Alan Greenspan: Mortgage banking

Remarks by Mr Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System, to the American Bankers Association Annual Convention, Palm Desert, California (via satellite), 26 September 2005.

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In the weeks and months ahead, the Federal Reserve will continue to closely follow the consequences of the recent devastating events in the Gulf Coast region in order to assess their implications for our economy. However, we are well aware that the broader economic impact is only a part of the human misery left in the wake of these events.

In my remarks today, I plan, in addition, to focus on one of the key factors driving the U.S. economy in recent years: the sharp rise in housing valuations and the associated build-up in mortgage debt.

Over the past decade, the market value of the stock of owner-occupied homes[1] has risen annually by approximately 9 percent on average, from $8 trillion at the end of 1995 to $18 trillion at the end of June of this year. Home mortgage debt linked to these structures has risen at a somewhat faster rate.

This enormous increase in housing values and mortgage debt has been spurred by the decline in mortgage interest rates, which remain historically low. Indeed, the thirty-year fixed-rate mortgage, currently around 5-3/4 percent, is about 1/2 percentage point below its level of late spring 2004, just before the Federal Open Market Committee (FOMC) embarked on the current cycle of policy tightening. This decline in mortgage rates and other long-term interest rates in the context of a concurrent rise in the federal funds rate is without precedent in recent U.S. experience.

Some of the decade-long decline can be ascribed to expectations of lower inflation, a reduced risk premium resulting from less inflation volatility, and a smaller real term premium that seems to be due to a moderation of the business cycle over the past few decades. Besides these factors, the worldwide trend reduction in long-term yields presumably reflects an excess of intended saving over intended investment.

Since the mid-1990s, worldwide saving has been boosted by a significant increase in the share of world output produced by economies with persistently above-average saving--predominantly the emerging economies of Asia. This impetus to saving has been supplemented by shifts in income toward the oil-exporting countries, which more recently have built surpluses because of steep increases in oil prices.

Softness in intended investment, however, is also part of the story. In the United States, for example, capital expenditures have been restrained for some time relative to the very substantial level of corporate cash flow. That development likely reflects the business caution that was apparent in the wake of the stock market decline and the corporate scandals early this decade. In similar fashion, Japanese investment exhibited prolonged restraint following the bursting of Japan's speculative bubble in the early 1990s, and investment in emerging Asia, excluding China, fell appreciably after the Asian financial crisis in the late 1990s.

The economic forces driving the global saving-investment balance have been becoming manifest over the past decade, so the steepness of the recent decline in long-term yields suggests that something more may have been at work over the past year. According to

[1] Includes second homes that are not rented, vacant homes for sale, and vacant land.

estimates prepared by the staff of the Federal Reserve Board, a significant portion of the more recent decline appears to have resulted from a fall in term premiums. Such estimates are subject to considerable uncertainty; nevertheless, they suggest that a perceived increase in economic stability in recent years has encouraged risk-takers to reach out to more-distant time horizons.

Regardless of the precise mix of factors that explains the decline in interest rates, the associated run-up in housing values has left households with a substantial pool of available home equity. According to data recently developed by Jim Kennedy of the Federal Reserve Board staff, and me, discretionary extraction of home equity accounts for about four-fifths of the rise in home mortgage debt.[2]

Our data splits home equity extraction net of closing costs, and hence debt increase on existing homes, into extraction from three sources: (1) that associated with home turnover--that is, mortgage originations of buyers of existing homes less the associated debt cancellation of sellers, (2) refinancing cash-outs, and (3) increases in home equity loans.

The size of equity extraction owing to turnover closely parallels and presumably finances the realized capital gains on homes, whereas cash-outs and home equity loans generally extract as-yet-unrealized capital gains.

What share of the financed capital gains are spent on consumer goods and services, thereby reducing the saving rate, is uncertain.[3] Survey data suggest that approximately a fourth to a third of the value of home equity loans and cash-outs finances personal consumption expenditures directly.[4]4 Another fourth funds repayment of nonmortgage debt that had been used, in effect, as bridge financing, predominantly of personal consumption expenditures.[5] Home mortgage debt is thus the final source of funding of some consumer outlays originally financed by extensions of credit card and other consumer debt. Although there are no comparable surveys of the disposition of equity extracted by sellers of homes beyond amounts applied as a down payment on a subsequent home purchase or outright cash purchases, plausibly they would exhibit similar propensities.

If indeed this is the case, the implied increase over the past decade in consumption expenditures financed by home equity extraction, rather than by income and other assets, would account for much of the decline in the personal saving rate since 1995.

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2 We define discretionary extraction as the change in mortgage debt (excluding construction loans), plus scheduled, i.e., nondiscretionary, debt amortization minus mortgage debt originations to finance newly built homes. See Alan Greenspan and James Kennedy (2005), "Estimates of Home Mortgage Originations, Repayments, and Debt on One-to-Four-Family Residences, " Finance and Economic Discussion Series 2005-41 (Washington: Board of Governors of the Federal Reserve System, September).

3 Because the personal saving rate is measured relative to personal disposable income, any purchases financed with the proceeds of capital gains will increase personal consumption expenditures but not income, and therefore the measured saving rate will decline. The reason for excluding capital gains from income, and hence saving, is that only book saving can finance capital investment, a key requirement of the structure of our national accounts. Capital gains do not add to gross domestic product (GDP).

4 Surveys report approximately a third of mortgage extraction is spent on "home improvements," part of which is home repair, a personal consumption expenditure.

5 The survey results cited here were reported in Glenn B. Canner, Karen Dynan, and Wayne Passmore, "Mortgage Refinancing in 2001 and Early 2002," Federal Reserve Bulletin, vol. 88 (December 2002), pp. 469-81, Peter J. Brady, Glenn B. Canner, and Dean M. Maki, "The Effects of Recent Mortgage Refinancing," Federal Reserve Bulletin, vol. 86 (July 2000), pp. 441-50, and Glenn B. Canner, Thomas A. Durkin, and Charles A. Luckett, "Recent Developments in Home Equity Lending," Federal Reserve Bulletin, vol. 84 (April 1998), pp. 241-251. It is not possible to trace the part of equity extraction that initially purchases certificates of deposit, stocks, bonds, and other assets but is later liquidated to finance personal consumption expenditures. Survey data usually request the disposition of loan proceeds over a limited period of about a year. We make the assumption that the shares of the loan proceeds are fixed over the past decade.

However, a significantly different approach to separating the proportion of consumer spending financed out of income from that financed out of wealth, though one that is similarly robust, concludes that the decline in the saving rate over the past decade can be explained by the decline in interest rates and by the increase in overall household wealth. That wealth, however, includes nonhousing wealth, most importantly stock market wealth.

Thus, we have two approaches, both of which would seem capable of explaining much or all of the decline in the personal saving rate. Of course, both cannot be true, for if they were, we would have explained a greater drop in personal saving than actually occurred. Obviously, this issue will remain an area of active research interest.

Nonetheless, it is difficult to dismiss the conclusion that a significant amount of consumption is driven by capital gains on some combination of both stocks and residences, with the latter being financed predominantly by home equity extraction.

If so, leaving aside the effect of equity prices on consumption, should mortgage interest rates rise or home affordability be further stretched, home turnover and mortgage refinancing cash-outs would decline as would equity extraction and, presumably, consumption expenditure growth. The personal saving rate, accordingly, would rise.

Carrying the hypothesis further, imports of consumer goods would surely decline as would those imported intermediate products that support them. And one would assume that the U.S. trade and current account deficits would shrink as well, all else being equal.

How significant and disruptive such adjustments turn out to be is an open question. Nonetheless, as I have pointed out in previous commentary, their economic effect will, to a large extent, depend on the flexibility inherent in our economy. In a highly flexible economy, such as the United States, shocks should be largely absorbed by changes in prices, interest rates, and exchange rates, rather than by wrenching declines in output and employment, a more likely outcome in a less flexible economy.

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To judge the size of a hypothetical decline in home turnover and cash-outs, we need to examine more closely the composition of sales of homes and the possible future path of home prices.

Although we do not have comprehensive data on the split between sales to owner-occupants and those to purchasers of second homes, especially investors, enough data are available to draw some conclusions, however tentative.

As I noted earlier, we can have little doubt that the exceptionally low level of home mortgage interest rates has been a major driver of the recent surge of homebuilding and home turnover and the steep climb in home prices. Indeed, home prices have been rising sharply in many countries around the world. In the United States, signs of froth have clearly emerged in some local markets where home prices seem to have risen to unsustainable levels. It is still too early to judge whether the froth will become evident on a widening geographic scale, or whether recent indications of some easing of speculative pressures signal the onset of a moderating trend.

The housing market in the United States is quite heterogeneous, and it does not facilitate the easy diffusion of local excesses. Instead, we have a collection of local markets only loosely connected by such factors as mortgage interest rates and, over the longer term, migration and construction capacity. As a consequence, the behavior of home prices varies widely across the nation.

Speculation in homes is also largely local, especially for owner-occupied residences. For homeowners to realize accumulated capital gains on a residence--a precondition of a speculative market--they must move. Another formidable barrier to speculative activity is that home sales involve significant commissions, taxes, points, and other fees, which average in the neighborhood of 9 percent of the sales price. Where sales by owner-occupants predominate, speculative turnover of homes is difficult.

But in recent years, the pace of turnover of existing homes has quickened. Apparently, a substantial part of the acceleration in turnover reflects the purchase of second homes--mainly for investment or vacation purposes. According to data collected under the Home Mortgage Disclosure Act (HMDA), mortgage originations for second-home purchases rose from 7 percent of total purchase originations in 2000 to twice that at the end of last year. Anecdotal evidence suggests that the share may currently be even higher. Because down payments on second homes appear to be larger, on average, than they are on homes bought for owner occupancy, and because a larger share of second homes appear to be paid for wholly in cash, second homes presumably represent a larger fraction of total purchases than of loan originations, and arguably are at historically unprecedented levels.

Transactions in second homes, of course, are not restrained to the same degree as sales of primary residences--an individual can sell without having to move. This suggests that speculative activity may have had a greater role in generating the recent price increases than it customarily has had in the past.

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The apparent froth in housing markets may have spilled over into mortgage markets. The dramatic increase in the prevalence of interest-only loans, as well as the introduction of other, more-exotic forms of adjustable-rate mortgages, are developments that bear close scrutiny. To be sure, these financing vehicles have their appropriate uses. But to the extent that some households may be employing these instruments to purchase a home that would otherwise be unaffordable, their use is adding to the pressures in the marketplace.

Over the past few years, a great deal of attention has focused on the growing range of loan choices available to mortgage borrowers. The menu, as you know, now features a long list of novel mortgage products, not only interest-only mortgages but also mortgages with forty-year amortization schedules and option ARMs, which allow for a limited amount of negative amortization. These products could be cause for some concern both because they expose borrowers to more interest-rate and house-price risk than the standard thirty-year, fixed-rate mortgage and because they are seen as vehicles that enable marginally qualified, highly leveraged borrowers to purchase homes at inflated prices. In the event of widespread cooling in house prices, these borrowers, and the institutions that service them, could be exposed to significant losses.

Although the aggregate loan-to-value ratio (LTV) for single-family residences, condominiums and cooperatives has been about flat since early 2003, this flatness could mask increases in the number of very highly leveraged home purchasers. Using data for individual mortgage loans and other information, members of the Board staff have estimated the distribution of the remaining mortgage principal to the current home value for a very large set of U.S. households. The loans factored into this calculation include first mortgage liens and most types of second liens. The results show that, as of mid-2005, less than 5 percent of borrowers had current LTVs exceeding 90 percent. In large part, this share was small because the recent growth in house prices has rapidly pushed down the effective LTV for many homeowners. Only the most recent, and the most highly leveraged, home purchasers have high LTVs.

Highly leveraged home purchasers tend to use so-called piggyback mortgages; that is, second liens originated at the time of purchase. These loans are popular, in significant part, because they avoid the non-deductible private mortgage insurance payments required on larger, single loans. If piggyback loans are more common in states in which house price appreciation has been particularly rapid over the past five years, one might worry that homebuyers are especially exposed to reversals in house prices. However, data collected for

2004, the first year of coverage in HMDA, show that the use of piggyback loans was not particularly correlated with strong appreciation of prices. Among mortgages tracked by HMDA, piggyback loan use was particularly high in Texas, California, Utah, Oregon, and Colorado. The presence of California on this list is probably no surprise, but home prices in the other four states have not grown particularly rapidly.

Of course, the HMDA data do not track mortgages made by all institutions or open-ended loans such as home equity lines of credit (HELOCs). Anecdotal reports suggest that some homebuyers are using HELOCs as piggyback mortgages, and so we probably do not have a full accounting of all mortgage debt.

Nonetheless, combining the newly available data on piggybacks from HMDA with other information, we can construct a reasonably comprehensive measure of the degree of leverage of mortgages used to purchase homes, by state, in 2004. These estimated LTVs are highest in states that have experienced relatively little house price appreciation, and lowest in states in which prices have appreciated the most, such as California and Massachusetts. The main reason for this negative relationship is likely that most people buying a home in California are probably also selling a home in California and using at least part of their accumulated home equity capital gains as a down payment on their new house. Apparently, many households are forgoing some consumption to lower their new mortgage balances.

In summary, it is encouraging to find that, despite the rapid growth of mortgage debt, only a small fraction of households across the country have loan-to-value ratios greater than 90 percent. Thus, the vast majority of homeowners have a sizable equity cushion with which to absorb a potential decline in house prices. In addition, the LTVs for recent homebuyers appear to be lower in those states that have experienced the most explosive run-up in house prices and that, conceivably, could be at risk for the largest price reversal. That said, the situation clearly will require our ongoing scrutiny in the period ahead, lest more adverse trends emerge.