Chapter VI

FINANCING OF SOCIAL HOUSING

A. Introduction

1. Social rented housing includes various forms of subsidized housing. Although its role and definition are different across the ECE region (see chapter II), it may be regarded as housing stock the access to which is not based on market rules (supply and demand) but is defined by a number of criteria (maximum income, target groups) and modes (allocation procedures); most often, a maximum rent is also in use.

2. There is a large variety of social landlords (see chapter III); they may be public (State, local authority, public company) or private (non-profit organization, property companies of various forms, quoted or not, in partnership or not, even individuals). The landlord tends to be public in socialist economies or in those where social housing is for the poorer. When the social housing stock is widely open, all cases can be met; however individual investors are rare (except for Germany and Switzerland). Also, the commitments that define social housing may be for a short or long, or even indefinite, period; they can be imposed by law or result from a contract.

3. It is thus logical to come across a wide variety of financial solutions for social housing. They extend from centralized budgetary approaches to privately financed solutions. As with any long-term investment with public support, social housing finance is a mix of loans or bonds, subsidies and own-funds. Many combinations are possible; subsidies can be granted through tax relief or direct support from a national or local budget, one time for all upon agreement of the investment, or year after year; they are often linked to a long-term loan, under the form of interest-rate rebate or access to off-market resources, or through free guarantees and so on.

4. A fundamental issue is whether social housing finance should be merely a part of the housing finance system or needs a fully separate treatment. This issue is embedded in a broader one: should the housing finance system itself be a part of the financial system? Most western European countries have been striving to integrate housing finance more and more into their financial markets; social housing is sometimes the only sector remaining off-market.

5. The question of financial resources to social housing is also linked to the rent policy and the respective share of object and subject subsidies, through the economic balance of the programmes. Indeed, the financial dimension of a social housing policy consists in finding the best possible combination between private and public funds, object and subject subsidies and so on. Extreme solutions and their drawbacks are well known, as already experienced:

- heavy allocation of funds from the State budget, with very low rents regardless of operating and maintenance costs (eastern European countries before transition);
- fully private rental housing, with rent controls which eventually discourage investors.

6. Initially, there is a single problem: how to bridge the gap between a market rent and a rent affordable to low-income households? This problem has a wide range of solutions; many countries in Europe and North America have experienced several of them, at different times in their history. The main factors influencing their choice are:

- importance of housing needs: State involvement and emphasis on object or subject subsidies are not the same when the flow of new construction is big or small compared to the stock;
- availability of long-term private finance to the housing sector; this is highly dependent on the degree of development of national financial markets;
- availability of public funds for social housing; this is both a technical (tightening budgets) and a political problem, at national and local levels. The political aspects will of course not be considered here; let us just mention that they include national trends such as emphasis on home ownership and local issues such as the NIMBY (not in my backyard) syndrome.

B. Generation of resources

1. Financial balance of social rented housing programmes

7. The financial balance of the two phases, investment and operation, is as follows:

Investment account

Investment costs	*Investment finance*
Developers' profit	Direct subsidies
Loan takeout costs	Loans
Construction costs	Own funds
Land improvement costs	
Land costs	

Operation account

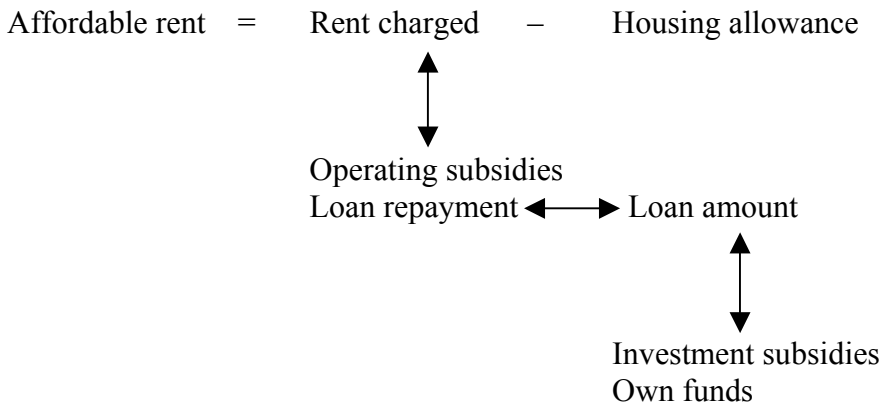
Expenses	*Revenue*
Maintenance costs	Chargeable rents
Management costs	Billable charges
Utility costs	Operating subsidies
Property tax	
Loan repayment	
Losses due to unpaid rents and charges	
Equity rebuilding	

8. Those who are in charge of housing policy have to decide who (that is, people with up to what income level) can be housed in the social rented sector. Starting from this point, they have to make the best choices concerning:

- rent setting in the social housing sector;
- the most efficient ways of financing investment in this sector;
- the balance between housing allowances and object subsidies.

9. They also have to see that investment and operation costs are under control, which refers to various aspects such as standards of quality (chapter VIII), rent collection and management (chapter V). Developers' profit can be saved when a social landlord is himself the developer.

10. Rent setting is a key element, as choices in that field heavily influence the other items of the accounts, according to the following scheme:



11. The balance of the operation account implies that lower rents should be associated either with higher operating subsidies or with lower loan repayments (or with both). Lower repayments mean a smaller loan amount (in a given social housing finance system); the balance of the investment account then requires that either investment subsidies or own funds (or both) should be increased.

12. Setting rents at the lowest possible level is a way to avoid paying housing allowances, but investment and operation must then be highly subsidized. Generation of resources for investment and operation can be considered independently. This method has been privileged by socialist economies. It is very inefficient from an economic viewpoint as households are not encouraged to adapt their housing consumption to their needs. Also, some households will be subsidized without their needing it.

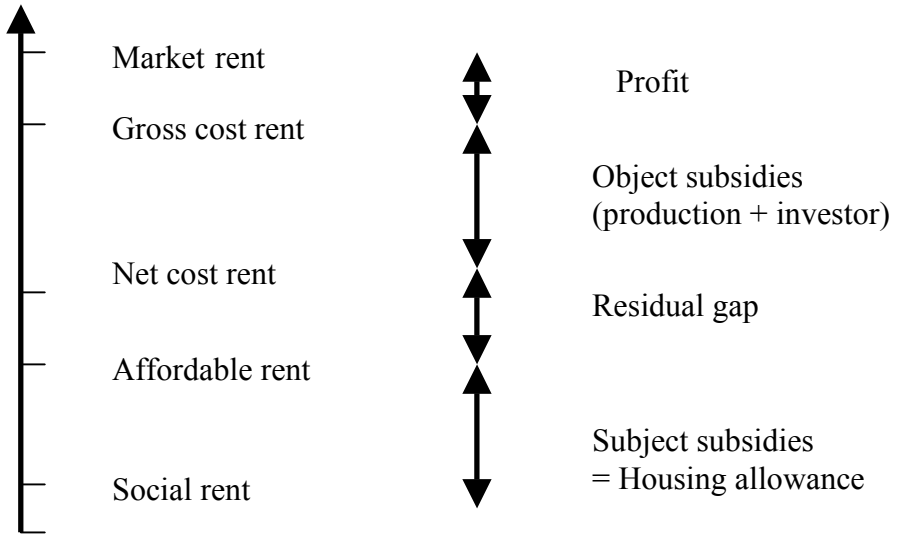
13. Nonetheless, in western European economies, rents are most often calculated according to cost rent principles, which means that the rent calculation is based on the actual cost of the investment. Thus the cost rent is, in principle, the rent which balances the investors' account over time if it is non-profit or, in other cases, provides him the return he expects. This is why it is sometimes called "equilibrium rent". Various "object subsidies" are used in order to reduce investment and operation costs, hence equilibrium rent.

14. To make rental housing affordable to low-income households, it is necessary to fill the gap between the rent they can "afford" (frequently set at 30 per cent or so of their net income) and the "gross cost rent" for a unit that meets State-prescribed standards. Almost all of the important subsidy policy aspects of social rental housing revolve around how this gap is closed.

15. Two families of instruments can be used, separately or in combination: "subject subsidies", usually in the form of "housing allowances", and "object subsidies". They play a symmetric role:

(a) Housing allowance is a payment designed to reduce the level of social rent down to a level that we call "affordable". We call "affordable rent" the rent that is affordable to target groups benefiting from this subsidy;

(b) Object subsidies are the combination of production and investor subsidies which enables eligible landlords to offer a lower rent. Object subsidies are sometimes called "bricks and mortar subsidies" or supply-side subsidies (see glossary).



16. "Net cost rent" is equal to "gross cost rent" – "object subsidies"; "affordable rent" is equal to "social rent" + "subject subsidies". Hence, "affordable rent" has to be at least equal to "net cost rent" for the social rented sector to be affordable by target groups. A perfect coincidence between "net cost rent "and "affordable rent" for any housing unit and any household is out of reach. It may happen that "affordable rent" exceeds "net cost rent", as the scales of housing allowances are not perfect, but this is an exception. The opposite case is unfortunately far more frequent; adding object and subject subsidies is not enough to make housing affordable to certain categories of households (which are not necessarily the poorest). There are different ways of making the necessary adjustments, for instance by reducing the size of the dwelling.

17. Access of target groups to social housing is thus possible whenever the total gap between (market or) gross cost rent and social rent is closed, using object and subject subsidies. This condition is necessary; in most dynamic urban areas it is not sufficient because demand exceeds supply, so that waiting lists and priority rules have to be applied.

18. Austria, Denmark, Finland, France, the Netherlands and Sweden are using cost rent methods. Another way of setting the level of initial rents is according to tenants' income (Germany). Belgium, Luxemburg and Portugal first calculate a cost rent which they next adjust according to tenants' income. Rent setting is freely decided by local authorities and housing associations in the United Kingdom and Ireland. Italy sets rents according to local market rent levels.

19. A drawback of the cost rent method is that rent level depends only on the way the programme has been financed and subsidized, regardless of the value of the service rendered to tenants. Moreover the rents are disconnected from local market values. Partial remedies are:

(a) Evening out: rents in new programmes may not cover their costs provided that rents in amortized properties allow landlords to balance their overall accounts;

(b) Rent pooling: rents in existing properties may be restructured in order to bring them into line with market levels, so that the cash loss on new property would be offset by cash surpluses being made on old property; such a rent restructuring policy is under way in the United Kingdom and is being experienced in France.

2. Financing new investment

(a) Specific requirements for loans to social rented housing

20. Most often, the major part of investment costs is financed through credit, and the key issue is to ensure social housing landlords a stable access to long-term credit with a low interest rate and necessary guarantees. Very few countries have been able to provide market resources for such loans, only those with a long tradition of low inflation (Japan, Switzerland). Many have thus developed off-market finance for social housing, sometimes using direct State loans (France and the Netherlands after the Second World War).

21. In some transition economies, the State has been providing housing loans by establishing a public fund to promote housing construction and purchase. Typical of such funds are the Housing Fund of Slovenia (created in 1991), the State Fund for Housing Development of the Slovak Republic (1996) and the National Housing Fund in Poland (1995). The Slovak Republic adopted in 1999 a programme to support housing construction by providing State guarantees on construction loans in order to allow the use of private finance in the housing sector; this programme gives priority to the construction of rental apartments for lower-income groups. [1]

22. The shift from State or, more generally, off-market loans towards market lending was made possible in western Europe by the development of the financial sector and its liberalization in the 1980s. Macroeconomic stability required to enter the euro zone and decreasing interest rates after euro introduction further encouraged social landlords to turn to market finance. France and Austria are the only countries in the euro zone which still use a State subsidiary to finance the social rented sector. Austria has developed a mixed system of grants and low-interest State loans to non-profit developers which results in revolving funds at the State (provincial) level and at the level of non-profit housing associations.

23. Germany also uses public banks, but only partly and as secondary lenders. Outside the euro zone, the Norwegian State Housing Bank provides loans, grants and housing allowances to the whole housing market (which is dominated by home ownership). The loans are funded by the treasury. Examples show the variety of financing systems in Europe and their efforts to use market finance (see case studies). However, specific intermediaries are needed (Finland, the Netherlands, United Kingdom) to help smaller investors access capital markets and secure loans.

[1] OECD, 2002 and Hegedüs, 2002

24. Financing loans to social rented housing by market actors, commercial banks or specialized lenders poses a number of problems as these loans are specific; they are (very) long term, often more than 30 years, which makes it difficult to raise matching funds; in addition, in some countries they have a high LTV ratio, both factors that increase the risk premium. On the other hand, a part of the rent is usually paid by the State through housing allowances which, on the contrary, reduces the risk to the lender. Moreover the risk is spread over a number of properties (unlike an individual investor). Hence the risk of such loans is often overestimated; more precisely, whereas the LGD (loss given default) is high, the PD (probability of default) is low.

25. Securing these loans requires special mechanisms as mortgage guarantees may simply not be used (when the landlord is public, repossession of a public property is often impossible), and when it can be used, the valuation of properties is not easy. As a consequence, guarantees are often provided by public entities, often local authorities, or by ad hoc mutual funds. Future rents can also be used as a collateral; recent loans to housing associations (United Kingdom) were secured by legal mortgages over social housing properties and cash reserves in favour of the issuer and bond trustee; in the event of non-payment, the bond trustee will have the right to collect the rents and manage the secured property of the housing association. [2]

26. An increasingly important issue, under the new approach of banking solvency ratios, [3] is the recognition of these distinctive features of social landlords, as they are facing a major danger: that increasing regional imbalances result in higher funding costs for investors in the poorer regions or the more social programmes. It is important that loan conditions remain the same regardless of the financial rating of the investor and the characteristics of its investment.

(b) Mobilizing savings for social housing

27. Any finance system needs to mobilize private and institutional savings. Whenever the social rented sector is not directly financed by the State (or local authorities), it has to find resources, directly by issuing bonds, or through the finance institutions, should they be commercial banks, public finance institutions or other intermediates. Due to the nature of the financial needs of the social sector (large volumes and long-term finance), institutional savings will be privileged. Main sources of institutional finance will therefore be pension funds and insurance companies. In other words, “wholesale funding” will be preferred to “retail funding”.

28. France’s funding system of *Caisse des dépôts* provides a rare example of private savings being used to finance social housing. [4] Short-term deposits are used to fund loans up to 50 years, which is an extreme case of maturity mismatch. The interest rate of the loans fluctuates with the interest paid to the savers (now indexed on the average of Euribor-1 year and annual variation of consumer price index), which eliminates the interest rate risk. Prudential ratios limit the liquidity risk; moreover, the deposits are guaranteed by the State.

[2] Standards & Poors, RatingsDirect, March 2004
[3] Basel 2
[4] See case studies and Housing Finance International, June 2003

29. Institutional investors, such as pension funds and insurance companies, will finance housing through lending, buying bonds, including mortgage bonds, and mortgage-backed securities. The same instruments can be used to finance social housing, but the peculiarities of this sector result in two major differences. Firstly, unlike individual investors, social landlords may borrow money directly from pension funds [5] ; they may also issue their own bonds on the capital market. Secondly, some specific needs of social housing (low interest, equal access, specific guarantee) impose constraints that may not easily fit the demand of investors (§ 24 & 25), whereas other features are, on the contrary, favourable (long-term and low-risk).

30. There are three different wholesale funding models [6]:

(a) The mortgage or bank bond model: The interest rate risk is shifted to investors by the direct issuance of bonds by the lender (Danish or German mortgage banks);

(b) The secondary mortgage facility, or liquidity facility, model: A separate agency provides liquidity for mortgage lenders against a collateral and issues uncollateralized obligations (CRH in France, FHL in the USA);

(c) The secondary mortgage market model: In addition to providing liquidity, the agency buys the assets according to pre-specified standards; the asset will be "securitized". This technique is the privileged way of funding home loans in the United States of America where the secondary mortgage market is organized by two "Government-sponsored agencies" (GSEs: Fannie Mae and Freddy Mac). In western Europe it has been unevenly successful, depending on the country and the type of loans (commercial, inter-bank, credit card, consumer, etc.).

31. Some transition countries have already introduced wholesale funding and others should consider doing it in the medium term. The spread analysis shows favourable results for the performance of the secondary mortgage market model and the mortgage bank model. [7] In situations of severely underdeveloped capital markets or a regionally strongly segregated banking system, a central liquidity facility could serve as an interim wholesale funding source.

(c) Object subsidies

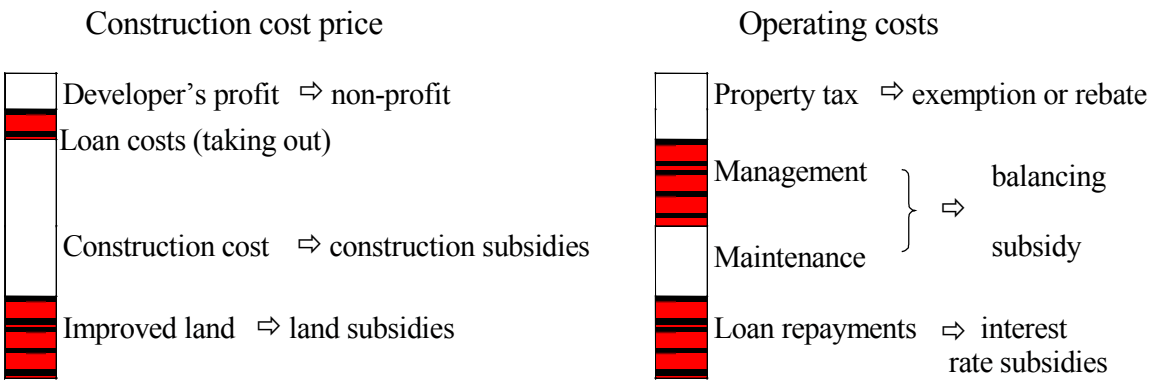
32. Object subsidies aim at lowering the cost of supply on the rental market. They can intervene through construction costs or operating costs (see chart below). [8]

[5] The Netherlands, see case studies and Housing Finance International, June 2003

[6] The reader will usefully refer to the work of the expert group dealing with Housing finance in countries in transition and to the UN-ECE document: Housing Finance, Key Concepts and Terms.

[7] Diamond & Lea, 1992

[8] See also C. Donner, 2000



33. When cost rent principles are used, two methods can be met:

(a) "Ex ante" subsidies: for each programme, the equilibrium rent is calculated from the existing subsidies; if it turns out to be higher than the maximum level permitted by legislation, additional funds, such as other subsidies from local authorities or more own funds, must be found. Ex ante subsidies can be "one time for all subsidies" (Austria, United Kingdom) or a combination of direct and tax subsidies (France); ex ante subsidies may include balancing subsidies: this was the case in the "dynamic cost price" method used in the Netherlands between 1974 and 1988;

(b) "Ex post subsidies": after a first set of subsidies has been granted, in order to cover, at least, the investment cost, operating subsidies are added in order to balance the accounts whenever necessary.

34. In practice, the ex ante calculation does not exclude the granting of ex post balancing subsidies or specific subsidies for renovation. No unanticipated subsidy will have to be added if the initial hypotheses are accurate. In every case, indeed, a number of hypotheses must be made concerning the discount rate, the depreciation of the property, the evolution of rents, the vacancy and default rates and so on. An accurate estimate of these parameters in a period of time spreading over several decades is of course out of reach. Moreover, most rents in social housing are set through a political process, and whether the landlords are non-profit or not, they are under pressure to keep the rent increases within bounds. These bounds are often not the same as agreed upon when the original profitability calculations were made.

35. The nature and amount of object subsidies are very diverse and depend on the nature of the investors and landlords involved. Direct subsidies remain important in Austria and the United Kingdom whereas the Netherlands have cancelled almost all object subsidies. [9]

36. A long-term trend in the European Union is to shift from object to subject subsidies. Central or federal States try to limit the amount of object subsidies that are direct budget expenses by:

[9] See case studies and Housing Finance International, June 2003

- Reducing the number of new programmes;
- Demanding greater contributions from the local authorities (land provision, loan guarantee) and from landlords (own funds);
- Searching for additional contributors such as employers' funds ("1 per cent levy" in France – see § 43).

(d) Own-funds

37. As States are reducing their subsidies, they urge landlords to increase self-financing of their new investments. This makes sense in a majority of western Europe countries because the amortized stock is large compared to the flow of new investment and there is no political will to significantly increase these flows.

38. Landlords in the social housing sector usually have low equity (compared to the amount of their investments). However, those who have a significant proportion of amortized property may generate cash flow, provided they have been allowed to raise rents and this cash flow is not absorbed by the renovation of these properties.

39. This cash flow can be injected into new investment by two different means: first, by using equity to contribute to financing new investment, second, by accepting that actual rents in new programmes are lower than cost rents. In the former case, equity rebuilding should be introduced in the operation account.

40. Sales to sitting tenants can also provide own funds to finance new investment in social housing. This can be justified when tenants' mobility is low; their dwelling is therefore never offered on the rental market. The property must be amortized enough for its sale to provide a positive net income, and the number of sales in a given programme large enough to cover the cost of creating and managing a condominium.

41. Landlords are often reluctant to resort to this solution, and when they are free to use it or not, their sales are not numerous as the units they are prepared to sell and those which tenants are willing to buy seldom coincide: individual houses are sold more easily than apartments in large buildings. Only in the United Kingdom have sales reached a high level (apart from mass privatization in transition countries, of course), because the decision lies with the tenant ("right-to-buy") and because he benefits from huge rebates. This is not a good example, however, as the main goal of British Governments was not to raise funds for new investment but to reorganize the social rented sector by globally reducing it and having it managed by professionals instead of by local authorities. [10]

42. Annual rhythms of sales vary between 1 per cent – 2 per cent of the social housing stock in Ireland, the Netherlands and Sweden to 0.5 per cent in Germany and less than 0.2 per cent in France and Belgium (see chapter V).

(e) Other ways of generating resources

[10] M. Borer, Prague, 2003

43. Low-cost resources can be generated through ad hoc "revolving funds". These funds receive subsidies as an initial funding which are transformed into long-term low-interest loans to social housing. The repayments of the loans increase the resources of the fund, so that the subsidies may be reduced and eventually suppressed. Such revolving funds exist in Austria at the regional level (see case studies) and in France at the national level. The "1 per cent levy" system consists of a tax amounting to 0.45 per cent (initially 1 per cent) of salaries in the private sector (for companies employing at least 10 persons). This resource, increased by returns from previous loans, provides additional long-term low-interest and long-delayed amortization loans for social housing programmes; in return, a number of dwellings are reserved for the contributors' employees.

44. International financial institutions, the European Investment Bank (EIB) and the Council of Europe Development Bank (CEB) can contribute to financing social housing. Within the EU and in the accession countries, projects considered for financing by the EIB, among other objectives, must contribute to "strengthening economic and social cohesion", "human capital formation" or "preserving the environment and improving the quality of life". [11] Up to now, the EIB has been more involved in housing renovation in the context of urban renewal, but it considers a wider opening to social housing finance in general, mainly using the argument of social cohesion. [12] In the "Partner countries", which include the Balkans, the EIB participates in implementing EU development aid and cooperation policies through long-term loans from own resources or subordinated loans and risk capital from EU or member States' budgetary funds. On the other hand, the CEB finances not only renovation but also new social housing programmes. In the last five years, it has intervened in 17 countries, including four new EU members and two other transition countries. [13]

3. Financing maintenance and renovation

(a) Adapting or adopting cost rent principles

45. When cost rent methods are used, there should be no need for additional financing of the maintenance and operation of social housing buildings. However, this may not be the case for several reasons:

- The ex ante calculation may not correspond to reality after time, because of changes in the macroeconomic environment or rent policy (§ 34);
- A frequent behaviour of social housing landlords is not to spend enough money on current maintenance which, after time, increases the need for major renovation.

46. Also, even well-maintained properties will probably need major renovation after a number of years of operation. International regulations normally require that lenders (in the social or the private sector) make provisions for major renovation. Buildings also need to be adapted to new standards, for example in terms of energy-saving and security equipment. More and more, landlords also have to face problems deriving from an ageing population and have to finance adaptation of buildings and housing units for handicapped tenants.

[11] EIB Annual Report 2002
[12] Seminar with Cecodhas, Brussels, 2004
[13] M. Meunier, Prague, 2003 and Report to the Governor, 2003

47. Cost rent methods were not used in the past in transition countries. In these countries, therefore, social housing usually has low rents that do not allow cost recovery of management and maintenance works. More renovation and modernization of the social housing stock is a priority but it requires a huge financial effort. As a preliminary, accurate information on the condition of the housing stock and on necessary improvement is needed.

48. It will be necessary to increase rents and introduce (or improve) housing allowances, but, probably, other forms of revenue, such as maintenance subsidies, will be needed to cover at least maintenance costs. This is of course a tough political issue. From a technical viewpoint, we shall refer only to the general discussions on the economic balance of social housing programmes and on the respective advantages and drawbacks of object and subject subsidies.

(b) Specific financial needs for renovation

49. Financial needs for renovation should normally be smaller than for new investment. On the other hand, they usually benefit from smaller subsidies, and the participation of sitting tenants, through rent increases, is limited by their affordability, which obviously depends on their income, but also on the scales of housing allowances.

50. As a result, under normal circumstances, renovation also requires lending, but the need for lending will be smaller than for new investment. Therefore, loans may have shorter terms and smaller amounts, so that they will be more easily provided by financial markets. It can be recommended that loan duration fits the length of the maintenance cycle.

51. This is unfortunately not the case in several transition economies where maintenance has been neglected for many years; neither is it the case in underserved areas in some western European countries where ad hoc urban renewal policies are under way, combining renovation, demolition and increasing social and tenure mix. These policies require specific financial solutions, sometimes including large amounts of subsidy (for example, the *Loi d'Orientation et de Programmation pour la Ville* in France) or other models (such as Contractual Saving Schemes in the Czech Republic).

C. Forms of Financial Support

1. Loans

52. Various kinds of loans are usually available in most countries (see glossary). The main choices are between fixed rates and adjustable rates on the one hand, and between constant, graduated and indexed repayments on the other. Best solutions for social rented housing are influenced by two specific features:

- loans are often long-term or very long-term,
- borrowers' resources consist mainly of rents, which are more or less indexed to inflation, but are subject to State intervention.

53. An important factor of choice between various kinds of loans is their respective behaviour under high inflation. This discussion will not be repeated here. [14] It should be emphasized only that the longer the term the bigger the risk that important variations in interest rates or inflation will occur.

54. Dual-indexed mortgages are frequently advocated. In such loans, borrower repayments are pegged to one index whereas the interest rate or the loan balance is linked to another. When rents are pegged to the same index as repayments (example: a construction cost index), using such loans enables the borrower to match the variation of his main resource (rents) and that of an important part of its costs (incidentally, maintenance costs will also vary in accordance with the construction cost index).

2. Securities

55. The technique of selling loan packages to investors has been used for decades by housing finance institutions in developed economies. It increases their liquid resources and may also reduce their exposure to risk. "Covered bonds" (or mortgage bonds) have been issued in Europe for more than 200 years. At present, mortgage legislation exists in 19 European countries (12 former and five new member States), among which are Germany (*Pfandbriefe*), Austria, Denmark, Spain (*Cedulas hipotecarias*) and France (*Obligations foncières*). Mortgage bonds are based on specific features safeguarding the bondholder against a default of the issuing credit institution. Following the "cover principle", the mortgage bond outstanding must be secured at all times by first ranking mortgages or by claims against public authorities or Governments. [15]

56. Securitization consists in packaging and selling mortgages themselves (instead of bonds guaranteed by the mortgages); ownership of these packages, called "mortgage-backed securities" (MBS) passes from the primary lender to the investor. This system is used (in the social rented sector) in the United Kingdom, Finland and Sweden. There are a number of different types of instruments in use to tap the capital markets; the most common are :

- Whole loan sales: the sale of whole loans can be an important way for primary lenders to raise funds and manage risk. They involve the sale of mortgages, either individually or more commonly in pools, to other lenders or investors;
- Agency bonds: these are bonds issued by agencies specializing in mortgage finance at a secondary (that is, not the loan origination) level. Issuers include liquidity facilities which refinance primary market lenders and the mortgage GSEs (§ 30);
- Mortgage pass-through securities and mortgage pay-through securities (see glossary).

57. Increases in mortgage bonds and MBS funding are expected to reduce funding costs and allow lenders in some European markets to widen their product range. Lenders are of course looking for the lowest funding cost, but they must pay attention to the currency risk and to the high origination cost, which only large volumes can amortize. They are also driven by a number of other factors: the need to diversify their funding, a reduction in deposit volumes, risk transfer and regulatory capital arbitrage. [16]

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[14] UN-ECE: Housing Finance, Key Concepts and Terms
[15] European Mortgage Federation, 2003
[16] Oliver, Mercer, Wyman, 2003

58. Securitization of rents is a technique that can be compared to the securitization of mortgages; future flows of rents from a given programme and for a limited period of time are sold to an investor, like future loan repayments. The default risk is also transferred to the investor. As already mentioned, in the case of social housing the fact that a part of the rent is paid by the State through housing allowances reduces the risk for the investor. The investors (and the rating agencies) will be concerned with the prospects of the programme, such as expected evolution of rents and allowances and vacancy rates. There is a recent example in Sunderland (United Kingdom).

3. Subsidies

(a) Choice between housing allowance and object subsidies

59. Compared to object subsidies, housing allowances are indeed:

- better targeted, as they are (more or less) directly linked to the income and other characteristics of the household;
- more flexible: they can vary upward or downward with changes in income or family size, which, in particular, helps to amortize the impact of economic crises on households.

60. They also have a few drawbacks, as:

- They are a counter-cyclical burden on the budget: an economic downturn increases the number of beneficiaries and the average subsidy amount. Attempts to reduce the allowance programme result in making low-income tenants insolvent; this is the dark side of their flexibility;
- They may have a "poverty trap" effect when they compensate too generously for the decrease of income due to unemployment;
- They may also have inflationary effects on rents when they are used in the private (free) sector (in the same way that incentives to investors may have an impact on housing prices). This cannot occur when rents are under strict control, which is the case in the social sector; it should not occur either when the households benefiting from these subsidies are a small proportion of the demand. On the contrary, when a significant number of tenants are eligible, price increases may be observed when the subsidy is introduced or improved (this was the case for students in France in 1993) [17]
- They are complex to administer, as this requires accurate and updated information on income and household composition;
- They have a limited impact on the quantity and quality of housing construction for moderate income households.

61. On the other hand, subsidies to investors are often poorly targeted, as it is difficult to design the target properly in terms of eligibility and priority:

[17] Laferrère & Leblanc, 2004

- if it is too broad, it may create lifelong benefits (additional rent is seldom used) for tenants;
- if it is too narrow, there is a risk of subsidized programmes turning into ghettos.

62. The main advantage of object subsidies is that they are more efficient to increase the supply of housing. Also, they can be used as a counter-cyclical instrument to boost the economy, or, on the contrary, reduced when housing needs are lower or budgets tighter.

63. Many countries use both housing allowances and aid to bricks and mortar in varying proportions, but the general trend is toward more housing allowances and less object subsidies, since needs are nowadays usually less important than in previous decades and because of their technical advantages.

64. Can social rented housing do without object subsidies? As housing allowances have more advantages than drawbacks, why not rely solely on housing allowances whenever possible? It may be considered that, with a combination of housing allowances to tenants, tax incentives and insurance for investors for default risk of tenants, private investors should be able to provide rental housing to anyone.

65. However, we observe that most mature market economies still have some kind of object subsidies to the social rental sector (sometimes of a very small volume, as in the Netherlands or Spain) in addition to a more widespread housing allowance.

		Object subsidies	
		Yes	No or little
Housing allowance	Yes	Other E.U. countries (15 members), Australia, Japan	Canada [18], the Netherlands, Spain, U.S.A.
	No	Belgium, Luxembourg, Portugal	Greece

66. Indeed, the amount of rental housing supplied by private investors is often small; not only is it concentrated in the top-of-the range part of the sector, it is also very volatile. A majority of investors are natural persons, as institutional investors prefer to invest in commercial property which is more profitable and easier to manage than housing. As for individuals, they are often reluctant to house tenants whom they cannot choose themselves or who belong to a different social group, or to invest in poorly valued areas, or to accept long-term commitments. Germany provides a rare example of a social rented sector with a significant number of individuals as landlords, but the size of the sector is rapidly decreasing as is the term of their commitments.

[18] None at the federal level; varies with the state.

(b) The scales of housing allowance

67. There is a great variety of housing allowance schemes. In its simplest form, the "voucher" is a standard contribution, independent of the rent, to be used, under certain conditions, at the tenant's discretion. More elaborate scales aim at keeping the rent-to-income ratio below a maximum level, more or less explicitly.

68. In Austria, France, Germany and Russia, the amount of the allowance is directly based on a calculation of the part of the housing expense to be paid by the household; a "rate of participation" is applied to its resources. The amount of the subsidy is thus equal to the difference between the eligible expense (the rent up to a maximum level plus a lump sum for utilities in France, the "maximum social rent" in Russia) and the household's participation:

Allowance = Rent + Charges – Participation.

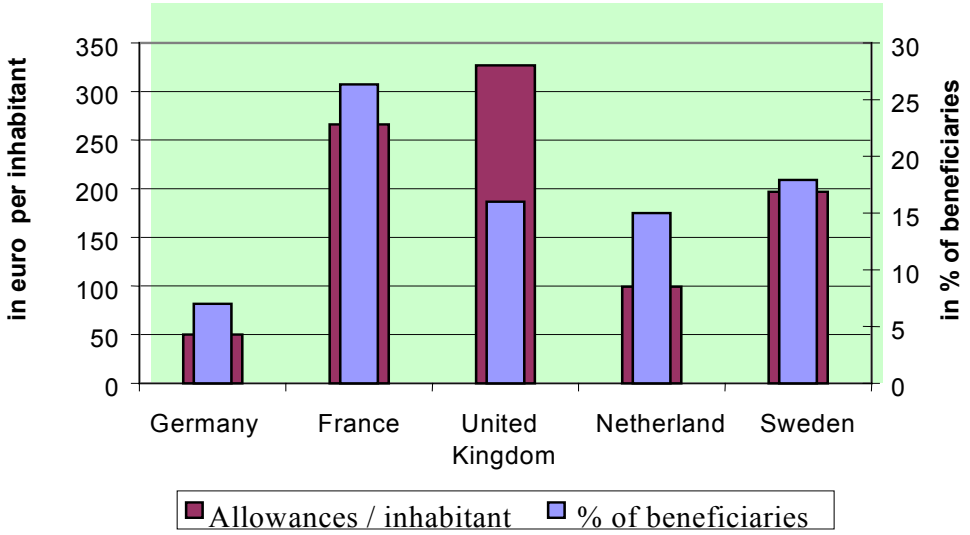
69. In the United Kingdom, the "housing benefit" is equal to the rent for households with very low incomes (under income support level). For those with a higher income, the allowance is reduced by £65 for every additional £100. Such a system is not only a poverty trap, it is also inflationary. [19]

70. In the Netherlands, the allowance is granted only if the rent does not exceed a certain level; households are thus encouraged to adapt their housing consumption to their income. [20]

71. There are great differences between countries (see chart); the United Kingdom has the higher allowance per inhabitant, whereas in France there is a large number of beneficiaries (home owners are eligible and more than 50 per cent of all tenants receive it).

[19] M. Stephens, Prague, 2004 and l'Observateur de l'immobilier, March 1997
[20] L'Observateur de l'immobilier, March 1997

Housing allowance: proportion of beneficiaries
and average amount per inhabitant (2001)



Source: A.M. Fribourg, Le logement en Europe, DGUHC, Paris, 2002.

(c) Forms of object subsidies

72. Object subsidies can be delivered in money form; examples are:

- direct grants from the budget
- tax subsidies: VAT reduced rate, income or profit tax rebate or exemption, property tax rebate or exemption
- direct low-interest public loans (Austria: revolving provincial funds; Norway: Norwegian State Housing Bank)
- subsidized loans, through subsidies paid to lenders or use of off-market resources.

73. They can also be given in kind:

- municipalities provide land for social housing programmes, through sale or long-term lease, for free or at a low price
- the State or local authorities provide investors with free guarantees for their loans.

74. Subsidies are adapted to the nature of investors; not only the financial objective, but also the form of object subsidies are different when the investor is public/non-profit or market/private:

(a) Registered social landlords often have a special (non-profit) status including profit tax exemption; tax rebates consisting in reducing the taxation of rental income are thus applicable only to the private rented sector;

(b) Budget subsidies, direct or through subsidized loans, are often reserved to specific actors such as registered landlords, either for moral reasons or because the control of social commitments is difficult when the landlord is a natural person or a private limited company, and it is conveniently delegated to the tax service;

(c) As budget money is scarce, other forms of support such as off-market loans and public guarantees are still used, despite a general trend toward finance standardization.

75. Subsidies may be granted one time for all or spread over time; interest subsidies, income or property tax rebate or exemptions are granted for a limited or indefinite period. A simple case is when operating subsidies are spread over time and investment subsidies are one time for all, but various combinations can be found. When subsidies are spread over time, the duration of the payment and the amount can be fixed in advance or variable.

D. Conclusions

1. Generation of resources

76. Economic balance of social rented housing programmes

(a) Both stages, investment and operation, are linked as a loan is usually the most important part of investment finance and loan repayment a (decreasing) part of operating expenses;

(b) In this global approach, which is privileged in Western economies, rent setting is a key element. Rents are then often calculated according to cost rent principles, which means that the rent calculation is based on the actual cost of the investment;

(c) In addition to rent setting, those who are in charge of housing policy have to make the best choices concerning:

- the most efficient ways of financing social housing investment
- the balance between housing allowances and object subsidies;

(d) With regard to finance for new investment a loan is usually the most important part; next come object subsidies and own funds, generated by benefits from amortized properties and sales to sitting tenants. Bond issue and securitization of rents are also sometimes used.

77. Financing new investment

(a) Specific requirements for loans to social rented housing:

(i) Macro-economic stability and the establishment of a well-functioning financial system are necessary to develop market finance for housing in general and the social rented sector in particular. As long as these conditions are not met, resort to special housing funds is a second-best solution;

(ii) Whenever it is available, market lending to social rented housing needs specific solutions for raising matching funds, as these loans are very long term, and for securing them. Efficiency of loan guarantee systems is of major importance although this lending is low risk and guarantees are seldom called for on an individual basis.

(b) Mobilizing savings for social housing

(i) As social housing finance requires long-term resources, wholesale funding is more appropriate than retail funding. Hence, institutional investors are a privileged source of funding for social housing.

(c) Object subsidies

(i) A wide range of subsidies have been used over time in many countries and are used at the same time in different countries; this proves that there is no unique best way of subsidizing social rented housing;

(ii) The ex ante calculation of subsidies does not guarantee that no unanticipated additional subsidy will ever be necessary in the future. However, it helps to keep this risk within reasonable bounds;

(iii) Direct subsidies from the State budget tend to be more and more limited, which increases pressure on local authorities and resort to tax rebates; it also pushes rents upwards, which, in turn, increases expenses on housing allowances.

(d) Own funds

(i) As States reduce their subsidies, cash flow generated by rents from amortized properties and sales to sitting tenants are more and more used by landlords to finance new investment.

(ii) This can be done more easily when the amortized part of the stock is important compared to the flow of new investment.

(e) Other ways of generating resources

(i) Low-cost resources can be generated through ad hoc “revolving funds”. The repayments of previous loans increase the available resources for new finance.

(ii) International financial institutions, the EIB and the CEB can contribute to financing of social housing programmes.

78. Financing maintenance and renovation

(a) Adapting or adopting cost rent principles

Adapting or adopting cost rent principles does not avoid the necessity to face the costs of major renovation.

(b) Specific financial needs for renovation

(i) Financial needs for renovation are usually smaller than for new investment, and shorter-term loans may be used.

(ii) In several transition economies and some western European countries where ad hoc urban renewal policies are under way, the needs are higher and require specific solutions.

2. Forms of support

79. Loans An important factor of choice between the various kinds of loans available is their respective behaviour under high inflation. Dual-indexed mortgages in which repayments and rents vary according to the same index are more likely to balance the operation account of the landlord.

80. Securities Selling loan packages to investors increases the liquid resources of lenders and may also reduce their exposure to risk. The main instruments in use are "mortgage bonds" and "mortgage-backed securities".

81. Subsidies:

(a) Choice between housing allowance and object subsidies

(i) Housing allowance has been playing an increasing role in most developed countries, and in some cases (North America) object subsidies have even disappeared.

(ii) It is frequently argued that housing allowance has more advantages (better targeting, flexibility) than drawbacks (poverty trap and inflationary effects).

(iii) However, many countries use object subsidies since relying solely on housing allowances might result in a shortage of affordable housing.

(iv) Object subsidies can also be better targeted in the case of special needs.

(b) The scales of housing allowance

(i) Most elaborate scales of housing allowance aim at keeping the rent burden under a given proportion of a household's disposable income. The calculation must therefore include the income, but also the rent and the family size.

(ii) The allowance decreases when income rises, and reaches zero at some point. Higher rent payments entail a more or less increase in the rent burden; eligibility may also be limited to a maximum rent level.

(c) Forms of object subsidies

There are several ways of reducing investment or operating costs through subsidies: money or in kind, direct grant, tax subsidy, subsidies attached to loans (reduced rate or free guarantee). They can be granted immediately or spread over time.

E. Recommendations

1. Generation of resources

82. Economic balance of social rented housing programmes

(a) Financing new investment in social rented housing requires a long-term view; thus a global approach, including investment and operation costs, should be privileged;

(b) In order to keep investment and operation expenses under control, social rented housing needs professional management, self-discipline and control by authorities;

(c) Rents should be made affordable to low-income groups by making a proper use of object and subject subsidies, not by being arbitrarily set at a low level;

(d) Too much difference between social rents and market rents has negative effects on mobility and housing consumption: over time, rents restructuring must be considered in order to reduce the main distortions.

83. Financing new investment

(a) Specific requirements for loans to social rented housing

(i) Market finance is generally more efficient than public finance when the financial markets are well developed. Public financing may be less costly if the funding cost of the public sector is lower than the cost of the private sector but it may entail hidden costs (linked to various risks) and distortions that have to be carefully evaluated.

(ii) However, public solutions must be used as long as the above prerequisites are not fulfilled.

(iii) Even so, attention must be paid to guarantee access to credit in similar terms to all social landlords, which is in contradiction to normal market behaviour and thus requires that special guarantee funds should be used.

(iv) The "mutual fund approach" used in the Netherlands and, on a smaller scale, in the United Kingdom, is a good way to secure such loans; however, providing inexpensive access to market finance without leaving anybody outside remains a difficult challenge.

(b) Mobilizing savings for social housing

Wholesale funding is more appropriate to financing social housing than retail funding (when it is available). Hence, institutional investors should be a privileged source of funding.

(c) Object subsidies

(i) Subsidies are the counterpart of the social commitments of the landlord and should be proportionate to these commitments.

(ii) They should also be associated with controls on various costs.

(iii) The ex ante calculation of object subsidies is recommended because it provides a good overview of present and future balances of investment and operation accounts. Too strict an application of this method should, however, be avoided as it may result in mismatches.

(d) Own funds

(i) Injecting equity into new investment finance can help in particular circumstances, such as when housing needs are important and land costs are high (central metropolitan areas), when it is necessary to limit lending, when subsidies are scarce; however, this cannot be sustainable as policy.

(ii) Landlords may be given general objectives in terms of volume of sales, but the choice of the programmes to be sold should preferably be left to them, instead of introducing a general right-to-buy to tenants.

(iii) Attention must be paid to avoiding increasing windfall profits for well-off tenants by selling at below market prices regardless of tenants' income.

(e) Other ways of generating resources.

(i) Creating revolving funds, mixing external resources (such as earmarked taxes) and internal resources (loan returns), is another way of providing low-cost finance. The sustainability of such funds should be carefully planned and monitored.

(ii) Banks or funds that finance social housing are advised to check whether their programmes are eligible to funding from international banks (EIB and CEB) as these may provide low-cost finance.

84. Financing maintenance and renovation

(a) Adapting or adopting cost rent principles: Landlords using cost principles should finance maintenance according to the initial planning (cost rent calculation takes into account the future cost of maintenance), in order not to accumulate needs for heavier renovation in the future.

(b) Specific financial needs for renovation: Needs for heavy renovation exist not only in transition economies but also in western European countries; they require specific financing solutions.

2. Forms of support

85. Loans "Inflation-proof" loans are recommended as social rented housing needs long-term loans. Among these loans, dual-indexed mortgages with repayments pegged to the same index as rents reduce the risk of mismatch between expenses and revenue for the landlord.

86. Securities "Mortgage bonds" and "mortgage-backed securities" are two types of vehicle to be developed in order to increase wholesale funding; they also provide opportunities to transfer risks to investors.

87. Subsidies

(a) Choice between allowance and object subsidies

(i) Housing allowance is the most flexible way to make rental housing affordable to low-income households; it should be introduced in every country provided the administration is able to get relevant and up-to-date information on households' composition and income.

(ii) However, object subsidies are more selective and housing allowance has little impact on housing supply.

(iii) Therefore, housing allowances and object subsidies should be used in parallel, in particular in countries where housing needs remain important.

(b) The scales of housing allowance

(i) Scales of housing allowances should depend closely on the household's income and composition; they should be adjusted accordingly without delay, especially to compensate for major losses of income (death, illness, unemployment).

(ii) They should be carefully designed so as to avoid the creation of poverty traps, inflationary effects and a lack of incentive to adjust the size of the unit to the real needs of the household. Their linkage with social benefits must also be carefully considered.

(iii) They should remain simple and transparent, so that beneficiaries can understand how they are calculated.

(c) Forms of object subsidies

(i) Subsidies which create long-term liabilities should be avoided. Subsidies should be transparent and measurable; hidden or unpredictable subsidies should be avoided.

(ii) Direct subsidies should be preferred to subsidized loans; subsidy and finance are distinct fields (need for transparency) and subsidized loans create long-term liabilities; moreover, if the subsidized loan has a guaranteed fixed rate (instead of a rebate such as market rates minus x points), the future amount of the subsidy cannot be anticipated.

(iii) Public guarantees to loans are often necessary but the risk taken by the State or the local authority should be measured and limited by strict financial control of landlords.

(iv) Guarantees brought by a mutual fund should be preferred, provided this does not entail selection between members.

F. Case studies

1. Austria

- Almost all new housing construction is subsidized (in Vienna, 90 per cent of new construction).
- Investors are mostly non-profit housing associations, in some cases municipalities or private developers.
- Housing subsidy schemes differ from region to region but in most cases subsidies are given in the form of long-term low-interest public loans (formerly: non-repayable grants).
- The main source of financing comes from earmarked taxes (part of income and corporate taxes).
- Loan repayments create revolving funds at State (provincial) level.
- Investors are free to choose any form of additional financing (own funds, bank loans) but are subject to strict maximum rent levels which must not exceed cost-covering rents.
- Non-profit developers benefit from tax exemptions.
- In Vienna, all subsidized new housing is subject to compulsory tender procedures and to compulsory developers' competition aiming at improving quality while reducing construction costs (see also chapter VIII).

In a context of heavy public intervention, the case of Austria is a mix of classical social rented housing finance, with off-market funding, and modern trends: decentralization (subsidy schemes vary according to region) and cost reduction through competition.

2. Finland

- Investors are either municipalities or non-profit organizations.
- The Housing Fund (ARA) provides:
  - direct subsidized financing (ARAVA housing),
  - subsidization of privately financed loans,
  - (in both cases, loan period = 35 years, LTV ratio up to 90-95 per cent).
- ARA is managed by central Government but receives no budget assistance; it was provided a portfolio of loans (State housing loans) without the matching funding liabilities.
- Its other sources of funding are direct borrowing on the capital market and securitization (which is not accounted for in the Government debt). Securitization has been an important source of finance for ARAVA since 1995 through the Fennica programme.
- The Housing Fund of Finland diversified its funding sources in 2001 by negotiating and signing two loan agreements with the EIB and the CEB.

Social housing finance in Finland tries to cumulate the benefits from the public sector (ARA gets a good rating thanks to its backing by the Ministry of Finance) and from the use of modern market financial techniques, including securitization.

3. France

- The majority of current loans to finance social rental housing are off-market. They are:
  - very long term (up to 35 years for construction and up to 50 years for land purchase);
  - distributed only by a State subsidiary multifunctional financial institution, the *Caisse des dépôts et consignations*;
  - funded by (short-term) deposits on "A" saving booklets;

- at a uniform rate which depends only on the interest paid to "A" booklet owners; deposits on "A" booklets are indirectly subsidized twice: they are tax free and guaranteed by the State.

- Investors are either public entities (Offices Publics and OPACs), non-profit private companies (Entreprises Sociales pour l'Habitat) or semi-public bodies (SEMs); only these can benefit from the special CDC loans.
- These loans are guaranteed by local authorities (95 per cent of cases); when this free guarantee is not available (5 per cent of cases), they are guaranteed by a mutual fund (CGLLS) for a 2 per cent fee.
- In practice, none of these guarantees is ever called on an individual (programme) basis. CGLLS and all local authorities involved may be called on a general (institution) basis to rescue a landlord in financial distress.

The French way of financing social rented housing is not only characterized by the use of an off-market, State subsidiary body, but also by the massive transformation of short-term savings into very long-term loans. It works well, based on long experience, but surely cannot be recommended as a model.

4. Germany

- Social rental housing stock has decreased sharply in recent years (from 8 million to 2.5) as the commitments of landlords result from an agreement, and investment in social rental housing is now open to all private investors.
- All investors in rental housing benefit from a generous income tax rebate based on accelerated depreciation.
- Investors in social rented housing are financed:
  - either by a mortgage bank (market loan); they receive operating subsidy or tax relief from federal and regional Governments;
  - or through a subsidized loan (0 per cent interest) from a regional public bank (which has no direct access to the market and is funded by mortgage banks).

The way Germany finances social rented housing is characterized by its flexibility, as it may vary between Länder and also be adapted to the features of investors, which may be of very different natures. However, since the specific statute of social landlords ended, the size of the sector has been severely reduced as private investors are reluctant to accept long-term commitments.

5. The Netherlands

- The Netherlands are the country which has, by far, the highest proportion of social rented housing in the EU (35 per cent).
- A drastic change occurred in 1995; mutual commitments between the State and social landlords were cancelled, as the amount of subsidies due to landlords and their loan outstanding were estimated to be globally equivalent.
- Since then, social landlords are no longer subsidized; they finance themselves through commercial banks or directly on the open market.

- However, the main lender is a bank with public capital, which proposes uniform rates, and the loans are guaranteed by a mutual fund, the Waarborgfonds Sociale Woningbouw (WSW), which is counter-guaranteed by the State and the municipality concerned in the project.
- Rent increases in zones where housing demand is strong were supposed to compensate for the end of the subsidies, but these increases result in more expensive personal allowances and pressure from tenants to buy their homes.
- Hence, landlords are urged by the State to increase invested own funds, and, in particular, to accelerate sales to sitting tenants.

The end of subsidies and the resort to market finance do not mean that all links with the State have been cut off; the main lender remains a public bank and the mutual fund has a public guarantee. Doing without subsidies may be viable because the Netherlands have a large social rented sector and there is a political will to reduce it by selling units to sitting tenants; in other circumstances it would surely not be sustainable.

6. Poland

- Poland is involved not only in renovation but also in supporting rental building.
- A specific type of social landlord, a Social Housing Association (TBS), was established in 1995-96; TBSs are, in most cases, commune-owned companies.
- The National Housing Fund (NHF) provides preferential long-term credit to TBSs and housing cooperatives.
- The NHF was initially financed by the central budget; it is now acquiring resources from the CEB, the EIB and the financial markets.
- NHF loans are long-term (30 to 40 years), dual-index, at subsidized interest rates (half the market level) and their amount may reach 70 per cent of the construction cost.
- In TBS programmes, rents should not exceed 4 per cent of the replacement value.

Like other countries in transition, Poland is facing difficulties in finding low-cost long term-market finance. The choice of a single financer to provide subsidized loans, using national and international resources, is therefore logical, as is the use of dual-index in regard to inflation.

7. The United Kingdom

- The social rented sector in the United Kingdom still represents 21 per cent of the housing stock. For more than 20 years, however, municipalities have been selling a large part of their social housing stock to sitting tenants (at highly discounted prices, through “right-to-buy”) and to housing associations (private, non-profit organizations) which are now the only investors in social rented housing.
- Housing associations receive subsidies (50 per cent on average) from the State budget and borrow the rest on the market.
- Smaller landlords, who do not have direct access to market lending, may use THFC (The Housing Finance Corporation) as an intermediary. THFC is an independent, specialist, non-profit organization; it funds itself through the issue of bonds and by borrowing from banks; THFC was created after some housing associations faced difficulties in individual market funding for their most social projects.

The British case illustrates a sound principle: transparency of subsidies, clearly separated from the finance, which is provided by the market and uses all the potential of developed financial markets such as bond issue, loan and rent securitization. But very few European markets are as deep as the British one.

GLOSSARY

Affordability The concept of affordability measures the financial capacity of a household to purchase or rent a housing unit. A usual measure of this concept in the rental sector is the ratio between the amount of the monthly rent and the monthly income of the tenant. For home buyers with access to credit, the equivalent ratio is between the monthly repayment and the monthly income. Housing allowances are usually deducted from the rent or loan repayment, whilst other social or familial benefits are added to the income.

Agency bonds These are bonds issued by agencies specializing in mortgage finance at a secondary (i.e., not the loan origination) level. Their bonds are not specifically backed by mortgage loans but the assets of the issuers are almost entirely mortgages or loans backed by mortgages.

Bond Financial instrument, often negotiable, used to borrow funds, with a maturity of more than one year.

"Bricks and mortar" or "object" or "production" subsidies Subsidies to the construction industry, through direct funding or subsidized raw materials. These expressions also cover specific subsidies to developers but they do not normally cover subsidies to private investors. As social landlords are usually their own developers, their subsidies such as tax benefits or subsidized loans are included.

Collateral Asset pledged as security to ensure payment or performance of an obligation.

"Consumer" or "subject" subsidies Subsidies to the consumer on the property market (home buyer) or the rental market (tenant). Direct consumer subsidies, delivered on a regular basis in order to reduce the rent burden and paid to the occupant or, sometimes, to his landlord, are called "housing allowances". Other direct subsidies may be available in particular circumstances, such as cash advances to help to pay the deposit on a property or temporary allowances to help to face a loss of income. Other types of consumer subsidies are tax subsidies (for example value added tax – VAT – or income tax rebate on maintenance works).

Cost rent. A rent is called "cost rent" when the rent calculation is based on the actual cost of the programme (investment and operation). Thus the cost rent is, in principle, the rent that balances the investors' account over time if it is non-profit or, in other cases, provides him with the return he expects.

"Covered" or "mortgage" bond Mortgage bonds are bonds issued by a credit institution and covered by mortgage loans, or, in certain countries, by public-sector loans. They remain on the balance sheet of the issuer but are based on specific features safeguarding the bondholder against a default of the issuer.

Demand-side subsidies and supply-side subsidies The rental housing market in fact comprises two different markets:

- the housing property market, in which the supply comes from developers or owners and the demand from investors;
- the housing rental market, in which the supply comes from landlords and the demand from users (tenants).

This duality does not exist in the home-ownership market, where the investor and the user are the same.
As a consequence, three different levels of subsidies should be considered: production subsidies, investor subsidies and consumer subsidies. The terms "supply-side" or "demand-side" subsidies should thus be avoided whenever the market concerned is not mentioned.

Direct, indirect subsidies A subsidy is a means used by an authority in order to lower the price of a good or a service to its consumer. A direct subsidy is a lump sum or a regular payment from the budget to the consumer (i.e. housing allowance). Subsidies paid to the producer (i.e. upfront grants to social housing programmes) or an intermediary (i.e. subsidies to lenders so that they provide low-interest rate loans) are indirect subsidies. Tax rebates or exemptions are also indirect subsidies. Off-market funding resulting in low-interest rates, free guarantees to loans or provision of land at a price lower than the market are examples of implicit subsidies. Rent control is also an implicit subsidy provided to tenants by landlords.

Dual-index loans In such loans, borrower repayments are pegged to one index (consumer price or construction cost index) whereas the interest rate or the loan balance is linked to another.

Equilibrium rent When the investor is non-profit, the cost rent is the rent that balances the investor's account over time; for that reason, it is sometimes called "equilibrium rent".

Housing allowance Housing allowance (or housing benefit) is a subsidy paid to households to cover a share of their rent or their loan repayment. It is usually higher when their income is lower and may be paid to the household or to its debtor (landlord or lender).

Mortgage-backed securities (MBS) MBS are securities backed by a pool of mortgages or trust deeds. Principal and interest payments on the underlying mortgages are used to pay principal and interest on the securities.

Mortgage pass-through securities Pass-throughs are securities issued against a specific collateral pool subject to cash flow matching. The balance on the pass-through is always equal to the balance on the mortgages in the pool and the cash flows received from borrowers are passed through to investors, with a delay and deduction for servicing and guarantee fees.

Mortgage pay-through securities Pay-throughs are multiple securities issued against a single collateral pool. They may be closed-end, where there is a fixed collateral pool and all securities are issued at the outset of the transaction, or open-end in which the collateral pool and securities can be increased over time (subject to constraints). These securities modify cash flows between borrowers and investors to meet the needs or requirements of investors.

Secondary mortgage market This market is a set of mechanisms available for buying and selling loans.

Securitization The issue of securities in exchange for debt, that is, the technique of selling loan packages to investors.