). The lender must also warrant that it complies with investor guidelines in underwriting and servicing the loan.

The risks that investors hold depend on the type of debt issued by the conduit. Current Russian legislation does not allow MBS, so a conduit can issue only straight debt. This will be changed soon. The law on mortgage securities is already prepared and before long it will be presented to Duma (parliament) for approval. If the conduit issues an MBS and does not provide its guarantee against credit risk, investors hold all the major risks: credit risk of the mortgagors, interest-rate risk and liquidity risk. They also bear the risk of the conduit default.

It is harder for investors to assess credit risk in Russia than for the lenders. An investor buying an MBS is purchasing a pool of loans with similar characteristics. Based on these characteristics it must assess the probability of defaults. In Russia, it may rely on two characteristics: downpayment and official income of borrowers. Investors can't base their decision on the data characterizing credit reputation of the borrowers. Information provided by credit bureaus are not available and the information that banks have can't be used because of its informal and subjective nature.

This means that the credit risk borne by the investor in the case of the secondary mortgage market model would be higher than the credit risk to the bank in case of the portfolio lending model. The investor may be freed from credit risk if the conduit provides the guarantee against it or in case the conduit issues the straight debt. The conduit will hold the risk in that case. Since the conduit does not have more information than the investor does, the risk will not be lower. The only difference is that the spread will be added to the conduit margin and not to the investor's.

A new method was developed recently in the U.S. that keeps credit risk with the lender. The method is called Mortgage Partnership Finance (MPF) and was developed by the Federal Home Loan Bank of Chicago.<sup>2</sup> The general idea of the method is that the conduit receives from the lender a guarantee against default. The conduit pays the lender for the guarantee.

This method might be very useful in Russia but it has two serious shortcomings:

- The method is very complex and can hardly be used in a country that has practically no housing finance experience at all.
- Although the borrower default risk to the conduit (or the investor) is eliminated, the risk of the bank default increases because the bank's first loss position disappears.

Since very few Russian banks have a credit rating, constant analyses of the financial situation of the banks would be needed to manage the risk. Specifics of the accounting principles in Russian banks (international standards are not used yet) make the analyses very complicated, expensive and often subjective.

Investors face two forms of interest-rate risk. One of them is the risk of reduction of the

security value in case of a market interest rate increase. Another one is the risk of prepayments which may take place in case of a market rate decrease (in case of straight debt, the prepayment risk is kept by a conduit). To some extent, some investors may be protected against prepayment risk if the MBS is issued in the form of collateralized mortgage obligations—CMO (also known as real estate mortgage investment conduits – REMIC in the U.S.). The CMO reallocates prepayment across the securities. Its use depends on the ability to find some investors willing to take more risk, reducing the risk for others. However, this form of MBS does not protect against massive prepayments in case of sharp decreases in interest rates and is too complicated to be implemented as a first form of MBS in Russia.

Liquidity risk to an investor refers to the ability to turn the security rapidly into cash. There may be two reasons for low liquidity. Investors may be unfamiliar with the security and need to spend time and money to assess it. This will definitely be the case if any Russian conduit starts to sell securities. Liquidity may also fall if the risk of conduit default increases. This risk depends on what particular institution is a founder and a guarantor of the conduit. The interest rate required by investors will fluctuate in accordance with the guarantor's credit rating fluctuations.

Different schemes for establishing conduits are currently under discussion or at the stage of implementation. According to one of them, the conduit is going to be guaranteed by the city of Moscow; according to another, by the government of the Russian federation. The third alternative is to establish a conduit as a company guaranteed by an international financial institution or even by the U.S. government. The highest liquidity risk will be in the first case, the lowest in the last one. In any case, the risk is measurable be-

cause all the potential guarantors trade their debt obligations on the market.

If a conduit adds its guarantee against credit risk to the security or issues straight debt, it bears credit risk, pipeline risk and prepayment risk (only in case of straight debt). Prepayment risk arises if the conduit will not be able to call its obligations if mortgagors refinance their loans. The pipeline risk is the risk that interest rates may increase between the moment the conduit starts buying mortgages from the banks and the moment it collects enough to combine a pool for sale.

Banks are anxious to see the system put into operation. For them the system provides the opportunity to get rid not only of interest rate and liquidity risk (that they can transfer now to TUSRIF) but of credit risk as well. Several institutions with the conduit status are established already. Among them are Federal Agency for Housing Mortgage Lending and several local agencies (Moscow Mortgage Agency, Irkutsk Mortgage Agency, Ufa Mortgage Agency, etc).

Nevertheless, the system is not developing. Existing agencies used the funds provided by the government to buy several loans and then canceled their operations. Financial institutions ready to assume the role of an investor or a guarantor of the conduit and to accept all the associated risks have not been found yet. International organizations are not willing to guarantee a conduit because of the risks associated with that activity. The federal government, in spite of the high risks, decided to provide guarantees for the Federal Agency for Housing Mortgage Lending but only in the amount of 2 billion rubles (approximately US\$70 million).

In January 2002, Delta Credit announced that it would soon start buying mortgages from one of the banks (United Industrial Trade Bank). The size of the program and how this buying will be refinanced is not

clear yet. If the loans cannot be sold or securitized, the ability of Delta Credit to keep the role of a conduit will be limited to the amount of funds provided by TUSRIF.

#### SYSTEM BASED ON MORTGAGE BOND MODEL

The Law on Mortgage Securities that will be presented to Duma for approval in the near future will introduce not only MBS, but mortgage bonds as well. This will create the legal background for establishing a system based on a mortgage bond model.

In order to fund mortgage loans, banks issue mortgage bonds—specific bank debt securities that are covered as collateral by corresponding mortgage loans. In case of the bank's default, a mortgage bondholder has the privilege of covering his losses from these assets. Sufficiency of values of the assets to cover the mortgage bonds (for the entire duration of bonds) is subject to strict government control. An investor, or holder of a mortgage bond, enjoys a degree of special security in comparison with the holder of a similar "ordinary" bond that is not backed by mortgage loans.<sup>1</sup>

Major participants of the scheme are banks and investors. Banks are subject to credit risk, liquidity risk and interest-rate risk (in the form of pipeline risk and prepayment risk). Investors hold liquidity risk, interest-rate risk, and risk of the bank default. All the risks (but the risk of the bank default) are similar to the risks associated with the portfolio lending model and the secondary market model. The bank default risk has specific nature.

The risk of the bank default in the case of the mortgage bond model is reduced by the inverted value of the mortgagor's credit risk. If, for example, the mortgagor's credit risk is infinitesimal (i.e., if it is 100% guaranteed that in case of the bank default the bondholder suffers no losses at all), the bank default risk approaches zero. The in-

vestor in this case will not care about the bank's credibility.

On the contrary, if it is known that in case of the bank default the mortgagor will immediately stop repaying his loan and it will be impossible to evict him (i.e., if the mortgagor's credit risk is extremely high), the risk of the bank's default will practically not be reduced at all.

It means that in order to evaluate the bank's default risk, the investor (buyer of a mortgage bond) will need to assess not only the credibility of the bank, but the credit risk of the mortgagors as well. The problems associated with these assessments in Russia were discussed above.

It seems that investors will not consider Russian mortgage bonds sufficiently less risky than "ordinary" bank bonds. It means that until data enabling the assessment of credit risk is accumulated and studied, the demand for mortgage bonds in Russia will not be much higher (and yield will not be much lower) than for "ordinary" bank bonds. It is doubtful that the system in this situation (if created) will develop.

#### CONTRACT SAVINGS SYSTEM

Efforts to establish a contract savings housing finance system have been started in Russia recently. The activity is headed by a group of German Bausparkassen institutions. The purpose is to establish a copy of the contract savings system that exists in Germany and Austria (recently established in Slovakia, Czech Republic and Hungary). The loans in the system are provided by special contract savings institutions [Bausparkassen] only to the depositors of the institutions. The depositors become eligible for the loans upon saving a certain minimum (in most cases in fixed monthly installments) through a prescribed minimum saving period. The sources of funds for the loans are the deposits. A

homebuyer receives a government subsidy with a loan.

There are three major groups of participants in the scheme: mortgagors-depositors, contract savings institutions and the government.

A major specific of the system is the absence of interest-rate risk. Interest rates on contract savings loans depend only on interest rates on contract savings deposits. Both are fixed and independent of market interest rate fluctuation.

Besides eliminating interest-rate risk, the contract savings system provides a real opportunity to measure and manage the borrower's default risk (one of the credit risk components). Adequate information on every borrower is obtained while he is a depositor. "By saving regularly over an extended period of time, a household evidences financial responsibility which may signal reduced credit risk."<sup>3</sup> The person's ability to provide saving payments in even monthly installments during the saving period may be used as a confirmation of his ability to make equal loan payments during the loan repayment period.

Unfortunately, it is not clear how to manage the collateral risk (another component of the credit risk) when implementing the contract savings system in Russia. Mortgagors would be unwilling to accept the lease-purchase scheme. The only way to manage the risk is to add to the interest rate the spread depending on the probability of default and on potential loss per default.

It was explained above that neither the probability of default, nor the potential loss per default, are known. There is no court practice yet. If it is found out that eviction is impossible, it may be that some people will decide to get mortgage loans with no intention to repay them. In this case, both the default rate and potential loss per default will be

very high. That, in turn, will require a high risk premium.

A depositor-mortgagor holds the risk of the contract savings institution default during the saving period and the risk of the inability of the contract savings institution to provide the loan at the end of the saving period. He also bears the risk of the government deferring the subsidy.

The risk of the default of the contract savings institution may be managed by rigid norms regulating conditions of loans and deposits and guaranteeing that there is no asset/liability mismatch. However, even very rigid norms can't guarantee that the contract savings institution always has enough funds to meet loan demand.

The system works well in the case of equal or increasing inflows of depositors. If the inflow decreases, shortages of funds arise and the contract savings institution becomes illiquid. The risk may be managed by establishing a liquidity facility that provides loans for contract savings institutions during the periods of shortages. If the facility is not established (as is the case of Germany), the risk is transferred to depositors. The latter may be forced to wait for an uncertain period of time before the contract savings institution receives enough funds from inflows to provide the loans.

Specific to Russia is that transferring the risk to depositors presents another risk—risk of losing trust. This is the risk that depositors may consider the contract savings institution a "pyramid company."

A pyramid company attracts private savings by promising a high yield, provision of goods at below market prices, etc. Most of such companies fulfill their promises for their first group of clients by utilizing funds provided by the clients that join the company later. These companies typically attract large initial savings inflows, enabling them to fulfill their obligations. As soon as the new saving

flow starts to decrease, the company becomes illiquid and stops the payments, provision of goods, etc. Thousands of Russians already suffered from such companies and lost all their savings. Thus, Russians became very suspicious of financial companies collecting savings, and the risk of losing trust is very high.

Risk of losing trust is the risk that as soon as a contract savings institution asks the first client to wait for the loan, it will be considered a pyramid company. The result may be a massive withdrawal of savings and, in the worst-case scenario, bankruptcy of the contract savings institution.

The risk of deferring government subsidies is also very high in Russia. This risk can be measured by assessing previous government behavior. Analyses conducted by the World Bank in 2000 showed that, since 1992, federal and regional governments were constantly deferring payments of salaries to government employees, transactions, subsidies, government pensions, etc.<sup>4</sup> There is no reason to believe that the situation with subsidies to homebuyers will be different.

The contract savings system has several advantages when compared to the other proposed systems. This is the only system in which it is possible to manage interest-rate risk and borrower default risk. It also makes it possible to manage the risk of contract savings institution default and the risk of not proving the mortgage loan on time, though management of these risks requires establishment of a liquidity facility and rigid government regulations.

The major shortcoming of the system is that two risks remain impossible to assess and manage. These risks are collateral risk and risk of government subsidy deferrals.

The system has a greater chance to be developed than the other systems because it facilitates improved management of basic

risks. At the same time, the existence of two risks that can't be managed make the chances of the system development problematic.

**THE BEST POSSIBLE ALTERNATIVE**

It seems logical that in order to adapt the contract savings system to the local conditions, there must be a way to manage the two remaining risks (collateral and deferrals of subsidies). The question is how to do it.

The best way to eliminate the risk of subsidy deferrals is to eliminate the subsidy. No subsidy—no problem. In Germany the contract savings system existed from its foundation in 1920 until 1952 without subsidies. Subsidies became necessary only when other borrowing and saving alternatives developed and the system started to compete with the other housing finance systems. Without subsidies, it would probably lose to the competition and become extinct.

On one hand, it means that with the current situation in Russia there is no need to waste money on subsidization since there is practically nothing to compete with the system besides Delta Credit—the TUSRIF program in Moscow and Saint Petersburg supported by the U.S. government. On the other hand, it means that if the subsidies are provided, when other housing finance systems later become available, the contract savings system will hinder their development as a government-supported competitor much the same way as the TUSRIF program hinders the development of the contract savings system.

Management of collateral risk would be possible if the contract savings institutions were established in a mutual form. If they were depositor-owned institutions, the risk would be managed not only legally but also socially. If any mortgagor in default decided to remain in a mortgaged home using loopholes in the law, he would deal not only with the court but also with his neighbors—depositors of the

contract savings institution. If the institutions were depositor-owned, the depositors would consider the person in default as the one who tries to steal their money.

Establishing the contract savings system as a mutual contract savings system with no subsidy seems to be an alternative that would make it possible to manage all the major risks associated with housing finance in current Russia.

This establishment is not an easy thing to do. As in the case of traditional contract savings model, rigid norms and regulations should be implemented. A liquidity facility should be established and funded.

Licensed processing companies could provide services for the mutuals in accordance with the rigid government regulations. In Germany, such specialized companies often do processing for Bausparkassen.

It is not clear how to establish these organizations. Processing companies should be private entities. At the beginning, they probably could be mostly foreign companies already involved in similar activities. It seems reasonable that a liquidity facility should be owned by the contract savings institutions and by the government. At the first stage, it may have only government guarantees. Resources of the contract savings institutions may be added later. It should be taken into account that at the initial stage of the contract savings system development, all the institutions will have very high liquidity because more people will be at the stage of saving than at the stage of borrowing. The risk will be low. A liquidity facility may not be used at all for a while, but it should exist since the risk of losing trust must be faced.

The problem is that development of the system will prepare the basis for its own elimination. Its progress supports creation of competing systems by providing the means for other institutions to measure risks. When

people develop a credit history with the help of contract savings loans and deposits, the commercial banks will get the opportunity to measure borrower's default risk. Foreclosures on the defaulted contract savings borrowers will make it possible for the banks to manage collateral risk. Stabilization of the economy with increasing amounts of savings will reduce interest-rate risk and bank default risk. What will happen to contract savings institutions then?

There are several alternatives. It may happen that some of the mutual contract savings institutions will be converted into stockholder-owned mortgage banks and will finance loans by issuing mortgage bonds. It is possible that liberalization will take place and some contract savings institutions will start providing other services besides housing loans and will convert themselves into retail banks (or consumer-oriented banks). And there are high chances that some of them will keep their nature and remain local mutual contract savings institutions, accumulating savings from the neighbors and assisting them in acquiring new homes.

**NOTES**

<sup>1</sup> Judith Hardt. "Recent Developments in European Mortgage Markets," *Housing Finance International*, December 2000.

<sup>2</sup> Pinto A. Drebentsov V, Morosov A. "Dis-mantling Russia's Nonpayment System: Creating Conditions for Growth." World Bank Technical Paper Series, 2000.

<sup>3</sup> Alex J. Pollock. "A New Housing Finance Option in the USA: MPF vs. MBS," *Housing Finance International*, March 1999.

<sup>4</sup> Michael Lea, Bertrand Renaud. "Contract Savings For Housing: Suitability to TSE Financial Reforms." November 1994. World Bank working paper.