Scenarios for the Next U.S. Recession

March 24, 2006

Notwithstanding a slowdown in the fourth quarter of 2005, U.S. economic activity has grown at a stable, robust pace for most of the last three years. Gross domestic product (GDP) grew at a real annualized rate of at least 3.3 percent in every quarter between March 2003 and September 2005 before sliding to a rate of 1.6 percent in the final quarter of last year. Meanwhile, FDIC-insured institutions turned in a fifth-consecutive year of record earnings in 2005, posting net income of $134.2 billion. In addition, today marks the 636th day since the FDIC last provided assistance to a failed or failing bank—the longest such streak in the history of the Corporation.

This string of positive reports on the U.S. economy and banking industry paradoxically has led some analysts to ask a somewhat pessimistic question: How long can these good times last? Experience teaches us that economic expansions do not last forever and that some types of economic disruptions can be associated with financial distress for banking organizations. While forecasting recessions is, at best, a hazardous business, it makes sense from a risk management perspective to explore various weak-economy scenarios to better prepare for adversity down the road.

With this in mind, the Federal Deposit Insurance Corporation recently hosted a panel discussion to gain insights into scenarios for the next recession. The event was moderated by FDIC Chief Economist Richard Brown, and the panelists included Kathleen Camilli, Chief Economist and Director of Camilli Economics; Arthur McMahon, Director of Economic Outlook and Bank Condition for the Office of the Comptroller of the Currency (OCC); and Meredith Whitney, Executive Director for CIBC World Markets, a subsidiary of the Canadian Imperial Bank of Commerce in New York.

Rich Brown	Kathleen Camilli	Art McMahon	Meridth Whitney
FDIC	Camilli Economics	OCC	CIBC World Markets

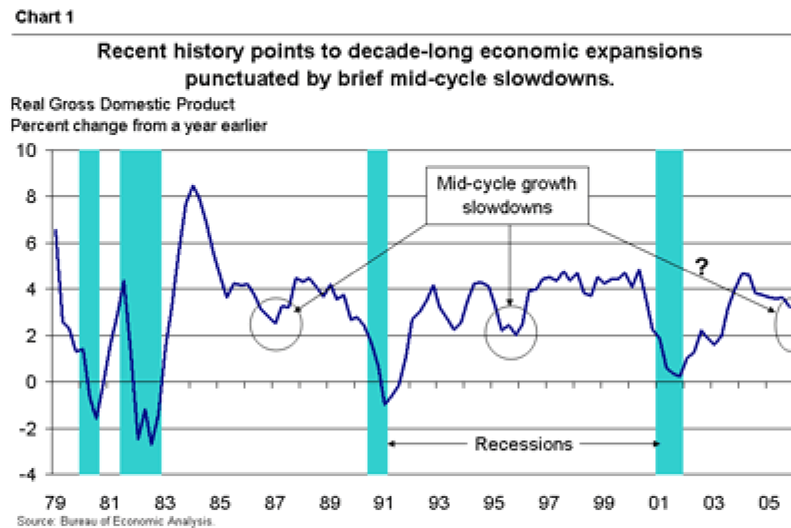
This issue of *FYI* addresses many of the themes presented at that forum, discussing recent economic trends and potential areas of weakness that could pose problems for banks in the next recession. This issue also looks at the historical performance of the banking industry across business cycles and how well the industry is positioned to effectively manage the risks and challenges that may be associated with the next recession.

The Economy Is Strong

There can be little debate about the fact that U.S. economic performance has been strong. The steady growth in real GDP noted above can be attributed to several sources. For one, business investment has risen at a double-digit pace during the past two years, fueled by several years of double-digit corporate profit growth. In addition, home prices have boomed, acting to support consumer spending despite less-than-stellar gains in average real wages and an easing in real median family income since the late 1990s. Finally, fiscal and monetary policies have been favorable with reduced tax rates, increased government spending, and steady,

clearly telegraphed interest-rate increases supporting economic growth while limiting near-term policy uncertainty.

Despite the overall strong appraisal, real GDP growth decelerated sharply, to a 1.6 percent annualized rate during fourth quarter 2005. This slowdown had been expected by many forecasters, including one of the FDIC roundtable panelists, Kathleen Camilli. She introduced the notion that the U.S. economy might have experienced a mid-cycle growth slowdown in late 2005. These slowdowns have a precedent, as they have occurred during expansions in both the 1980s and 1990s (see Chart 1). Ms. Camilli also noted that the recent historical pattern of real GDP growth points to recessions occurring near the start of every decade. On that basis, the U.S. economy may have a few more years of expansion ahead of it before entering the next recession. The link below provies Ms. Camilli's full presentation. (http://www.fdic.gov/news/conferences/2006_economic_outlook/camilli.html).



Although fourth quarter GDP growth was weak, recent signs point to a resurgence early in 2006. For instance, job growth has picked up and the unemployment rate fell to 4.8 percent as of February. The economy added an average of 228,000 net nonfarm positions per month between November and February, almost double the average 125,000 per month gain from July through October. During January and February, average weekly initial unemployment claims ran below 300,000, a decrease from the 330,000 average in fourth quarter 2005. After a slow start, business investment surged late in the fourth quarter. Shipments of nondefense, nonaircraft capital goods jumped 3.8 percent in December following much weaker monthly gains in October and November. These shipments again advanced modestly in January. Meanwhile, monthly surveys of purchasing managers indicated robust growth in both the manufacturing and services sectors during February. As of early March, many forecasters were expecting annualized quarterly real GDP growth of over 4 percent during the first three months of 2006 and over 3 percent for all of 2006.

Three Key Economic and Banking Risk Concerns

Despite a favorable outlook, there are at least three widely acknowledged areas of near-term concern that could pose risks to the economy going forward: a spike in energy prices, a decline in home prices, and a retrenchment in consumer spending arising from record consumer indebtedness. The consequences that any of these developments might have for economic growth could range from modest to severe, depending on how events play out over the next few years. It should be noted that these three areas are by no means the only potential sources of risk. Financial market panics, natural disasters, terrorism, war, and even changes to policy are among many other potential sources of disruption to the currently benign economic and banking environment. It is difficult to assess many of these risks before they occur, but in 2005 the FDIC did examine so-called "stroke-of-the-pen" risk, or risk that arises when tax, monetary, accounting and other policy changes produce unintended consequences for the economy and banking.[1]

Energy Shock

Because global excess crude oil production and refining capacity are limited, the risk of supply-side energy shocks remains high. Strong global growth in energy demand in recent years, coupled with decades of limited new international investment in energy production capacity, have left the United States and the world exposed to increased energy risks. Although the U.S. economy is less reliant on energy today than in the 1970s, it can still suffer from energy supply disruptions that result in spiking oil, gas, and gasoline prices.

Given historically mild January weather, natural gas prices fell by roughly half from their elevated early winter levels. Crude oil and gasoline prices have also come down from their late summer peak because of an increase in imports and the gradual return of damaged production capacity following the summer hurricane season. Even so, oil prices remained 29 percent above year-earlier levels in February, and gasoline prices were 19 percent higher.

With time the economy should be able to adjust to higher energy prices, but in the short run, any supply-disrupting events, including labor strikes, severe weather, or terrorism, may cause energy prices to jump. By varying degrees, these spikes would be likely to weigh on overall economic growth while adding volatility to the outlook. Moreover, this risk is likely to stay in play for several more years, given the long lags required to add new energy production capacity and expectations for continued global growth in energy demand.

Housing

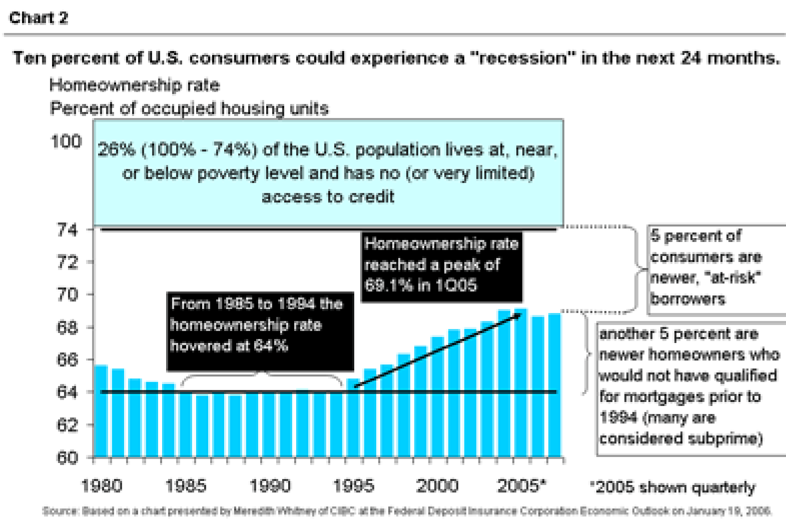
The risk of a housing slowdown is another area of concern going forward. The recent housing boom has been unprecedented in modern U.S. history.[2] It has been suggested by many analysts that the housing boom has been a significant contributor to gains in consumer spending in recent years. Indeed, a number of the FDIC roundtable panelists pointed to the apparent connection between rising real estate wealth during the past four years and the sustained strength in consumer spending during that period. Because consumer spending accounts for over two-thirds of U.S. economic activity, any shock to consumer spending, such as that which might be caused by a housing slowdown, is a concern to overall economic growth.

It is very likely that housing wealth has been a significant factor behind growth in consumer spending. Through the use of cash-out refinancing, increased mortgage balances, and greater use of home equity lines of credit, as well as through owners selling homes outright and cashing in on their accumulated equity, it is estimated that anywhere from $444 billion to $600 billion was liquidated from housing wealth during 2005.[3] Whichever estimate one uses, the total almost surely eclipses the $375 billion gain in after-tax income for the year. While probably not all of the home equity liquidated during 2005 fed consumption spending (much of it was invested into other assets, including second or vacation homes), these statistics illustrate how important home equity has become as a source of household liquidity.

There are concerns, however, that changes in the structure of mortgage lending could pose new risks to housing. These changes are most evident in the rising popularity of interest-only and payment-option mortgages, which allow borrowers to afford more expensive homes relative to their income, but which also increase variability in borrower payments and loan balances. To the extent that some borrowers with these innovative mortgages may not fully understand the potential variability in their payments over time, the credit risk associated with these instruments could be difficult to evaluate. In addition, the degree of effective leverage in home-purchase loans has risen in recent years with the advent of so-called “piggy-back” mortgage structures that substitute a second-lien mortgage for some or all of the traditional down payment. Meredith Whitney noted at the roundtable that the recent use of revolving home equity lines of credit in lieu of down payments has enabled an increasing number of first-time buyers to qualify for homes that they otherwise could not afford. Link to the complete text of Ms. Whitney’s remarks in the transcript (https://www.fdic.gov/news/conferences/2006_economic_outlook/whitney.html).

Overall, Ms. Whitney’s research suggests that a group that includes approximately 10 percent of U.S. households may be at heightened risk of credit problems in the current environment. This group mainly

includes households that gained access to mortgage credit for the first time during the recent expansion of subprime and innovative mortgage loan programs. Not only do many borrowers in this group have pre-existing credit problems, they may also be more vulnerable than other groups to rising interest rates because of their reliance on interest-only and payment-option mortgages. These types of mortgages have the potential for significant payment shock that occurs when low introductory interest rates expire, when index rates rise, or when these loans eventually begin to require regular amortization of principal including any deferred interest that has accrued (see Chart 2).



Because of the importance of mortgage lending to bank and thrift earnings, the large-scale changes that have taken place in this sector will clearly have implications for the banking outlook. Bank exposure to mortgage and home equity lending is now at peak levels. As reported in the FDIC's latest *Quarterly Banking Profile* (https://www.fdic.gov/qbp/index.html), 1-4 family residential mortgages and home equity lines of credit accounted for a combined 38 percent of total loans and leases in fourth quarter 2005, well above the roughly one-third share maintained at the beginning of the decade.

Housing analysts are in disagreement as to whether or not recent signs point to a moderation in housing activity or the beginning of a more significant correction. Currently, inventories of unsold homes and sales volumes are among the indicators pointing to a housing slowdown. Inventories of unsold existing homes rose from under four months of supply at current sales volume in early 2005 to 5.3 months of supply as of January 2006. Meanwhile, the pace of existing home sales has been trending lower since last summer. A clear trend in the direction of home sales and prices may not be evident until the completion of the peak spring and summer selling season later this year.

Many analysts argue that home prices in the hottest coastal markets, especially in the Northeast and California, could be poised to decline in the near future. For example, PMI Mortgage Insurance Company analysts place essentially even odds that home prices will decline during the next two years in a dozen cities in California and the Northeast.[4] Should home prices either stop rising or begin to fall in these areas, local banks and thrifts would need to look to non-residential loans to support revenue growth.

Art McMahon of the OCC outlined the banking industry's reliance on mortgage lending during his remarks at the FDIC roundtable. Link to the full text of Mr. McMahon's remarks in the transcript (https://www.fdic.gov/news/conferences/2006_economic_outlook/artmc.html .) Mr. McMahon acknowledged that previous historical episodes of large metro-area home price declines were generally the result of severe local economic distress.[5] Should some regional housing market downturns occur, banks may be hard-pressed to generate non-residential loans in great volume. Historically, regional housing price declines have tended to be associated with a slowdown in small business activity, with banks making fewer commercial and industrial loans in addition to suffering mortgage and consumer portfolio stress.

Consumer Debt and Lack of Saving

A large, long-term increase in consumer indebtedness has raised concerns that the next U.S. recession could originate

in the household sector. The housing boom of recent years has resulted in a surge in new consumer debt, most of it in the form of mortgages. Historically, recessions have provided an opportunity for households and businesses to retrench and rebuild balance sheets that might have become strained late in the previous expansion. The response of businesses during the 2001 recession provides a classic example in this regard as investment, spending, and hiring activities were curtailed sharply from their heady, late-1990s pace. In part because of the wealth-offset provided by housing, however, the long "jobless recovery" following the 2001 recession did not weigh heavily on the consumer sector. Consumers did slow their pace of spending growth in 2001 and 2002, but spending growth never fell below a 1 percent annual pace in any quarter—and in no quarter did it actually decline. By contrast, during the early 1990s recession, consumer spending declined for two straight quarters. At this point in time, however, the consumer sector has not experienced a real recession in 15 years.

In some sense, this long recession hiatus itself raises concerns. Consumers have gradually become more indebted over time—so much so that they are now spending more in aggregate than they earn, resulting in the much-lamented negative personal savings rate.[6] The personal savings rate may turn out to be a bit of a statistical anachronism in an economy where so much spending is driven by the accumulation of wealth rather than current income. Even so, home prices will not boom forever. Even a moderation in home-price growth would reduce the amount of new home equity added to the economy each year. This slower accumulation of wealth, coupled with rising interest rates that increase the cost of tapping that wealth, could soon begin to curtail the pace of U.S. consumer spending growth. Just as there has been a positive wealth effect from soaring home prices in recent years, the concern is that an end to the housing boom could result in a slowdown in consumer spending growth. However, it is important to keep in mind that such an outcome would likely play out over several years, as happened during the boom.

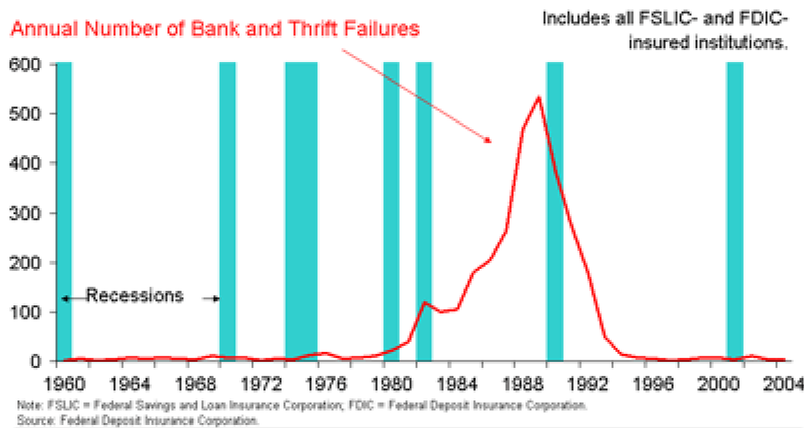
The risk posed by a slower rate of home equity growth was also discussed by the FDIC roundtable panel. It should be noted that in only the first six years of this decade, the value of net housing wealth (or owners' equity) held by U.S. households has risen by over $5 trillion. Keep in mind that this is the net gain, after allowing for a record increase in mortgage debt. Moreover, the increase in net housing wealth during the first half of this decade alone was two to three times as large as the gains posted during each of the prior two decades. Although some new buyers have put very little down on their home and thus have accumulated little equity, many longtime homeowners have accumulated significant additional equity that remains untapped. At the FDIC roundtable event, panelist Kathleen Camilli noted this untapped wealth as a potential area of support for consumer spending going forward. History supports Ms. Camilli's stance. During the past 50 years, the nominal value of U.S. housing wealth has declined only once in a meaningful way—in 1990, in the midst of the bi-coastal residential real estate bust. Although falling home prices might take a dent out of wealth and spending, it would take some time to totally neutralize the effects of a $5 trillion wealth gain.

The Banking Industry Appears Well Positioned for the Next Recession

Historically, the fortunes of the banking business have varied with economic cycles, but the worst of times in recent memory were not predominantly the result of recession. During the roundtable discussion, FDIC Chief Economist Richard Brown pointed out that, as one would expect, loan growth tends to decline and charge-offs tend to rise during recessions. Even so, the industry has seen its biggest swings outside of the U.S. business cycle. As an example, Mr. Brown pointed to the "100-year flood" of losses in the banking and thrift industries, or the failure of over 2,500 federally-insured banks and thrifts between 1980 and 1993. Chart 3 shows that while there have been increases in bank failures during and immediately after recessions, these increases are dwarfed by the episodic surge in failures between 1980 and 1993. This wave of failures took place during a period that included two U.S. recessions and a seven-and-a-half-year economic expansion. During this period, according to Brown, the U.S. economy experienced a rolling regional recession that moved from the farm belt to the oil patch to the Northeast to Southern California. This rolling regional recession featured some significant regional boom and bust cycles in real estate. These real estate busts were partly due to the 1986 amendment to federal tax laws on real estate investments. This tax policy change essentially dampened demand for commercial real estate investment and put downward pressure on real estate prices.[7] Poor risk management practices and fraud also were common factors in the episodic wave of bank and thrift failures. Link to the complete text of Mr. Brown's remarks in the transcript (https:/www.fdic.gov/news/conferences/2006_economic_outlook/mrbrown.html.) The lesson of this episode appears to be that the business cycle is not necessarily the dominant factor in explaining banking industry performance—and failures, in particular—in the modern period.

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.



The first half of this decade provides another example of how the fortunes of the banking industry need not directly follow the performance of the U.S. economy. During and just after the 2001 recession, the U.S. economy experienced the loss of trillions of dollars in stock market wealth and the failure of hundreds of publicly traded companies, including Enron and WorldCom. Associated with this corporate turmoil was a significant credit event for large banks that had made loans to corporate borrowers. Between 2000 and 2002, the annual loan loss provisions for FDIC-insured institutions rose by $18 billion—a 61 percent increase. Meanwhile, job growth recovered very slowly, with payroll employment not reaching its pre-recession level until early 2005. Despite this adversity, FDIC-insured institutions posted record earnings every year between 2001 and 2005.

Part of the reason that the banking industry has been able to produce such strong financial results amid economic adversity was the response of monetary policy to the recession itself. Between 2000 and 2002—as the corporate credit event was boosting the industry's provision expenses—low nominal interest rates and a steep yield curve were helping to boost net interest income by some $33 billion, while the industry was also able to realize gains on the sale of securities of $11 billion. These offsetting factors were more than double the increase in credit losses.

Given its strong current financial position, the banking industry appears to be generally well positioned to meet the challenges of the next recession. At the January roundtable, both Brown and McMahon pointed to the banking industry's historically strong earnings, reserves, and capital as significant buffers against future economic downturns. That said, as always, risk management practices will play a crucial role in determining how economic adversity might affect the industry's bottom line. Strong underwriting practices, effective management of loan concentrations, proper servicing procedures, and well-designed policies to hedge against market volatility were all cited as essential risk management tools for the industry. The true test of these industry practices will occur down the road when the recession scenario finally becomes a reality.

To access the complete transcript of the 2006 FDIC Economic Outlook proceedings, https://www.fdic.gov/news/conferences/2006_economic_outlook/index.html.

Endnotes

[1] See: Federal Deposit Insurance Corporation, In Focus This Quarter: Stroke-of-the-Pen Risk, FDIC Outlook, Fall 2005, https://www.fdic.gov/bank/analytical/regional/.

[2] In February and May 2005, the FDIC published two FYI reports on the topic of "U.S. Home Prices: Does Bust Always Follow Boom?" See: http://www.fdic.gov/bank/analytical/fyi/index.html.

[3] The more conservative $444 billion estimate is the sum of Freddie Mac's estimates for cash-out refinancings and increased loan balances from mortgage consolidation ($279 billion in 2005) plus the $165 billion gain in home equity

lines of credit during 2005. The bigger estimate calculated by some analysts takes the $1,067 billion growth in total residential mortgages in 2005 and subtracts the $467 billion in new residential construction put in place last year.

[4] For more information, see: PMI Mortgage Insurance Co., “Economic and Real Estate Trends,” Winter 2006, http://www.pmigroup.com/lenders/media_lenders/pmi_eret06v1s.pdf.

[5] For additional information, see: Federal Deposit Insurance Corporation, “U.S. Home Prices: Does Bust Always Follow Boom?” FYI, February 10, 2005 (revised April 8, 2005), http://www.fdic.gov/bank/analytical/fyi/index.html.

[6] According to the Bureau of Economic Analysis, the savings of U.S. households in 2005 totaled a negative $34 billion, or -0.4 percent of total disposable personal income for the year. Although the personal savings rate has trended consistently lower over the last 20 years, 2005 marks the first year since the Great Depression for which the ratio fell below zero.

[7] For more information, see: Federal Deposit Insurance Corporation, History of the Eighties—Lessons for the Future, Chapter 3, “Commercial Real Estate Crises of the 1980s and Early 1990s, ” https://www.fdic.gov/bank/historical/history/index.html .

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Chart 1

Recent history points to decade-long economic expansions punctuated by brief mid-cycle slowdowns.		
Year/Qtr	Real Gross Domestic Product (SAAR, Bil.Chn.2000$) % Change - Year to Year	real GDP yr yr %
19791	6.55%	6.553779912
19792	2.61%	2.610929658
19793	2.34%	2.340899679
19794	1.31%	1.310001168
19801	1.44%	1.435676264
19802	-0.71%	-0.706480601
19803	-1.58%	-1.58014414
19804	-0.05%	-0.049954849
19811	1.65%	1.650929845
19812	2.94%	2.9359448
19813	4.35%	4.354466069
19814	1.18%	1.178370274
19821	-2.46%	-2.456900612
19822	-1.16%	-1.162150358
19823	-2.71%	-2.713047394
19824	-1.40%	-1.398335677
19831	1.48%	1.481524406
19832	3.22%	3.216200119
19833	5.65%	5.654555273
19834	7.72%	7.720914101
19841	8.49%	8.489093608
19842	7.92%	7.922119018
19843	6.86%	6.861492407
19844	5.58%	5.579107414
19851	4.51%	4.510684585
19852	3.62%	3.620276307
19853	4.23%	4.225953573
19854	4.17%	4.171184603
19861	4.21%	4.205207407
19862	3.73%	3.731815307
19863	3.11%	3.113886294
19864	2.84%	2.842923592
19871	2.54%	2.538905178
19872	3.26%	3.257381258

19873	3.21%	3.20581083
19874	4.48%	4.481766138
19881	4.31%	4.306362922
19882	4.48%	4.483294483
19883	4.10%	4.096467182
19884	3.66%	3.659865593
19891	4.20%	4.202376828
19892	3.57%	3.569569421
19893	3.75%	3.753291712
19894	2.66%	2.661857898
19901	2.80%	2.804238158
19902	2.40%	2.395347167
19903	1.68%	1.678287776
19904	0.65%	0.65425479
19911	-1.00%	-1.002516838
19912	-0.61%	-0.614279904
19913	-0.14%	-0.141639087
19914	1.09%	1.090873122
19921	2.66%	2.66162936
19922	2.98%	2.983136951
19923	3.49%	3.494038507
19924	4.15%	4.145874394
19931	3.20%	3.202733737
19932	2.74%	2.735033366
19933	2.26%	2.259312029
19934	2.51%	2.505804824
19941	3.42%	3.423730177
19942	4.24%	4.24408136
19943	4.29%	4.292728238
19944	4.11%	4.113965486
19951	3.35%	3.351868414
19952	2.20%	2.204537022
19953	2.46%	2.463261022
19954	2.02%	2.017204085
19961	2.45%	2.451810326
19962	3.94%	3.944667001
19963	3.97%	3.968658032
19964	4.42%	4.42061144
19971	4.49%	4.491259854
19972	4.37%	4.368248004
19973	4.79%	4.789374993

19974	4.34%	4.342077303
19981	4.69%	4.687152212
19982	3.80%	3.802303307
19983	3.71%	3.706532022
19984	4.51%	4.510997466
19991	4.24%	4.244533471
19992	4.42%	4.41675097
19993	4.43%	4.432403917
19994	4.70%	4.698444317
20001	4.08%	4.08029628
20002	4.85%	4.847433086
20003	3.52%	3.519185031
20004	2.24%	2.2396625
20011	1.86%	1.856512232
20012	0.59%	0.588958052
20013	0.35%	0.350730944
20014	0.23%	0.225532733
20021	1.03%	1.029810847
20022	1.27%	1.268940732
20023	2.22%	2.224676075
20024	1.87%	1.874873865
20031	1.62%	1.616669841
20032	1.98%	1.981737709
20033	3.17%	3.173218905
20034	4.03%	4.029398364
20041	4.67%	4.674215375
20042	4.63%	4.630317485
20043	3.82%	3.822916367
20044	3.76%	3.756212747
20051	3.64%	3.644758539
20052	3.60%	3.597686868
20053	3.64%	3.639593298
20054	3.22%	3.216452084

Source: Bureau of Economic Analysis

Chart 2

Ten percent of U.S. consumers could experience a "recession" in the next 24 months.	
Year	**Home Ownership Rate**
1980	65.6
1981	65.4
1982	64.8
1983	64.6
1984	64.5
1985	63.9
1986	63.8
1987	64.0
1988	63.8
1989	63.9
1990	63.9
1991	64.1
1992	64.1
1993	64.0
1994	64.0
1995	64.7
1996	65.4
1997	65.7
1998	66.3
1999	66.8
2000	67.4
2001	67.8
2002	67.9
2003	68.3
2004	69.0
1Q05	69.1
2Q05	68.6
3Q05	68.8

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

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.		
Year	**Annual Number of Bank and Thrift Failures** **Includes all FSLIC- and FDIC-insured institutions**	
1960	2	Recession Shading
1961	6	
1962	2	
1963	3	
1964	8	
1965	6	
1966	8	
1967	5	
1968	4	
1969	10	
1970	7	Recession Shading
1971	7	
1972	2	
1973	6	
1974	4	Recession Shading
1975	13	Recession Shading
1976	17	
1977	6	
1978	7	
1979	10	
1980	22	Recession Shading
1981	40	
1982	119	Recession Shading
1983	99	
1984	106	
1985	180	
1986	204	
1987	263	

1988	470	
1989	534	
1990	382	Recession Shading
1991	271	
1992	181	
1993	50	
1994	15	
1995	8	
1996	6	
1997	1	
1998	3	
1999	8	
2000	7	
2001	4	Recession Shading
2002	11	
2003	3	
2004	4	

Source: FDIC