

# Market Trends: Past Is Prologue

by Robert Van Order

TO UNDERSTAND WHERE THE mortgage market is headed, it is instructive to look back at where it has been recently. The divergent paths taken by loan-origination rates and mortgage-debt growth, for example, reveal much about the factors driving the mortgage market.

In both the third and fourth quarters of 1993, for instance, mortgage originations hit close to \$300 billion and finished the year by exceeding \$1 trillion (*Exhibit 1*). By mid 1995, however, quarterly originations had fallen more than 50 percent, leading to a year in which originations totaled \$636 billion. Originations for 1996 will rebound to about \$750 billion, thanks to rather vigorous market activity during the first half of the year. Yet, despite these bigger-than-average ups and downs, the outstanding stock of mortgages has held to a much steadier course lately (*Exhibit 2*).

Through the 1970s and 1980s, mortgage debt grew at about 10 percent per year. In the 1990s, though, that growth rate has slowed to a fairly constant 5 percent.

The wide fluctuations in loan originations that took the mortgage market on a bumpy ride did little to change the relatively even, upward expansion

EXHIBIT 1: Total Single-Family Mortgage Originations

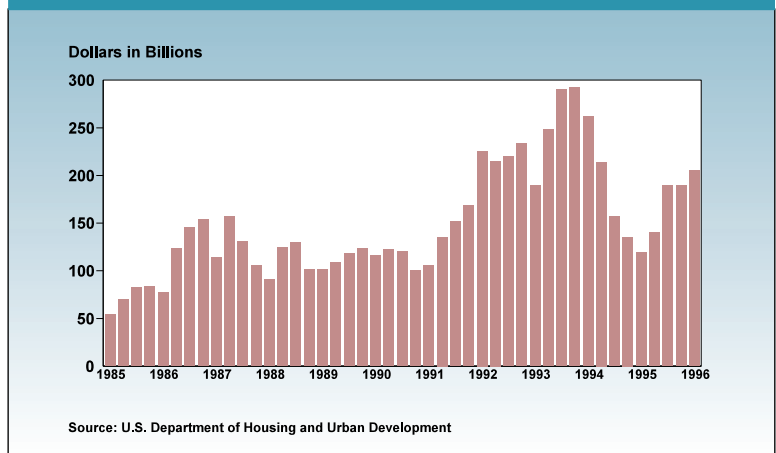
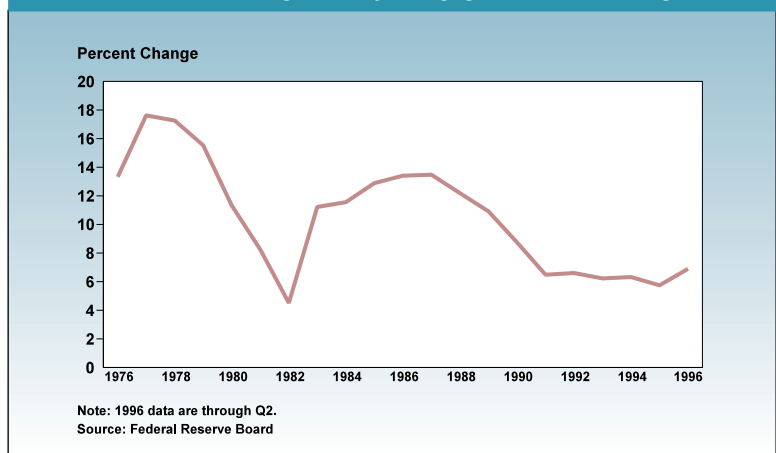


EXHIBIT 2: Growth in Single-Family Mortgage Debt Outstanding



of the mortgage debt owed by the nation's borrowers. The two mortgage-market indicators, as it turns out, are shaped by entirely different factors.

In the short run, periodic refinancing waves dictate what happens to the mortgage-origination business. Originations increase sharply as borrowers rush to trade in old interest rates for lower ones. Conversely, originations decline when rates

stabilize and drop further still if rates head back up.

For the most part, though, these refinancing spasms merely recycle existing loans, leaving the amount of mortgage debt outstanding virtually unchanged. The exceptions are refinancers who swap into bigger loan balances, take equity out of their properties or pay down their mortgages, but these borrowers represent only a minor fraction

Robert Van Order is Freddie Mac's chief economist.

of the trade-in business during a refinancing boom.

Increases in the country's collective mortgage balance are tied primarily to growth in the economy in general and the housing market in particular. Over time, average mortgage-market growth tends to equal the rate of growth in real gross domestic product (GDP) plus the rate of growth in house prices. The main reason the expansion of the outstanding mortgage stock has remained so even in recent years comes down to the relatively slow and steady lope at which the GDP and house-price appreciation numbers have changed (*Exhibit 3*).

#### The Macroeconomic Backdrop

There is, of course, much more going on in the mortgage market than simply its changeable size. The types of mortgages originated are changing, as are the participants and their roles in the lending process. While much of this is driven by competition and technology (see "Technology Is Destiny in a Not-So-Distant Future," page 5), the importance of the economy should not be overlooked.

As far as the fortunes of the mortgage market go, the overall economy is cooperating nicely, as measured by most macroeconomic standards. The unemployment rate is fairly settled at around 5.5 percent or a bit lower, inflation remains in the 3-percent range and housing

starts and sales are up for the year.

In fact, 1996 is coming together as an even better year than most analysts anticipated, despite the rise in mortgage rates that surprised many forecasters. The housing market

is finally slowing—but not too badly—in the face of higher interest rates that are now bobbing around 8 percent after starting the year at about 7 percent. Housing's buoyancy is due to an economy that has yet to lose steam and house prices that are on the rise, thereby prompting consumers to view housing as a better investment than they have for several years.

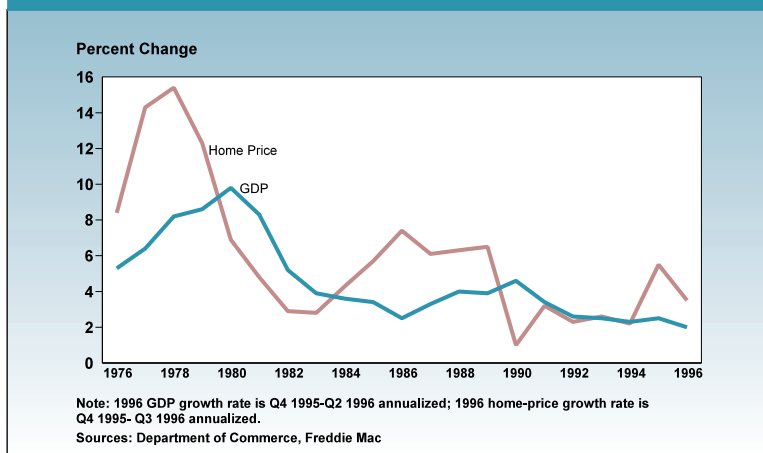
The reappointment of Alan Greenspan to the chairmanship of the Federal Reserve Board will go down as the main macroeconomic event of 1996. By setting monetary policy through interest-rate changes, the Fed is capable of redirecting the course of business cycles, at least in the short run. The actions of the Fed, naturally enough, are of enormous interest to the housing market, due to its keen interest-rate sensitivity.

As economists go, Greenspan falls a bit to the right of mainstream economic thought. As

central bankers go, he probably fits somewhere in the middle. It is clear that Greenspan's primary focus, as it is with most central bankers, is on controlling inflation. From all appearances, Greenspan is not in hot pursuit of a low unemployment rate or high economic growth, both of which exceed the Fed's grasp except for short periods of time. Inflation, however, represents the one part of the economy over which the Fed does exercise some long-run control. It is unlikely that Greenspan, an intelligent central banker with an eye on a place in history, would want to reverse past efforts to lower inflation, especially after seeing the price society paid in high unemployment rates for suppressing inflation in the early 1980s.

On the other hand, Greenspan is no inflation hawk, bent on achieving zero inflation. Greenspan probably views the current inflation rate of roughly 3 percent as acceptable. In fact,

EXHIBIT 3: Growth in GDP and Home Prices



he is probably even more comfortable with the status quo, given he has stated publicly that the Consumer Price Index (CPI) overestimates inflation, which would put the “true” inflation rate at closer to 2 percent. As long as inflation does not accelerate and no catastrophe breaks out, Greenspan most likely will concentrate on maintaining the economy’s overall stability, perhaps allowing the next recession—whenever that happens—to push down inflation. As a result, the relatively low inflation rates of the past few years should persist and, in turn, lead to consistently single-digit mortgage rates in the 7-percent to 9-percent range.

A low-inflation-rate policy will do little, however, to alleviate short-run interest-rate fluctuations. That is because interest rates act as an automatic economic stabilizer and the Fed is part of the reason why. When the economy expands, interest rates tend to rise due to increased credit pressure from businesses and homebuyers. If the economy is expanding too quickly, the Fed may raise short-term rates further to slow growth, the classic response under a countercyclical monetary policy. Indeed, to the extent that the Fed succeeds at stabilizing the economy, it also will tend to destabilize interest rates. Consequently, look for mortgage-rate swings in the 100-basis-point to 200-basis-point range to remain

*The chance of a recession in the near future is slim as the economy continues to approach equilibrium.*

in the housing market’s future.

An interest-rate rise is not altogether bad for housing, provided it stems from a robust economy that stimulates housing demand and from increasing house-price appreciation that makes housing look like a better investment. There is no comparable offset against an interest-rate rise, though, for the refinancing side of the mortgage business, where volume is a function of the relationship between current and past interest rates. Refinancing waves like those of the past few years will occur as interest rates fluctuate, but without much warning, even while the undulations bring about smaller changes in the housing market’s other elements.

The chance of a recession in the near future is slim as the economy continues to approach equilibrium. The Fed is unlikely

to make an economic policy correction in the face of a low, stable inflation rate and a surprisingly low unemployment rate. The United States tends to experience one or two recessions a decade. Just when the next one will happen is not easy to predict, although soon is not probable.

#### **As Far as the Eye Can See**

The Fed can do little to steer economic growth over the next 10 years. From decade to decade, real growth is equal to the rate of growth in the labor force, which stays close to 1 percent a year, plus the growth in productivity, as measured by output per worker. Both of these depend on variables mostly beyond the Fed’s reach. The best the Fed can do is provide a stable economic backdrop.

Historically, productivity growth averaged 2 percent annually until the post-World War II period, when it jumped to 3 percent. For the past two decades, however, it has scraped along at little more than 1 percent a year. Most economists are forecasting a 1.5-percent productivity growth rate for the next few years, which, on top of a 1-percentage-point annual increase in the size of the labor force, means real economic growth is likely to hover around 2.5 percent per year.

With inflation around 3 percent, growth in nominal GDP

*(continued on page 6)*

## Technology Is Destiny in a Not-So-Distant Future

From now on, technological advances in information handling and collection will determine both mortgage-market performance and the details of who does what.

No surprises there. Information is king in an industry that demands answers to questions such as: Who is likely to default? Who is likely to prepay? and How should cash flows be managed? The information typically needed to answer these questions is not going to change, but the swiftness with which it is assembled and the quantities in which it is collected will increase.

Recently developed mortgage-scoring models represent one technological advance that will play a particularly dynamic role in reconfiguring the mortgage market of the future (see "The Promise of Automated Underwriting: Providing a Simpler, Fairer, More Inclusive Mortgage Lending System," page 18). This technology strengthens the quality of loan decisions by predicting eventual borrower repayment performance with an unparalleled degree of accuracy. It also will enable mortgage closings within a week of loan application to become commonplace.

### The Value of Information

Speed is but one manifestation of the technological changes afoot and not even the most important. That distinction will belong to the way credit risk is managed from here on out.

Today, unlike 20 years ago, it is customary for different institutions to originate and service mortgages. When loans wind up in securities, several entities may share in the credit risk of the instruments in order to attract a broader spectrum of capital-market investors than in the past.

Although this division of labor contributes greatly to the efficiency of mortgage markets, it can come at a cost, namely conflicts of interest. When a company depends on others to furnish important services in pursuit of a business objective, the company needs to worry about whether it is in the interest of the service providers to perform as expected.

At the secondary-market level, for instance, a major risk is born of the reliance on originators to make prudent loans and on servicers to administer them properly. Adverse selection is one possible manifestation of this risk. A lender, equipped with superior insights into local market conditions that a more distant secondary investor cannot match, may decide to keep the good loans and sell the bad loans. Similarly, related risks of "moral hazard" can occur in situations when an

originator, secure in the knowledge that the secondary investor will absorb default losses, decides to increase revenues through higher loan volume. As such, the originator may write and sell mortgages that are riskier than they appear, underwrite loans poorly or fail to exercise careful quality control. One of the challenges for the secondary market lies in developing access to information by which to better evaluate loan quality.

Mortgage scoring is, in part, a way of addressing conflicts of interest by offsetting the informational advantages of other market participants. The players who build the best and cheapest systems for evaluating mortgages will become the ones to equip the marketplace with the tools to guard against potential asymmetric information risks or, conversely, to exploit them.

### Managing and Pricing Credit Risk

Cross-subsidization of mortgage interest rates between the safer repayment bets and the riskier ones is a long-standing hallmark of the mortgage markets. Generally, safer borrowers have paid more than their expected default costs warrant. Put another way, the market has typically failed to price individual mortgages on the true cost of the risks they represent, relying instead on the good loans to average out the bad.

That, of course, is not entirely true. Mandatory mortgage insurance on low-down-payment loans is, in effect, a pricing mechanism, as is the advent of B and C markets for riskier borrowers.

Nonetheless, pricing and risk have not been widely linked at the individual loan level. As mortgage scoring progresses, it will become much easier to attach an objective measure of credit risk and other associated costs to each applicant and convert that quantification into a price. Giving lenders the means to test an applicant's repayment abilities with greater precision under a variety of scenarios will also lead to the development of new mortgage structures.

In sum, competition is going to force the mortgage market to exploit new technologies. That will push the industry to embrace increasingly more sophisticated pricing. As that happens, the market base will expand. Mortgage-scoring models will help find borrowers who are less risky than previously believed and better pricing will become a substitute for loan rejection. At the same time, the technology will support the development of products and pricing strategies that give high-risk candidates another shot at buying a home for keeps.

—Robert Van Order, chief economist

*(continued from page 4)*

is likely to remain close to 5.5 percent a year. The current stability in the economy suggests little reason to expect much deviation from this over the next decade.

The mortgage market can grow faster than the economy as a whole, but, in the long run, only to the extent that house prices grow more quickly than prices in general. Freddie Mac's forecasts put house-price growth at 1 percent to 2 percent a year above the CPI. At this rate of growth, the dollar value of the mortgage market and most of the activity related to it will expand by 6.5 percent to 7.5 percent a year for the next decade, which is low compared with annual growth rates of around 10 percent for the past 30 years. Nonetheless, the "real" elements of the market, such as starts and sales, will continue to do well.

#### **Better Times Ahead?**

Although economic forecasters got the reasons wrong, their predictions are actually proving right that 1996 will shape up as a pretty good year for housing. Forecasts early in the year, colored by low interest rates and receding recessionary fears, called for climbing home sales and production and a big jump in originations to \$850 billion in

1996 from \$636 billion in 1995. The economy played along until late February, when interest rates began climbing. With rates around 8 percent ever since, Freddie Mac's revised forecast now sees the year ending with a sharp fall-off in originations, which will put new loan business closer to \$750 billion for the year.

The housing market would be in much worse shape except that the current high mortgage rates are due to a strong economy. That, in turn, has triggered higher house-price appreciation of the sort that fuels home sales and new production.

Prior to 1995, house prices on a nationwide basis grew by less than inflation for six consecutive years, according to the Conventional Mortgage Home-Price Index. For the past year or so, however, prices have outpaced inflation in most parts of the country and showed improvement in regions where values had been deteriorating. House prices should grow by a percentage point or two more than inflation for the next few years. Although the resulting annual growth rate of 4 percent to 5 percent is low compared with the double-digit surges in house-price appreciation seen periodically in the 1970s and 1980s, the rate compares favorably to the most recent past.

Most economists expect a slowdown in the second half of 1996, which could imply lower

mortgage rates; a better bet is that they will stay close to 8 percent. The ARM share, catching up with the last interest-rate rise, should represent about one-third of all mortgage originations for the year and about one-quarter of the market after that. Refinancings, after claiming a first-quarter share of 44 percent, will drop to 20 percent for the last six months of 1996 and stay there if, indeed, mortgage rates remain around 8 percent.

A mortgage interest rate of 8 percent is really 5 percent or 6 percent after taxes for most homeowners. If borrowers are expecting their homes to appreciate at 5 percent a year, then they are more or less expecting price growth to cancel out the interest-rate costs of purchasing a home. This alone is reason to expect relatively strong housing markets for the next few years.

#### **Lament of the Economic Forecaster**

The underlying macroeconomic structure looks fairly stable in the years ahead. That is fortunate, given the enormous potential for turbulence in the mortgage market. Although economic forecasters can say something about the usual aggregate measures, it is quite impossible to predict who in the mortgage market will be doing what for how much with what 10 years from now. **SMM**