Housing Finance Models and Standards in the Republic of Croatia

By Mr. sc. Mladen Mirko Tepuš

Research and Analysis Division, Hrvatska poštanska banka d.d.[1]

1. Introduction

The Republic of Croatia is a sovereign, independent republic, established as a parliamentary democracy since 1991. Its governing structure is based on a principle of the distribution of power among the legislative authority (the Croatian parliament), executive authority (Government of the Republic of Croatia) and judiciary (municipal courts, country courts, commercial courts, the High Commercial Court, the Administrative Court and the Supreme Court). The power is decentralized by virtue of the constitutional right to local and regional self-administration. The country's territorial organization includes 20 counties and the City of Zagreb (the capital) with a total of 123 towns and 425 municipalities.

As a new independent country Croatia is going through a complex process of transition toward a market economy. The main objective is the establishment of a welfare state and to achieve it, it is necessary to improve the efficiency on the macroeconomic as well as the microeconomic level as much as possible, and to raise the living standard and reduce inequality among citizens.

The general urbanization level (ratio of town residents to the total population) stands at 51.09% and is expected to rise further. In line with the trend, the urbanization level is expected to reach 75-80% by 2015. The average population density is relatively low at 78.39 residents per sq km. The fact that towns represent the main hubs of employment is among the reasons that 16% of the total population lives in the metropolis

Table 1. Land Indicators

Land area (km^2)	56,542	Residential land (km^2, % of the total):	7.65%
Coastal sea (km^2)	31,067		
Islands:	1,185	Inhabited Islands:	47
Capital:	Zagreb	National currency:	Kuna (HRK)

Source: Central Bureau of Statistic

Table 2. Macro Economy

		2002	2003	2004
GDP (at market prices)	(million USD)	22,812	28,810	34,311
GDP - year-on-year rate of growth	(in %, constant prices)	5.2	4.3	3.8
GDP per capita	(USD)	5,134	6,486	7,724
Unemployment rate	(% of labor force)	22.3	19.2	18
Inflation rate	(in % end of year)	1.7	1.8	2.1
Gross savings rate	(time and savings deposits as % of GDP)	63.6	69.2	69.5
Monthly average net wages	(in USD; end of year)	520.6	643.9	740.3
Exchange rate	(HRK : USD; end of year)	71,457	61,185	56,368

Source: Central Bureau of Statistic and Croatian National Bank

[1] The opinions presented in this article are those of the author and are not necessarily held by the Hrvatska poštanska banka d.d.

(City of Zagreb). Out of the total housing units in 2003, 67.03% were in towns and 15.6% of the total population were day migrants (or commuters).

Croatia's demographic picture based on the facts collected in the 2001 census can be described as less than satisfactory: senior citizens prevail in the population and the number of deaths exceeds the number of births (the population is shrinking).[2]

The Croatian economy recorded solid growth in 2004 (slightly weaker than a year earlier) which, along with the total outstanding external debt (reaching 88% of GDP) and balance of payments and fiscal deficits, was the main characteristic of the macroeconomic situation. Construction, which was the activity with the strongest growth in 2003 (primarily thanks to intense investment in the road infrastructure because it was stressed as a top priority of the Government's economic programme) declined in 2004, while the strongest growth in 2004 was achieved in industrial production (especially electricity, gas and water supply). Among the monetary developments it is interesting to point out that the Croatian National Bank (CNB) enforced certain measures in 2003 aimed at curbing the credit expansion (after a 39.9% credit expansion to non-financial institutions in 2002 and 19.0% in 2003), so 2004 credits to non-financial institutions grew 14.2% (with the financial activities of non-banking institutions, eg leasing etc growing at the same time). Also, there has been an evident increase in the credit exposure to households (household credits rose 46.8% in 2002, 27.7% in 2003, and 19.1% in 2004).[3]

In April 2004 Croatia received a positive opinion of the European Commission. It became an official EU candidate two months later, and the negotiations on accession to the EU started in October 2005.

2. Housing supply and demand

The data available on the number of housing units, households and population might lead to a conclusion that there is no lack of housing. However, even a rough analysis shows an evident over population of a number of dwellings (as several households sometimes inhabit the same dwelling) as well as a considerable shortage of housing in large centers/towns, low housing standards (the average housing area was just 27.6 sq m per person in 2001, etc)[4] and strong demand for social housing, while a number of dwellings are in need of renovation (eg 7.2% of inhabited dwellings lack sewage, 6.3% have no water supply and some 14% have no WC or bathroom). All this considering, the demand for the purchase and renovation of housing is expected to grow in the future, and so is the demand for home financing.

There is a shortage of urban housing stock, especially in the four largest agglomerations. Estimated shortage for the Capital of Croatia - Zagreb is about 45,000 housing units. Dwelling stock that is still in the hands of local authorities (social housing) is in very poor living condition. The part of urban dwelling stock which was previously owned by the state and was mostly privatized with the beginning of transition has a problem with maintenance (eg the roof leaks, façades are falling off etc). A remarkable part of the privatized housing stock needs serious investments and renovation. War damage during the recent aggression on Croatia contributed to an erosion of housing standards as 135,000 dwellings were destroyed between 1991 and 1994, worsening the living conditions of numerous displaced persons and refugees. A total of 12,580 units were completed in 2001, down 21% compared with 2000, while the number of dwellings built since 1996 is largely a result of the renovation of housing destroyed or damaged during the war. The number of dwellings built each year still lags behind the pre-war period (in the 1980s, 20-30,000 units were being built annually). Resolving the housing problems of the Homeland War victims and the reconstruction of destroyed dwellings was set as a priority of the housing crisis resolution by the Croatian government. All the structures damaged in the war should be rebuilt by 2006 as part of a programme entitled “A Roof for Each House”.

A recent survey on social issues with a representative sample on national level indicated 20% of respondents needed more housing space; 27% of cases had finished housing; 24.9% had finished doors and windows; walls and floors were finished in 21.2% of cases, while 14.5% indicated a problem with humidity in flats.[5]

The rented housing market is poorly organized and the exact number of tenants is difficult to determine as a large number of people who let housing do not report this officially in order to avoid paying tax. Around 37,000 households in Zagreb alone (or 13.5%) have the status of lessees (tenants), paying a monthly rent of 5-7 EUR per sq m[6]. Furthermore, large cities have a considerable number of dwellings with several rooms inhabited by the elderly, so this points to insufficient and inadequate programmes of care for senior citizens.

The first signs of stabilization in the region following the Homeland War brought about a considerable increase in housing prices. The average price per sq m of new-built

[2] According to the Ministry of Environmental Protection, Physical Planning and Construction 2003 Status Report for the Republic of Croatia, 23.7% of the population was young (between 0-19 years of age), mature population (between 20-59 years of age) represented 54.5%, while the old population (60+ years old) accounted for 21.3%.

[3] Source: *Banks Bulletin*, Croatian National Bank

[4] After: Fröhlich, Z., Bežovan, G. and others, 2001, pp. 10-13

[5] Centar za promicanje socijalnih nauka crkve, 2004

[6] Bežovan, G., Tepuš, M. M., Fröhlich, Z., 2004, p. 35.

dwellings in 2004 was between 10,450 kuna (in Zagreb area) and 7,831 kuna (in other towns), while the average monthly net wage totaled 4,173 kuna. A comparison of these amounts shows that an average citizen needed 1.9 – 2.5 monthly net wages for the purchase of a square meter of housing, ie financing the purchase of one's own flat or house from the regular income is impossible.

The latest figures released indicate an increase in the prices of housing in Zagreb and on the Adriatic as a lot of foreign buyers have appeared alongside local buyers, so a number of analysts predict that the prices will increase further.

In the absence of one's own funding, housing may be bought and financed by borrowing on the financial market. However, a large number of average Croatian citizens cannot meet the current criteria of commercial banks – the single market creditors providing long-term housing loans immediately.

3. Housing finance market and system

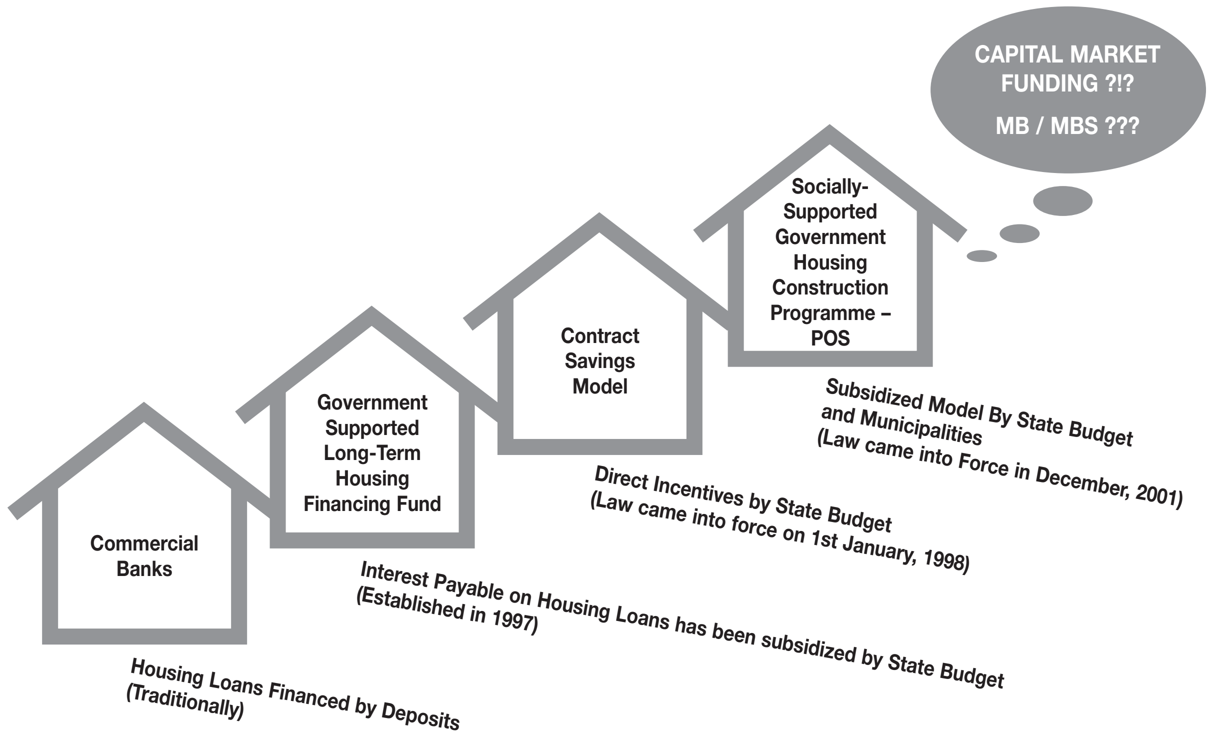
Organized housing financing in Croatia is the business of commercial banks and housing savings banks - HSB (ie, in German, Bausparkassen). Commercial banks often participate in home financing together with housing savings banks, and their products are included in various housing models (eg the government-subsidized POS model). The Government Supported Long-Term Housing Financing Fund was introduced in 1997 but has stopped functioning after just one year of existence.

The ratio of approved housing loans to the Gross Domestic Product in Croatia was 11.3% at the end of 2004, or relatively low compared to the European Union average.[7]

Basic data on housing financing products of the main creditors are shown in Table 4 and are explained in more details under following subtitles.

The Banking Law and the CNB regulations form the basis of the regulatory system of housing financing while the other key national legal regulations that govern housing financing issues are the following: Civil Law, Land Registration Law, Law on Ownership and Other Material Rights, Deed of Assignment Act, Bankruptcy Law, General Tax Law, Income Tax Law, Execution Act, Penalty Interest Rate Act, Draft (Bill of Exchange) Act, Trial Proceedings Act, Notary Public Service Act,

Figure 1. Development of housing finance market in Croatia



[7] The same ratio at the European Union level totaled approximately 40% at the end of 2003, and was particularly high in Denmark (70%), the Netherlands (more than 60%), as well as in Germany and England (more than 50%).

Table 3. Distribution of Granted Home Loans by Financing Model

		2002	2003	2004
TOTAL HOME LOANS	(In mil. USD)	1,742,96	2,792,20	3,862,32
	(Change in %)	53.93	60.20	38.32
	(%)	100.00	100.00	100.00
Market share - Banks	(%)	99.27	98.90	98.29
Market share - Housing Savings Banks	(%)	0.73	1.10	1.71
GDP (at market prices)	(mil. USD)	22,812	28,810	34,311
Home loans / GDP	(%)	7.64	9.69	11.26

Source: Croatian National Bank

Table 4. Typical Mortgage Products

Major products	Method of payment	Loan interest rates	Maturities	Borrowers	LTV	Others
1. Home loan of Commercial bank	Monthly instalments (amortization)	5.50-7.95% (adjustable)	mostly 15-20 years (possible up to 35 years)	Higher & middle-income households	up to 100%	Maximum payment/income ratio = 1 : 3; average loan amount 40,000-50,000 EUR; indexed to the EURO; deposits are requested (10-20%); co-borrowers (1 or 2) are allowed; guarantors (1 to 3) are requested ; real estate as collateral (1:1.3); loan fees 0.5-1.5% of the loan
2. Home loan of Housing Savings Banks	Monthly instalments (amortization)	4.44-6.0% (fixed)	up to 20 years	Households	up to 100%	Controlled use of funds; co-borrowers (1 or 2) are allowed; guarantors (1 to 3) are requested; real estate as collateral (1:1,5); deposit is requested (30-50%); indexed to the EURO; loan fee 1%

Foreign Currency Act and various CNB decisions or directives (eg those regulating a single way of expressing the effective credit and deposit interest rate, or a classification of bank credits and potential liabilities etc).

The business of commercial banks and housing savings banks is supervised by the CNB, along with the Ministry of Finance etc. (eg housing saving banks are also supervised by the State Auditor's Office).

3.1. Housing financing by commercial banks

Along with the process of establishing its independence the Republic of Croatia also embarked on a reform aimed at building an efficient, market-based financial system, transparent by international standards. The early banking regulations were drafted after those in Germany, while also taking into account quality solutions found in other countries. However, the inherited and current state of affairs at the time did not enable a complete "copying" of foreign models. The proposed legislation could not be such as to cause major "breakdowns" within the banking system, but at the time its provisions were supposed to influence banks to develop their business in line with the market rules.[8] After the Bank and Savings Bank Act was adopted in October 1993, universal-type commercial banks began to be founded and they nowadays represent the most developed type of local deposit financial institutions. The development of commercial banks has

[8] Leko, 1999

Table 5. Regulator and Supervisor

	Name of organization	Establishment	Main functions
Primary mortgage market (Lending and credit market)	1. Croatian National Bank	Independent from former Federal National Bank since 1989. Latest law in 2001	Central bank; Supervision Authority for Banks, Housing Savings Banks and Payment System; Banking regulation
	2. Ministry of Finance	-	State Treasury, Supervision, Regulator
	3. Money-Laundering Prevention Office	1997	Anti Money-Laundering Authority - Supervisor for payment transactions
	4. Deposit Insurance and Bank Rehabilitation Agency	1994	Deposits insurance (up to 17,740 USD) and bank rehabilitation
Secondary mortgage market (Funding market)	-	-	-

gone through various stages, and Croatia also had two banking crises.

There were 37 active commercial banks in Croatia at the end of 2004, and 31 of them had credits to households related to the housing loans granted to them.[9] Banks that do not engage in housing financing (6 of them) are smaller banks with individual assets of less than 850 million kuna, while their combined assets represent 1.0% of the total banking sector assets. At the end of 2004, the share of housing loans approved by commercial banks in their total assets amounted to 9.3%.

Total consolidated commercial banks' assets at the end of 2004 reached 225.6 billion kuna and stood 15.5% higher compared to 2003, or 105.1% higher compared to 2000.

The Croatian banking system is characterized by a significant presence of large commercial banks. The two largest commercial banks by asset size (*Zagrebačka Banka d.d. and Privredna Banka Zagreb d.d.*) account for 43.0% of the total banking sector assets, while 9 largest banks account for 89.99% of the banking sector total. The same 9 largest banks by assets size granted 97.02% of the overall housing loans reported at the end of 2004.

There is no organized trade in housing loans in Croatia, and banks engage in housing financing as portfolio lenders. Commercial banks encounter numerous problems

Table 6. Structure of Bank's Loans by Institutional Sectors

	1999	2000	2001	2002	2003	2004
Government units	6.41	8.01	6.59	7.26	7.76	7.21
Financial institutions	2.42	2.12	2.25	2.34	2.78	2.63
Public enterprises	3.73	4.60	4.43	4.09	3.67	3.96
Other enterprises	48.86	43.58	43.48	40.94	37.36	35.61
Non-profit institutions	0.44	0.57	0.25	0.33	0.31	0.31
Households	37.10	40.57	42.48	44.51	47.76	50.03
Non-residents	1.05	0.54	0.52	0.53	0.36	0.25
Total credits (%; mil. USD)	100.00	100.00	100.00	100.00	100.00	100.00
	6,095	6,280	7,884	12,916	17,995	22,212

Source: Croatian National Bank

[9] See: Kraft, Dolenec, Duliba, Faulend, Galac, Šošić and Tepuš, 2001, p.5, almost a half of all commercial banks offered no long-term loans early in 2000. Nowadays, long-term housing loans are available from most banks and the level of interest rate charged makes them most favorable since the country gained independence, ie since the beginning of transition.

related to housing loans, the most significant of which are an information asymmetry, ie insufficient information on retail clients (a credit register was established in 2004), and difficulties related to the valuation and use of collateral (property assessors, in bankers' opinion, are not focused enough on the market value; collection by seizure and sale of mortgaged property is difficult to implement and very often takes a long time).

It is evident from the share of housing loans in the total household credits that the absolute amount of these loans as well as their relative share in the portfolio of commercial banks is growing. The reasons for such developments lie in the following: stable growth of long-term savings deposits, fall of the interest rates charged by banks on housing loans, rise of living standards, loan security (loan service by retail clients has proven the best), improvements in property rights and judicial practice (eg fiduciary rights) etc.

Housing loans are currently offered on the local financial market at a nominal interest rate of between 5.50 and 7.95% (ie effective interest rate of 5.64 to 8.43%[10]) annually, and various credit worthiness criteria are applied.[11] The main criteria for obtaining a housing loan are a borrower's income (salary size) and the quality of the company he/she works for (the stability of its business is assessed). Depending on these criteria additional requirements may also be made (a borrower's own participation; co-borrowers and/or guarantors with appropriate income; certain type and amount of collateral – most often a housing unit worth at least as much as the loan amount to be approved[12], life insurance policy of the borrower tied over to the bank etc.).

Recently, some banks have issued housing loans indexed to the Swiss franc, thereby promoting lower interest rates (between 3.99 and 4.50% annually) and others have granted loans under a repayment-free model, with nothing but the interest repayable over the loan period while the respective share of matured principal is paid into an investment fund. Such products represent an innovation on the local housing loan market and their supply is currently limited, but it is expected to grow in the future. Up to now, there is no analysis made on national level about the risks arising from such products.

Refinancing housing loans from more favorable resources has had negligible scope in Croatia so far, although housing loan contracts include the clauses that regulate this issue, mostly providing for the payment of a certain fee (and interest rate re-charge for the period of taking a loan until the date of prepayment[13]). However, such a state of affairs is definitely influenced by the widespread practice of Croatian banks which, prior to approving housing loans, require that borrowers open current accounts with them for the payment of their whole salary (or other regular income) and do not approve housing loans before a certain period has elapsed (usually three months). Therefore, the choice of a bank to apply to for a housing loan does not depend exclusively on loan terms. Nevertheless, there has been some liberalization of loan terms in that respect as well lately, and it is sure to continue in the future.

Banks use their own networks of branches and outlets (these totaled 1,037 at the end of 2004) as the main distribution channel for housing loans, while the Internet is used first and foremost to inform clients on loan terms and documents that are necessary. Banks have yet to develop external credit brokers (Agents) as a distribution channel for loans. Some banks have opted to operate through such arrangements and we may expect this distribution channel to see further improvements in the future.

The characteristics of housing loans granted by commercial banks in Croatia are very similar, so we may speak about a certain standard of primary housing financing set by the banking industry which is applied throughout the country. For now, there have been no housing loans with the credit characteristics adjusted to particular groups of retail clients (so-called hybrid housing loans etc.) although there is scope for developing such products (eg for people who let private villas in the residential parts of towns and as well as numerous rooms and tourist apartments along the Adriatic coast etc.).

In view of a multiple effect of banking products that finance private housing projects of developers (as a component of the total cost, project feasibility factor etc.) it is necessary to point out, as part of the subject matter of this paper, that such products with their characteristics (loan period, required documents, collateral etc) are very often not adjusted to the needs of entrepreneurs/developers. This ultimately translates into less favorable terms for buyers as it also raises housing prices.

To finance housing loans, Croatian banks do not yet issue mortgage bonds or mortgage-backed securities, nor do they raise funding for this particular purpose in any other manner. The main sources of their housing funding are deposits and their own capital, with the EBRD special-purpose credits/deposits and long-term syndicated loans used by some banks also worth mentioning.

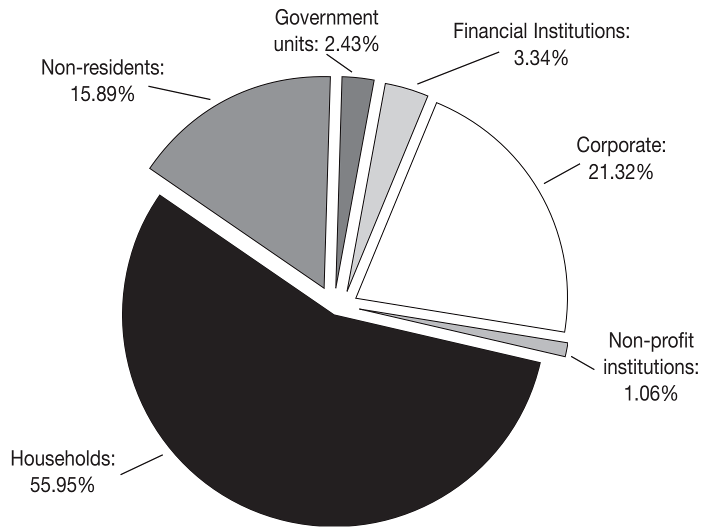
[10] The Croatian National Bank has set the effective interest rate, ie the unique method of calculation of interest rates that the banks have to present to clients and public, since 1st January, 2002.

[11] Almost all the home loans granted in Croatia are indexed to foreign currency.

[12] The mortgaged property has to be insured against fire, natural disasters etc. in the minimum amount equal to the loan amount (hazard insurance).

[13] Example of a home loan prepayment procedure of a bank operating in Croatia: the bank granted a home loan indexed to (EUR) foreign currency (amount: 87,500 EUR; interest rate: 7.5% fixed; monthly instalment: 654 EUR; repayment term: 20 years; secured by: mortgage, 10% deposit, 2 co-borrowers and 4 guarantors) and a client asked to prepay after 6 years of ordinary payments (654 EUR * (6 * 12) = 47,088 EUR). The bank charged 1.5% prepayment fee (919 EUR) on undue principal (61,251 EUR) and 16.328 EUR because of interest rate re-charge (because the total interest had been distributed over principal so that monthly instalment amounts the same over the whole 20 years of repayment).

Figure 2. Distribution of Deposits as at end of 2004 by Sectors (in %)



Most savings at commercial banks are denominated in foreign currencies (foreign currency deposits account for 36% of the total liabilities in the consolidated balance sheet of commercial banks) and are mostly household deposits. Toward the end of 2004, household deposits made up 55.95% of the total deposits.

When raising housing loans, retail clients are required to make a deposit of 10-20% (of the total loan amount) and some banks enable the deposit and loan processing fee to be subtracted from the disbursed loan amount. The deposit has a function of collateral and is often blocked in a special account for the whole loan period and bears no or very negligible interest. Recently, it has been possible to raise a deposit-free housing loan under partially changed loan terms, as banks may require a life insurance policy of the borrower, a larger number of guarantors and/or larger mortgage amount.

3.2. Contract Savings Model – Housing Savings Banks

Croatia, as a number of other countries at the beginning of the transition process, introduced a model to develop housing financing by engaging private citizens' own funds for the purpose of resolving their housing problems. It is a contract model of special-purpose savings with housing savings banks, similar to those in Germany and Austria (Germ. *Bausparkassen*).[14]

To regulate and help develop the contract special-purpose housing savings and financing model, the Housing Saving and Government Incentive to the Housing Saving Act was passed and came into force on 1st January, 1998. It enabled the establishment of financial institutions that specialize in housing financing – housing savings banks. Soon after this Act came into force, housing savings banks began to be founded, expecting a good acceptance in the market and solid business results. Three housing savings banks were founded in the first year after the Act came into force, and two were founded later. During 2002 two housing savings banks merged as a result of their mother-banks merger. The housing savings banks with the Croatian National Bank license operating on end of 2004 were: 1. *PBZ stambena štedionica d.d.*[15], 2. *Prva stambena štedionica d.d.*, 3. *Raiffeisen stambena štedionica d.d.*, and 4. *Wüstenrot stambena štedionica d.d.*

The Housing Saving and Government Incentive to the Housing Saving Act defined the terms under which housing savings banks may be established as well as their operations, the housing savings and housing loan terms, the terms, criteria and procedure of using state incentives for housing and penal provisions. Art. 20 Par. 2 Cl. 2 of the Act stipulates that a maximum agreed interest rate to be charged by a housing savings bank on a housing loan may not exceed the interest rate it pays on housing savings deposits by more than 3,0 percentage points.

The stimulation of housing savings by Croatian citizens is visible from direct incentives, i.e. budgetary funds allocated to all the housing savings banks in the amount equal to 15% of one's own payments into housing savings deposits over a previous calendar year. The basis to which 15% in state incentives is added is legally limited to 5,000 kuna (887 USD) at most, so a maximum amount of incentives a single housing depositor may get is 750 kuna (133 USD).[16]

An analysis of the operations of housing savings banks in Croatia since they were established reveals three distinct periods: a) the first did not allow for housing savings contracts with a protective monetary clause (which is often referred to as the "currency clause" in public)[17], b) the second period since 8th July, 1999, when agreeing the clause was enabled, making it the main

[14] The first housing savings banks in the transition countries of the region were founded in: Slovakia in 1992, Czech Republic in 1992 and Hungary in 1997.

[15] *PBZ stambena Štedionica d.d.* began operating early in 2003.

[16] The state incentives amounted 25% (1,250 HRK = 222 USD) of the same basis (5,000 HRK = 887 USD) before 2005.

[17] Currency clause means that a loan (or deposit) is indexed to foreign currency.

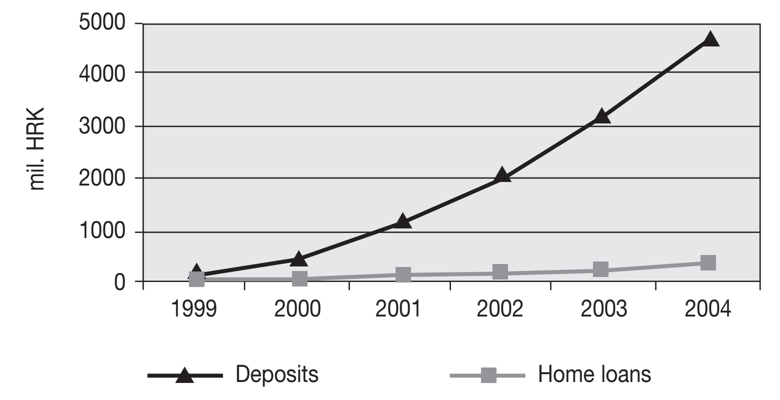
reason for a marked increase in the amount of savings deposited with housing savings banks in the following years, and c) the third period started from July 2005 with the state incentive reduction and de-regulation of Housing Savings Banks operation. By the end of 2004, housing savings banks had concluded more than 630,000 housing savings contracts with private citizens.

In order to win new depositors, housing savings banks have used the following distribution channels: 1) a network of their external salesmen – organized on various multi-level principles, with all the members motivated to sell by the commission paid on the basis of contracts they conclude with depositors, 2) their own and private licensed sales offices, 3) cooperation with and use of the distribution channels of banks (e.g. their counters and outlets), 4) the Internet etc.

Since the approval of an application for a housing loan before July 2005 was subject to a minimum of two years of purpose savings, housing savings banks began granting housing loans only in 2000, while greater credit activity as far as the number and total amount of approved loans is expected in the future.

Figure 3 illustrates a rift between the housing savings accumulated by housing savings banks and the amount of housing loans they granted in the period under observation, with their respective trend. Since a significant portion of loans has not yet "come up" for granting, in the circumstances of strong demand for housing loans housing savings banks have been placing the funds for other purposes defined by the law.[18] Before July 2005, under the Housing Saving and Government Incentive to the Housing Saving Act, housing savings banks were not allowed to engage in direct interim financing of housing depositors, but they have all developed a form of cooperation with commercial banks that enables them to offer a product with appropriate characteristics in the local market. Nevertheless, such a form of interim financing had imposed additional costs, while also hampering the development of this product and a whole area of housing savings banks' business policy. Therefore, instead of financing housing loans their credit potential was channeled into financing the government and its institutions through bond investment.

Figure 3. Overview of Deposits and Home Loans in the Housing Savings Banks Model



3.3. Socially-Supported Government Housing Construction Programme

A socially-supported government housing construction programme (known in Croatia as "POS" model) is the latest market incentive housing model, implemented in Croatia since 11th December, 2001, when the Socially-Supported Housing Construction Act was passed. This model is designed to resolve/improve the housing needs and conditions of households by engaging public funds (those of the government, towns and municipalities) and combining them with the funding of commercial banks and households. It is implemented through the construction of housing units organized so as to optimize the use of public and other funding for the coverage of costs, ensure its repayment and enable the financing of housing purchases on installment schemes, under more favorable than market conditions as far as the interest rates and years of repayment are concerned. The socially-supported housing construction model envisages the construction of flats provided that their maximum sales price does not exceed 910 euros per sq meter of the net usable area while the market price of a sq meter at the time POS model was introduced amounted approximately 1.400 euros (nowadays the market price amounts almost twice as much as the POS price).

Local self-administration units determine the housing needs and interest for the purchase of flats in their respective areas, and are under obligation to provide adequate building site with utilities and other communal infrastructure for this purpose. Those units also set the terms, criteria and procedure for determining the order of priority for the purchase of flats under this model.

If the flats under the POS programme are purchased on an installment scheme, the

[18] The lending policy of housing savings banks is regulated by Art. 10 of the Housing Saving and Government Incentive to the Housing Saving Act, which stipulates that the funds may be used for financing clients' housing loans, investment into the financial market instruments with first-class guarantees (deposits), as well as for the purchase of first-class sovereign securities issues and other securities issued with state guarantees or bank guarantees and placements with safe credit institutions.

buyers have to provide 15 percent of the estimated value of the flat as their own share (down payment), 45 percent is financed by a bank loan, while the Ministry of Environmental Protection, Physical Planning and Construction and self-administration units finance the remaining 40% of the value of flats. Each person buying a flat on an installment scheme has to meet the credit worthiness criteria set by the state Agency for Real Estate Affairs (APN) or a commercial bank providing the loan funds, and the flat being bought is used as collateral to guarantee the repayment of the entire debt including interest. After each such purchase the commercial bank loan is to be repaid first, followed by the remaining part owed to the Ministry and self-administration unit. The annual interest rate charged on the bank portion of the loan is 7.85% and is linked to the six-month EURIBOR, while the interest on the Ministry and self-administration unit's funding (40% of the flat's value) is not payable for the first 16 years and only a so-called compound interest at a 2% rate is calculated. Over the next 15 years, the loan is to be repaid at a 5% annual interest, and the total repayment time on an installment scheme may not exceed 31 year starting from the time a purchase agreement is concluded. The monthly annuity is set as an even amount over the entire loan period, but it may not be smaller than 0.25% of the total purchase price of the flat.

The social dimension of the described model is reflected in the provisions that provide an advantage in the purchase of flats to the households without adequate housing. Under adequate housing we understand flats of 35 sq m in size (with appropriate infrastructure) for a one-member family, plus an additional 10 sq m for each additional member of the household.

By end of May 2005, a total of 2,006 flats under the POS programme had been completed and delivered to their users, while another 2,240 flats are in various stages of construction. According to the data that has been published, 4,617 flat are currently being planned and the interest in further housing construction has been recorded. The new Croatian government, elected in November 2003, announced further improvements to this model of housing financing.

4. Concluding remarks

On the basis of an analysis of the housing financing models presented in this paper one may conclude that Croatia has traditionally been dominated by a deposit-based housing financing model, with commercial banks appearing as the main creditors, although new models and products that have emerged in the past few years are also being developed. As part of the moves to help households resolve their housing problems, the State-Supported Long-Term Housing Financing Fund Act, the Housing Saving and Government Incentive to the Housing Saving Act and a Socially-Supported Housing Construction Programme were adopted. Croatian citizens have shown particular interest in the housing savings bank products and the Socially-Supported Housing Construction Programme, while a state-supported long-term housing financing fund did not take off in practice.

The ratio of housing loans granted by commercial banks and housing savings banks to the Gross Domestic Product has been rising continually over the past few years (it stood at 11.26% at the end of 2004), so it can be expected to continue rising in the future thanks primarily to an increase in the living standards and more accessible financing.

Out of the total outstanding housing loans in Croatia, 98.3% were granted by commercial banks while housing savings banks granted no more than 1.7% of all housing loans. Housing lending is led by the banks with more than 5 billion kuna in assets, and they accounted for 89.99% of the total outstanding housing loans at the end of 2004. Most of the housing loans granted by Croatian commercial banks and housing savings banks are indexed to the euro. Nevertheless, the interest charged by commercial banks is for the most part variable, while housing savings banks grant loans at fixed interest rates.

Whereas mortgage (loss) insurance is very frequent and popular instrument of securing regular loan repayment by retail clients in many countries, very few insurance companies in Croatia offer or design such products. Nevertheless, it is certain that they will be improved in the future, and the Government might begin by setting the necessary standard and even introduce such instruments through its own institutions.

The operations of housing savings banks in Croatia, as well as those in a number of other countries, depend primarily on state incentives (premium) paid into individual accounts of housing depositors. The Croatian housing savings model could develop further through a process of deregulation of the housing savings bank operations, which would enable direct financing of developers' (housing) projects, investments in real estate and provision of some other banking services. During such a process, housing savings banks would assume many of the characteristics of banks so it is entirely possible that, some time in the future, they may start operating regardless of the existence or the level of the government premium.

The latest housing financing model (POS) bears a certain resemblance to the social housing programmes in Finland (as households are required to provide 15% of the funding) and France (since part of the responsibility for the programme is shared by the central and local government, with the local government units responsible for the urban and housing planning and preparing the sites for building).[19] Still, the fact that it is heavily subsidized by the government, apart from its "political charge", is a major shortcoming of this

[19] Similarities to social housing programmes in Finland and France are made based on the Tähtien, T. and Schaefer, J. P. articles in the Housing Finance International, vol. XVII/No 4.

model. Its development might be helped by structural changes to enable private sector investment and initiative, thereby reducing state funding for this model.

The rented housing market has not been part of the housing reform to date as far as the supply or the demand side is concerned, so regulating this segment might benefit all stakeholders.

When providing incentives to the housing construction, it would be vital to take note of the volume of construction work and the capacity of local builders, while also improving the accompanying administrative procedures and activities since stimulating measures on the demand side, while supply remains unchanged, are likely to lead to higher housing prices. The housing prices are increasing in the last few years, while the construction inputs and other costs have not changed sufficiently to prompt or justify such growth. However, if the purchase of homes is most often financed by the loan products of financial institutions, as is the case in Croatia (often up to 100%), it is right to wonder how realistic those prices truly are, whether a price bubble is being created and what might happen when it bursts. Such an outcome might provoke a financial system crisis, and this should definitely be taken into account when deciding on the housing policy measures.

The problems related to housing financing with the help of the models presented in this article have not been completely resolved since many citizens still could not meet the actual home loan terms set out by the banks. Most of the home loans are granted with fully variable interest rates and indexed to foreign currency. In addition, many Croats are taking home loans according to their current credit capacity (in amount as high as a bank is willing to grant) but the dwelling that could be financed in this way does not meet their needs (by size etc.). Therefore, a new cycle of housing financing, in witch larger dwellings (in better shape) will be financed, is expected to appear in the future. Because of presented trends and standards, it seems justifiable to launch an initiative for designing a national model to envisage resorting to the capital market as a source of funding for housing financing that will also limit the client's interest rate risk by introducing long term home loans granted with a fixed interest rate. To that end it is necessary to set the standards or criteria for granting housing loans on the primary market, establish an efficient and comprehensive credit register and a single register of pledged property, while also spurring the development of a system of housing loan repayment insurance (not vital). Certain laws (depending on the model to be developed) would also need to be modified and amended to make sure that the issues such as who may trade in credit portfolios and in what circumstances, are properly and accurately regulated. Licensing and establishment of legal agencies to take part in such a model would also have to be regulated, and Croatia would have to pass legislation governing national mortgage bonds (or mortgage-backed securities), and then set and supervise the minimum criteria that the securities issued on the basis of a mortgage pool have to meet.

Resolving the problems of housing financing is a complex task that depends on a number of national specifics so, when determining the national housing strategy measures and policies, conclusions should be made on the basis of the state of the housing sector and the current fiscal policy (particularly as far as tax relief, subsidies, state guarantees etc. are concerned). If Croatia were to embark on reforms so as to reduce budgetary spending on the existing housing financing models (mostly under the POS programme) and design new models (based on market principles), it would be recommended to include international institutions that have respectable experience with similar tasks (UN, World Bank, EBRD, specialized consultants, etc.) in the process.

References

Centar za promicanje socijalnih nauka crkve (2004): *Praćenje siromaštva u Hrvatskoj, neobjavljeni rad.*

Croatian National Bank (2004): *Banks Bulletin*, nr. 10.

Bežovan, G. (1998.): *Tranzicija u stambenom sektoru i strateške točke razvoja stambene politike u Hrvatskoj*, Revija za socijalnu politiku, 1, str. 23-34

Bežovan, G., Tepuš, M. M., Fröhlich, Z. (2004): *The City of Zagreb Housing Strategy (draft)*.

Fröhlich, Z., Bezovan, G. and others (2001): *Housing – Development Strategy of the Republic of Croatia (draft)*.

Kraft, E., Dolenc, H., Duliba, M., Faulend, M., Galac, T., Šošić, V. i Tepuš M. M. (2001): *Kreditna politika hrvatskih banaka*, Pregledi Hrvatske narodne banke, br. 5.

Leko, V. (1999): *Financijske institucije i tržišta*, materijali za kolegij "Financijske institucije i tržišta", Ekonomski fakultet u Zagrebu, Mikrorad, Zagreb.

Ministarstvo zaštite okoliša, prostornog uređenja i graditeljstva (2004): *Izvješće o stanju u prostoru Republike Hrvatske 2003. (nacrt)*.

Tähtien, T. (2003): Financing Social Housing in Finland, *Housing Finance International*, vol. XVII / No. 4.

Schaefer, J. P. (2003): *Financing Social Housing in France*, Housing Finance International, vol. XVII / No. 4.

Tepuš, M. M. (2002): *An Analysis of the Operation of Building Societies in the Republic of Croatia*, Surveys of Croatian National Bank, S - 6.

Tepuš, M. M. (2004): *Analysis of the Housing Finance Models of the Republic of Croatia*, Surveys of Croatian National Bank, S - 18.

Tepuš, M. M. (2004): *Housing Finance in Croatia – Country Note:* OECD, Paris, France.

Tepuš, M. M. (2005): *Modeli štednje: Razvijati, a ne zaustavljati*, Banka, listopad, Zagreb, str. 50 - 51.

Tepuš, M. M. (2005): *Modeli stambenog financiranja: Housing Finance Models*, Albatros media, Zagreb.