This chapter analyses the financial framework of Armenia's housing sector. The first section provides an overview of the financing available within the housing sector, including public financing. The Government's provision of financial assistance to the sector and to individuals will be analysed. The chapter then moves on to assess the current framework conditions of the housing finance system and its infrastructure, i.e. the banking system, property registration, housing markets, valuation and foreclosure.

A. Housing finance and subsidies

Total spending on housing

Total spending on capital investment as well as maintenance and repair in the housing sector during the past decade has been far too low to prevent the housing stock from decaying. The low level of financing is in particular due to the continuous decrease in public spending. Table 12 indicates the levels and sources of capital spending on housing since 1994, and clearly shows the withdrawal of the state from supporting capital expenditure on housing. Given the Government's withdrawal from major housing expenditure, it is encouraging that during recent years individuals have provided the majority of housing finance and the amounts have risen greatly between 1994 and 2002. Other sources of finance, such as aid and foreign investment, have fluctuated.

Table 12. Capital spending on housing

(a) Armenian drams (millions)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
State	2,605	148	199	1,396	2,708	2,736	49	29	0
Privatization	0	0	0	0	0	0	4,411	1,864	1,039
Community	0	134	0	0	0	0	0	1	0
World Bank credit	1,057	3,529	1,650	841	268	0	0	0	0
Aid	553	1,152	642	911	618	3,914	2,141	1,831	12,815
Foreign investors	0	0	0	0	0	175	233	791	11,404
Organizations	219	427	136	275	399	556	123	1,489	4,827
Individuals	8,500	12,618	9,380	12,551	25,301	18,724	14,141	23,442	45,932
Other	201	5	0	0	517	0	0	0	0
Total	13,135	18,013	12,007	15,974	29,811	26,105	21,098	28,656	64,613

(b)	Percentage	of	total	
(-)				

	1994	1995	1996	1997	1998	1999	2000	2001	2002
State	19.8	0.8	1.7	8.7	9.1	10.5	0.2	0.1	0.0
Privatization	0.0	0.0	0.0	0.0	0.0	0.0	20.9	6.5	1.6
Community	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
World Bank credit	8.0	19.6	13.7	5.3	0.9	0.0	0.0	0.0	0.0
Aid	4.2	6.4	5.3	5.7	2.1	15.0	10.1	6.4	19.8
Foreign investors	0.0	0.0	0.0	0.0	0.0	0.7	1.1	2.8	17.6
Organizations	1.7	2.4	1.1	1.7	1.3	2.1	0.6	5.2	7.5
Individuals	64.7	70.0	78.1	78.6	84.9	71.7	67.0	81.8	71.1
Other	1.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Urban Development.

Public spending on housing and subsidies

Public spending on housing has been concentrated on those who lost their homes mainly as a result of the earthquake or regional conflicts. Much of this has been foreign aid, so it cannot be assumed that recent levels of spending will be maintained in the post-disaster period.

There have been several programmes aimed at providing housing by subsidizing supply or demand.

The most direct supply-side subsidy has been the provision of new homes at no cost to homeless families. Per unit, this is the most expensive way of meeting housing needs. Some units that were damaged in the earthquake have been strengthened and renovated to basic standards. This is less expensive than building new ones. These direct interventions will have had some spillover effect, both positive and negative. For example, some private construction activity, both inside and outside the earthquake zone, will have been crowded out. On the other hand, some new housing (such as houses funded by the Lincy Foundation in Gyumri) has been located in 'recovery channels,' which are designated new residential areas, to restore confidence in the city's prospects, which, in turn, could help to attract private investment.

Other households have been given land on which to build housing. The cost of this policy does not show up in the Government's spending figures, but nevertheless represents a substantial subsidy. Some households have been able to obtain bank loans to finance construction through a government guarantee. A variation of this policy has been assistance to families to complete unfinished dwellings, or to bring temporary structures up to habitable standards.

The principal demand-side subsidy has been the housing vouchers, officially known as "housing purchase certificates" These have been pioneered in Armenia by the Urban Institute and funded by USAID, having been used previously in the Russian Federation to rehouse military families who had been based in the Baltic States. In Armenia, they have been used to rehouse people who had been living for instance in *domics* in public places. They therefore fulfil a dual

objective of rehousing families in permanent structures while returning public spaces to their intended use.

Eligible households receive vouchers allowing them to buy a house of a size based on the number of household members at the time of the earthquake. The vouchers can be used only to buy permanent houses built to current construction standards. (See also chap. II.)

The vouchers are not tradable and may be deposited only with eligible banks. They can be used only to buy a house. Initially, families have three months in which to spend their vouchers, although this can be extended for a further three months. The evidence suggests that the vast majority of vouchers are used within the time limit.

The vouchers are an attempt to introduce a more consumer- and market-oriented approach to rehousing earthquake victims. Families may choose the house, rather than having a house allocated to them. Their design also allows for some 'shopping' incentive to be retained, at least at the margin. A household wishing to buy a more expensive house may top up the voucher with its own funds. Conversely, if a cheaper house is bought, the family may retain the 'unspent' portion of the voucher.

They are also intended to bring some movement into the property market, and to encourage a more efficient use of the stock. Emigration has left some units empty, while other families may have surplus housing for their size. The use of vouchers can help to use empty dwellings and to give other families an incentive to trade down into smaller accommodation. Released equity may help to stimulate economic activity, either through increased spending or by enabling a family to start a business.

There is no national housing allowance scheme in Armenia, although the Ministry of Urban Development and the Ministry of Social Affairs are considering options for one now in the hope that it might facilitate increases in public housing rents to finance repairs. The central Government does operate a system of welfare benefits, but these are not meant to cover housing costs. Responsibility for housing assistance has been devolved to the municipalities, but they do not have sufficient funds to implement it. There is, however, a temporary programme funded by the central Government to provide rental subsidy to households who are eligible for housing, but who are not benefiting from any of the programmes outlined above. The allowance is roughly equivalent to US\$ 18 per month.\(^1\)

There are no explicit housing subsidies to support housing maintenance or repairs, although de facto subsidies arise in what is left of the public rental housing stock, as rents and other charges are not paid up.

The implementation of any housing support system is currently hampered by the Government's lack of funding. An important potential source of public funds is the property tax (see chap. III for a more detailed description of the Government's revenues). However, collection rates are low. Increasing the collection rate would contribute to healthier public

¹ P. Tatian, Framework for Housing Policy in the Armenia Earthquake Zone (Washington, DC, Urban Institue, 2002).

finances and would increase the Government's and the municipalities' ability to implement housing policies (see conclusions and recommendations).

B. The housing finance system

The development of an efficient housing finance system is fundamental to maximizing the effectiveness of market institutions in Armenia. Across the world, housing is expensive in relation to earnings, so normally cannot be bought from a household's current income. It is also a necessity, which means that households depend on loans to buy a home. Sometimes such loans can be arranged informally, for example by intergenerational lending within the same extended family, or by local contacts. But for a society to depend on such informal arrangements is to leave access to housing up to luck. Intermediaries that can direct the savings of those households that wish to save to those who wish to borrow can improve access to housing finance and, by extension, to housing for many people.

Privatization has created a situation whereby the majority of Armenians have no immediate need of housing finance to enable them to secure housing. But for newly formed households, and for households wishing to secure larger or more expensive housing as their families grow, the availability of housing finance is crucial. Over time, the availability of housing finance will become important to an increasing number of people in determining their housing opportunities. This is particularly true in a country that depends so heavily on owner-occupation. Parallels can be drawn with parts of Southern Europe where access to housing finance is limited and young people have difficulty in setting up home. Difficulties in accessing housing finance and housing may even contribute to ageing populations.

An efficient housing finance system cannot solve all housing access and affordability problems. It cannot solve the access problems of those households who are and are likely to remain very poor. Such households will require large housing subsidies throughout their lives. Nor can a housing finance system be expected to solve all affordability problems associated with the life cycle. It can help, but temporary subsidies may also be required for some households.

In the shorter term, housing finance is also required to tackle the problems of disrepair in the stock. In many cases major capital repairs cannot be funded from current incomes, and the refinancing of property will be required if funds are to be made available. The collective nature of repairs in apartment buildings, where private costs and benefits are not discrete, makes it more difficult to establish the principles by which subsidies should be determined.

Attributes of an efficient housing finance system

An efficient housing finance system requires several attributes:

- Low to moderate inflation;
- A reliable system of property registration;
- A valuation system;

- A legal and administrative system that allows reasonably quick and certain foreclosure;
- A network of intermediaries (lenders).

These are described and examined one by one below.

Inflation

A housing finance system operates more easily in a climate of low inflation. Very high levels of inflation make mortgage lending less attractive and more complex mortgage instruments, involving indexing the value of the loan, tend to need to be developed in countries experiencing hyperinflation.

Even inflation levels that cannot be said to be 'hyper' can worsen the affordability problem because higher inflation tends to be associated with higher nominal interest rates. The higher the interest rate, the greater the so-called front-end loading problem – the tendency of the real burden of payments being concentrated in the early years of the mortgage, which are often when the household is least able to afford them.

It is true that higher inflation leads to a more rapid diminution of the real value of debt (and the accumulation of equity on the part of the owner, provided that real house prices increase). However, the distribution tends to favour those households who bought a house some time ago at the expense of limiting access to housing for others. This increases the numbers of households requiring assistance in order to access housing, and gives rise to pressure to introduce subsidy instruments (such as interest-rate subsidies).

However, moderate levels of inflation (no more than 5%) can assist a housing finance system, as negative inflation is a risk for both borrower and lender. Negative equity (where the value of the house falls below the value of the mortgage) reduces the liquidity of the housing market, and removes full security from the loan. Since loans are (ideally) long-term, a degree of certainty in macroeconomic management is also required.

Armenia experienced hyperinflation in the 1990s, but inflation has now been brought under control and is currently around 3%, which is the targeted level. This is forecast to continue over the next few years.² Combined with economic growth, the basic macroeconomic environment for housing finance has moved from being extremely hostile to being benign.

Property registration

A reliable system of property registration is needed so that property rights can be established. Without proof of ownership, housing transactions will be discouraged and intermediaries will be reluctant to grant mortgages.

² International Monetary Fund, Republic of Armenia Staff Report for the 2002 Article IV Consultation, First and Second Reviews under the Poverty Reduction and Growth Facility, and Request for Waiver of Performance Criteria (Washington, DC, 2002), p. 13.

Armenia has a well-functioning system of property registration, the cadastre, which operates through 47 offices across the country. Registration fees are relatively modest. However, the rate of registration is still low. The main gap in the system of property registration arises from the large numbers of illegally constructed dwellings (estimated to be 325,000).

Valuation system

Lenders also require a system that can reliably establish the market value of a property.

Armenia operates a system of independent appraisers, who are licensed by the cadastre. They use a formula to establish the value of properties. The cadastre itself registers a value for a property, but this tends to rely more strongly on notions of intrinsic value, so its valuations tend to be lower than the market value in high-demand areas, but higher in low-demand areas. The independent valuers are reported to attempt to make more market-oriented estimates, but it is difficult to see how these can be particularly reliable when the volume of transactions is so low. Ultimately, the most reliable guide to the market value of a property is the actual prices paid recently for similar dwellings in the same neighbourhood. But if there are very few such transactions, it is impossible to make a reliable estimate.

Foreclosure

The ability of a lender to foreclose a loan in the event of default is crucial to the development of an efficient housing finance system. If foreclosure takes too long or the outcome is uncertain, then lenders will be reluctant to lend, or will lend only to very safe customers. Inevitably this restricts access to housing finance.

The reports received from interviewees indicated that, broadly speaking, Armenia has an adequate system of foreclosure. The average time taken for a lender to foreclose a property is reported to be six months – which is relatively quick by international standards. It might take another six months to gain vacant possession of the property in order to resell it at its full value. Some parties believe that the system is difficult to operate, but others suggest that it is efficient provided that lenders keep good records and are proactive in pursuing claims. Of course, the system has not really been tested to any great extent because the number of mortgages in Armenia is so small, but evidence from the enforcement of utility debts suggests that the framework for debt recovery is reasonably effective.

Properties taken into possession are sold at public auction. There is some anecdotal evidence of corruption in this part of the process. For example, officials might be bribed in order not to publicize the auction properly, so the property either fails to gain its full market value, or is not sold at all. The process may sometimes fail due to solidarity (rather than corruption). In some tight-knit communities, neighbours might refuse to buy a dwelling that had been taken into possession.

Complaints of corruption during the disposal of property have given rise to the amendment of the law to allow mortgage contracts to specify an alternative disposal mechanism.

The banking system

The banking system is the weakest part of the infrastructure required for a successful housing finance system.

The banking sector has encountered many problems since the transition began. In the Soviet period the banks were nationalized, undertook basic payment and settlement functions, but operated in a risk-free environment and, consequently, were not subject to regulation or capital-adequacy standards. The banks were not really intermediaries.

The economic collapse in the early 1990s made the establishment of a banking system still more problematic. Hyperinflation and high levels of dollarization meant that the banking system was weakened by losing its capacity to make payments and settlements.³

Thereafter, the introduction of a new currency, the stabilization of prices and the recovery of the economy made for a more favourable climate for the development of the banking sector. After 1994, the central bank established a regulatory framework for the sector. As confidence in the sector began to rise, deposits from households flowed in and lending capacity grew. Long-term lending grew in the late 1990s, although this was mostly generated by internationally funded projects or loans made under government guarantee to the energy sector (to buy imported fuel).⁴

By 2001 there were 28 banks operating in Armenia. All were privately owned and three were subsidiaries of foreign banks. However, towards the end of 2001, there was a new banking crisis and funds began to be withdrawn once again. By mid-2002, 8 of the country's 28 banks had been taken under interim administration. The five smallest of these banks are being wound up; the others are being restructured. Together, these banks represent almost one fifth of the sector's assets, more than one quarter of its loans and almost one third of its deposits. The cause of the crisis appears to lie in a combination of mounting bad debts (related to inadequate risk assessment methods) and fraud (reflecting a failure of the supervisory system). Further consolidation in the sector is expected.

Much effort is now being directed towards restoring confidence in the banking sector. Before the mid-1990s, the minimum capital required to establish a bank is reported to have been as low as the price of a second-hand car.⁶ It was raised to US\$ 50,000 in 1995, to US\$ 1 million in 2001 and will rise to US\$ 5 million by mid-2005.⁷ Moreover, these more rigorous requirements will be extended to banks that are already operating.⁸

Deposit insurance is also being phased in from 2003, and should be operational by mid-2005. This is intended to restore confidence in the banking system and to attract savers back into it. However, there are some concerns that deposit insurance may reduce the incentive for banks to

³ B. Asatryan, "Banking System Reform," in Griffen, K. (ed) *Growth, Inequality and Poverty in Armenia* (Erevan, United Nations Development Programme, 2002).

⁴ Ibid.

⁵ IMF, op. cit.

⁶ Asatryan, op. cit.

⁷ Ibid.

⁸ IMF, op. cit.

avoid high-risk lending or to develop better risk assessment methods. There are further concerns that deposit insurance may operate to the disadvantage of prudent banks that currently offer relatively low interest rates to savers.

Legislation has also been developed to support a non-banking financial sector. At present this includes the insurance sector and a number of cooperatives. These institutions are not required to meet the same capital-adequacy standards as the banks and are excluded from the deposit insurance scheme.

Housing and mortgage markets

Given the parlous state of the banking sector, it is unsurprising that the mortgage market is almost non-existent. In 2002, there were only about 3,320 mortgage transactions involving residential property, just over half of which were in Erevan. Within Erevan the market is said to be concentrated in the central areas. Nationally, mortgage transactions represent only a tiny proportion (around 5.5%) of total housing market activity.

Housing transactions grew by more than one third in 2001 and 2002, when almost 61,000 properties were registered. However, not all of these registrations will have arisen from actual sales of residential property (see chap. II). For example, they may include privatized flats that are being registered. Transactions are heavily concentrated in the owner-occupied sector: there were only 373 transactions of rental property in 2002 and the vast majority of these were in Erevan. Nevertheless, overall levels of genuine property transactions are reported to be very low – involving perhaps 2.5% of the stock each year, which is even lower than the estimated number of illegal transactions in the Soviet era. So it must be remembered that the percentage increases in property transactions are measured against a very low base.

The low levels of mortgage transactions can be attributed to demand factors as well as supply factors. Not only are the banks unable to provide very much long-term finance, when they do so it is on extremely restrictive terms. A 50% down payment is normally required, although in exceptional circumstances this may be reduced to 30%. Loans must be repaid over three years, and nominal interest rates are around 18% (that is still 15% in real terms). It is questionable whether loans with such onerous terms merit the term 'mortgage' in anything but a technical sense. They do virtually nothing to facilitate access to housing.

Table 13 indicates clearly the way in which longer repayment periods and lower interest rates enhance the affordability of housing finance. Repayments under current mortgage terms (US\$ 330 per month for a \$6,000 mortgage at 18% repaid over three years) can be contrasted with the payment in an efficient housing finance system (US\$ 36 for a \$6,000 mortgage repaid over 25 years at 5% interest). It should be remembered, however, that with the present levels of income the vast majority of households would be unable to sustain a mortgage, even on the more generous terms.

⁹ The real estate market in 2002.

¹⁰ Ibid.

¹¹ Ibid.

¹² New construction and existing housing.

Table 13. Monthly mortgage repayments for a US\$ 6,000 mortgage under different lending terms

Interest rate → Repayment period	5%	10%	18%	
3 years	184	201	330	
10 years	65	81	111	
20 years	40	59	93	
25 years	36	84	92	

Source: Author's calculation using the Building Society Association's mortgage repayment tables.

Several factors appear to contribute to the conservatism of the banks. Apart from their lack of long-term finance, it is clear that banks lack confidence in the housing market itself. This is understandable, given the economic crisis of the 1990s and the lack of liquidity in the market. Banks are willing to lend in downtown Erevan because the area attracts higher-income households (including many from abroad) and enjoys higher transaction levels than elsewhere. The housing market is caught in a vicious circle: transactions are low in part because mortgage finance is restricted, while mortgage finance is restricted because transactions are low.

There is, of course, also a demand element in the lack of mortgage activity. Demand for mortgages is likely to be relatively low in a country where so many people own their houses outright. But demand might be expected to rise as prospective households wish to form and require mortgage finance to gain access to housing. Moreover, demand for mortgages is clearly severely limited at present by their restricted availability. In other words there is effective demand for mortgages on more generous terms.

Outside the general banks there are no specialist institutions offering mortgage finance. For example, there are no mortgage banks issuing mortgage bonds, and the legislation to facilitate this does not exist. This is to be expected given the dearth of institutional sources of finance, such as private pension funds.

However, there is anecdotal evidence of an informal mortgage market. In addition to intergenerational lending within the same family, arrangements are sometimes made for prospective house buyers to provide credit to a builder, or for builders to extend credit to buyers.