

**ANALYSIS OF CONTRACT
SAVINGS FOR HOUSING
SYSTEMS IN POLAND**

Prepared for



East European Regional Urban Sector Assistance Project
Project 180-0034

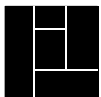
U.S. Agency for International Development
Contract No. EPE-C-00-95-001100-00, RFS No. 645

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March 1998
UI Project 06610-645

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OVERVIEW

In June 1997, the *Sejm* passed an act providing the legal basis to establish contract savings for housing (CSH) institutions modeled after the German *Bausparkassen*. The purpose of these specialized institutions is to mobilize savings deposits for the purpose of providing housing loans. This is the second CSH system introduced in Poland. The initial system (*kasy mieszkaniowe*) was created in an Act of October 1995 and is in operation today.

The objectives of the CSH systems are to collect savings for housing purposes and provide low-cost loans for the same purpose. The government supports the systems by channeling subsidies to savers who take out housing loans.

The *Bausparkasse* system is well-established and successful in Germany and Austria and has been a significant part of their housing finance systems since the 1950s. In addition, CSH systems modeled after the *Bausparkassen* have been recently established in the Czech Republic, Hungary and Slovakia.

The creation of CSH systems in Poland raises potentially significant budgetary and financial sector stability issues. The *Bausparkassen* Act provides for an annual bonus from the state budget in the amount of 30 percent of the savings accumulated in a given year (subject to limits) and the *mieszkaniowe* system provides a tax credit of 30 percent. In both systems, there is a contingent liability for the provider associated with the contractual guarantee to grant a housing loan upon satisfactory completion of a savings contract. The institution providing this guarantee is subject to significant liquidity risk, which has implications for the financial regulatory authorities and potentially the state budget.

This report compares and contrasts the two Polish systems, with each other and with the variants recently introduced in the Czech Republic, Hungary and Slovakia, and analyze their potential effects on the state budget and housing finance system. Based on this analysis the recommendations for amending the *Bausparkassen* legislation are offered. The report is based on interviews and information obtained during the period March 9-20, in Poland, the Czech Republic and Hungary.

ANALYSIS OF CONTRACT SAVINGS FOR HOUSING SYSTEMS IN POLAND

I. DESCRIPTION OF SYSTEMS

Generic

Contract savings for housing (CSH) systems derive from the early United Kingdom (U.K.) experiences with mutual forms of housing finance.¹ They involve a contract on the part of a household to save an agreed amount over a prescribed period in return for a commitment on the part of a financial institution to provide a loan, at pre-specified terms, for the purchase or renovation of owner-occupied housing.² CSH systems are typically characterized by fixed, below-market rates on savings and subsequent loans. In their modern form, governments subsidize savings accumulation through lump sum grants (bonuses) and/or tax relief. CSH contracts may be offered by specialized institutions (e.g., *Bausparkassen* in Austria and Germany) or through the banking system (e.g., *épargne logement* in France).

There are four major components to any CSH system: the savings contract, the loan, the subsidy and the delivery mechanism.

Savings

CSH starts with the household and a financial institution concluding a *contract* wherein the household agrees to save a sum (this can be monthly, annually or a total over the life of the contract) over a certain period of time (the contract may specify minimum and maximum savings periods) at pre-specified terms (the interest rate is typically but does not have to be fixed) usually below market.³ The use of the funds may be constrained (for example, the funds may be restricted to use solely for pre-defined housing purposes, or unconstrained, wherein the household may be able to withdraw the funds after completion of the savings contract without penalty. There are typically heavy penalties for early withdrawal of funds (before completion of the contract) including loss of the subsidy.

¹For a detailed analysis of CSH see Lea, M. and B. Renaud, "Contract Savings for Housing: How Suitable Are They for Transitional Economies?", World Bank Financial Sector Development Department Policy Research Working Paper 1516, September 1995.

²Depending on the system, there can be multiple contracts per household (e.g., one per family member).

³The discipline of regular savings and the accumulation of a down payment from savings signal lower credit risk.

Loan

Once the household has satisfied the savings contract, it is entitled to a loan, also at pre-specified terms (e.g., the rate, the spread over the savings rate, and the term). The size of the loan is based on a *multiplier* concept. The loan amount is a multiple of the savings sum (which is 1—1.5, including interest and subsidy, in Germany, or of the amount of interest earned on the savings contract, which is a multiple of 1.5 to 2.5 in France).

In both the French and German systems, the household is *entitled* to the loan upon satisfactory completion of the savings contract. In the case of French households the entitlement is immediate, whereas German households are subject to a waiting period that depends on the availability of funds. In both cases, the granting of the loan is not subject to normal credit underwriting. From a financial perspective, this feature introduces an *option* component to the contract. The household has the right, but not the obligation, to call a loan at pre-specified terms from the financial institution. This option may be very valuable to the household for three reasons: the loan is typically at a below-market rate; the loan term may be long; and the household does not have to go through an underwriting process to receive the loan proceeds.

Subsidy

In a developed financial system with both savings and loan options for households there would be no need or demand for a CSH system because households could save and borrow at market rates. What makes the CSH system attractive is the subsidy the government provides for the savings. The subsidy attempts to bring the effective rate on the savings up to (or exceeding) market interest rates. This makes the package attractive to the household on financial terms: they can save at market rates on a competitive after-tax/subsidy basis and then receive a below-market interest rate loan.

Subsidies take the form of either favorable tax treatment and/or a lump sum grant. Favorable tax treatment can take the form of deduction of interest earned or savings made from taxable income or a tax credit for the same. The subsidy is typically in the form of a bonus paid to the household. This can be done on an annual basis (e.g., a fraction of the new savings for the year) or upon successful completion of the contract (i.e., at the end of the savings period or when the loan is granted).

The dependence of CSH systems on subsidies means that these systems are an integral part of national housing policy and have significant impact on state budgets. It also interjects political risk into the system. At its heart, the CSH system is a mutual system where members of the collective help each other obtain loans. This means that the system depends on a continued influx of new savers to provide the funds to satisfy the loan commitments made to earlier savers who have satisfied the contract. Changing the

level of subsidy becomes a tricky issue as it can have major implications on the flow of new savings and the ability of the system to provide loans.⁴

Delivery Mechanism

The contracts can be offered either through “closed” or “open” means. By closed we mean a system that adheres strictly to principles of mutuality and transparency. Germany has a closed system. CSH deposits are mobilized by a specialized institution, the *Bausparkasse*. These funds are only available to make housing loans to participants.⁵ In case the funds available are not adequate to meet current CSH loan demand, participants will be served according to well-defined queuing rules. This closed special circuit is substantially (but not completely) isolated from the capital markets.

The original French system was closed. By 1970, it had been modified into an “open” system wherein universal banking institutions offer the savings and loan contracts. The purpose of the open system was to create a tranche of savers who would be willing to leave their savings in the CSH system without exercising their loan rights because they found the yield on their savings attractive. The “free funds” so generated could be used by deposit institutions to fund other types of housing loans or invest in mortgage bonds.

Risk

The delivery mechanism has major implications for the design of the contracts and the risk and performance of the system. The key risk of a CSH system is liquidity risk. The terms of the contract obligate the offering institution to provide a loan when the saver is withdrawing his/her own funds. The cash to meet these demands must come from new savings from existing savers who have not yet fulfilled their contracts, or new savers starting contracts. The attractiveness of the after-tax/subsidy savings rate and the timely availability of loan funds are key to the viability of a CSH system. A reduction in the subsidy that makes savings rates unattractive or an uncertain delay in the receipt of subsidy payments or loan funds may result in new savers not coming into the system, endangering the ability of the institution to meet its existing loan commitments.

The ability to manage liquidity risk depends in part on other sources of funds available to meet loan demand. In the open French system, lenders can draw on other

⁴Subsidies have been gradually reduced in both France and Germany over the years without fundamentally reducing the popularity of the systems. However, on occasion they have been raised to ensure stability. The key is to maintain an attractive after-tax/subsidy savings yield.

⁵The *Bausparkasse* institutions offer bridge or interim loans at market rates of interest as well as contract loans.

funds to meet loan demand. This has a major cost, however, because the institution will be using market-rate savings deposits to fund below-market rate loans. If the proportion of CSH loans to total assets is large, it could affect the profitability and solvency of the institution. The liquidity risk is greater in the closed German system. In keeping with the mutual concept, there are limits on the ability of the institutions to obtain funds other than CSH deposits.⁶ For this reason, the German contracts allow the *Bausparkassen* to delay funding of the loans based on available funds. Too long of a delay is self-defeating because it will affect the attractiveness of the system to new savers.

The presence and significance of liquidity risk means that CSH systems must be tightly regulated and supervised. This is done through close monitoring of system savings flows and loan commitments and through periodic changing of the contract terms (which are controlled by regulators in France and Germany). The main contractual levers are the minimum savings period (which, if lengthened, will slow down new loan demand) and the loan multiplier, as a lower multiplier reduces loan demand. Changing contract terms may have to be accompanied by a change in subsidy rates to maintain or improve overall attractiveness.

Polish Contract Savings Systems

The Polish *Bausparkassen* system is based on an Act passed in June 1997 that allows the creation and operation of joint stock banking companies authorized to obtain savings from individuals and make loans for housing purposes. To date two groups have applied to the National Bank of Poland (NBP) for licenses but none have been granted. The *kasa mieszkaniowe* system is based on an Act passed in October 1995, since amended.

The characteristics of the *Bausparkasse* and *mieszkaniowe* systems are shown in Appendix A.⁷

Savings Contracts

Both systems require minimum savings periods (two and three years). Compared to CSH systems in other countries, the minimum savings periods are relatively short (four to seven years). A short minimum savings period can increase the liquidity risk of the systems. It may also result in a larger portion of funds used for renovation and

⁶*Bausparkassen* institutions can accept deposits from other financial institutions, take loans or issue bonds with a maximum maturity of 5 years. There are limits on their ability to obtain funds from these sources.

⁷See also *Building on Progress: The Future of Housing Finance in Poland*, prepared by the Urban Institute Consortium for USAID/Warsaw, May 1997.

modernization projects than for new construction or purchase, as the proportion of the value of the house that can be funded with a short savings period is relatively low.

The two systems differ fundamentally in the setting of interest rates for both the savings and loan. The *mieszaniowe* system has a floating rate (25 percent of the NBP discount rate). This allows some adjustment of contract conditions for changes in the macroeconomic environment. However, the NBP discount rate is not a true market rate; it is used for monetary policy purposes. The *Bausparkassen* system has a rate fixed by law. The design deliberately attempts to insulate participants from fluctuations in capital market (macroeconomic) conditions. In both cases, the real value of accumulated savings is eroded by inflation.

In both systems deposits are guaranteed by the government. In the *mieszaniowe* system the deposit insurance fee is a standard 0.4 percent of deposits. Deposits greater than the amount covered by the fund (9,000 ECU) are covered by an explicit government guarantee. In the *Bausparkasse* system there is a lower deposit insurance fee of 0.1 percent of total risk-weighted balance sheet assets and guarantees. There is no statement as to whether the maximum coverage limit of deposits applies.

Loan Contracts

The *mieszaniowe* loan rates are floating (50 percent of the NBP discount rate), with a spread variable of 25 percent of the NBP rate). The *Bausparkassen* loan rate is fixed at a spread of three percentage points. Neither the rate nor the spread is related to macroeconomic conditions (i.e., inflation).

The formula determining loan size differs between the two programs. In the *mieszaniowe* program, the maximum loan size is 150 percent of the savings. In practice, the multiplier is varied between 1.0 and 1.5 depending on the size and regularity of savings. Liquidity risk rises with the multiplier. Participating banks have the ability to delay funding in event of a *temporary* liquidity problem.

The *Bausparkasse* system's loan multiplier is only 100 percent. The terms of the act are unclear about the borrower's right to immediate funding. *Article 9, Paragraph 2* states that the agreement may not contain limitations on the obligation of the society to grant a housing loan if the saver meets the conditions set forth in the agreement. This wording suggests that the saver has the right to the loan immediately upon completing the savings contract. Institutions considering creating a *Bausparkasse* contemplate a waiting period to obtain loan funds along with the possibility of granting interim loans.⁸

⁸In Germany, the Czech Republic and Hungary the *Bausparkassen* are allowed to provide bridge or interim loans to savers who have completed their savings contracts but are not eligible in the queue to receive their *Bausparkasse* loan. These loans are made at market rates of interest and refinanced by the *Bausparkasse* loan

Subsidy

The *mieszkaniowe* subsidy is a tax credit based on actual savings. Prior to 1997, the household could deduct 30 percent of annual savings. In 1997 an amendment changed the subsidy from a deduction to a credit. The household can claim 30 percent of annual savings as a credit against income tax liability. All other things being equal, a credit is less regressive in incidence than a deduction because the value is not based on the household's marginal tax rate.⁹ A subsidy flowing through the tax system favors upper income households in Poland because most moderate and lower income households do not pay taxes. In general, tax subsidies are less visible and controllable (not subject to annual budget appropriations). However, linking the subsidy to tax payments does provide an incentive for reporting income.

The subsidy in the *Bausparkassen* contract is 30 percent of the annual amount saved up to a limit equal to the average value of three square meters of housing. The current average value of a square meter of housing is New Polish Złotys (PLN) 1450. The maximum first year subsidy is thus PLN 1305. The cap is thus adjusted for house price inflation. In general, lump sum subsidies are visible because as budget expenditures they are subject to annual budgeting and can be easily targeted.

Regulation and Risk

The *mieszkaniowe* program is run by banks as an adjunct to their normal business. The accounts are segregated from the rest of the banks accounts but reported on a consolidated basis. Institutions offering the program are subject to regulation by NBP and the General Inspectorate of Banking Supervision within the NBP.

Liquidity risk is covered in part by a requirement that net income be retained within the system and not taxed and that the National Housing Fund (NHF) provide a refinancing line. Also, banks can fund shortfalls with their own funds, at a loss. The supervision of the *mieszkaniowe* system is the responsibility of the NHF (in the Bank Gospodarstwa Krajowego (BGK)) but an explicit regulatory regime (reporting, modeling etc.) has not been created.

when it become available. In the Czech Republic, the *Bausparkassen* are allowed to make bridge loans once savers have reached 50 percent of the target sum at a rate (9-10 percent) that is higher than the *Bausparkasse* loan rate but lower than market rates of interest (15-16 percent).

⁹Prior to 1997, the saver could withdraw savings and keep previous tax savings. This led to some obvious exploitation of the system whereby households would make a large savings deposit at the end of the year, claim the deduction and withdraw the funds the following year. This practice was eliminated in 1997 with a requirement that past tax savings be refunded in the event that savings were not kept in the system for the entire term of the contract.

The *Bausparkassen* will be subject to Banking Act provisions. However there is no requirement that the NBP specifically regulate the *Bausparkasse* system and the terms of contracts they offer. The alternatives available to maintain liquidity are very limited. According to the Act, they have no other sources of funds (except shareholder equity) and no back-up liquidity source. As noted above, there is ambiguity regarding whether institutions can delay funding. There is no requirement to build a reserve during the start-up period.

The tax treatment and orientation of the two systems are fundamentally different. The *mieszkaniowe* system is non-profit. Institutions offering the program can charge a one percent fee to manage the accounts. They also have the opportunity to cross-sell other financial products to program participants. In keeping with the non-profit status of the program, there is no taxation of net revenues, and retained earnings are kept as a reserve and help reduce the liquidity risk of the program.

The *Bausparkassen* are for-profit institutions. They will be fully taxable at the normal corporate rate of taxation. Although there is a maximum spread between the loan and savings rates, there is no limitation on the fees the *Bausparkassen* can charge. There is no specific regulation about profit distribution. It is likely that the *Bausparkassen* will earn significant profits in the early years reflecting the wide spread between the below-market rate funds and market-rate bond and deposit investments.

Performance

We did not find official data on the number and volume of contracts in the *mieszkaniowe* system. There are three banks offering the program with Pekao SA having the largest program. BGK estimates that approximately 30,000 contracts have been started but does not have data on actual numbers or terms of contracts. A significant number were terminated in 1997 as households took advantage of the regulatory loophole to keep the subsidy without remaining in the program. There have been at least two applications to the NBP to create *Bausparkassen* with a total of five groups known to be planning to enter the market. These are all joint ventures between Polish banks and German *Bausparkasse*.

Summary

The target groups, instruments and regulation of the two systems are fundamentally different. The *mieszkaniowe* system is in reality a housing subsidy program run through the banks. The savings can only be used for housing savings loans. Profits and excess savings are retained in the system and cannot be used for other purposes by the bank. The savings and loan rates are indexed to interest rates and therefore reflect macroeconomic conditions. A liquidity back-stop exists for the program, which ensures that the savers will eventually receive loan funds.

The main shortcoming of the *mieszkaniaowe* system is the use of the tax code as the subsidy instrument. A system based on tax deductions is regressive, in particular in Poland, where upper income households pay most of the personal income tax and therefore stand to benefit the most. The switch to a tax credit reduces the regressivity but the program as presently structured does not benefit moderate or lower income households.

The single change in the subsidy scheme has undoubtedly affected the performance of the program. In addition, publicity surrounding the debate over the introduction of a competing system has presumably also affected the decisions of households to participate.

Providing a liquidity back-stop for the system is an important way to maintain confidence in the system by both savers and institutions. It is particularly important given the design of the system which allows savers to obtain loans in a maximum amount equal to 150 percent of accumulated savings. We believe the National Housing Fund is not well suited to be the liquidity source. This Fund is dependent on the budget for funds and has a number of important housing program responsibilities.¹⁰

In contrast, the *Bausparkassen* system is based on the creation of separate and specialized banking institutions. In the short run this approach is more costly to institutional participants because the banks must be separately capitalized. However, the *Bausparkassen* will operate through the branch systems and networks of agents so the incremental operating costs will be lower than those incurred in the creation of a new universal bank. The rationale for the creation of separate banking institutions is to maintain the strict mutuality and transparency of the system. Almost all funds come from savers (mutuality) and can be used only for housing loans (transparency). This is also the case with the *mieszkaniaowe* system. The major difference is that the *Bausparkassen* can be run on a for-profit basis, which is more attractive to the banking institutions and is necessary to attract German joint venture partners and their expertise.

The use of a lump sum subsidy based on savings will appeal to a larger proportion of the Polish population than would a tax-based subsidy. It will also be less regressive. The use of a fixed rate of interest makes the *Bausparkassen* program more dependent on a subsidy which will have to be adjusted to macroeconomic conditions to maintain its attractiveness to new savers, without making it overly attractive. Frequent changes in the program parameters should be avoided. Any CSH system depends on the continuity of the program to keep a flow of new funds coming into the institutions in order to maintain liquidity.

¹⁰For example, NHF funds were depleted in 1997 to provide flood relief.



As currently structured, both programs are attractive to households wishing to obtain housing loans. Although the *Bausparkassen* may attract some funds from the *mieszkaniowe* providers, many upper-income households may open accounts in both.

II. COMPARISON WITH OTHER BAUSPARKASSEN SYSTEMS

Bausparkassen programs modeled after the German system have been adopted in the Czech Republic (1993), Hungary (1997) and Slovakia (1992). Appendix 2 summarizes the key features and performance in comparison with Poland.

There are several notable characteristic differences between the programs in the Czech Republic (CR) and Hungary, and those in the Polish Act. These include:

- Higher maximum premium in Poland (equivalent to 100 percent of average monthly wage, compared to 53 percent and 75 percent of average monthly wages in the CR and Hungary respectively).
- Shorter minimum savings period in Poland (two year period, as opposed to four years in Hungary and five years in CR).
- Participants may keep the premium without taking a loan after the minimum savings period in the CR and Hungary but not in Poland.
- Requirement for regular savings in CR and Hungary (not specified in Poland).
- Waiting periods may be imposed and bridge loans may be offered in CR and Hungary (unclear in Poland).

Indexed Cap in Poland (Fixed Nominal Cap in CR and Hungary)

The programs have been quite popular in all three countries as gauged by the number of *participants*. The number of households with contracts in CR and Slovakia exceeded two percent of the population after the first full year of operation. In the Czech Republic the proportion of total outstanding contracts of the population is over 19 percent and over 17 percent in Slovakia. The Hungarian program was started in May 1997 with the granting of three licenses to conduct business. By the end of 1997, over 290,000 contracts (nearly three percent of the population) had been signed.

The programs have generated significant *savings* as well. On average, in 1997, Czech participants saved PLN 1,031 or 9.6 percent of average annual income. This amount was 56 percent of the optimal level of savings (defined as the amount necessary to maximize the premium)—a ratio that has been rising since program inception. The first

year savings response in Hungary has been greater. On average, participants saved PLN 1,739, or 17.4 percent of average annual income and 80 percent of the optimal level. This performance suggests that a large portion of *Bausparkassen* savings is coming from the transfer of existing savings accounts.

The Czech and Slovak programs have begun to produce *loans*. The net stock of loans in the Czech Republic has grown to 9 billion CK, a loan-to-savings proportion of 15.2 percent. As the minimum savings period is five years and the program began in 1993, a significant portion of the loans are interim and will be paid off with a *Bausparkassen* loan once the household concludes the savings contract). Lending has also begun in Slovakia, but we have no details on volume or characteristics.

The *budgetary impact* in neighboring countries has also been significant. In Hungary, *Bausparkassen* premiums will represent seven percent of the 1998 housing budget and 0.3 percent of total budget. Based on first year household behavior, if the number of contracts rises to 800,000 by the end of third year (eight percent of the population, still well below the participation rates in the Czech Republic and Slovakia) the premiums would rise to 28 percent of the housing budget and one percent of total budget by 2000. In Czech Republic, premiums accounted for 29 percent of the housing budget in 1997, and are forecast to rise to 38 percent in 1998. In 1997, premiums accounted for 0.74 percent of the total government budget and are forecast to rise to one percent in 1998. In Slovakia, premiums accounted for 33 percent of the housing budget and 1.6 percent of the total budget in 1996. The government cut back the premium, which reduced budgetary impact to only 1.06 percent of the total budget in 1997.

The Hungarians and Czechs have taken different paths with respect to *regulation*. There is no specific regulation of the *Bausparkasse system* in the Czech Republic. The institutions must obtain banking licenses and demonstrate satisfactory equity. There is an assumption that the presence of professional foreign know-how and equity support is sufficient to guarantee stability, as it is strongly in the domestic self-interest of the partners that the foreign venture succeed. At this point in time the Central Bank expresses no concern over liquidity but is focusing on the credit quality of newly offered interim loans. The Ministry of Finance has developed a system to calculate, pay and control premiums on individual accounts.¹¹

¹¹This system cost about 7 million CK and may be adaptable to Poland.



The Hungarians have followed a different approach in developing a detailed regulatory framework modeled after that in Germany.¹² Some specific requirements include:

- Minimum equity for *Bausparkassen* in excess of normal banks (500 million FT relative to 400 million FT).
- Formula guidelines relating loan and savings terms.¹³
- Ability to obtain market-based liabilities (up to 40 percent of contractual savings).
- Required reserve equal to 10 percent of deposits.

The latter requirement is particularly noteworthy. The purpose of the provision is to keep a substantial portion of the profits derived in the early years of the program available to meet future loan demand. The government will review the level of the reserve (which is tax deductible) after the system begins funding loans. The Ministry of Finance (Department of Financial Institutions) has the responsibility for regulation and oversight of the system.

Summary

The Czech and Hungarian *Bausparkassen* laws are more detailed and somewhat more conservative than the Polish Act. The premiums are less generous relative to monthly incomes, the required savings periods are longer, and the premium may be kept after a minimum period in order to encourage participation of non-borrowing savers. The Czech and Hungarian Acts specifically allow waiting periods and interim loans. The Hungarian legislation contains a number of regulatory provisions designed to minimize liquidity risk and is an appropriate model to consider for Poland (as the macroeconomic environments are similar).

III. ESTIMATION OF BUDGETARY IMPACT

The budgetary effect of the Act as well as the commercial viability of the *Bausparkassen* will depend on the flow of new savings. The annual determinants of the

¹²There are detailed regulations specific to *Bausparkassen* programs laid down in both the *Bausparkassen* law and various implementing regulations. These are summarized in Section I. We have been told that the regulators in Germany (the Federal Banking Supervisory Office) will require the foreign activities of most *Bausparkassen* to conform substantially to the German law.

¹³(Term*amount of savings)/(proposed term*amount of loan) >0.8 (0.9 recommended in Hungarian legislation).

subsidy are the number of savers and savings per household. It is difficult to quantify the likely demand of households to save in the Polish *Bausparkassen* program. The flow of savings will depend on the attractiveness of the program, the perceptions of households about future availability of subsidies, loans and interest rates and the savings capacity of households.

Attractiveness

If the household saves an optimal amount (that necessary to obtain the maximum subsidy) the after-subsidy returns are quite attractive in the current macroeconomic environment.¹⁴ As shown in Table 1, the household will earn a positive real return over an 8 year holding period with an 11 percent constant inflation assumption. With lower inflation the real returns rise and the break-even holding period (after which real returns become negative) becomes longer. However, at higher inflation rates (e.g., 20 percent), the break-even holding period falls (e.g., to five years).

Table 1
Real Savings Returns with Different Inflation Rates (percent per annum)

Savings Period	Inflation Rate (percent)		
	5 Percent	11 Percent	20 Percent
2	16.56	15.08	13.02
3	12.21	9.91	6.69
4	9.53	6.70	2.76
5	7.71	4.53	0.10
6	6.39	2.96	-1.83
7	5.40	1.77	-3.28
8	4.62	0.84	-4.40

At current inflation levels, the savings return is quite attractive. Market deposit rates for a 12-24 month term are in the range of 19-24 percent with most around 20-21 percent. Inflation in 1998 is projected to be approximately 14 percent but is expected to decline to 12 percent, which suggests that real savings interest rates are in the range of 6-8 percent. Real rates are currently high, reflecting tight monetary policy in response to the Asian currency crisis and the unexpected budgetary outlays for flood relief in 1997.

¹⁴The household must save PLN 4350 annually to obtain the maximum premium. Simulations assume a three percent annual savings rate and a six percent annual loan rate.

Focusing on the savings returns alone ignores the value of the below-market rate loan which adds significantly to the attractiveness of the program. To express the value of the savings contract and the loan, we computed the net present value (NPV) of the sum of savings, loan, premium and interest over different holding periods, discounted at the assumed inflation rate.¹⁵ A positive NPV indicates that the value of the contract to the household is greater than what it has to pay for it. Table 2 shows that the *Bausparkassen* contract with its current parameters is unequivocally a good deal for the household. The NPV is positive for all combinations of inflation rates and savings period, assuming a loan term equal to the savings period.

Table 2
NPV with Different Inflation Rates

Savings Period	5 Percent	11 Percent	20 Percent
2	2474	2873	3203
3	3484	4027	4288
4	4347	4983	4996
5	5069	5738	5324
6	5653	6290	5285
7	6103	6641	4895
8	6424	6793	4178

For the current 14 percent inflation rate environment, the NPV rises with the length of the savings period. Although the value of the savings falls with longer savings periods, the value of the below-market-rate loan rises the longer it is in effect, assuming the loan term is assumed to equal the savings period. The package is worth less at lower inflation rates. The value of the below market rate loan is less in the later years. At higher inflation rates, the household maximizes the benefit with a shorter term contract (i.e., five years). Inflation reduces the value of the savings as well as the value of the below market rate loan if it is obtained later into the future. A loan term longer than the savings period increases the value of the contract to the households because they would benefit from the below market rate loan over a longer period.

The value of the contract is dependent on the size of the subsidy. We analyzed the effect of changing the subsidy rate on the real savings return and the NPV of the contract (Table 3). When the subsidy rate is cut from 30 percent to 10 percent, the two year real savings return falls from 15.1 percent to 5.5 percent and the year in which the real return falls from year 9 or 10 for a 30 percent premium to year four or five for a 10 percent

¹⁵Discounting at the mortgage rate which is above the inflation rate would reduce the NPV but it would remain positive over the parameters shown in Table 2.

premium. The NPV of the contract remains positive for all combinations but falls 56 percent for a two year savings and loan period and 84 percent for an eight year period.

Table 3
Subsidy Rate Sensitivity

	Subsidy Rate			
	30 Percent	20 Percent	15 Percent	10 Percent
Two year real savings return (Percent)	15.1	10.6	8.2	5.5
Savings Break-Even Year (Percent)	9-10	7-8	5-6	4-5
Two year loan NPV (PLN)	2873	2068	1665	1263
Eight year loan NPV (PLN)	6793	3925	2491	1057

Note: Based on assumption of an 11 percent inflation rate.

The system is vulnerable to macroeconomic shock. If inflation rates were to rise to 25 percent and 30 percent in the second and third years respectively, with a five percent real rate premium, before falling back to 11 percent inflation and zero percent real rate premium, the two year savings real return would fall to 10.4 percent with a 30 percent government premium and 5.5 percent with a 20 percent premium. The savings real return would become negative between the third and fourth years with a 30 percent premium and the second and third years with a 20 percent premium. The NPV of the contract remains positive in both scenarios but falls with longer holding periods with the lower premium.

The subsidy analysis suggests that the premium could be cut from 30 percent to 20 percent while maintaining the attractiveness of the program relative to current savings rates (approximately 6-8 percent real). If real rates of interest are expected to decline significantly in 1998 and the probability of a macroeconomic shock is judged to be low, the subsidy rate could be reduced to 15 percent without jeopardizing the attractiveness of the program.

Conclusion. The Bausparkasse program will be very attractive to users of housing loans. The savings rates are high over a short term horizon (three years) but steadily decline as inflation erodes the value of old savings (earning three percent after the first year). However, the availability of the low rate loan means that the net present value of the combined loan and savings are positive throughout the periods, although they fall after five years at higher rates of inflation.

An important additional and non-quantified element of value is the *loan option* obligating the *Bausparkasse* to provide the loan at a future date that is, not subject to credit underwriting. This option may be perceived as very valuable in a market where mortgage loans are not yet generally available and many households do not have

experience with the formal financial sector. As currently written, there is no underwriting requirement at the time the loan is taken out, but there is a requirement that a mortgage lien be placed on the property.

Perceptions

The attractiveness will also depend on perceptions—the government's delivery of the subsidy and the *Bausparkassen* institutions to deliver a loan, as well as on macroeconomic forecasts. A strength of the current Act is the obligation to fund on an annual basis, given past bad experience with the PKO-BP program. Expectations of falling inflation increase savings yields but lower the attractiveness of a loan for a given subsidy rate.

Savings Capacity

There are two likely sources of *Bausparkassen* funds. Households can shift existing deposit holdings from banks to *Bausparkassen* or sell holdings of fixed income (Treasury) securities. Given the attractiveness of the returns in the program in its current form and the need for housing (both upgrading and new construction) it is likely that most savings in the first few years will come from existing funds. However, over time, new savings will be based on the savings capacity of Polish households.

At the end of 1997, Polish households held the following fixed income investments:

Table 4
Holdings of Deposits and Treasury Securities

Type	PLN (Millions)	
	30/12/96	30/12/97
Term Deposits (PLN)	47,251.6	68384.4
Term Deposits (foreign currency)	22,869.8	17805
Treasury Securities Purchased by Private Persons	N/A	4508

Source: National Bank of Poland

The question is what percentage of savings may shift from current term deposit holdings and Treasury security holdings to *Bausparkassen* accounts. The experience from other countries suggests that there will be a substantial short run shift. A substantial shift of savings from bank deposits to *Bausparkassen* accounts could cause liquidity problems for smaller banks.

Over the longer term, new savings are more likely to come from the savings capacity of households rather than from the shifting of existing deposits. Data from the 1997:3 survey of income (statistical agency) and expenditure suggest that the average Polish household is a net saver. This is consistent with the recent strong real income growth of Polish households. The average monthly per capita savings during that period was PLN 44, but the savings of the highest quintile was PLN 221. These figures suggest that there is significant savings capacity among Polish households.

Summary Budget Impact

The experience of the other countries suggests that two percent of the population will start contracts in the first full year. The proportion of households with contracts may rise to 15-20 percent over the first four years. In Poland, with a population of 38 million, this suggests that 760,000 contracts will be signed in the first full year, rising to 5-7 million by the end of four years. Assuming the premium and macroeconomic conditions remain about the same, the number of households signing contracts will rise at an accelerating pace for the first few years.

From other countries, the average size contract appears to be in the range of 50-80 percent of optimal. If savings contracts are 50 percent of the optimal amount, this implies a first year budget outlay of 496 million (16 percent of the total 1998 housing budget, 46 percent of the available (net of legacy) housing budget, and 0.3 percent of the total government budget). This budgetary impact is in line with Hungary's first year experience and less than the Czech first year outlay of 0.7 percent total government expenditures and Slovak first full year outlays of 0.47 percent of total budget). If participation rises to 6 million by the fourth year, the forecast outlay would be 3.9 billion PLN (130 percent of total 1997 housing budget). This would imply an outlay of 1.9 percent of the total budget at the end of four years, assuming the total budget increases by 11 percent per year. If the *mieszkaniove* is maintained, the budgetary impact of contract savings for housing programs will be even larger.

The projected budgetary impact is significant given Poland's goal to join the European Union (EU). The forecast budget deficit in 1998 is 2.82 percent, below the EU target of three percent. The addition of a mandated program with the potential to add 1-2 percent to the total budget by the fourth year of operation implies that the government will have to make cuts in other program expenditures or raise taxes.

The housing budget in Poland has been declining in nominal terms over the past few years. In 1998 64 percent of the housing budget was dedicated to legacy programs. The addition of a fast-growing program like the *Bausparkassen* will take up most if not all of the incremental housing resources of the government within the first few years of operation. CSH systems are targeted to homeowners (current or prospective) and will be



a supplementary finance source for most. Therefore, they will not meet the housing needs of all Polish households.

Will the Program Be Self-Financing?

Supporters of the *Bausparkassen* Act assert that it will become self-financing once loans begin flowing. The claim is that the tax revenues from real estate transactions and the *Bausparkassen* themselves will more than offset the premiums within four years. In the view of the team this degree of offset is highly unlikely. A large portion of the loans will be for renovation and modernization and will generate less tax revenue than new construction or home purchases. In part this is due to the fact that for most households, the *Bausparkassen* program will be insufficient for the household to purchase or construct without supplementary funds. The high likelihood of tax avoidance in Poland also suggests that tax revenue from building homes will be less than forecasted. Finally, a significant portion of housing activity attributed to the *Bausparkassen* program would have occurred in its absence (i.e., funded with household equity or bank loans) and cannot be attributed directly to the program.

IV. LIKELY EFFECTS ON HOUSING AND MORTGAGE DEMAND

While the returns are attractive the contract is not likely to provide sufficient funds for households to purchase or construct new houses over the short term. Table 5 shows the square meters of housing financed from the different components of the package over different savings holding periods for households optimizing their eligible levels of premiums. For short holding periods, the package will finance only a small fraction of the value of an average 60 square meter flat (25 percent and 36 percent over two and three year holding periods). The percentage rises with the holding period, reaching over 55 percent in the fifth year and 79 percent by the eighth year. That implies that the household will have to obtain a supplementary loan and/or additional savings to construct or purchase a house.

Table 5
Affordability of Bausparkassen Loans Assuming Optimal Savings

Square Meters Financed					
Savings Period	Savings	(premium)	Loan	Total	Percent of Home Financed
	3.0	0.9	4.0	7.9	
2	5.7	1.7	7.7	15.1	25
3	8.1	2.4	11.1	21.7	36.1
4	10.3	3.1	14.3	27.7	46.1
5	12.3	3.7	17.3	33.3	55.5
6	14.1	4.2	20.0	38.3	63.8
7	15.7	4.7	22.6	43.0	71.6
8	17.1	5.1	24.9	47.2	78.6

Note: Based on an assumption of an 11 percent annual inflation rate.

Inflation significantly erodes affordability. At a 20 percent inflation rate, for example, the square meters financed by the *Bausparkassen* package falls to 48 percent over five years and 63 percent over eight years (Table 6).

Table 6
Affordability at 20 Percent Inflation

Square Meters Financed					
Savings Period	Savings	(Premium)	Loan	Total	Percent of Home Financed
	3.0	0.9	4.0	7.9	
2	5.5	1.7	7.4	14.6	24.3
3	7.6	2.3	10.4	20.2	33.7
4	9.3	2.8	12.9	25.0	41.7
5	10.8	3.2	15.0	29.0	48.3
6	12.0	3.6	16.9	32.5	54.1
7	13.0	3.9	18.5	35.4	59
8	13.8	4.1	19.9	37.8	63

A decrease in the subsidy rate has only minor effects on affordability. A decline from 30 percent to 20 percent in an 11 percent inflation environment reduces the percent financed over a five year period from 57.5 percent to 53 percent and over eight years from 83 percent to 77 percent.

Summary

The combination of the relatively short minimum savings period, high real returns in the early years of savings, the need for substantial additional funds for purchase or construction and the high reported need for renovating and modernizing existing housing units all point to strong demand for short term contracts. If this is the case, this has significant implications for the system. These include:

- Lower budgetary impact (fewer years of paying subsidies to savers).
- Greater liquidity risk (less new savings coming in from existing savers to meet the loan demand).
- Lower profitability of *Bausparkassen* (fewer years to invest below market rate savings in market rate investments).
- Less housing market impact (low demand for new units from *Bausparkassen* savers).

The groups interested in setting up *Bausparkassen* believe that households will take out contracts of four to six years. In addition, they plan on imposing minimum waiting periods and offering market rate bridge loans. If they do this, the system will have a relatively great budgetary impact and low liquidity risk. The *Bausparkassen* will show higher profits during their start-up phase.

The stated intention of the *banks* is to offer loan terms equal to the savings period. This policy has a negative effect on affordability as it forces the households to repay the loan (which is greater than the savings by the amount of the premium and interest) over a short period of time. This policy will reduce liquidity risk.

An important additional effect of the *Bausparkassen* system is on the rate of development of the broader housing finance system. A high rate of participation in the system may reduce short run demand for market rate mortgage credit and thus development of bank mortgage lending and the mortgage bond market. The groups interested in creating *Bausparkassen* have also expressed an interest in offering market rate supplementary credits to *Bausparkassen* borrowers.

V. FINANCIAL RISK AND REGULATION

The main financial risk is liquidity risk, or the risk that the *Bausparkassen* will have insufficient funds to meet future loan demand. 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 satisfied their savings contracts). Possible imbalances between available funds and loan commitments are regulated in the closed German *Bausparkasse* system by a well-publicized point system, plus explicit negotiable loan features trading off loan size, regularity of savings and priority in the queue. In the more open French épargne logement system, stability comes from the liquidity provided by non-users.

The magnitude of liquidity risk is determined by four factors:

- The first factor is the duration of the loans and the savings deposits. To be affordable, housing loans (particularly for purchase) should have relatively long maturities (e.g., 10 years or more). The longer the amortization period the smaller the periodic cash flow and the greater the loan duration. A longer savings term can reduce the liquidity risk of a given loan term.
- The second factor is the loan-to-savings multiple. The larger the multiple, the greater the liquidity risk.
- The third factor is the nature of the loan commitment. If the commitment is an option exercised by a qualified saver (i.e., at their request), the risk is greater than if the lender determines when the commitment is funded.
- The fourth factor is the ability of the *Bausparkassen* to obtain funds other than contract savings. The ability to borrow from other financial institutions or the capital markets (at market rates) can help manage short-term cash shortfalls.

Liquidity risk is significant during the early development of a CSH system. It is easy to get a large number of savers to enter the system during the first few years by offering a large subsidy. A large portion of savings in the early years is likely to come from existing sources (i.e., shifting from existing accounts). But sustainability depends on the flow of new savings into the system, which in turn is dependent on the continued attractiveness of the system. In order to control liquidity risk, the system must ensure continued attractiveness to new savers, which is a function of both the savings return (including the bonus) and availability of loans.

The *Bausparkassen* Act contains one major feature that will minimize liquidity risk. In Article 12 the amount of the housing loan may not exceed the amount of savings together with the bonuses and interest. In other words, the multiplier is one. An institutional practice of equating the loan and savings periods could also significantly reduce liquidity risk.

There are several aspects of the Act that can lead to increased liquidity risk:

- A relatively short minimum savings period. A faster turnover of funds reduces the stock of savings available to meet future loan demand. This can become significant if market pressures force the *Bausparkassen* to offer loan terms greater than the savings period (which is the case in the *mieszkanie* system).
- The *Bausparkassen* have no access to additional funds through loans or bond issuance.
- There is little possibility of “good brothers” (households that leave their savings in the *Bausparkassen* and do not take loans), as accessing the subsidy is dependent on taking a loan.
- The Act is ambiguous when it comes to the ability to impose a waiting period. Article 9, paragraph 2 states that “The agreement may not contain limitations in the obligation of the society to grant a housing loan if the saver meets the conditions set forth in the agreement.” This statement can be interpreted to mean that the saver has a right to immediate funding of the loan upon completing the savings contract.

The Act is silent with respect to the specific regulation and supervision of the *Bausparkassen*, stating only that they will be banks and subject to the Banking Law. In Germany the authorizing legislation includes a number of regulatory provisions governing the operations of the institutions and structure of the contracts. Furthermore, the Federal Banking Supervisory Office (*Bundesaufsichtamt für das Kreditwesen*) has developed detailed regulatory guidelines that focus on maintaining the liquidity of the system. In particular, the law states that the Office is “authorized to give such instructions as may be necessary to reconcile the business operations of the *Bausparkassen* with the general business principles and with the standard terms and conditions for *Bausparkassen* contracts.” This is interpreted as allowing the regulators to review and approve the terms of *Bausparkassen* contracts from a safety and soundness perspective. Some of the more notable regulatory provisions are:

- Limits on the sum of housing loans and guarantees to eight times the equity resources of the *Bausparkassen*.
- Ability to accept third party monies from credit institutions and other institutional investors and to issue bonds with a maximum lifetime of five years.
- Investment of the spread between interim and contract loan rates into a technical reserve up to an amount equal to three percent of *Bausparkassen* deposits.

- Requirement that the *Bausparkasse* not designate a specific point in time at which the contract sum will be paid to the customer.
- Minimum savings period of seven years (to receive the subsidy).

An important issue that is not addressed in the Polish legislation is the access to profits generated in the early stages of the system. During their first few years of operation the *Bausparkassen* will earn significant profits by investing savings paying three percent interest into money market instruments (government securities and deposits in banks). There are no restrictions on the ability of the *Bausparkassen* to pay out the net income to their investors in the form of dividends or requirements to establish reserves to fund future loans.¹⁶

Summary

The Polish *Bausparkassen* Act is virtually silent about regulation and supervision of the system. This omission is dangerous. Because of the importance of the subsidy to the attractiveness of the system, any inability of the institutions to meet future loan demand is likely to result in demands to the government to meet contractual obligations at below-market-rates of interest. It is therefore in the interest of the government to ensure that the system is run on a conservative and sound basis.

The first step in this process is to ensure that the proper regulatory agency (National Bank of Poland or National Banking Commission) has regulatory and supervisory oversight of the system. This includes the authority to specifically regulate the *Bausparkassen* institutions and contracts in a similar fashion as exists in Germany. The same regulatory framework and regulator should be used for the two CSH systems.

A number of changes to the existing legislation should be considered to ensure safety and soundness. These include but should not be limited to the following:

- Increase in the minimum savings period.
- Specific allowance for waiting periods and bridge loans and regulation of the terms thereof.

¹⁶Several of the groups interviewed for this study indicated that they did not intend on paying dividends for the first 5-10 years. The profitability of the *Bausparkassen* may be lower in the first few years reflecting the start-up costs of a new organization. However, the joint ventures will allow the *Bausparkassen* to market their products through the existing branch systems of Polish banks. Furthermore, the systems and software for the system will be adapted from the German joint venture partners and may be licensed from or contributed to the joint venture reducing up-front costs.

- Regulation of the proportion of assets made as bridge loans.
- Specific allowance of non-contract savings liabilities.
- Regulation of the proportion of liabilities in non-contract form.
- Ability of regulators to approve terms of new contracts (e.g., minimum savings periods, waiting periods, multipliers, loan terms).
- Ability to require liquidity reserves.
- Monthly or quarterly reporting of activity and liquidity position.
- Allowing savers to retain the bonus after a certain period of time to allow for the possibility of non-borrowing savers in the system.
- Requirement that a model of the liquidity of the system be created and run on at least a quarterly basis by the appropriate regulatory agency.

The net earnings of the system can be an important contributor to system liquidity and thus sustainability. The Hungarian approach of requiring profits to be retained in the institution until a reserve equal to 10 percent of savings is created is a conservative policy that will help ensure the availability of funds to meet future loan demand.

As part of the licensing process for *Bausparkassen* the National Bank of Poland should request details on the contract designs the institutions propose to offer, the proportion of contract savings loans they intend to fund with bridge credits, simulation analyses of the performance of the institution in different macroeconomic scenarios and a plan for maintaining the liquidity of the institution in such scenarios.

VI. RECOMMENDATIONS

The recommendations of the team address two major areas of concern: the budgetary impact and risk to the financial system. The major area of emphasis from the budgetary standpoint is the subsidy formula and from a risk standpoint the regulation and supervision of the liquidity risk of the *Bausparkassen* system.

Subsidy Formula

If the government believes that the forecast subsidy commitment (now and over the life of contracts) is unsustainable, *it is imperative to change the formula now as a later change increases liquidity risk* as described above. The object of the analysis is to

produce a result that retains the attractiveness of the program to households, institutions and sustainability with minimal liquidity risk for the government.

Problems with the Existing Formula

The initial subsidy rate appears to be too high, relative to that needed to attract new savers, particularly if the option component of a loan is factored in. Furthermore, the use of a fixed formula does not allow for change as macroeconomic conditions such as inflation change. Indexing the formula to the value of housing means that the program may grow in real terms as the rate of housing inflation is greater than overall inflation.

The Act locks the government into a specific subsidy formula with no ability to control outlays (without amending the Act). The lack of control over the subsidy, the silence regarding specific regulation and supervision of *Bausparkassen* and their dependence on only two sources of funds; contract savings and shareholder equity increase the liquidity risk of the system.

Ministry of Finance (MOF) Proposal

The MOF has proposed to defer payout to end of savings contract (period). *This is not a good solution for several reasons:*

- Deferral does not reduce or eliminate the government's liability. Proper accounting would set it up as a contingent liability.
- Deferral does not address the subsidy level or the flexibility necessary to respond to changes in the macroeconomic environment.
- Deferral increases perception of risk to households and institutions, which reduces the attractiveness of the program.

Options

The team believes the following changes in the subsidy formula should be enacted:

- **Reduction in the Initial Level.** An initial level of 20 percent would provide attractive but not extraordinary returns to households in the current environment. The cap on the *mieszkaniaowe* program should be set at a comparable level to maintain relatively similar levels of attractiveness of the two programs.
- **Indexing the Formula to Inflation.** The purpose of the subsidy is to obtain a competitive savings yield. If inflation drops and the subsidy does not, the

formula will generate extraordinary yields. If inflation rises and the subsidy does not, the formula will generate below market yields, reducing new inflows and increasing liquidity risk. Indexing to inflation is not ideal as it does not allow for real rate variability. An alternative would be to tie the rate to the interbank rate or another market rate. It is preferable to index the formula rather than to depend on ad hoc future adjustments which have to go through the legislature with uncertain results and timing. The changes in the formula would only apply to new vintages—i.e., new savers. Locking in the rate existing in the contract would honor the concept of a contract and would not imply that the government was changing the rules of the game.

- **Fixed Nominal Cap.** For budgetary purposes it is preferable to fix a maximum cap in nominal Zloty rather than to index the cap to house prices. As noted above, house prices have been rising in real terms, and are likely to continue to do so. Given the supply constraints in the market it is dangerous to the budget to implement a program for which costs could increase in real terms, particularly if tax revenues are not similarly indexed. The cap could be set at approximately the same level as is currently in the legislation (PLN 4350). If the real value of the cap declines too much it can be adjusted in legislation.
- **Limit on Time Eligibility.** A limit on the number of years households can receive a subsidy would eliminate long tails on subsidy obligations. In Germany the maximum is seven (7) years (in CR five (5) years, Hungary eight (8) years). If adopted this limit could be combined with a change allowing households to keep the premium if they keep their savings in a *Bausparkasse* more than seven (7) years. This change will reduce liquidity risk to system by generating good brothers (savers who do not withdraw funds for housing loans).

Regulation and Supervision

It is imperative that the Act require the NBP to *specifically* regulate the *Bausparkassen* and terms of contracts they offer. The German regulatory system is highly developed and very risk-averse and is the proper starting point for creating regulations governing the system. In fact, it may be that German joint venture partners will not be allowed to participate if a regulatory framework substantially similar to that in Germany is not in place. The team has the following additional observations on control of the liquidity risk of the system:

- **Require a Longer Minimum Savings Period.** The current two year minimum savings period is much shorter than in Germany or the neighboring countries. A longer minimum savings period (e.g., four years) would reduce liquidity risk and increase the proportion of resources going to larger housing solutions (e.g., purchase and new construction).

- **Clarify Article 9, Paragraph 2.** It should be made clear that the *Bausparkassen* cannot guarantee immediate funding of the loan upon completion of the savings contract. The possibility of a waiting period is one of the few strong levers that exist to manage the liquidity of the institution. The terminology should refer to the right of the saver to *eventually* receive a loan, conditional on the availability of *funds from other savers*. As in the German law, the Act may state that funds “. . . will be allocated in a manner that keeps the waiting periods equal in length and as short as possible”. The Act should further specify that the *Bausparkassen* can make interim or bridge loans but that the proportion of such loans to total savings should be strictly limited.
- **Require a Reserve Fund to Meet Future Loan Demand.** One danger in the Act as currently written is that the *Bausparkassen* can dividend the after-tax profits earned in the early years of the program, generated from the spread between market rate other assets and low rate contract savings, to shareholders. This reduces the funds available to meet future loan commitments. Some portion of savings should be required to be placed in a reserve that cannot be paid out to shareholders until some future date when the regulatory authorities determine that the institution is stable from a liquidity perspective. The Hungarian approach of requiring institutions to create a reserve funded from the spread between market rate investments and contract savings in the early years should be considered. One option to consider in Poland is to allow *Bausparkassen* to defer tax on some portion of profits, with the requirement that the deferred tax liability be held as a cash/investment security reserve.
- **Uniform Deposit Insurance Premiums.** The Act states that the required annual fee for coverage of *Bausparkassen* savings deposits under the Bank Guarantee Fund is 0.1 percent of total balance sheet assets, guarantees and sureties of weighed risk. As currently designed there is no reason to believe that the *Bausparkassen* will be substantially less risky than universal banks. Reducing the deposit insurance fee is an inappropriate way to subsidize the system. *Bausparkassen* deposits should be subject to the same deposit insurance premiums as deposits in other financial institutions.

APPENDICES

APPENDIX A

CHARACTERISTICS OF POLISH CONTRACTUAL HOUSING SAVINGS SYSTEMS

Characteristic	Mieszkaniowe System	Bausparkassen
Enabling Act	October 1995	June 1997
Delivery Mechanism	Specific accounts offered by existing banks	New type of bank
Savings		
Minimum Period	Three years	Two years
Minimum Amount	In contract	In contract
Maximum Term/Amount	In contract (ref. to regular savings)	In contract (ref. to target sum)
Rate	Floating at 25 percent of NBP discount rate (min. Two percent)	Fixed by bank
Cancellation	Right of account holder with three months notice and short-term interest cap	Not specified
Cessable Rights	Yes, to close relatives	Specified in contract
Loan		
Multiplier	150 percent of savings	100 percent of savings (including premium + interest)
Maximum Loan Term	In contract (function of multiplier in existing schemes)	In contract
Rate	Maximum floating at 50 percent of NBP discount rate (min. Four percent)	Fixed at maximum three percentage points over savings rate
Availability	Within three months of creditworthiness, collateral adequacy and funds availability	There can be no limitations on obligations of bank to grant loan if savings conditions met
Conditions	Secure claim through mortgage or other form	Secure claim through mortgage or other form
Purpose	Housing (broad range)	Housing (broad range)
Subsidy		
State Premium	No	30 percent of yearly accrued saving up to total equal to value of 3 m ² (current max. PLN 4 350)

Characteristic	Mieszkaniowe System	Bausparkassen
Savings Tax Treatment	30 percent of yearly savings as a credit against income tax due up to max. PLN 15,000	No
Number of Accounts	One per household	One per family member and institution
Limits	No limits on number of years or total sum	Not specified in Act
Banking Institution Treatment		
Profit Orientation	Non-profit. Maximum One percent servicing fee. Net income retained as reserve	For profit. No restrictions specified on use or payout
Tax Treatment		
Profit Orientation	Non-taxable (non-profit)	Taxable at full corporate tax rate (40 percent)
Deposit Insurance	Yes (not subject to maximum). 0.4 percent fee	Yes. 0.1 percent fee
Investment Authority	Housing loans, NBP or Treasury securities, bank deposits	Housing loans, NBP or Treasury securities, bank deposits
Funding Authority	Contract savings reserves	Contract savings, equity
Monetary Reserves	Exempt	Exempt
Capital Requirements	Normal banking (consolidated)	Normal banking (initial, risk-based)
Liquidity Back-up	Refinancing line with National Housing Fund	None specified
Regulation/ Supervision	NHF, NBP	Banking Act. No specific reference to CSH
Liquidation	Must transfer accounts to another bank	Not specified

APPENDIX B

SYSTEM COMPARISONS

	Czech Republic	Hungary	Poland
Date of Act	Feb-93	Nov-96	Jul-97
Date of first operations	Sep-93	May-97	Summer 98
Inflation: 1997 (Percent)	10	18.30	13
Inflation: 1998 (Percent)	12	14	11
Number of inhabitants (Millions)	10.3	10.5	38
Max. Multiplier Loan/ Savings + Premium	1	1	1
Yearly premium savings (Percent)	25	40	30
Yearly maximum premium	4500 CK	36,000 Ft	PLN 1300
Equivalent (Percent) of 1997 monthly wage	53	75	100
Yearly optimum saving (1998)	18,000 CK	120,000 Ft	PLN 4350
Actual average premium	2450 CK	29,000 Ft	n/a
Percent of optimum level	54	81	n/a
Minimum saving terms			
For contractual housing	5 years	4 years	2 years
Kept premium without loan	5 years + target	8 years +	n/a
Earlier "interim" loans	2 years	2 years	n/a
Regular savings?	Yes, on minimum	Yes (amounts, term)	n/a
Expected "good brothers"?	n/a	30-60 (renewals)	n/a
Other features	Interest tax deductible	n/a	n/a
Optimum contract target (for maximum yield)	250,000 CK	1,250,000 Ft	PLN 25,000
Actual average contract (1997)	141,000 CK	800,000 Ft	n/a
As percent of optimum level	54	80	n/a
Housing as percent of total budget expenditure (1998)	2.59	4.05	2.10
Housing budget as percent of GDP	0.79	n/a	0.59
Housing net of legacy (Percent)	n/a	2.60	0.75

	Czech Republic	Hungary	Poland
Housing net of legacy (Percent GDP)	n/a	n/a	0.21
New contracts as percent population (first year)	2 percent	2.8 percent (in first six months)	n/a
New contracts as percent of population (1997)	5.10	n/a	n/a
Accrued contracts as percent of population (1997)	9.1 percent	n/a	n/a
Number of loans as percent of population (1997)	0.80	0	n/a
Net stock savings (bn) (1997)	59.6	n/a	n/a
Contracted amounts (bn) (1997)	291	220	n/a
Net stock loans (bn) (1997)	9.1	0	n/a
As percent of stock savings	15.20	0	n/a
Premiums for 1998 (bn)	5.5	5.8	n/a
Percent Budget	0.74-1	0.30	n/a
Percent Housing Budget	29-38	7	n/a
Percent available housing budget	n/a	11	n/a
Percent GDP	0.23-0.30	n/a	n/a
Potential development			
New contracts in 1998	250,000- 450,000	n/a	700,000
Accrued contracts in four years	3.5 million	800,000	3 -6 million
Then premium budget (Percent)	1.50	1	0.3-0.5 (after one year)