For release on delivery
7:00 p.m. PST (10:00 p.m. EST)
February 28, 2003

The Strength in Consumer Durables and Housing: Policy Stabilization or Problem in the Making?

Remarks by

Donald L. Kohn

Member, Board of Governors of the Federal Reserve System

at the

Conference on Finance and Macroeconomics

sponsored by the

Federal Reserve Bank of San Francisco
and Stanford Institute for Economic Policy Research

San Francisco, California

February 28, 2003

We have spent the day examining the intersection of finance and macroeconomics from a theoretical and longer-run empirical perspective. I thought it might be interesting as after-dinner entertainment to bring the topic to the here and now--to the current economic and monetary policy situation. In particular, a number of commentators have raised the specter that imbalances are being created in the markets for consumer durable goods and houses--unsustainably high prices or activity--that will produce macroeconomic strains when, inevitably, they correct. These concerns obviously echo those expressed by some observers that monetary policy allowed run-ups in equity prices and capital spending in the 1990s that ultimately proved to be destabilizing. In that context, I thought it might be useful to consider the choices and information available to the central bank on this related question now--in real time--without the aid of 20-20 hindsight. I want to emphasize that what follows is focused on the question of imbalances in houses and durables and is not intended to be a comprehensive discussion of the outlook for the U.S. economy, which will depend on a wide array of influences I am not addressing. I should note the views on this question are my own and do not necessarily represent those of my colleagues on the Federal Open Market Committee.*

Monetary Policy Backdrop

The basic story is straightforward: In response to a series of developments that curtailed aggregate demand in the United States, the Federal Reserve has eased policy aggressively, cutting the federal funds rate 5-1/4 percentage points in two years, bringing the real federal funds rate to below zero. The most important contributors to economic weakness have been sharp contractions in investment spending and equity prices as businesses and investors re-evaluated the profitability of capital spending and the productive capacity built up in the late 1990s. The

*John Roberts of the Board's staff contributed to the preparation of these remarks.

lower interest rates boosted investment in housing and consumer durables, helping to offset the drag of the decline in business investment and the damping effects of the drop in household wealth on consumer spending. These policy actions have kept the economy from softening even further and inflation from dropping by more from already low levels.

To a considerable extent, monetary policy easing is working no differently today than in the past: It stimulates interest-sensitive spending. But there are many forces at work in this cycle that have required interest rates working through their effects on household spending to shoulder an unusually heavy burden to support growth. Unlike most other cycles in recent U.S. economic experience, the weakness was initiated by a cutback in investment spending. This contrast is illustrated in chart 1, which shows spending relative to GDP for a number of components of investment. While business fixed investment, shown in the upper panel, typically drops more than GDP when the economy weakens, the recent episode is remarkable in a couple of ways. First, the drop in the high-tech share, the red line, is unprecedented. Second, the drop in the share for non-high-tech equipment, the black line, has been unusually steep, exceeded only in the 1979-82 episode, when the contraction in output was far deeper.

Another unusual aspect of the current cycle is that equity prices and wealth continued to move lower long after interest rates started falling and kept declining well after the economy seemed to have bottomed out. This pattern appears to have occurred because the re-evaluation of corporate profitability has persisted for some time; because of last summer's revelations of corporate misdeeds; and because the recent increase in perceptions of geopolitical risk. These same concerns have continued to raise risk spreads in credit markets, damping the passthrough of lower policy interest rates to the cost of business credit. With uncertainty high and financial markets skittish, firms have remained hesitant to commit their cash and investment has been very slow to turn around.

In addition, economic weakness and sharp declines in equity prices have been widespread globally, and, until recently, these developments have helped keep the dollar strong despite the reduction in interest rates. Sluggish growth in the economies of our trading partners and the relatively high dollar have held down net exports, blunting another potential channel for monetary policy easing to bolster spending. In the late 1990s, the rise in the dollar reflected global perceptions of expanding investment opportunities in the United States and the resulting current account deficit provided a safety valve through which strong domestic demand was met in part by higher foreign production. But even though we do not need that safety valve anymore, the current account deficit has continued to increase of late, requiring easier monetary policy to keep domestic demand elevated relative to domestic income.

In the lower panel, chart 1 also gives some sense of the extent to which household investment has been carrying the economy. Economic contractions have frequently been led by weakness in the household sector, which often has responded to higher interest rates as the Federal Reserve acts to reverse inflation pressures. This pattern can be seen in the chart, where the spending shares of housing and consumer durables typically drop sharply before and during recessions. In this episode, however, these shares have continued to move slightly higher, despite a pronounced drop in wealth and a weak economy. Thus, household investment has stayed unusually strong throughout the recession and early in the recovery, buoyed, no doubt, by low interest rates.

Going Forward: The Benign Scenario

As a consequence, it is to be expected that stocks of interest-sensitive investment goods--in the present circumstances, especially cars and houses--are greater than they would otherwise be. And with demand for housing strong, it is perhaps not surprising that house prices are probably higher than they otherwise would be.

But judging from the steep upward slope of the yield curve, few see interest rates as holding at current levels indefinitely. When, at some point, interest rates rise to more typical levels, desired stocks of these goods likely would fall, holding other factors equal, restraining this interest-sensitive spending. But it is important to remember that such an increase in interest rates would not occur in a vacuum; it would occur because the economy looked to be growing more vigorously. Most economists expect that a more pronounced step-up in the pace of activity will be brought about by a recovery in business investment from its current subdued levels. In that case, the need for high levels of spending on housing will be reduced. And higher interest rates will be instrumental in bringing about the adjustment in housing expenditures required to keep economic activity from overshooting its potential. In principle, a housing or durables boom induced by monetary policy need not entail a bust that would be painful to the economy.

Of course, it is not likely to occur as smoothly as that. Among other things, markets could get it wrong--for example, they could anticipate greater strength in underlying demand than is actually occurring. Then, higher interest rates would tend to damp spending unduly. But there is an "automatic stabilizer" aspect to the interaction of financial markets and the economy. As investors realized their error, rates would fall back. And markets would likely get a nudge from the Federal Reserve: We would set rates lower than the markets have built in, and in our various statements we would attempt to make clear our assessment of economic prospects. Interest rates could then stay low for an extended period, the desired stock of housing would remain elevated, and housing investment would remain high as well. But that would be just what is required. Alternatively, business investment could snap back faster than expected. In that case, interest rates would rise more rapidly as the extent of the strength of demand became clear--with, undoubtedly, some help from the Federal Reserve--weakening household investment more sharply as would be required. With production currently well below potential and inflation and inflation expectations low, it is doubtful that the temporary misalignment of rates would result in the development of any perceptible inflation pressures before the Federal Reserve would have time to take countervailing steps.

Costs and Risks to the Benign Scenario

So far I have painted a rather sanguine picture of the longer-term consequences of a monetary-policy-induced boom in household investment. While this story has the virtues of plausibility and internal consistency, it does involve some features that bear further thought. First, the benign scenario relies on the transfer of productive resources across sectors--in particular, it involves primarily the inflow of resources into the residential construction sector. Presumably, the transfer of these resources entails some costs--retraining and perhaps relocation of workers, a different mix of capital, and so forth. If residential construction were eventually to shrink as interest rates rose, further costs would be incurred as those resources shifted yet again to different uses.

Another possibility is that the reality of the housing and consumer durables booms may not work out as neatly as the benign scenario would suggest. Indeed, some have drawn the comparison with the high-tech investment boom that peaked in 2000. As events have unfolded, it appears that firms concluded that the investment they undertook in those years was not justified; the subsequent drop in investment suggests that, in hindsight, firms concluded that they had "overinvested" in high-tech equipment; and that sharp cutback in investment created a recession. Is it possible, these commentators have asked, that the current boom in housing and durables will leave us with similar regrets in a few years?

Furthermore, *prices* of houses have been rising faster than inflation in recent years, reminiscent of the surge in equity prices through 2000. Some analysts argue that loose monetary policy is feeding a bubble in housing prices that will eventually burst.[1]

In short, the question is whether the stimulus to household investment, while cushioning the economic cycle in the near-term, is setting the stage for greater instability in the longer-run.

Taking these concerns in turn:

Reallocation costs. There is little doubt that it is costly to build up a commercial enterprise. Workers must be hired, office space rented, equipment purchased, management expertise redirected. All of these actions entail costs. At the same time, as I already noted, if the yield curve is any indication, interest rates will one day go back up, giving rise to the possibility

[1]Another possibility is that the build up of debt associated with the strength in household investment will feedback adversely on financial conditions, especially as the boom unwinds. Such consequences could occur even in the absence of a "bubble" in housing prices if households were overextended and lenders had not taken adequate precautions against even a measured drop in collateral values. However, the link between debt burdens and consumer spending are tenuous at best, and when measured on a consistent basis, burdens do not look especially large. Moreover, loan-to-value ratios on mortgages have been about flat, leaving ample cushion for moderate housing price declines, should they occur. These observations suggest that widespread credit difficulties with important macroeconomic effects are unlikely when interest rates rise. For this reason, and to keep the subject manageable, I will not deal with the debt associated with acquiring the houses and durables.

that some of the current expansion of construction firms will eventually need to be unwound.

So relying on the housing sector to offset weakness elsewhere in the economy clearly entails costs. But these costs need to be put against the costs of underutilized resources. Facilitating an increase in residential construction puts resources to use that would otherwise lie idle. Implicit in the conventional story is the assumption that the costs of unemployment are significantly greater than the costs of shifting resources across sectors; if so, the presence of adjustment costs should not seriously impede the desire to offset weakness in spending elsewhere with greater spending on household investment. Alternatively, a judgment that the adjustment costs were large, or the shock to demand temporary, might argue in the direction of a more measured policy response.

While it is hard to know for sure how important these adjustment costs may be, it is worth noting that, historically, there has been considerable variation in employment and production in the residential construction sector. Seasonal fluctuations in residential construction are quite large, and in business cycles from the early 1970s to the early 1990s, it was not uncommon for housing starts to drop by more than half. So it appears that this sector of the economy has evolved in such a way that it can expand and contract rapidly. Moreover, in the current episode, the falloff in commercial construction has freed many resources that can readily be put to work building houses for now, then shifted back when business spending picks up.

Similarly, even with the strong sales of light motor vehicles and other consumer durables last year, capacity utilization in these industries for the most part has remained at moderate levels, which suggests that the additional production induced by the monetary stimulus has occurred without important and costly new investment in production capacity.[2]

In sum, it does not seem that the costs of shifting resources across sectors should be a concern now. This is especially true when you consider that these resources would quite possibly otherwise be idle. That is not to say that such costs might not loom larger in other circumstances--say when resources are being temporarily shifted between the tradeable goods and nontradeable service sectors--though policymakers and their critics would still also need to be mindful of the costs of keeping more people unemployed.

Excesses. Perhaps the more challenging question is whether excesses and imbalances have built up that could create economic instability in the future when they are unwound. It is not hard to see why the issue arises. Chart 2 shows that real house prices have risen rapidly in the last few years. On a constant quality basis, new house prices still have not breached the peak of the late 1970s, but the prices of existing homes have sky-rocketed. Moreover, as can be seen in chart 3, the stock of consumer durables has risen at an elevated rate in the last few years; while the stock of houses has been growing more moderately, that pace has been maintained for some years.

The difficulties of real-time identification of imbalances are hard to overstate. One can never be sure until well after the event whether prices or quantities have indeed deviated from sustainable levels, because the sustainable level is never observable but must be estimated, and those estimates are quite sensitive to the assumptions being made. This point is especially true of asset prices: For example, the literature on both equity prices and exchange rates indicates that it

---

[2]The exception was for light trucks, when capacity utilization reached 97 percent in the third quarter of 2002.

is hard to beat a random walk. A similar point can be made about investment and the capital stock--including the stock of houses and durables. As the recent experience with business capital so graphically illustrates, excesses are only clearly evident after the fact--and the size of the over-investment may be disputable even then.

All that said, we can identify a number of factors that should affect what I will call the "sustainable" stock of housing and consumer durable goods--the level that would be desired over time at particular levels of interest rates and other key determinants of demand. Among these determinants are wealth, permanent income, and the user cost of owning the good--in effect its "price." That price, in turn, depends importantly on the rate of interest. The demand for housing as an asset may also reflect some specific institutional changes. In particular, in recent decades, the rise of home equity lines of credit and the lower costs of mortgage refinancing has meant that housing wealth has become increasingly "liquid," and as a consequence, may have become more attractive.

Chart 4 compares the actual levels of the stocks of housing and consumer durables with their desired levels derived from the Board staff's "FRB/US" model of the U.S. economy, using both current interest rates and their historical averages. Somewhat surprisingly, estimates from this conventional approach suggest that, at current interest rates, the existing stocks of houses and consumer durables are appreciably *below* the sustainable levels. In this model, low interest rates have a powerful effect on the desired stocks of housing and durables. Even when we estimate sustainable levels based on historical average interest rates, we conclude by this method that current housing and durables stocks are about in line with long-run demand.[3] We need to keep in mind that these are only very rough estimates of unobservable variables. But such as they are, they do not suggest that as interest rates rise we will find that we are left with a vast oversupply of houses and durables.

What about house prices? Unfortunately, as I already noted, asset prices are even harder to model than investment. Just as equity prices can be thought of as being the present discounted value of future benefits of equity ownership--in principle, dividends and share repurchases--so house prices can be thought of as being the present discounted value of the future benefits of home-ownership, which, in theory, should be the potential market value of the *rent* from the house. And, just as the rate of return on equity should fall along with interest rates, so should the rental rate of return on houses. With rents changing very slowly over time, we ought to expect that, other things being equal, lower interest rates would raise house prices. In addition, households may be weighing houses against alternative investments other than bonds. In that regard, the collapse of expectations for gains from holding equity have undoubtedly made real estate relatively more attractive, contributing to price increases and higher activity.

On the supply side of the market, the scarcity of desirable land relative to population growth naturally puts upward pressures on prices. In addition, productivity in construction has lagged gains in the overall productivity of nonfarm businesses. Consequently, it should not be surprising to see the price of housing rise relative to the prices of other goods and services.

The combination of demand and supply factors has caused house price gains to outstrip

---

[3]This conclusion proved relative robust to alternative models using varying definitions of permanent income and wealth. In all models, the elasticity of the demand for housing relative to user cost was 0.5 and that of consumer durables was 0.9.

per capita income gains in recent years. The top of chart 5 shows that the ratio of house prices to per capita disposable income has increased substantially since 1998. But owing to the decline in mortgage rates, this has not made housing less affordable. The bottom of chart 5 shows an index of housing "affordability," which compares the mortgage payment on a typical home to median household income; high levels of the index mean greater affordability. Although house prices outpaced income through much of the late 1990s, housing remained quite affordable by historical standards. It does not appear that the rise in prices has meant that the market is being supported on an increasingly narrow base, given increases in incomes and declines in interest rates. If interest rates were to rise so that real mortgage rates were equal to their long-term average, the affordability index would drop back, but only to a level that would still leave houses more affordable than they were in the second half of the 1980s.

Conclusion: Implications and Policy Choices

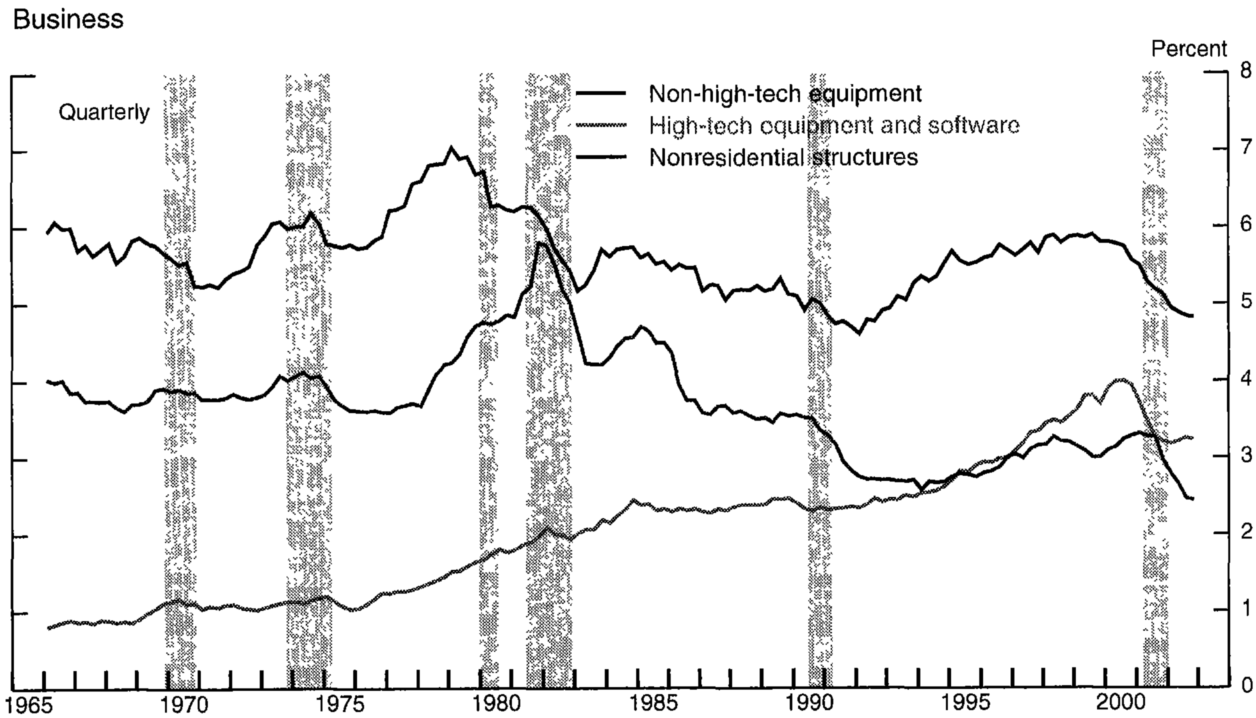
In sum, the rise in housing prices and the increase in household investment in houses and consumer durables do not appear out of line with what might be expected in the current environment of low interest rates and continuing growth in real disposable incomes. Judging from this analysis, and bearing in mind its inherently tentative--if not speculative--character, it seems likely that as the economy strengthens and interest rates rise in response, household investment and prices are likely to soften some relative to recent trends, but not to break precipitously. Houses and cars would not be providing the impetus to economic activity they often have in past recoveries, but they do not appear set to replicate the experience of fiber-optic cable.

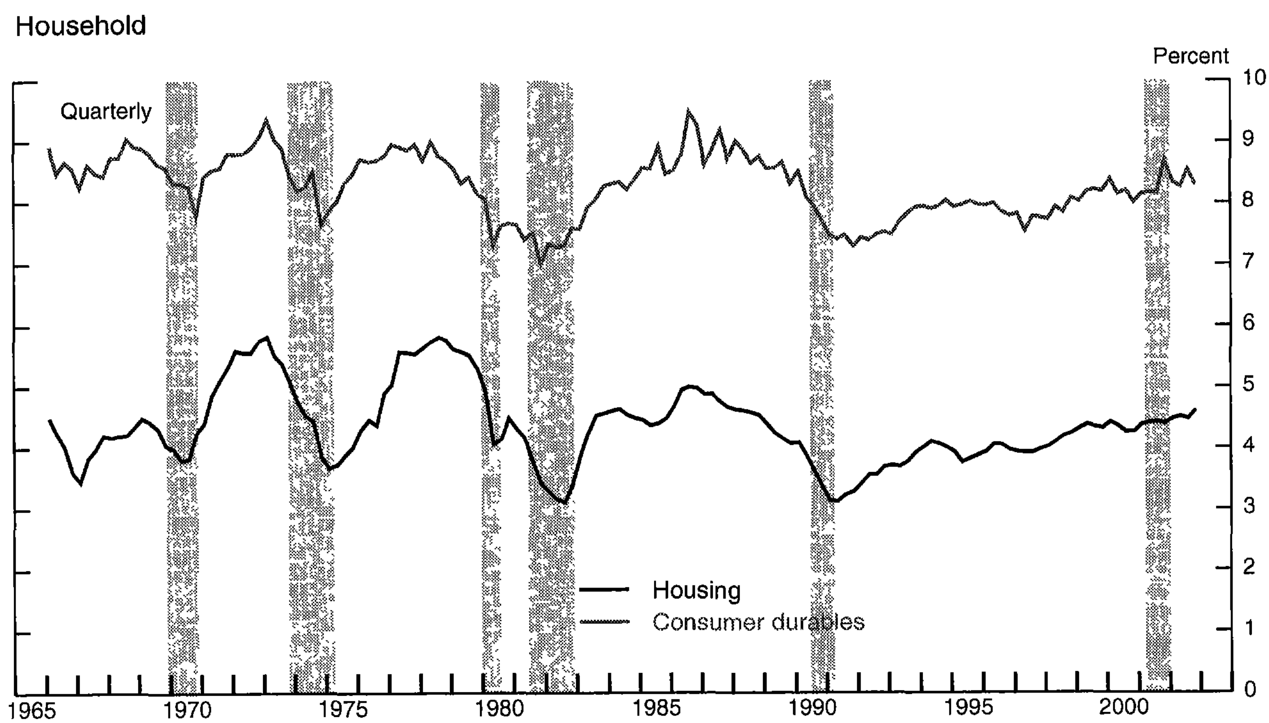
We are making inferences from very inexact proxies for desired stocks and sustainable prices. No one could definitively rule out the possibility that home construction and prices could drop sharply. Undoubtedly this will occur in some local markets, and it could become widespread. But the odds would seem to favor a more measured response to the inevitable tightening of policy as the recovery in business investment picks up steam, consistent with keeping the economy on a sustainable growth track rather than becoming another source of macroeconomic instability.

And weighing those odds is what policy is all about: Making choices in real time, using incomplete knowledge of future asset market behavior, and weighing potential costs and benefits for economic performance over time from alternative policy strategies.

By lowering interest rates aggressively, the Federal Reserve undoubtedly has shifted some forms of economic activity from the future to the present. In effect, we are trying to cushion the effects of decisions by the private sector to postpone business capital spending for now. Adjustment costs aside, and these appear to be minor, it is not clear why we would not want to bring construction spending in from the future, when it is likely that other parts of the economy would not be so weak. It makes sense to build the houses and cars now, when the cost of doing so is relatively low, rather than waiting. And building them now has kept more people employed and reduced the risk of deflation. All in all, from my perspective, with the knowledge and analysis available to me, the policy choices we have made seem consistent with fostering our legislated goals of maximum employment, stable prices, and moderate long-run interest rates, not only in the near term, but most likely over the longer run as well.

Investment Shares of GDP



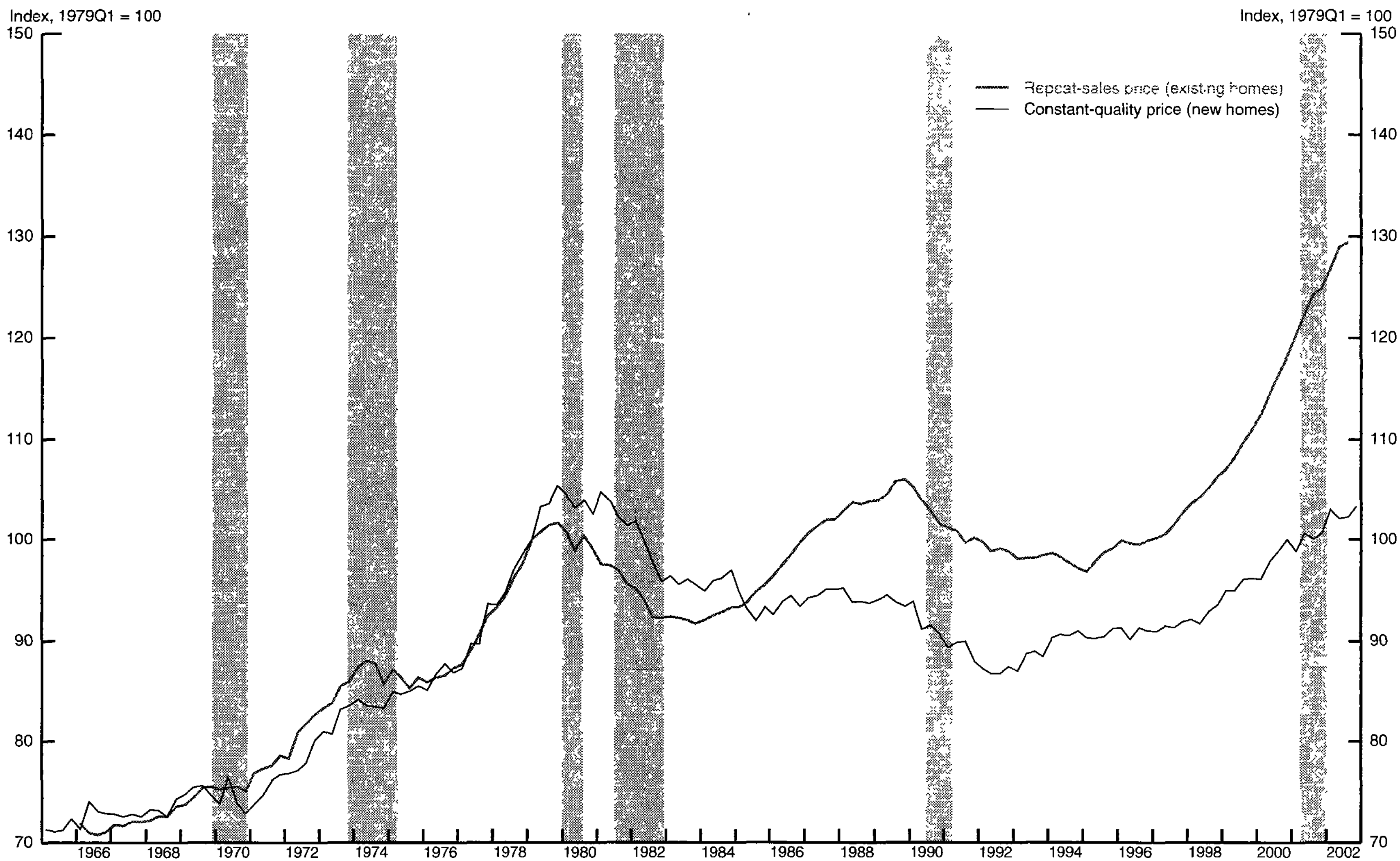


Shaded regions indicate NBER recessions, except 2001:Q2-2001:Q4, where a trough has not yet been announced.

Source: Bureau of Economic Analysis. Shares are ratios of nominal quantities.

Chart 2

Real House Prices

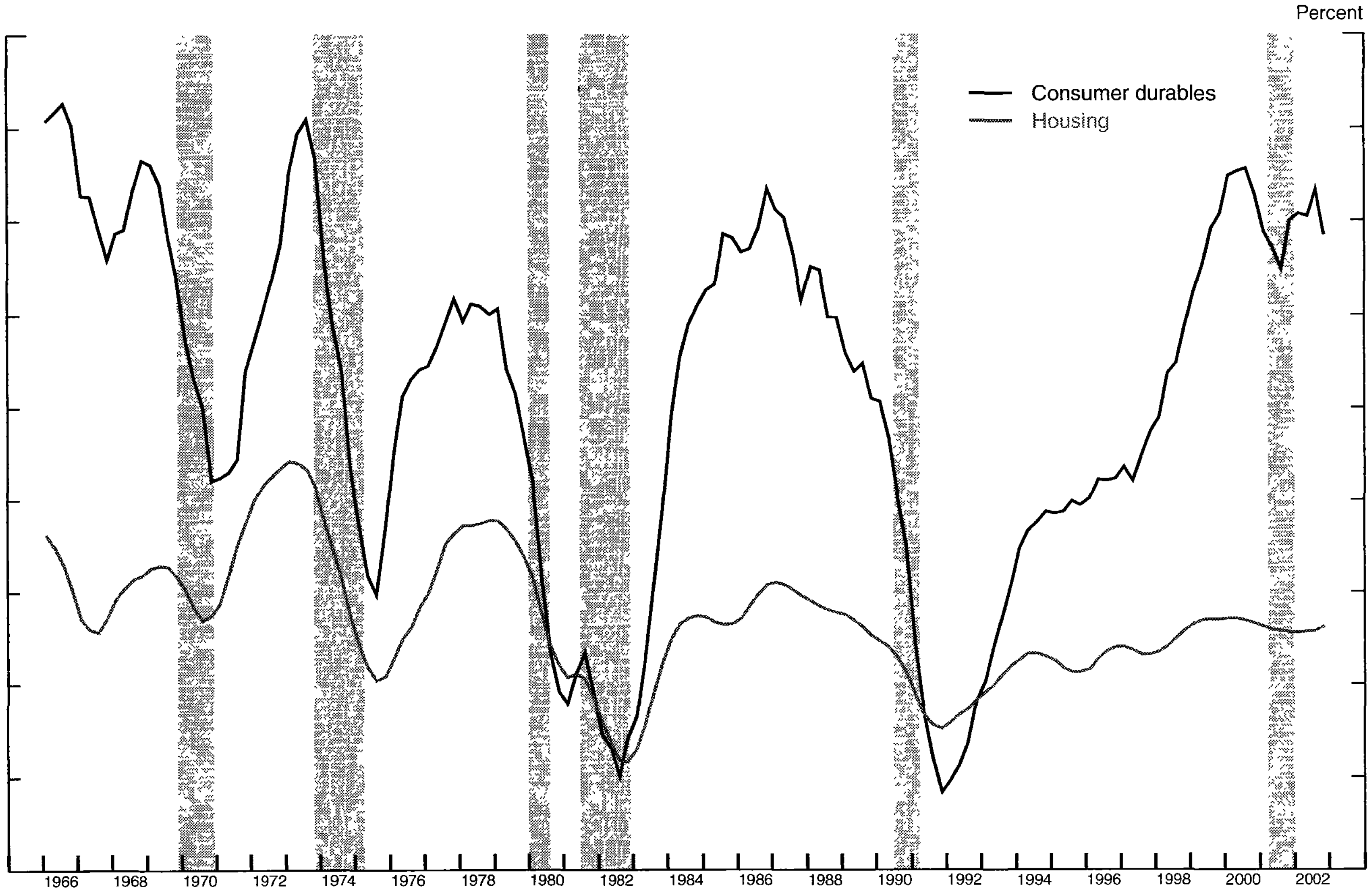


Note. Repeat-sales price index is extended back prior to 1975 using the median sales price of existing homes. Prices are deflated using the price index for personal consumption expenditures other than food and energy.
Sources. OFHEO, Census Bureau, National Association of Realtors.

Chart 3

2/27/03

Growth in Household Stocks
Four-quarter changes



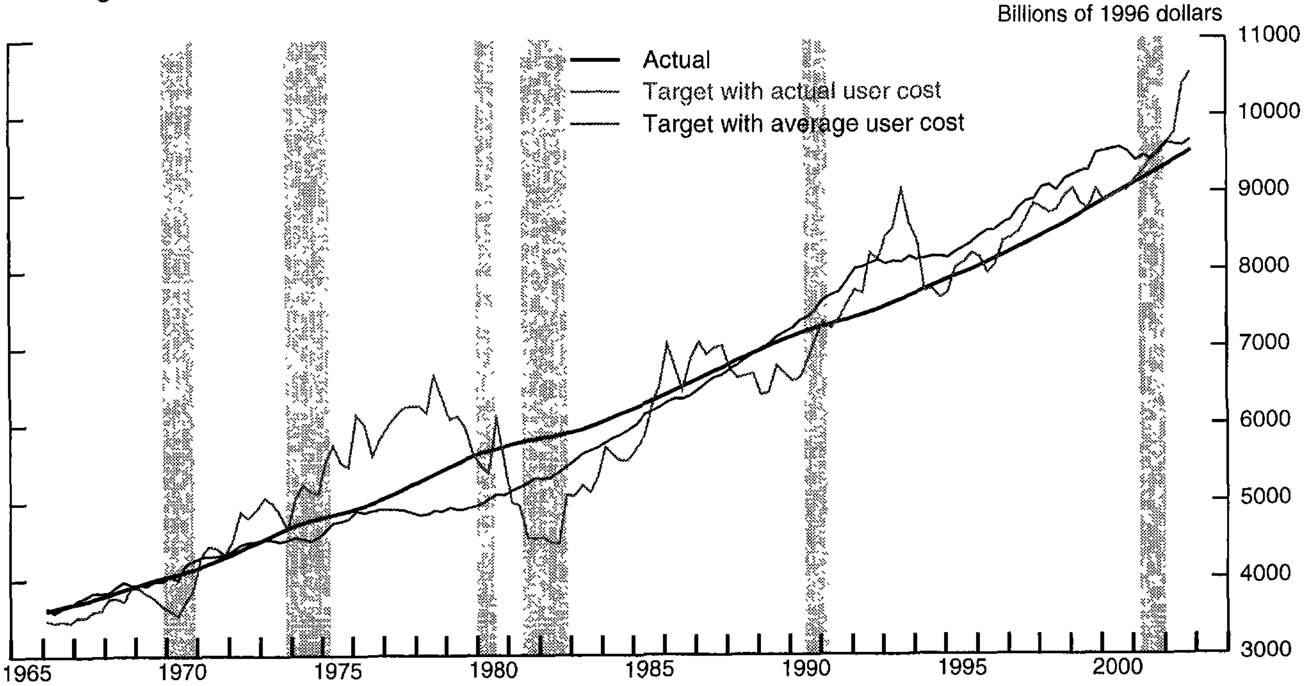
Shaded regions indicate NBER recessions, except 2001:Q2-2001:Q4, where a trough has not yet been announced.

Source: Bureau of Economic Analysis

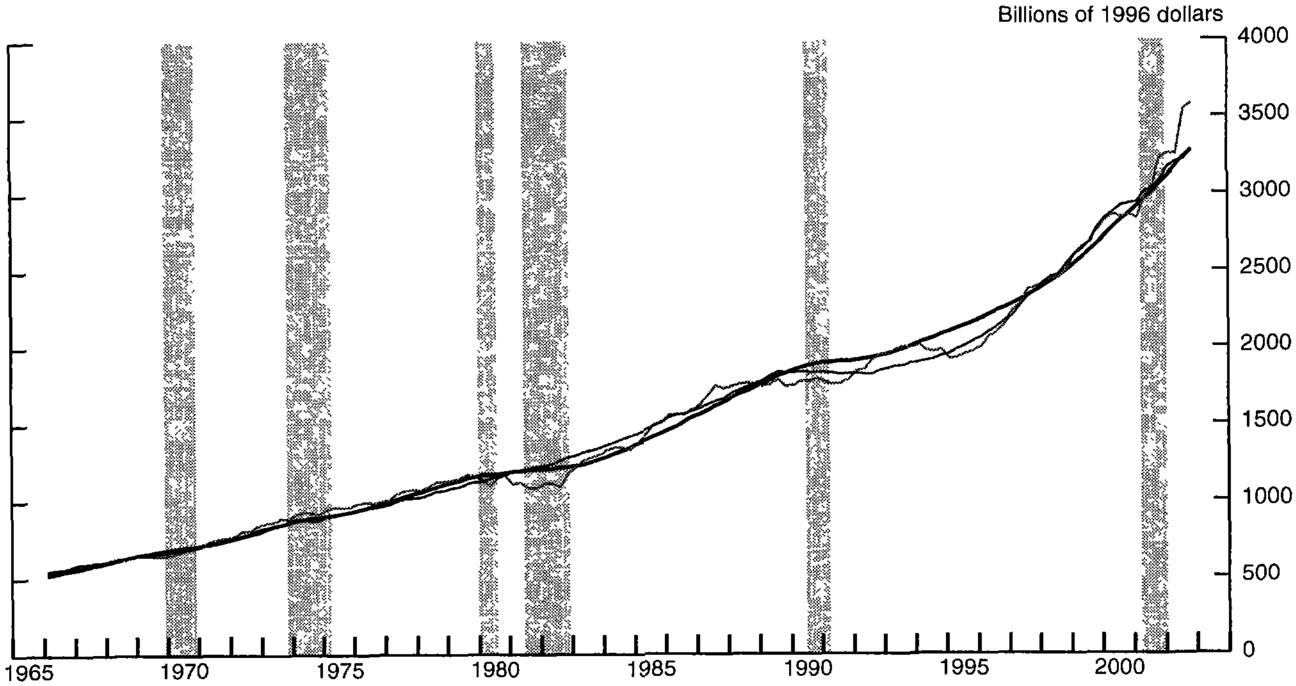
Chart 4

Actual and Target Household Stocks

Housing



Consumer Durables

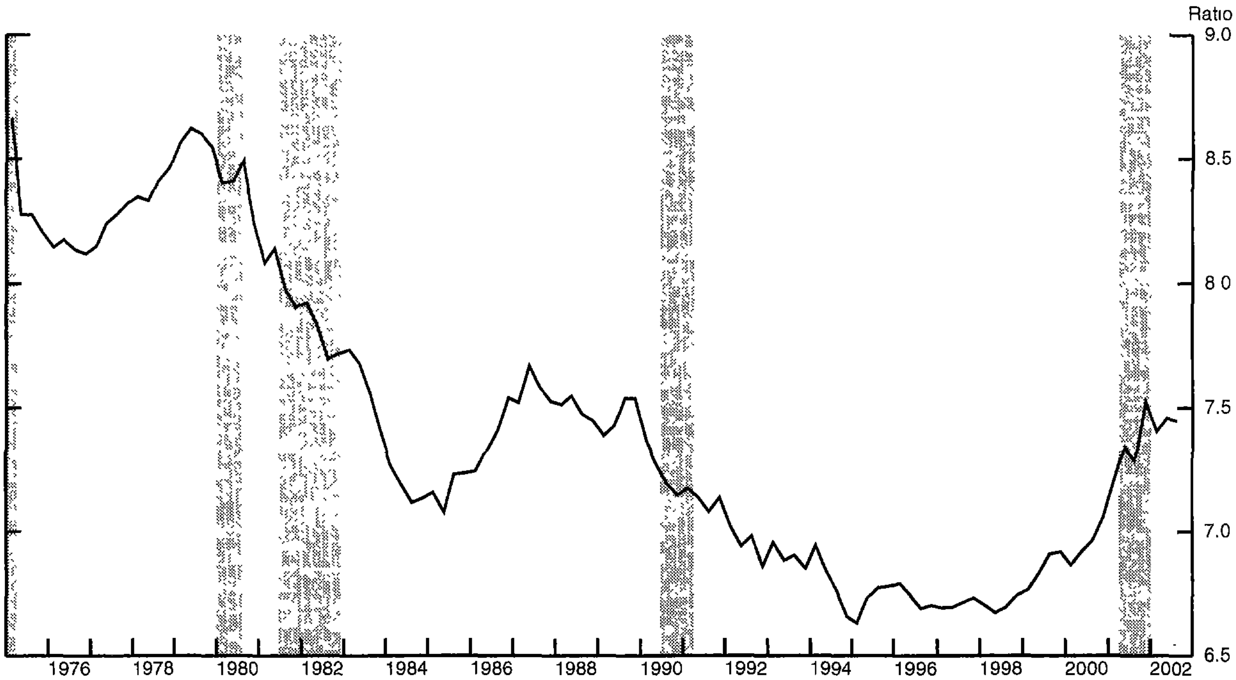


Shaded regions indicate NBER recessions, except 2001:Q2-2001:Q4, where a trough has not yet been announced.

Source: Bureau of Economic Analysis; Federal Reserve; author's calculations.

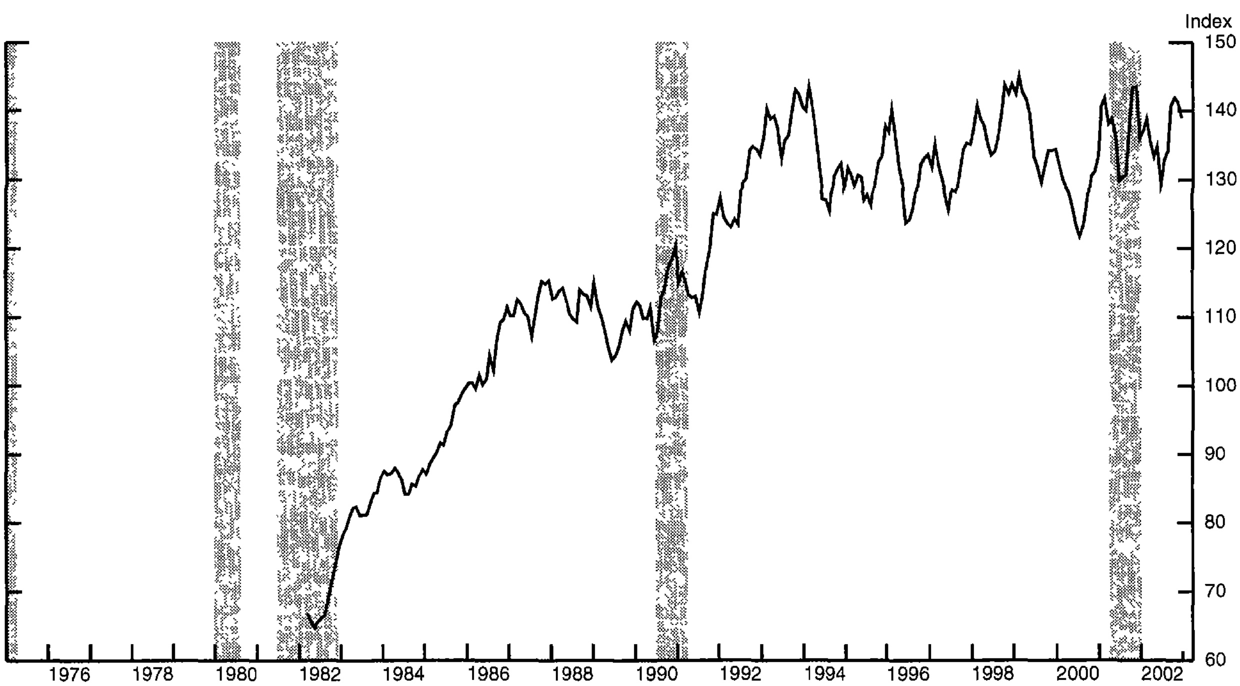
Chart 5

Ratio of House Prices to Per Capita Disposable Personal Income



Note. The ratio is the OFHEO existing home repeat sales index (1996=100) multiplied by the average sales price of existing homes in 1996 from the National Association of Realtors divided by per capita disposable personal income as reported by the BEA.

Affordability Index of Existing Homes



Note. A value of 100 indicates that the median family income is equal to the qualifying income for the median price of existing homes sold Qualifying income is the income required to qualify for a conventional loan covering 80 percent of a median-priced existing single-family home. Values greater than 100 indicate that the median family income is greater than the qualifying income.
Source. National Association of Realtors.