

## The Efficiency of Housing Finance Systems : An International Comparison

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### INTRODUCTION

This paper is a summary of the results of a major study, sponsored by Fannie Mae, to provide a comparative analysis of the efficiency of housing finance arrangements in five developed countries: the United States, Denmark, France, Germany, and the United Kingdom.<sup>1</sup> The analysis focuses on the efficiency with which the different mortgage markets deliver mortgage credit to home buyers. The focus on efficiency is a reflection of the times; efficiency as a policy goal has been steadily rising in importance in recent years. This trend has come about partly because of increasing international trade and competition in nearly every sector, including financial services. At the same time, renewed emphasis on national economic growth relative to other policy goals has promoted greater interest in achieving the economic rewards of increased efficiency in all areas of economic activity.

The effects of these trends have been particularly pronounced in the area of housing finance, which in many countries had been strongly shaped by government intervention. Major benefits of improved efficiency include reductions in the costs of credit

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intermediation and significant increases in the availability of funds and range of contract terms. However, deregulation and removal of subsidies in the sector may cause an increase in the direct cost of mortgage funds to the borrower.

An additional source of interest in this topic is the pending increase in competition in financial services across borders, especially in the European Community after 1992. Presumably, more efficient systems of financing home buyers will be able to penetrate new markets. Whatever the likely extent of actual penetration, the potential is causing many EC countries to make their own systems more efficient in order to ward off foreign entry.

The five countries examined in the report were chosen because they offer a broad array of institutional arrangements and government policies. Mortgage loan funding ranges from heavy dependence on retail depository institutions (U.K., France) to extensive capital markets funding (Denmark) (see Table 1). Government support ranges from subsidies for contract savings plans to government backing or ownership of lending institutions and enhancers of mortgage credit. In addition, the U.S., U.K., and France have undergone major financial market deregulation during the past ten years.

The dominant contracts may have rates fixed for 30 years or rates being subject to change at any time by the lender (see Table

2). In the U.K. and the U.S., borrowers can utilize mortgage insurance to reach loan-to-value (LTV) ratios of over 95 percent, while in Denmark and Germany, borrowers must have the portion over 70 to 80 percent underwritten as a personal unsecured loan.

The study was commissioned by Fannie Mae in April 1991. Most on-site research and data compilation occurred in the summer of 1991; the majority of the analysis and some further data collection proceeding through to January 1992. All of the systems studied are in a certain degree of dynamic disequilibrium. The effects of policy shifts and financial market events are still being felt, and more shocks to the systems are to come. Most of the major reforms are complete, however, and in any case, the rapid pace of change in the last five years has outdated most existing examinations of these housing finance systems.<sup>2</sup>

### THE DEFINITION OF EFFICIENCY

For the purposes of this research, efficiency means intermediation efficiency. The goal of the analysis is to answer the question, "Which country is pursuing institutional, transactional, subsidy and risk allocation arrangements with the lowest total public and private costs of providing housing credit?"

Some of the private costs of housing credit are readily apparent, including interest payments, any payment for mortgage

insurance (to cover either shortfalls at foreclosure or declines in payment ability), and origination fees. Other costs are not so apparent. These include the risks borne by the borrower that interest rates will change in the future, either changing the payment (if a variable-rate loan) or resulting in a yield-maintenance penalty in case of prepayment. There may also be public costs associated primarily with direct or indirect subsidies. To the extent that public costs produce private benefits (either through reductions in the private costs or receipt of valued services), there is no net increase in total costs. However, if the value of the subsidies to the recipients is less than the cost to the government (or the society as a whole), then these subsidies act to raise the total costs of housing finance.<sup>3</sup>

In some cases, certain types of contractual arrangements are precluded from being offered in the market. Such restrictions also have a cost to society, namely the difference between the willingness of consumers to pay for the product and the potential cost of providing the product. Because the costs of preclusion can be significant, the report carefully examines each country's contractual choice set. Within the definition of efficiency used in this report, deregulation and the elimination of subsidies are seen as moving a system towards greater efficiency, as these changes result in a broadening and leveling of the playing field.

This definition of efficiency involves more than the informational efficiency debated in the finance literature. In the context here, a perfectly efficient market is one in which no new entrant could make extraordinary returns, despite having full access to all available subsidies, information and technology and despite enjoying full exemption from any restrictions or regulations. Intermediation efficiency is measured by the actual all-in societal costs of providing housing finance relative to the minimum achievable in the absence of distortions and subsidies. The report seeks to determine whether restrictions and regulations distort behavior, analyzes the magnitude of the intermediation and transactions costs in the market,

and examines the efficiency of any subsidies to suppliers of mortgage credit.

Our definition is more restrictive a term than economic efficiency, which also accounts for societal benefits. The report does examine the extent to which subsidies and regulation are costly to a society and how they affect market structure, contract design, and the pricing of mortgage credit. It does not go into whether these social costs are worthwhile expenditures of resources due to effects on housing markets, home ownership, aggregate savings, etc. We have no basis on which to quantify such benefits, nor do we consider other worthwhile goals for a financial system, such as increased stability or reduced uncertainty.

## METHODOLOGY

The measurement of intermediation efficiency starts with the cost to society of providing housing finance. The simplest notion of such a cost is the interest rate paid by borrowers under a specific mortgage contract in a given country. Table 2 indicates the dominant types of loans and recent levels of interest rates for each country. To the interest rate must be added any origination fees and the costs to society of any subsidies. That amount, annualized, is the gross societal cost of that mortgage contract. Is it in excess of the minimum possible cost? The theoretical minimum in most developed countries is the cost to the government of issuing sovereign debt, and it is against that cost that the mortgage cost is compared.

Other adjustments are necessary to standardize the comparison. The sovereign debt should be of the same duration as the mortgage debt. In addition, because there are differences among countries, and among contracts within countries, in the options accompanying the mortgage debt (assuming the government debt has no options or risks), the value of those options needs to be removed from the mortgage rate.<sup>4</sup> Fi-

nally, there may be some subtle differences between types of lenders; for example, depositories and mortgage banks may each offer different packages of products. Because of this, comparisons should be made among similar lenders.

The adjusted spread between the costs of mortgage finance and government debt, gross of subsidies and net of the market value of options, is given below:<sup>5</sup>

$$\text{Adjusted Spread} = \text{Mortgage Rate} - \text{Government Rate} + \text{Origination Fees} - \text{Value of Options} + \text{Cost of Subsidies}$$

If all adjustments are made properly, the resulting estimates of the costs of intermediating mortgage funds can be compared across countries. What would such a comparison reveal? The major components are first, the differential transactions costs of funding, originating, and servicing mortgages as opposed to government debt and second, the excess between the social costs of supply-side subsidies over the net impact on the interest rate.<sup>6</sup> The smaller the adjusted spread, the more efficient the housing finance arrangements.

In Chapter 7, the adjusted spreads for the five countries in the study are estimated and compared. Because of data limitations, such analysis is only feasible for certain mortgages in these countries. The values of options are estimated through a variety of means, including regressions of determinants of risks on gross spreads over time. As a practical matter, it is not possible to draw fine distinctions between the sources of differences in adjusted spreads from country to country. To do so would have required data on the cost structure of intermediaries and on the incidence of tax and subsidy programs. We therefore focus on the resulting estimates as overall measures of the relative efficiency of systems.

Analysis of adjusted spreads can be informative in its own right, but there are two major drawbacks to sole reliance on this approach. First, there are such major data difficulties that estimates of some of the

**Exhibit 1-1 : Mortgage Market Comparisons - 1991**

Country	Mortgage Originations	Funding Instruments (in order of importance)	Market Structure	Role of Government	Change in Role of Government in 1980s	Market Changes in 1980s
<b>Denmark</b>	Mort Credit Instit. (80%) Depositories (12%) Other (8%)	Mortgage Bonds Deposits	Oligopoly (MCIs) Depositories mainly do "top-up" and short-term loans	Control over MCI entry, mortgage contract terms, insurer/pension investments	Liberalization of mortgage contract terms; Expanded options for MCI ownership and entry; Reduced tax subsidy (MCI & borrower)	Expansion of housing credit & MCI share; severe housing & mortgage losses
<b>France</b>	Depositories (85%) Specialized Lenders (10%) Other (5%)	Contract Savings Deposits Collateralized Debt	Competitive; dominated by depositories with advantaged access to funds	Subsidized contract savings; deposit rate regulation; state ownership of banks	Reduced loan subsidies; elimination of credit controls; support of alternatives to deposit funding (mutual funds, securitization)	Expansion of housing credit; increased competition for lending and savings, increased default and prepayment losses
<b>Germany</b>	Depositories (55%) Mortgage Banks (22%) Bausparkassen (13%) Other (10%)	Deposits Mortgage Bonds Contract Savings Uncollateralized Debt	Segmented funding by regulation; significant affiliation across segments	Control over terms and institutional use of mortgage bonds and contract savings; limits on insurer investments; subsidized contract savings; state-owned savings banks.	Reduced contract savings subsidies	Increased concentration; increased competition across segments; relative stability in housing and mortgage markets; increased cross selling of financial services
<b>United Kingdom</b>	Depositories (94%) Centralized Lenders (6%)	Deposits Uncollateralized Debt Mortgage-Backed Securities	Competitive with free entry	Prudential regulation	Elimination of credit controls; levelled tax treatment of govt. & private debt securities;	Expansion of housing credit; Severe housing cycle and default losses; increased leverage; entry by centralized lenders; increased cross-choice; increased cross-selling of financial services
<b>United States</b>	Thriffs (30%) Banks (30%) Mortgage Banks (35%) Other (5%)	Mortgage-Backed Securities Deposits Collateralized debt	Competitive; duopoly provision of MBS guarantees	Govt. deposit insurance, support for secy. market agencies; mortgage insurance	Eliminated rate regulation; decreased tax subsidies for thriffs; allowed ARMs; eased MBS issuance	Expansion of housing credit; decreased thrift & increased commercial bank share; increased secondary market funding;

**Exhibit 1-2 : Mortgage Instrument Comparisons (dominant contracts by country)**

Country	Mortgage Contract <sup>1</sup>	Lender	Average Mortgage Yield (1990)	Benchmark Government Bond	Ave. Gross Bond Yield (1990)	Ave. Gross Spread (1990) <sup>2</sup> (in basis points)	Prepayment Risk Allocation	Default Risk Allocation
<b>Denmark</b>	20-30 year fixed-rate	MCI's	11.33%	10 year	10.63%	120	In rate; borne by investor New originations with small original discount	LTVs up to 100%; Risk over 80% LTV borne by banks, priced in unsecured "top-up" loan to individual
<b>France</b>	15 year fixed-rate <sup>3</sup>	Commercial bank or finance co.	11.09	10 year	9.88	175	In rate; borne by lender	Ave. LTV < 80% Some LTV pricing & Borrower specific pricing
<b>Germany</b>	25-30 year <sup>4</sup> 1. fixed-rate (10 year) 2. reviewable-rate	1. Mortgage bank 2. Commercial or savings bank	9.66 9.58	10 year 1 year	8.73 8.86	125 128	1. Precluded 2. not applicable	Ave. LTV < 80% Risk over 80% LTV for repeat borrowers borne by banks, priced in unsecured "top-up" loan to individual
<b>United Kingdom</b>	25 year reviewable-rate	Building society	15.12	3 month	14.14	117	Lender; generally small with minimal premium	LTVs up to 100%; Risk over 80% LTV generally borne by third party insurers
<b>United States</b>	30 year 1. fixed-rate 2. adjustable-rate	1. Conventional securitized by agency 2. Depository	10.38 9.26	10 year 1 year	8.55 7.88	206 156	1. FRMs in rate; borne by investor 2. ARMs in rate (caps) borne by lender	LTVs up to 95%; Risk over 80% LTV borne by third party insurers; residual risk borne by government

<sup>1</sup>Most commonly used, 80% LTV

<sup>2</sup>Including annualized fees

<sup>3</sup>Typically combined with contract savings loan through depository

<sup>4</sup>Typically combined with contract savings loan through affiliated Bausparkassen

adjustments can be reached only with heroic assumptions. For example, the empirical basis for identifying and estimating the cost to society of all direct and indirect subsidies is usually weak. Another data difficulty arises from distortions of pricing that are especially difficult to adjust for, including cross-selling of financial products and objectives other than profit-maximization. Also, estimates of options values are likely to be highly sensitive to the specification of the option pricing model. The specific measurement difficulties encountered in the subject countries are examined in Chapter 7 of the report.

A second major drawback is that this measurement of efficiency is very narrow. It captures only inefficiency in the subsidy system and in operations and fund raising. It does not reflect the efficiency of pricing in the sub-markets for options in the mortgage contract.<sup>7</sup> More important, the adjusted spread does not capture a wide variety of statutory and regulatory distortions in the provision of different mortgage contracts (e.g., fixed-rate versus variable-rate) and origination process (e.g. are all lenders allowed to offer all types of contracts), and in the level of prepayment or credit risks embedded in the mortgage contracts in each country (e.g., whether prepayment is allowed; whether differences in borrower legal rights increase credit risk or lead to limits on contract terms).

The adjusted spread largely misses the reasons for the many significant differences in lending patterns among the countries because it looks at what is available on the market and not at what is being kept off the market. The issue is well illustrated in the five countries' treatment of prepayment risk. Three of the countries handle prepayment risk in distinctly different ways, for reasons partly rooted in legal restrictions or subsidies. In fact, only the U.K. really offers a full range of choices to consumers. Systems that preclude the offering of important alternatives to consumers and investors cannot be considered to be completely efficient, because extraordinary profits can be attained by an intermediary offering the de-

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sired contract.

In order to be more confident and broad-based in its conclusions, the study employed an additional independent but complementary methodology. It used available quantitative and qualitative information to evaluate indicators of the degree of efficiency of each key aspect of the mortgage market, including the allocation of each type of risk (e.g. interest rate risk, credit risk) as well as for the basic intermediation processes and subsidies. These indicia relate to market conditions that are conducive to inefficiency, and generally are not quantifiable, at least by any cardinal measures. Examples are incompleteness and segmentation of markets on the asset and liability sides, barriers to entrance or exit, presence of market power or objectives other than profit maximization, and the presence of liquidity and information constraints. Although the indicia are generally non-quantifiable, they are used to develop a ranking of the countries in each area of the market.

### SUMMARY OF RESULTS

As noted above, the countries under study here take significantly different approaches to housing finance. The United States has two major complementary systems:

- long-term fixed-rate contracts funded primarily by the wholesale capital market and accompanied by an unconstrained prepayment option; and
- long-term variable-rate contracts tied to market-related indexes and funded by retail deposits.

In both cases, the credit risk on higher LTV loans is shifted primarily to specialist insurance companies. The government is a residual risk bearer in both systems, through provision of extensive deposit insurance and support for the secondary mortgage market agencies.

The Danish system also uses long-term fixed-rate contracts funded by the capital markets and with unconstrained prepayment, but the credit risk of high LTV lending is primarily borne by banks through short-term, reviewable-rate loans for the top portion of the financing.<sup>8</sup> Long-term, variable-rate loans are not available.

France uses capital markets, deposits, and savings contracts to raise funds; a distinguishing feature is that all of these activities (and most of the lending) are by the one type of entity, namely commercial and savings banks. Since most loans are at fixed rates, and most funding is through deposits, there is a degree of interest rate risk not present in other systems. The contract savings program provides below-market funding for a major portion of the fixed-rate lending.

German lenders offer a wide range of "fixed-interest" loans (with rates fixed for 1 to 10 years but amortizing over a longer period), with no prepayment option, funded primarily by mortgage bonds. The major alternatives are long-term reviewable-rate loans funded primarily by retail deposits. As in Denmark, the upper portion of high LTV loans is funded as an unsecured personal loans by a bank. Germany also has a contract-savings program that is primarily used by first-time buyers to secure a portion of their financing at a below-market rate. Use of mortgage bond and contract savings funding is restricted to specialized institutions.

Housing finance in the United Kingdom is somewhat the mirror image of that in the U.S., with the dominant loan being a reviewable-rate mortgage funded by savings deposits. Use of wholesale markets and securitization has begun, and some adjustable-rate loans with longer fixed interest periods (up to five years) are being offered. The U.K. is similar to the U.S. in that it uses mortgage insurance to bear the bulk of the credit risk, but it minimizes the role of the government in this and most other aspects of the market.

Despite the significant diversity in the

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details of the systems, the estimated adjusted spreads for intermediating funds to owner-occupied housing do not vary greatly across the dominant loan types in these countries. For a fixed-rate, wholesale-funded loan in Denmark, Germany, the U.K., and the U.S., the adjusted spread is estimated to be about 120 to 150 basis points. The spreads for variable-rate or reviewable-rate loans funded by depositories is somewhat higher (except through building societies in the U.K.). Only for France are the estimated adjusted spreads for both depositories and wholesale-funded lenders much higher.

These results are consistent with the proposition that the basic operating costs of intermediating funds into mortgages are similar across the five advanced countries, which share many aspects of financial technology. Even the U.S., with its highly developed secondary markets and sophisticated repackaging and arbitrage activities, does not do much better than the other four countries. In fact, most of the advanced U.S. technology is directed towards efficiently allocating prepayment risk, while the Germans simply preclude it. For their part, the Germans, Danes, and French have been tapping wholesale markets with mortgage-backed bonds for almost 150 years and presumably can do so at the lowest cost possible.

The result that wholesale funded lenders offer mortgages at lower adjusted spreads than do depositories in all subject countries other than the U.K. is not that surprising. The operating costs of running branch systems is inevitably higher than accessing wholesale funds. To some degree this disadvantage is offset if the intermediary can attract savings at below market rates and/or offer a package of products that the wholesale-funded lender cannot easily reproduce. The low adjusted spreads of the building societies in the U.K. appear to reflect lower operating costs relative to other depositories in the study.

If the technology to deliver funds to home buyers is uniformly available in all of these

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countries, then two major sources of significant variation in adjusted spreads would remain:

- the excess of the cost of subsidies over the benefits received by buyers in the form of lower interest rates; or
- legal or regulatory restrictions preventing cost minimizing competition.

The subsidies referred to are those to suppliers of housing finance. However, most of these countries do not have major subsidies for the dominant types of loans; thus, relatively little potential for an excess subsidy cost.

In this regard, the U.K. has the lowest subsidies and essentially no excess costs. Denmark, Germany and the U.S. intervene in the markets in relatively small ways and currently generate subsidy costs in excess of benefits in the market rate estimated to be only 10 to 20 basis points. Both the operating costs and subsidies for housing finance in France are significantly higher than in the other countries. The continued reliance on segmented and subsidized sources of funding for mortgage lending along with the dominance of state owned banks exhibiting significant interest rate risk and high operating costs results in, within our definition of efficiency, a significantly less efficient housing finance system.

The qualitative analysis focuses on the presence of market imperfections, such as lack of competition, constraints on choice, or non-profit maximizing behavior. As a result, the countries that score the highest are those with the most open and competitive market in these key areas. The U.K. and the U.S. have adopted a policy of deregulation and free market determination of most aspects of their housing finance systems. The U.K. illustrates this approach most clearly, since it has very little government intervention in any aspect of the market. This not only encourages competition, but also permits the offering of a full range of

contract designs to consumers and investors. Because of this, the U.K. system is judged to be the most efficient under this study's standards of efficiency.

The U.S. system is not so purely market-driven; the government retains key roles through the provision of default risk insurance through Federal Housing Administration (FHA) and Department of Veterans Affairs (VA) and in providing guarantees for funds raised in the deposit and secondary markets. The mispricing of these guarantees currently creates a small degree of inefficiency. In addition, state consumer protection legislation denies consumers a complete choice set with respect to prepayment risk.

The Danish system is judged to be slightly less efficient than those in the U.K. and U.S. It had been tightly regulated with significant restrictions on entry until recently, but government policy has moved steadily towards greater market competition and flexibility. It now appears to include only two major distortions: restrictions on the investment set of insurance companies and pension funds that encourage purchases of mortgage bonds, and the lack of availability to consumers of a long-term adjustable-rate mortgage.

Germany is the only one of the countries not to have launched a major deregulation of its financial markets in the 1980s. In principle, it maintains a highly segmented funding system, but the acquisition of specialized institutions by commercial and savings banks has effectively overcome the regulatory barriers. As a result, consumers now have "one-stop shopping" for a package of mortgage loans, and competition has served to reduce the overall cost of intermediating funds. However, entry of innovators is very difficult, and consumers continue to have a restricted range of contract options, thus increasing the costs of preclusion in the system.

France did embark on massive financial sector reforms in the 1980s and has transformed the sector from an instrument of

government credit allocation into a much more market-driven entity. However, the depositories enjoy a significant advantage in funding mortgages which effectively limits competition by wholesale-funded lenders. And the French legal system strongly protects borrowers, limiting their ability to use their collateral in obtaining loans. The financial revolution is ongoing and may yet wipe out the significant vestiges that remain of the old system. Until it does, though, it must be judged to be the least efficient system, either in terms of the indicia or the adjusted spread.

## LIMITATIONS

Many observers would use a different yardstick to measure efficiency. Although difficult to quantify, various regulatory restrictions and subsidies may add social benefits which could improve a system's economic efficiency. Germany's evaluation illustrates the situation. Finance markets work very well in Germany, with relatively few explicit inefficiencies. But they are fully orchestrated by the government, and the market structure itself is not permitted to be responsive to the full range of supply and demand forces. The public does not get the benefit of some important savings and deposit options, or of loan innovations. In particular, risky home ownership is discouraged in several ways, and thus the overall ownership rate is reduced. This approach tends to maximize the stability of the system, but stability is not part of the efficiency criteria in this study.

Similarly, the very efficient U.K. market is certainly not without its problems. The market structure has been severely tested by the losses from the slumping real estate market and the accompanying political uproar over foreclosures and other dislocations. The cost of private mortgage insurance has increased sharply and the perceived riskiness of MBS, many of which are backed by pool insurance, has jumped. In turn, this has reduced the competitiveness of the centralized lenders relative to the well-capitalized building societies and re-

duced the issuance of MBS. The potential for a flood of foreclosures has put increased downward pressure on real estate prices and raised the prospects of homelessness. However, many of the problems in the U.K. have their roots in housing and land market inflexibility (in particular the absence of private rental market options) and volatile macroeconomic policy rather than in the housing finance system.<sup>9</sup>

The situation in the U.K. is a reminder that intermediation efficiency is a narrow policy criterion. It incorporates only private benefits and gives no weight to the overall stability of the system, or other goals of public policy. Thus, for example, the government-run deposit insurance system in the U.S. must be counted as a significant source of inefficiency, as premiums do not vary according to risk, yet it is also a source of stability of the banking system. The U.K. has a far less comprehensive system of government support and thus encourages the proper pricing of risk. But, if catastrophic events do occur, the system could prove to be unstable and force the government, on an *ex post* basis, to intervene.<sup>10</sup>

With these limitations in mind, intermediation efficiency can be a useful public policy criterion. As housing finance systems evolve, particularly in developing and former Socialist countries, a goal should be to achieve all intermediation efficiencies possible, congruent with other social goals. To do so results in a housing finance system in which costs are minimized, risks are allocated to those entities best able to manage them and consumers have a wide range of choice. ■

## NOTES

<sup>1</sup> Diamond & Lea [1992a].

<sup>2</sup> For example, the most comprehensive survey of housing finance systems (which included many more countries than analyzed in this study), conducted by

Boleat [1985], is based on data from the early 1980s.

<sup>3</sup> It should be noted that our focus is the efficiency of the intermediation process, not the overall housing or housing finance system. Thus, subsidies directly to developers or purchasers of houses, including homeowner tax deductions, are not included.

<sup>4</sup> Options include borrower option to default or prepay and for the intermediary options to change the interest rate or default on liabilities. Alternatively, a set of standard options could be specified, but then the underlying determinants of the values of the options (e.g., likelihood of default) would also have to be standardized.

<sup>5</sup> Such a spread applies directly to intermediaries drawing funds from the wholesale financial markets. As will be discussed in Chapter 7, it is more appropriate to estimate a spread over the entire yield curve for lenders funding reviewable-rate mortgages with retail deposits. Also, the spread is based on a particular prepayment assumption and yield curve.

<sup>6</sup> Alternatively, if we had an estimate of minimum operating costs, the difference between the adjusted spread and minimum operating costs can be viewed as the operating inefficiency of the housing finance system. This measure of inefficiency is proposed in Hendershott [1991].

<sup>7</sup> In principle, this kind of inefficiency could be captured if the efficient market value of an option is inserted instead of the observed value. We feel that making such distinction is well beyond the capacity of the data.

<sup>8</sup> Reviewable-rate loans have rates administered by the lender as opposed to variable-rate or adjustable-rate loans which have rates that vary with the movement in an underlying index.

<sup>9</sup> For more detail, see Lea [1994, forthcoming].



## HABITAT II . . .

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suggests that the size of the housing finance sector rises with the level of income and the financial depth of the economy. It was also found that there are considerable variations within and among regions due to differences in institutional and policy influences (World Bank and UNCHS 1993, Volume I, p.19).

In order to support the in-country preparatory process for Habitat II, it has been decided that a set of policy-sensitive urban sector indicators will be developed jointly by the World Bank and UNCHS to be used together with the key housing indicators in addressing the two main themes of Habitat II: Shelter for All and Sustainable Human Settlements in an Urbanizing World.

The urban indicators will cover major fields of urban infrastructure (water supply, sanitation, solid waste management, transportation, electricity), urban finance, urban environment, social services, productivity, poverty, and quality of life. The Secretariat for Habitat II, which has been established within UNCHS, will call upon relevant ongoing programmes and initiatives of the UN system to provide funding and technical assistance for country-level activities including the application of human settlements indicators.

The process of developing and using a standardized set of indicators will contribute to harmonizing national reporting at Habitat II and also lead to the formation of a database of internationally comparable information, which will facilitate the sharing of knowledge and understanding the best practice at the city, national and international levels, thereby assisting individual countries to improve their policies by learning from experiences of others, as well as their own. Nevertheless, the programme still strongly emphasizes the importance of strengthening national capacity for regular and systematic monitoring of housing conditions and housing policies. Therefore,

individual countries may consider some additional indicators or narrow the list of indicators to pay more attention to as they see appropriate.

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<sup>10</sup> Although proposals for increased regulation (i.e., credit controls) have been made, the U.K. government has refrained from making significant changes to the housing finance system. In particular, no lenders or insurers have failed or have been bailed out. Some households have benefited from the creation of an *ex post* safety net through the government's purchase of foreclosed homes and renting of them to former owners.

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