Chapter 2

Structure and Evolution of Housing Finance Systems

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A characteristic feature of a housing investment is its relative size and long investment horizon, requiring large amounts of long-term finance. The aim of a housing finance system is to provide these funds to the producers and purchasers of housing, both rental and owner-occupied.[1] This simple description has spawned a broad array of institutional arrangements, ranging from contractual savings schemes; to depository institutions specializing in mortgage finance; to the issuance, sale, and trading of mortgage bonds and securities. All of these arrangements have been created with the same purpose in mind, to mobilize and channel funds from savers to borrowers in an effective way.

In an economy without a well-developed formal financial system, housing is either *self-financed* (that is, by equity accrued through many years of prior savings or through incremental construction; in most countries the majority of real estate transactions remain financed by cash) or *directly financed* between individuals (such arrangements are often referred to as informal finance). Direct finance can be provided by friends, relatives, small sav-

1. For comparative reviews of housing finance development, see Boleat 1985 and Diamond and Lea 1992. This taxonomy was originally developed by Boleat and expanded in Lea and Bernstein 2001.

ings and lending clubs (for example, *consórcios* in Brazil), or housing cooperatives or landlords (for example, the *chonsei* system in Korea). Although often the only alternative for households seeking to better their housing circumstances, informal arrangements are often inefficient and costly because the requirements of savers and borrowers are different, information is not equally shared, it is difficult to achieve scale, and lending is hampered by limited funding and risk-management capacities. Dependence on direct finance results in cities that are built as they are financed, with a considerable and visible proportion of self-construction and slum proliferation.

An alternative to direct finance are installment sales contracts, where developers finance purchase through deferred payments. This type of finance is seen in most emerging economies (for example, Egypt, Brazil, and Turkey). While more scalable than direct finance, it is also quite inefficient, as it ties up developer capital, making it more difficult to start new projects. Developers may also finance projects through presales, with or without mortgages. This can be quite problematic for buyers as they may bear both completion and quality of construction risk. This type of finance has been plagued with problems in some countries (China, Turkey, Russia, and Ukraine).

A sign of financial-sector development is the funding of housing by formal financial institutions. These institutions can be private-sector entities, which can be shareholder-owned or mutual organizations, or government-sponsored or -owned institutions (for example, state housing banks). Historically, a characteristic of many housing finance systems was the existence of a special circuit in which particular types of lenders enjoyed preferential financing, often operating apart from the broader financial markets (Diamond and Lea 1993). As economies develop and financial systems are liberalized, provision of housing finance often moves away from extensive reliance on special circuits toward integration of housing finance into the broader financial markets.

Mortgage Lending Models

Building Societies/Savings & Loans

In many countries, the traditional and still predominant mechanism for formal financial-sector finance of housing is the retail depository institution.

Figure 2.1. Depository and Direct Lending

In this system, an institution gathers savings from households and enterprises and makes loans to homebuyers (figure 2.1). By taking in savings from non-homebuyers, depository institutions can access a much larger pool of funds than through dedicated savings, including a stable mass of core deposits at a relatively cheap funding cost. There are several types of deposit-taking institutions, including commercial banks that offer a complete range of banking services, savings banks that deal largely with the household sector, and specialist housing-finance institutions (building societies or savings and loan associations) that focus their lending primarily on housing. A key feature of a depository system is that the institution originates, services, and funds the loan. Funding is primarily through retail deposits, but these institutions may also issue bonds and mortgage securities. Another important feature is the short-term, variable rate nature of the funding, compared to the longer-term housing loans.

Specialist-deposit-funded institutions have traditionally dominated the provision of housing finance in Anglo-Saxon countries (for example, Australia, Canada, South Africa, and United States) as well as in Commonwealth countries. The initial model for housing finance was the terminating building societies founded in England in 1775, later introduced in the United States in the 19th century (Mason 2004). The early building societies were formed to mobilize savings of lower- and middle-income households for the sole purpose of home construction. Members would agree to contribute regularly to the society, build houses together, and allocate houses by lottery until each member was housed. Once the defined group of members was provided housing and had repaid the loans, surplus assets, if any, would be distributed among members and the society would be terminated. Credit risk was lowered by the shared information about the groups' members. Variants can still be found in many lower-income countries particularly when commercial banks are absent from the market.

During the mid-19th century, societies developed into permanent institutions, attracting funds not just from borrowers but also from other savers, and lending for purchase of existing houses as well as for building new ones. This development loosened the bond that had previously existed between savers and borrowers. The permanent form had the advantage, however, of widening the investor base and offering a stable and relatively risk-free form of saving, greatly increasing the supply of funds for housing. Increased scale facilitated the hiring of permanent management.

Building societies are mutual institutions owned by their investors and borrowers. Savers purchased "shares" in the society that allowed them to participate in the surplus, if any, that existed after all of the group had received and repaid their loans. In this sense, members were risk takers, as their return depended on the performance of the institution and was not guaranteed. In later versions, savers received periodic dividends. As the permanent society developed, shares became interest-bearing deposits that could be withdrawn at par upon reasonable notice.

Through most of the 20th century, the building society/savings and loan (S&L) model dominated housing finance in the English-speaking world. These institutions were the cornerstone of a special circuit for housing finance supported by regulation (for example, in the United Kingdom, banks had high reserve requirements on housing loans as a form of credit control; in the United States, S&Ls had funding and tax advantages vis-à-vis commercial banks). Starting in the 1980s, this model began to lose influence and market share to commercial banks. The main drivers of change were deregulation (removing preferences and constraints, allowing broader asset and liability powers), demutualization, and institution failure (United States).[2] The failure of many U.S. S&Ls was a result of their inability to manage the market risks of providing long-term fixed-rate loans vs. shorter-term variable rate liabilities. Regulatory failure, initially by requiring fixed-rate lending and later

2. The reasons for demutualization included diversification of assets and funding sources, the desire to raise new equity capital, and the possibility of large payouts for members and management.

through regulatory and capital forbearance, contributed to the collapse. The remaining institutions have evolved into broader-based depository institutions but retained their focus on housing finance (offering variable rate mortgages). The mutual, specialized housing-finance model continues to exist in the United Kingdom, where the remaining societies compete on benefits provided to members in the form of lower mortgage rates and higher savings rates in lieu of dividends paid to shareholders. Today, however, building societies account for less than 25 percent of the U.K. mortgage market and S&Ls a smaller share of the U.S. market.

In many emerging economies, where variants of this model were introduced (for example, S&Ls in Latin America; building societies in Nigeria, Kenya, or Malaysia), these deposit-based specialized institutions either gradually lost ground against other models (for example, banks and mortgage companies in Malaysia) or were wiped out by losses related to excessive risks during phases of macro instability (hyperinflation, asset-liability mismatches, deposit runs, and so forth, particularly in Latin America). Nevertheless, there are advantages to the building society model for lower-income countries. The group nature and informational advantages of mutual organizations provide an advantage over other lenders in credit-risk management, an attribute shared with other mutual organizations such as credit cooperatives and credit unions (for example, Paraguay, Mali) and housing micro-lenders (for example, Peru or Bolivia, as discussed in a later chapter). While a marginal source of funding in developed markets today, mutual housing-finance specialists may still have a role to play in lower-income emerging markets with weak or government-run commercial banking systems. The danger (as evident from developed markets) is providing government support that creates a special circuit that delays the inevitable entry of commercial banks or non-depository lenders.

Commercial Banks

Commercial banks historically did not have a major involvement in housing finance. Their traditional purposes of financing business and providing means of payment lead them to a commercial, not a consumer, orientation. Prior to financial liberalization, this tendency was often supported by regulation that constrained banks from offering mortgage finance. Banks have concerns about the risks of providing long-term loans as well, if much of their funding comes from short-term deposits that can be withdrawn on demand. In many countries, regulators concerned about the volatility of real estate markets have also further constrained bank presence, although confusion has often existed between riskier construction loans to developers and safer individual mortgage loans.

Financial liberalization in developed countries has changed the role of banks in the mortgage market.[3] Central banks provide liquidity and deposit insurance, discouraging runs and reducing the concern over liquidity.[4] In stable economies, a proportion of core deposits can be safely used for long-term finance. Banks are turning to retail clients across the world in part because of a loss of their business lending to the capital markets. Long-term mortgage loans are attractive to banks that hope to cross-sell other services and develop long-term customer relationships. In most countries, banks have substantial brand, distribution, and funding advantages over other lenders, and have emerged as market leaders. Banks can be portfolio lenders, offering ARMs to reduce interest-rate risk; providers of short-term construction and warehousing loans; and sellers of loans in the secondary market.

Despite the growing attractiveness of mortgage lending for banks, there are many lower-income countries where banks still refuse to enter the market. Their ambivalence may reflect deep-seated concerns about the ability to manage risk, particularly credit risk in markets with weak legal foundations for collateralized lending, the relatively high cost of making smaller loans, and potential political risk over raising rates and enforcing liens. While improving the infrastructure and environment for mortgage lending is the long-run solution for obtaining bank entry, in the short to medium term,

3. Savings banks are major mortgage lenders in several European countries (France, Germany, Spain). They are often owned by state or municipal governments and can benefit from government backing. Cooperative banks have significant market share in Germany and the Netherlands. They operate as mutual organizations. Such institutions are not housing-finance specialists.

4. The ability of central banks to provide sufficient liquidity to keep banks lending is being tested in the credit crunch that started in 2007. Banks' concern over the quality of their portfolios has severely impacted the interbank and swap markets. The reluctance on the part of banks to lend to each other has been reflected in lower volumes and higher rates on interbank loans (for example, London Interbank Offered Rate). Central banks in Canada, Europe, and the United States have injected liquidity into the system and set up a term auction facility that will make loans available to banks at a non-penalty rate backed by a broader range of collateral than open market operations.

most lending may be done by specialized lenders. If well-run in a stable environment, the specialists may show that mortgage lending can be a safe and profitable business. This has been the case in Mexico, where successful Sociedad Financiera de Objeto Limitado (SOFOL) lending has led the banks to reenter the market.

Contract Saving Schemes

Contract savings institutions can be viewed as specialized depository institution circuits. Contract savings are major components of the housing finance systems of Austria, France, and Germany. They have been developed in Central and Eastern Europe (Slovakia, Czech Republic, and Hungary) as well as in a few French-speaking African countries (for example, Cameroon). They generate funds through loan-linked savings contracts, generally at a below-market fixed rate of interest. There are two variants to the system, the so-called closed system in which specialized institutions make loans funded by the contractual savings attracted from potential home buyers (for example, the Bausparkassen in Austria and Germany), and open systems in which banks offer the loans funded by the contractual savings held within their overall deposit base (for example, l'Epargne Logement in France). Contract savings are generally supported by government through savings bonuses and favorable tax treatment.[5] In France and Germany, the contract savings system provides supplementary credit (that is, second mortgages), while in Austria it provides primary mortgages. In the Czech Republic and Hungary, the system has generated considerable savings aided by significant savings subsidies, but produced comparatively few and small housing loans (mostly for renovation purposes). Unsubsidized contract savings programs have been introduced in India (unsuccessfully) and more recently in China, with limited success.[6] This model, its impacts, and limits are discussed in chapter 9.

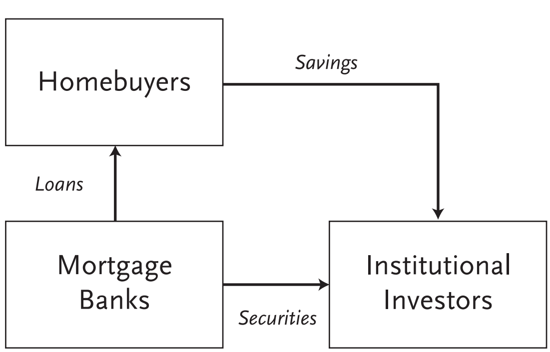
5. Recently, France has reduced its support of the *epargne logement* system and Germany has eliminated the savings bonus.
6. A number of cities in China have housing provident funds (HPFs), primarily for state employees. While they have accumulated significant funds, their housing lending performance has been modest and a number of funds have been plagued with fraud. HPF loans account for approximately 20 percent of total Chinese housing finance lending.

Specialist Mortgage Banks

An alternative to depository institution lenders are mortgage banks (figure 2.2). In such systems, specialized institutions (mortgage banks) originate and service portfolios of mortgage loans that are funded by securities they issue. The securities (mortgage, or covered, bonds) are general obligations of the mortgage bank and are typically purchased by institutions with long-term sources of funds (for example, pension funds and insurance companies). The mortgage bank system dates back to the late 1700s and has been extensively used in continental Europe (particularly in Germany and Scandinavia) (EMF 2001). Mortgage banks offer both residential and commercial mortgages. A major feature of mortgage banking systems is the predominance of long-term, fixed-rate mortgages that are match-funded with corporate debt. The bonds are considered very high quality as a result of conservative underwriting, strong regulation, priority rights of investors in the event of bankruptcy, and transparent operations (mortgage, or covered, bonds are described in more detail in chapter 12).

Mortgage banks are transparent, efficient producers of mortgage assets; however, as with other specialist systems in developed countries, mortgage banks are in decline. Their reach is limited by their specialization, as their funding source constrains their product selection (that is, the need to produce standardized assets in high volume to achieve liquidity and low fixed

Figure 2.2. Mortgage Bank System

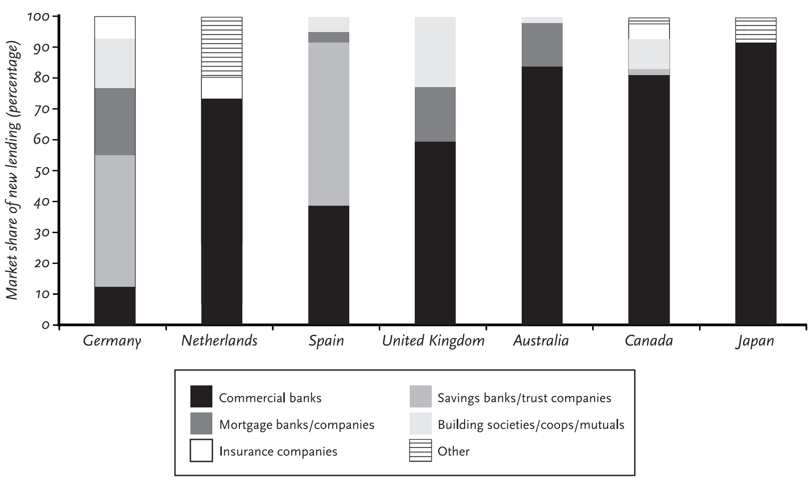


cost of funding) and their inability to provide other types of financial services (although they do function as brokers of other financial services). The efficient funding mechanism of covered bonds has been extended to commercial banks in most countries (Chile, both Western and Eastern Europe, and the United States). Also, many mortgage banks have been purchased by commercial banks. In Germany and, more recently, Denmark, mortgage banks have lost their monopoly on covered bond issuance. Thus, they are likely to be folded into the general operations of their commercial bank parents over time.

Combining Different Systems

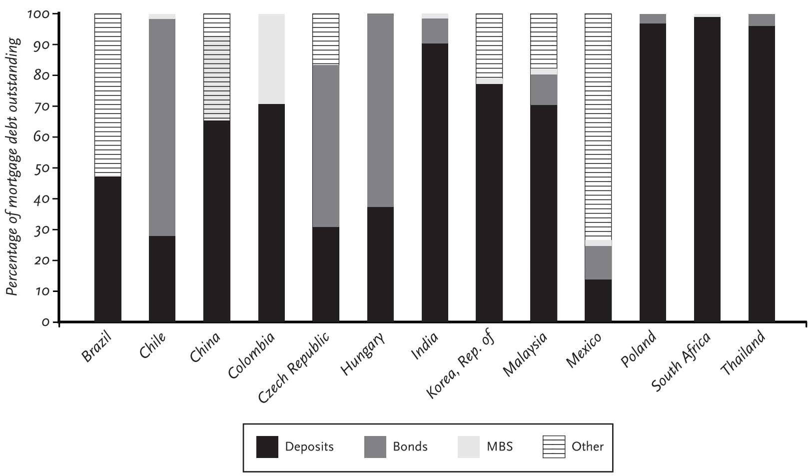
Figure 2.3 shows the market shares of different lenders in major developed markets. Commercial and savings banks have more than a 70 percent market share in all countries except Germany. Non-depositories (mortgage banks or

Figure 2.3. Mortgage Lenders by Type



Sources: ABS, CMHC, EMF, and Merrill Lynch.

Figure 2.4. Emerging Market Mortgage Funding



Sources: Various and author estimates.

mortgage companies) have significant market share in Australia, Germany and the United Kingdom.[7]

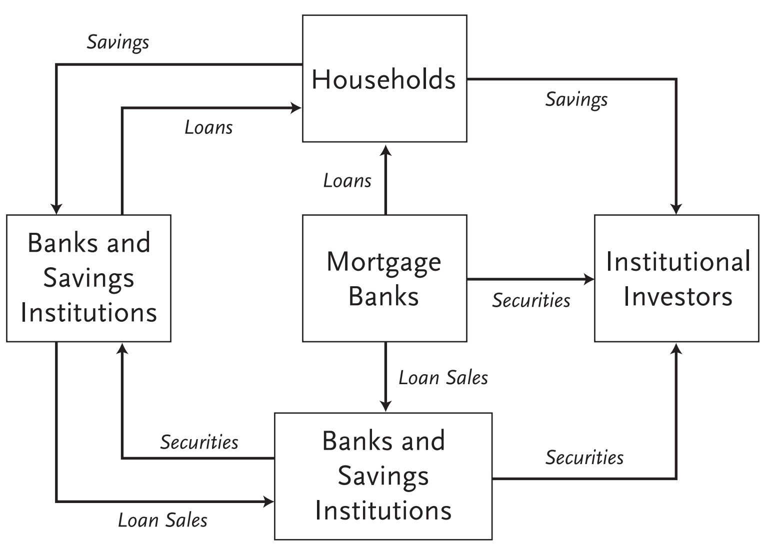
Figure 2.4 shows the market shares of different types of lenders in a number of major emerging markets. In most countries, commercial banks and savings institutions dominate the provision of housing finance. Two notable exceptions are Brazil and Mexico, which have large housing provident fund (HPF) special circuits. These circuits are described in a later chapter. China and Korea also have sizeable special circuits. Note that figure 2.4 refers to funding share rather than lending share.

7. Note that the United States does not keep figures on lending by institution type. Most of the top 25 lenders that had a 87 percent market share in 2006 were commercial banks but all major lenders in the United States source mortgages through multiple channels including loans purchased from correspondents. The largest mortgage companies have acquired bank charters to add retail deposits to their financing options.

Secondary Mortgage Markets

Another approach that has gained popularity in developed and emerging markets is a secondary mortgage market (figure 2.5). A secondary market involves the sale of mortgage loans or mortgage securities backed by specific pools of mortgages. As such, it involves the transfer of the risks and ownership of mortgage loans to a third party. The loans are originated by a variety of primary lenders, including banks and specialized mortgage companies. Although portfolio lenders occasionally securitize pools of seasoned loans, a hallmark of secondary market-based systems is the widespread securitization of newly originated loans. They may be sold to specialized institutions called conduits or through special purpose vehicles (SPVs). These entities raise funds through issuance of securities backed (or collateralized) by the loans. The majority of residential mortgage loans in the United States are funded through the secondary market. Mortgage security issuance, while on

Figure 2.5. Housing Finance with a Secondary Mortgage Market



the rise, represents a small fraction of funding for emerging markets (for more detail, see the mortgage securities chapter).

Mortgage or housing finance companies are specialized non-depository institutions that obtain funds either through sale of loans or special circuit funding. In the United States, mortgage companies developed with the secondary market. They pioneered the unbundling of mortgage functions (below) as specialists in origination and servicing. During the 1980s and 1990s, independent mortgage companies were the largest lender class in the United States. More recently, many U.S. mortgage companies have been absorbed by the commercial banking system. Specialized mortgage companies were an important component of the recent subprime lending boom in the United States, but a number failed in the collapse of the market in late 2006 and 2007. The existence of secondary markets facilitates the easy entry (and exit) of such lenders.[8]

Introducing New Lending Models: Mexico and India

In Mexico, the Sociedades Financieras de Objecto Limitado (SOFOLs) were created to provide mortgage finance after the collapse and withdrawal of commercial banks. They focus on the low- to moderate-income sector and initially obtained their funds from the Central Bank and World Bank. The SOFOLs showed that lending to low- to moderate-income households can be profitable with manageable credit risk. In recent years, the SOFOLs have issued mortgage securities and moved more upmarket. As of 2006, a majority of their funds were coming from the capital markets. At the same time, the commercial banks have reentered the market and have purchased several SOFOLs.

Until recently, the Housing Finance Companies (HFCs) were the major providers of housing finance in India. The Housing Development Finance Corporation (HDFC), a private-public partnership, was the first specialized housing lender in India. It initially received funding from its investors

8. A major cause of failure was the inability to obtain short-term funding for their inventory (loans held for sale) and loans subject to repurchase. Mortgage companies obtained such funds through warehouse lines of credit with commercial banks and through issuance of commercial paper. The commercial paper market dried up in fall 2007, and banks refused to extend or roll over the warehouse lines because of concerns about the quality of the loans pledged as collateral.

Box 2.1. SOFOLs—Mexican Mortgage Companies

The SOFOLs (Sociedad Financiera de Objecto Limitado) were born in 1993 as a result of the North American Free Trade Agreement, with a limited scope. They were created just before Mexico entered the worst economic crisis in its history, which devastated the banking industry, resulting in their withdrawal from the mortgage market. Along with two housing pension programs described later, the SOFOLs have been the major mortgage lenders in Mexico until recently. In 2006, they provided over $5 billion in mortgage funding, representing 24% of the market. In the previous years, they had a much higher market share, but it was reduced by the sale of the largest SOFOL, Hipotecaria Nacional (National Mortgage), to the largest bank, BBVA Bancomer, in 2005). SOFOLs are specialized financial institutions that grant mortgage (both construction and permanent loans), consumer, automotive, agricultural, and other kind of loans (that is, working capital). For the past few years, they have successfully competed with commercial banks that have returned to the market. They serve the middle and lower market with more than 50 percent of clients with incomes below eight minimum wages. They specialize in the origination and servicing of loans and have low default rates (less than 3.5 percent). Initially funded through a state-owned liquidity facility (passing on refinancing loans from the public sector and the World Bank), 70 percent of funds now come from the financial markets, including 38 percent from mortgage-backed security issuances in the bond markets (domestic and international).

and through the issuance of bonds. Subsequently, HDFC and other HFCs were funded by the National Housing Bank, which was created as a regulator and liquidity facility for the sector. HDFC showed that housing finance is profitable even in a market where foreclosure and repossession are nearly impossible. The HFCs thrived during the time that state banks were not allowed to provide housing finance. Financial sector liberalization has led to strong entry by banks, which now have a dominant market share (HDFC has formed its own bank). HFC market share has fallen from 61 percent in 2001–2 to 34 percent in 2004–5. Inevitably, all but the largest HFCs are likely to be absorbed by banks.

Box 2.2. HDFC—Creating a Market

The Housing Development Finance Corporation (HDFC) was incorporated in 1977 with the primary objective of promoting home ownership by providing long-term finance to households for their housing needs in India. At that time, there was very little housing finance provided in the country as the state-owned banking sector was prohibited from lending and only government lending programs existed. HDFC was promoted as a private-sector institution with an initial share capital of Rs. 100 million. HDFC was primarily funded wholesale in its first decade, with loans from international donors. HDFC launched a retail deposit program in 1991 and created a bank subsidiary in 1995. HDFC was declared India's best-managed company by *Asia Money* in 1995. It has promoted private-sector housing-finance companies in Bangladesh (Delta Brac) and Sri Lanka. HDFC was a pioneer in instruments (first ARM in 1999), securitization (2000), Internet loan approval (2001), and business process outsourcing (2001) in India and is an acknowledged leader in corporate governance and financial institution efficiency. As of 2005, HDFC had about $3.1 billion in mortgage loans outstanding, representing a 28 percent market share.

Unbundling of Mortgage Value Chain

A major emerging characteristic of mortgage markets is functional separation (or unbundling) in which specialists perform the various functions underlying a mortgage loan (Jacobides 2001).

As shown in figure 2.6, in the bundled model of mortgage lending a financial institution performs the major functions of origination, servicing, funding, and portfolio risk management. These intermediaries may utilize the services of third-party vendors, such as mortgage insurers, appraisers, and credit agencies. A single firm, however, accomplishes the primary functions. The portfolio lender originates a mortgage to a home buyer, services it, and performs the pipeline risk management and portfolio management functions, including funding. Portfolio lenders may be specialized institutions such as savings and loans, building societies, or European-style mortgage banks, or general-purpose depository institutions (commercial banks, savings banks).

Figure 2.6. The Bundled Home Mortgage Delivery

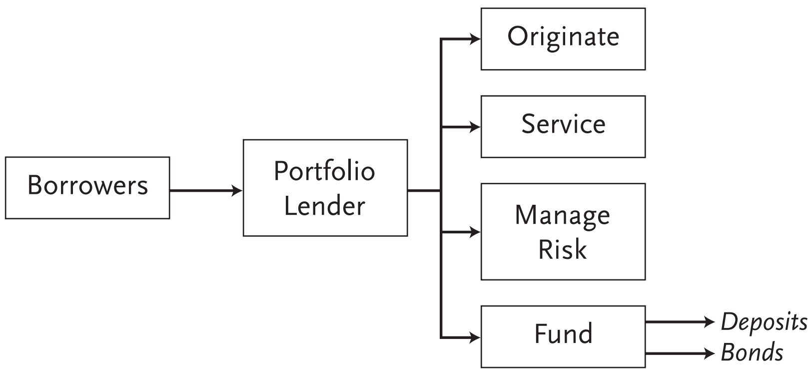


Figure 2.7. Unbundled Home Mortgage Delivery

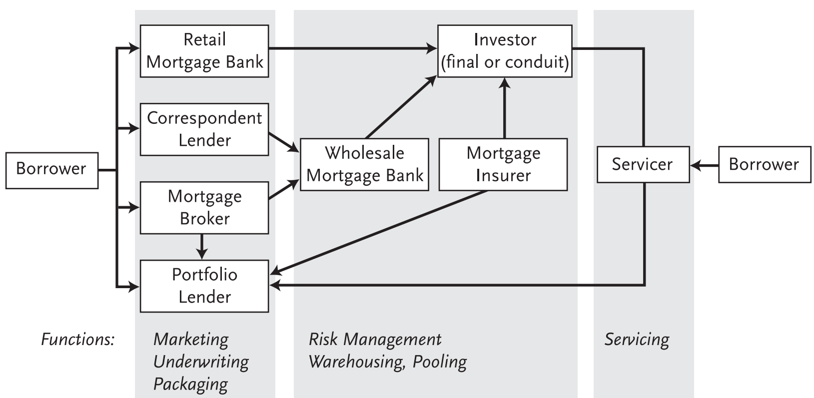
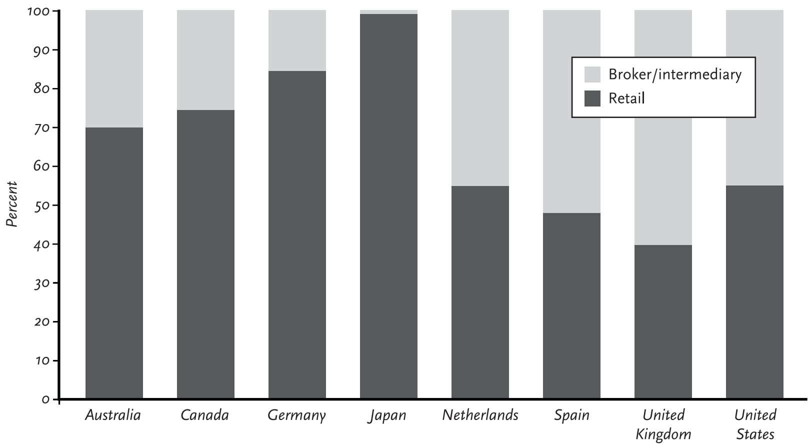


Figure 2.7 shows the unbundled mortgage delivery system. In this system, the functions of origination, servicing, risk management, and funding are unbundled and provided by different specialized entities.

For example, mortgage origination is no longer confined to retail branches of financial institutions, although they remain important distribution chan-

Figure 2.8. Mortgage Distribution Channels



Sources: Mercer, Oliver, Wyman 2003 (Germany, Netherlands, Spain); MBA 2006 (United States); *Realty Times* 2004 (Canada); Market Intelligence Strategy Center 2005 (Australia); Building Societies Association 2005 (United Kingdom). U.S. percentage assumes correspondent split 50:50 between retail and broker/intermediary.

nels. Mortgage intermediaries (introducers, brokers) are increasingly important in developed markets (figure 2.8). These entities may be specialists in mortgage origination or originate mortgages in conjunction with other activities such as real estate brokerage, providing financial advisory services, or building homes. Mortgage brokers are becoming a more important distribution channel in the new EU member countries (more than 50 percent of new originations in the Czech Republic and Poland) and recently in India. They remain underdeveloped in most emerging economies, but should take more importance as mortgage markets grow in size and competitiveness. Correspondent lenders close loans in their own name (but underwritten to the specifications of the ultimate investor) and immediately sell them to larger, wholesale lenders that can get better execution upon sale in the secondary market. The Internet is rising in importance in mortgage lending, but primarily as an adjunct to existing distribution channels. "Pure" Internet origination has not yet proven itself as a stand-alone channel, as it depends on other channels for fulfillment.

The institution that originates the loan may or may not be the one that services it. In recent years, mortgage servicing has become much more consolidated in the United States, with the top 10 servicers administering over 70 (2007) percent of the market. Various aspects of servicing, such as arrears management, have become even more specialized, as the importance of this function has risen with the advent of the subprime mortgage market in developed markets such as Australia, the United Kingdom, and the United States. Outsourcing of administrative and information technology (IT) functions for both origination and servicing, whether by commercial banks or specialist lenders, is also becoming more commonplace, but there again mostly in developed markets rather than emerging ones.

In the unbundled system, there are a wide variety of investors in housing loans, ranging from depositories to mutual funds. Investors provide funds to the housing market by funding whole loans or investing in mortgage bonds or mortgage-backed securities. In the global market, they may be either domestic or foreign. Credit risk management is often specialized as well, provided by third parties such as mortgage insurance or bond insurance companies (public or private) for the benefit of investors.

Three major factors driving unbundling are competition, technology, and the development of mortgage securities. Housing finance is becoming a more competitive business on a daily basis, creating spread compression and incentives to cut cost. Administrative activities such as servicing lend themselves to automation and scale economies that can be achieved through consolidation and outsourcing. Improved and more timely access to information facilitates monitoring of agent behavior, reducing both cost and risk associated with unbundling.

The subprime debacle of 2007 exposed a fundamental flaw in the disaggregate model of mortgage lending. With the rise of the secondary market and sale of loans, most players in the market became fee driven. Loan brokers receive fees to originate loans. Lenders receive fees to sell ("gains on sale") and service loans. Investment banks and rating agencies receive fees to create, rate, and sell securities. Each of these players is more volume oriented than quality oriented. This unbundling creates agency problems resulting from a divergence in incentives between the agents to the transaction and the ultimate risk takers (investors). While brokers, mortgage companies and investment banks will continue to play an important role in the market, the secondary market share will shrink substantially and new models of compensation and risk management will need to be developed.

Yet, in most emerging economies, fees and margins of the lenders—net of assessed or perceived costs and risks—remain too large to create incentives for unbundling and outsourcing. In addition, many banks remain culturally reluctant to transfer to any third party any information of commercial and financial value about their loans and clients. Therefore, unbundling remains limited to a few functions such as housing appraisal, and in fewer cases, mortgage origination and, to some extent, mortgage default insurance (more as a credit-risk management tool than as actual unbundling). A higher scale of competitiveness would be needed to create the incentives to realize the net gains of unbundling. Secondary market development is a necessary major catalyst for unbundling, as it creates incentives for specialized origination and servicing as well as third-party credit enhancement.

State-owned Lenders

In many countries, government-supported or -controlled institutions have a prominent role in the provision of housing finance. The largest housing finance institutions in the United States, the Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac), are government-sponsored enterprises operating in the secondary mortgage markets, with —until the 2008 rescue by the federal government—private shareholders but a government charter and both funding and tax advantages. Until recently, the largest housing finance institution in Japan was the Government Housing Loan Corporation, a government entity.[9] There is an emerging privatization trend, with former government-supported lending institutions in Argentina, Australia, France, Korea, and Spain being partially or totally sold to the private sector. The nature of state intervention has taken different forms (for example, support to securitization conduits or to mortgage insurance products, smarter subsidies, preferential

9. The Government Housing Loan Corporation has been converted from an originator and matched funder of mortgages to a secondary market institution that both guarantees securities issues by private lenders and purchases closed loans, and issues mortgage-backed securities. It has been renamed the Japan Housing Finance Agency.

regulatory treatment of mortgage loans) but the trend has been away from state-owned institutions, notably state housing banks, because of their poor performance as inefficient lenders, failure to meet housing policy objectives, and crowding out of private market participants (chapter 10).

Conclusions

The use of one or more of these systems depends on the stage of development of a country's markets as well as government policies. Housing finance usually emerges as a retail activity. Wholesale funds mobilization develops if the banking system is constrained from supplying sufficient mortgage credit to meet demand or if capital market sources of funding are more cost effective. The issuance of mortgage securities, however, is premised on the existence of several conditions, including a supportive legal and regulatory framework, sizeable and standardized primary mortgage markets, and well-developed bond markets. Specialized lenders can create efficiencies; however, they need an external funding source such as a government lending window or secondary market. Experience suggests that specialized lenders can thrive in a market for a period as long as their funding can incorporate bond markets and be competitive with retail (deposit) sources. Their viability will ultimately depend on the willingness of investors to buy mortgage-backed securities and provide short-term funding, which in turn depends on their confidence in the credit quality of the underlying assets. Eventually, however, banks are likely to take the dominant market share reflecting their inherent distribution, brand, and funding advantages (including central bank support).