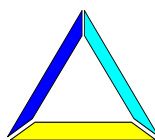


Contractual Saving Schemes in Ukraine

Kyiv, November 2004

INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING



**GERMAN ADVISORY GROUP ON ECONOMIC REFORMS
WITH THE UKRAINIAN GOVERNMENT**

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1 Opening of the Round Table

Dr. Ricardo Giucci

German Advisory Group, DIW Berlin

Ukraine needs more and better housing. About a third of the population lives in poor or inappropriate housing conditions. There is a huge demand in the population for new buildings and for renovating old ones. However, the access to long-term and affordable housing loans is rather limited and expensive. There are two main reasons for this. First, home builders are commonly not able to offer a collateral, which is safe enough. As a result, banks hesitate to provide loans. Second, most commercial banks themselves do not have access to cheap long-term refinancing.

Thus, the question arises how this unsatisfactory situation could be improved. From my point of view, the main approach should be the further development of mortgage lending in Ukraine. As soon as the legal and economic environment for mortgage lending will improve, home builders' access to credit will progress considerably. Loans could be safely covered by first rank mortgages on the apartments and houses owned by borrowers. Ukrainian banks, in turn, would be empowered to obtain cheaper refinancing by selling related mortgage securities on the capital market.

Nonetheless, mortgage lending cannot be the only answer. Credits obtained through mortgage contracts will, in most cases, not provide the total necessary funds to actually build a house or flat. Home builders still need to accumulate a certain share of overall costs through savings. Consequently, the housing market needs complementary financial instruments of long-term savings. One possible instrument, which enables households to build a financial base for their housing projects, are contractual saving schemes. These schemes cannot substitute the crucial system of mortgage lending, but they are a fine complement to it.

Thanks to contractual saving schemes, banks and their customers can develop a rewarding long-term relation of mutual trust. Instead of rejecting customer's credit requests categorically, a bank may offer a saving scheme to its client. Such a scheme involves a promise by the bank to concede the desired loan at a specified point in time in the future (i.e. in 5 years). In return for such future loan guarantee, the customer will have to pay a monthly sum into a specific bank account. The interest rates on a saving scheme account will be certainly lower than that of comparable saving investment on the market.

Due to their characteristics, contractual saving schemes will solve the two main problems for Ukrainian banks while providing housing loans, namely, the lack of bank safety and the bank's difficult refinancing conditions. Firstly, as a result of regular payments, the customer will create its own

credit history and signals strong financial credibility. The longer and better a client's credit history is, the more apt a bank will be to grant a loan as the risk of failure decreases considerably. Secondly, the regular pay-ins of contractual savers will provide the bank with an excellent source of funding to grant loans to those ready to start their housing project at the end of their savings phase. The closed circuit of finance which is inherent in such a system diminishes the dependence on external refinancing substantially.

Summing up, contractual saving schemes can clearly contribute to improve the population's access to long-term and affordable housing loans in Ukraine. However, such improvement will only be possible if a proper and solid system will be put in place. In this context, an appropriate regulatory and supervisory framework will be of primordial importance. Dr. Roy from the German Association of Private Bausparkassen will explain in detail, how to construct a solid system taking into account the characteristics of Ukraine. We hope that this Round Table will contribute to the establishment of a solid system of contractual savings, which will in turn enhance the well-being of the Ukrainian population.



2 General Principles of Contractual Saving Schemes and Selected Examples

Friedemann Roy

Association of Private Bausparkassen

2.1 Contract savings schemes for housing (bausparen) in an emerging markets context

Housing is an endless topic for dinner party chats in Ukraine as well as in Germany. This is not surprising since housing is often the single biggest component of their wealth. For example, housing in Western Europe accounts for as much as 30 – 40 % of total household wealth. If people do not have a house, there is a strong desire to have one (or at least to renovate the own house). In this context, the question of how to finance such transactions is raised, which is in a strong correlation with affordability, in particular for low to middle income groups.

When do bauspar systems appear suitable to implement in emerging housing finance systems?

- **Affordability:** the Department of Housing and Urban Development (USA) defines “affordable housing” as a home which costs less than 30 % of a family’s income in either rent or a monthly mortgage. When households pay more than 30 % of a family income, they tend to skimp on other necessities, such as health care. Poor access to housing loans, especially for low to middle income groups, is usually caused by:
- **Ill-functioning legal conditions:** the existence of a working legislation and stable institutions (e.g. Central Bank) are an essential prerequisite for a functioning banking sector. As for housing finance, incomplete land registries, for example, make it rather difficult to convert property into liquid funds through a mortgage (since there is no clear, registered title to the land and the registration of the mortgage in the land register).
- **Underdeveloped retail financial markets:** a poorly developed banking sector lacks the capacity of providing long-term capital for long-term investments. Often, property value monitoring is hardly achievable. Thus, banks hesitate to enter into housing finance.
- **One consequence of an ill-functioning banking sector is an absence of long-term savings/low official savings ratios.** In addition, other institutional long-term investors (pension funds, insurance companies etc.) remain underdeveloped. Coupled with that, people prefer to put their savings into “shoe-boxes” instead of channelling them into the banks, which could use these funds to finance medium/long-term housing investments. To give you an example, experts estimate that the shoebox money in Russia amounts up to USD 20 billion – 50 billion

(in foreign currency, as a result of the financial crisis of 1998 because the confidence in the stability of the Ruble is still limited).

- Income: typically, the residential mortgage markets in transition economies are characterised by vast differences between house prices and incomes of the citizens. In addition, banks face substantial difficulties taking into consideration the legal, but undeclared incomes when assessing the creditworthiness of the potential borrowers. However, these incomes account for a considerable share of private household revenues.

In conclusion, we may identify three main reasons why market based long-term finance for housing is difficult to obtain in transition economies, especially for middle and lower income groups:

1. High inflation rates have been so far an obstacle for long-term savings. As a result, banks lack long-term funding sources in order to finance long-term projects (e.g. housing).
2. Ambiguous attitude of banks towards property as collateral; foreclosure is often difficult.
3. Banks focus on corporates. Retail banking is limited to selected customers (higher income groups) and few transactions/services (e.g. credit cards, payment cards, consumer loans and payment services).

How can baspar systems offer a solution to combat housing shortages?

With rising economic growth, demand for housing also increases in Ukraine. In this context, baspar systems may help mitigate housing shortages and improve housing affordability. Before implementing baspar systems, answers to the following questions should be found:

- When are baspar systems likely to be successful in mobilising long-term savings for housing? Why will a household (especially middle and lower income groups) conclude a baspar-contract? When is a baspar-contract attractive for them?
- How do baspar systems react under changing macroeconomic and financial market conditions? When will a bank offer baspar-contracts?
- Which risks does the baspar system entail, both to the banks that offer them and to the government that support them? How do baspar systems contribute to the development of financial markets and the housing sector? What kind of difficulties do financial authorities face in regulating basparkassen?

The objective of this paper is to give you an answer to these questions raised. In addition, the answers will be supported by examples of already existing baspar systems.

2.2 How do baspar systems work?

The baspar system offers a dedicated loan-linked form of saving. It links a phase of contractual savings remunerated below market interest rates to the promise of a housing loan at a rate fixed below market at the time of the conclusion of the baspar-contract. Originally designed to provide long-

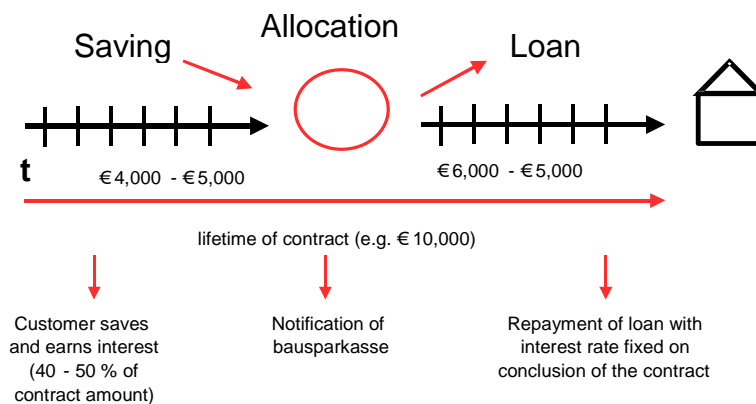


term funds to be specifically channelled into the housing sector at a time when long-term finance was not available and reconstruction was a national priority, baupar systems have won a positive record in continental Europe.

In general, the baupar contract is designed in a way that the accumulation of savings is linked to a loan offer. Thus, we can differentiate four elements:

1. Conclusion of the contract with the following items such as specific contract sum (in our example € 10,000), savings rate, repayment rate, interest rates for the savings and the loan etc.
2. Savings period: up to 40 – 50 % of this amount will be saved (= € 4,000 - € 5,000) in monthly instalments. The use of the funds is restricted to housing purposes.
3. Allocation period: in general, the customer saves for 3 or 5 years, before a loan offer will be made to him. Once the customer has completed the savings period, he is entitled to a loan. The size of the loan is usually the difference between the contract sum and the amount saved (e.g. in our case € 6,000 - € 4,000). Since the baupar system is managed as a closed system, banks can only allocate those saved funds in form of loans to the customers, which the banks have previously collected. Hence, customers are subject to a waiting period the length of which depends on the availability of funds. The challenge for the bauparkasse in managing such an “allocation pool” is to balance fluctuating inflow and outflow of funds in order to meet all the future loan demands of the customers within a reasonable time span. Short and consistent waiting periods are an important factor of the attractiveness of the system. Therefore, specific queuing rules determine the sequence of the loan disbursements to the customers.
4. Loan period: the customer repays his loan on the basis of the agreed interest rate.

Graph 2.1
How do Baupar Systems Work?



A sound financing structure for a home

In Germany, you will regularly find the following financing structure: a combination of a bauspar loan and a mortgage loan has appeared as a good solution of a balanced financing structure of a home. The bauspar-funds which account for roughly 30 % of the purchase price of a home supplements the mortgage loan (50 % of purchase price) and the down-payment (20 % of purchase price). The bauspar system has a complementary function.

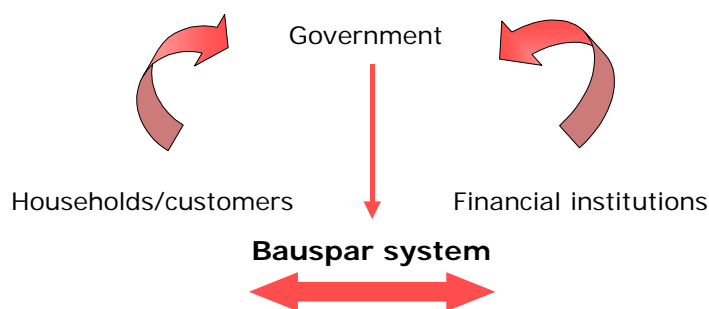
Conclusion: From a financial perspective, the bauspar contract introduces an option component to the contract. The customer has the right, but not the obligation, to call a loan at pre-specified terms from the bank. Since there is no free lunch, the price for the option is the interest rate in the savings period below market and a possible waiting period in the allocation period. This option may be very valuable to the customer for three reasons: the loan is typically at a below market rate, interest rates are fixed over the whole lifetime of the contract for the savings and the loan (safeness of interest rates) and the customer benefits from a simple underwriting process to receive the loan proceeds. This option may be perceived as very valuable in a market where mortgage loans are not yet generally available i.e. capital markets do not work and many households do not have experience with the formal financial sector.

2.3 General features of bauspar systems in transition economies

The different features of bauspar systems will be regrouped according to the participating parties: customers, financial institutions and the government. Each member has different expectations and concerns on bauspar systems (overlaps cannot be avoided):

Graph 2.2

General Features of Bauspar Systems in Transition Economies



Customers' (households') view:

- Credit option of the bauspar-contract: the guarantee of a loan for which the customer does not have to qualify at the time of contract completion may have a significant value for him. He is able to demonstrate his creditworthiness through regular savings, which the



lending bank may regard as a substitute for a lacking credit history. An additional incentive is that banks rarely offer long-term fixed rate loans or offer these only with excessive rates.

- Inflation rate: one precondition for saving activities is stabilising or stable inflation rates. In Ukraine, the inflation rate currently amounts to 8.2 %. A further decrease to 8.0 in 2004 (7.0 in 2005) is expected.
- Financing of renovation or modernisation measures: Since the average amount for these project oscillates around € 3,000 – 6,000, the bauspar loan offers to the customer an interesting alternative because a consumer loan is too expensive. Furthermore, a mortgage bank starts lending from € 50,000 because small loan amounts are not profitable for the mortgage bank.

Financial institutions which want to offer bauspar-contracts:

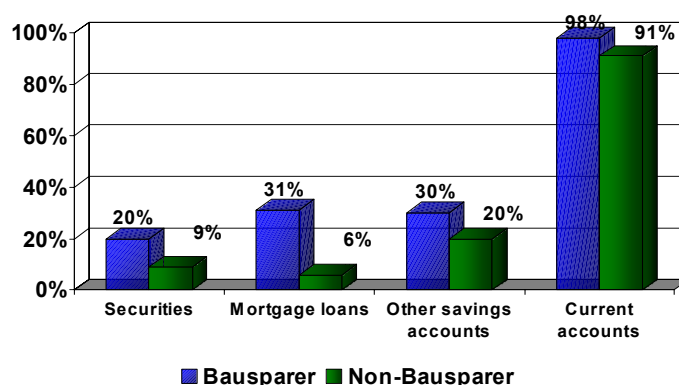
- Credit risk: the greatest attraction of bausparen for lenders probably lies in their capacity to lower credit risk because a successful saver has demonstrated his ability to budget and set aside a portion of income for savings during an extended period (about 3 to 5 years). Such behaviour indicates that he will probably be a reliable borrower, too. As a result, lending to a bauspar-client is perceived as less risky than lending to an average borrower. This assumption can be confirmed by surveys from Germany, which reveal that people with bauspar-contracts show a lower number of foreclosures sales in comparison with borrowers without a bauspar-contract (as per 1998 0.15 %). Moreover, the default rate of the German bausparkassen was about 0.02 % of their entire loan portfolio.
- Liquidity risk in view of volatile inflation rates i.e. interest rates: the key risk of the bauspar system is liquidity risk, or the risk that banks will have insufficient funds to meet future loan demands. The possibility of a cash shortfall arises when the cash from new deposits and existing loan payoffs is insufficient to fund loan commitments (i.e. loans to savers who have completed the savings period). The magnitude of liquidity risk is determined by three factors: First, the duration of the loans and the savings deposits: the longer the maturities of the savings and the loan period the lower is liquidity risk. Second, the loan-to-savings multiple: the larger the multiple, the greater the liquidity risk. Third, the nature of the loan commitment: liquidity risk is lower if the bank determines funding of the loan commitment.¹

¹ Inflation rates have a major impact on the flow of funds into the bauspar system, since the bausparkassen offer savings with a below market interest rate. In order to manage liquidity risk, bausparkassen must ensure continued attractiveness to new savers, which is a function of both the savings return and the availability of loans. However, existing contractual obligations will always be met because the allocation fund is filled up by both the savings and redemption payments. This means, the bausparkasse can also use the proceeds from the allocation fund to pay back the savings. As a consequence, a bausparkasse will constantly adapt the bauspar-product to the changing market conditions (inflation rate/interest rate) in which it operates. Therefore, a bausparkasse needs a concept which allow the banks to modify the conditions of the contract in order to meet future demand.

- Interest rate risk is in a closed baupar-system limited by contract design. Rates on savings and the loan are fixed for the maturity of the contract and do not vary with market conditions. The spread between the interest rate on the savings and the loan is usually 200 - 300 BP, i.e. the debit interest rate is 2 % p.a. and the credit interest rate is 4 – 5 % p.a.² In an open baupar-system (e.g. French épargne logement system) interest rate risk is of greater concern.
- Relationship with the customer: signing a baupar-contract implies that the bank will enter into a relationship with the customer for at least six years and most often for 15 to 20 years. This long-term link allows for the bank to deepen the relationship and to offer various possibilities for cross selling. According to the graph 2.3, German customers who have acquired a baupar product, buy at least two to three additional products from the bank, which sells baupar contracts.

Graph 2.3

Break-down of product use of banks with bauparkassen subsidiary and banks operating without bauparkassen subsidiary in Germany (per 2003)



Government's view:

- Mobilisation of funds: the government views bauparen as a useful tool to mobilise funds in order to promote housing output expansion. Baupar systems are often understood to improve the access to credit for middle and lower income groups because they have the ability to show their financial discipline (through regular savings). In this context, the baupar system can be a means of managing the issue of legal, but undeclared income. To the degree that an individual or couple may sustain a given monthly allocation to savings, they may establish their capacity to sustain a comparable mortgage payment, even if it seems high in terms of their reported salary.
- Subsidies: Governments, which intend to mobilise saving activities, may consider the introduction of subsidies to induce savings activities,

However, modifications should only be applied for the next "saver-generation". Otherwise, confidence into the system will deteriorate.

² Average condition of baupar contracts in Germany.



especially for middle and lower income groups. The underlying rationale for such a policy is that the linkage between savings and accessing an ownership subsidy may prove very efficient in building up the financial resources of the household before owning a house. Bausparen may be one way of achieving this goal. It is evident that other possibilities also exist. Subsidies are also aimed at supporting the transformation of short-term savings to long-term savings and investments. Under these circumstances, the government wishes to encourage housing demand, which should be relatively independent from the development of market interest rates and cyclical motions. The crucial question for the government is the optimum deployment of the subsidies related to budget resources and their effects on housing activities. Two criteria may measure the effectiveness of subsidies: relative and absolute magnitude and potential for distortion.

The introduction of subsidies serves to induce savings activities (start-up effect). However, subsidies should not be used to keep a system running (magnitude). Otherwise, we may observe a substitution effect: people channelling their savings into it in order to receive the subsidy instead of using them for housing purposes. We may then observe rent-seeking effects, which lead to market distortions (potential for distortion). The money once spent in order to serve a well-accepted goal will be wasted. Therefore, the system should be self-sustainable. For example, subsidies should be linked to the use of the funds for housing purposes. If real interest rates are expected to decline and the probability of macroeconomic shocks is judged to be low, a lowering of the subsidy should not be excluded.

- Stability of the bauspar system: long-term obligations require special protection so that customers are willing to entrust their savings to a bank because failures where depositors have lost money may have a lasting impact on the savings willingness and the viability of the institutions which administer them. Furthermore, the stability and attractiveness also depends on how people perceive the government's conception of the bauspar system and how these institutions deliver the loan. Therefore, regulations must ensure that the bausparkassen are well managed.
- Integration of bauspar system in financial markets: the establishment of the bauspar system should be consistent with the trend towards integration of financial markets. Specialised institutions may be viewed as an impediment to integrated financial markets because this approach implies less diversification and reduced cross-selling opportunities. Liquidity must be managed and monitored more carefully because of fewer possibilities to evade macroeconomic shocks. Furthermore, they cause additional costs to the institutional participants because the banks must be separately capitalised and competent staff in the supervisory bodies is needed to ensure the functioning and the stability of these banks. On the other hand, a clear focus may guarantee best that the flow of funds collected by them will be dedicated to housing purposes. Specialised institutions also underline the strict mutuality and transparency of the system: almost all funds come from savers (mutuality) and may be used only for housing loans (transparency).

Since the baupar funds are clearly separated from other activities, the supervisor can monitor flow of funds more easily.

2.4 Examples of implemented baupar systems

The following countries have adopted baupar systems comparable to the German bauparkassen model: Czech Republic, Slovakia, Hungary and Croatia. Operations of bauparkassen have started in Romania in 2004. Outside Europe, the bauparkassen have expanded to India. In China, activities have been launched this year. The introduction of baupar systems has also been discussed in the Baltic States, Bulgaria, Serbia, Belarus, Russia, Kazakhstan, Armenia and Azerbaijan.

Bausparen in Germany

Before tackling the question of how baupar systems have been implemented in housing finance markets and what has been their outcome, I would like to briefly explain why bausparen has emerged in Germany.

Since conditions in Ukraine may be comparable to those in Germany one hundred years ago, the evolution of the German housing finance market may serve as a good example how to present housing finance solution to households, lenders and the government in Ukraine. Berlin, which became the capital of the new Germany in 1870, attracted many investors. Poor housing and working conditions became the rule for the average worker. They lived in the so-called backyards in humid flats (the house at the front of the streets were reserved for the upper class).

Having its roots in the United Kingdom about 300 years ago (Kettley's Building Society in 1775), bausparen provided a sensible solution in view to the severe housing shortage and the restricted access of lower to middle income groups to housing finance. Founded as mutual self-help organisations, these "savings community" became very attractive to the people, which allowed them to regularly save and receive a loan according to pre-determined queuing rules.

Initially, bauparkassen offered complete home financings like ordinary mortgage banks. However, this business model was restricted by the saver's capacity and persistence. These restrictions became even clearer since the waiting periods became longer. Even if the offer of complete home financings was the result of the situation after World War I, the bauparkassen started specialising on loans secured by second ranked mortgages: universal banks and mortgage banks granted mortgage loans up to an LTV ratio of 60 %. Bauparkassen granted loans with an LTV ratio between 60 % and 80 %. The remaining 20 % of the price for a home constituted the down payment. This "division of labour" between commercial banks and mortgage banks (home financings secured through first ranked mortgages) and bauparkassen (home financings secured through second ranked mortgages) has emerged and proven rather successful and was later confirmed by the government in its legislation for mortgage banks and bauparkassen (it is still working in that way today).



It is now interesting to explore how the baupark systems have reacted to the criteria formulated above:

➤ *Households:*

- Attractiveness of product: the market share is roughly 30 % (2002); since 1948, the bauparkassen have disbursed loans exceeding € 700 billion which have been invested in the construction of more than 14m homes. Every third person in Germany has a baupark contract (about 26m contracts). Since the end of the 1990s, bauparkassen have managed to attract a rising volumes of contracts, especially since Germany has fallen into recession because people seek secure investments.

➤ *Financial institutions:*

- Provider: bauparkassen operate as specialised institutions.
- Relationship with the customer: baupark contracts are part of the allfinance strategy of nearly all commercial banks in Germany which shows the still on-going viability of the system.
- Credit risk: despite recession in Germany, the default rate of bauparkassen customers has only risen from 0.02 % as per 2001 to 0.04 % as per September 2003.
- Liquidity risk: bauparkassen are not obliged to fund the baupark-loan at a particular date. The average waiting period for loan allocation is currently zero (after the savings period). Liquidity management may be more transparent because funding beyond the pool will be visible in the balance sheet.
- Interest rate risk is limited by contract design because rates are fixed during whole lifetime of contract.

➤ *Government view:*

- As for mobilisation of funds, the baupark system has proven as an effective tool. Baupark funds were involved in the construction of 13 mln. dwellings since 1948.
- Subsidies: payment is subject to income thresholds (taxable income up to € 25,600 for single person and € 51,200 for married couple). Bonus is 8.8 % of annual savings up to a maximum of € 512 (single person) or € 1,024 (married couple). Thus, the bonus amounts to € 45.06 and € 90.11 respectively. Furthermore, funds are to be placed for 7 years in the bauparkassen in order to receive the subsidy. There are no tax exemptions. Subsidies target lower and middle incomes groups. The payment of the premium is not regulated in the bauparkassen act, but in a different act called the act on savings premium dedicated to housing (Wohnungsbauprämiengesetz). This act is also aimed at supporting other savings models dedicated to housing with a premium. To date, the bauparkassen have been the only financial institutions, which offer such products.
- Stability: the baupark system has contributed to stable financing structures. Even in times of economic decline, no massive rise of

foreclosures sales has been observed. Many banks require a baupar contract for the mortgage loan.

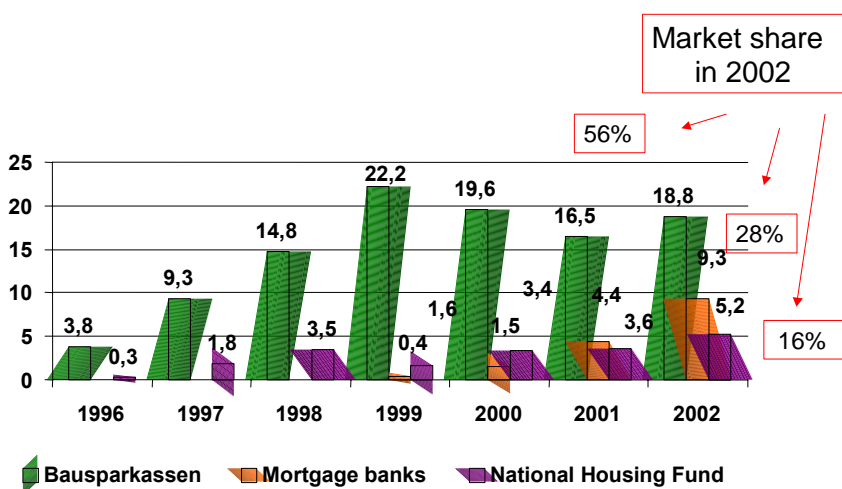
- Integration in financial markets: most of the bauparkassen are subsidiaries of commercial banks what indicates their importance as a distribution outlet.

Bausparen in Slovakia

Housing construction financing is offered by bauparkassen, mortgage banks and the State Housing Development Fund (SHDF), a state-owned entity. The following graph gives an overview about their respective loan delivery (from 1996 to 2002):

Graph 2.4

Housing finance market in Slovakia (1996 – 2002) in billion SKK



Housing Finance Volumes in SKK billion of banks, bauparkassen and the SHDF (1996 – 2002)

Source: OECD, author's calculations

To date, bauparkassen have emerged as the most important providers of housing finance. The 3 bauparkassen, which operate in Slovakia, have achieved a total financing volume of € 2,063.7 mln. The ratio of granted housing loans to the volume of received housing baupar-deposits amounts to 98 %. The figure means that 98 % of savings received (including subsidies) are disbursed in form of housing loans to the customers of the bauparkassen. Interest rates on savings vary between 2 % and 4.5 % p.a. (market rates oscillate between 3 % and 6 % p.a.). Interest rates on baupar-loans fluctuate between 2.75 % and 6 % p.a. (interest rates for mortgage loans between 7.5 % and 9 % p.a. excluding interest rate subsidies). Usually, terms of baupar-loans vary between 8 and 20 years. Funds are used for renovation/modernisation (37%), construction (23%) and purchase of home (40%).

A rising volume of mortgage loans granted through banks and mortgage banks has emerged since 1999 when the government has introduced interest rate subsidies. To date, the subsidised loans have accounted for more than half of all mortgage loans granted. Until the introduction of the



interest rate subsidy, the volume of granted mortgage loans has been negligible (compared to other commercial activities of the banks).

The establishment of the State Housing Development Fund (SHDF) is aimed at extending government aid to the improvement of the housing stock. The SHDF mainly grants advantageous long-term loans and non-recurring bonuses for the construction of dwellings or renovation/modernisation of houses. Since its inception in 1996, the government has channelled through the SHDF funds in the form of direct subsidies of € 288 mln. to Slovakian citizens.

The three participating parties have the following experiences with the bauspar system:

➤ *Households:*

- Rising contract volumes and loan disbursements show a wide acceptance of the population. About 60 % of the bauspar customers conclude a new contract after completion of the previous contract. Bausparkassen are considered stable.
- Attractiveness of product: about 2.6 mln. Slovaks have concluded a bauspar-contract (about 50 % of the population).
- Concerns about inflation: favourable macroeconomic conditions have encouraged growth of bauspar-funds.

➤ *Financial institutions:*

- Bausparkassen have offered an alternative for ordinary bank financings. Customers mainly derive from middle and lower income groups. A balanced risk structure prevails. The default rate of all bausparkassen amounts to 0.56 % of their whole portfolio.
- Provider: bausparkassen operate as specialised institutions.

➤ *Government:*

- Mobilisation of funds dedicated to housing has been effected.
- Subsidies: the government has adapted the subsidy payments according to the development of the inflation rate and the bausparkassen. Subsidies have proven to be a beneficial catalyst to starting the system.
- Integration in financial system: currently, bausparkassen are the only working loan providers for housing purposes. Especially of middle and lower income groups face difficulties obtaining a mortgage loan from a commercial bank.

Recent developments of implemented bauspar systems in India and China

In India, there is a large gap (55m) between the existing housing stock and the demand for new houses; the demand for new dwellings is expected to further increase by 20m units a year (in addition to the already existing gap). Especially low and middle-income groups have no access to housing loans. In this context, microentrepreneurs (shop keepers, craftsmen, carriers etc.) have difficulties to prove a steady income. Through the savings mechanism of the bauspar system, they are able to build up a

stable payment history. A fully-fledged implementation of the baspar system has taken place in March 2003. It is expected that the baspar system attracts about 250,000 new customers per year.

In China, the housing market is expected to grow by 10% annually (which is equivalent to about € 1.3 billion). The purchase price of an apartment (about 80 square metres) amount to € 25,000.00. The average annual income is € 3,800.00. The government wants the citizens to do their own provisions for housing finance. Therefore, citizens are in need of mechanisms, which manage savings accounts and grant loans. The baspar system has been effective in the province Tianjin since the beginning of 2004. Experts reckon that the contract volume in the next 3 years is likely to rise up to 160,000 (which corresponds to an expected financing volume of more than € 1 billion).

2.5 General evaluation and conclusion

Baspar systems are aimed at increasing savings, indicating the creditworthiness of the future borrower and thereby channelling loans with an interest rate below market to housing (in order to complement market rate financing). In this context, basparkassen have specialised in mortgage loans secured through second ranked mortgages and in granting loans to middle and lower income groups who often have no suitable access to credit mainly because of a lacking down payment.

The implementation of baspar system in a transition economy requires a thorough evaluation of every feature of the system since households (customers), financial institutions and governmental bodies enter into long-term relations:

➤ Households (customers):

Baspar-contracts facilitate the accumulation of funds and offer the prospect of a low-interest loan. They promote savings discipline and provide a concrete goal that many households consider important.

Furthermore, they offer better access to credit, which is particularly important for low and middle-income groups because they have the ability to prove their financial discipline (through regular savings). As a result, they benefit from a better creditworthiness towards the bank (achievement of more favourable credit scores), particularly in countries with poorly functioning legal conditions.

Baspar systems also provide a buffer in case of difficulties: if a property is 100 % financed through mortgages, no room for manoeuvre will be left in case of declining house prices. The situation may worsen if customers have not agreed on fixed interest rates or if the fixed interest-period expired and they face higher interest rates for the next period.

High inflation rates may lead to longer waiting periods if the inflow of funds into the basparkassen slows down.

In Ukraine, borrowers also need money to finance modernisation and renovation of their dwellings. These activities usually require lower demand for financing. In this context, basparen offers an alternative since small loan amounts are available at reasonable prices.



➤ *Financial institutions:*

For financial institutions, which envisage the implementation of *bausparen*, the system can help to overcome the severe information asymmetries they face in transition or developing countries, where there are usually no retail financial markets, weak legislation and problematic income reporting. *Bauspar* systems are very effective in screening, monitoring and establishing the reputation of steady savers as future borrowers. They are good at lowering credit risks because *bauspar* systems enhance the capacity and the willingness to repay the loan. They are also an important tool for developing and deepening the customer relationship (cross-selling).

However, *bauspar* systems are subject to liquidity risk, since *bauspar* systems need a constant inflow of funds to meet future loan commitments. In case of volatile inflation rates (i.e. interest rates) it may be difficult to attract new savers. One decisive factor in this context is short and consistent waiting periods.

The attractiveness of *bauspar* systems is closely related to the macroeconomic and legal conditions. It is therefore important that people perceive the institutions managing their funds as stable and viable so that they do not risk losing their money. Close government regulation and supervision should be the crucial measure. Under these circumstances, the invitation of foreign investors may be a suitable step to build up such a system. The confidence in such a foreign-owned entity may be higher.

➤ *Government:*

The underlying rationale for the government to promote the implementation of *bauspar* systems is that they help overcome information constraints on financial contracts and contribute to higher financial savings rates. Before introducing *bauspar* systems, however, policy makers should identify and thoroughly investigate two points:

First, the general housing finance system that they intend to promote and how it will interact with the overall financial system. Second the financial costs and benefits of every option embedded in the proposed *bauspar* system. Areas to be regulated are the definition of the waiting period, duration of the savings period, requirements of reserve funds, general contract management and the supervision of the *bausparkassen*.

A further point to be taken into consideration is the integration of the *bauspar* system in the overall national financial system. *Bauspar* systems may stabilise the prospects for development of market based housing finance systems and the banking sector as a whole. The question whether this goal may be best achieved through specialised institutions may be answered by the experience of Germany, Slovakia and India.³

Hence, the basic function of the *bauspar* system is to assist the customers in building equity for down payment and to complement the first mortgage loan. Since *bausparkassen* are specialised in housing finance for middle

³ A recent case is Mexico where the company "Hipotecaria Su Casita" operates as specialised institution for housing finance. The company was established in 1994. Today, it manages assets worth USD 1,300 mio. 65,000 loans have been granted yet.

and lower income groups, they could contribute to the government's objective to extend their access to housing finance. As a result, baspar solutions will not only help offer sustainable housing finance solutions to low and middle income borrowers, but they will also pave the way for the development of broader capital market solutions in Ukraine.



3 Contractual Savings Schemes for Housing (CSH) in Ukraine: Recommendations

Friedemann Roy

Association of Private Bausparkassen

Acknowledgements

The author received support from many quarters in preparing the study. The author wishes first to recognise the consistent help offered by Dr Ricardo Giucci from the German Advisory Group in Ukraine. He assisted in organising the fieldwork in Ukraine. He arranged a round table at the Institute for Economic Research and Policy Consulting, where housing finance experts and the author discussed the introduction of CSH in Ukraine. He also provided extremely useful comments on the draft report.

Special thanks are expressed to Dr. Lars Handrich, Halyna Herasym and Alina Dolya from the Institute for Economic Research and Policy Consulting in Kiev. They provided excellent support in the following areas: provision of data on housing sector and mortgage lending in Ukraine, scheduling of meetings as well as offering advice and counsel.

The author met with several individuals during the fieldwork to obtain information and insights about the workings of Ukraine's housing, housing finance (in particular savings schemes), and financial markets. These individuals were without exception co-operative, open, and informative.

While these individuals provided invaluable assistance to the author, he is solely responsible for the paper. The statement herein is the author's alone and not necessarily the views of the German Advisory Group in Ukraine, the Institute for Economic Research and Policy Consulting or the Association of Private Bausparkassen.

3.1 Introduction

Lack of residential space and adequate housing conditions is one of the most urgent social and economic issues to be taken on in Ukraine. In addition, there is a strong demand for renovation and modernisation of the existing housing stock. Inherited from the 1980s when Ukraine was a part of the former Soviet Union, these deficiencies became especially acute in the post-Soviet 1990s when the government decided to cut social housing programmes. According to the Ministry of the Economy, total capital investments in residential real estate were reduced by 4.5 times from 1991 to 2000 while budgetary allocations to the housing sector decreased by 60 times. Today, they amount to UAH 1.8 billion (about 1.8 % of total budget).

The broad availability of mortgage finance accelerates the pace at which households improve their housing conditions by permitting them to leverage their current income and savings. While there were a few long-term housing loans in the former Soviet Union, such loans were really little more than an element of centrally allocated credit.⁴ Thus, Ukraine, like the other former Soviet republics, entered the transition period with no tradition of mortgage lending. The development of such lending has been hampered by the immaturity of the banking sector and macroeconomic setbacks.

Stability and impressive growth rates have been the key Ukrainian economic characteristics of recent years. Under these conditions the demand for housing has expanded and can be expected to continue to grow. Government entities (including the National Bank of Ukraine –NBU) and the private banking sector, all recognise the need for improved mortgage finance services to augment this demand. They see the commercial and development opportunities that development of mortgage lending entails.

The current debate is driven by the need for more and better housing. Moreover, banks have started to introduce complementary instruments to already existing mortgage-lending programmes in order to attract new borrowers. In this context, contractual savings schemes for housing (CSH) are viewed as an attractive tool.

This is the appropriate time, therefore, for a systematic analysis of how this mortgage-lending instrument can develop in Ukraine. The objective of this paper is to give a response to this issue. The study is organised in the following way: the first part provides a comprehensive description of the housing sector (including the banking sector) and CSH already in practice. The second part analyses the introduction of CSH in Ukraine against a defined set of criteria. The third part presents the author's recommendations about a future architecture of CSH in the country.

3.2 The current situation

This part of the study reviews the current situation for mortgage lending, capital markets, real estate practices, and related topics. Its objective is to set the stage for a discussion of the desirable direction for future development of housing lending and the potential role of CSH in this context that is presented in the following parts.

Macroeconomic environment

Since the 1998 – 99 financial crisis, Ukraine's macroeconomic performance has improved substantially. The sustained economic recovery that followed the deep output slump in the 1990's was supported by sharp real exchange rate depreciation in 1998 – 99 and by establishment of macroeconomic stability, in particular the maintenance of a prudent fiscal stance.

⁴ See, K. Kosareva and R. Struyk, "Emerging Long-term Housing Finance in Russia," *Housing Finance International*, vol. 10, no. 3, 1996, pp. 20-30.



The table below shows the main economic indicators of the Ukrainian economy:

Table 3.1

Basic economic indicators of the Ukrainian economy (1999 - 2003)

	1999	2000	2001	2002	2003
GDP growth in % to previous year	-0.2	5.9	9.2	5.2	9.4
Inflation rate in %	19.2	25.8	6.1	-0.6	8.2
Unemployment rate in % (ILO methodology)	11.9	11.7	11.8	10.1	9.1
Average monthly salary in UAH	218.9	296.3	378.5	442.9	517

Source: State Committee for Statistics, IER Kiev, IMF

In 2003, GDP grew by 9.4 %. Through June 2004, GDP increased by 12.7 % on an annual basis.⁵ Growth in 2003 –2004 has been prompted by favourable external demand, a competitive cost structure, and dynamic domestic demand.

Growth was also fuelled by a sharp increase in credit to the private sector and rising disposable incomes. From 1998 to 2002, they rose by 198 %.⁶ The highest salaries are paid in finance (UAH 976.14), manufacturing (UAH 609.94) and transportation (UAH 572.50).⁷ Despite the strong growth, however, unemployment remains high. It is expected to decrease to 7.8 % in 2004.

With 8.2 %, inflation has faced a strong upward pressure (in comparison to 2002). As per June 2004, it only modestly declined to 8 %. A further dip to 7 % is likely. However, the strong fluctuations during the last years still reflect a highly volatile environment. The recent rise of pensions may significantly delay the falling trend.

The International Monetary Fund attests to Ukraine a background of strong economic performance. However, it underlines that the economy faces numerous vulnerabilities. It does not rule out that expansionary financial policies may contribute to inflationary pressures, in an economy that is already showing signs of overheating in some sectors.

The housing sector in Ukraine

Housing constitutes an integral part of living. Therefore, the question of access to affordable and adequate housing is crucial to a working housing

⁵ According Source: IMF, IER Kiev, World Bank, Vneshtorgbank, author's calculations to calculations by IMF. Official statistics may be capturing the hitherto unrecorded economy, thus overstating GDP growth.

⁶ In comparison to other transition economies, Ukrainian income rises lack far behind: in Bulgaria, the average wage is USD 187.05. In Russia, it amounts to USD 255. In Poland and the Czech Republic, they have risen to about USD 683.7. With USD 1,394.5 on average, the Slovenians earn the highest salaries.

⁷ Data as per 2002. Source: Ukrainian State Statistics Committee.

sector. In Ukraine, current housing standards do not meet the needs of the citizens.

Table 3.2

Ukrainian housing data in comparison with other countries (2003)

	Ukraine	Russia	Germany	United States
Mortgage loans (percent of GDP)	1.7	> 1	54.3	63.7
Affordability ratio	48.8	47.6	79.7	113.6
Average dwelling space per person in m ²	21.6	15.5	39.4	83.2
Ownership ratio (in%)	80	80	43.6	68.2

Source: IMF, IER Kiev, World Bank, Vneshtorgbank, author's calculations

The table above gives an overview about housing standards in Ukraine. In comparison to other countries, they appear as inadequate. For example average dwelling space per person (21.6 m²) is far lower than in Germany (39.4) and the U.S. (83.2), but higher than in Russia (15.5).

The affordability ratio is the ratio of house prices to disposable income per worker. A high ratio indicates a better access to housing (especially for low and middle income groups). In the U.S., for instance, people pay less for a dwelling than in Germany. Soaring house prices have also attributed to lower housing affordability in Ukraine. In 2003, house prices increased on average by about 5 % every month. Today, the price per square metre amounts to UAH 3,983 (in Kiev).⁸

A low home-ownership ratio may also confirm a lower affordability.⁹ The high homeownership ratios in Ukraine and Russia have been the result of the privatisation of the former state-owned housing stock. The incumbent governments referred to this policy in order to get rid of the massive costs for renovation and modernisation of the housing stock, which have been transferred to the new owners.

The low affordability ratios in Ukraine (and in Russia) reflect the clear need for a better and more affordable supply of dwellings. The low average incomes suggest that only a fraction of the society has currently access to affordable housing. Banks have stated that house prices in Ukraine (especially in Kiev) have been soaring during the last years. Since incomes rises have been relatively weaker, the affordability ratio is likely to decline.¹⁰

⁸ In 2004, prices rises have been a little weaker, but still oscillate around 2 % per month.

⁹ The low home-ownership ratio in Germany is due to the following factors: considerable construction costs, restricted land zoning through municipal authorities and tenant friendly legislation.

¹⁰ In this context, the given data on Russia and Kiev could be distorted due to the following reasons: the data do not include unreported incomes. Thus, actual salaries could be higher. House price data only refers to the cities of Kiev and Moscow. A slight distortion could be therefore possible since house prices on the



In addition, the quality of the housing stock is not satisfactory: About 80 % of the housing stock was built between 1919 and 1980.¹¹ This stock needs urgent renovation and modernisation. Only 44.8 % of the housing units have access to piped water in their house. Supply of hot water is available to 39 % of the dwellings. Only 57.7 % of the houses are connected to central heating. The Institute for Economic Research and Policy Consulting reports that most families wish to modernise or renovate their dwellings.

The banking sector in Ukraine

After the 1998-99 crisis, banks have experienced a vast expansion in lending. Credit to GDP now stands at 29.5 % compared to 12.4 % in 2000. The annual average growth of 5 percentage points during this period was among the highest of transition countries. The graph below shows that Ukraine's credit-to-GDP ratio is now well within the average range of more advanced countries like the Czech Republic (38 %) or Poland (30 %) and above average for transition countries with similar institutional quality in the financial sector (like Russia with 22.5 %).

Graph 3.1

Transition economies: credit/GDP ratio and financial sector reform



Source: International Financial Statistics, EBRD Transition Report 2003, IMF, author's calculations

However, this speed of credit expansion may entail significant risk, since risk assessments of individual loans usually tend to suffer in times of rapid loan increases.¹² This lending boom has been funded through deposits and short-term borrowing by Ukrainian banks. In addition, loans have been

countryside are lower. Data do not take into consideration average household structure (e.g. persons per household, how many persons are employed per household etc.).

¹¹ Arkada Bank, Informational Memorandum.

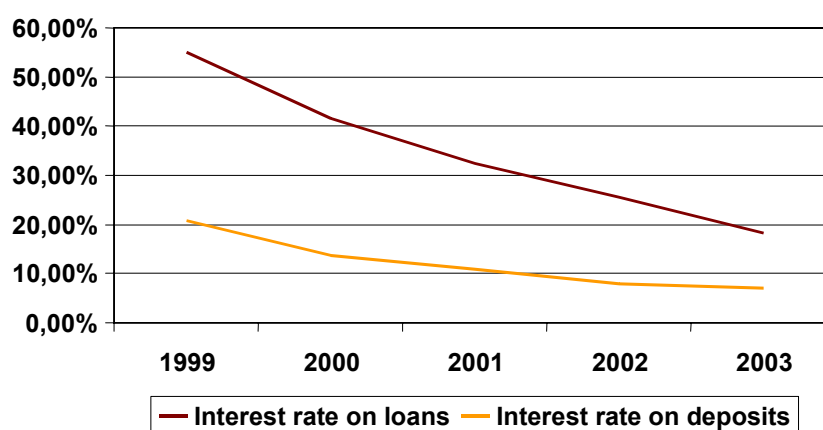
¹² The IMF states that lending booms of similar scale have preceded some of the financial sector crises in other emerging markets. For further details, see IMF, "Ukraine: Request for Stand-By Arrangement – Staff Report", Washington, May 2004.

granted in foreign currencies to borrowers without significant foreign exchange income.¹³ As a result, the banking sector is exposed to credit risk, exchange risk and liquidity risk (depending on the size of longer term loans which are refinanced through short term funds). In addition, institutional weaknesses in terms of poor collateral and difficult enforcement of contracts aggravate lacking risk management.¹⁴

The positive macroeconomic environment has also lead to lower spreads. As shown in the graph below, spreads have fallen from 34.3 percentage points in 1999 to 11.3 percentage points in 2003. Typically, loans terms are not longer than 1 year (55 %). The rest varies between 2 and 3 years (with some up to 5 years).

Graph 3.2

Development of interest rates in the Ukrainian economy (1999 - 2003)



Source: National Bank of Ukraine

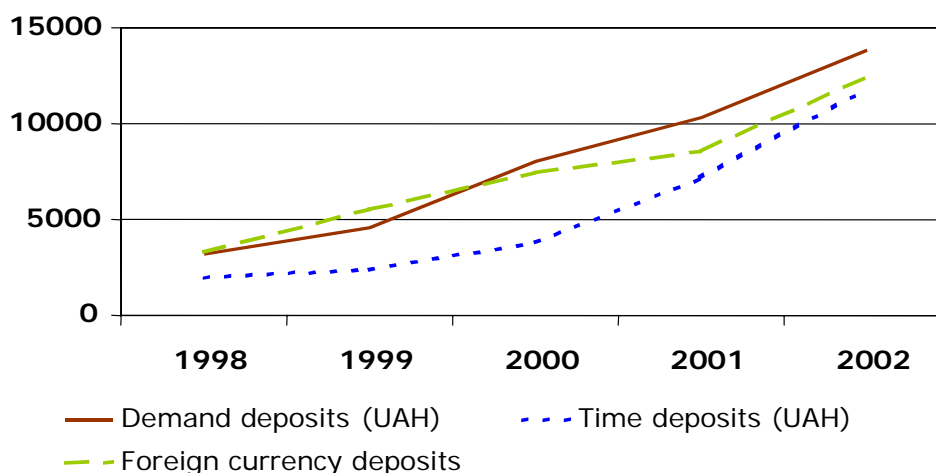
Rising deposits in banks prove an increase in confidence in the banking sector. According to the graph below, from 1998 to 2002, deposits in banks rose from UAH 8.5 billion to UAH 38.01 billion. A major share of deposits is still held in foreign currency (about 33 % as per December 2002), which reflects the citizens' fear of volatile inflation rates. During this period, the share of time deposits grew 23 % to 31 %. Saving terms vary between one and 1 ½ years. Thus, people are slowly moving into longer-term savings periods. Thus, it seems that people are more willing to save for longer periods.

¹³ 37.4 % of loans are denominated in foreign currency.

¹⁴ The National Bank of Ukraine (NBU) has responded to this trend by improving the regulatory and supervisory framework (increasing the minimum capital adequacy ratio, tightening the definition of capital, enhancing risk assessment practices etc.).

**Graph 3.3**

Deposits in Ukrainian banks in UAH (1999 - 2002)



Source: National Bank of Ukraine, IMF

In order to reduce risk in the banking sector, the state has reacted in several ways: while the National Bank of Ukraine (NBU) has strengthened the regulatory and supervisory framework by increasing the minimum capital adequacy ratio, tightening the definition of capital and insider lending rules, enhancing risk assessment practices etc., the government has improved the legal system by improving creditor rights and the legal framework for financial intermediation as well as by adopting a law on mortgage (June 2003).¹⁵

Although these measures address this problem in part, the rapidly expanding banking sector will remain a significant source of risk. This issue will be of considerable importance in longer-term commitments, such as housing finance.

Mortgage lending in Ukraine

Since 2001, Ukraine has experienced major growth in the mortgage market. Key to this growth have been economic policies that have created a favourable macroeconomic environment with rising incomes, declining interest rates, a stronger banking system, growing bank deposits, and rising construction activity. The enacted Law on Mortgage and the proposed Law on Mortgage Securities will further strengthen this development.

¹⁵ This law defines the main terms in mortgaging, including the term "mortgage", sets requirements for the object of a mortgage, stipulates obligatory parts of a mortgage contract and clarifies the procedure of property sales. In addition, the law introduces a "mortgage deed" that is a security which certifies the rights for the object of a mortgage loan.

In addition, there have been strong, profit-driven efforts by the private financial sector to develop this area. The result has been a continuing process of lenders learning to do the business and offering better products over time. Banks regard diversification of activities in mortgage lending as a profitable business since the turnover in the real estate market has soared, accompanied by rising construction and house prices. Thus, they expect the demand for housing loans to further increase. However, the total volume of mortgage debt in comparison to other transition economies in Central and Eastern Europe is insignificant. With 1.7 % of GDP, Ukraine lags behind countries like the Czech Republic (14 %) or Hungary (6 %) but outperforms Russia (less than 1 %). At present, mortgage loans account for 7 % of the total credit portfolio of Ukrainian commercial banks.¹⁶

At present, only 35 of the 159 operating banks in Ukraine grant mortgage loans. The mortgage loan market is very concentrated: the largest ten banks account for almost 70 % of the mortgage market. The most important players are Arkada Bank (18 % market share as per December 2002), Pravex Bank (13 %), Aval Bank (11 %) and JSC State Savings Bank of Ukraine (8 %). Ukrsibbank is the first specialised mortgage institution; it operates only in Kiev.

Interest rates on loans vary between 18 – 22 % in UAH and 14 – 16 % in USD.¹⁷ 60 % of all mortgage loans are granted in USD. Typically, loan terms are not longer than 1 – 3 years up to a maximum of 5 – 10 years. Arkada Bank provides the longest terms (up to 30 years). Ukrsibbank offers loans with terms up to 10 years, bearing interest rates of 18.5 % in UAH and 14 % in USD respectively. Most banks require an LTV-ratio of 70 %.

However bank indicated that only 6 % of the population has access to mortgage loan. The low housing affordability ratio confirms this statement. In addition, lending is centralised in Kiev and several industrial oblasts (Donetsk, Kharkiv, Dnipropetrovsk and Zaporizhzhia), which account for about 50 % of all mortgage loans provided in the country. IER (Kiev) reports that it is difficult to obtain a housing loan in small towns or rural areas.

According to banks' statements, the following deficiencies hamper further development of mortgage market in Ukraine:¹⁸

- Bank risk management capabilities: banks lack standardised procedures in order to assess a borrower's creditworthiness.

¹⁶ Corresponding figures for Poland and the EU-15 are 25.8 % and 40 % respectively.

¹⁷ Data provided by the Institute for Economic Research and Policy Consulting (IER, Kiev). The Association of Ukrainian Banks mentions slightly lower rates: 14 – 18 % in UAH and 12 – 14 % in USD (as per early 2004).

¹⁸ See O. Kirieiev, "Problems of Mortgage Lending Development in Ukraine", in "Mortgage Lending in Ukraine", Proceedings of the Round Table organised by the Institute for Economic Research and Policy Consulting and the NBU Center for Banking Policy Research, Kiev, March 2004.



- Poorly functioning legislation on mortgages: there is no centralised and publicly available system for registration of real estate property rights and encumbrance. Banks have no legal base for the clear and unambiguous determination of the borrower's right on the real estate proposed for a collateral and the assurance that there are no other encumbrances to it. In addition, foreclosure procedures are not clearly developed, thus time consuming. In this context, eviction constitutes an impediment to foreclosure (especially when the pledged dwelling is occupied by family members, in particular children).
- Clear appraisal standards are not yet clearly developed.
- Low purchasing power of population: although incomes have increased in real terms, housing affordability is still low. In addition, there is a reluctance to incur debts, which is deeply rooted in the national mentality.
- Attraction of long-term funds for mortgage lending:¹⁹ Most of the growth in mortgage lending has been funded out of a similarly rapid growth in the deposits held by banks. This trend may continue for the near future, but it creates several tensions in the sector. First, reliance on short-term deposits discourages lenders from offering longer maturities on their loans.²⁰ Second, such deposits are not as long in duration as even the relatively short-term mortgages (5 – 10 years) popular at the moment.²¹ This issue could cause a build-up over time of an undesirable degree of liquidity risk in the banking sector. Third, the pressing need for expanded credit in the rural production sectors will further stretch the resources available to the banking sector from their normal deposit base.

In order to further strengthen mortgage lending, the government has initiated various measures:

- Improving legislation on mortgages: in 2003, the government has enacted several new laws thereof the Law on Mortgage, the Law on Mortgage Crediting, Operations with Consolidated Mortgage Debt and Mortgage Certificates as well as the Law on Financial and Crediting Mechanisms and Property Management in the process of Housing Construction and Real Estate Operations. The Law on Mortgage Securities and the Law on State Registration of Proprietary Rights on Real Estate are currently being debated in the Parliament.
- Funding of mortgage loans: in order to improve long-term funding, obtained from capital markets, the Cabinet of Ministers and the NBU agreed on the establishment of a state-owned non-bank specialised

¹⁹ See. D. Diamond, "Factors Affecting the Feasibility of a 2nd Tier Mortgage Refinancing Institution in Ukraine," Report, May 2004.

²⁰ This development will become important as interest rates decline further in the next few years, since borrowers will wish to borrow more and repay more slowly.

²¹ Duration refers to the average term of the cash flows for a loan or bond, weighted by the discounted present values of those flows.

mortgage company.²² Its activities are aimed at refinancing mortgage loans by extending advances to qualified mortgage lenders based on qualified mortgage collateral. Fund raising would be obtained through the issuance of corporate bonds.²³

Development of contractual savings schemes for housing (CSH) in Ukraine:

In order to raise affordability and to obtain long-term funding, banks have pursued several strategies thereof one option is the introduction of savings schemes. To date, the schemes offered in the market are not regulated by law or supervised by NBU. In addition, banks consider savings schemes a complementary product in order to diversify from other lenders, thus attracting new clients. At present, the following approaches exist:

Construction saving programmes:

These schemes are related to the construction of (usually) a specific multi-family house. Typically, the customer makes a down-payment (e.g. 25 % of the purchase price of the dwelling) in order to be eligible for the purchase. Afterwards, he makes fixed payments within a predefined period in order to obtain full ownership. Some construction companies expect the price to be completely paid before construction is finished or they grant a loan the amount of which is determined by the remaining balance between the purchase price and the down-payment. The apartment serves as a collateral. In order to attract new clients, construction companies have established their own banks.²⁴

Savings schemes offered by banks:

Currently, there are two suppliers in the market. The most prominent is the "Deposit Housing Programme (DHP)" offered by Arcada Bank. It is very closely modelled after the German *bausparkassen* system.²⁵

This programme has been inaugurated in May 2002. To date, 425 customers have accumulated funds worth UAH 12.8 mln. The average savings balance amounts to UAH 30,118. Client can either save in UAH or USD. Arcada bank offers the following contract types (see table below):

²² According to NBU, this institution should be a bank. Founders could be NBU, the Government and commercial banks.

²³ In order to enhance credibility among institutional investors, NBU proposes to purchase the first issuances within a special credit line so that the status of these securities could be significantly raised to government securities level.

²⁴ This type of savings schemes is associated with various risks. For further information about this issue, see V. Mints, "Strategies of transitional countries to establish a housing finance system – the Russian experience", in *Housing Financial International*, December 2004.

²⁵ Presentation "Program Deposit Housing" provided by Arcada Bank, November 2004.



Table 3.3
Contract types offered by Arkada Bank (2004)

Currency	Tariff	Interest rate on deposit in %	Interest rate on loans in %
In OdIn	Deposit – 3 years; credit 5 years	1.5	3.0
	Deposit – 4 years; credit 7 years	1.5	3.5
	Deposit – 5 years; credit 10 years	1.5	4.0
In USD	Deposit – 3 years; credit 5 years	2.0	5.0
	Deposit – 4 years; credit 7 years	2.0	5.5
	Deposit – 5 years; credit 10 years	2.0	6.0

Source: Arkada Bank

If the customer wishes to save in UAH, his savings will be denominated in Odin units. This is an artificial unit for calculation in order to protect the savings against inflation.²⁶ The applied loan multiplier in all tariffs is one. Due to inflation, the loan amount is relatively higher than the prior accumulated savings (only for contracts in OdIn). Upon completion of the savings period, there will be an immediate allocation of the loan (no waiting period).²⁷

The majority of the savings are denominated in USD (71 % of all funds accumulated in DHP).²⁸ Most customers opt for savings period between 3 and 5 years (60.6 % in OdIn and 77.1 % in USD respectively). At present, DHP is only offered in Kiev. An expansion to other regions is envisaged. Customers of DHP mainly belong to middle-income groups that have no access to the other lending programmes of Arkada Bank.

To date, experiences with DHP have been mixed: Arkada Bank states that clients have cancelled their contracts mainly for fear of not having sufficient funds to cover rising house prices, which are seen as a major impediment to a further expansion of the programme. Arkada Bank has also found out that customers would not accept a waiting period. However, the bank wants to maintain DHP because it is used as pre-screening instrument in order to determine reliable borrowers thus reducing credit

²⁶ Arkada bank recalculates the OdIn/UAH-rate every month according to an inflation index, which comprises the index of construction material prices and CPI. As of July 2004, 100 OdIn were equivalent to UAH 1,850.03. NBU has not approved the OdIn formula.

²⁷ Waiting period is the period the customer has to wait until his loan will be allocated.

²⁸ Arkada bank has not commented on the attractive to its OdIn formula among customers.

risk. In order to enhance the attractiveness of the product, Arcada Bank plans to market DHP as an instrument to finance modernisation and renovation of dwellings (which is less dependent on the current price hike in the real estate market).²⁹

A different savings programme is offered by JSC State Savings Bank of Ukraine (SSB).³⁰ The main features of the programme are listed in the table below:

Table 3.4

Terms of savings programme offered by JSC State Savings Bank of Ukraine (2004)

Duration of savings period	18 months
Conclusion of contract	Down-payment of UAH 3,000 is required
Interest rate on deposits	Variable, at present: 12 – 13 % p.a.
Loan allocation	On completion of savings period, customer earns entitlement to claim for loan subject to general bank conditions
Loan term	Standard loan term can be extended by 5 years.

Source: JSC State Savings Bank of Ukraine

The conclusion of savings contract requires a down payment of UAH 3,000. Interest rates on deposit are below market rates. The minimum savings rate is UAH 200. The contract gives the customer an entitlement to a longer loan term. Thus, the standard loan terms will be extended by five years. Since the maximum standard loan term is 15 years, the customer is able to extend his term to 20 years. Due to longer loan terms, repayment rates are lower, thus increasing affordability. However, loans are not granted at preferential interest rates.

Since the product has been launched in July this year, current results may not prove very meaningful for the future development. SSB stated that it has attracted through this programme UAH 1.5 mln of new deposits (as per October 2004).

²⁹ To date, Arkada Bank has done no projections on possible demand for such financings. Currently, people do this type of work themselves. To save money, building material is often stolen at building sites.

³⁰ The terms of the programme were adopted by the Management Board on 1 June 2004.



3.3 Development of CSH in Ukraine

Despite the mixed experiences of Arkada Bank, the recent launch of a savings programme by SSB shows that banks assign to this product a competitive advantage. According to the assessment of the Association of Ukrainian Banks, such schemes may be of interest for the larger savings banks, which often serve clients belonging to low and middle-income groups. Moreover, savings schemes may be useful to attract further deposits (with longer terms) to the banking sector in order to reduce duration gaps many banks face.

The following analysis on a possible introduction of CSH is organised in a way that the instrument is assessed against specific criteria in the light of the Ukrainian context. This assessment is followed by suggestions for the establishment of CSH in Ukraine.

The following criteria will be applied:

- Likely effectiveness of system in addressing financial risks. CSH like any other financing instrument is subject to an array of risks. The risk analysis outlines to what extent the instrument is subject to individual risks and which measures can be introduced to mitigate each risk. The following risks are analysed:
 - Credit risk
 - Interest rate risk
 - Liquidity risk
 - Exchange rate risk
 - Prepayment risk
- Cost to consumers. Which costs are imposed on the consumer when he takes up a mortgage loan? Costs usually consist of the interest rate and further fees, including notary and cadastre fees, credit report, and an application fee if the lender requires one.
- Cost to lenders. Which costs does the lender bear when he introduces CSH?
- Cost to government. Which cost does the government incur for the introduction of a new financing instrument in the market, especially when fiscal support is envisaged (whatever type it will be)? How far should the government be involved in regulating the market?
- Readiness of financial system for the innovation and its long-term sustainability. To what degree is the Ukrainian financial system ready for the introduction of new financing tools both now and in the next 2 – 3 years? What may happen if the inflow of savings drops?

Contract savings schemes for housing (CSH) - description and analysis

CSH offers a dedicated loan-linked form of saving. It links a phase of contractual savings, usually remunerated at below market interest rates, to the promise of a housing loan at a rate fixed below the market level at the time of the conclusion of the CSH-contract. Having their roots in the

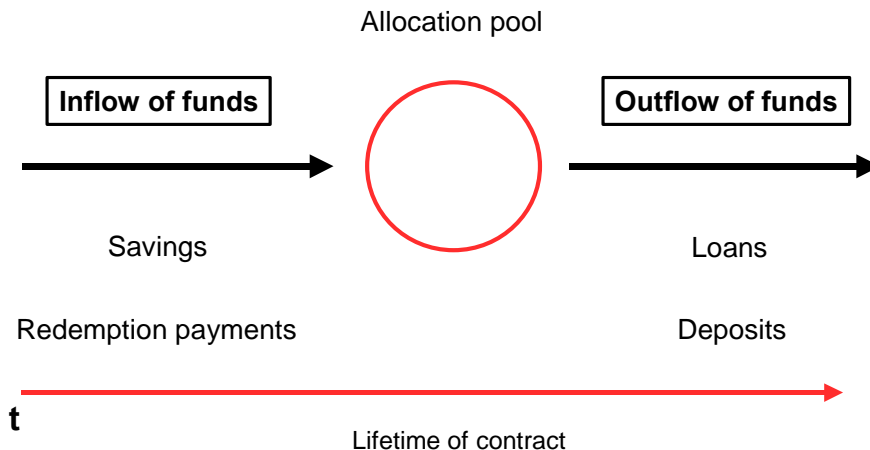
buildings society movement in the United Kingdom in the late 18th century, mainly two forms of CSH have emerged:

- Closed system: funding of CSH-loans exclusively relies on savings funds previously collected by the CSH institution.
- Open system: external funding is permitted when the inflow of savings does not suffice to meet the loan commitments of the CSH-institution.

Today, operating CSHs show variances of these two types ranging from strictly regulated closed systems (e.g. in Germany, Slovakia, Czech Republic) to open CSH regulated systems (France) or unregulated open schemes (e.g., Iran, Latin America). Despite different features, the underlying construction of the CSH product is more or less identical: it starts with a savings period, in which the saver is required to regularly save, eventually accumulating about 50 percent of the previously agreed contract sum. Subsequently, he is entitled to a loan offer. The CSH-loan, which is made up of the remaining balance between the contract amount and the amount saved, will be paid out to the customer together with his savings. Especially in a closed system, the disbursement of the CSH-loan may be deferred unless there are enough funds in the savings collective. Thus, the customer may be subject to a waiting period. During the loan period, the customer repays his CSH-loan in regular instalments.

Graph 3.4

The allocation pool in a closed system



Source: Author

The closed CSH system can be described as a "time-money"-system: on conclusion of the CSH contract, all conditions will be fixed (including the interest rate on the savings and the loan), i.e. the CSH bank cannot use the interest rate to balance supply and demand of funds. As the graph above indicates, the allocation pool is therefore the decisive management tool in a closed system because the CSH institution can only allocate those funds in form of CSH-loans, which it has previously collected. Hence, customers are subject to a waiting period the length of which depends on



the availability of funds. The challenge for the CSH-institution in managing such an “allocation pool” is to balance fluctuating inflow and outflow of funds in order to meet future loan demands within a reasonable time span. In order to reach short and consistent waiting periods, CSH institutions stick to specific queuing rules, which determine the sequence of the loan disbursements.³¹

The concept of the closed CSH system makes external funding less relevant. However, overall market conditions influence fund supply and loan demand. Especially in a volatile environment, a cash shortfall is likely and may lead to unsustainable waiting periods. Hence, most countries, which have introduced CSH, have applied strict laws and introduced tight supervision (usually through the central bank) to ensure the stability of the CSH pool and the managing institution.

In Germany, the system started its operations in the mid-1920s as private savings initiatives (bausparkassen) in order to offer low- and middle-income groups a savings channel to build up the necessary down-payment in order to become eligible for the CSH (or bauspar)-loan and a regular mortgage loan.³² Today, activities of the bausparkassen are regulated by a specific bausparkassen act. This law also constitutes the principle of speciality for the bausparkassen.³³ It defines the rights and obligations of the bausparkasse and limits the business to make housing loans available to its participants by raising prior savings from them. The German Federal Financial Supervisory Agency (BAFIN) and the German Central Bank (GCB) supervise and regulate the bausparkassen. BAFIN issues the licenses permitting a bausparkasse to take up business and approves bauspar contract terms (tariffs). The GCB monitors the liquidity position of every bausparkasse.³⁴

³¹ The sequence of the individual loan allocations is regulated through an assessment figure that is aimed at measuring the saving performance of every saver. The calculation of this figure takes into consideration the amount of funds and the period of time the CSH-contract saver has made his savings available to the CSH-community in relation to the total commitments of the bausparkasse. The higher the assessment figure, the earlier the customer becomes eligible for allocation of the bauspar loan.

³² Bausparkassen specialised on loans secured by second ranked mortgages established in this way a division of labour between universal or mortgage banks and the bausparkassen: whereas the latter grant loans with an LTV ratio between 60 % and 80 %, the lending ceiling of universal banks and mortgage banks goes up to an LTV ratio of 60 %.

³³ On adoption of the Bausparkassen act in 1972, the legislator justified the introduction of specialised bausparkassen as follows: securing access to subordinated loans at reasonable costs, thus also confirming the division of labour among banks and bausparkassen. Furthermore, he states that the specific characteristics of the bauspar business require specialised knowledge, which is not necessarily known to a universal bank. Specialised institutions are also better at avoiding a misuse of funds than a universal bank model.

³⁴ The German Central Bank monitors bausparkassen under legislation on banking monitoring and supervision.

In Germany, *bauspar* customers are also entitled to a savings bonus, which is provided by the government. To be entitled to a bonus, the customer must save for a minimum period of 7 years and must not exceed income limitations (taxable yearly income up to € 25,600 for a single person and € 51,200 for a married couple). If the saver fulfils these criteria, he will receive a bonus of 8.8 percent of his annual savings up to a maximum of € 45.06 (for a single person) or € 90.11 (for a married couple). The government does not grant any tax exemptions. Most other countries with a CSH offer similar support.³⁵

CSH systems similar to the German *bauspar* system have appeared in the Czech Republic (1993), Slovakia (1992), Hungary (1996), Croatia (1997), Romania and China (2004). The business of specialised CSH-institutions is regulated by a special CSH act and supervised by the central bank. Customers in those countries are also entitled to a savings bonus.

Likely effectiveness of system in addressing financial risk:

- Credit risk: due to the pre-savings requirement, a high number of defaulting loans is unlikely. Default rates of the *bausparkassen* in Germany amount to 0.03 percent of the total loan portfolio and in Slovakia to 0.56 percent (date as per December 2003). In Ukraine, a CSH system may allow for expansion of lending to riskier clients provided they are capable of saving regularly.
- Interest rate risk: in a closed system, interest rate risk is limited by the contract design. However, pricing of the contract must take into consideration capital market movements. If interest rates on the savings and the loans do not anticipate future market developments, attraction of savings or selling loans may become difficult. Under current market conditions in Ukraine, pricing of CSH contracts may be set in a range of 5 to 7 percent for savings and 11 to 13 percent for the loan, reflecting the expected decline in interest rates. It is evident that these figures are estimates. However, actual contract conditions can only be set on the introduction of CSH schemes.³⁶
- Liquidity risk: the key risk of the CSH is liquidity risk, or the risk that banks will have insufficient funds to meet future loan demands. Therefore, aggregate liquidity management crucially depends on whether products are individually viable and how credible the scheme is as a generator of loans. The latter implies ensuring a sufficient ratio of loan allocations within the collective. As a result, contractual loan-to-savings multipliers cannot exceed certain prudential values. The author recommends that in a set-up phase, the multiplier should not be higher

³⁵ For a detailed overview, see R. Struyk, "Homeownership and Housing Finance Policy in The Former Soviet Bloc – Costly Populism, Urban Institute, Washington, 2000.

³⁶ Typically, interest rates on deposits in a CSH are below market rates. However, the high spreads, which are likely to remain unchanged in the next years, may allow the bank to offer an interest rate which is close to market conditions in order to be more competitive with ordinary savings products. In point 3 of this study, the author discusses a suggestion how to adapt the interest rates to volatile inflation rates.



than 1.³⁷ In addition, the CSH-institution should not be obliged to promise immediate loan allocation after the eligibility threshold has been reached, in order to gain a degree of freedom of liquidity management. In order to establish confidence in CSH and, thus, to attract customers on a sustained basis, the overall concept of the CSH is the crucial element. Stability of CSH can be achieved through carefully designed legislation and tight supervision by CBU. Existing systems also oblige CSH-institutions to establish a reserve fund in order to balance fluctuating flows of funds. In addition, CSH contracts should be subject to prior approval (also by CBU) before the system's launch in the market. Testing should show that the contract design would work under several scenarios (e.g. increase of the inflation rate).

In Ukraine, longer terms on savings are slowly appearing. SSB has recently launched its CSH programme. In Arkada Bank's DHP, the first generation of contracts is ready for allocation. The future attractiveness of this programme will be tested in the next years. However, these initiatives seem to indicate that people are in principle ready to commit themselves into longer-term contractual obligations, which is also partly due to the rising macroeconomic stability in the country.

- Exchange rate risk: as long as contracts are offered in one currency, exchange rate risk does not exist. Arkada Bank offers CSH products either in USD or UAH. If a financial institution decides to offer CSH in USD and UAH, it should be obliged to establish separate pools for the respective currency. In case of CSH in USD, however, the customer would bear the exchange rate risk.
- Prepayment risk: for liquidity management reasons, CSH loans are usually pre-payable. These prepayments are reinvested in new CSH loans, which stabilise the CSH pool. If contract savings and loan rates are set too high, a drop in market rates may force the managing bank to reinvest large sums at low or negative spreads. Since interest rates in Ukraine are expected to decline, a surge in prepayment seems feasible. The Ukrainian mentality to avoid incurring debts may reinforce this assumption. Thus, the pricing of the CSH-product should anticipate future interest rate movement in order to avoid massive pre-payments. A later limitation of pre-payments may make the system less attractive.

Cost to consumers

A CSH scheme consists of three products: a savings product, the option to receive a fixed-rate loan product (interest rate option product) and the option to receive a loan proportional to savings (credit option product). A customer may face difficulties in adding direct costs to each individual sub-product.

³⁷ Albeit fundamental, it is nevertheless often violated in inflationary environments when no additional measures have been taken to preserve the real value of savings. The consequence is a severe rationing of willing loan takers through the imposition of waiting periods or, in the cases where this is legally impossible, by conversion into an open system with interest rate risk. In the extreme form, the system accumulates a large number of fixed-rate loan claims and becomes insolvent and/or illiquid.

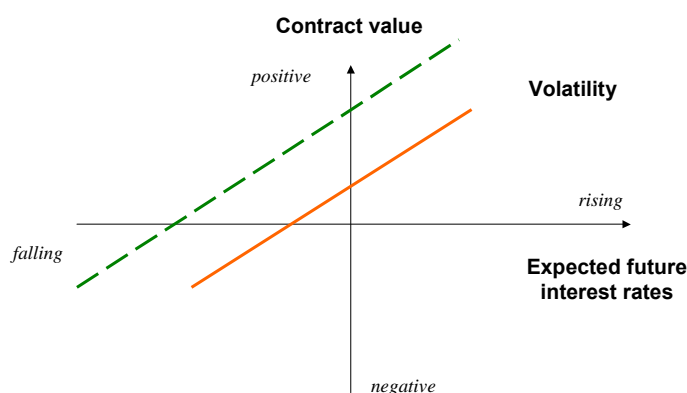
As the graph below shows, therefore, the definite value of the total product the customer attributes to the product depends on the individual expectations of the customer: if, for example, he expects interest rates to rise, he will value the interest rate and credit option higher and be more willing to accept a lower return on his savings (upper right quadrant).³⁸ It will drop in value in the reverse case (lower left quadrant). The contract value may become negative if the opportunity costs of higher remunerated savings today exceed the value of the interest rate option.

The interest rate option value rises, the more volatile the interest option is. The CSH contract may in fact become extremely valuable as a protection against interest rate risk for the buyer's perspective (dark green dashed line). This feature is typical for countries with high levels of monetary instability of banking sector fragility. Although interest rates are likely in decline in Ukraine, recent experience has shown that short-term hikes may interrupt this trend. In addition, the banking sector in the country is still viewed as fragile.

In conclusion, the opportunity costs reflect the value of the option products, thus determining the value of the overall contract. Furthermore, the CSH institutions may charge a contract closing fee and an account administration fee.

Graph 3.5

Determination of CSH contract value in relation to development of interest rates



Source: Dübel

Cost to lenders

The introduction of CSH usually results in the following costs for a financial institution:

- Purchase or development of the relevant software and its integration into an existing IT-structure.

³⁸ The contract value may become negative if the opportunity costs of higher remunerated savings today exceed the value of the interest rate option.



- Administration costs: legislation will require the CSH-institution to administer CSH-funds separately from the bank's other assets and to fulfil certain rules.
- Training (and possibly recruiting) of staff and sales agents: CSH are sold through different sales channels of which branches and sales agents are the most important. Since CSH is a mass product and requires a wide outreach, a CSH institution requires a widespread sales agent network.
- Marketing costs: in order to reach a considerable number of potential clients, the CSH institutions may count on some marketing costs.
- According to recently adopted regulations by NBU, banks will be licensed as a savings bank the deposits of which make up for more than 50 % of their liabilities. These new rules may have two consequences: first, smaller banks that consider the introduction of CSH may be transformed into a specialised savings bank. Second, bigger banks may outsource CSH into a separate entity (specialised savings bank). In this context, these institutions have to be separately capitalised and may also require additional staff. The licensing process may incur further costs.

Cost to government

The choice of CSH schemes as a housing policy instrument worth special support has been controversial.³⁹ The author recommends that CBU and the responsible legislative bodies of Ukraine should emphasise the functionality of CSH, i.e. prudent legislation and tight monitoring of CSH should be an unconditional prerequisite for their implementation.

A direct support in the form of a savings bonus requires a profound and distinct argumentation since the government has constantly withdrawn its (financial) support of the housing sector during the last years. Direct subsidies for a CSH system may induce further subsidy claims on the government and lead to distortions in the housing market as well as a severe burden on the state budget.⁴⁰

Readiness of financial system for the innovation and its long-term sustainability

Since longer-term savings products have not extensively been tested in Ukraine, a successful launch of CSH may induce higher savings activities in the country. Bankers interviewed by the author welcomed a wider introduction of CSH. These banks saw the scheme as particularly applicable

³⁹ See D. Diamond, "Do Bausparkassen Make Sense in Transition Countries?", *European Mortgage Review*, Issue No. 21, Council of Mortgage Lenders, London, 1999.

⁴⁰ Some countries in Central and Eastern Europe (like the Czech Republic and Hungary) introduced extensive subsidy schemes of various forms and sizes in order to promote housing. As a consequence, these countries suffer from a distorted housing sector and higher budget deficits (especially Hungary). For further information, see A. Dobricza, "Home finance subsidies in Hungary", *Housing Finance International*, December 2004; H.-J. Dübel, "Wohnbauförderung in Mitteleuropa", *BWV Berliner Wissenschafts-Verlag*, Berlin, 2004.

to modest loans for home improvement or for complementing other mortgage loans. The final outcome largely depends on the individual and regulatory structure of the CSH-product. Banks may also use this product in order to expand their customer base and to deepen the existing one.⁴¹ An important issue is whether consumer confidence in banks is already sufficiently developed to encourage them to sign multi-year savings contracts.

As experiences in Germany as well as in other transition countries have shown, CSH have helped improve the access to credit of low and middle-income groups since they are able to save into creditworthiness. Therefore, CSH can be regarded as a tool in Ukraine to reach groups, which so far have little or no access to credit.

CSH also contributes to enhancing long-term funding in Ukraine because customers are expected to save for at least 2 – 3 years and to receive a loan with at least similar terms. CSH in Slovakia, for example, offers households almost automatic access to long-term credit with typical loan durations of 10-20 years, including for smaller investments.⁴²

The case for CSH is strongest when considering its use outside the standard mortgage market. CSH offers generally small volume loans, which are often not collateralised by mortgages and are therefore costly to securitise.⁴³ Even as financial systems develop, viable alternatives may never appear. According to the author's assessment, CSH loans may be an attractive instrument to finance renovation and modernisation in Ukraine. Since demand for housing improvements is very high, CSH may offer to households an alternative to informal lending or costly consumer loans.

3.4 Recommendations for the establishment of CSH in Ukraine

This part of the study concentrates on recommendations that are crucial to working and stable CSH. In addition, it provides an outline on the desirable input of legislation on CSH.

Taking into consideration the various risks CSH imply, the need for tight and strict regulation as well as supervision and monitoring is clear. These measures are aimed at supporting the stability of the system and raising

⁴¹ Surveys in Germany have shown that baupar customers have purchased at least two other bank products in comparison with non-baupar clients.

⁴² For a detailed analysis on the Slovakian CSH market, please compare H.-J. Dübel, "Financial, fiscal and housing policy aspects of Contract Savings for Housing (CSH) in Transition Countries – the Cases of Czech Republic and Slovakia", study commissioned by the Financial Sector Development Department of the World Bank. Washington, D.C., 2003.

⁴³ In the Czech Republic and Slovakia between 2/3 and 4/5 of loans are not collateralised and are given on a personal guarantee basis.



confidence in the scheme, thus laying the foundation for continued attractiveness and viability of the scheme.⁴⁴

Open versus closed CSH systems

Open CSH systems add capital market funds for loan allocation, if necessary. The advantage is a simplified liquidity management and a greater loan volume allocation to the saver; the disadvantage a higher vulnerability of the financing to interest rate risk arising from volatile capital market conditions.

Proponents of closed CSH systems argue therefore that the central value of the contract is diluted. Closed schemes, in contrast, rely exclusively on collective savings, which enable them to fix low interest rates for both savings and lending. The downside is that closed schemes generate significant liquidity risk, if market conditions are adverse to attracting new saver generations. Lending is therefore rationed to savers with sufficiently high savings efforts, and more limited in volume than under open schemes. In crisis situations, closed schemes have been forced to move to open status. Promises to provide loans for low fixed rates can no often longer be held under these circumstances.

The author recommends that the government (or NBU) or an international financial institution guarantee the savings against bank failure for an initial period to generate the necessary consumer confidence. If this model is adopted, the CSH can operate as an open system. Otherwise, to insure proper management and to facilitate supervision, it should be a closed system.

CSH managed by specialised institutions

In Germany, Austria, the Czech Republic, Slovakia, Hungary and Croatia, specialised institutions run CSH. The argument for specialisation is maximum risk management quality and exclusive business focus. For example, the Slovakian bauparkasse, P.S.S., pioneered a new origination, servicing and risk management infrastructure for the Slovakian housing finance market. Specialised institutions also underline the strict mutuality and transparency of the system: almost all funds come from savers (mutuality) and can be used only for housing loans (transparency).

Institutional specialisation may lead to an undesirable fragmentation of the banking system because this approach implies less diversification and reduced cross-selling opportunities. Thus, they are more exposed to macroeconomic shocks. Liquidity risk will strongly rise when the inflow of savings drops substantially. Furthermore, they must be separately capitalised and staffed.

The author recommends that CSH should be open to all market participants. An intermediate model for Ukraine could be an open special

⁴⁴ Continued attractiveness to new savers depends on both the savings return and the availability of loans. A steady inflow of new savings is required to manage liquidity risk.

bank offering CSH as a core, but not exclusive, product.⁴⁵ The model combines scale and flexibility on product and funding side with a sufficient risk management and regulation framework for CSH.

In any case, CSH funds must be separated from other activities and separately shown in the balance sheet in order to facilitate supervision. CSH should be subject to special regulation, due to the risk profile of the product. The law on CSH should be in line with the overall banking legislation of Ukraine.⁴⁶

Regulation must assure high supervisory standards in order to protect the savings of the customers and to keep waiting period balanced. In this context, the author underlines that an act on CSH should first focus on the security and stability of the system, and not on subsidy regulations.

Management of CSH under volatile inflation

As in other central and eastern European countries, Ukraine has also experienced falling inflation rates. However, banks do not rule out a future rise of the inflation rate. Bank Arkada's approach to use an artificial currency for UAH deposits underlines the existing fear that the value of the savings may be diluted (because of inflation).

By relating savings in UAH to OdIn Arkada Bank has shifted the risk of rising inflation to its customers. It may be aggravated if incomes do not rise in line with the underlying index of Arcada Bank indexation policy, thus deteriorating the affordability of the product.

In the context of rising real estate prices, it is not clear whether many Ukrainians would be willing to save at below-market interest rates for an extended period of time in order to qualify for a below-market rate mortgage loan.

Two options may be discussed in order to manage CSH under volatile inflation:

- The interest rate design of CSH could be linked to the refinancing rate of NBU. For example, the nominal interest rate could be revised every year and be fixed for the next year. This option is currently discussed in Belarus.⁴⁷ However, this solution implies the same drawback as in Bank Arkada's design of DHP.
- The scheme that would operate could pay a market interest rate for savings and charge a slightly reduced rate on the mortgage loan (i.e. 150 BP or so). Such a reward might be necessary to attract savers. Currently, this approach could be financed out of the existing high spread and justified by the lower credit risk these loans entails due to

⁴⁵ Such a specialised two-product institution (mortgages, CSH) is S-Bausparkasse in Austria. The Slovakian bausparkasse (especially P.S.S.) are likely to move in the similar direction.

⁴⁶ It should be clarified how the regulation on savings banks interferes with CSH within a universal bank model.

⁴⁷ For further details, see A. Chubrik, "Creation of the System of Contractual Savings for Housing in Belarus", IPM Research Center, December 2004.



the savings period as pre-screening instrument. The product design of SSB moves in this direction. Before a final decision is made, the options should be discussed in detail with banks and potential consumers.

State support of CSH

As examples show, subsidies are not an essential feature of CSH.⁴⁸ Typically, strong arguments in favour of subsidies are compensation of opportunity costs of long-term savings at below market rate interest and/or the mobilisation of savings channelled into housing investments.

The author recommends that careful analysis should be undertaken that takes into consideration the investment multiplier generated through CSH resources invested in housing loans, distribution effects and the magnitude of substitution effects with other housing finance mechanisms. A central metric for the multiplier should be a sufficiently high loan-to-deposit ratio. In order to reach a sufficiently high loan-to-deposit ratio, analysis must focus on the asset, not liability, side of the system.⁴⁹

In any case, it is important that any subsidies are low enough so as not to impair macroeconomic management or price stability, and do not distort the housing or financial services market. Therefore, any such incentives should be strictly capped and targeted to lower income persons, to limit the government's contingent liability, and to conform to subsidy targeting policies.⁵⁰ Alternative incentives could focus on lower central bank minimum reserves or lower capital requirements staggered by liquidity proximity.

As a guideline for appropriate subsidy scheme serve the German and Slovakian case. In Germany, income threshold apply, thus directing the subsidy to low and middle-income groups. In Slovakia, the subsidy has been constantly lowered with falling inflation rates and rising macroeconomic stabilisation.⁵¹

⁴⁸ The Indian Birla Home Finance Limited is a joint venture between the German BHW Bausparkasse and Chambal Fertilizers and Chemicals Ltd. The Easy Home Loan Deposit scheme is closed and fixes low savings and loan rates. The loan-to-savings multiplier is about 1, with savings terms between 3 and 5 years. The scheme is not specifically subsidised beyond the Indian tax subsidies for mortgages, nor is it regulated. For further information see, J. Klare, BHW activities in India, International Union for Housing Finance – Newsletter, November 2004.

⁴⁹ For instance, in the Czech Republic the loan-to-deposit ratio stagnated after the initial build-up at around 30% despite the subsidisation of CSH deposits.

⁵⁰ See M. Lea/B. Renaud, "Contractual Savings for Housing: How Suitable Are They for Transition Economies?", Policy Research Working Paper No. 1516, The World Bank, August 1995.

⁵¹ The terms of the subsidy scheme are as follows: the payment of subsidy is subject to a minimum savings period of 6 years. The bonus amounts to 15% of annual savings up to a maximum of SKK 2,500.00. Thus, the maximum savings amount to be eligible for the bonus is SKK 17,000.00 per year. The drawback of the Slovakian scheme is that modifications also include previous saver generations. Such regulations may hamper confidence in the scheme.

Regulation on CSH

The following are general principles of CSH regulation. Specific provisions would be drafted after design of the appropriate system for the Ukrainian context.

1. Identification of supervisory body: this role should be allocated to NBU, which should also be responsible for approval of new contract conditions.
2. The supervisory body (NBU) should monitor the CSH and its executing banks as well as the terms of contract: approval of new contract terms should comprise saving terms, allocation terms, loan terms, interest rates etc. The supervisor should verify whether the banks have sufficient capital. Furthermore, monthly or quarterly reporting of activity and the liquidity position should be reported to the regulatory institution.⁵² The supervisory body should be entitled to:
 - Enforce regulations
 - Conduct on-site inspections
 - Review proposed modifications to CSH standard contracts
 - Set or review allocation rules of CSH institutions
 - Discipline CSH managers
 - Deny or revoke an operating license
3. Reporting and auditing standards
 - Separate disclosure of balance sheet and profit and loss statement
 - Periodic liquidity status reporting
 - Approval of new tariffs or product lines
 - Approval of loan transfer to other management
 - Rules for transfer of contract portfolio

Typically, liquidity risk is higher in a closed system than in an open one. Hence, in the case of a closed system, there must be particularly careful regulation during the accumulation period as well as careful supervision of the CSH institution's risk management practices. Legislation should concentrate on the following issues:

- Maintain short and consistent waiting periods in order to avoid big fluctuations in lending activities. In particular, start-up effects should not be transferred to the customer (i.e. all in-going funds should not be transformed into loans), but retained in order to keep the waiting periods in future in balance. If waiting periods are not stable, confidence in the CSH institution may be jeopardised.
- Clearly define the waiting period: it should be made clear that the CSH institution may not guarantee immediate funding of the loan upon

⁵² A liquidity model of the CSH should be designed, which should be run on at least a quarterly basis by the regulatory body.



completion of the savings contract because the waiting period is one of the few strong levers that exist to manage the liquidity of the bank. Savers should have the right to receive a loan, which is conditional on the availability of funds (from other savers). In any case, the amount of loans should not exceed the volume of savings.

- Duration of the savings period: the savings period should encompass a certain minimum amount, a minimum time span of saving activities and the fulfilment of an assessment figure (which takes into consideration the ratio of the whole volume of savings and loans of a CSH institution).⁵³
- Require a reserve fund to meet future loan demand: some portions of the savings should be required to be placed in a special fund, which serves as a cash/investment security reserve.⁵⁴

Flexible contract management: CSH-institutions should be allowed to modify the conditions of the contract for new entrants into the system. However, these modifications should not affect existing contracts. Otherwise, the confidence into the system and the institution could be severely damaged.

3.5 Conclusion

The introduction of CSH could favour the development of housing finance instruments in Ukraine. CSH would be justified for the following reasons:

- The lack of long-term funding instruments, hindering specifically the development of fixed-rate mortgage products.
- Problems of access to mortgage finance for young and low-income households due to low high down-payment requirements and high credit risk management costs.
- Related to the former problem, to generate loan supply in areas not covered by standard mortgage finance and characterised by low loan volumes and high servicing costs, especially modernisation and small transaction loans.

⁵³ A minimum savings period prevents “quick savers” from receiving a loan too early without long saving efforts, which would decrease the liquidity of the CSH-institution in the long run. Other savers might wait longer before receiving a loan. As a result, consistent waiting periods are especially beneficial to savers who save regularly. In countries, where CSH has been introduced, legislators have opted for savings periods between 5 and 7 years.

⁵⁴ These reserves should be used to keep the waiting periods equal in length and as short as possible. The set-up of reserves is of special importance in the start-up period of the CSH.

The results of the analysis are summarised in the table below:

Table 3.4

Results of analysis on the possible introduction of CSH in Ukraine

Criteria of assessment	Results
Effectiveness in addressing risk:	
▪ Credit risk	+
▪ Interest rate risk	+++
▪ Liquidity risk	+++
▪ Exchange rate risk	+
▪ Prepayment risk:	++
Cost to consumers	Depends on individual assessment of options embedded in CSH
Cost to lenders	Mass-product, but economies of scale
Cost to government	May be of importance if subsidies are implemented and wrongly targeted
Readiness of financial system and long-term sustainability	Yes. Sustainability depends on development of market interest rates

Legend: +++ = described risk varies from low (+) to strong (+++) importance for model

Source: Roy

Both in a closed and an open system, credit risk is lowered through the pre-savings requirement. Although interest rates risk is limited in a closed system by contract design, CSH is exposed to interest rate movements in the capital market. Therefore, the setting of the interest rates requires careful anticipation of future interest rate moves. Under volatile conditions, liquidity management will face extensive challenges. Thus, a new CSH product should be tested under stress scenarios before it will be launched. In this regard, tight legislation and supervision are important issues for stable and viable CSH.

In conclusion, CSH helps move lending downward the income distribution in Ukraine. Especially low and middle-income groups have the ability of proving their financial discipline (through regular savings). In addition, they benefit from a better creditworthiness towards the bank (achievement of more favourable credit scores). As a result, housing affordability is likely to rise.

For Ukrainian banks, CSH would be an instrument to attract longer-term savings, which will be channelled into the banking sector, and to further tie relationships with their exiting customers. In addition, it would assist banks in improving their competitiveness.

In this context, CSH helps to develop the overall housing finance systems by supplementing other models. A sound and well-functioning housing finance sector has also stabilising effects on the whole financial sector.