Future Trends in Housing Finance

by David W. Glenn

INTRODUCTION

Even greater globalization of the capital markets and the ability to segment, package and sell credit risk and interest rate risk will profoundly change the housing finance markets in times ahead. Lenders will find a new ability to serve the full spectrum of borrowers as risk-based pricing is smoothly integrated from the secondary market down to the consumer.

Andrew Grove, the former chief executive officer of Intel, once wrote: "Sooner or later, something fundamental in your business world will change. You probably ought to know why."

As a case in point, an article recently published in *The Wall Street Journal* tells us a little about one bank and a lot about what is occurring within financial services generally.

The newspaper reported on how Charlotte, North Carolina-based First Union—one of the nation's largest banks—uses a new computer system dubbed "Einstein." The system's purpose: Assemble all the factors of customer activity and their related costs, and use that information to segment bank customers into three groups—color-coded green, yellow and red—depending on the profits each generates for the bank.

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With Einstein, First Union attempts to better manage what it sees as a diverse customer base. The bank looks to retain profitable customers by offering them better or customized services along with an occasional price break. At the same time, the bank is willing to part with unprofitable customers by offering them standard services and not budging on price. A bank manager says, "Everyone is not all the same anymore."

WHAT IS GOING ON HERE?

First Union demonstrates how one company is taking advantage of trends that are shaping the future of financial services. Through new tools that eliminate cross-subsidies—such as Einstein—and new markets that distribute risks more efficiently, financial service firms are able to gain more profitable market share in industries going through transition.

These same trends are at work in housing finance and are forcing a similar transition. More and more, the industry is removing the structural barriers that prevent many mortgage lenders from originating the full spectrum of home loans and then leveraging this scale to gain efficiency. Indeed, a relentless hunt to eliminate cross-subsidies is beginning to blur the distinctions among residential market segments.

Risk Transfer to Capital Markets

A growing capability to transfer new and different forms of risk to the capital markets is enabling lenders to efficiently fund a broader array of home loans. Further, the globalization of the capital markets is improving the stability and liquidity—relative to other credit instruments—of the industry's bedrock asset, mortgage-backed securities (MBS).

These are all components of an emerging housing finance system that will create more opportunity for lenders and reduce mortgage rates for consumers. Once the full effects of these and other trends materialize, lenders will see typical origination costs decline by one-third or more, and the average consumer will see their annual mortgage payments decline by $260—equal to the savings of a full hazard insurance policy every year.

Of course, getting from here to there will be easier said than done. To succeed, lenders and the secondary market will have to address a few practical issues.

THE HUNT TO ELIMINATE CROSS-SUBSIDIES

One such issue is how quickly the industry can eliminate cross-subsidies in mortgage credit risk. From credit-card issuers to insurance companies, many financial firms have already identified the existence of cross-subsidies, i.e., quoting the same price to

profitable and unprofitable customers alike. Cross-subsidies reflect an inefficient company or industry, or both, that relies on market-average pricing. Ultimately, competition seeks out and destroys cross-subsidies.

Eliminating cross-subsidies requires a savvy approach to managing costs. Savvy, because costs can be of two types—operating costs and risks—and each requires a different approach. For instance, by abandoning the one-price-fits-all approach, First Union is rooting out cross-subsidies associated with the operating costs of serving individual accounts. In these situations, financial firms are using data mining, automation and process re-engineering to improve efficiency.

For many other financial firms, though, the primary costs are from risks. The stakes are higher here because the true costs of today's pricing decisions are often not known for years. Insurance companies wrestle with this issue every day, asking whether the premiums they charge are low enough to be competitive yet high enough to absorb the costs of future claims. To manage costs that involve these forms of risk, financial firms are improving their understanding of risk itself.

Impact of Automated Underwriting Systems

In housing finance, this improved understanding comes from the development of automated underwriting systems such as Freddie Mac's Loan Prospector® and Fannie Mae's Desktop Underwriter®, and their use by mortgage lenders and originators. These systems contain statistical models, reflect the actual default experience of home loans and incorporate many risk factors associated with the individual borrower and property. As such, automated underwriting allows the industry to measure risk at a more refined level and distinguish among risks once thought to be similar and priced the same.

Through broad adoption of automated underwriting, which has experienced the quickest adoption cycle to date of any mortgage technology, the industry is setting the stage to eliminate cross-subsidies in mortgage credit risk. For example, in the residential mortgage market, estimates of cross-subsidies range as high as $5.7 billion, and the pricing differences between the conventional and subprime market segments are unevenly distributed.

To eliminate these cross-subsidies and market anomalies, the next step involves leveraging automated underwriting to move away from average pricing and toward tailored loan terms that reflect the credit characteristics of individual borrowers. This is an approach that can be used across all segments in the residential mortgage market.

Benefits to Come

By using one process, a combination of automated underwriting and risk-based pricing, lenders will be able to originate virtually any home loan and capture the resulting benefits of increased market share and improved efficiency. That is because, rather than denying loans or referring borrowers to market specialists, lenders will have the tools to evaluate, price and otherwise tailor loan terms for nearly every prospective borrower. Further, by applying this process on a large scale, lenders will be able to significantly reduce their origination costs.

For consumers, a more tailored approach to home loans will reduce mortgage rates for almost half of home buyers at any given time, with most of the benefits accruing to minorities and low-income borrowers.

With these benefits in mind, Paul Reid, executive vice president of the Mortgage Bankers Association of America (MBA), stated at a February 1999 conference sponsored by Harvard's Joint Center for Housing Studies that some form of risk-based pricing will become a standard industrywide tool, although not for some time. Indeed, to some lenders, redesigning the pricing process might well prove more difficult than the move to automated underwriting.

Currently, the industry is largely relying on delivery fee adjustments in secondary marketing to tailor prices on closed loans that were processed through automated underwriting. Freddie Mac is using this approach to purchase a number of loans outside its traditional credit standards.

Consumers Must Receive Lower Rates

This approach is a step in the right direction, but consumers must see lower mortgage rates if the industry ultimately is to eliminate cross-subsidies. Thus, in the long run, lenders will need tools that can easily process a diverse set of secondary market prices from mortgage purchasers; quote tailored mortgage rates (and other terms) to borrowers; address how to change these prices should credit characteristics change during the origination process; and do so in a manner consistent with fair lending. These are not insignificant issues.

But if history is any guide, those lenders that move first and innovate will capture a larger share of the benefits. These market leaders will spur competition and, importantly, chip away at the pricing distinctions between segments in the residential mortgage market.

Once put in motion, the pace of change likely will accelerate. That is because the cost of being disadvantaged—loss of market share, loss of profitability—will prove too great to allow other lenders to slowly grow accustomed to new approaches. That is why I believe that some form of risk-based pricing will happen sooner rather than later.

Once this change has occurred, the sharp pricing distinctions that exist today across market segments will fade away, an integrated market will emerge along a smoother pricing continuum and cross-subsidies will be a thing of the past.

THE DRIVE TO TRANSFER MORE RISK TO THE CAPITAL MARKETS

As the march to eliminate cross-subsidies begins, financial firms are also beginning to take greater advantage of the capital markets and investors abroad. More and more, the capital markets are opening up to new and different forms of risk, and international investors are financing ever-larger portions of many financial firms' debt. In housing finance, these trends likely will give lenders access to new distribution channels for mortgage-related risk as well as new securities to hedge pipelines.

To open up the capital markets, a greater variety of players, such as credit-rating agencies, third-party guarantors and reinsurers, are being used to unbundle and repackage risks, develop sophisticated security structures and redistribute risk to capital-market investors.

Property and casualty insurance companies, for example, have long struggled with the appropriate means to manage the risks they assume. Typically, insurers have relied upon loss-reserve pools and investments to pay claims as they occur. But this approach has concentrated large amounts of society's risks within the hands of a relatively few financial firms.

In recent years, these same insurers have created new capital market structures to distribute risk more broadly. By issuing what are known as catastrophe bonds, insurers are mitigating their risk exposure by transferring earthquake and hurricane risk to the capital markets.

MBS Market Showed the Way for Housing

In housing finance, transferring risk to the capital markets is not a new idea. During the past decade, the industry has largely moved away from a situation where most residential mortgage risks were concentrated in savings and loan institutions. The mortgage-backed securities market—second only to U.S. Treasuries as the largest segment in the fixed-income securities market—has proved to be a more effective and efficient means to manage the interest rate risk associated with home loans.

However, the transfer of mortgage credit risk to the capital markets has developed more slowly; but, like the insurance industry, this capability is beginning to emerge. A recent example can be found at Freddie Mac.

Last year, our company was involved in a credit derivatives transaction called MODERNS (Mortgage Default Recourse Notes). In brief, the transaction worked this way: A reinsurance company issued a floating-rate bond that transferred a portion of Freddie Mac's mortgage credit risk to securities investors. The individual classes were indexed to $20 billion of home loans that Freddie Mac purchased in 1996. Because the cash flows decline as loan defaults occur, investors that buy these bonds absorb the underlying mortgage credit risk.

Introducing More Flexibility

While still in its formative stage, the transfer of mortgage credit risk to the capital markets has the potential to create more flexibility for the industry to seek the best possible price for this risk. Further, as market demand for credit derivatives materializes, mortgage purchasers, including Freddie Mac, will be able to purchase home loans regardless of whether they meet preset credit standards. That is because the capital markets will provide an effective outlet for credit risks that mortgage purchasers do not wish to retain.

The net effect is that mortgage lenders will be able to originate a broader array of home loans (which builds on the first trend) and fund them with the most efficient structures available in the capital markets. This should produce a modest profitability boost for lenders and incrementally lower mortgage rates for consumers.

GLOBALIZATION OF THE CAPITAL MARKETS

The search for flexible funding sources is being further enabled by the globalization of the capital markets. Over the years, securitization of credit, proliferation of mutual funds and financial consolidation all have propelled global markets. In the 1990s alone, the global bond market has almost tripled.

Globalization is best seen through two recent developments, the decline in issuance volume of U.S. Treasury notes and bonds, and the credit crunch of 1998. Because of federal budget surpluses, Treasury securities have been issued with less frequency, lower volumes and fewer maturities. Indeed, the average quarterly volume of new issuance has declined from $150 billion in 1996 to half that amount now. Various forecasts predict that the outstanding supply of Treasury securities, now at more than $3 trillion, could be sliced in half over the next decade.

It is important to remember that Treasury securities have been a credit benchmark for long-term debt only since the 1970s, when the federal government began to experience budget deficits. Prior to that time, other corporate sectors, such as utilities and railroads, combined to serve as long-term benchmarks.

Developing Alternative Benchmarks

The recent decline in new Treasury issuances has done two things to the financial markets. First, it has created an investment gap for fixed-income investors who have traditionally relied on these credit instruments. Second, it has created room for alternative benchmarks to emerge and begin to fill part or all of this gap.

Freddie Mac and Fannie Mae have positioned GSE debt as one logical alternative to help meet investors' needs. That is because both firms issue debt in very large volumes and with regularity, and trade closer to Treasury yields than other credit instruments because of their high credit quality, liquidity and institutional integrity. These are all key reasons why investors buy Treasury securities in the first place.

Thus, seeing the decline in new Treasury issuances, last year both firms designed separate but similar programs—Freddie Mac's Reference Notes and Fannie Mae's Benchmark Securities—to function as Treasury-like credit instruments.

How does market globalization play a role here? International investors have purchased surprisingly large volumes of Reference Notes and Benchmark Securities. Indeed, of the $20 billion in Reference Notes that Freddie Mac issued last year, fully 40% were sold to investors outside the United States, a trend I expect will continue. New issuance volume likely will double in 1999, market conditions permitting.

Globalization Produces New Tools, Efficiencies

Again, a trend that is still somewhat in its infancy, global access to the capital markets is beginning to produce new hedging tools for lenders as well as market efficiencies that will ultimately result in modestly lower mortgage rates for consumers. For Freddie Mac and Fannie Mae, these securities are helping our firms to fund the daily operations of our investment portfolios. At a combined total of $670 billion at year-end 1998, GSE portfolios are playing an increasingly significant role in the mortgage-backed securities market.

For example, during the credit crunch that gripped the markets last summer and fall, credit-quality spreads widened significantly and became extremely volatile. Investors withdrew en masse from other fixed-income segments and fled to Treasury securities.

Mortgage-backed securities, however, while certainly not immune from these developments, showed less volatility than other credit segments. For example, when compared with Treasury yields, the spreads for asset-backed securities and commercial mortgage-backed securities suddenly tripled and quadrupled, respectively, and forms of corporate debt fared even worse. But residential mortgage-backed securities' spreads increased by less than half.

This relative stability was due, in part, to the capacity of Freddie Mac's and Fannie Mae's investment portfolios—funded to a large degree by international investors purchasing GSE debt—to enter the market at a critical juncture, absorb more than $200 billion in mortgage production during the third and fourth quarters and keep mortgage funds flowing to lenders and borrowers alike. Indeed, the MBA's Reid said at the time, "Fannie Mae and Freddie Mac were . . . the anchor in the storm."

As a result, hundreds of thousands of consumers were able to refinance their home loans at the lowest mortgage rates in a generation, and at mortgage rates as much as 62 basis points lower than jumbo loans.

THE ROAD AHEAD

Eliminating cross-subsidies. The capacity to transfer new and different forms of risk to the capital markets. The globalization of the capital markets. These and other trends are increasingly shaping the future of financial services.

In housing finance, these same trends are improving the system's effectiveness and efficiency in pricing and distributing the risks associated with home loans. On the road ahead, more lenders will be able to expand their markets and improve their efficiency. Meanwhile, more consumers will see loan terms tailored to their individual credit characteristics, and achieve lower mortgage rates as a result.

Something fundamental is indeed occurring within our industry. And it represents a future well worth working toward.