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Interest Rates and the Real Estate Bubble

Gil Sandler

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Imagine: Immediately after the January 31, 2006 Federal Open Market Committee meeting, retiring Fed Chairman Alan Greenspan was seen slipping into a nearby phone booth to call his wife, prominent TV journalist, Andrea Mitchell. Choosing the anonymity of a public phone to avoid satellite intercepts of cellphone calls (his contacts with foreign central bankers made the non-FISA Court Hit List), the Commanding General of the War Against Inflation was unaware of Homeland Security's latest mini-bug—installed for just such candid "Kodak" moments. Fortunately, the transcripts of this and other high-alert national security calls were accidentally declassified and fell into the wrong hands. (Oh, well, so much for Homeland Security—as was said about FEMA's ex-director, they do "a helluva job!").

Greenspan: Good day, Liebchin. As you will soon hear from your friends at CNN, I have done my patriotic duty and raised rates once more. I believe my work is done here. The coming recession will be Big Ben's problem.

Mitchell: Not so fast, Dr. G. What about that big, fat ugly real estate bubble—brimful of frothy exuberance? I don't recall hearing it burst just yet. Didn't you say you had to prick the real estate balloon to curb inflation—our Public Enemy No. 1?

Greenspan: No worries, Sweet Pea. No real need to have a "splat." The bubble is wilting before our eyes, though I made sure none of us got hit by flying scraps. One might say this will be more like a giant soap bubble floating in the wind than that gooey pink stuff.

Mitchell: Yes, I see, My Leader, but for those of us mere mortals who are economics-challenged, please explain again how you did all those wonderful things.

Greenspan: Elementary, My Dear Mitchell. Listen closely, please. We began with a recession—NOT MY FAULT! Remember, I warned them all about bidding up tech-turkey stocks, but they didn't listen. (Alas, I had to pass up the Google IPO to prove I believed in the Bubble.)

But, as I told W in 2000, and again after 9/11, the best cure for recession was not to wait for a trickle-down from a top bracket tax cut, but to jack up consumer spending and confidence. It would also help if we could create a few million new jobs, real and reportable, and inside America.

So, after consulting my Ouija Board, I used my Fed Superhero powers over the discount rate[1] nobody ever uses to cut interest rates. This would, of course, suck consumers into grabbing and spending. After all, who could resist such easy money? Then, with renewed confidence—soon to be reported in all the surveys—they could buy new and second homes, speculate on condos, and trade up on cars.

Eventually, of course, it gets crazy. Housing costs will rise, taking the cost of living, CPI, PPI, etc. with it. So now it looks like we have

inflation, a "*quelle dommage,*" and sadly, we must then pull the plug. We can and did jack up rates, maybe even a few more "measured" quarters than necessary for pure inflation control, but that big hot air balloon lifting real estate above the clouds will begin to leak and sink like a lead balloon (I just love blowing up and pricking balloons.)

Even an economics neophyte can see that we played it perfectly. With 14 raises totaling 3.5 percent, we also bumped COL and CPI, and by directing the banks not to lend to risky borrowers at higher future rates, even for first homes, we could inflict some real pain. So what if the music stops and those silly amateurs without chairs get caught sleeping standing up?

Mitchell: Your Mensa mind is *wunderbar!* But at a more basic level, that sounds just a tad callous, don't you think? What about all the warnings we heard about overdoing that rate trick? I know you think those whining '80s throwbacks were soft on inflation, but how does it help the economy to wipe out consumer spending power with high home equity rates? Remember, you're the guy who told the poor slobs in middle-America that the economy was moving forward so they should run out and buy new Gas Guzzlers and Big Screen HDs with home equity loans. Then you told them their hidden real estate equity could support early retirement, so the big employers cut non-farm payrolls and no longer report higher unemployment claims. Now, what happens when the banks reset the rates on ARMs? Won't that trigger defaults, bankruptcies and foreclosures, just like the early '80s and '90s?

Greenspan: No pain no gain. If you can believe it (I'm not sure I do), W says jobs are moving and the economy is roaring. (Just between us chickens, I think he heard it on Fox News, or maybe Dick heard it hunting and slipped it into his daily intelligence briefing.) The Big Developers and Homebuilders that create non-Asian jobs will be OK because we're making their tax cuts permanent and they can always cut elastic jobs. We're all set up for the next cycle, if big Ben doesn't blow it. Tax savings and excess profits from Big Oil will trickle right down to consumers over the next 10 or 15 years; the Big Banks will handle mortgage and credit card defaults just fine under the new bankruptcy law.

And here's the best of all: Big Developers and Homebuilders can swallow some smaller ones with lower-priced stocks and pick up bargain-priced land and unfinished projects in foreclosure. We learned quite a bit from the Great Real Estate Recession of the '90s. Now, how's that for a stable recovery plan, *Mon Petit Cieu*?

Mitchell: You are, indeed, a genius, My Oracle, and non-partisan to boot. I'm starting to get your drift. Let me guess about how we'll keep everyone thinking we have full employment. The DOL reports on job loss claims won't be swollen by construction layoffs because so many workers are illegal and can't file? Wow, as the Guinness Brothers say on the tellie: Brilliant!

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Of course, that politically incorrect call never happened, and none of us really knows what great innermost thoughts lurked in the mind of our legendary Inflation Fighter. Dr. Greenspan undoubtedly leaves us with an exemplary record over most of his tenure, and served most ably under both Democratic and Republican Presidents.

Nonetheless, the real point of this tongue-in-cheek exercise is that the housing and real estate slowdown data we are seeing on a daily basis, and the all-too-predictable pain, could have been caused as posited. The conversation was pretty silly, but maybe there's a speck of truth amidst the fabricated economics lesson.

OK, let's get back to reality.

FED RATE POLICY AS AN ECONOMIC MANAGEMENT TOOL

Yes, indeed Greenspan's Last Dance was a rocker. The 14th 25 basis point (.25 percent) increase since June 2004 lifted US banks' prime lending rate to 7.5 percent—at least 2 percent higher than most real estate borrowers budgeted and lenders underwrote when they made commitments in the past two years. And a 15th increase occurred at the early March FOMC meeting. In March, Ben Bernanke's New Fed raised the Fed Funds rate an unprecedented 15th time to 4.75 percent, moving the prime rate to 7.75 percent and removing any doubts about his clean acceptance of Greenspan's baton—the commitment to fight inflation. Finally, the flattened yield curve has ratcheted up the benchmark 10-year Treasury yield more than 50 basis points to break the five percent barrier predicted to hold until year-end. Conventional mortgage rates have followed with the 30-year conventional rate breaking the 6.50 percent line. Dragging ARM and home equity loan rates up with it, 15 short-term rate hikes have sucked the air out of the residential real estate balloon. The unemployment, jobless claims, and producer price index reports can all be

interpreted as inflationary, but stripped of heavy oil and energy prices, and adjusted for reporting time lags, other economic signals are not nearly so clear. Has the Fed gone too far in using interest rates and the real estate balloon to manipulate the economy?

The answer is affirmative, if anyone cares to remember the Japanese central bank's rate push to burst the real estate bubble? That bubble burst with the inevitable defaults, foreclosures and bank failures; before the 1988-93 RTC-led recession/recovery, but unlike the US technology-led recovery, Japan endured a massive recession prolonged by a drop in real estate values. After more than 20 years, real estate values in many areas remain at historically low levels, and the Japanese central bank was struggling to raise its rates from the "0" level, which it supported, to avoid deflation. This may not happen here, with the global pressures against high Treasury yields, but it has already sparked slowdowns, auctions, and project cancellations on residential and commercial developments. Further Fed increases could easily trigger widespread defaults and drawdowns on already razor-thin personal savings.

In hindsight, it seems clear that money was far too easy for homebuilders who sucked up every piece of open land to build for the boomers. It also was too easy for homeowners sucked into buying a second and third condo with near-free vacation offers. Now that money has become costly again, and homeowners and smaller builders don't have the cash to repay high LTV loans, we have begun to see suspended and defaulting projects and condo auctions.

Remember when real estate was a solid, fundamental long-term investment? Only recently did it become a consumer ATM[2] or macro-economic management tool. Remember when future retirees were encouraged to pay down their mortgages so they could live their golden years rent-free? Without a doubt, real estate is a logical source for economy boosting. It has been estimated that as much as 36 percent of our GDP is related to real estate—from planning to design to administration, sales, title insurance, brokerage, financing, and management.[3] So promoting real estate activity can and did jumpstart job growth, even if many of the jobs are temporary, as well as consumer spending.[4]

It seems clear that Dr. Greenspan and other Fed policy pros intended all along to use real estate as their primary tool to turn the last recession into a boom. Perhaps they could have found less painful ways than creating the "froth" they complain of by inflating real estate values and sticking easy money candy into the faces of "can-build" developers. The Fed quite deliberately promoted consumer spending by lowering the federal discount rate, and dependent rates like LIBOR and prime, just as surely as it would have with a lower- and middle-class tax cut, but with one notable difference. Loans need to be repaid, and they can only be repaid with the proceeds of sale or successive refinancings—all predicated on ever-increasing property values. Of course, they knew they also would be lowering home equity and mortgage rates. What is not so clear, however, is whether the Fed fully understood the impact on the US economy of lifting real estate values by 10 percent to 25 percent a year for four years or anticipated the predictably adverse impact of corrective rate increases to a so-called neutral level.

Raising rates, particularly real estate borrowers' rates, to limit or reduce inflation is, at best, a self-fulfilling prophecy.

At the same time that homeowners' net worths seemed to be rising exponentially, housing has become significantly less affordable in most large markets,[5] despite historically low mortgage rates. The banking industry's solution was to craft creative option and negative amortization or "affordability" ARMs, low or no-down payment mortgages, and negative amortization "choose your payment" loans. This form of mortgage made huge bets on continuing double-digit value appreciation,[6] much like the thrift loans that led to foreclosure auctions in the late 1980s and early 1990s. These high-risk instruments were readily available because originating lenders could book fee income without holding and reserving for losses in portfolios after syndicating and securitizing them.[7] Little concern was expressed for the very real prospect that these loans could eventually implode when rates returned to normal levels, crushing consumers forced to spend as much as 50 percent of their available cash[8] on real estate and further dipping into savings. So long as the recovering economy could turn artificially bloated homequity lines into cash machines,[9] why worry about savings?

NEGATIVE IMPACT ON REAL ESTATE VALUES

Rising interest rates can burst not only real estate bubbles and speculators' paper profits. They can also slash real GDP, job growth or retention, real net worth, retirement assets, and obviously consumer spending and confidence. Real estate net worth could actually decline, if, as we expect, first and second homes must be sold to generate net proceeds for retirement, and prices off their bubble tops do not generate enough net proceeds to pay off the home equity or negative amortization mortgages used to support the higher cost lifestyle. In recent years, the policy makers claiming credit for pulling us out of the techno-bubble recession have deluded themselves into believing that our economy is strong and inflation is well-contained, but they missed the fairly obvious disconnect between the two. The claimed job growth is really imperceptible, in terms of real income growth and current purchasing power. Unemployment rates now being trumpeted as breaking through 5 percent have long been miscalculated, misstated, or misunderstood for years because they have not included those whose jobs cannot be replaced and who no longer remain in the workplace, neo-retirees living off their newly inflated net worths or the many illegal and cash-based workers below the radar of Social Security and tax filings.

Raising rates, particularly real estate borrowers' rates, to limit or reduce inflation is, at best, a self-fulfilling prophecy, and can do more harm than good. Higher rates can indeed discourage spending, as well as real estate speculation, but what really contributes to inflation is the interest component in prices that, along with ever-higher energy costs, must be passed on to the consumer.

While we cannot cite an authoritative measure of the interest component in the prices of finished goods, there is little doubt that cheap foreign goods benefit from low foreign interest rates, as much as low labor costs. Moreover, in recent labor negotiations, labor negotiators have become increasingly conscious of labor's cries of reduced spending power—due in large measure to higher consumer loan rates. The resulting demand for higher wages, and ardent opposition to benefits reductions of both current workers and retirees, is not satisfied by assurances that inflation is being well-controlled by a vigilant Fed ready to do further damage by raising borrowing costs.

Now, let's look at the impact of higher rates on real estate under development. Most phased planned residential developments that began construction with 50 percent to 80 percent of their units pre-sold will finish their phases. Finished collateral is much more valuable to lenders, and presales are backed by either cash or lines of credit, so most loans will close, perhaps with a bit more equity or collateral posted. However, later phases planned at much higher prices will be suspended indefinitely, as speculators will be struggling to unload.[10] Without the price increases artificially sustained by developer marketing of subsequent phases, prices of the initial phases will drift into freefall. Anyone who remembers the RTC era knows that it wasn't just lender foreclosures and thrift failures that triggered 50 percent to 100 percent declines. It was also the massive volume of units thrown up for sale that even a global auction market could not absorb.

WHAT ABOUT "THE COMING RECESSION"?

A major question is how widely the crunch will be felt. For the present, the flattened and inverted yield curve, itself fueled by low global rates and lessened borrower demand, will enable many homeowners to lock in relatively low medium and long-term rates for primary residences. If the economy can survive without major job or wage losses—a big if as the domestic auto industry struggles with overcapacity and inability to reduce fixed costs—defaults will be limited to the higher volume areas of speculative building. This could include Las Vegas, parts of Florida, and the Sun Belt,[11] and more than a few urban luxury high-rise projects, as well as condo-hotels and various forms of interval or shared ownership that have thrived in the recent lower rate cycle. High-rise condos could become rentals if rents rise enough. Paradoxically, rental projects resold at record low cap rates may be converted to condos at a discount from planned condo project prices, simply because of the 15 percent to 25 percent (or greater) disparity between those values.

The growth in new retail and office park projects feeding off residential expansion also will be slowed. Although there is often a five to ten year lag, as new roads open new residential projects, they are soon followed, first by neighborhood and other retail centers, and then by local office projects to service the emerging population centers. Self-storage centers are a newer category designed to service the downsized condo purchasers and small businesses. Residential growth also creates demand for both schools and healthcare providers. Then, too, once the office market has begun, hospitality projects begin to be planned. All of

these markets and sub-markets will be affected by the slowdown in residential real estate.

As indicated, the slackening in demand for new residential product will delay or kill many commercial, retail, and industrial projects on the drawing boards. Moreover, continued commercial development will be even more adversely affected by declines in consumer spending triggered directly by higher consumer loan rates, and by higher development costs caused by higher acquisition, construction, and permanent loan rates.

Pension funds will begin to take profits and redirect new investment capital to other markets.

Retailers will be less eager to seek new locations when spending and confidence erode and existing store sales stagnate. Office and warehouse projects closely follow retail and residential projects in the same or adjacent geographic areas, so they, too, will adopt a more measured growth attitude.

HOW HIGHER RATES IMPACT REAL ESTATE DEVELOPMENT

Of perhaps even greater magnitude, however, is the 375 basis point hike in construction loan rates—and counting. Among the key components of new project analysis directly impacted by rate movements are the following:

- The higher cost of more equity or mezzanine debt;
- The higher capitalized interest expense;
- The reduced permanent loan proceeds available to meet (i) minimum debt coverage ratios based on higher debt constants and potentially lower net operating incomes (NOI), and (ii) reduced appraisal completion values; and
- Correspondingly greater amounts of equity that can provide a market return on investment and net cash flows on lower NOI.

The present and near-term higher-rate environment will change both expectations and returns on capital. Large public homebuilders have already seen 20 percent to 50 percent stock declines from growth-driven highs. The industry should see some consolidation as Wall Street and shareholders press to maintain earnings by cutting operating and administration costs and selling off non-core assets. This can only produce net job losses in the biggest growth industry of the century. At the same time, wholesale dispositions of undeveloped properties will feed both potential wholesale buyers and small developers who can find funding and equity.

The same kind of market cap reductions and earning reductions seen in public homebuilders likely will spread, albeit to a somewhat lesser extent, to public equity REITS that have funded new projects and bid aggressively for existing, completed projects. Along with higher borrowing costs for leveraged REITs, fewer bidders will emerge for new projects and unit resales, further dampening prices and profit potential for speculators. Mortgage REITS may have some difficulty obtaining full and timely repayment from less-capitalized entrepreneurial borrowers and projects to the extent they have been funded with less than 15 percent true equity, and workouts will reduce their returns. Pension funds will begin to take profits and redirect new investment capital to other markets. At this point, we can look forward to a new cycle of no or slow development, all due directly or indirectly to the Fed's use of interest rate management to end the last bubble-burst recession, and then to control barely visible inflation.

We might agree that Dr. Greenspan and his Fed followers have engineered the much-desired "soft landing," at least, thus far. Perhaps, the dire "what-if" scenarios over the negative effects of the Fed's having pushed the rate button too often will turn out to be overly pessimistic. Maybe the reversal of the rate cycle will be readily absorbed by our ever-resilient economy that can handle the Iraqi War along with domestic recovery programs, and the menace of an unfunded Social Security system.

AN ALTERNATIVE APPROACH TO RATE-BASED ECONOMIC MANAGEMENT

It is tempting to wonder what would have occurred if, instead of inflating real estate with easy money, only to be forced to deflate it five years later, the Fed had chosen a different approach. Could it have encouraged consumer spending and boosted confidence sufficiently by reducing rates while, at the same time, using regulatory and tax policy to promote savings and job creation? Could any of this have been accomplished without promoting risky real estate borrowings and cost and value inflation?

The primary thesis of this article is that the Fed could and should have recognized differences in this 21st Century global economy from the recession-inflation cycles of the last century and modified its approach to recovery and inflation suppression. No lesser light than our next Fed chair, Prof. Ben Bernanke, recognized a new type of "asset-price spiral" of stock and real estate prices that is more resistant than previous inflationary cycles to traditional interest rate manipulation.[12] Once it is understood that bubbles and froth cause more harm than good by creating a myth of financial security[13] and unaffordable lifestyles, we can approach a solution. As Bernanke and other economists have observed, bubble-like increases in asset prices are caused not merely by low interest rates, but by the combination of low rates with unregulated loan policy encouraging high-risk loans.[14] This, then, suggests the need for additional tools to fight the adverse attributes of inflation. Rather than using "measured pace" rate increases to burst bubbles, and inflicting pain across the broad spectrum of consumer borrowing, the Fed can apply regulatory constraints to rein in riskier lending.

We know from the Australian example, adopted in part by the Fed only after three years of rapid, excessive, growth in housing prices, that careful management of loan underwriting criteria and tax policy can restrict low-cost mortgage loans to equity-supported home purchases and justifiable home improvement, which would discourage speculation and overbuilding. Yet, the Fed might have fostered its own inflation scenario by allowing easy and cheap money to inflate real estate costs and values.

Admittedly, the Fed can pride itself on GDP growth, relatively controlled inflation (other than housing and energy) and can take credit for ending the recession by making Americans feel richer than ever, and spending more than ever. The sad corollary is that real income has declined, real net worth has declined, and real estate — all too often an illiquid asset — rather than savings, has become the largest component of net worth.

A NEW FED POLICY?

So much for the Greenspan Legacy. What more can we expect of his successor, Ben Bernanke? Will "Greenspeak" simply be replaced by an equally inscrutable "Bernankular"? We expect no major rate redirection for the short-term, but Professor Bernanke's strong academic background and previous writings suggest a more flexible, multi-faceted approach to detecting and analyzing both the causes and effects of inflation. Prof. Bernanke is known to have espoused the use of "microregulatory policy" in tandem with or in lieu of interest rate policy to control the bubble effect of inflation.[15] For example, restricting mortgage loans to buyers posting at least 10 percent downpayments and capable of meeting higher ARM reset rates would reduce the number of bids on each new or resale unit, without increasing every homeowner's monthly payment. Another option is to return to the more restrictive policy of underwriting second home and speculative investor loans more conservatively, and requiring more equity at risk.

It is uncertain whether there will be more rate increases. If the Fed looks at all the reports of slowdowns in key areas,[16] and CPI increases are analyzed without politically sensitive components such as energy, a rate reduction in 2006 could be warranted, perhaps even by mid-year, to return to a realistically neutral rate. Even a cursory analysis would indicate that the housing slowdown and its multi-pronged effect on jobs, real estate values, consumer savings, and spending power could result in consumer spending and confidence declines.[17] These should have a larger overall impact on rate policy than a simplistic reaction to standard inflationary triggers.

A growing number of respected economists have come to believe that a core inflation rate in the 3 percent to 4 percent range is well tolerated, and perhaps expected in a healthy economy. A "neutral" interest rate environment sounds admirable in theory, but at the current 4.5 percent discount rate and 7.5 percent prime rate level and still rising, floating borrowing rates for interim investments are significantly higher than mortgage rates, and much more discouraging than neutral. We are at a different point in long-term economic cycles than the early 1980s when the Fed could impose, and the market could tolerate a 21 percent prime rate, because primary mortgages and other essential borrowing could still be done at lower rates.

SOME SUGGESTIONS FOR THE FED

The Fed should recognize that much of the economic and asset price slowdown it has worked overtime to achieve with rate policy has been caused independently by higher energy costs, and Hurricane Katrina labor and materials cost escalations. Even without further rate increases, consumers must heat their homes and buy gasoline for commuting, so they have that much less to spend on consumer goods. Continuing rate increases can only aggravate the inevitable slowdown, without necessarily stabilizing inflated asset prices.[18] Accordingly, the Fed should

consider both a modification of its inflation targets and control mechanisms.

Finally, the Fed should recognize that real estate has become an integral part of personal investment portfolios, retirement planning for the huge boomer generation, and general well-being. Home equity loans secured by real estate were not a primary source of credit in the high rate environments of either the early 1980s or the early 1990s, and were not a major source of credit or consumer spending.

However, in 2006, real estate has become a substantially larger component of net worth. In order to avoid some of the ill effects of eroding consumer confidence—hopefully well before we start measuring for the recessionary coffin—Fed rate policy will need to support continuing real estate ownership as an integral part of creating and maintaining a stable economy. Whether rate levels are consistent with a "neutral" or "accommodative" policy, or for that matter, whether the slowdown qualifies as a full-blown recession, will be largely irrelevant if high interest costs, piled onto higher healthcare, energy, and tax costs, squeeze millions of future retirees and housing-deprived workers alike.

NOTES

1. Ostensibly, the Federal Reserve has no ability to move free market interest rates, but by resetting the discount rate at which the Fed lends to banks, and more often, by executing Treasury bill repurchase or "repo" transactions, the Fed can lift or drop short-term market rates. Ultimately, movements in short-term rates are expected to impact Treasury note rates, primarily the two, five, and ten year maturities, although the flat and inverted yield curves since January 2006 have defied that progression.
2. The widespread use of home equity lines has been accelerated by the concurrence of dramatically lower interest rates and the securitization and risk dispersal of bank loans. One report suggests that as much as $887 billion was withdrawn in 2005 through real estate mortgage loans. R. Gerena-Morales and T. Annett, "Growth May Slow in 2006 As Boom in Housing Cools," *The Wall Street Journal*, Jan. 3, 2006, pp A1-A2.
3. D. Gross, "As the McMansions Go, So Goes Job Growth," *The New York Times*, Nov. 20, 2005, p. 4 (BUS.).
4. A recent Federal Reserve study noted that rising home prices added $600 billion to consumers' spending power. *See*, J.R. Hagerty, "What's Behind the Boom," *The Wall Street Journal*, Nov. 21, 2005, p. R4.
5. The affordability of housing units has declined during the real estate boom at all price levels. *See*, W. Neuman, "Reading the New York Signposts," *The New York Times*, Oct. 2, 2005, p. 13 (NJ RE). Also, while home prices increase by 53 percent since 2001, affordability has dropped, especially in high-cost areas such as California where as few as 15 percent of homeowners earn enough to qualify for conventional mortgages by lifting housing costs to 30 percent of their incomes. *See*, J.R. Hagerty, *supra* n.4, p. R4.
6. It has been reported that the median downpayment in some markets had dropped to as little as 3 percent from the conventional 10 percent to 20 percent. D. Akst, "Pop Goes the Bubble?," *The New York Times*, Sept. 18, 2005 p. 4 (BUS.).
7. Thus, the default risk was off-loaded to CMBS investors and the ultimate time bomb of rate and value correction was deferred. *See*, L. Uchitelle, "To Fight Rising Prices, Fed Nominee May Need New Weapons," *The New York Times*, Nov. 4, 2006, pp. C1, C13.
8. By one estimate, about one-third of homeowners spend more than 30 percent of disposable income on housing, while about one-eighth spend 50 percent or more. *See*, J.R. Hagerty, *supra* n.4, p. R4.
9. Family savings of retirees reportedly fell by 23 percent from 2001 to 2004, while home prices rose 22 percent. *See*, M. Rich and E. Porter, "Increasingly, the Home Is Paying for Retirement," *The New York Times*, Feb. 24, 2006, pp. C1, C6.
10. Even commercial projects have begun to feel the heat from higher costs and lower rents and begun to cancel office projects. J. S. Forsyth, "As Costs Climb, Builders Put Off Office Projects," *The Wall street Journal*, Nov. 9, 2005, p. B8.
11. Speculators are believed to form a large part of the new unit market in certain areas. Reportedly, 36 percent of home sales in Miami-Dade County, FL, and 40 percent in Clark County, NV (Las Vegas), were for homes sold in less than two years. *See*, Neuman, *supra* n.5.
12. *See*, L. Uchitelle, "To Fight Rising Prices, Fed Nominee May Need New Weapons," Note 7, supra, p. C13.
13. See, D. Leonhardt, "Don't Fear the Bubble That Bursts," *The New York Times*, Mar. 1, 2006 p. C1-C2.
14. L. Uchitelle, *supra* n.13. Making larger loan amounts available to buyers with insufficient incomes or equity at risk inflates demand for new housing units and radically shifts the supply-demand balance in favor of higher prices.
15. Bernanke's views were stated in a little-known interview published in 2005 by the Federal Reserve Bank of Minneapolis. *See*, L. Uchitelle, *supra* n.13, p. C13.
16. The housing slowdown and its wider effects are considered one of Prof. Bernanke's biggest challenges in 2006. *See*, Gerena-Morales and Annett, *supra* n.2, p. A2.
17. As the National Association of Realtors reports that sales of existing homes declined for the fifth consecutive month, and unsold inventories continued to increase, consumer confidence also dropped. *See*, C. Conkey, "Existing Home Sales Fall Again," *The Wall Street Journal*, Mar. 1, 2006, p. A2; V. Bajaj, "Sales of Existing Homes Near 2-Year Low; Consumer Confidence Ebbs," *The New York Times*, Mar. 1, 2006, p. C3.
18. L. Uchitelle, *supra* n.13, p. C13.