

Federal Deposit Insurance Corporation

2006 Economic Outlook Roundtable: Scenarios for the Next U.S. Recession

Thursday, January 19, 2006
10:00 a.m. – 12 noon

Moderator:

Richard A. Brown, Chief Economist and Associate Director, Risk Analysis Branch, Division of Insurance and Research, FDIC.

Panelists:

Kathleen Camilli, Chief Economist and Director, Camilli Economics

Arthur J. McMahon, Director, Economic Outlook and Bank Condition, Office of the Comptroller of the Currency

Meredith Whitney, Executive Director, CIBC World Markets, a subsidiary of Canadian Imperial Bank of Commerce

MR. BROWN: Good morning, everyone. Welcome to today's FDIC 2006 Economic Outlook Roundtable. My name is Rich Brown. I will be the Moderator for today's panel discussion.

I wanted to let you know that this is our fourth annual FDIC Outlook Roundtable. In previous years, we have discussed issues such as deflation, the art of forecasting, and the much maligned, but still undeterred, U.S. consumer sector. And this year we decided to cut to the chase and talk about the topic of recession and what the next recession might mean for the U.S. banking industry.

I'm very pleased today to have a distinguished panel of experts to give you their viewpoints on the U.S. economy and how it will affect banking. I will introduce them all at once before turning it over to them.

On my immediate left is Kathleen Camilli. Kathleen is Chief Economist and Director of Camilli Economics and is one of the nation's top economic forecasters. The *Wall Street Journal* named her one of the top five economic forecasters two years running, and *Business Week* has named her their number-one performing forecaster. Kathy formerly was the U.S. Economist at Credit Suisse Asset Management in New York before starting her own firm, and she chairs the Financial Roundtable at the National Association for Business Economics. Welcome, Kathy.

MS. CAMILLI: Thank you.

MR. BROWN: Next will be Arthur McMahon. Art is the Director of Economic Outlook and Bank Condition for the Office of the Comptroller of the Currency here in Washington. Art joined the OCC in 1993, and before that he was with the International Banking and Portfolio Investment Office of the U.S. Department of Treasury where he participated in negotiations for the Uruguay Round of the bilateral negotiations.

We make it a priority to regularly trade views with our colleagues at the Comptroller's Office, but this is the first time we've been able to have Art at one of our roundtables.

Art, it's nice to have you here today.

Last, but not least, we have Meredith Whitney. Meredith is Executive Director for CIBC World Markets, a subsidiary of the Canadian Imperial Bank of Commerce in New York. She serves as Senior Financial Institutions Analyst there, focusing on large and mid-sized banks, as well as a cross-section of independent commercial and consumer finance companies.

Prior to joining CIBC, she spent four years at the financial institution's Research Unit at Wachovia Securities, formerly First Union. She also comes to us with a forecasting pedigree; she was named the number-two stock picker in her category by *The Wall Street Journal's* Best on the Street Survey in 2002.

Meredith, welcome to the FDIC.

I have asked these panelists to be forward-looking in their remarks today. But as I was preparing for this discussion, I thought maybe it would be worth looking backward for just a moment and set up some historical background, a point of departure, for our discussion of recession and how it affects the banking industry. Therefore, I've put together a couple of remarks I'd like to share with you before we turn it over to our panel.

I think that our sense of the connection between banking problems and economic recessions goes back deep into our history. Before there was deposit insurance, economic recessions—or depressions, as they were then called—were often associated with banking panics. These episodes took place in 1857 and '58, 1873, 1884, 1907, and, most memorably, a series in the early 1930s, just before the introduction of the FDIC.

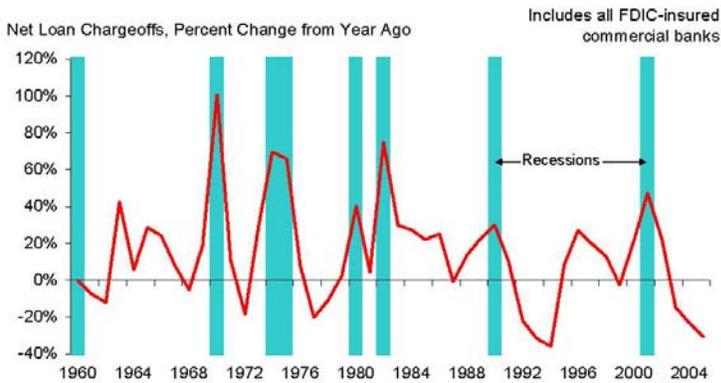
These events typically involved episodes of illiquidity, which led to bank runs and forced the liquidation of assets, leading in turn to declines in stock prices and real estate prices. So in that era, banking problems and bank failures were closely associated with economic downturns.

However, since the Great Depression, and after the establishment of deposit insurance, a lender of last resort, the social safety net, various economic stabilizers, and active programs of counter-cyclical policy, we've seen the connection between the U.S. business cycle and the fortunes of the banking industry become somewhat less clear cut than previously.

Recessions still affect credit quality and loan demand in ways that you would expect. Chart 1 shows how charge-offs tend to peak during recession periods, as you might expect.

Chart 1

Bank loan losses generally rise during recessions.

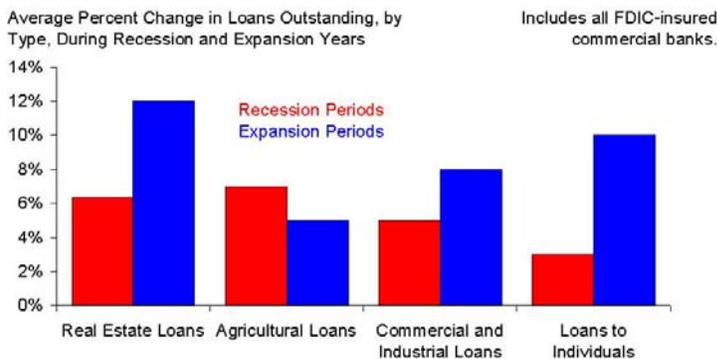


Source: FDIC

Moreover, looking at loan demand in recession years versus non-recession years in Chart 2, you see that for most asset categories, with the exception of agricultural loans, loan growth has been higher during the expansion periods.

Chart 2

Loan volume also tends to be procyclical, rising faster during economic expansions and slower during recessions.



Source: FDIC

Despite these empirical connections, I'm going to argue that the business cycle has not been the dominant factor in explaining banking industry earnings and failures in the modern period. One episode that I think illustrates this point is what we refer to as the 100-year flood of losses in the banking and thrift industries, or the failure of over 2,500 banks and thrifts between 1980 and 1993.

Chart 3 shows this wave of bank failures. We see up ticks of bank failures during some of the recession periods, but, clearly, they are orders of magnitude smaller in size than the increase in failures we saw during the 1980s.

Chart 3

The wave of bank and thrift failures during the 1980s and early 1990s dwarfs all other episodes of financial institution distress since the 1930s.

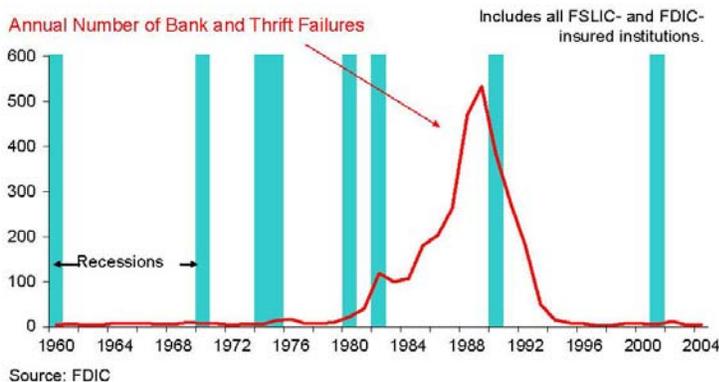
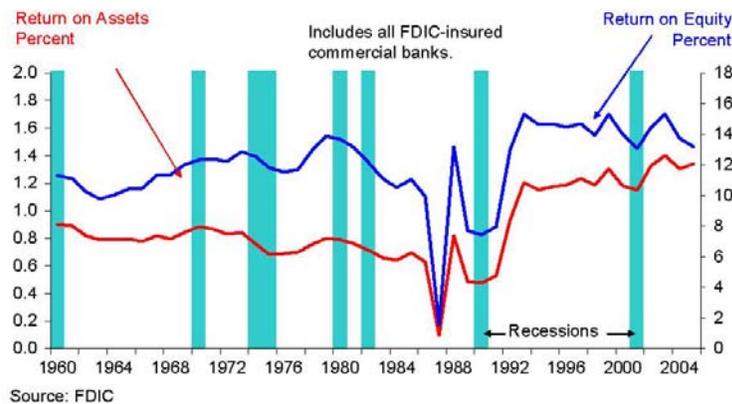


Chart 4 shows you the same episode, starting in the 1980s, from the perspective of return on assets.

Chart 4

Industry earnings have not always fluctuated in sync with the business cycle.



Now, this great wave of failures spanned more than a decade and encompassed two U.S. macroeconomic recessions, but I'm going to argue that it was not primarily a product of the U.S. business cycle. Rather, it was more closely related to what has been called a "rolling regional recession" that traveled from the farm belt to the oil patch to the Northeast to Southern California.

There were a lot of factors involved in this wave of bank failures, including risk management problems, fraud, and self-dealing. But probably the biggest single economic factor related to boom and bust cycles in real estate. For more information, I would refer you to the FDIC's *History of the '80s* study, which is on the FDIC Web site.¹

¹ See: <http://www.fdic.gov/bank/historical/history/>.

Another case in point is the experience of the last five years, from 2001 through 2005. We saw trillions of dollars in stock market losses starting in 2000 with the failure of hundreds of publicly traded companies, including Enron and WorldCom, followed by a very slow recovery in job growth over the next couple of years.

How did all of that affect FDIC-insured institution? They earned record profits every year from 2001 through 2004. Year-end results are not in yet, but 2005 also looks like it could well be another record year.

Part of the reason the industry was able to post this strong performance was the response of monetary policy to the recession itself. Low nominal interest rates and a steep yield curve helped the industry boost its net interest income and realize gains on the sale of securities that offset the increase in credit losses.

Let me give you an example. Between 2000 and 2002, the annual loan loss provisions for FDIC-insured institutions increased by \$18 billion—a 61 percent increase. This was a major credit event that was concentrated at large banks that made loans to large corporate customers.

But also during that two-year period we saw annual net interest income rise by some \$33 billion. At the same time, during those two years the industry was able to realize gains on the sale of securities of \$11 billion. So these offsetting factors outweighed the increase in credit losses by a factor of almost two and a half to one, which shows the power of counter-cyclical monetary policy and low interest rates in influencing the industry's bottom line.

We had a similar experience in the previous recession (1990-1991), where an increase in net interest income helped to overcome credit losses.

But as an investment advisor might tell you, past performance is not necessarily indicative of future results. We can't necessarily expect that the banking industry will always be so well insulated from the effects of recession.

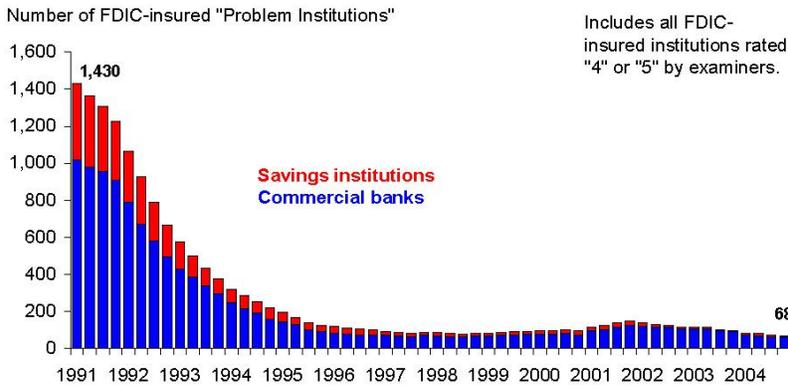
I think the main lesson here is that the boom and bust cycles, or the particular sectoral incidence of a cyclical downturn, are more important than recession itself in determining which institutions are affected.

As you know, good old-fashioned risk management plays a big role in terms of how well prepared the industry is for an economic downturn. Loan underwriting and servicing, managing concentrations, and hedging against volatility are all important. But it's very difficult to come up with an overall measure for risk management practices of the industry.

We do have our list of problem institutions, those with the lowest two supervisory ratings. Chart 5 shows that the number of problem institutions has fallen to historically low levels, in order of magnitude less than they were 15 years ago.

Chart 5

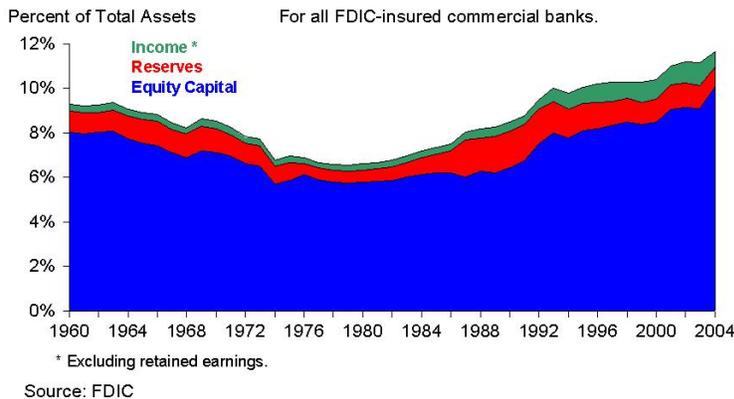
The number of FDIC-insured "problem institutions" has fallen to historical lows during this expansion.



Capital, reserves, and earnings also matter as a cushion against losses. In Chart 6 we see that together, cushion appears fairly large compared with previous historical periods. That shows that the industry probably is in a fairly good position to withstand the adversity that would be associated with an economic downturn.

Chart 6

The banking industry's capacity to absorb losses has climbed to a historically high level.



So with these observations as a historical prologue, we'll now turn to our panel of experts as they consider the economic future and ask them to describe what they see as the probable nature of the next U.S. downturn and what banks and thrifts need to be doing to prepare for that inevitability.

MS. CAMILLI: Good morning, everyone. It's a pleasure and an honor to be invited to the FDIC to give a presentation on the economic outlook.

I just want to start out with a little commercial and tell you a little bit about what I do. This is a mission statement for the firm. The mission of Camilli Economics is to deliver insightful economic analysis to our clients and to teach people about the workings of the economy so that they may live prosperously and fulfilled.

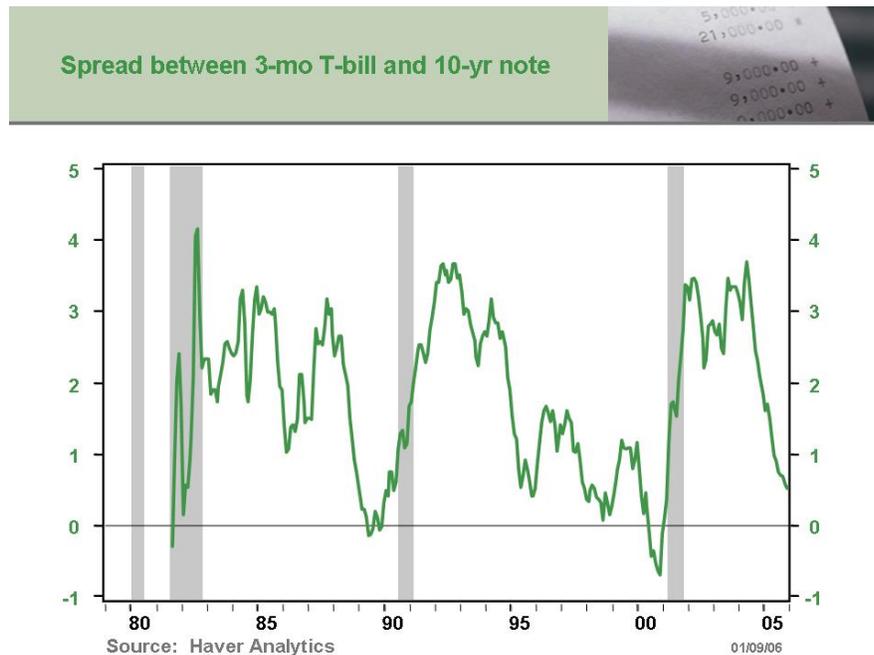
And just a little quote from John Kenneth Galbraith before we start. It's important to remember, when economists are asked to forecast, they divide themselves into two camps: those who don't know, and those who don't know that they don't know.

(Laughter.)

I prefer to think of myself as the former. So I want to start out with that.

I would concur with Rich that your bigger problem is probably with exogenous shocks and external factors that might affect a banking system, rather than with an outright recession. What you're looking at right here is a spread between the 3-month T-bill and the 10-year note (see Chart 7). And when people ask me, "Well, when do you think the next recession will be?" I always tell them, "Well, probably 2010."

Chart 7



Why? Because we've tended to have recessions that coincide with the political presidential cycle, and they tend to be around the turn of the decade. So we had one in 1970 and '80 and '90 and 2000 and 2001, and we'll probably have one in 2010.

I think probably what's of greater interest to all of us right now is whether we're going to have a mid-cycle growth recession. Certainly, that's what I'm being asked and what I'm focusing on.

And I think that the evidence to date is inconclusive. It looks like fourth quarter GDP may be our weakest quarter last year, and maybe when we look back we will determine that that was our mid-cycle growth recession. We'll see as the slides go on.

I think that probably your greater worry is what's going on within the banking system. Chairman Greenspan has, starting with the annual conference at Jackson Hole, been talking about the narrow risk premium in the markets, the narrow credit spreads, and how people are extrapolating into the future that asset values will continue to climb at the current rates.

So it appears much more likely that we'll be affected by something external rather than recession, as to affecting the banks.

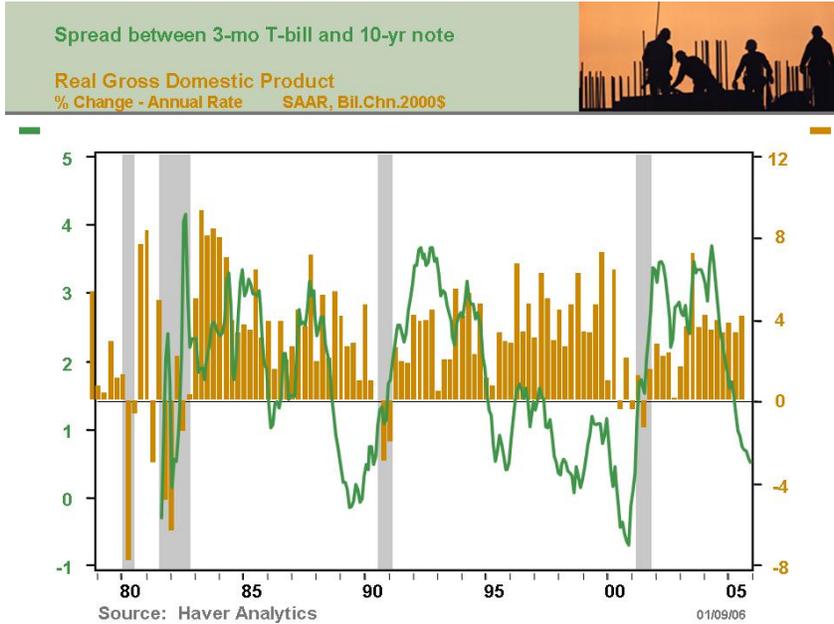
And just to put this in perspective, it has been a while since we've had a shock. Going back through the 1990s, the IO-PO [interest-only–principal-only stripped mortgage-backed security] market debacle in 1994 was the last time we were in the middle of an economic expansion. When the Fed ended up overtightening, it had some ramifications on the market.

Then, of course, we had Long-Term Capital Management in 1997 and the 1998 episode that was sparked by the Russian debt default. And we had the unraveling of the NASDAQ in 2000, which had some repercussions on the financial system. And it has really been a while. It's been a few years. So from that perspective, just the perspective of probabilities, we're kind of overdue for something to happen. And I think that's the reason we've had a cautionary flag sent up by some policymakers.

With that said, our last two recessions have been relatively short and shallow, even leading some people to believe that the business cycle could be dismissed or has been rendered irrelevant. But I doubt that's the case, since we've had business cycles for hundreds of years.

So I'd like to draw your attention to this chart showing the yield curve spread (see Chart 8). The worry right now is that the inversion of the yield curve is somehow signaling a recession. And from my perspective, that couldn't be further from the truth. This particular yield curve, based on the spread between 2-year and 10-year maturities, is not yet inverted. But it has tended to invert before the last two downturns, and you can see it was pretty significantly below zero in 2000, and similarly in 1989.

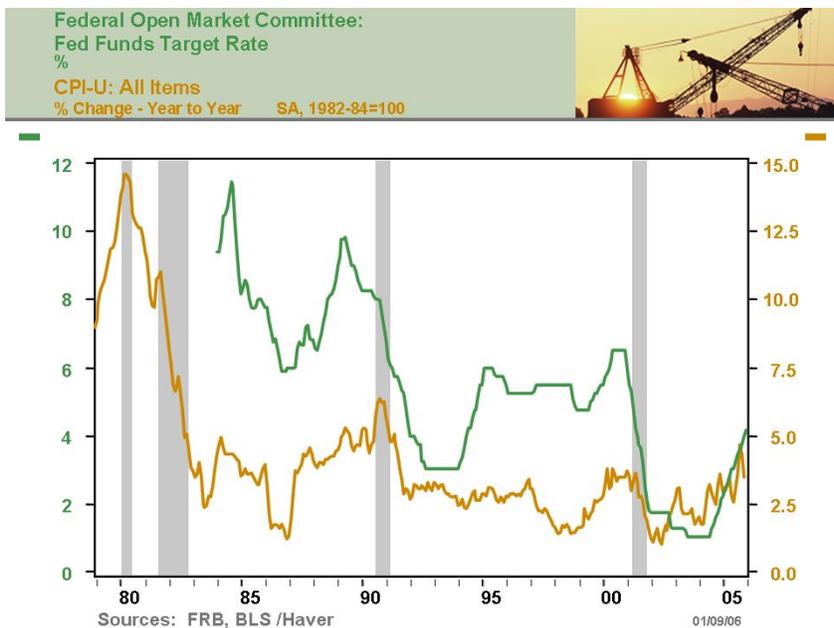
Chart 8



So from my perspective, we're nowhere near an outright downturn in the economy.

In this chart we've put that against GDP, just so you can see the mid-cycle growth slowdown (see Chart 9). We had one in 1986 when GDP growth dropped to roughly 1 percent, and we had one in 1995 when you had two back-to-back quarters of growth under 2 percent, in the first two quarters of 1995.

Chart 9



The question that I would pose is: Are we now going to have two soft quarters that could be characterized as our mid-cycle growth slowdown? I'm posing the question. I don't know the answer.

Of course, I always like to tell people who listen to my speeches that each and every economic expansion and each and every economic recession is unique, because the economy is never the same at any two points in time. It's dynamic, it's complex, and these elements are what makes the economy so fascinating to watch.

Now, of course, the Fed has been combating inflation, but really what they've been doing is moving the federal funds rate from an aberrantly low level of 1 percent up to where it currently is, around 4 ¼ percent.

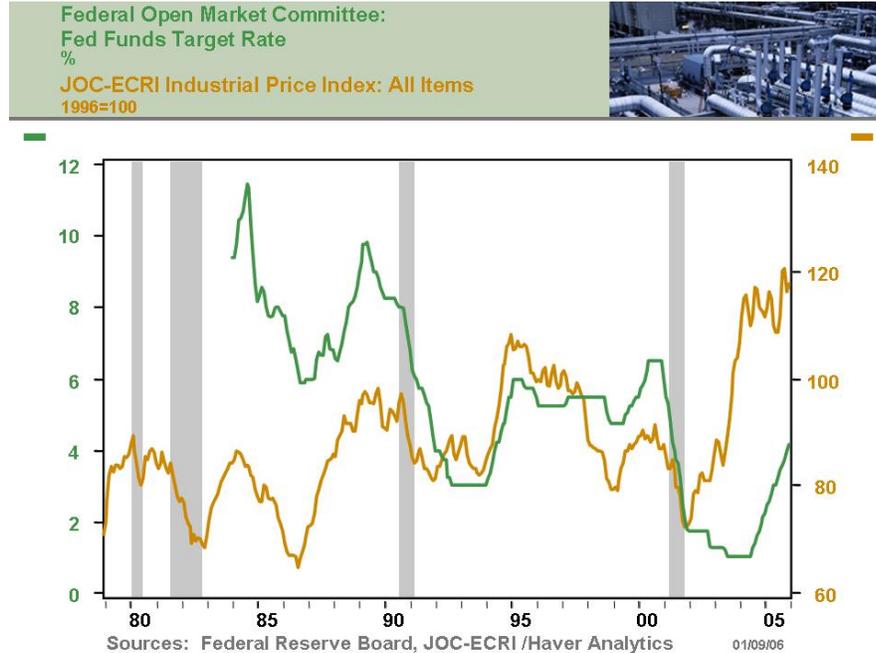
And I put up here the target rate for the FOMC [Federal Open Market Committee], the federal funds target against CPI [Consumer Price Index], just so you can see that even back in 1995 they really weren't going after a perspective rise in inflation, even though commodity prices were rising. This time around you've got a combination of rising commodity prices, rising energy prices, and the Fed also wanted to just get the federal funds rate off of this very, very low level.

So last year I made a forecast that the Fed would stop tightening at around 3 ¾ percent. That forecast has been incorrect. They raised rates up to 4 ¼ percent, and the market is anticipating at least two more tightenings. The language from the most recent FOMC meeting suggests that there is a bit of uncertainty right now, and future policy will depend on the data that comes in.

From my perspective, I think that there is a possibility that they could pause here at the FOMC meeting at the end of the month, and maybe not signal that they've stopped, but maybe signal that they paused, just so that they could wait to see the impact of their efforts over the last year.

Again, [Chart 10] is a picture of the federal funds rates and *The Journal of Commerce* and Industrial Price Index, just to show you that, really, back in 1994 what they were worried about was rising commodity prices. And it was that reaction to rising commodity prices that really caused them to overtighten.

Chart 10



So as I look at this graph, keeping in mind as we know that only about 10 percent of the price of a good is commodities, I really wonder whether the Fed isn't repeating the same error in overtightening as a reaction to commodity prices. That's my greatest concern, which is why I think they probably could have stopped earlier, but they have not.

[Chart 11] is a picture of the target rate once again, the federal funds rate versus home prices. And so we turn our discussion now to where the real inflation is that the Fed may be trying to combat. Instead of being in commodity prices, instead of being in energy prices specifically, or a worry about a rise in the overall price level, I think that probably what they're really after is what's going on with this little bubble in housing prices. I'll call it a little bubble, because I'm on record as saying that we don't have any broad-based bubble in the nation's housing stocks, but we have seen speculation in certain housing markets around the country. I guess Mr. McMahon is going to address that later. And as we know from Dr. Schiller up at Yale, speculation always ends badly.

Chart 11

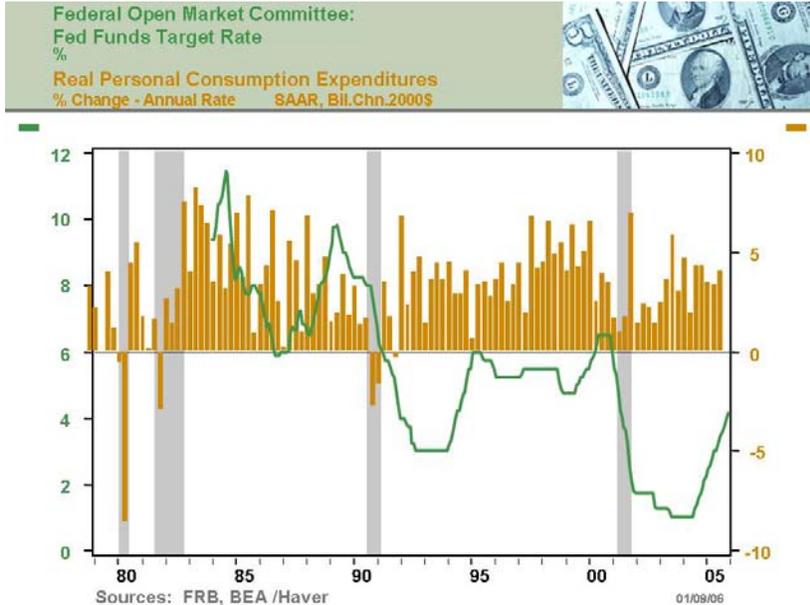


So my guess is that home prices—that is, the median price on existing homes—have already peaked and are starting to roll over. They are gradually coming down. That's judged from the level of inventory, of stock on the market. So my guess is that if they were just to leave policy here now for the remainder of this year, this would kind of untangle itself on its own, without them needing to do anything else.

Now, there's been a lot of talk about a housing bubble and the adverse impact that will unfold as the Federal Reserve tightens and housing starts to subside. But I really question that. We're going to look at some charts later on about overall wealth in the economy.

Again, [Chart 12] is a picture of the target rate for federal funds and the impact on consumption. You can see that we have had mid-cycle growth recessions in the last two decades, in 1986 and in 1995. We did temporarily have a dip in consumption in those episodes. You can see from the personal consumption numbers and the type of growth rates we've seen in this particular expansion that we've had no evidence of any dip in consumption yet.

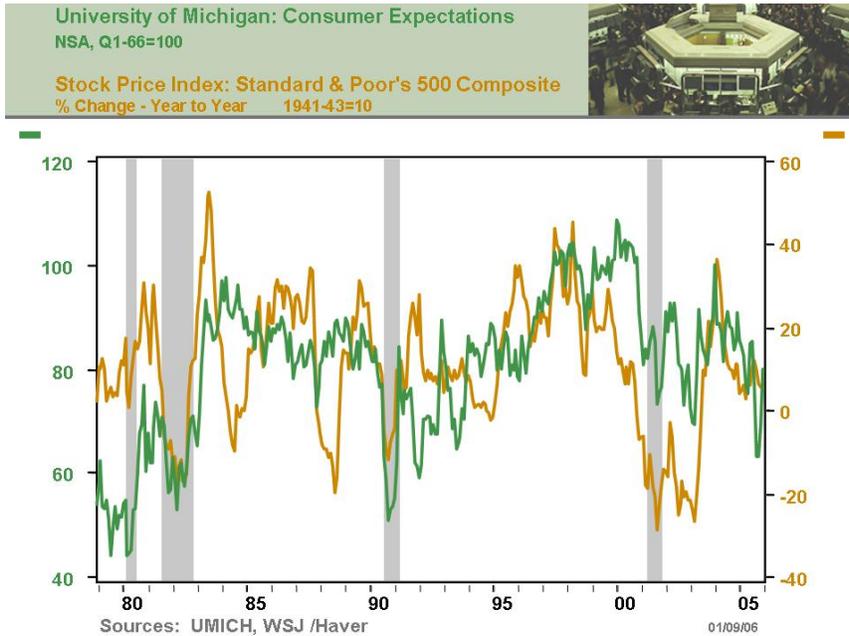
Chart 12



Again, when the fourth quarter GDP number comes out next week, we may see evidence that we're already in the midst of our mid-cycle growth recession. All of the numbers we've seen so far suggest that PCE [personal consumption expenditure] growth did subside in the fourth quarter.

My two favorite leading indicators—and, of course, Chairman Greenspan says that we can't use any single econometric model or any single indicator to predict the direction of the economy—but my two favorites happen to be the University of Michigan Consumer Expectations Index combined with the S&P 500. Those were the two indicators I used in the spring of 2000 and in December 2000 to call the beginning of the recession. Those two indicators don't indicate that any recession is pending in the near future at all (see Chart 13).

Chart 13



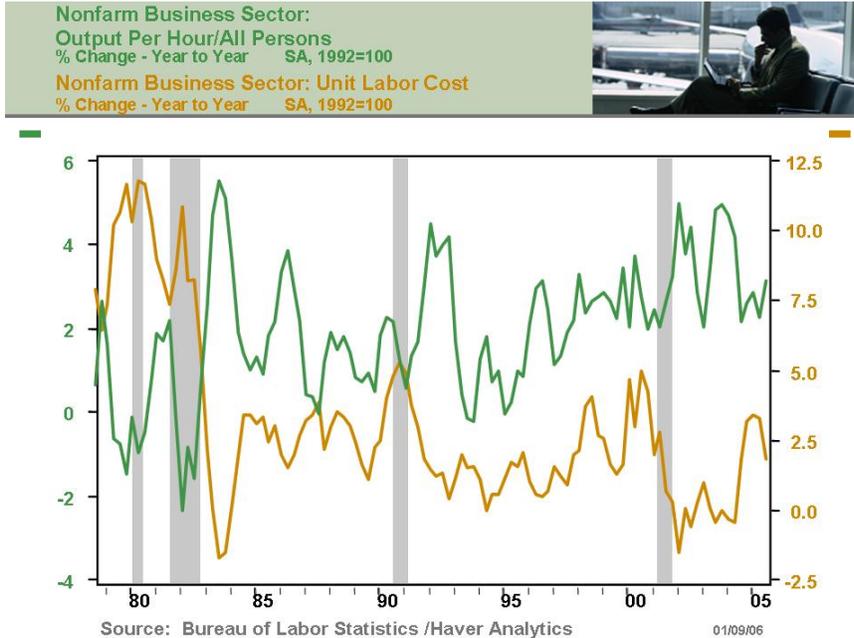
And this is the Economic Cycle Research Institute, Jeffrey Moore's Institute, and his leading index is also not signaling any imminent recession at hand (see Chart 14).

Chart 14



[In Chart 15] we have a picture of productivity and unit labor costs. And I really question whether, in fact, we are about to see some rise in unit labor costs, even though it has been widely proclaimed in the papers that what we need to see right now is a rise in unit labor costs, or will we see that as productivity subsiding.

Chart 15



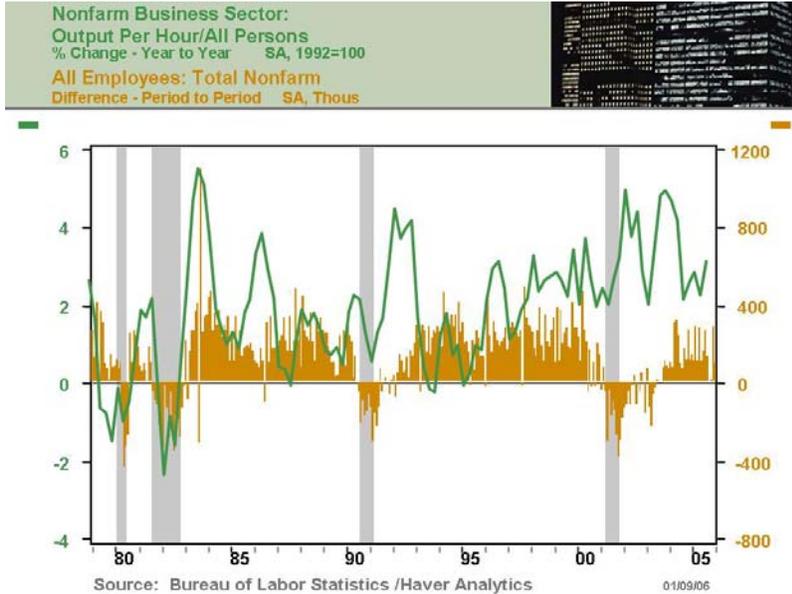
I completely question the thesis. I would concur with Dale Jorgenson up at Yale that we are moving into a period of capital deepening, and that the structural productivity rate in the economy is probably running at around 3 percent.

If that's the case, it means that our economy can grow on a sustained basis for the remainder of this decade at a rate of 3 to 4 percent. And I think that that's what we're looking at—barring exogenous shocks, of course.

And why don't I think that unit labor costs really have to rise here? Why will they just kind of muddle along around 2 ½ to 3 percent every year? Well, we have outsourcing, we have offshoring, we have all different kinds of ways for companies to make use of the technology that's at their disposal.

And this expansion has been unique in that the economy has been able to grow between 3 and 4 percent, but we haven't had what we should have had in terms of nonfarm payroll growth, which should be between 300,000 and 400,000 on average every month during this type of period (see Chart 16).

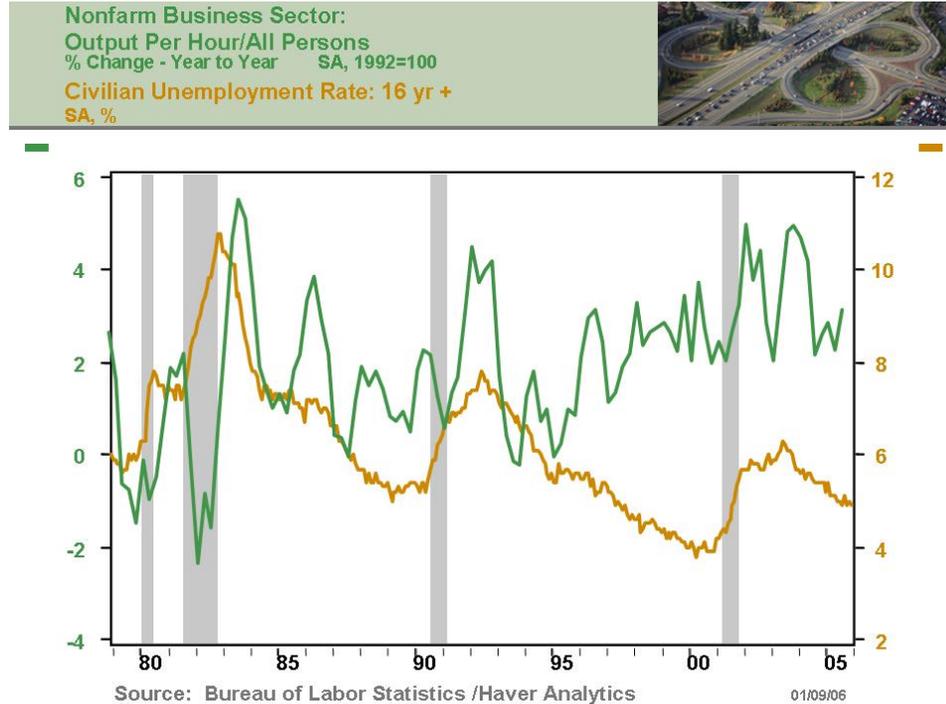
Chart 16



Instead, we have had average nonfarm payroll growth last year of about 166,000 per month. I don't suspect it will change this year or the next year, and that just has to do with different ways companies are dealing with the opening up of India and China, and what's at their disposal.

Also, I do think that there's probably some job growth that's occurring at small companies. There's been a lot of creation of start-up companies because of the Internet, and I'm not so sure how much that is being captured in the employment statistics. The unemployment rate seems to reflect that as it keeps going down. It has hit a low of about 4.9 percent, which hopefully is where it will stay for the remainder of the decade, or at least around that area (see Chart 17). I don't expect it will go down to 3.8 percent anytime soon.

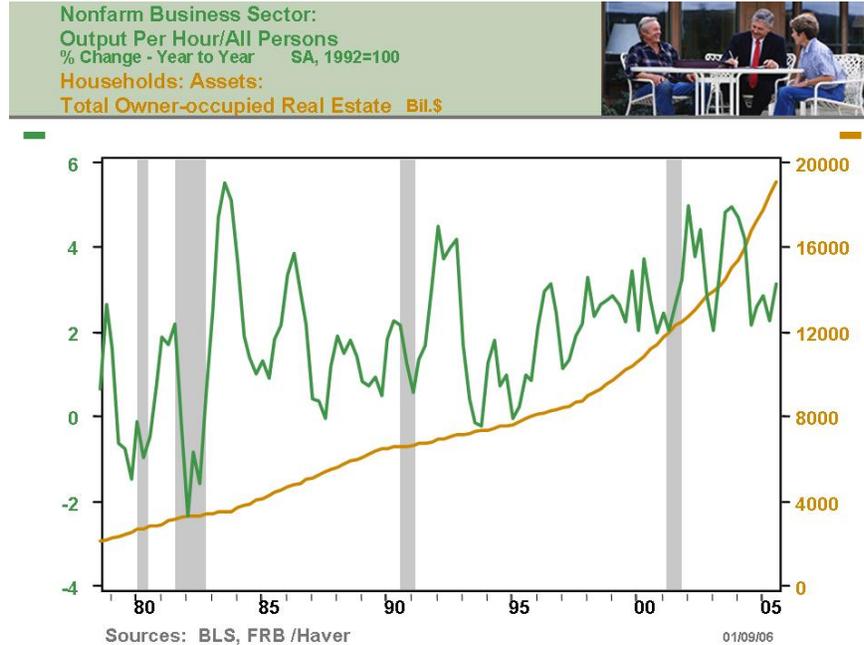
Chart 17



But, again, I think the scenario for the rest of the decade is one of relatively strong growth, relatively low inflation, and relatively low short- and long-term interest rates. Really, you couldn't wish for a better economic environment, again barring exogenous shocks. And I think exogenous shocks are anyone's guess.

So, again, we have future productivity, nonfarm business productivity, and we have a picture here of real estate prices (see Chart 18). This is where I want to pause and talk a little bit about wealth. One of the reasons that I was successful in making that call in 1999 for *Business Week* is because I did take into account the impact of wealth; in particular, at that time it was the rise in stock prices and their impact on consumption.

Chart 18

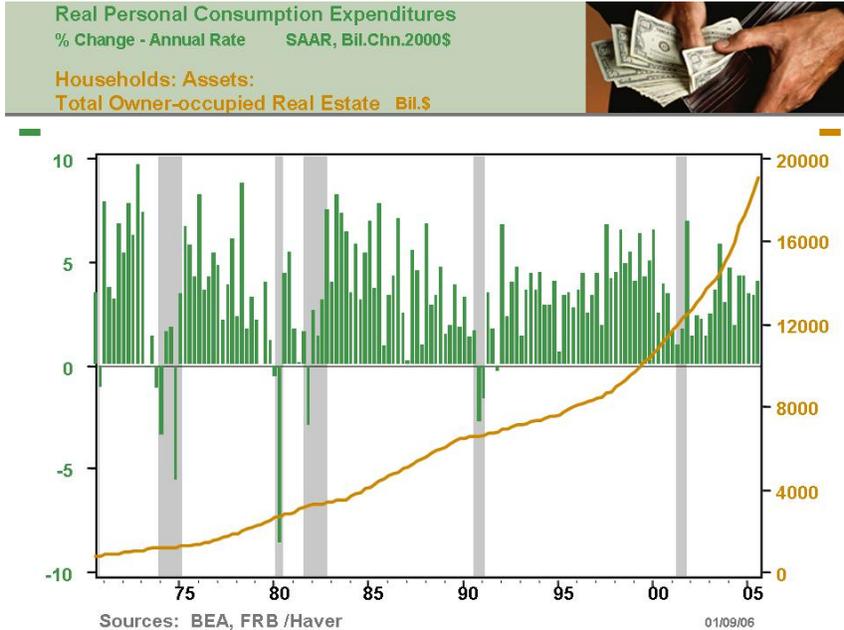


And I think, similarly, the overall level of wealth that's in the housing stock, and its continued rise during this four-year period, is translating into a higher level of spending than there otherwise would be. Just take a look at how sharply the level of wealth in real estate has gone up just in the last four years, compared to the two decades prior to that. It was a gradual rise over the course of the 1980s, over the course of most of the '90s. Then, we hit the Internet boom, of course, a boom tied to innovation, which only happens about once every 70 years. Much of the wealth that was created during the Internet boom, much of which was maintained, went into real estate. So that is the cause for the acceleration in real estate prices in the latter half of the 1990s.

And then, of course, when we went into recession in 2001 and the Federal Reserve lowered interest rates, money came out of the equity market and moved to a different asset class. It moved to the real estate market. That's where it is now, because people want to get the highest rate of return on their money, and it was perceived that equities would no longer return double-digit rates. So people moved into real estate.

The rise in the value of the stock of real estate is just incredible, and I think it is having a big impact on consumption spending. So you would never find me forecasting a downturn in PCE, now or anytime soon, purely because of what happened to housing. Here I put PCE against housing wealth just to further drive home the point that consumption spending is not just being driven off of income, as in a traditional econometric model (see Chart 19). Much of it is being driven off of wealth in housing.

Chart 19

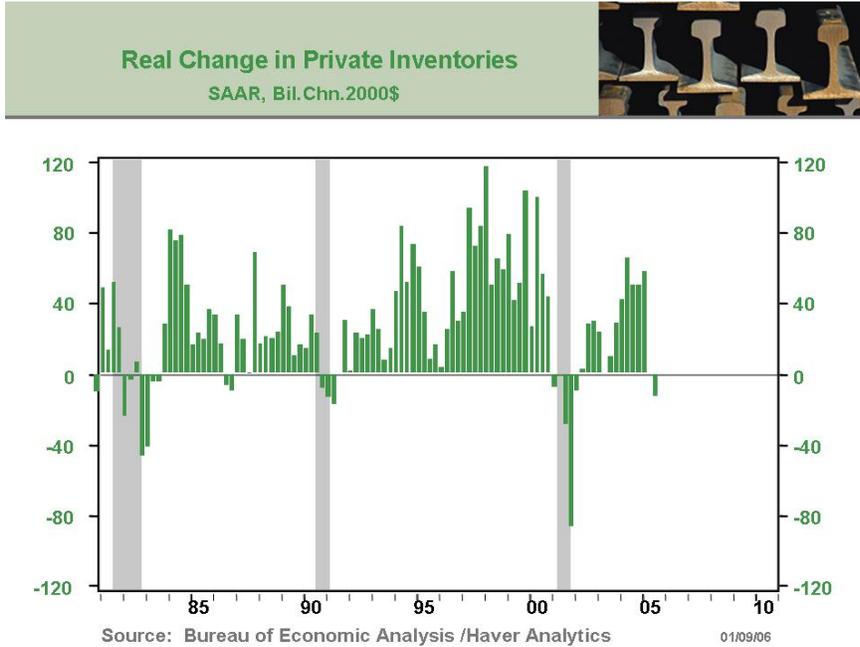


And I think that there's a reason that Greenspan focused on this in the paper that he co-authored with Mr. Kennedy that was released several months ago. The home is the primary vehicle for savings in the United States, and people are using it as a vehicle for spending.

Let's not forget the other research reports that have focused on people who are putting very little down on their home and pulling the equity out. Please don't forget when you look at this that there are many, many people in our country who have owned their homes since the 1950s and '60s, and sometimes live in the same home in the same neighborhoods, and the value of this property has exploded. It is allowing them, and baby boomers in particular, to liquidate that property and to take the money out and go somewhere else, to a place where there's a lower cost of living. So it's not to be underestimated.

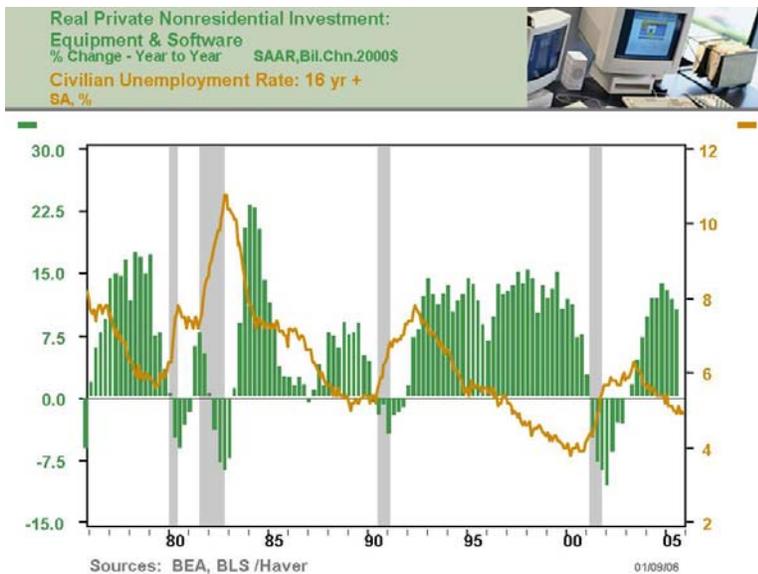
I show you the change in private inventories only to reinforce the fact that when we are in the midst of a mid-cycle growth recession, we tend to have some contraction (see Chart 20). We had one quarter of contraction in 1986, we almost had one in 1995, and we may have already had one in the fourth quarter of last year, which, again, is another piece of evidence that leads me to believe that we may have just lived through our mid-cycle slowdown in this particular expansion.

Chart 20



I want to show you a picture [in Chart 21] of the nonresidential investment spending in equipment and software, just to drive home the point that I expect that capital spending will be a driver of economic growth for the remainder of the decade. This, again, is due to Dale Jorgenson's thesis that we have capital deepening going on, and companies will continue to be upgrading software and hardware and figuring out ways to use the Internet to be more efficient.

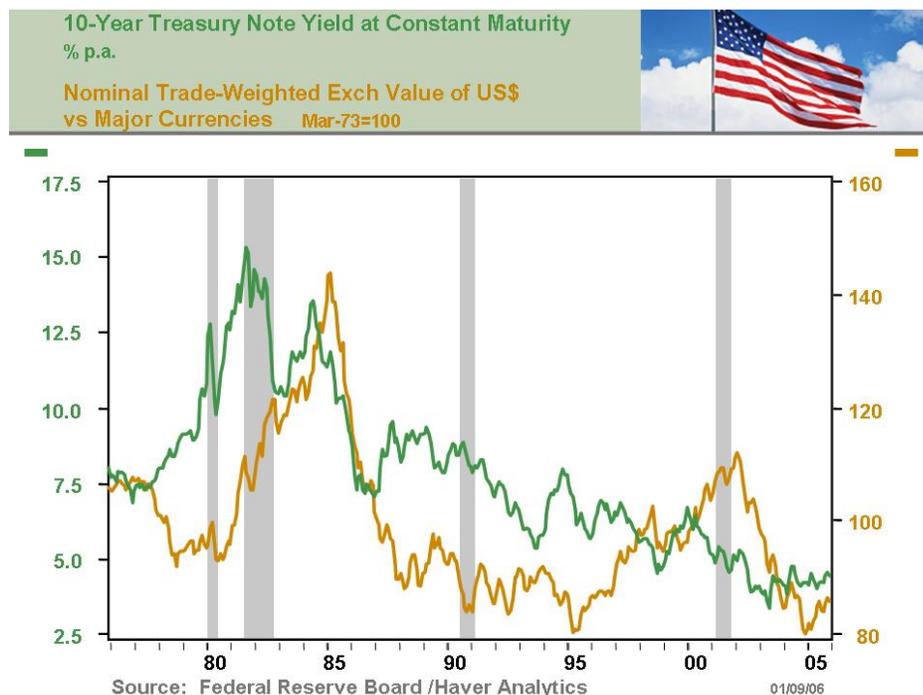
Chart 21



Of course, the big mystery is why the dollar hasn't broken down, given such a large current account deficit, and for that I'd have to turn to Catherine Mann's thesis from the Institute of International Economics on the co-dependency between the United States and China.

Last year, I had a really good call on the dollar. When most people were bearish, I predicted that the dollar would not break through the old 1995 low, primarily based on President Bush's aggressive agenda for structural reform of health care and Social Security, and also by looking at this chart and concluding that we wouldn't break through, on a trade-weighted basis, the old 1995 low on the dollar. [In Chart 22] is a picture of the trade-weighted dollar versus the 10-year note, just to drive home my thesis that the dollar will probably stay in a range of 82 to 84 this year. That's, again, the trade-weighted dollar. If my guess is right, we could have low, sustainable long-term interest rates for a long time. And by that I mean between 4 and 5 percent indefinitely for the remainder of the decade.

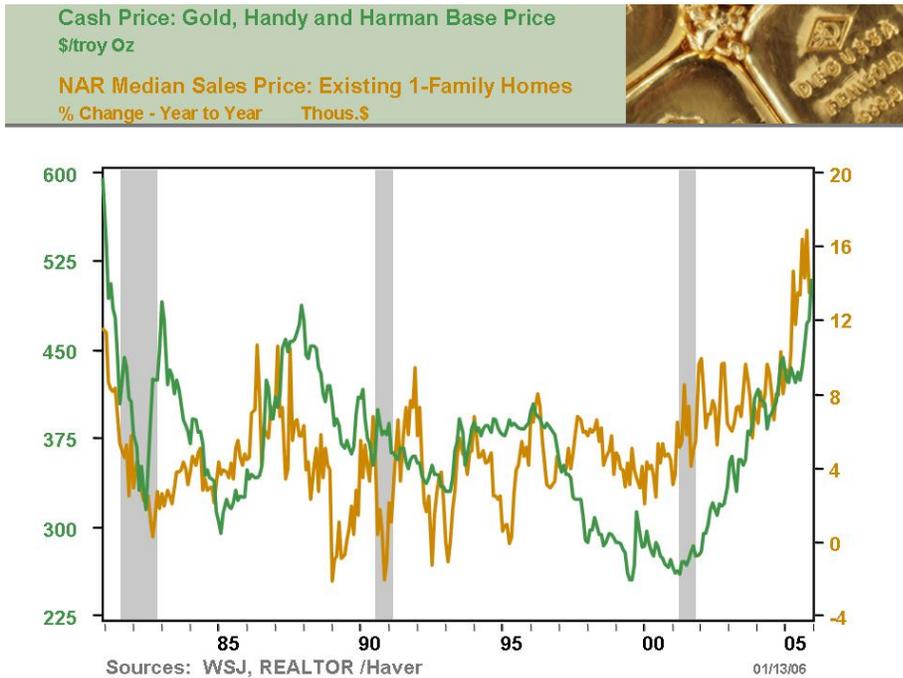
Chart 22



Why? Because we're living in a disinflationary environment. Why? Because the Chinese continue to buy our long-term debt. Why? Because they're not going to disenfranchise themselves of U.S. securities for diversification of portfolio. The adjustment will be at the margin.

And I want to conclude with two pictures on gold. Tim Geithner, at the NYABE [New York Chapter of the National Association for Business Economics] last week, referred to puzzles in asset prices and how asset prices are increasingly figured into the making of monetary policy. And gold is always signaled when there's inflation. Back in 1987, it told us there was inflation in real estate and in stock prices (see Chart 23).

Chart 23



So if Milton Friedman is correct that inflation is now and always a monetary phenomenon, and it's signaled through gold, you have to wonder, where is the inflation? So I put it against industry home prices. Clearly, we've had inflation in home prices. Again, I would paraphrase that home-price inflation as being not broad-based across the country but in specific markets.

And, again, this chart shows gold against the S&P 500, just to drive home the point that gold is signaling that there's inflation somewhere (see Chart 24).

Chart 24



One of the things that Greenspan said at the Jackson Hole conference—and I want to leave you with this thought, because I think it's a good one—is that during the last two decades, 25 years or so, we've lived through what has been a period of rolling bubbles, with money moving in and out of asset classes, bubbles forming when the values in that asset class become overvalued, then moving out to a different asset class.

So it has been a period of extreme flexibility in the economy. And I think that Greenspan's remarks at Jackson Hole are apropos to what we're dealing with here today. If we can maintain an adequate degree of flexibility, some of America's economic imbalances, most notably the large current account deficit and housing boom, can be rectified by adjustments in prices, interest rates, and exchange rates, rather than through more wrenching changes in output, incomes, and employment.

And I think that's a particularly good thought to end with, because I think we can stop asset price inflation, the one that we're experiencing right now, without it actually impacting the real economy. Instead, let it fall on the broadest shoulders in the financial markets, where they can clearly absorb it.

I'll conclude there. Thank you.

MR. BROWN: Thank you, Kathy.

I thought what we would do is defer the questions to the end. If you'll save your questions up, we're going to have plenty of time at the end for a good back and forth between the panel and the audience.

That was a very comprehensive overview of the economic picture, and now I'm going to turn to Art McMahan.

MR. McMAHON: Thank you very much, Rich. It's a pleasure to be here. I appreciate your invitation to join the panel. And I think my presentation will actually echo some of the things that you said earlier. You mentioned that we have a lot of discussions and share our views, and that may be reflected in some of the echoing that you're going to hear today.

And I'll also amplify some of the points that you made, including the idea of the rolling regional recessions.

I'm going to focus on three main things. First, I'm going to focus on where we are now and dig into net interest income. I would like to illustrate how important changes in margins can be and how they drove earnings in the last recession and right after the recession.

And then, obviously, there is the issue of housing. I think I have to talk about housing, because it has been the big driver for both bank earnings and assets. I will also take a look at what has happened in the past, picking up on the theme of rolling recessions that Rich mentioned in his opening remarks.

We have not seen a decline in national home prices for quite a while, but we have seen some regional corrections in home prices. And I'd like to take a look at some of the areas where we've seen that kind of correction. I will especially focus on California in the early 1990s, where we had a lengthy period with an impressive nominal decline in prices. I will take a look at what happened to banks that were operating in California at that time.

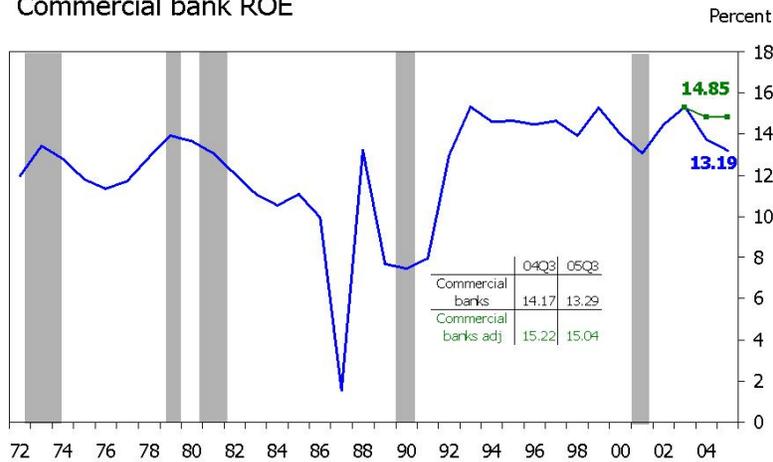
And then finally, since the theme is scenarios for the next recession, I want to spend a little bit of time talking about the main factors that are likely to be affected if we do see a significant slowing in the economy. And, again, I think you'll see that I will echo some of the points that Rich made.

Turning first to earnings, here is our chart illustrating commercial bank return on equity (see Chart 25). It is similar to the chart that Rich showed you before, though I would ask you to focus on the fact that earnings over the last decade or so have been extremely strong relative to the previous period. From the early 1990s on we've had a series of years of very strong earnings, consistently higher than the preceding 20 years.

Chart 25

Bank earnings remain high

Commercial bank ROE



Source: Integrated Banking Information System (OCC)

* 2005 data as of September 30, 2005. All other data as of year-end. Shaded areas represent periods of recession. Adjusted ROE estimates ROE level without merger accounting effects on income and equity.

[Chart 25] includes two green dots in the right upper corner. They represent our attempt to adjust the return on equity for the accounting treatment of two big mergers that happened in 2004. Those mergers affected the equity reported at some of the big banks, so they affect the aggregate numbers as well. So when you make that adjustment, you see that there's been some decline in ROE, but it's pretty modest. Earnings continue to be quite strong—just under 15 percent after that adjustment—for the system as a whole.

And in the little inset [for Chart 25] you see the quarterly numbers—the third quarter of this year compared to the third quarter of last year. And it's a similar story: a modest slowing, but continuing, very strong earnings. Obviously, that puts banks in a good position.

I want to spend a minute or two going through some of the dynamics of net interest income, because it is the single biggest item for bank earnings for most of the banks. I want to break down the components, one of which is the price—the net interest margin, measured on total assets.

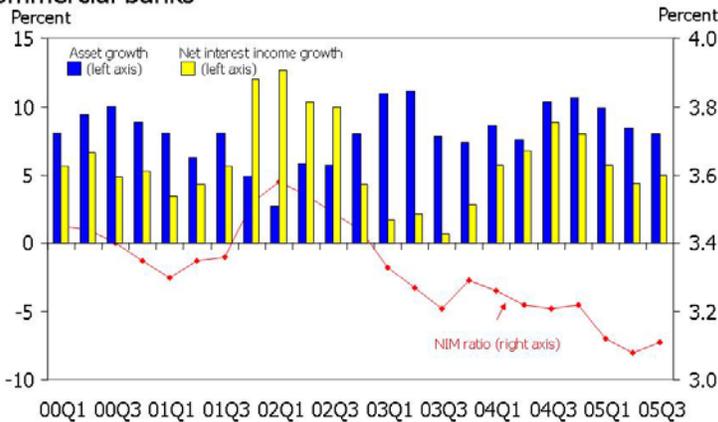
We had a pick-up in the net interest margin in late 2001 and into 2002, and it stayed up throughout most of 2002. The economy was weak then, and the Fed's response led to a decline in short-term rates. This translated into a widening of spreads. A big increase in core deposits also helped to support margins. The resulting shift in the net interest margin was a major positive for net interest income.

Since that time, however, margins have been quite weak. What has offset the drop-off in margins has been very strong volume growth for commercial banks over the last three years or so (see Chart 26). The 20-year average rate of asset growth for the industry is about 6 ¼ percent. Commercial banks experienced a drop-off in asset volume growth to below-average levels but a

pick-up in net interest margin when the economy slowed in 2001. This led to a big increase in net interest income, as the impact of the margin gain more than offset the deceleration in asset growth. As the economy subsequently strengthened, these forces reversed, and we've had an increase in volume and a drop-off in margin since then. The continued expansion of net interest income has largely been dependent on banks maintaining above-average levels of asset growth.

Chart 26

Strong asset growth has supported net interest income as margins remain weak
Commercial banks



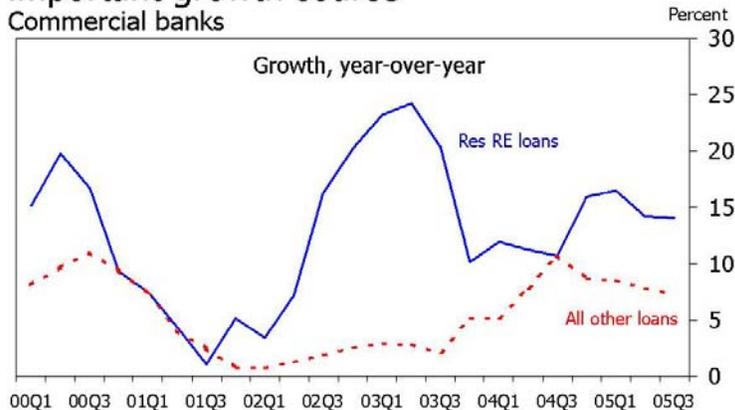
Source: Integrated Banking Information System (OCC)

Growth calculated from the year-ago quarter.

And as Kathleen mentioned, a lot of that volume has come from housing. Since the middle of 2002, residential real estate loans including home equity and single family mortgages have consistently grown at double-digit rates (see Chart 27). In contrast, the expansion of other loans has been less robust. I should mention that securitization does affect these numbers a bit, although it does not alter the fundamental story. If you combine mortgage lending with securitization activity, the main impact is to smooth the quarterly growth numbers out a little bit.

Chart 27

Residential real estate remains the most important growth source



Source: Integrated Banking Information System (OCC)

Growth calculated from the same quarter a year ago.
Residential RE is 1-4 family and home equity.

5

Given the importance of housing, both to the economy and to banks, I want to take a minute or two and talk about what past experience tells us about the housing market. First of all, as Kathleen I think implied, there is an expectation that most analysts expect a cooling of the market, but not a steep drop in nominal home prices. However, a number of analysts believe that regional housing price declines are possible. We're going to take a look at some declines we've seen in the past—especially in California, where we've had a series of years when home prices fell. These declines don't occur in a vacuum; they tend to be associated with a contraction in the economy and some loss of employment. The home price decline tends to exacerbate the contraction once you have that kind of economic weakness develop. Once significant home price declines occur in an area, they tend to last for a while, and it takes some time to get back to the home price level that existed at the peak and for employment to recover.

We will also look at the experience of banks in California during this multi-year period of home price decline. What we will discover from a review of their experience is that it wasn't the residential real estate loan book that deteriorated the most. Rather, it was other kinds of lending. I think that speaks to the connection of housing to the overall economy. If the housing market is weak, the region is likely to experience softness in the job market. That means there's less small business activity going on, and there's more stress from C&I [commercial and industrial] loans and other parts of the portfolio.

Let us turn first to where we've been. When we look at the OFHEO home price index for the last 30 years, since the inception of the index, we see that we've never had a decline in nominal prices nationwide (see Chart 28). But we have seen periods in which home price growth has been positive but rather weak, as in the early 1990s. This is similar to what many analysts are projecting about home prices over the next few years.

Chart 28

Consensus is for flat home prices assuming a benign macro environment



Source: OFHEO, Economy.com

Forecasts for 2006, 2007 from Economy.com, Jan 2006

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For example, projections from Economy.com, which are consistent with the views of a lot of analysts, suggest a deceleration of national home price gains to 5 percent in 2006. In 2007, they expect price growth to drop to about 1.9 percent.

So the general expectation is for a flattening of home prices but not a steep decline in average nominal home prices. We know that even though we've never had a national home price decline, we have had a series of regional home prices declines. This relates to the concept of rolling regional recessions.

A number of major MSAs have had significant drop-offs in nominal home prices in the past. For example, both Houston and Los Angeles have experienced 20 percent drops in nominal prices (see Chart 29). In New York home prices dropped by over 10 percent in the 1990s.

Chart 29

Past major regional home price declines have lasted for a while and been associated with weak economies

MSA (Home price peak)	Home price		Employment	
	Price decline: peak to trough	Time to climb back to price peak	Job losses peak to trough	Time required to climb back to original job peak
Boston (88:4)	7.2%	6 yrs	12.7%	8 yrs
New York (89:1)	10.0	11	10.9	11
Los Angeles (90:3)	21.4	11	10.0	8
San Francisco (90:1)	3.8	7	7.3	6
Houston (84:1)	23.1	7	8.3	3
National	No decline	--	--	--

Source: OFHEO, Bureau of Labor Statistics/Haver Analytics

Home price peak is the quarter in which peak occurred.

8

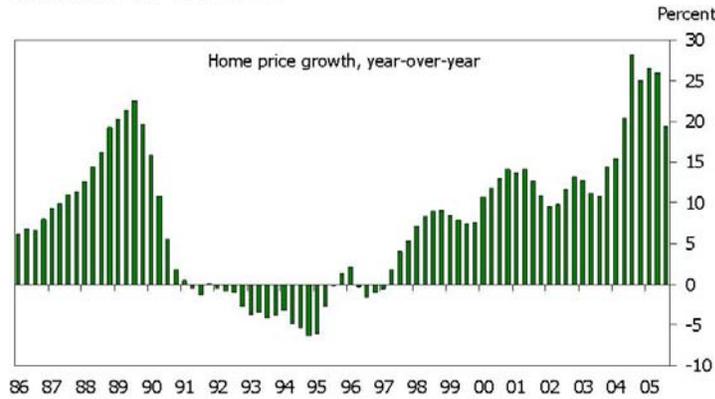
Moreover, it took a long time for prices to get back to their previous peaks in those MSAs. For the three MSAs already mentioned plus San Francisco and Boston, which also experienced periods of nominal price decline, it took at least six years before home prices got back to their previous highs.

As I mentioned, home price declines tend not to occur in a vacuum. Typically, the regional economy is weak as well. That was certainly true in the case of all five of the MSAs that have been mentioned. All of them experienced sizable job losses at the same time that home prices were falling. In all five cases, there was a loss of over 7 percent of total jobs. Again, as with home prices, it took a while for those jobs to be completely recovered.

The message we take from this is that you can experience regional corrections in home prices even though you're not seeing a decline on a national basis. You could argue that California has been the poster child for this situation. I noted that both Los Angeles and San Francisco have experienced nominal home price declines. The problems were broader than that, and beginning in 1991 and lasting until 1997, nominal home prices declined statewide in California (see Chart 30).

Chart 30

CA experienced multiple-year home price decline in the 90s



Source: OFHEO/Haver Analytics

Quarterly data through 2005Q3.

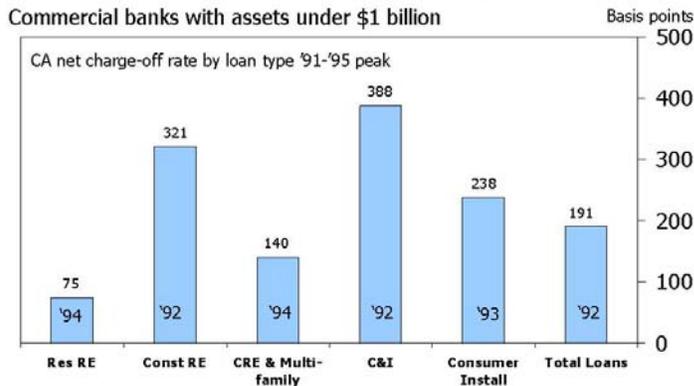
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Those home price declines were associated with a slowdown in the overall California economy. The state lost about 700,000 jobs, many of them the result of defense spending cutbacks. At the end of the Cold War, the federal defense budget was trimmed, and this particularly affected California.

Let's take a look at what that meant for banks in the state at that time (see Chart 31). We confine our attention to commercial banks in the state with assets under \$1 billion. The idea is to avoid including banks that were operating in multiple states, for which it would be hard to accurately determine where their exposure was concentrated.

Chart 31

California's residential loans performed better than other credits during housing slump



Source: Integrated Banking Information System (OCC)

Res RE is 1-4 family and home equity.

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Let's look at the peak charge-off rate by loan type for the period of time when home prices were under pressure. One interesting finding is that residential real estate, which includes one-to-four family mortgages plus home equity loans, had the lowest rate of charge-offs. Charge-offs were much more significant in C&I loans, which for banks of this size are generally small business loans, as well as in construction, commercial real estate and consumer installment loans. These results reinforce our sense of the connection between the housing market and the overall economy and points to the likelihood that weakness in one is likely to spill over into the other.

Next, I wanted to talk briefly about the impact on banks if we do see a significant slowing in the economy. I must say, it was very comforting hearing your perspectives on things, Kathleen. It sounds like it's a pretty good environment for banks going forward.

MS. CAMILLI: Well, I'm usually an optimist.

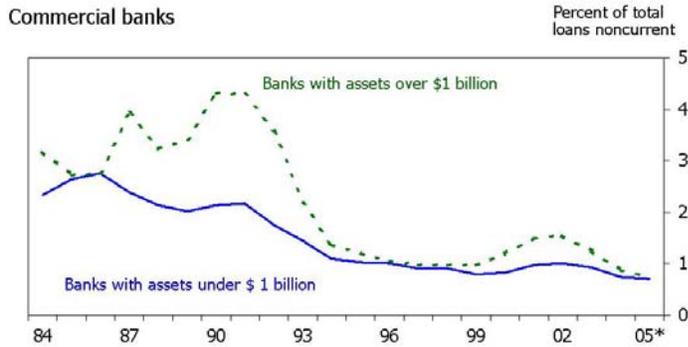
MR. McMAHON: Just in case things turn out to be a little bit grimmer than that, let's take a look at what that might mean for banks. And again, I'll think you'll hear echoes of what Rich said. There are several factors that could impact banks in a slowdown, the biggest factor being deterioration of credit quality and the impact that has on provision expenses for banks.

You also could expect to see a slowdown in volume growth when you have weakness in the economy, and that would probably also hit non-interest income as well. But there are some positives, typically from softer short-term interest rates. Margins may well increase in this environment, as we discussed a few minutes ago. As we noted, during the last recession the improvement in margins provided a big boost to net interest income during the last slowdown, more than offsetting the impact of slower asset growth. You would also see gains on the sale of securities and other holdings that are sensitive to interest rates and rise in value as interest rates fall.

First of all, banks are now at all-time lows for levels of non-current loans (see Chart 32). So we're starting with a very strong credit quality position for the banking industry. The most recent recession bumped non-currents up a bit, but they remained well below levels seen in the early 1990s. It is also important to note the distinction between large banks and smaller banks with respect to the deterioration in credit quality in past periods of economic weakness.

Chart 32

Noncurrent loans are now at all-time lows



Source: Integrated Banking Information System (OCC) * 2005 data as of September 30, 2005. All other data as of year-end.

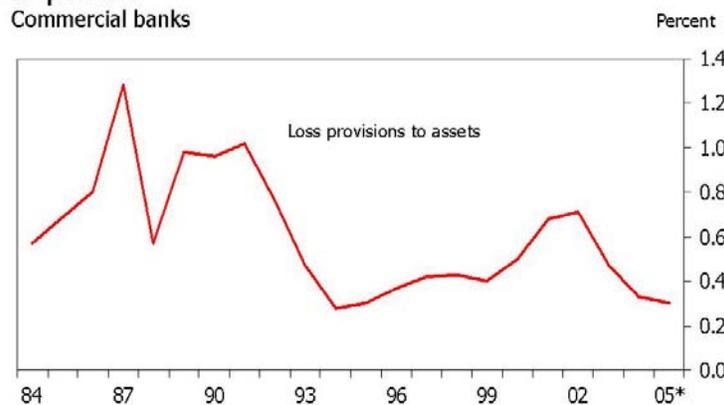
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Large banks tend to have much bigger swings, and the 2000 recession and deterioration of credit quality was heavily concentrated at the larger banks.

So we're starting in a better position than we were, let's say, in the late 1980s. That's the good news. The bad news is that banks have been able to hold down provision expenses because credit quality has been so strong (see Chart 33). That has been a key positive for them in terms of their earnings. That also means that loan loss provisions are likely to go up if there is any fall-off in credit quality.

Chart 33

This allowed banks to reduce provisioning expense



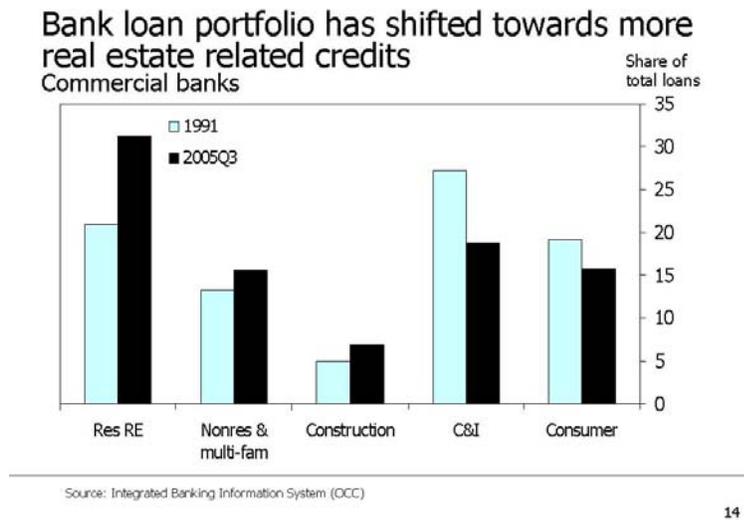
Source: Integrated Banking Information System (OCC) * 2005 data as of September 30, 2005 (annualized). All other data as of year-end.

13

In fact, in the last quarter, dollar provisioning rose for the first time in about three years. Many analysts believe we are at a turning point and provisioning will start to be a drag on earnings going forward, even if the economy continues to perform well. If there's a deterioration in credit quality, it will require more of an increase in provisioning, which will, of course, cut into net income even more.

However, there has also been a significant shift in the portfolio over the last 10 or 15 years that may act to benefit banks overall credit quality (see Chart 34). Not surprisingly, the importance of housing has increased.

Chart 34



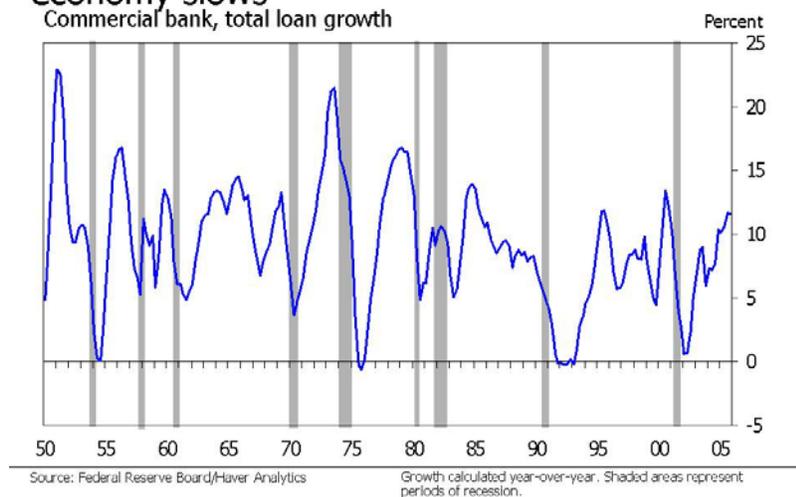
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Residential real estate lending is now about 30 percent of total loans for commercial banks. That is an increase of 10 percentage points. And C&I loans are now under 20 percent as a share of the loan portfolio. So there has been a shift away from what have been relatively riskier loan categories. If it continues to be true that residential real estate loans outperform business lending in an economic downturn, this shift will help limit the need for increased provisioning at banks.

And then, to echo a point that Rich made earlier, there does tend to be a drop-off in the volume of lending and asset growth generally when the economy slows (see Chart 35). This has been the pattern in recessions going back to 1950.

Chart 35

Bank loan growth tends to tail off when economy slows



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As I mentioned, there are some positives in the picture. If you do get a softening of the short-term rates, the yield curve will get steeper. Usually core deposits pick up in that kind of environment, and that allows banks to pay off some of their wholesale, more expensive borrowing. Both of those things tend to increase margins. As I noted earlier, the rise in the net interest margin provided a big boost to net interest income during the last recession and its aftermath.

And, finally, there are gains on interest-sensitive assets if interest rates come down as economic activity slows. That doesn't tend to fully offset the credit losses in most cases but does provide a cushion.

So, in summary, we're in a very strong position. Earnings have been high, and banks are in a good position now. Housing has been the big driver of growth. Analysts do think there's a possibility of some regional housing corrections. If so, the message is that it's not just the residential loans that banks need to worry about. It's other kinds of loans as well.

If the economy does slow sharply, which is certainly not the consensus here, we will see negative pressure on bank income. Fortunately, banks will be starting from a very strong position, and some of the impact will likely be cushioned by softer interest rates.

I'd be happy to answer questions.

MR. BROWN: Art, thank you.

The last two presentations have really highlighted the importance of the housing sector to the economic outlook and the banking outlook, and that's something that Meredith Whitney is going to comment on in her presentation. I would like to mention that her recent paper, "The State of

the U.S. Consumer: 10 Percent at Risk," really made an impression upon the staff here at the FDIC. A copy of the paper is in your folder. We are glad that she accepted our invitation to come and tell you about it today.

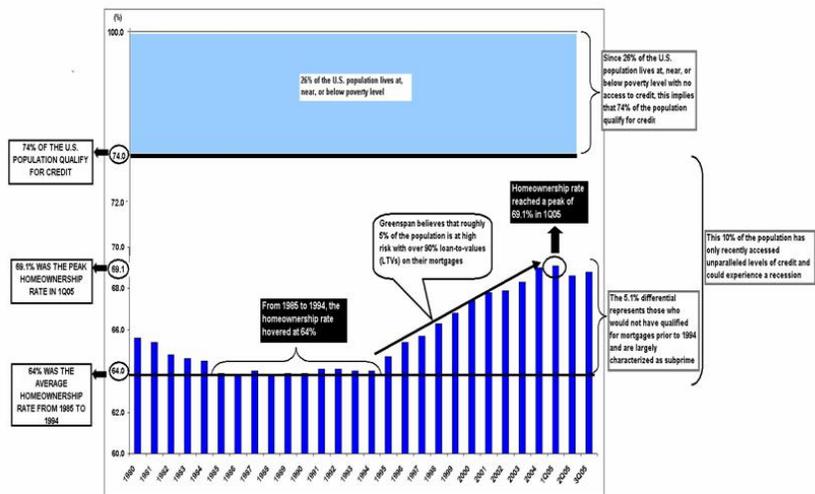
With that I'll turn it over to Meredith.

MS. WHITNEY: Thank you. That's music to my ears, because I analyze banks and financial institutions for a living, and I place particular focus in my career on the state of the U.S. consumer. It's of key interest to me, and, particularly because of what I do for a living, it's an enormous honor to present to all of you.

So with that said, the paper that we put out in October was really inspired by an analysis of Hurricane Katrina. So many Americans saw a side of the U.S. economy that I don't think many of us had seen before or had really digested as far as how it fit into the total U.S. economy. It challenged me to drill down deeper into the analysis of who was at risk in terms of any type of consumer softening, or a potential recession. My conclusion was that I believe 10 percent of the U.S. economy will actually experience a segmented consumer recession over the next 24 months (see Chart 36).

Chart 36

We Believe There Will Be a Segmented Consumer Recession Over the Next 24 Months That Will Impact 10% of U.S. Consumers



Source: US Census Bureau, Federal Reserve, and CIBC World Markets



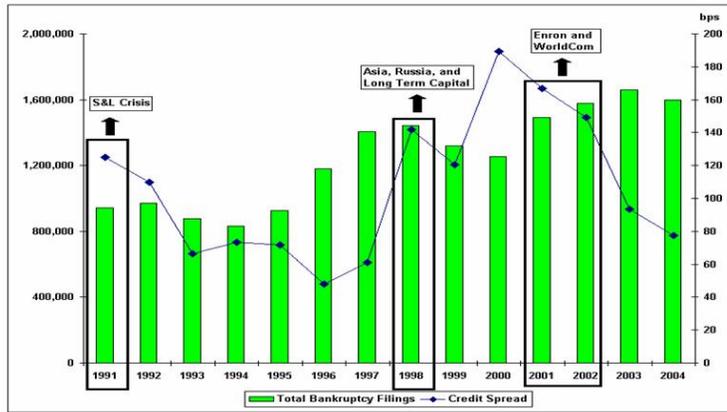
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Looking at [Chart 36], which we'll get back to in a second, my analysis divides the U.S. consumer market into three main buckets: those who have had newfound access to credit, those who have had a long-time access to credit, and those who, over the past decade, have had access to unprecedented amounts of credit.

The underlying thesis to our recession scenario is that an interruption in liquidity always precedes a recession (see Chart 37). You can look at the S&L crisis, especially, or, as Kathy did, to the Long-Term Capital Management crisis or to the Enron/WorldCom bankruptcies in 2002. We believe that the next interruption of liquidity will affect the consumer market specifically.

Chart 37

Our Underlying Thesis is That A Strain in Liquidity Will Be the Catalyst to This Consumer Recession



* Credit spreads are derived from the spreads between the 5-year Treasury and 5-year BBB-rated Corporate Bond Index.

Source: Administrative Office of the US Courts, Bloomberg, and CIBC World Markets



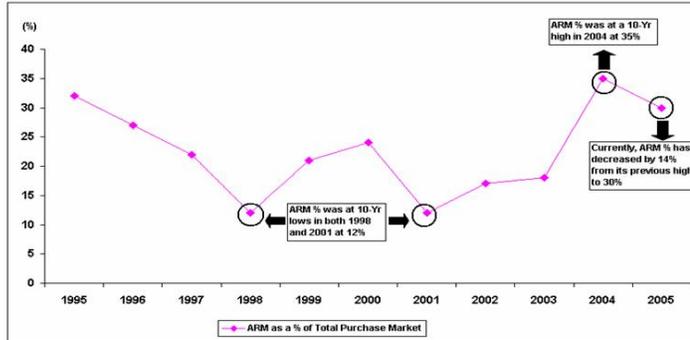
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Factors that will precipitate this event could include a continued rise in the fed funds rate, a capital strain caused by the ratings agencies, or the change in minimum payment guidelines for the credit card market.

Let's start with higher rates. We believe that the Fed is surgically targeting the housing market in its efforts to raise rates (see Chart 38). Let me just give you an example. Thirty-five percent of the housing market's new purchase originations in 2004 were adjustable-rate mortgages. Now, 30 percent of new home originations are adjustable-rate mortgages.

Chart 38

Fed Has Raised Rates 13 Times Over the Past 18 Months: The Fed is Surgically Targeting the Housing Market



¹ For 2005, the figure is an estimate from the Mortgage Bankers Association

Source: Federal Housing Finance Board, Mortgage Bankers Association, and CIBC World Markets



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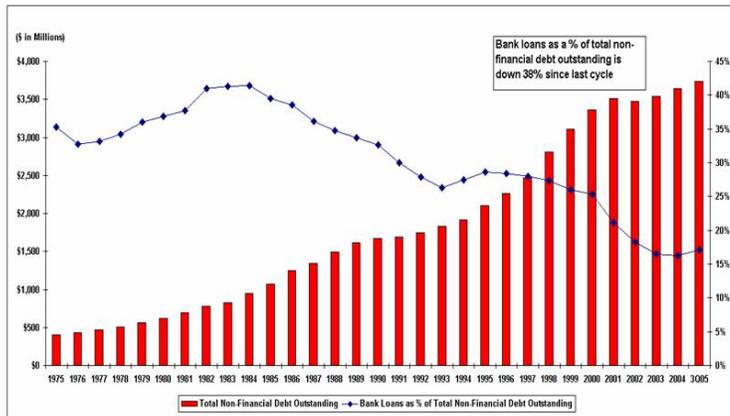
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Just from an anecdotal perspective, if you know short-term rates are rising, and long-term rates are declining or at least staying static, wouldn't it be prudent to lock in a long-term mortgage? Why is 30 percent of the mortgage market still booking into adjustable-rate mortgages? Because we believe they couldn't otherwise afford to squeeze themselves into a home or they're squeezing themselves into a more expensive home for affordability factors.

I want to take out one major portion of the economy first, which is the corporate market. And this is not incongruous to what my esteemed colleagues have said already in the presentation. Today, 17 percent of corporate funding comes from banks. The vast majority of corporate funding comes from the public market. It's more efficient to go directly to the public market, and it's more cost effective. So this is a 38 percent decline since the last cycle. So we think that higher short-term rates have much less of an impact on the U.S. corporate market than they ever have before, and that Greenspan and the Fed governors are well aware of this (see Chart 39).

Chart 39

Higher Short-Term Rates Less Meaningful To U.S. Corporations This Cycle



¹ Total non-financial debt outstanding is the sum of bank loans and public market debt (includes corporate bonds and commercial paper)

Sources: Federal Reserve and CIBC World Markets

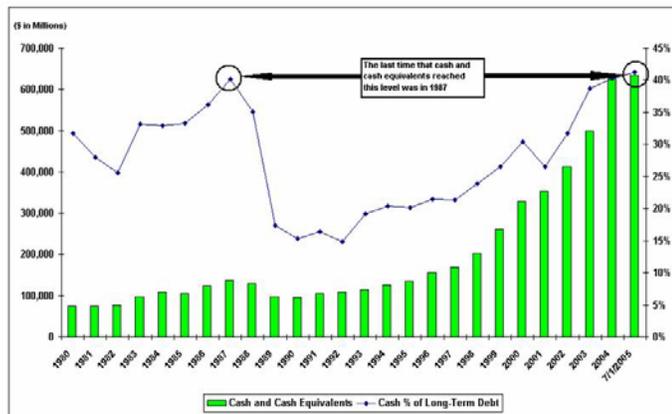


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In addition, as you look at cash levels on U.S. corporate balance sheets, they have never been better (see Chart 40). Cash as a percentage of long-term debt is at 42 percent. The last time they were at this level was when they were about 40, 41 percent in 1987. And as you remember, those were the days of Michael Milken, leveraged buyout fever, and tremendous consolidation. Because what are you going to do with piles of cash? You're going to invest, and you're going to consolidate. You're going to invest, and you're going to buy. Extra cash—go shopping.

Chart 40

Non-Bank Corporations Have the Best Balance Sheets in 25 Years



Sources: Standard and Poor's and CIBC World Markets

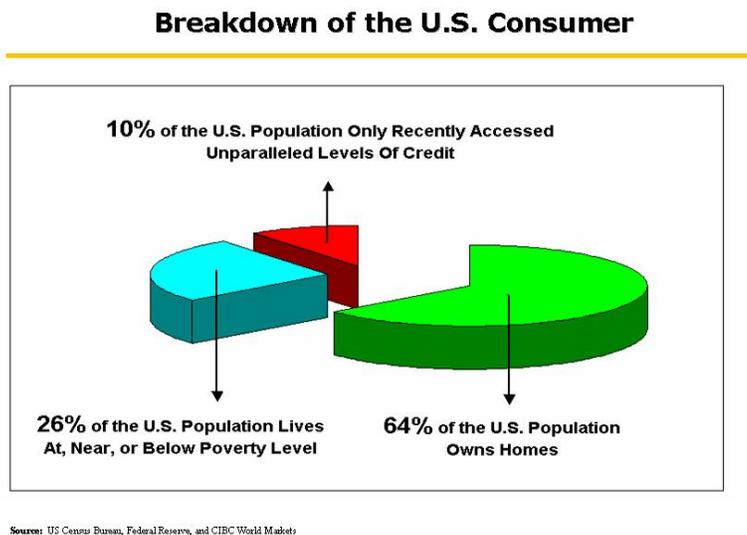


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Okay. So the idea here is that U.S. corporations will probably extend a 14-month cycle of capital investment, and you will probably see near-record merger and acquisition levels this year. So in our analysis, we're not worried about the corporate market at all. It was exclusive of exogenous events that will actually put risk-based pricing back into the spread market. We don't see that, believe it or not.

At any rate, let's focus on the consumer, because this is really what our analysis is about. And this will be probably the most important thing I say today. You have to look at three separate buckets of the U.S. consumer market: those with traditional, good quality credit; those folks who have not had any access to credit; and then this segment of the market that has had new access, new and unprecedented access to credit (see Chart 41).

Chart 41

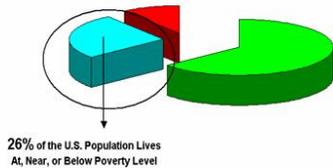


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I want to focus on this statistic, which is pretty alarming. We estimate that 26 percent of the U.S. population lives at, near, or below the poverty level (see Chart 42). The number for the poverty level is living below \$23,000 a year, and that covers 13 percent of the population. We go on to estimate, actually, that 26 percent of the population lives at, near, or below the poverty level. Now, these guys have no access to credit.

Chart 42

26% of the U.S. Population Lives At, Near, Or Below the Poverty Level



- We estimate 26% of the U.S. population lives at, near, or below the poverty level, and has no access to credit.

Source: US Census Bureau, Federal Reserve, and CIBC World Markets



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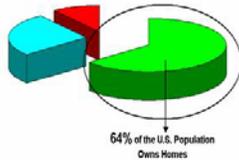
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Now, my estimate seemed alarming when I came up with it. I've been told by leading consumer lenders that actually my estimate is low. It could be as high as 30 percent or higher. So what you need to do when you look at the U.S. consumer is extract this portion from the total pie at risk, because these guys don't have access to credit. These are the folks that shop at dollar stores primarily, where they use cash and food stamps for purchases. Dollar stores are nearby. They're not driving a car, so they're less impacted by commodity prices, in terms of prices at the pump, and, as a result, have not gotten wealthier or poorer over the last decade; they've stayed steady-state. And if you look at a lot of the dollar store results, they have essentially flatlined, which supports this point.

The next segment of the market, which we also extract from this pie, is the 64 percent of the market made up by what I will call "fat cats" (see Chart 43). Sixty-four percent was the traditional homeownership rate as far back as the 1970s to about 1994. This is as far back as the data show, so 64 percent is what we really call the "natural rate of homeownership."

Chart 43

64% Has Been the Long-Term, Over-The-Cycle Level of Homeownership in the U.S.



- 64% was the average homeownership rate from the 1970s to 1994 and represents “GOOD QUALITY CREDITS” to traditional lenders.

Sources: US Census Bureau, Federal Reserve, and CIBC World Markets



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Of course, you know that 69 percent of the U.S. population today owns homes. Greenspan, in his paper on the mortgage industry in September, targeted 5 percent of the U.S. population at risk in terms of very low equity levels in homes. Sixty-nine minus 64 is 5 percent. So these are the new, first-time homebuyers, which we see at risk.

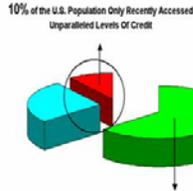
Kathleen also talked about how amazing it has been if you have owned a home over the last decade. If you own a home, you've been sitting on the single-greatest wealth creator in the market, as opposed to equities or bonds. Homeownership has had a 10-year rate of return of around 8 or 9 percent. And last year, as you know, home prices grew by 10 percent.

In terms of equity in homes, it has declined by 9 percent. This is average equity in homes. So, in 1990, the average equity in homes was 60 percent; today it's 56 percent. So we think, actually, that has created a barbell between those folks who own their homes outright versus the new buyers, who have put very little down on their homes.

Now, [Chart 44] shows the 10 percent of the population that we're talking about, that we believe is at risk. They have had access to unparalleled levels of credit.

Chart 44

10% of the U.S. Population Has Only Recently Accessed Unparalleled Levels of Credit



- This 10% of the population has only recently accessed unparalleled levels of credit and could experience a recession.
- Greenspan believes that roughly 5% of the U.S. population is at high risk with 90% of their loan-to-values (LTVs) on their mortgages.
- The remaining 5.1% differential represents those who would not have qualified for mortgages prior to 1994 and are largely characterized as subprime.

Source: US Census Bureau, Federal Reserve, and CIBC World Markets



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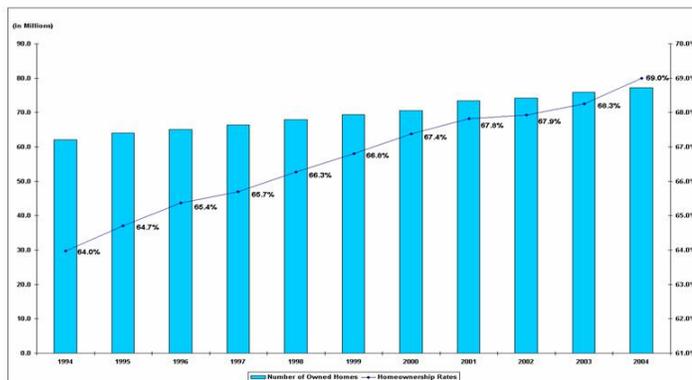
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In 1994, the standards through which an individual could qualify for a home really relaxed considerably. And from that time, 15 million new homeowners were created in the United States. So it's not just a matter of money going from the equity market into the housing market. It's also the fact that 15 million new households became homebuyers, and an increased demand versus supply clearly sent home prices higher. So an expansion of 8 percent in the size of the market cannot be overestimated in terms of its impact on the market (see Chart 45).

Chart 45

After Underwriting Standards Relaxed in 1994, Homeownership Expanded Almost 8% or By Over 15 Million Households

We Believe This is the "At Risk" Group



Source: Internal Revenue Service, Federal Reserve, Freddie Mac, OFHEO, and Census Bureau

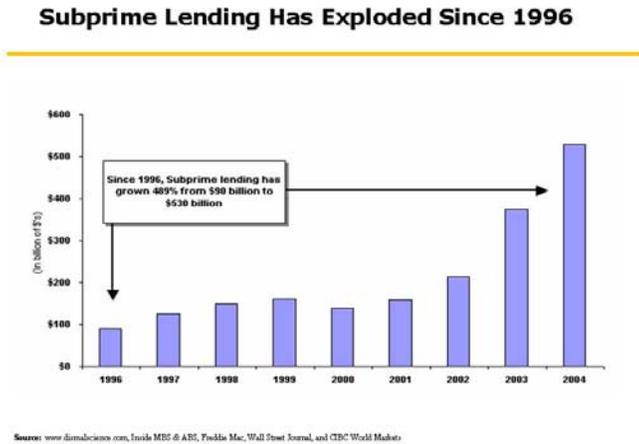


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Since 1996, subprime lending has grown five-fold (see Chart 46). And these numbers actually may be understated, as a lot of large banks are reticent to admit that they actually have any type of subprime loans. Instead, it has been called non-prime, or non-traditional. What this shows is a five-fold expansion in the subprime lending volume.

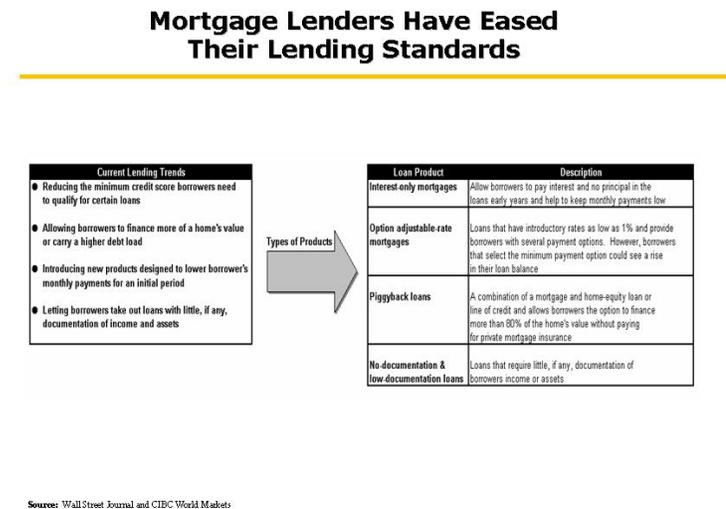
Chart 46



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[Chart 47] is an example of how lenders have loosened their underwriting standards. One obvious element that you are well aware of is lower documentation, in terms of credit scoring and also in terms of proof of income, proof of employment, *et cetera*.

Chart 47

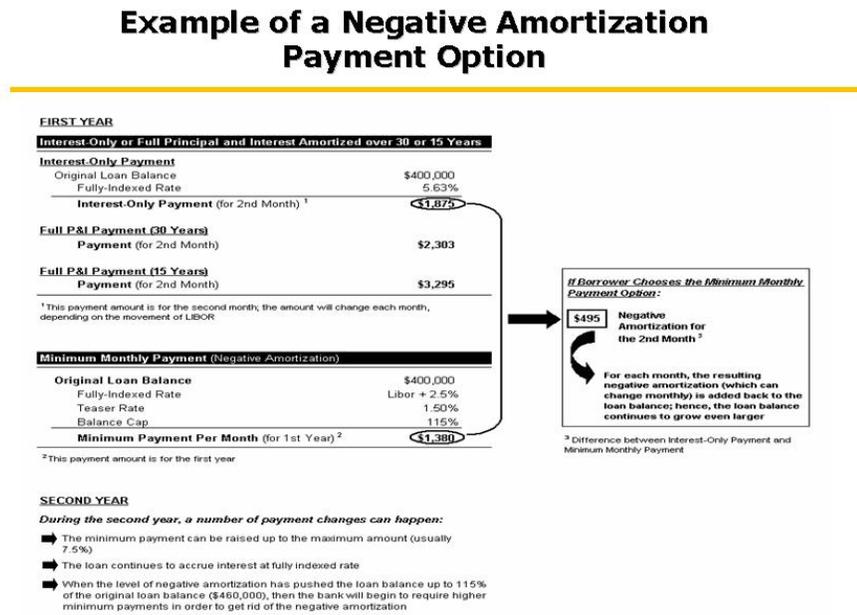


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It's interesting that the National Association of Realtors recently came out and said that 43 percent of all new homes are purchased with no money down. You wouldn't have heard about that prior to 1994. So the ability to access credit has expanded dramatically.

Something I referenced a little bit earlier relates to the hazards of adopting an adjustable-rate mortgage and the negative amortization that is now associated with a lot of the adjustable-rate mortgage products (see Chart 48).

Chart 48



Source: HSH Associates and CIBC World Markets



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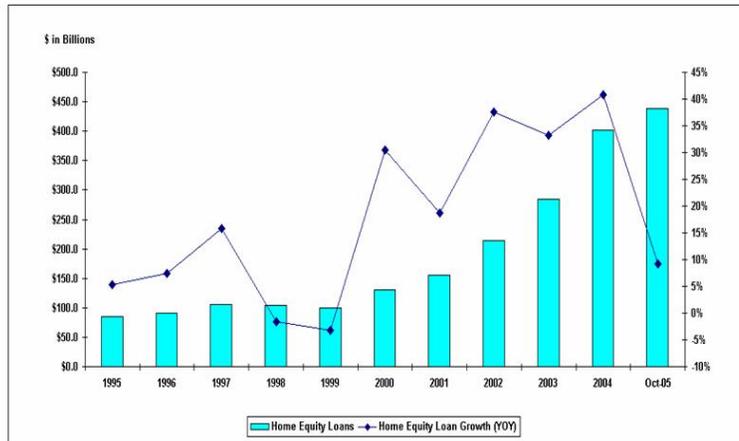
Again, I want to talk about why someone would do this to themselves, why someone would take on an adjustable-rate product when you know short-term rates are rising. That doesn't make any sense. The only conclusion that you can draw from this is that, otherwise, these homes would not be affordable to these consumers.

Home equity, which has really been the consumer's ATM over the last certainly five to ten years, has enabled a lot of this affordability. A lot of the new home mortgages that are originated come with piggyback home equity loan features.

Now, I want to point out that [Chart 49] is only talking about revolving home equity lines. The total home equity number is closer to about \$800 billion. So a lot of this home equity is acting like sort of a new version of a credit card for consumers.

Chart 49

Home Equity Loan Growth has Outpaced Most Loan Products Growth at Banks



Source: Federal Reserve and CIBC World Markets



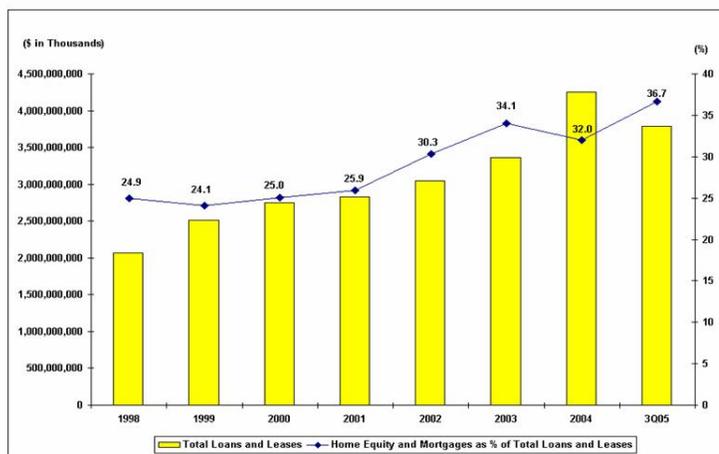
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This is something that Art discussed previously. Bank exposure to mortgages and home equity is now at peak levels, having risen dramatically (see Chart 50). If you look at 1998, the total exposure to mortgages and home equity loans was about 25 percent. In the last quarter, the third quarter, it had risen to 37 percent.

Chart 50

Bank Exposure to Mortgages and Home Equity is Now at Peak Levels



Source: SNL DataSource and CIBC World Markets



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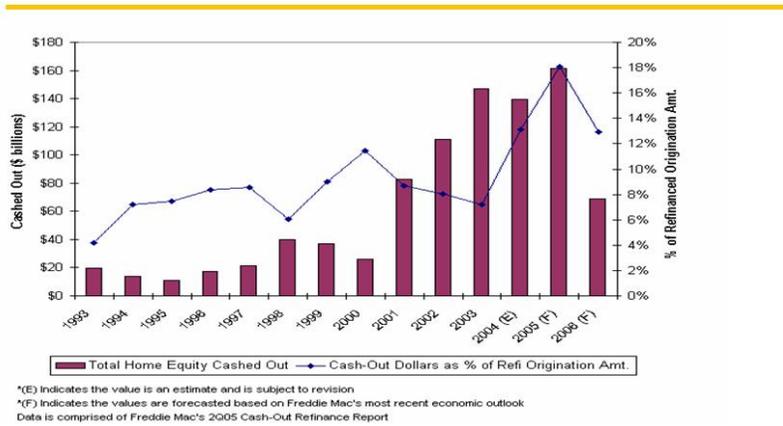
Now, there are a couple of reasons why this is the case. Many U.S. companies have managed to carry on without needing banks. We showed this in the slide that shows that only 17 percent of corporate funding is delivered by the banks.

The banks need to originate some product. One of the biggest problems for the bank industry today is tremendous deposit growth and very little asset growth. So you have institutions that are liability-rich and asset-poor, and they're going to put anything on the balance sheet they can. For the past five years or so, mortgages have provided the best vehicle for asset growth and any type of margin gain whatsoever—although we would also argue that that margin has been increasingly challenged over the last year.

There are a couple of things that we see happening to banks over the next 24 months, really triggered by liquidity strains. And I want to talk about the liquidity strains for the mortgage sector in two parts. First, you have a liquidity strain because of what I will call the denominator effect, which is caused by higher short-term interest rates (see Chart 51).

Chart 51

The Denominator Effect: Shrinking Portfolios Will Create Higher Loss Ratios



Source: Freddie Mac and CIBC World Markets

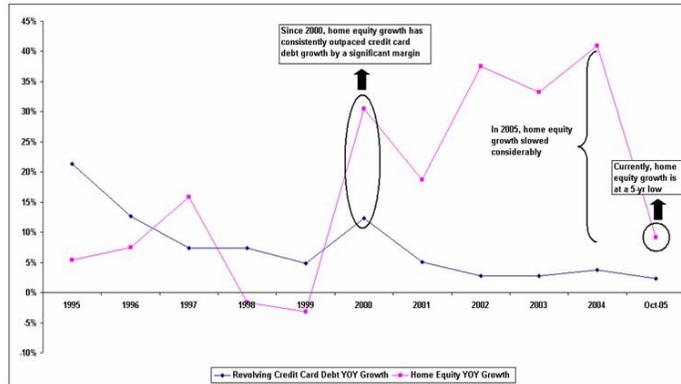


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Over the past two months, home equity lines have declined for the first time in almost a decade because the yield spread between the 3-month LIBOR and prime has inverted (see Chart 52). This is undesirable for consumers, and it's undesirable for banks making these loans.

Chart 52

The Denominator Effect: Shrinking Portfolios Will Create Higher Loss Ratios (cont'd)



Source: Federal Reserve and CIBC World Markets



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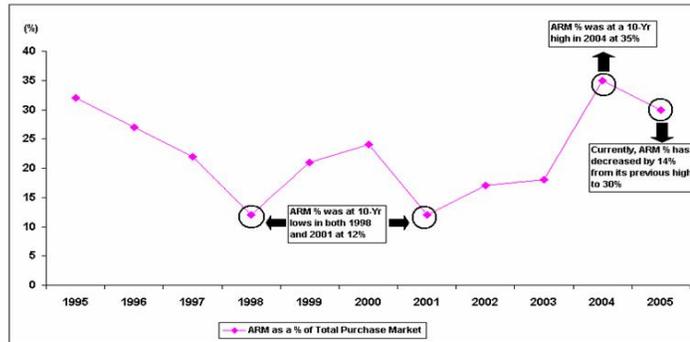
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So there is a liquidity squeeze for consumers as rates rise, which is related to the affordability factor. In 2004, as I said, adjustable-rate mortgages were 35 percent of total purchase originations. Today, they're 30 percent. And I can't emphasize enough that the vast majority of subprime purchases are coming through adjustable-rate mortgage products.

The second factor which is significant is that the ratings agencies have required higher subordination levels associated with subprime mortgage origination (see Chart 53). So it's less profitable for banks and independent institutions to originate these mortgages. In the second quarter, capital required against subprime mortgage originations increased by 10 percent. That's a lot of dough, and that's a big impact to profitability.

Chart 53

Shrinking ARM Market is a Prelude to Decelerating Subprime Originations



¹ For 2005, the figure is an estimate from the Mortgage Bankers Association

Source: Federal Housing Finance Board, Mortgage Bankers Association, and CIBC World Markets



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So what all of this creates, then, is smaller loan balances, and a smaller denominator makes your loss ratio become all of a sudden a lot higher, and your profitability become much more challenged.

We believe a shrinking adjustable-rate mortgage market is a prelude to decelerating subprime mortgage originations. Yesterday we saw that a subsidiary of First Franklin, which is one of the largest subprime mortgage originators, reported that it still has over 70 percent of its mortgage originations coming through adjustable-rate mortgages.

So as you see adjustable-rate mortgages decline in terms of total purchases, you will see subprime mortgages decline in terms of total originations. You already see declining home equity balances. You will begin to see declining mortgage balances.

The factor through which liquidity is challenged in the credit card market is the change in minimum payment guidelines, which prior to 2003 took the independent credit card lenders out of negative amortization.

In 2005, the OCC required all of the big banks to become compliant with negative amortization extraction in that, if you were a customer, you had to start paying down your principal. You could no longer continue to contribute to your debt burden each month. Well, that's a liquidity squeeze for the consumer, and we'll get into that in a second. It also shrinks balances at the credit card lenders.

I'm going to give a little background here. We believe credit cards have become the loan product of adverse selection, based on the expansion in homeownership (see Chart 54). The age-old rule

by banks is that 80 percent of your losses come from 20 percent of your borrowers—the so-called “80/20 rule.”

Chart 54

Credit Cards Have Become Loan Product of Adverse Selection

- **80/20 Rule: 80% of Losses Come From 20% of Customers, Those Customers Who Don't Own Homes**

(\$ in Billions)

Year	Credit Card	% Change	Home Equity	% Change
1995	\$443.5	21%	\$84.7	5%
1996	\$499.6	13%	\$91.0	7%
1997	\$536.7	7%	\$105.4	16%
1998	\$576.5	7%	\$103.7	-2%
1999	\$604.5	5%	\$100.4	-3%
2000	\$678.9	12%	\$131.0	30%
2001	\$713.3	5%	\$155.5	19%
2002	\$732.7	3%	\$213.9	38%
2003	\$752.8	3%	\$285.0	33%
2004	\$781.1	4%	\$401.5	41%
Oct-05	\$798.9	2%	\$438.2	9%

¹ Revolving Home Equity data from H.8 Assets and Liabilities of Commercial Banks in the U.S.

² Credit card data from G.19 Seasonally Adjusted Consumer Credit

Source: Federal Reserve and CIBC World Markets



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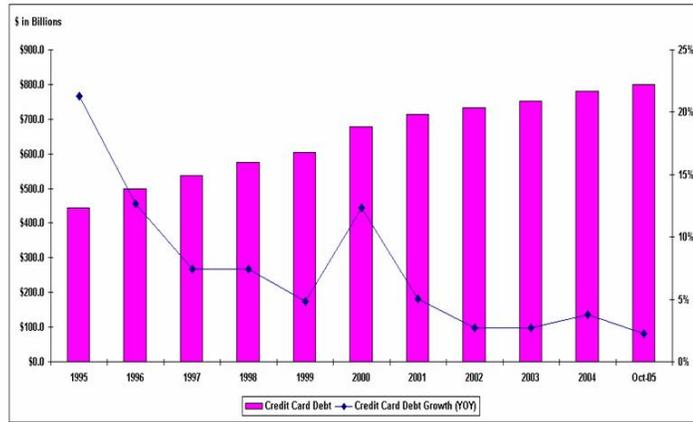
Well, if you've owned a home over the past decade, particularly over the past five years, and you all of a sudden refinanced your mortgage, you've either paid down your credit card debt or you've refinanced your mortgage and taken a home equity line out, which has tax advantages just like a mortgage does. It also carries a lower interest rate, because it's collateralized. So we believe that the home equity market has cannibalized the best credit card customers, leaving those folks who have revolving balances, which is about 40 percent of all U.S. credit card customers, as the folks to be worried about.

Now the growth in the credit card industry is in single digits. We're in an environment that's flush with cash. People have either not wanted to maintain revolving debt or they've transferred it, if they could, into home equity loans, or they're simply not revolving debt at all.

So what is left in the credit card industry is those folks who have nowhere else to go, those folks who are playing credit card roulette, because it is certainly a source of borrowed funds. And I want to point out that those folks have been plied with seven times the rate of capital than the standard credit card industry. In other words, the growth in the subprime market has exceeded the growth in the traditional credit card market by a factor of seven times (see Chart 55).

Chart 55

Credit Card Debt Growth Has Expanded Largely Through Subprime Growth



Sources: Federal Reserve and CIBC World Markets



CIBC
World Markets

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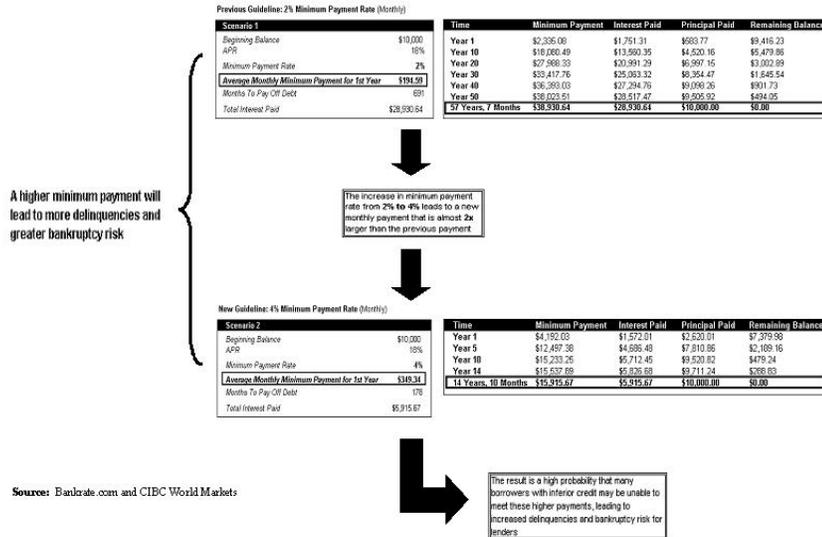
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Why is minimum payment compliance such a significant factor? Just as you've heard about mortgage payment shock that occurs when your mortgage reprices, this is effectively a repricing of a consumer debt burden, a monthly consumer debt burden. And this change in minimum payment, at least in the example that we provide with a \$10,000 beginning balance, increases a consumer's minimum payment by almost a factor of two times.

By the end of 2005, everyone except for J.P. Morgan and Citi (who are two of the top three largest credit card issuers in the United States) was compliant with the minimum payment guidelines (see Chart 56).

Chart 56

Liquidity Catalyst: Minimum Payment Compliance: JPM and C Still Not Yet Compliant



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So let's say, for example, you're a Capital One credit card customer. Your minimum payment has already been revised to meet the new guidelines, as of 2003. Let's say you have a Capital One card, on which you're paying a higher minimum payment as required by Capital One.

Suppose you've also got an American Express card. Similarly, those issues apply. Then you also have a J.P Morgan card and a Citigroup card. And by 2006, when these payment standards are adopted across the board, all of a sudden your credit card payment doubles on two of your cards. And most likely, in the subprime sector, you're not just carrying two cards. You're carrying several cards.

This is a massive liquidity squeeze. At a very minimum, it will shrink the growth in balances at the credit card issuer level. So, as I said with the denominator effect, these loan balances are going to shrink for Citi and J.P. Morgan, because customers are paying more of their debt off. At another level, your liquidity as a consumer is also strained, and that is what we believe will set up higher defaults at the bank issuers.

Now, Art had talked about how overall credit losses for banks are at a 15-year low. And from a corporate perspective, we think credit spreads are going to remain very narrow for an extended period of time because of the savings environment that we're in (see Chart 57).

Chart 57

Credit Losses Most Likely Will Worsen; Current Credit Losses Are at 15 Year Lows

In 2001 and 2002, NCOs-to-Avg. Loans ratios were at peak levels since 1990

Company Name	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	3Q05	
REGIONAL BANKS																		
AmSouth Bancorporation	0.78	0.75	0.54	0.25	0.27	0.29	0.55	0.40	0.34	0.40	0.48	0.82	0.75	0.60	0.37	0.23	0.21	0.18
BB&T Corporation	0.65	0.68	0.45	0.38	0.15	0.23	0.30	0.40	0.28	0.26	0.27	0.40	0.48	0.43	0.36	0.27	0.25	0.30
Commerce Bancorp, Inc.	0.41	0.58	1.06	0.88	0.29	0.14	0.25	0.13	0.08	0.08	0.11	0.19	0.18	0.16	0.19	0.11	0.09	0.19
National City Corporation	1.16	1.18	0.75	0.49	0.34	0.38	0.45	0.43	0.35	0.41	0.44	0.61	0.69	0.62	0.34	0.31	0.25	0.28
PNC Financial Services Group, Inc.	2.12	2.20	1.61	1.64	0.37	0.29	0.34	0.51	0.80	0.30	0.26	2.02	0.56	0.56	0.27	0.10	-0.31	0.12
SunTrust Banks, Inc.	0.83	0.88	0.66	0.46	0.23	0.22	0.40	0.36	0.32	0.35	0.18	0.37	0.56	0.37	0.22	0.13	0.12	0.26
LARGE-CAP BANKS																		
Bank of America Corporation	0.89	1.84	1.24	0.52	0.33	0.38	0.53	0.54	0.71	0.54	0.60	1.14	1.06	0.85	0.65	0.67	0.66	0.85
Citigroup Inc.	NA	NA	NA	NA	NA	NA	1.10	1.10	1.52	1.57	1.54	1.86	2.17	1.92	1.65	1.36	1.26	1.98
JPMorgan Chase & Co.	1.85	NA	NA	1.86	1.07	0.57	0.60	0.50	0.78	0.87	0.67	1.06	1.74	1.00	1.00	0.82	0.76	0.84
U.S. Bancorp	0.73	0.79	0.74	0.56	0.20	0.21	0.40	0.63	0.53	0.61	0.69	1.29	1.17	1.03	0.62	0.53	0.43	0.45
Wachovia Corporation	0.68	1.48	0.86	0.57	0.54	0.45	0.64	0.64	0.47	0.51	0.56	0.66	0.69	0.39	0.16	0.08	0.09	1.10
Wells Fargo & Company	1.55	1.37	0.83	0.54	0.54	0.71	0.94	1.08	1.24	0.79	0.76	0.93	0.76	0.62	0.54	0.71	0.55	0.63

Source: SNL DataSource and CIBC World Markets



CIBC World Markets

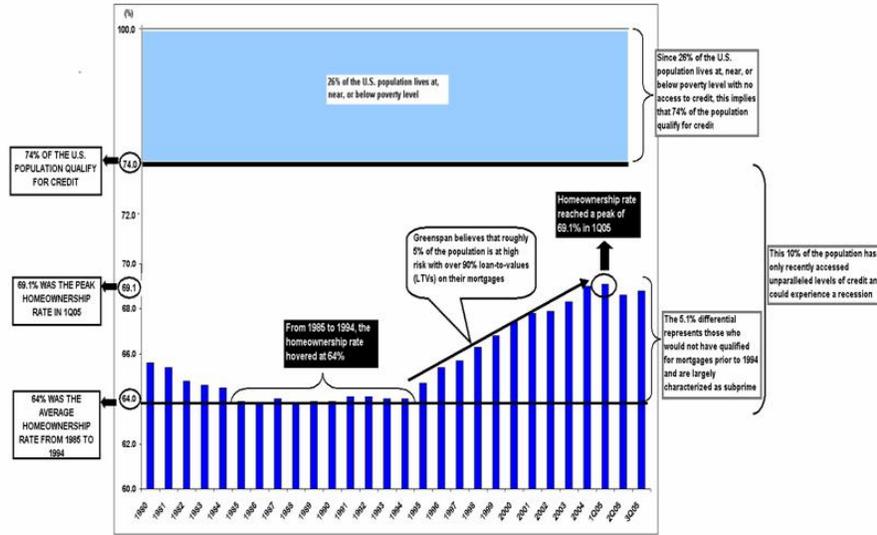
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And credit losses would have to deteriorate significantly from today's levels to have a major impact on banks. We estimate a 40 percent increase in credit losses would still not have a meaningful impact to earnings for a lot of these banks. But for banks like Citi and J.P. Morgan, where they have 20 to 25 percent of their earnings coming from credit cards, higher losses are going to create a very challenging environment for them to show earnings growth.

So I want to summarize all of this, and I hope I didn't go too quickly. I'm a New Yorker, so I've been told I speak quickly. If you segment the consumer market into three very important buckets, then take out the folks that have no access to credit and take out the folks that are what I would call the fat cats—who already had access to credit, have gotten a lot richer because they've owned homes, and may have taken on more debt but remain well positioned from a financial balance sheet—then we can really focus on the 10 percent of consumers that are at risk (see Chart 58).

Chart 58

Consumer Credit in America



Source: US Census Bureau, Federal Reserve, and CIBC World Markets



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Five percent of the U.S. consumer market is made up of folks that are new homebuyers. This is the 5 percent of the U.S. consumer market that Greenspan is worried about, that have such little equity in their homes that if home prices decline in any way, they owe more than they own. That's a bad situation, particularly as most of these guys are in adjustable-rate mortgage products, and they are going to be squeezed as rates continue to rise.

Then we add the other 5 percent of households, including the folks that are playing credit card roulette, who are going to be squeezed by this minimum payment guideline, who have never had access to credit before, who have gotten a lot richer over the past decade, and are about to get a lot poorer because of liquidity strain.

So when you look at this 10 percent of the market which we qualify as subprime, what does it mean to the total economy at large? Well, 40 percent of discretionary spending is done by the top 20 percent of the consumers. We don't think the subprime market correlates to the top 20 percent of the consumers.

The way I refer to this market is that these are probably the Wal-Mart customers. It's one level above the dollar stores, and probably one level below a Target store. And you've already seen spending at Wal-Mart contract somewhat. Many of these numbers can be confirmed by just looking at general trends in retail sales. You see no blip whatsoever at Nordstrom's and Neiman Marcus, all of the higher-end retailers, that have really been carrying a lot of the consumer

spending. So we think consumer spending in a finite portion of the market will slow, and credit deterioration will increase dramatically in a finite segment of bank portfolios.

Again, we think 10 percent of the U.S. consumers will definitely go into a segmented recession, but the rest of corporate and consumer America looks pretty good.

MR. BROWN: Meredith, thank you.

Question and Answer Period

MR. BROWN: You've heard from the experts about the economic outlook. You've heard that the U.S. economy is performing well. The banking industry also has been performing well. But both are very dependent on housing, very dependent on the consumer sector, and, clearly, there are some issues to consider there.

I'd like to turn it over to you, the audience, now, and start taking your questions directed to the panel. Please stand up if you want to ask a question, and identify yourself, and we'll direct it to the panel.

MR. NOTHAFT: Hi. I'm Frank Nothaft with Freddie Mac. I have a couple of questions for Kathleen. You had mentioned investment from China in U.S. fixed-income assets helping to keep interest rates low, and that would continue to keep rates low. I was wondering if you could quantify that. How much lower are rates now because of it? And what's the risk to U.S. interest rates if foreign investment funds pull out of the dollar?

My second question is about the steepness of the yield curve. You were talking about the 3-month T-bill to a 10-year spread, and you mentioned the market is expecting a rate hike on January 31, and perhaps another one in the spring. So if we have another rate hike at the end of the month, that will pretty much give us flat yield curve. And if there is another one in the spring, we'll have the inverted yield curve. How does that tie in, then, with your outlook for economic growth?

MS. CAMILLI: Thanks—two great questions. As to the first one, on China, I have no idea how much it [China's investment in U.S. fixed-income assets] is influencing the long end of the yield curve. I don't think even policymakers have an idea. The reason I borrowed Catherine Mann's analysis on co-dependency is because, in reality, our trade deficit and our current account in trade deficit have expanded because we are just importing large amounts of goods from China.

We are offshoring manufacturing to produce goods there. They are exporting to us, we are importing from them, and we are in a co-dependent relationship with them, which is causing our trade deficit to expand.

We had a tiny revaluation of the yuan this summer. We probably will have a few more revaluations of the yuan. But the fact is that the Chinese have large dollar reserves. Those dollar reserves have to be invested in the U.S. Treasury market.

I can remember back in the 1980s when there was a big fear that the Japanese would divest themselves of U.S. Treasuries. Instead, the Japanese went on not only to own U.S. Treasuries in their portfolio, but then to own U.S. corporate bonds and U.S. mortgages.

So I suspect that the same thing will happen with the Chinese, that they will eventually go on to diversify the portfolio into other U.S. fixed-income assets, and then also to diversify into other markets. I'm not anticipating that that will be a big problem for the dollar.

Your second question was on the shape of the yield curve. Yes, I really found Tim Geithner's speech last week to be fascinating on this. The speech was predominantly on asset prices and the impact of asset prices and the feedback loop on monetary policy. I think he was in some way telegraphing what the Fed plans to do here using the recent UK example. And in the UK, they did end up inverting the yield curve. They raised rates to 4 $\frac{3}{4}$ percent before the housing market really started to roll over and roll over rapidly, at which point they backed away from the tightening and lowered rates a quarter of a point, and then left them there and left the yield curve inverted.

So when I read Tim's speech, and I thought about the UK example, I thought to myself, the Fed is doing the same thing. This is why Greenspan keeps saying, "We can invert the yield curve, and it doesn't mean that a recession is coming."

We can invert it, and maybe we need to invert it, to stop the acceleration in home prices, but it won't necessarily be a signal of a recession. And I think that may be accurate, because my other indicators don't indicate a recession. The S&P 500 doesn't indicate a recession. The University of Michigan does not indicate a recession.

So I think that may be what's happening. It would not be my preferred course of action, and I said so in my remarks. My preferred course of action would be to just pause right here at the January 31st meeting, put some language in the text that says we've decided to pause here to assess the outlook, and then, if it turns out that the economic numbers don't show some moderation in growth, then I would proceed with the tightening. But that might not be their preferred course.

Thank you for the questions.

MR. BROWN: Kathleen, does the dependence on foreign capital, the effect that it's having on long-term interest rates, and, presumably, home prices, does that represent a possible source of instability in the housing market if long-term interest rates should suddenly shoot up? What effect would that have on our housing market?

MS. CAMILLI: Well, I can't imagine what a challenge it has been for the Fed to conduct monetary policy in this environment, where normally when you start raising interest rates you get a backup in long rates, as the premium for inflationary expectations gets built in and causes long rates to rise.

That didn't happen this time around. Instead, long rates have stayed low, and I believe they've stayed low because of the perception of a low inflationary expectation, as well as the impact of foreign capital flows.

So I imagine it's especially trying for them, and it is with great difficulty that they're conducting monetary policy, which may be why they feel they need to invert the yield curve, to bring about the desired result of moderation in home prices.

MR. BROWN: Other questions?

MS. MARCUSS: Rosemary Marcuss, Bureau of Economic Analysis. This is a question for Mr. McMahan. I found your point that the local housing markets often reflected the job market a very interesting one. As we're trying to measure the GDP, we're always asked, "Well, where are the effects of Hurricanes Katrina and Wilma? We know they're sort of in there somewhere."

I'm wondering whether, through the banking system, you've been able to perceive any noticeable effects of such a large destruction of house values that occurred such an unusual way.

MR. McMAHON: I think when Katrina first hit there was an expectation that it would be a big drag on economic activity, and it certainly destroyed a lot of wealth in the area, which is slowly being rebuilt.

But in terms of housing activity, it probably extended the housing boom a little bit, by creating more demand for home construction in that region. And certainly one would imagine that would lead to a bidding up in the cost of resources, which are already pretty fully employed in home construction, and, therefore, would be positive for home prices, at least temporarily, as contractors bid construction workers and others away from Florida and other places to come to the Gulf and start to rebuild.

I'm not sure that the rebuilding in New Orleans, for example, has started yet on a big scale. I'm also not so sure about southern Mississippi, but I think that Katrina will end up being a positive for housing for a while, although, obviously, the wealth destruction is a negative on so many other fronts. But my general sense is that most of the forecasts I saw were expecting a bigger impact from Katrina, in the third quarter at least, than actually occurred.

MS. CAMILLI: I also made an error in my forecast. I took down GDP for the third and fourth quarter, thinking it would have a bigger impact, and that turned out not to be correct.

MR. SEIBERG: Jaret Seiberg with the Washington Research Group. I have a question for Mr. McMahan and Mr. Brown. When you look at what a decline in housing prices could mean to the banking industry, do you explore how many of these exotic mortgages banks are keeping on their books, and how many they are selling off to the secondary market? And how does that affect your analysis?

MR. McMAHON: Well, first of all, it's not easy to get a complete account from looking at the numbers that are actually available, because while you get originations, and you get information on securitized loans, it's hard to get a really accurate picture of everything that's going on.

Clearly, banks are securitizing a lot of their mortgage assets. We have to get information about banks' exotic mortgage activities from our examiners in the banks, and we get that for the larger institutions. It's harder to collect it on the smaller institutions.

One thing I would say about exotic instruments, I think you do tend to see a concentration of activity here in the larger institutions and the more sophisticated institutions. And, one would believe that they have more sophisticated tools at their disposal to manage the risks. While we've talked about the increase in residential real estate exposure generally, we haven't spoken about the distinction between large and small banks.

And a lot of the increase in the one-to-four book, as opposed to the home equity book, has been in the large institutions. I think if you look at the growth rate of one-to-four lending at smaller institutions, it's going to trail significantly behind larger institutions. And I think for the exotic instruments, that's certainly the case.

And we have people in each of the large banks. The OCC has a resident team in there looking at what they're doing, looking at the risk management, looking at how they're handling these things.

MR. SEIBERG: Do you have any sense as to whether they are actively trying to securitize these?

MR. McMAHON: They are clearly doing a lot of securitization, and securitization decisions are based on a lot of factors, including the need for liquidity, whether the bank wants to make some other loans and is anxious to securitize a portion of its portfolio to get some funds to do that.

And I think there are different strategies among the banks about the kinds of instruments that they keep on the books, and the kind of instruments they securitize. But, clearly, there has been a pick-up in securitization that has contributed to the expansion of residential real estate financing, availability, and to activity generally, because while banks have increased their loan book by the amounts we've shown you, they've also securitized a lot of other assets, a lot of loans that they've originated. And so the risk is spread out. But I'm not sure I can tell you precisely what percentage of the exotic stuff goes off the books. I think that does vary bank by bank.

MR. BROWN: The large institutions are certainly active in originating the new mortgage products. Seven out of the top 10 mortgage originators are at FDIC-insured institutions or their affiliates, and they are very active also in the innovative mortgage products. This is also an area where mortgage brokers have been very active, and they have also been pushing the envelope as far as the terms of these loans.

The ability to securitize those has been, I think, one of the factors that has led to some of the growth in the market. The private-label MBS market has been shown to have a surprising appetite for these innovative structures.

Again, they have performed really admirably in what has been a fairly benign economic environment. I think there is some uncertainty about what the extent of payment shock would be under some higher interest rate scenarios, and I think that's one of the things that is going to test the marketplace going forward.

I'd like to throw out a question to Meredith about this also. You mentioned the possibility of liquidity shocks, and, clearly, the appetite for risk in the private-label MBS market has been something that has fueled mortgage lending. What do you think some of the triggers could be for cutting off some of these sources of private-label financing in the mortgage-backed markets?

MS. WHITNEY: For the originators, it will be the higher capital levels required, and this is insisted upon largely by S&P and other ratings agencies. So to get a deal rated you're going to put more capital against the deal.

All of this ties back to a prolonged environment of very low, long-term interest rates. In my analysis, China is less of a factor than many people would have you believe. Japan and Europe together represent over 70 percent of the buying power, and they've been very consistent sources of capital. And China has been very consistently 15 percent of the buying power.

So there's nothing that erratic about what China is doing, and there's nothing that erratic about what Europe and Japan are doing. But because rates are so low—for example, 10-year yields in Japan are around 1.5 or 1.6 percent—of course you're going to go where your money is better rewarded, to the U.S. market.

Everyone is looking for yield, so people are taking on more risk, and will take on these crazy exotic mortgage products, or at least portions of them, such as a senior sub-piece that they wouldn't have taken on otherwise, because they are so desperate for yield.

The rates we're seeing in Argentina, for example, are crazy. Throughout Latin America, we see interest rates and capital availability that we thought we would never see. The cost of accessing capital in Greece is virtually at parity with some of the leading European nations.

But it is difficult for investors to make some of these distinctions in this environment of very low rates when they are going after yield. People sometimes think, okay, things can't be that bad, and the greed almost overshadows anything else in terms of the buyer's demand for these assets.

What will place a limit on the issuance of debt is a more onerous capital requirement. It makes the deal that much less profitable.

MR. BROWN: Do you think it's more likely that a market event or a regulatory event will end this cycle?

MS. WHITNEY: A regulatory event.

Let's go back to the late 1990s. A former colleague of mine is in the audience, and we used to cover these somewhat shady mortgage companies that lent on home equity, which used to be a four-letter word, by the way. In the 1990s, this was considered the lowest-of-low type of product. It was almost like one of these Japanese loans that you get at a kiosk that no one wants to talk about.

What happened after the collapse of Long-Term Capital Management was that you had a systemic risk event that flooded the market, and credit spreads widened so dramatically that it became so much less profitable to originate these loans. And it basically shuttered over 50 companies that did this type of lending.

So it gets back to what happens with the rating agencies and the credit markets. And this is a very different environment now compared to the late 1990s. Then, we were going into a budget surplus, and so maybe more Americans were buying securities, and that's why long-term rates were lower. In this environment, it's because we're really in a global economy.

So I don't want to say it can't happen. That would be foolish. But I don't see an exogenous market event being as likely as I do a change in which the rating agencies continue to require more capital. That may mean fewer business failures, but it could bring a real slowdown in lending. And that could be a real Goldilocks-type of environment for the regulators.

MR. GABRIEL: Steve Gabriel with the FDIC. I'd like to address this to Kathleen. Do you expect that the U.S. economy will be able to continue to sort of shrug off future energy price spikes as it has in recent months, and especially in light of the fact that there is the expectation that we may be facing years, and maybe decades, of increased hurricane activity in the Atlantic?

And if your answer is yes, could you come up with a scenario where we would need a confluence of events in combination with an energy price spike in order to cause some problems for the economy?

MS. CAMILLI: Typically, energy price spikes in the past have had an impact on consumer spending. And I'm not so sure that they aren't having an impact now, given what we see is happening in fourth quarter GDP. Again, we don't need to look at the report.

To date, everyone has been impressed with the fact that energy has seemed to have had an impact on spending, but that could just be because housing prices has been going up so dramatically that they're offsetting whatever negative impact is coming from energy.

So I imagine once you take the price acceleration away in homes, and you're left with just \$70-a-barrel oil, you may have more of a negative impact. And you would only conclude that from looking at prior price spikes, because they usually do have a negative impact on consumption.

Now, with that said, how are they impacting the way businesses operate? Well, businesses seem to have built it in. I'm not talking about airlines, but businesses seem to have come to accept the fact that we may be dealing on a sustained basis with higher energy prices for the foreseeable future, and they're building that into their models.

But I actually think the consensus has been that energy prices would subside to about \$50-a-barrel oil this year. And, if anything, in the last couple of weeks it has proved not to be the case. So I think they do have an impact, yes.

MS. SCHTEVIE: Hi. I'm Helly Schtevie with CNBC. This question is for Ms. Whitney. I just want to clarify, how concerned are you by that 5 percent of the new homebuyers? Do you think they could have a ripple effect on the economy if the housing market were to cool significantly?

MS. WHITNEY: They will have a ripple effect on the economy vis-à-vis consumer spending, clearly. Is it as severe as it would be if it were a higher net worth demographic? As I said, the top 20 percent of earners spend 40 percent of discretionary spending.

I don't think it's going to have a profound effect on the economy, but I think it will certainly put pressure on bank earnings. This may raise another issue in terms of how difficult it is for you guys to analyze what percentage of banks are exposed to these exotic products. They don't want to admit it. They don't want to admit the exposure to subprime. It is a dirty word, particularly after what happened in the late 1990s.

So it will have an impact. I think it will ultimately slow down consumer lending, and it will put pressure on consumer spending. And as Kathleen could tell you, most economists are expecting a slowdown in consumer spending for 2006 anyway.

And I would imagine that at least some portion of it will be picked up by an increase in corporate spending, which I expect to be very robust. But I don't expect it to send seismic waves through the economy.

MR. BROWN: I would just add that I see somewhat of a parallel between the democratization of consumer credit that we saw in the mid-1980s where everyone got credit cards for the first time. What you saw there was a quintupling of personal bankruptcy filings between 1985 and 1994. And after that you saw a much higher loss rate on credit cards.

On the other hand, the credit card companies were able to manage and price that risk reasonably well. They managed to make a lot of money during that period of time.

It's not unreasonable, if you take that parallel, to think that this availability of credit that is now being given to residential borrowers, and the flexibility you're giving them to skip payments, could ultimately result in a higher loss environment in mortgage lending.

Again, we've seen low losses in recent years with this very benign set of conditions that we don't think is going to last forever. But the idea of moving to a higher loss environment seems to me to make sense.

Now, can the risk dispersal mechanisms of mortgage securitization help keep the risks manageable? Can the lenders and mortgage investors continue to make money during this

environment? I think there's a good case to be made there, but I think it ultimately remains to be seen.

MS. WHITNEY: It seems to me that rational pricing only comes after an event. People have to start losing a lot of money. You start with very aggressive credit card teaser rates, and then there is some type of credit blowup.

You saw credit card issuers aggressively marketing teaser-rate programs in the late 1990s into 2000. This tends to lead to a credit bubble, and then you finally have rationalization of pricing. And that is the cycle that we know very well.

Most of the credit card lenders at the time that you're speaking of were diversified banks. So they managed.

MR. KLUMPNER: Jim Klumpner, Senate Budget Committee. I wanted to go back to something that Kathleen Camilli said about the impact of energy price increases on firms as opposed to consumers. And you said they are factoring it into their models.

But it goes beyond just factoring it into your models. There was a real income loss somewhere there, for every firm in the United States uses energy, and so they saw their costs go up and may see further cost increases if the price of oil stays high. Somebody has to bear that income loss, whether it's a hit on profits, whether there's less hiring and wage growth, or whether it's passed on in the prices of non-energy goods, and, therefore, borne by consumers.

And what I'm trying to puzzle out is: Who took that income loss? A lot of people have focused on the consumer and the direct impact of the energy price increases on consumer spending, but was it profits? Was it wages? And I don't think you can make the case that it was passed through into non-energy goods prices.

So it seems like it should be either profits or wages. And what's the effect of that going to be?

MS. CAMILLI: Well, I think it's all of the above. I think if you look at the airline industry, it has been adversely affected; their profits have been affected. Last week I went to Phoenix, and I spent some time talking to two of the flight attendants. Their wages and income have been severely adversely affected by everything that has happened to the airline industry as a result of higher energy prices.

I was flying American, and they were telling me how American didn't hedge their exposure to higher oil prices. And so I think it's all of the above. I think profits have been affected and wages have been affected, and in some cases, in service businesses, prices have been affected. It has been passed through. It may not be passed along in a generalized way that we're used to seeing when oil price shocks impact profits, but it has had an effect.

There are really two tiers of price inflation, and I think sometimes when we listen to the press we get this impression that everything is all lumped together, because we look at the overall price measures as CPI and PCE and the GDP deflator. But if you're in a service business, you've been

adversely affected. You take that energy increase, and if you can pass it along in the final price of your product, you're doing that.

There's a whole other tier of prices—what I would call commodities or the Wal-Marts of the country—where they've either hedged it or they've figured out a way not to pass it on. So you have to put those two forces together. One is almost a deflationary force, and one is an inflationary force, and you put them together and you just don't get that much effect, at least in the price indices.

In real life, I think it's a different story. But in the price indices, because of the weightings, you just don't get much of an acceleration in inflation. But I think it is falling out in profits. And, certainly, people who operate at a minimum wage have been affected by higher energy prices. I don't think we couldn't conclude that.

MR. GONZALEZ: Hi. I'm Oscar Gonzalez with the FDIC. I have a question for Ms. Whitney. I've been analyzing the impact of Rita and Katrina over the population of the Gulf Coast that was affected. One of the findings is that, if you take the counties that were most affected by it, approximately 173 zip codes, the population there only earns about 65 to 70 percent of the average income for the United States. So it's a relatively poor population. So I think in analyzing exogenous shocks, you make a very good point in terms of understanding the segmentation that occurs as well.

The question I had is: When looking at events like the hurricanes in the Gulf Coast, for example, let's say the population that is low income is 10 percent—in numbers, that's a big number of people. But what percent of GDP would this group represent? I am wondering what the impact of future hurricanes in the Gulf Coast might be with a population that lags the rest of the country in terms of income as well.

MS. WHITNEY: To start off with, I'm not an expert on regional economies or regional demographics. I suppose I know a good deal to the extent that I spend a lot of time researching these issues. What I have found, particularly with Katrina, was that the city of New Orleans had a 20 percent unemployment rate. Fifty percent of the residents of New Orleans didn't have bank accounts. That's extraordinary.

And if you look at these facts you might conclude that the state of Louisiana has been the single-worst state for lenders in the country. Most major lenders don't have a large presence in Louisiana. Even so, a lot of the large banks have taken charges related to Katrina, which makes you scratch your head and say, "Wait a second—you weren't even in Louisiana, and California wasn't affected by Katrina. How do you come up with a \$500 million charge?"

But, anyway, that's just conjecture. You have to look at the segmenting and income levels to see who qualifies for credit anyway, and that's why you have to break down your 100 percent based on income levels. And I think the kimono was opened in terms of how incredibly poor that region was. What you see is that the bulk of the wealth resides on the two coasts. And then, as you move in, you see poorer and poorer areas. This was a dirty little secret that has not changed in a hundred years.

Many of the residents were government-subsidized and incredibly poor, and your analysis would have to ask who was borrowing there. A very small percentage of people in that area had actually borrowed or had any access to credit. And I would say that would be pretty consistent through the area. But the state of Louisiana is like a different country in terms of lending and regulation, and that's why many of the bigger lenders aren't there.

MR. GONZALEZ: So do you think this is why the effect of Katrina was not seen in the GDP figures? Do you think there is a time lag maybe that will show when insurance claims come up? Do you think it was because the population was low-income and didn't participate as much in the larger economy?

MS. WHITNEY: One guess on that. Look at the folks who did business in the state of Louisiana. Many of them were petrochemical companies, which have had amazing tailwinds behind them. They do business in Louisiana at least in part because it has the most relaxed environmental standards of any state in the United States.

So your one anomaly for that region might be in terms of what the commodity industries have contributed to overall GDP. Certainly the commodity companies have been the biggest stock market performers and have had the most extraordinary profitability across corporate America.

The other suggestion I would offer is that because you didn't have an enormous consumer buying capacity from that region, it didn't make a major impact. Let's suppose that Manhattan were closed down for that period of time, or Los Angeles or Chicago. Then you would see a bigger impact on GDP.

You're looking at really a very, very poor segment of consumers in New Orleans. A lot of those folks didn't leave town because they had no car or because they couldn't even afford a bus ticket. That limited the impact on the economy from a consumer perspective.

MR. BROWN: I would just point out also, the FDIC released earlier this month a preliminary analysis of the effects of Hurricane Katrina on FDIC-insured institutions. And while there are large U.S. institutions that do business in the Gulf Coast region, it's probably not a very big part of their portfolios.

There are 120 institutions that are headquartered in the most heavily damaged regions as designated by FEMA, and there are 87 institutions that get 100 percent of their deposits in those counties in southern Louisiana and Mississippi.

Those institutions have been really impacted in terms of facilities. We still had 100 institutions as of the beginning of this month that still had offices closed. They've been working very hard to get the operations back into swing there.

Going forward, I think these institutions are going to be critical as far as turning around the economic environment there. There is going to have to be a lot of small business lending to get that region back on its feet.

So I think the financial sector down there may not be a big part of the national picture, but it's vitally important to that region. And I think those institutions are going to be playing a leading role in the recovery process.

MS. KAPER: Hi. This question is for Mr. McMahon. I'm Stacy Kaper with *American Banker* newspaper. There has been a great deal of emphasis today on the real estate market, and I was wondering, what would be the first signs of change in that market that could negatively affect the earnings for banks? And if they start to see that, what should they do?

MR. McMAHON: Looking at the recent data, I think you'll see a mixed picture on housing. And, Kathleen, you may want to supplement my comments on this.

What you see is very strong housing starts. You see home prices rising. You see some slowing in home sales, and a little bit of an increase in inventories. But we're still at a very high level of activity in housing. So I think to see a slowing there, you would want to look to see if there was slowing in sales and a big backup in inventory of homes available for sale.

In terms of the impact on the banks, I think the first thing you would see would be a decline in loan volume. The question really is: How do banks make up for any reduction in demand for new mortgages or for refinancing mortgages? And we are seeing some tailing off in that activity.

Where will you see banks go with their funds to offset the loss of that loan volume, to make up for that in terms of their earnings? That would be the key question. Because if we have the kind of economic environment that Kathleen and other analysts have been talking about, home price changes will continue to be positive, but activity will be slow. Typically, you will need to see some prolonged period of stress, really, before you see a negative movement in overall home prices.

In that environment, the issue is going to be a volume issue and where banks go to offset slowdown in the volume of real estate lending. That would be what I would look to—whether there is enough growth in C&I lending demand. As has been pointed out, the corporations have a lot of alternatives for bank financing, and C&I lending has declined as a share of total bank financing.

And so the question is going to be whether there is an adequate pick-up in other demand for loans to offset the weakness in real estate demand, if that's what happens. Does that answer your question?

MS. KAPER: Yes. I guess just the second part would be: What do you see as the most important economic sector that banks should be concerned about in the near future?

MR. McMAHON: Well, certainly, housing is one, not just because of the risk of loss on housing loans, but because of its integration into the rest of the economy and its potential impact on other loan types, in terms of credit losses.

But given the financial strength of the banks right now, it would really take a dramatic slowing in economic activity or some other external shock that we're not anticipating at the moment to really create an earnings issue for banks. They're in a very strong position at the moment.

MR. BROWN: With regard to the housing markets, we do track some of the measures of inventory. One of them is months supply on the market, which has recently risen from below four months to up around five.

Given the activity that we've had—and housing has been red hot for about four years now—we're going to have to wait until the spring to really see how it starts to shake out. And then, I think we'll get a clearer picture about just how much slowdown there is.

I think we would agree that a slowdown is inevitable. It's a question of whether it's an orderly or a disorderly slowdown, and I just don't think we're going to see that until we get to the spring, or maybe even beyond.

MR. DeYOUNG: I'm Bob DeYoung here at the FDIC. I have two quick questions. They are unrelated.

The first has to do with exotic mortgages, and my question is: Do we have any data on which households are getting these? I seem to recall seeing that the vast majority of exotic mortgages are made to households with FICO scores above 660, and with loan-to-value ratios well below 80 percent. That's my first question.

The second question is unrelated. It has to do with the growth of the economy. We know there's two reasons—and two reasons only—why economies grow. One is that the economy gets more resources. The second is that the economy learns to use those resources better

We've talked about how productivity growth has been one of the keys to growth in the current expansion, and we've talked about an influx in capital from abroad. That's more resources. No one has mentioned the increase in labor. There has been a huge influx of labor, much of it undocumented. And that, of course, is fuel for the economy to grow.

Do any of you have any comments about what might happen if policy interrupts that flow of labor into the economy?

MR. McMAHON: I'll start with the first question if I can. I think there are lots of ways to look at the data, and there are lots of different sources of data on this stuff. But what I've seen is consistent with the point you made, that if you look at the exotic instruments, and you look at the FICO scores and you look at the loan-to-values, they look reasonable. They're above subprime.

Now, if you look at the subprime category by itself, you may see that a growing number of these may be in exotic instruments. But if you look at the total pool, I think you'll get a slightly different picture.

The other thing I would say, though, is that there has been some erosion over time. Though the FICO scores are high, and the loan-to-values are relatively low, you do see over time a bit of an erosion in those characteristics, even though they still are fairly robust.

MS. WHITNEY: Of course, due to the law of large numbers, the larger percentage of adjustable-rate mortgages are going to be higher FICO. You look at a company like Golden West—it has done prime mortgages and simple adjustable-rate mortgages for 50 years or so, and there is a big portion of borrowers who want adjustable-rate mortgages.

But just looking at a segment of what I estimate to be 15 million households, the vast majority of those are subprime borrowers and are in adjustable-rate mortgages. That's how I would explain it.

And looking at it from a corporate analysis standpoint, it is productivity gains that will offset everything else. Aside from unions, which I would say had more of a negative impact on the airline industry than oil prices, you've see enormous productivity gains in the United States.

MR. DeYOUNG: But my question with labor has to do with the quantity of labor, and the 10 million or so undocumented folks that have come into the economy since...

MS. WHITNEY: So if we build a wall to Mexico, that...

MR. DeYOUNG: No. My question is, that's an increase in quantity, that's an increase in resources, and the economy grows because of that. And my question is: Does anybody have any idea of the magnitudes of that and what might happen to economic growth if we staunch that flow of labor?

MS. CAMILLI: I don't have an estimate of that. There are many, many underemployed white-collar workers. I doubt they would be willing to do the jobs of the immigrant labor. But it's a good question.

MS. WHITNEY: If you look at the largest percentage of unemployed, they are the folks who are below high school-level education. The undocumented worker technically wouldn't factor into the unemployment numbers.

MR. BROWN: Part of what you're talking about, Bob, may be reflected in the relatively slow growth in the labor force itself during this expansion. Payroll growth has been slower than usual, but also the job force has been growing relatively slow, slower than you would expect. Usually, an expansion draws people back in.

A lot of jobs are being taken by immigrants who don't have the proper paperwork, so maybe that is affecting the statistics. It's certainly worth taking another look at.

MS. WHITNEY: I would doubt it, though, because if you look at the largest demographic of undocumented workers, they would come from Mexico. There are large amounts of

undocumented funds that go back to Mexico from undocumented workers in the United States. It is even larger than the dollars from tourism.

But much of that is going to be in California, and I don't know that California could single-handedly represent all of the growth in the United States. That makes no sense.

MS. CAMILLI: Just one other point that I thought of as you were asking the question. It's very rarely talked about, and involves the huge amounts of wealth that were created in the last decade and how this may relate to the number of people who have exited the labor force. This also may be a reason why the labor force is growing so slowly, because they have accumulated wealth and they don't need to work and are living off of portfolio income. That's not really talked about very much.

MR. BROWN: I'm sure we could go on longer, but our time is just about up. We have really enjoyed the chance to have this back and forth, and have enjoyed answering your questions. I hope you will join me in thanking these experts for coming and sharing their views with us today.