How Federal Regulators, Lenders, and Wall Street Created America's Housing Crisis

Nine Proposals for a Long-Term Recovery

Submitted by
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Weiss Research, Inc.

to

The Federal Reserve Board

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Foreword

by Martin D. Weiss, Ph.D.
President, Weiss Research, Inc.

The persistence and severity of America's housing crisis has taken many trained observers by surprise, prompting both a re-evaluation of the investment risks and more urgent inquiries regarding viable solutions.

However, a small minority of U.S. analysts has been devoting their efforts to these very issues since the first signs of a housing bubble appeared many months ago; and the author of this paper, Weiss Research's Michael Larson, is certainly among them.

Michael Larson has provided our 200,000 subscribers in-depth research and forecasts of the evolving crisis with unusual foresight and precision. He has consistently warned, well in advance, of each phase in the cycle — the growth of high-risk mortgages, the decline in sales, the excess home inventories, the subsequent slump in home values, the rising rate of delinquencies, the surge in foreclosures, the losses among high risk lenders, the impacts on certain hedge funds. And he has been increasingly called upon by the media to explain these events as they unfolded.

In March of this year, recognizing that Mr. Larson's insights could add real value to the public debate, I asked him to draw from his years of research on the industry to help develop solutions for regulators and legislators.

This paper is the culmination of that effort, thoroughly updated through July 2007. I believe it provides an objective review of the current state of the industry along with valuable proposals to help bring about a real recovery.

Jupiter, Florida
July 19, 2007

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How Federal Regulators, Lenders, and Wall Street Created America's Housing Crisis
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Executive Summary:

For many Americans, the dream of home ownership is turning into a nightmare.

Despite the absence of an economic recession, delinquencies are surging, home sales are falling, prices are declining, and foreclosure rates are rising to multi-year highs. All told, up to 2.4 million could lose their homes, while investors may lose as much as $110 billion.

The impacts of the housing slump on home financing are serious: Delinquency rates on all forms of mortgages have climbed sharply. Some 96 higher-risk lenders have succumbed to rising loan losses, early payment defaults, funding cutoffs and related financial difficulties. At the same time, delinquencies and charge-offs may be spilling over into the commercial real estate lending sector.

As a result, some large banks and thrifts may be at risk. And overall, it appears the mortgage crisis may not be limited to niche players that specialized in low-quality loans.

How did the housing and mortgage crisis reach this extreme?

Rather than acting as a moderating force, the Federal Reserve often played an important role in further inflating the housing bubble.

In the early 2000s, the Fed drove real interest rates into negative territory, erasing the real returns on a wide variety of savings instruments relied upon for income by millions of Americans and encouraging them to shift resources to real estate speculation. At the same time, it drove down the real cost of borrowing and encouraged imprudent risk-taking.

The Fed replaced one bubble, mostly confined to the technology sector, with another, far larger bubble, encompassing most of the housing market. And consequently, homes became unaffordable to most Americans, as the housing affordability index compiled by the National Association of Realtors dropped to its lowest level on record.

By 2004, it was nearly impossible to ignore that the housing market was overheating, as home prices rose at the fastest rates in decades and by more than four-and-a-half times as quickly as inflation. Yet the Federal Reserve did not believe it should play a forceful role in stemming this mania via monetary policy.

Although setting monetary policy is a complex process, we believe that, in the face of a potentially dangerous speculative mania in housing, policymakers at the Federal Reserve failed to recognize the evidence, failed to send clear signals to market participants, and failed to lean against the inflating asset bubble.

Most of the private marketplace players also failed to take protective steps. Rather than maintain prudent lending standards and accept a decline in loan volume, they debased lending standards and accepted the risk of serious long-term damage to their finances, to the industry, and, ultimately, to the economy.

The securitization boom, aided by excess liquidity, significantly boosted risk-taking and greatly inflated the housing bubble.

As of year-end 2006, there were $6.5 trillion worth of securitized loans outstanding, compared to $4.3 trillion in U.S. Treasuries. The issuance of mortgage-backed securities surged to $2.4 trillion in 2006 from $738 billion in 2000, more than a three-fold increase.

This aggravated the boom and bust in several ways: Securitization removed, minimized, or postponed the consequences of poor lending decisions from those making those decisions. It stressed quantity over quality. It made it more profitable and easier for lenders and brokers to lead borrowers to inappropriate loan products. And it resulted in distorted market price signals regarding the risks inherent in the subprime mortgage market. Several investment funds have suffered severe financial difficulties in 2007.

Nine Proposals for a Long-Term Recovery

With the goal of avoiding quick fixes and fostering a healthy, long-term recovery, we offer the following proposals to federal regulators and legislators:

1. Better monitoring and prompter action by the Federal Reserve to help avert run-away asset price inflation.

2. Better enforcement of existing predatory lending statutes.

3. Better protection of borrowers through a model akin to one recently established between the Office of Thrift Supervision (OTS) and three subsidiaries of American International Group.

4. Greater focus by regulators on banks and thrifts whose mortgage performance measures are showing the most stress.

5. Suitability requirements for the mortgage lending industry.

6. Restrict, but do not ban, specific lending practices.

7. Federal training, education, licensing, and testing standards for mortgage lenders.

8. Assignee liability for secondary market buyers of home loans should be seriously considered.

9. More focus on developing programs that promote *saving* for a down payment.

These solutions cannot be painless. But in order to pave the way for a sounder future, many of the sacrifices that were avoided in the past may have to be made in the present.

How Federal Regulators, Lenders, and Wall Street Created America's Housing Crisis

Nine Proposals for a Long-Term Recovery

For many Americans, the dream of home ownership is turning into a nightmare.

Delinquencies are surging as borrowers face sharply rising monthly payments on their home mortgages — with an estimated $1.1 trillion in Adjustable Rate Mortgages and interest only loans poised to reset this year alone.[1] Home sales are falling and prices are declining, as for-sale inventories increase. Foreclosure rates are rising to multi-year highs, despite a relatively strong overall economy.

All told, it is estimated that up to 2.4 million borrowers could lose their homes, while lenders, borrowers, and investors may lose as much as $110 billion. By many measures, this is one of the most difficult times for the housing and mortgage markets in modern history.[2]

How did it reach this extreme? Did monetary policymakers, banking regulators, mortgage lenders, and real estate agents drop the ball? Did home buyers, developers, investors and speculators go astray? If so, when and how?

More importantly, what steps must be taken to avoid perpetuating the crisis, while paving the way for a healthier housing and mortgage market?

In Part 1 of the paper, we review the current status of the housing and mortgage crisis.

In Part 2, we seek to identify some of the most vulnerable banks and thrifts.

In Part 3, we review the housing bubble and the forces that inflated it.

In Part 4, we discuss the boom in securitization of mortgage debt.

And in Part 5, we propose steps to avoid prolonging the crisis unnecessarily, while laying the groundwork for healthier housing and mortgage markets in the future.

These solutions cannot be painless. But in order to pave the way for a sounder future, many of the sacrifices that were avoided in the past may have to be made in the present.

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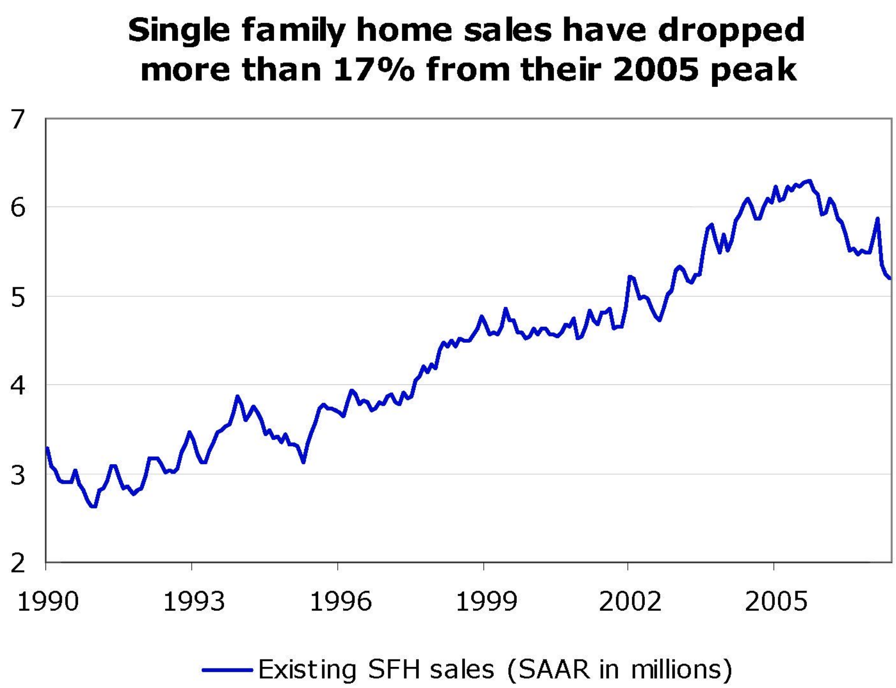
[1] This estimate includes both securitized and unsecuritized mortgages of all credit types and sizes (Alt-A, subprime, jumbo, conforming, etc.). Most are either ARMs that face an interest rate reset or interest only mortgages that are reaching the end of the interest-only payment period. See David W. Berson, David Kogut, and Molly R. Boesel, *Economic and Mortgage Market Developments*, Fannie Mae, April 12, 2007, available at http://www.fanniemae.com/media/pdf/berson/monthly/2007/041207.pdf.

[2] This characterization is based on the swiftness of the seize-up in the subprime mortgage market, the severity of the home price declines we're seeing, the magnitude of today's inventory overhang, and several other factors, which are detailed in Part 1 of this report.

Part 1: The Housing Crisis is Severe and Continuing to Deepen

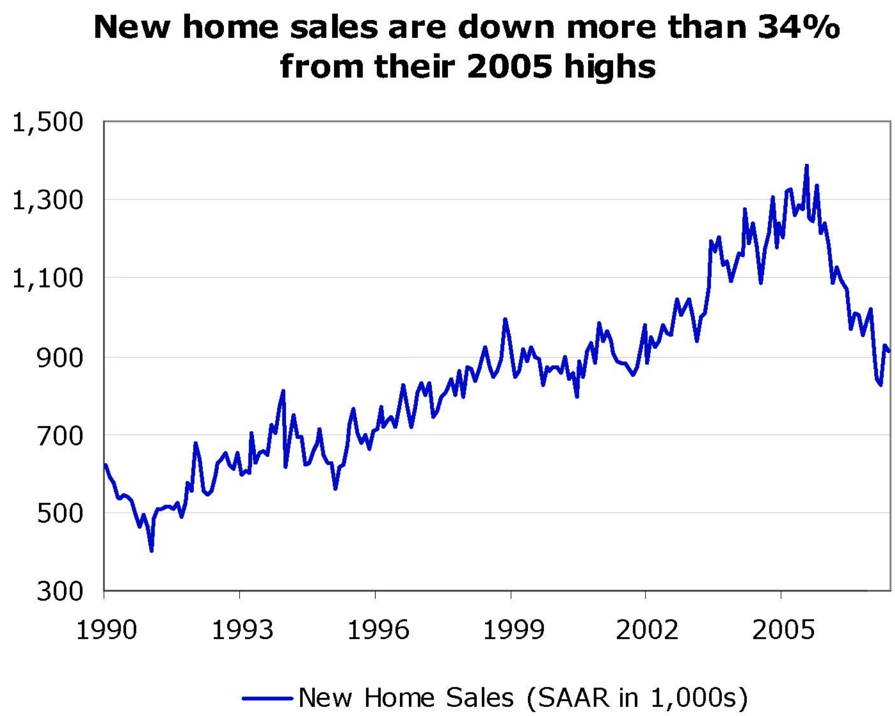
The facts indicate that we could be in the midst of one of the worst housing downturns of the past 40 years, marked by falling home sales, declining home prices, record-high housing inventories, rapidly rising loan delinquencies, surging foreclosure rates, plus steep declines in construction and permitting activity. The statistics supporting this grim outlook are sobering:

1. Sales of existing homes, including single-family units, condos and co-ops, are down 16.9% from the September 2005 peak.[3] The seasonally-adjusted annual rate of sales, at 5.99 million in May, was the lowest since June 2003. Single-family-only sales are off 17.4%.



[3] Existing home sales data is from the National Association of Realtors (NAR). Calculations are based on figures through May 2007.

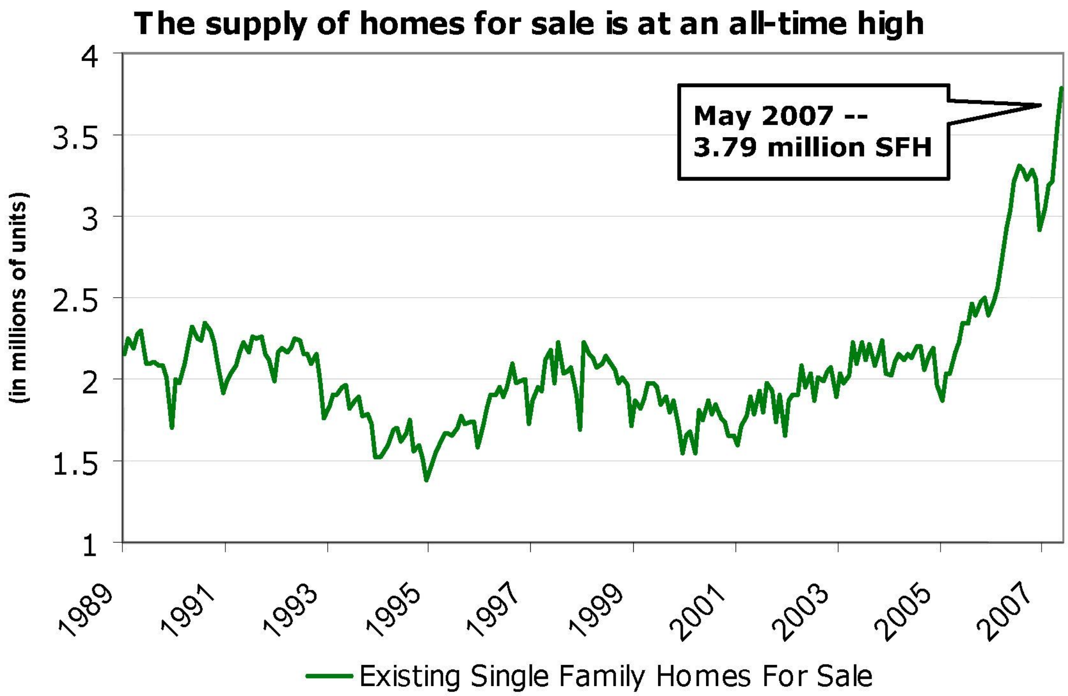
2. In the new home market, sales have declined 34.1% from the July 2005 peak. The seasonally-adjusted annual rate of sales for new homes hit its cycle low (to date) of 827,000 in March 2007, the lowest reading since June 2000.[4]



[4] New home sales data is from the Census Bureau. Calculations are based on figures through May 2007. Historical data may be obtained at http://www.census.gov/const/www/newressalesindex.html.

3. For-sale inventories of existing homes have risen sharply. As of May, there were 4.431 million existing homes of all types on the market. Between 1999 (when the National Association of Realtors began compiling all-property inventory statistics) and 2004, inventory typically hovered between 2 million and 2.5 million units. Even allowing for normal growth due to population increases and economic expansion, the difference between these two levels — from 1.93 million to 2.43 million units — constitutes a rough measure of excess inventories currently on the market, a figure which is unusually large.[5]

Data on single-family homes leads to the same conclusion — the largest inventory glut in recorded history, with 3.79 million units in May 2007, compared to a typical range of 1.5 million to 2.3 million units in the 1990s and early 2000s.

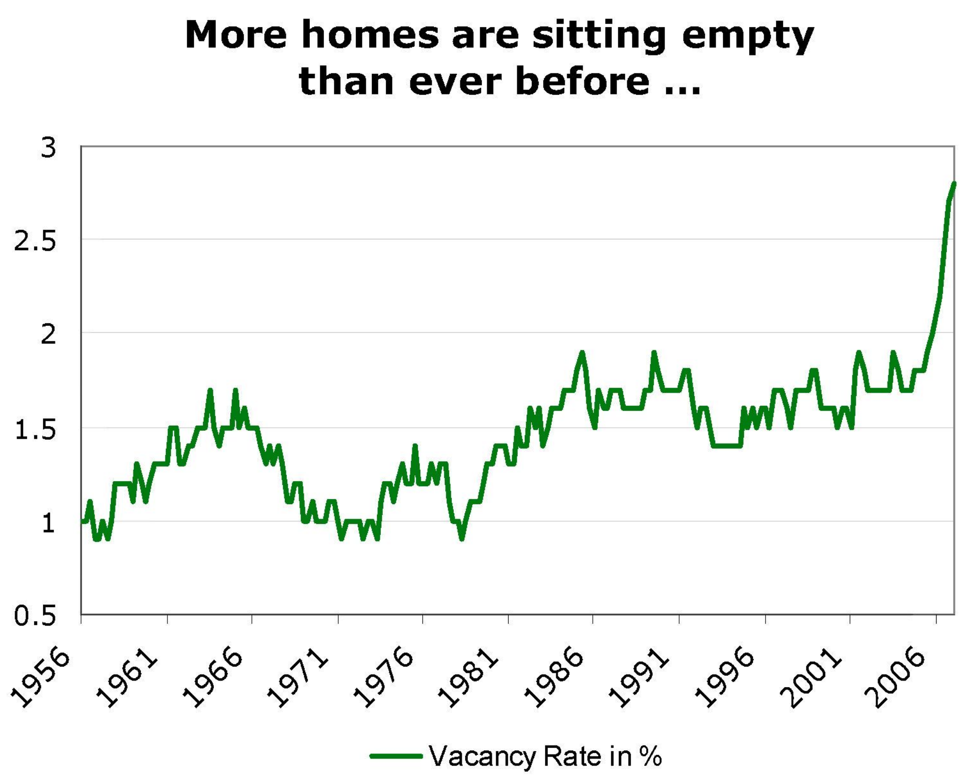


[5] Data source: National Association of Realtors

4. Excess inventories in the new home market are also severe, with 536,000 units on the market as of May 2007. That figure is down somewhat from its July 2006 peak of 573,000. But it is still far above the historical average.

From the time record keeping began in 1963, through early 2005, there were never more than 432,000 homes for sale. And throughout the 1980s and 1990s, the typical number of homes for sale was 300,000 to 320,000 (with short-term spikes to about 370,000 in 1989 and 1995). Therefore, this data is also unambiguous in pointing toward a continuing and large glut of new homes, with excess inventory of approximately 200,000 to 250,000 units.[6]

5. Homeowner vacancies are rampant. Some 2.8% of the nation's homes for sale were sitting empty as of Q1 2007. That was up sharply from 2.1% a year earlier and the highest vacancy rate since relevant Census Bureau figures were first collected in 1956.[7]



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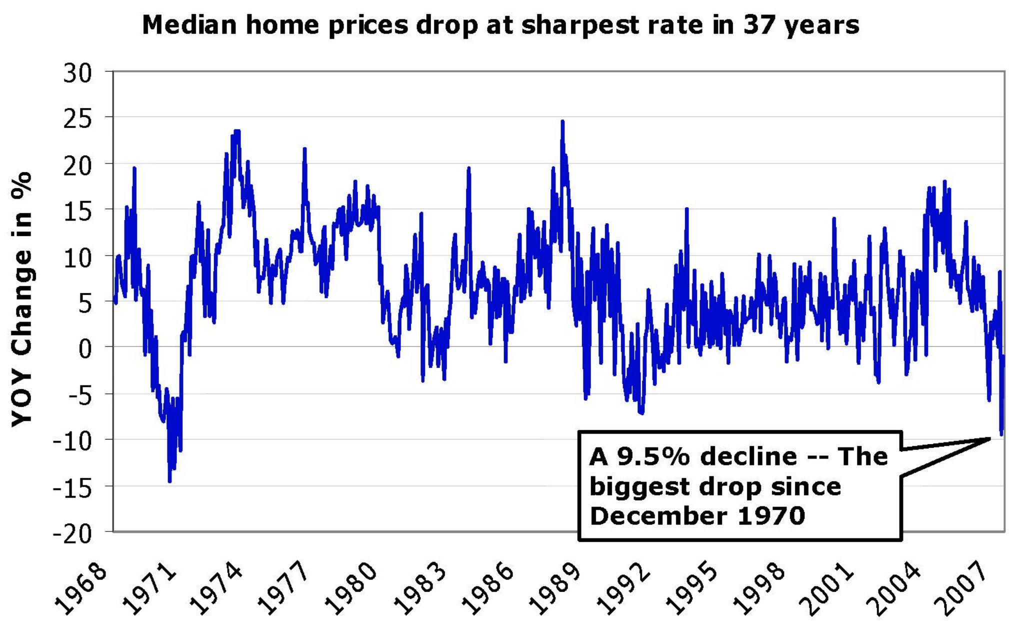
[6] Census Bureau data.
[7] *Ibid.*

6. Existing home prices are declining nationally. For the first time since data was collected in 1968, median existing home prices have declined nationally for 10 months in a row. Median existing home prices were down 2.1% year-over-year in May — to $223,700 from $228,500 in the same month of 2006.[8]

This year could also be the first time since the National Association of Realtors began collecting data — and most likely the first time since the Great Depression —— that existing home prices have fallen both (a) nationwide and (b) on an annual basis.

7. The median price of new homes recently fell more than the median price of existing homes. It was down 9.5% to $232,700 in April 2007 from $257,000 a year earlier — the largest decline in any month since December 1970.[9] Prices did bounce back somewhat in May, however, paring the year-over-year price decline to 0.9%.



Impacts on Home Financing Are Serious

In the wake of the housing slump, we are beginning to see serious consequences resulting from the excesses observed in earlier financing of the housing market boom:

- **The subprime mortgage delinquency rate** climbed to 13.77% in the first quarter of 2007, the highest rate since the third quarter of 2002.[10]

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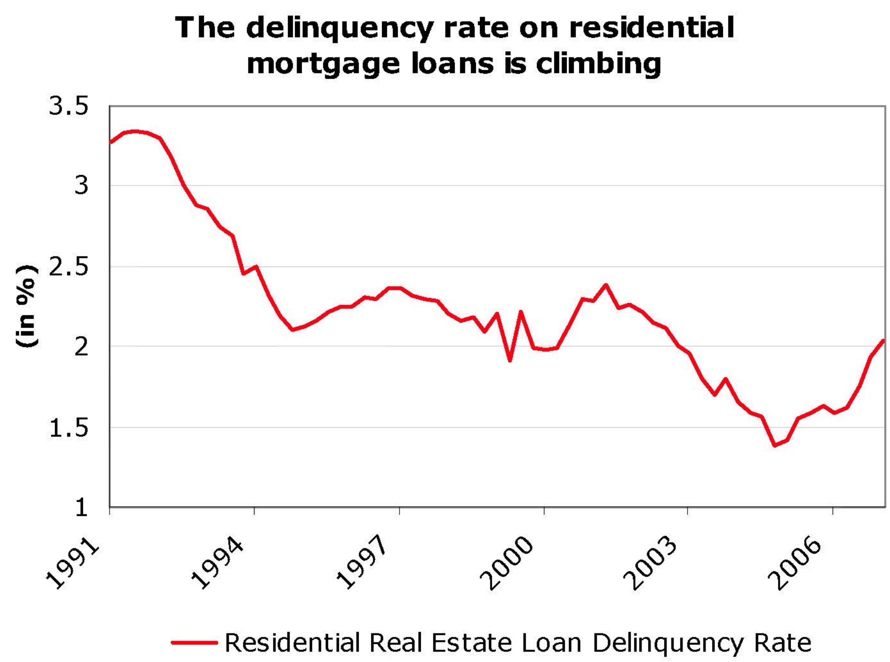
[8] NAR data.
[9] Census Bureau data.
[10] National Delinquency Survey, Mortgage Bankers Association, First Quarter 2006 data. See http://www.mortgagebankers.org/NewsandMedia/PressCenter/55132.htm for more details.

- **The 60-day delinquency rate on middle-tier "Alt-A"** loans has more than doubled in the past year — to 2.9% from 1.23%.[11]

- **In early 2007, the trend toward higher delinquency rates continued.** Delinquencies on all mortgage debt outstanding climbed to 2.87% in Q1 2007, up from a low of 2.03% in Q4 2005 and surpassing the highs seen during the last recession.[12]

- As of early June 2007, some **96 higher-risk lenders have succumbed to rising loan losses**, early payment defaults, funding cutoffs and related financial difficulties.[13] Some have ceased or curtailed lending operations. Others have filed for bankruptcy.

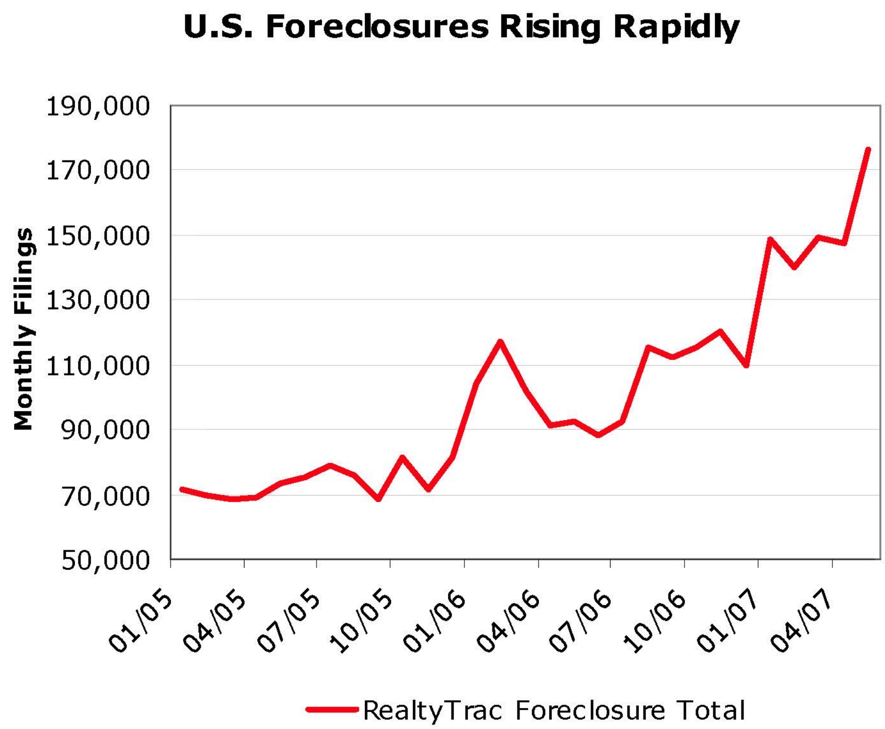
- **The delinquency rate on residential real estate loans,** as tracked by the Federal Financial Institutions Examination Council, climbed to 2.04% in Q1 2007 from 1.94% in Q4 2006.[14] The Q1 2007 rate is the highest in 18 quarters. Meanwhile, the charge-off rate on delinquent residential mortgage loans rose to a 13-quarter high of 0.16% from 0.13%.



[11] Mathew Padilla, "Lending's next tsunami?; Borrowers in the credit niche above subprime are missing more loan payments, and another crop of lenders is trying to regroup and stem the losses," The Orange County Register, May 13, 2007. The figures cited are for February.
[12] Quarterly Household Credit Report, CreditForecast.com, April 2007, available at http://www.economy.com/dismal/pro/release.asp?rk=97E79986-950B-4EDD-9FE8-94FA5608BF7A.
[13] The Mortgage Lender Implode-O-Meter, available at http://ml-implode.com/.
[14] Consolidated Reports of Condition and Income, Federal Financial Institutions Examination Council (FFIEC). Data available at http://www.federalreserve.gov/releases/chargeoff/delallsa.htm.

- **Delinquencies and charge-offs may be spilling over into the commercial real estate (CRE) lending sector,** including construction and development loans plus loans to build multifamily property. The CRE delinquency rate rose to 1.37% in Q1 2007, the highest since Q4 2003, while the CRE charge-off rate climbed to 0.07%, the highest since Q2 2004.

- **Monthly foreclosure filings** surged 90% year-over-year in May 2007 to a record high of 176,137.[15]



Credible estimates of the overall foreclosure toll and cost to the industry vary widely. FirstAmerican CoreLogic estimates that homeowners, lenders, and investors will lose up to $112.5 billion in the period between now and 2014, and that some 1.1 million loans could be foreclosed on.[16] The Center for Responsible Lending expects an even higher failure rate on higher-risk loans. It estimates 2.4 million foreclosures will result from subprime mortgages originated between 1998 and 2006.[17]

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[15] Data from RealtyTrac, available at: http://www.realtytrac.com/ContentManagement/pressrelease.aspx?ChannelID=9&ItemID=2644&accnt=64847.

[16] Christopher L. Cagan, *Mortgage Payment Reset, The Issue and The Impact*, First American CoreLogic, March 19, 2007, available at http://www.firstamres.com/pdf/20070048_reset_study_03062007_RV5.pdf.

[17] Ellen Schloemer, Wei Li, Keith Ernst, and Kathleen Keest, *Losing Ground: Foreclosures in the Subprime Market and their Cost to Homeowners*, Center for Responsible Lending, December 2006, available at http://www.responsiblelending.org/pdfs/foreclosure-paper-report-2-17.pdf. See also Center for Responsible Lending, *Subprime lending: A Net Drain on Homeownership*, CRL Issue Paper No. 14, March 27, 2007, available at http://www.responsiblelending.org/pdfs/Net-Drain-in-Home-Ownership.pdf.

Part 2: Some Large Banks and Thrifts May Be at Risk

The banking and thrift industries are in fairly strong financial shape overall, with few institutional failures and relatively low levels of loan delinquencies. However, signs of housing- and mortgage-related credit stress are beginning to appear.

The degree of stress can vary greatly from institution to institution. Banks and thrifts followed a wide range of lending practices, from most aggressive to most conservative, during the boom. The most extreme cases have the potential to fail sooner, causing ripple effects throughout the financial system and undermining investor confidence.

With the goal of quantifying mortgage risk in the banking and thrift industries, we used first quarter 2007 call report and thrift report data to identify:

> 1) All banks and thrifts with $100 million or more in assets
>
> 2) Among these, the banks and thrifts with the most mortgage risk, worst loan performance, and largest amount of mortgage-related charge-offs.

We used the following definitions and metrics:

1) Past due loans – loans with payments past due by 90 days or more

2) Nonaccrual loans – loans for which the institution no longer expects to receive interest payments.

3) Nonperforming loans — the sum of past due loans and nonaccrual loans

4) Charge-offs — the write-down of a nonperforming loan. The loan balance (plus foreclosure expenses) is charged against the institution's loan loss reserve.

5) Recoveries — the collection of payment or proceeds of liquidated collateral on a loan previously charged-off. Recoveries are usually credited against the loan loss reserve.

6) Net Charge-Offs — charge-offs, less recoveries.

7) Nonperforming mortgages — nonperforming 1-4 family residential first lien mortgages, 1-4 family junior lien mortgages, and home equity loans. Multifamily and commercial mortgages are not included.

8) Total mortgages — the sum of 1-4 family residential first lien mortgages, 1-4 family junior lien mortgages, and home equity loans. Multifamily and commercial mortgages are not included.

9) Risk-based capital (RBC) — Tier one capital, plus loan loss reserves, plus unrealized gains on available-for-sale securities.

The accompanying tables below summarize our findings, with more data available in Appendix A.

Analysis #1 – Nonperforming mortgage loans as a percent of risk-based capital.

- Miami Valley Bank of Quincy, Ohio has the highest ratio of nonperforming mortgage loans to RBC. Total nonperforming mortgage loans amount to $18.34 million – 1.83 times the bank's $10.03 million in RBC.

  As an indication of the broader impact of the mortgage crisis on this institution's financial health, TheStreet.com Ratings, formerly Weiss Ratings, recently downgraded its rating on the bank to "E-" from "B."[18] An E rating denotes a "very weak" institution that "currently demonstrates what we consider to be significant weaknesses and has also failed some of the basic tests that we use to identify fiscal stability. Therefore, even in a favorable economic environment, it is our opinion that depositors or creditors could incur significant risks."[19]

- NBank NA is also at high risk. The Georgia-based institution reports total nonperforming residential mortgage loans of $3.25 million – 66.9% of the bank's $4.85 million in RBC. TheStreet.com Rating for this bank is "E-," the lowest rating possible prior to bankruptcy.

- Five other banks with assets of at least $1 billion are also vulnerable to financial difficulties. The largest, Emigrant Bank of New York, reports $128.5 million in nonperforming mortgage loans, 13.65% of its $941.2 million in RBC. Its overall rating is "B-," indicating "good" financial stability despite its mortgage difficulties.

- The second-largest and third-largest banks among the 20 with the worst ratios are both based in San Juan, Puerto Rico. R-G Premier Bank (Rating: "D+") reported $123 million in nonperforming residential mortgage loans, 23.03% of its $533.9 million in RBC. Oriental Bank and Trust (Rating: "C") reports $49 million in nonperforming residential mortgage loans, 13.07% of its $305.7 million in RBC.

- Among thrifts, Eastern Savings Bank FSB of Hunt Valley, Maryland (Rating: "D") tops the list. Nonperforming mortgage loans total $153.4 million, or 117.8% of the institution's $130.3 million in RBC. EverBank of Jacksonville, Florida (Rating: "B-")

[18] "Deteriorating Asset Quality Drives First-Quarter Bank Earnings Lower," Business Wire press release, June 28, 2007, available at http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20070628005840&newsLang=en.

[19] The Street.com Ratings measure asset quality, profitability, liquidity, capital and reserve adequacy, and other metrics. For ratings definitions, see page 58.

is second among the most vulnerable 20 institutions by this measure. The institution reports $249.5 million in nonperformers, 77.45% of its $322.2 million in RBC.

- Seven thrifts in the top 20 list have at least $1 billion in assets. The largest is IndyMac Bank FSB of Pasadena, California (Rating: "C+") at 13.26% of RBC. IndyMac ranks as largest "Alt-A" lender in the third and fourth quarters of 2006, with $20.5 billion and $19.1 billion in originations, respectively.[20]

- The second-largest thrift on the list is Lehman Brothers Bank FSB of Wilmington, Delaware (Rating: "C+"), reporting nonperforming mortgages of $350.6 million, or 17.24% of the institution's $2.03 billion in RBC.

Table #1: 20 Most vulnerable banks in terms of nonperforming mortgage loans as a percentage of risk-based capital

Bank	State	Total Assets ($1,000s)	Nonperforming mortgages/Risk-based capital (%)	Street.com Rating
Miami Valley Bk	OH	157,234	**182.83**	E-
NBank NA	GA	112,258	**66.93**	E-
Home Town Bk of Villa Rica	GA	276,058	**30.85**	C
R-G Premier Bk of PR	PR	7,918,047	**23.03**	D+
Lincoln Park Svgs Bk	IL	253,280	**21.17**	D
Heritage Banking Group	MS	192,798	**19.70**	E+
First NB of AZ	AZ	2,766,512	**19.66**	C-
Northpointe Bk	MI	339,571	**19.24**	C-
Georgia Banking Co	GA	138,560	**18.06**	B
Oxford Bk	MI	511,851	**17.63**	D
First NB in Tremont	IL	105,480	**14.70**	C-
Central Bk of Jefferson Cnty	KY	178,918	**14.33**	C
First Mariner Bk	MD	1,168,107	**14.24**	D-
Arlington Bk	OH	191,040	**14.12**	B-
First St Bk	MI	755,069	**13.76**	C
Brickyard Bk	IL	174,083	**13.66**	D+
Emigrant Bk	NY	11,518,347	**13.65**	B-
First Commercial Bk	MN	206,590	**13.38**	D
Lowell Co-Op Bk	MA	124,577	**13.12**	D-
Oriental B&TC	PR	5,224,073	**13.07**	C

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

[20] Data provided by National Mortgage News. More rankings can be obtained here: http://data.nationalmortgagenews.com/freedata/?what=altaorig.

Table #2: 20 Most vulnerable thrifts in terms of nonperforming mortgage loans as a percentage of risk-based capital

Thrift	State	Total Assets ($1,000s)	Nonperforming mortgages/Risk-based Capital (%)	Street.com Rating
Eastern Svgs Bk FSB	MD	981,924	**117.77**	D
EverBank	FL	4,693,569	**77.45**	B-
Midfirst Bk	OK	11,361,502	**66.34**	B
NetBank	GA	3,249,096	**55.82**	E-
Inter Svgs Bk FSB	MN	930,947	**29.39**	C-
Ameribank Inc	WV	167,961	**29.33**	D-
Lafayette Svgs Bk FSB	IN	361,747	**23.86**	D
Cenlar FSB	NJ	531,723	**20.89**	C-
Cardunal Svgs Bk FSB	IL	180,737	**18.77**	D
Suburban FSB	MD	412,919	**18.55**	C-
Lehman Brothers Bk FSB	DE	20,200,916	**17.24**	C+
Brattleboro S&LA FA	VT	158,039	**16.31**	C-
Home FS&LA of Collinsville	IL	141,223	**15.98**	C+
New South FSB	AL	1,812,175	**15.81**	C
Home Loan Investment Bank, FSB	RI	226,202	**14.95**	B+
Gateway Bk FSB	CA	416,210	**14.94**	B
Platinum Community Bk	IL	112,282	**14.73**	D
Horizon Bank	IA	129,451	**13.49**	E-
IndyMac Bk FSB	CA	29,088,796	**13.26**	C+
Ohio Svgs Bk FSB	OH	17,939,345	**13.12**	B

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

Analysis #2 – Nonperforming mortgage loans as a percentage of total mortgage loans.

- Sun West Bank of Las Vegas, Nevada (Rating: "D+") has the worst ratio among the 20 on this list, with nonperforming mortgage loans of $6 million, representing 58.6% of its $10.24 million in total mortgage loans.

- Bankfirst of Sioux Falls, South Dakota (Rating: "D+") has the second worst ratio, with $5.66 million in nonperforming mortgages, representing 23.7% of its $23.9 million in first mortgages, junior lien mortgages and home equity loans.

- Two relatively large banks are also vulnerable based on this metric – First National Bank of Arizona in Scottsdale (Rating: "C-") and Wells Fargo Bank Northwest NA of Ogden, Utah (Rating: "C+"). Nonperforming mortgage loans total $54.2 million at First National, 10.49% of the bank's $516.9 million in overall mortgages. The comparable figures at Wells Fargo Bank are $13 million, 16.88%, and $77 million.

- Among the thrifts, Eastern Savings Bank of Hunt Valley, Maryland tops the list. Nonperformers are $153.4 million, 24.99% of the firm's $613.8 in total mortgage loans.

- Midfirst Bank of Oklahoma City, Oklahoma (Rating: "B") is second in vulnerability based on this metric. Nonperformers total $590.3 million, 21.97% of the company's $2.687 billion in mortgage loans.

- The list includes six thrifts with at least $1 billion in assets. Midfirst Bank is the largest, with $11.4 billion, followed by EverBank, with $4.69 billion.

- EverBank is fifth among thrifts when ranked by nonperforming mortgage loans as a percentage of total mortgage loans, and second when ranked by nonperforming mortgage loans as a percent of risk-based capital.

Table #3: 20 Most vulnerable banks in terms of nonperforming mortgage loans as a percentage of total mortgage loans

Bank	State	Total Assets ($1,000s)	Nonperforming/ Total Mortgages (%)	Street.com Rating
Sun West Bk	NV	413,560	**58.62**	D+
Bankfirst	SD	641,199	**23.66**	D+
Citrus Bk NA	FL	132,613	**23.39**	C
Equity Bk	TX	158,249	**22.92**	D-
Home Town Bk of Villa Rica	GA	276,058	**18.92**	C
Wells Fargo Bk Northwest NA	UT	15,003,000	**16.88**	C+
New Millennium Bk	NJ	151,758	**16.21**	D+
Miami Valley Bk	OH	157,234	**15.38**	E-
Corn Belt B&TC	IL	335,329	**14.80**	C-
Terrabank NA	FL	295,911	**14.66**	D-
First Bk of OH	OH	115,996	**14.13**	A
Biltmore Bk of Arizona	AZ	232,885	**13.70**	B-
Premier Bk	IL	217,285	**13.42**	B+
Brickyard Bk	IL	174,083	**13.41**	D+
San Joaquin Bk	CA	760,194	**13.12**	C+
Security Bk of North Metro	GA	208,760	**13.01**	D
North Houston Bk	TX	341,522	**11.69**	A-
First NB of AZ	AZ	2,766,512	**10.49**	C-
Washita St Bk	OK	209,358	**10.00**	B-
NBank NA	GA	112,258	**9.93**	E-

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

Table #4: 20 Most vulnerable thrifts in terms of nonperforming mortgage loans as a percentage of total mortgage loans

Thrift	State	Total Assets ($1,000s)	Nonperforming/ Total Mortgages (%)	Street.com Rating
Eastern Svgs Bk FSB	MD	981,924	**24.99**	D
Midfirst Bk	OK	11,361,502	**21.97**	B
Cenlar FSB	NJ	531,723	**11.33**	C-
NetBank	GA	3,249,096	**7.99**	E-
EverBank	FL	4,693,569	**7.98**	B-
Lafayette Svgs Bk FSB	IN	361,747	**6.01**	D
Ameribank Inc	WV	167,961	**5.67**	D-
Washington Svgs Bk FSB	MD	430,793	**5.32**	B
Inter Svgs Bk FSB	MN	930,947	**4.16**	C-
New South FSB	AL	1,812,175	**4.11**	C
First Trust Bk for Svgs	TN	364,423	**4.06**	C
Home Federal Bk of Hollywood	FL	108,272	**3.71**	C
Home Loan Investment Bank, FSB	RI	226,202	**3.58**	B+
Home FS&LA of Collinsville	IL	141,223	**3.57**	C+
Fidelity Bk	KS	1,790,098	**3.50**	C+
United Midwest Savings Bank	OH	215,437	**3.33**	D+
Coastal Bk	FL	150,590	**3.29**	B+
Cardunal Svgs Bk FSB	IL	180,737	**3.22**	D
Shelby County Bk	IN	140,693	**3.12**	C-
M & I Bk FSB	NV	1,079,295	**2.62**	B

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

Analysis #3 – Total Mortgage Loan Charge-Offs

This analysis provides a mechanism for tracking the overall scope of the bad-loan problem among large financial institutions. The list is dominated by the largest institutions overall, since they originate and hold the most mortgage loans.

- Among banks, Citibank NA of Las Vegas, Nevada (Rating: "B-") has the most net charge-offs, with $111 million.

- Among thrifts, Washington Mutual Bank of Henderson, Nevada (Rating: "B-") has the most with $98.7 million.

- Total charge-offs for residential 1-4 family first lien mortgages, residential 1-4 family junior lien mortgages and home equity loans amount to $563.1 million for the top 20 banks and $172.2 million for the top 20 thrifts.

Table #5: 20 Banks with the Most mortgage loan charge-offs

Bank	State	Total Assets ($1,000s)	Net Charge-Offs of Total Mortgages ($1,000s)	Street.com Rating
Citibank NA	NV	1,076,949,000	**111,000**	B-
JPMorgan Chase Bk NA	OH	1,224,104,000	**90,000**	C+
National City Bk	OH	131,741,508	**79,907**	C+
Wells Fargo Bk NA	SD	396,847,000	**73,000**	C+
SunTrust Bk	GA	184,810,394	**27,572**	B-
Wachovia Bk NA	NC	518,753,000	**27,000**	B
US Bk NA	OH	219,825,070	**26,037**	B-
Bank of America NA	NC	1,204,471,773	**22,101**	B-
Fifth Third Bk	MI	47,845,701	**16,060**	B+
HSBC Bk USA NA	DE	169,010,168	**13,269**	C
Fifth Third Bk	OH	51,561,153	**12,527**	B+
Regions Bank	AL	133,224,309	**9,898**	B
Charter One Bank, NA	OH	45,954,950	**8,822**	C+
Branch Bkg&TC	NC	118,083,229	**7,921**	B
Keybank NA	OH	89,408,200	**7,462**	B-
PNC Bk NA	PA	90,405,030	**6,465**	B
Wells Fargo Financial Bk	SD	4,225,751	**6,350**	C+
First Tennessee Bk NA	TN	38,522,657	**6,159**	B-
Irwin Union Bk	IN	5,431,259	**5,928**	C-
Huntington NB	OH	34,489,760	**5,618**	C

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

Table #6: 20 Thrifts with the Most mortgage loan charge-offs*

Thrift	State	Total Assets ($1,000s)	Net Charge-Offs of Total Mortgages ($1000s)	Street.com Rating
Washington Mutual Bank	NV	318,295,206	**98,698**	B-
Countrywide Bank, FSB	VA	94,671,124	**26,850**	B
E*Trade Bank	VA	54,999,199	**12,193**	C+
Ohio Svgs Bk FSB	OH	17,939,345	**5,411**	B
Peoples Community Bank	OH	1,011,372	**3,995**	D
Lehman Brothers Bk FSB	DE	20,200,916	**3,952**	C+
Flagstar Bk FSB	MI	15,400,036	**3,762**	C+
IndyMac Bk FSB	CA	29,088,796	**2,938**	C+
USAA FSB	TX	27,822,069	**2,829**	B
Progressive-Home FS&LA	PA	49,416	**1,882**	D
Mid America Bk FSB	IL	10,343,276	**1,695**	B
Sovereign Bk	PA	82,087,707	**1,543**	C+
World Svgs Bk FSB	CA	143,932,616	**1,393**	B
State Farm Bk, FSB	IL	13,625,631	**1,206**	C-
Guaranty Bank	WI	1,911,434	**716**	D
ING Bank FSB	DE	68,072,956	**678**	B-
Downey S&LA FA	CA	15,237,612	**647**	A-
Chevy Chase Bk FSB	VA	14,320,079	**614**	C-
Guaranty Bk	TX	15,745,632	**612**	C+
First Place Bank	OH	3,077,258	**599**	B

* One thrift among these 20 has less than $100 million in assets.

Rating Scale: A = Excellent, B = Good, C = Fair, D = Weak, E = Very Weak.
See definitions in Appendix A

Overall, an analysis of our risk measures and broader data on the financial industry demonstrates that:

1. The mortgage crisis is not limited to niche players that specialized in low-quality loans. It may also affect some larger institutions.

2. Many of the institutions with high exposure to the crisis may also be vulnerable to other financial pressures, including low capitalization and low asset quality overall, as demonstrated by their low ratings.

3. Loan delinquencies and foreclosures are rising throughout the mortgage system. We expect conditions in the banking and thrift industries will get worse, rather than better, in the foreseeable future. Therefore, the institutions we've named may merely be the first to be affected, and should be observed carefully for further clues regarding the potential impact on other depository institutions.

Overall, it cannot be disputed that the housing and mortgage markets are in the midst of one of the most severe downturns on record, and that the impact on key lenders, thrifts, and banks could be significant.

This begs the questions: What went wrong? Where do we go from here? What policy changes must be made in the short- and long-term? We address the first question in the next section.

Part 3. The Housing Bubble and the Forces that Inflated It

Rudyard Kipling once wrote: "If you can keep your head when all about you are losing theirs and blaming it on you … Yours is the Earth and everything that's in it, And — which is more — you'll be a Man, my son!"

Unfortunately, between 2002 and 2006, few in the housing finance food chain took Kipling's advice. Too many home buyers, lenders, and policymakers made poor choices and helped to inflate the largest housing bubble of all time. In this section, we review the roles of the key players.

**Rather Than Acting as a Moderating Force,
The Federal Reserve Often Played an Important
Role in Further Inflating the Housing Bubble.**

Two rounds of stimulative monetary policy can be closely associated with the genesis of the housing bubble, and each can be associated with two perceived threats in the early 2000s — first the unraveling of the dot.com bubble of the late 1990s, and second, the feared economic impacts of the 9-11 terrorist attacks.

The Federal Reserve's primary response to these dual threats was to drop the federal funds rate from 6.5% at the beginning of January 2001 to 1% by June 2003, the lowest level in more than four decades.[21] This produced the desired effect of buffering the economy. But it also unleashed a chain reaction of undesired consequences and side effects:

Below-average interest rates: First, it drove real (inflation-adjusted) interest rates into negative territory, erasing the real returns on a wide variety of savings instruments relied upon for income by millions of Americans — short-term Treasuries, certificates of deposit, and money market mutual funds.

Cheap credit: Second, it drove down the real cost of borrowing. Thirty-year fixed mortgage rates fell from 7.07% in January 2001 to 5.21% in June 2003, and remained near or below 6% in most months through late 2005.[22] One-year adjustable rate mortgage rates plunged by more than half, to 3% from 6.68%. After adjusting for inflation, credit was very cheap, often free.

Imprudent risk-taking: Third, these dramatic changes in the savings and lending environment tipped the usual balance between prudent savings behavior and speculative risk taking, injecting a pervasive, nationwide bubble mentality into the housing market.

[21] Selected Interest Rates, Federal Reserve, available at: http://www.federalreserve.gov/releases/h15/data.htm.
[22] Primary Mortgage Market Survey, Freddie Mac, available at: http://www.freddiemac.com/pmms/pmms_archives.html.

At the time, only a minority of observers noted the dangers. But with the benefit of hindsight, it is — or should be — obvious to any serious economic historian that we merely replaced one bubble, mostly confined to the technology sector, with another, far larger bubble, encompassing most of the housing market.

Once set in motion, the speculative fever spread quickly. From Miami to Phoenix to San Diego to Las Vegas, we witnessed investors camping outside housing developments to snap up three, four, five, or more units at a time. We saw condominium developers building gleaming towers in major cities, driven almost exclusively by anticipated bids from investors and speculators, often with little or no demographic evidence of underlying demand. From coast to coast, we saw investors signing pre-construction contracts, only to flip them before the first shovels touched the ground.

The percentage of homes purchased as second homes or investments climbed from 34% in 2003 to 40% in 2005, the highest recorded by the National Association of Realtors.[23] Speculators and non-owner occupier-buyers, previously at the margins of the housing market, penetrated its core, emerging as one of the more powerful forces driving housing purchase and sale decisions by both buyers and sellers.

Slowly at first, but soon gaining great momentum, home prices climbed. In the new home market,

- The rate of year-over-year appreciation rose from 4.8% in January 2001 to 18.1% in October 2004.[24]

- Cumulatively, median home prices jumped by a startling 50% between January 2001 ($171,300) and the peak in April 2006 ($257,000).[25]

In the existing home market, the numbers were even more dramatic:

- The rate of price appreciation surged from 3.6% in January 2001 to 16.6% in November 2005[26] and

- Median prices climbed 62.5% from $141,700 to $230,200 at the July 2006 peak.[27]

The Office of Federal Housing Enterprise Oversight's House Price Index (HPI), one of the broadest measures of existing home values, also accelerated substantially. The HPI appreciation rate rose from 8.08% in Q1 2001 to 13.72% in Q2 2005, the fastest recorded since Q2 1979.[28]

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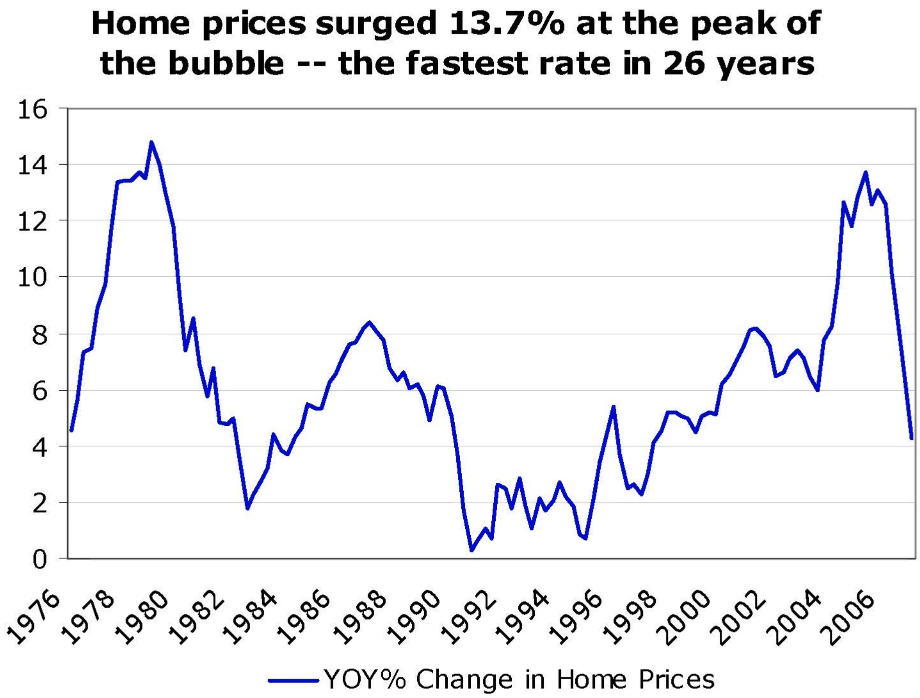
[23] *2007 Investment and Vacation Home Buyers Survey*, National Association of Realtors.
[24] Census Bureau data.
[25] *Ibid.*
[26] NAR data.
[27] *Ibid.*
[28] House Price Index, Office of Federal Housing Enterprise Oversight, available at http://www.ofheo.gov/media/pdf/4q06hpi.pdf.



Needless to say, this was a bonanza for most existing homeowners and for much of the economy. But there was one drawback: The appreciation in home prices far outstripped the income gains of most Americans:

- Median, unadjusted household incomes climbed from $42,317 in 2001 to $46,242 in 2005, an increase of 9.3%.[29] Meanwhile,

- During the same period, new home prices shot up 37.5%,[30] and existing home prices surged 43.4%.[31]

This great discrepancy was accompanied by a series of direct and indirect consequences:

Consequence #1. The median price-to-income ratio on existing homes rose from 3.62-to-1 to 4.75-to-1. Measured over the longer term (using a slightly different measure of income — the Census Bureau's Current Population Survey), single-family existing home prices reached a new, all-time historic high in relation to household incomes.[32]

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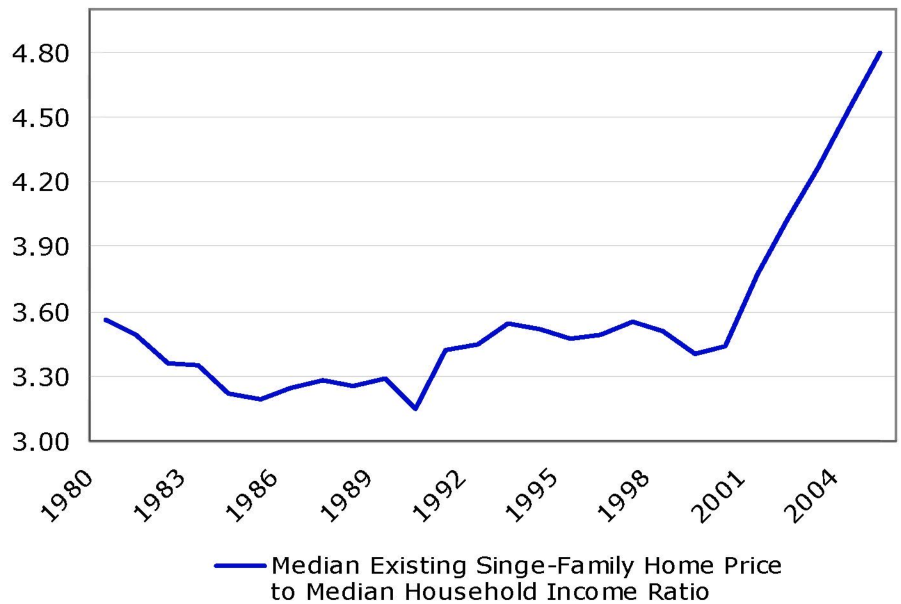
[29] American Community Survey, Census Bureau.
[30] Census Bureau data.
[31] NAR data.
[32] Current Population Survey, Census Bureau. Historical income data is available at http://www.census.gov/hhes/www/income/histinc/h06ar.html.

Home prices are at a historic high in relation to income



Consequence #2. A monthly housing affordability index compiled by the National Association of Realtors dropped from 134.70 in 2001 to 99.60 in July 2006, the lowest on record.[33]

Consequence #3. The cost of owning a home rose substantially in comparison to the cost of renting a home. The ratio of median monthly ownership costs to median monthly rental expenses surged to an all-time high of 1.166 in 2005, from approximately 1.0 in the pre-bubble days of 1999 and the 0.95 range prevalent during the 1980s.[34]

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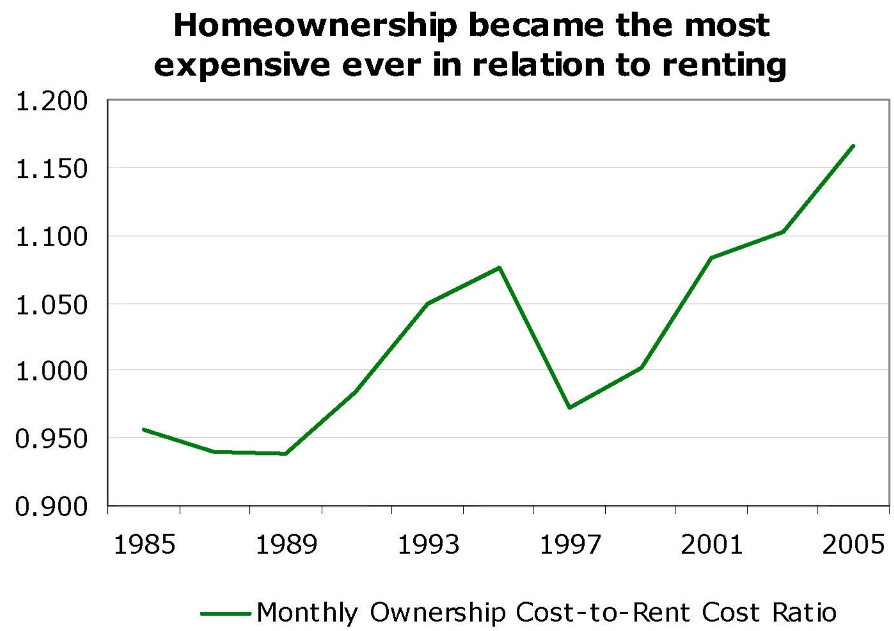
[33] Composite Home Buyer Affordability Index, National Association of Realtors. Monthly data dates back to January 1989.

[34] American Housing Survey for the United States, Census Bureau. Historical data is available at http://www.census.gov/hhes/www/housing/ahs/nationaldata.html. Census bureau data on monthly housing costs for owner-occupied units include the monthly payments on all mortgages, except reverse mortgages and home equity lines of credit. The figures also take into account real estate taxes, property insurance, HOA, condo, or cooperative fees, and utilities. Figures on renter occupied housing include the monthly rent, utilities, property insurance and any mobile home park fees.



Thus, the short-term benefit to existing homeowners (home price appreciation) was outweighed by the long-term roadblocks that these higher prices created for *new* home buyers.

By 2004, it Was Nearly Impossible to Ignore That the Housing Market Was Overheating.

The quantitative evidence was certainly not scarce:

- Home prices were already rising at the fastest rates in decades — more than four-and-a-half times as quickly as inflation.[35]
- Mortgage debt was already increasing at the fastest rate in two and a half decades.[36]
- Home price growth was already far outpacing income growth, driving long-standing valuation ratios to extreme highs, while ownership costs were surging in relation to rents.

At the same time, anecdotal reports of excessive speculation were abundant.

[35] The year-over-year rate of change in existing home prices averaged 8.3% in Q1 2004. The YOY change in the Consumer Price Index averaged 1.77% during the same period.
[36] Flow of Funds Report, Federal Reserve, available at http://www.federalreserve.gov/releases/z1/current/z1r-2.pdf. Home mortgage debt climbed by 14.4% in 2003 and 14.2% in 2004. The previous high for mortgage debt growth was in 1979, when debt rose 16.4%.

Yet the Federal Reserve did not believe it should play a forceful role in stemming this mania via monetary policy, focusing instead on traditional measures of inflation, and deciding not to begin raising short-term rates until June 2004. Furthermore, the rate adjustments were slower and more hesitant than those of the preceding down phase of the interest rate cycle.

Adding fuel to the speculative fires, monetary policymakers used their public pulpits to send mixed signals to the marketplace, often encouraging continued risk-taking that has proven harmful to borrowers, lenders and the industry as a whole. Here are just a few examples:

Example #1. Encouraging ARMs. In February 2004, former Chairman Alan Greenspan effectively steered lenders and borrowers toward a greater reliance on adjustable-rate mortgages (ARMs), when he stated:

> "American consumers might benefit if lenders provided greater mortgage product alternatives to the traditional fixed-rate mortgage. To the degree that households are driven by fears of payment shocks but are willing to manage their own interest rate risks, the traditional fixed-rate mortgage may be an expensive method of financing a home."[37]

For many American home buyers, that advice has proven to be costly: At the time, fixed-rate mortgages were roughly as cheap as they've been in decades, while rates on adjustable- rate mortgages were close to their nadir, poised to rise by more than 200 basis points (from around 3.5% to more than 5.5%).

Example #2. Encouraging alternative financing. The former Chairman's support for greater mortgage product alternatives was interpreted by many lenders as a green light to become more creative with their financing, a notion that was given further credence by the Chairman's praise of the operating skills of the subprime lending industry. In April 2005, he stated:

> "With these advances in technology, lenders have taken advantage of credit-scoring models and other techniques for efficiently extending credit to a broader spectrum of consumers. The widespread adoption of these models has reduced the costs of evaluating the creditworthiness of borrowers, and in competitive markets, cost reductions tend to be passed through to borrowers. Where once more-marginal applicants would simply have been denied credit, lenders are now able to quite efficiently judge the risk posed by individual applicants and to price that risk appropriately. These improvements have led to rapid growth in

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[37] Remarks by Alan Greenspan, "Understanding household debt obligations," Credit Union National Association 2004 Governmental Affairs Conference, Washington, D.C., February 23, 2004, available at http://www.federalreserve.gov/boarddocs/speeches/2004/20040223/default.htm.

> subprime mortgage lending; indeed, today subprime mortgages account for roughly 10 percent of the number of all mortgages outstanding, up from just 1 or 2 percent in the early 1990s."[38]

Needless to say, many lenders did not efficiently judge the risk posed by individual applicants. They lent too much money on too easy terms to too many unqualified borrowers, leading to the delinquency and foreclosure surge we are seeing today.

Example #3. Underestimating the bubble. As we've demonstrated above, the bubble should have been evident by early 2004. But it appears the Federal Reserve initially misjudged the extent of the mania, as evidenced by these comments by the Chairman in October of that year:

> "Housing price bubbles presuppose an ability of market participants to trade properties as they speculate about the future. But upon sale of a house, homeowners must move and live elsewhere. This necessity, as well as large transaction costs, are significant impediments to speculative trading and an important restraint on the development of price bubbles.
>
> "Some homeowners drawn by large capital gains do sell and rent. And certainly in recent years some homebuyers fearful of losing a purchase have bid through sellers' offering prices. But these market participants have probably contributed only modestly to overall house price speculation.
>
> "More likely participants in speculative trading are investors in single residence rental and second home properties. But even though in recent years their share of purchases of single family homes has been growing, in 2003 their mortgage originations were still less than 11 percent of total home mortgage originations. Overall, while local economies may experience significant speculative price imbalances, a national severe price distortion seems most unlikely in the United States, given its size and diversity."[39]

Example #4. Denying stronger evidence of a bubble. Even after it was more widely recognized that we were experiencing a housing bubble, there were efforts to stress the uncertainty of its existence: The Federal Reserve steadfastly maintained that it is impossible to determine whether there is an asset price

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[38] Remarks by Alan Greenspan, "Consumer finance," Federal Reserve System's Fourth Annual Community Affairs Research Conference, Washington, D.C., April 8, 2005, available at http://www.federalreserve.gov/boarddocs/speeches/2005/20050408/default.htm.

[39] Remarks by Alan Greenspan, "The mortgage market and consumer debt," America's Community Bankers Annual Convention, Washington, D.C., October 19, 2004, available at http://www.federalreserve.gov/boarddocs/speeches/2004/20041019/default.htm.

bubble at any given time, and that even if it was possible to do so, the Fed should not target that bubble. In January 2005, for instance, former Vice Chairman Roger Ferguson expressed the view that

> "Current statistical methods are simply not up to the task of 'detecting' asset-price bubbles, especially not in real time, when it matters most. 'Detecting' a bubble appears to require judgment based on scant evidence. It entails asserting knowledge of the fundamental value of the assets in question. Unsurprisingly, central bankers are not comfortable making such a judgment call. Inevitably, a central bank claiming to detect a bubble would be asked to explain why it was willing to trust its own judgment over that of investors with perhaps many billions of dollars on the line."[40]

As we have already discussed, several quantitative measures showed that the housing market was being driven by excessive borrowing and excessive speculation, and that those forces were driving prices to excessive levels (in relation to household incomes and rental costs). However, it appears the Fed chose to narrowly focus on traditional consumer price inflation, ignoring the broader trend in asset and monetary inflation.

Other Banking Regulators Did Overtly Recognize the Bubble, But There Was Often No Teeth in Their Actions, So Lenders Tended to Ignore Them.

The Fed is just one of five major federal regulatory agencies that oversee the banking industry.[41] Their goal is to ensure banks and lenders are operating in a safe and sound manner and adhering to various lending laws.[42] Sandra F. Braunstein, Director of the Fed's Division of Consumer and Community Affairs, recently laid out several ways banking regulators respond to improper activity:

1) Fed examiners conduct regular reviews of banks and bank holding companies. Those reviews examine credit risk-management practices, such as underwriting, portfolio risk management, and quality control processes concerning third-party originations. Examiners also study stress testing,

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[40] Remarks by Roger W. Ferguson Jr., "Recessions and Recoveries Associated with Asset-Price Movements: What do we know?" Stanford Institute for Economic Policy Research, Stanford, Calif., January 12, 2005, available at http://www.federalreserve.gov/boarddocs/speeches/2005/20050112/default.htm

[41] The other four are the Office of Thrift Supervision (OTS), Office of the Comptroller of the Currency (OCC), the National Credit Union Administration (NCUA), and the Federal Deposit Insurance Corporation (FDIC)

[42] These include the Truth in Lending Act, the Home Ownership and Equity Protection Act, the Real Estate Settlement Procedures Act, among others.

economic capital methods, and other quantitative risk-management techniques, as well as asset securitization activity and appraisal practices.[43]

When examiners find problems, they report on them to bank management. Most agree voluntarily to fix the problems. If that is deemed inadequate, regulators can compel compliance through the use of enforcement actions.

2) If bank examiners find weaknesses in risk management or underwriting at multiple institutions, regulators may issue public guidance to the industry. The guidance is designed to point institutions in the right direction, but does not carry the same weight as fresh regulation.

3) Enacting new regulations, or revising existing rules, is the third option available to the banking regulators. Changes to the Home Ownership and Equity Protection Act (HOEPA) that took effect in 2002 are an example of this type of action.[44]

As the bubble expanded rapidly in 2004 and 2005, banking regulators commented several times that high-risk lending practices were proliferating. For example, in November 2005, Office of Thrift Supervision Director John Reich said:

> "The experience with these instruments has so far been favorable. However, these new products share a common, potentially substantial additional risk element — a payment shock when the loan terms are eventually recast. For pay option ARMs, in particular, this shock can be quite dramatic — under reasonable assumptions about interest rates, as much as a 100% increase or more in the monthly payment.
>
> "These new products have the potential to take risk to a higher level than bank managers may be accustomed to. Given the relatively short period of time many of these newer instruments have been offered, the banking industry's overall experience with these two particular products is limited. Nonetheless, these products are now being offered in many markets across the country and it appears that a growing number of institutions with limited experience in managing the risks associated with these types of loans have begun to originate them in increasing volumes."[45]

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[43] Testimony of Sandra F. Braunstein, Director, Division of Consumer and Community Affairs, Before the House Subcommittee on Financial Institutions and Consumer Credit, March 27, 2007, available at http://www.federalreserve.gov/boarddocs/testimony/2007/20070327/default.htm

[44] *Ibid.*

[45] Speech by John M. Reich, Director, Office of Thrift Supervision, Before the Community Bankers Association of New York State, Naples, Florida, November 18, 2005, available at: http://www.ots.gov/docs/8/87109.pdf

Comptroller of the Currency John C. Dugan also warned about the risks of negatively amortizing loans in December 2005, saying:

> "I believe that neg am consumer loans raise substantial — and intertwined — consumer protection and safety and soundness issues. Too many consumers have been attracted to products by the seductive prospect of low minimum payments that delay the day of reckoning, but often make ultimate repayment of growing principal far more difficult. At the same time, too many lenders have been attracted to the product by the prospect of booking immediate revenue without receiving cash in hand, a process that often masks underlying credit problems that could ultimately produce substantial losses."[46]

Despite these stated concerns, and despite the evidence of riskier lending throughout the mortgage industry, regulatory agencies did not enact new rules or regulations. Instead, they opted for the milder approach of issuing guidance on higher-risk home equity lending in May 2005[47] and on interest only loans and option ARMs in September 2006.[48] Additional guidance on subprime mortgage lending was proposed in March 2007 and finally enacted on June 28.[49]

However, because guidance lacks both financial carrots and legal sticks for the mortgage industry, there was very little change in the behavior of lenders. Nearly all lenders continued to make high-risk loans, which secondary market buyers continued to purchase. As the *New York Times* reported in July 2005:

> "For two months now, federal banking regulators have signaled their discomfort about the explosive rise in risky mortgage loans.
>
> "First they issued new 'guidance' to banks about home-equity loans, warning against letting homeowners borrow too much against their houses. Then they expressed worry about the surge in no-money-down mortgages, interest-only loans and 'liar's loans' that require no proof of a borrower's income.
>
> "The impact so far? Almost nil.

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[46] Remarks by John C. Dugan, Comptroller of the Currency, Before the Consumer Federal of America, December 1, 2005, available at http://www.occ.treas.gov/ftp/release/2005-117a.pdf

[47] See "Credit Risk Management Guidance for Home Equity Lending," May 16, 2005, available at http://www.federalreserve.gov/boarddocs/press/bcreg/2005/20050516/attachment.pdf

[48] See "Interagency Guidance on Nontraditional Mortgage Product Risks," September 29, 2006, available at http://www.federalreserve.gov/boarddocs/press/bcreg/2006/20060929/attachment1.pdf

[49] See "Statement on Subprime Mortgage Lending," June 28, 2007, available at http://www.federalreserve.gov/boarddocs/press/bcreg/2007/20070629/attachment.pdf.

"'It's as easy to get these loans now as it was two months ago,' said Michael Menatian, president of Sanborn Mortgage, a mortgage broker in West Hartford, Conn. 'If anything, people are offering them even more than before.' "

"The reason is that federal banking regulators, from the Federal Reserve to the Office of the Comptroller of the Currency, have been reluctant to back up their words with specific actions. For even as they urge caution, officials here are loath to stand in the way of new methods of extending credit.

"'We don't want to stifle financial innovation,' said Steve Fritts, associate director for risk management policy at the Federal Deposit Insurance Corporation. 'We have the most vibrant housing and housing-finance market in the world, and there is a lot of innovation. Normally, we think that if consumers have a lot of choice, that's a good thing.'"[50]

This apparent disregard for guidance continued over the course of the next year, with the *Washington Post* reporting in August 2006:

"Despite regulators' warnings that some popular types of mortgages are risky, lenders are still making them, and mortgage insurance companies have begun pleading with federal banking agencies to act quickly to restrict them.

"The loans under scrutiny include interest-only mortgages and 'option' mortgages, in which borrowers decide each month how much to repay. Because monthly payments are lower than with traditional fixed-rate mortgages, borrowers can buy more expensive houses. In the past five years, millions of Americans have bought or refinanced homes using these loans. The risk comes because eventually these loans 'reset,' meaning the payment is adjusted upward — sometimes as much as doubling — to repay the full interest and principal owed.

"'We are deeply concerned about the potential contagion effect from poorly underwritten or unsuitable mortgages and home equity loans,' Suzanne C. Hutchinson, executive vice president of the Mortgage Insurance Companies of America, wrote in a recent letter to regulators. 'The most recent market trends show alarming

[50] Edmund L. Andrews, "Efforts to Regulate Risky Mortgage Innovations Are So Far Ignored," The New York Times, July 15, 2005.

> signs of undue risk-taking that puts both lenders and consumers at risk.'"[51]

In sum, we recognize that setting monetary policy is a complex process, and necessarily involves assessing a wide variety of economic and market indicators. But we believe that, in the face of a potentially dangerous speculative mania in housing, monetary policymakers at the Federal Reserve failed to recognize clear, on-the-ground evidence, failed to send clear signals to market participants who were taking on excessive risk, and failed to lean against the inflating asset bubble.

Federal regulators, for their part, warned about high-risk mortgage lending. But they failed to back up those warnings with rules or regulations designed to contain or reduce lending abuses. So lenders routinely ignored the warnings.

We believe these constitute a series of fatal policy errors. And we believe they virtually ensured the outcome: A climactic period of unrestrained risk-taking in the residential real estate market, followed by the painful bust we are now witnessing.

Most of The Private Marketplace Players
Also Failed to Take Protective Steps

During the bubble years, with home sales surging, home inventories shrinking, home prices skyrocketing, housing affordability plunging, and demand from top-tier borrowers all but satiated, mortgage lenders faced a difficult choice. They could either:

- Maintain prudent lending standards and accept a decline in loan volume, or
- Debase lending standards and accept the risk of serious long-term damage to their finances, to the industry, and, ultimately, to the economy.

With scant exceptions, they chose the latter path. The most common mechanism: A series of specialized mortgages, designed for the legitimate purpose of serving a small number of niche borrowers, were repositioned as so-called "affordability loans" available to a wide number of average American households. Specifically:

1. Stated income mortgages were originally designed to serve self-employed borrowers and others with specific difficulties in documenting their income through traditional means, such as W-2 forms or pay stubs. But as more borrowers could not qualify for increasingly costly homes, mortgage brokers and lenders began using stated income mortgages to bypass qualification standards.

Many lenders turned a blind eye to stated incomes that were most probably exaggerated. Some brokers even falsified borrower incomes on loan applications. And only rarely did

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[51] Kristin Downey, "Insurers Urge Action On Risky Mortgages; Firms Want More Loan Restrictions," The Washington Post, August 19, 2006.

lenders restrict the use of stated income mortgages to the occasional special situations for which they were originally designed.

The Mortgage Asset Research Institute (MARI) reported on a sample of 100 stated income loans for which income data, as reported to the Internal Revenue Service, was also available. Among these, nine in 10 involved incomes that were inflated by 5% or more, and almost six in 10 included income figures that had been exaggerated by more than 50%. According to MARI,

> "Stated income and reduced documentation loans speed up the approval process, but they are open invitations to fraudsters. It appears that many members of the industry have little historical appreciation for the havoc created by low-doc/no-doc products that were the rage in the early 1990s. Those loans produced hundreds of millions of dollars in losses for their users. ...
>
> "When these loans were introduced, they made sense, given the relatively strict requirements borrows had to meet before qualifying. However, competitive pressures have caused many lenders to loosen these requirements to a point that makes many risk managers squirm."[52]

Indeed, overall fraud levels rose rapidly in the early years of this decade — to 28,372 instances in fiscal 2006, up from 3,515 in 2000. Bogus loan application data, including falsified employment and income histories, have been key contributors to the increase.[53]

2. Option Adjustable Rate Mortgages, or "Pick Your Payment" loans, were also misused throughout the industry. Historically, option ARMs allowed high-net-worth borrowers to maximize interest deductions for their taxes. Commissioned salespeople with irregular incomes were another typical user of option ARMs. These relatively sophisticated borrowers could make the interest-only payment, or the bare minimum payment, during their lean times, then make large, lump-sum principal payments during busier times.

But beginning in 2003, and accelerating thereafter, lenders and brokers distributed these loans well beyond the sophisticated niche market for which they were intended. As a result, the market share of negatively amortizing home purchase loans climbed from practically zero in 2003 to 6.6% in 2006.[54]

[52] Mortgage Asset Research Institute, *Eighth Periodic Mortgage Fraud Case Report to Mortgage Bankers Association*, April 2006, available at http://www.mari-inc.com/pdfs/mba/MBA8thCaseRpt.pdf.
[53] Financial Crimes Enforcement Network, via *Ninth Periodic Mortgage Fraud Case Report to Mortgage Bankers Association*, Mortgage Asset Research Institute, April 2007, available at http://www.mari-inc.com/pdfs/mba/MBA9thCaseRpt.pdf.
[54] LoanPerformance MBS/ABS Securities Database.

Moreover, lenders pushed these loans despite evidence that many, if not most, of the borrowers could barely afford the *minimum* payments — let alone fully amortized payments. With an option ARM, a borrower who pays the minimum payment suffers the added burden of negative amortization as unpaid interest is added to the principal.

3. Dramatic easing of lending standards was ubiquitous in the industry even as the boom began to bust. For example, Alternative-A, or "Alt-A," loans, are those that fall between subprime and prime on the risk spectrum. They were designed for borrowers who can't — or don't want to — qualify for conventional, prime mortgages, but who generally have good credit.

According to LoanPerformance, however, standards for Alt-A originations sank steadily in the beginning of the decade.[55] Specifically:

- In 2000, the average debt-to-income ratio was 34.7%. By 2006, that had risen to 37.8%.

- In 2000, ARMs accounted for just 12.7% of Alt-A originations. By 2006, that had surged to 69.5%.

- In 2000, only 1.1% of Alt-A loans had the potential for negative amortization. By 2006, that number had shot up to 42.2%.

- In the same period, the combined market share of "low-doc" and "no doc" mortgages within the Alt-A universe rose from 62.9% to 83.5%; the share of loans with "silent second" mortgages climbed from 0.2% to 38.7%; the share of interest-only mortgages rose from 1.1% to 35.6%; and the share of 40-year amortization loans climbed from virtually nothing to 10.8%.

In sum, almost every measure of loan risk rose and did so dramatically.

4. A growing number of mortgage originators pressured home appraisers into playing a game of "hit the number." A broker or lender would order an appraisal on a collateral property. He would then give the appraiser a certain target value needed in order for the loan to close. And whether communicated overtly or subtly, it was generally understood that, if the appraiser could not justify the target value, he could lose the business on that loan, or worse, might not be consulted on future loans.

If this were merely a matter of a few bad apples in a solid industry, it would not be cause for alarm. But according to a recent study by October Research, including more than 1,200 appraisers, 90% felt pressured to make false appraisals, up from 55% four years earlier.[56] Separately, the Appraisal Institute, a trade group with 22,000 members in the

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[55] David Liu and Shumin Li, *Alt-A Credit - The Other Shoe Drops?*, The MarketPulse, LoanPerformance, December 2006, available at http://www.loanperformance.com/market_pulse/currentMP_lowres.pdf.
[56] 2007 October Research National Appraisal Survey, October Research Corp.

real estate appraisal industry, has warned of this widespread problem and urged something be done to fix it:

> "We continue to see too little emphasis paid to the collateral side of lending, particularly as it relates to appraisal independence. It is common for mortgage lenders, mortgage brokers and others to use only those appraisers who 'hit the number,' regardless of whether it represents market value. In some instances appraisers who refuse to bow to such pressure are placed on exclusionary lists or are simply not paid.
>
> "Further, these concerns are confirmed by the federal bank regulatory agencies, which report widespread breakdowns in appraisal independence. However, institutions outside of the purview of federal bank regulatory agencies drive much of the mortgage market, and they are able to do so with very little regard to appraisal requirements."[57]

Thus, countless buyers were lured into homes with values inflated by distorted appraisals. They were encouraged to borrow more on their homes than they were worth. And they are now more likely to have little or no equity stake to help them ride out the tough times. This can only lead to more delinquencies, defaults and foreclosures.

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[57] 2007 Appraisal Institute Legislative Talking Points, Appraisal Institute, available at http://www.appraisalinstitute.org/govtaffairs/downloads/tlkng_pnts_fnl.pdf.

Part 4. The Securitization Boom, Aided by Excess Liquidity, Significantly Boosted Risk-Taking and Greatly Inflated the Housing Bubble

Mortgage securitization is not a new phenomenon — lenders have been securitizing home loans since the 1970s.[58] But the growth in this sector during the recent housing bubble was many times greater than the decades of growth that preceded it.

This surge can be attributed to a flood of excess liquidity. And the excess liquidity, in turn, stemmed from two overlapping factors:

(A) Relatively rapid growth in the nation's money supply, and

(B) The unusually deep decline in interest rates engineered largely by the Federal Reserve, encouraging savers and investors to abandon lower-yielding conservative investments and seek the higher yields available only on more aggressive instruments, especially those being created in the mortgage markets.

Typically, the securitization process follows this sequence:

Step 1. Loan originators make mortgage loans.

Step 2. Wholesale lenders, government sponsored entities, and Wall Street investment firms fund and/or purchase those loans.

Step 3. The firms either hold the loans in their portfolios or package them into Mortgage-Backed Securities (MBS) for sale to investors. Ratings agencies analyze and rate the securities constructed from the underlying pools of home loans.

Step 4. Investors, including foreign central banks, pension funds, bond mutual funds, individuals and others, buy and sell these MBS in the secondary market.[59]

Securitization proponents argue that the process has benefited mortgage lenders and borrowers. David Sherr, Managing Director and Global Head of Securitized Products for Lehman Brothers, explained it this way in April:

> "Before securitization became widespread, banks had relatively limited capital available to make loans to prospective homeowners. Their lending activities were constrained because they had no

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[58] For more on the evolution of the securitization industry, see Leon T. Kendall and Michael J. Fishman, "A Primer on Securitization" (Cambridge, Mass.: The MIT Press, 2000).

[59] The "primary" market is where borrowers obtain loans from brokers, banks, and other primary lenders; the "secondary" market is where those loans are bought and sold, either as individual mortgages or within the MBS framework.

effective means to convert their existing loan portfolios to cash that could be used to make additional loans. There was no liquid market for mortgage loans. With the advent of the securitization market, banks (and other financial institutions) have been able to monetize their existing loan portfolios and to transfer the risk associated with those loans to sophisticated investors. As a result, more money is available to borrowers who wish to buy their own homes, or to refinance their existing mortgage loans on more attractive terms."[60]

In recent years, however, the secondary market changed with the influx of large volumes of liquid investment capital, as central bankers in the U.S. and overseas pursued more stimulative monetary policies. These excess liquid funds, in turn, pursued yields higher than those available on U.S. Treasuries, creating intense demand for pools of higher-yielding mortgage pools.

With new money flooding into the secondary market, primary lenders realized they could originate almost any loan, even one with excessive risk, and sell it off to investors at a profit.

Meanwhile, soaring home prices and plunging home affordability made it all but impossible for many borrowers to afford houses using traditional mortgages. They demanded a solution, and, as we discussed in the previous section, lenders responded by rolling out alternative home mortgages on a wider basis than ever before.

This also gave mortgage brokers an opportunity to concentrate on the higher-risk segments of the business, inasmuch as lenders were ratcheting up the fees they paid out to brokers who brought them subprime mortgages. Indeed, the subprime and Alt-A share of mortgage broker originations surged from just 19.7% in 2000 to 42.7% in 2004 and 50% in 2006.[61]

The *Wall Street Journal* describes the explosion in secondary market liquidity in the subprime mortgage arena, while chronicling increasing foreclosures in a Detroit neighborhood:

> "... [B]eginning in the mid-1990s, the evolution of subprime lending from a local niche business to a global market drastically rearranged lenders' incentives. Instead of putting their own money at risk, mortgage lenders began reselling loans at a profit to Wall Street banks. The bankers, in turn, transformed a large chunk of the subprime loans into highly rated securities, which attracted investors from all over the world by paying a better return than

[60] Written statement of David Sherr, Managing Director and Global Head of Securitized Products for Lehman Brothers, Before the Senate Banking Subcommittee on Securities, Insurance, and Investment, April 17, 2007, available at http://banking.senate.gov/_files/sherr.pdf.
[61] Data from Wholesale Access Mortgage Research & Consulting.

> other securities with the same rating. The investors cared much more about the broader qualities of the securities — things like the average credit score and overall geographic distribution — than exactly where and to whom the loans were being made ...
>
> "Suddenly, mortgage lenders saw places like West Outer Drive as attractive targets for new business, because so many families either owned their homes outright or owed much less on their mortgages than their homes were worth. Lenders seeking to tap that equity bombarded the area with radio, television, direct-mail advertisements and armies of agents and brokers, often peddling loans that veiled high interest rates and fat fees behind low introductory payments. Unscrupulous players had little reason to worry about whether or not people could afford the loans: The more contracts they could sign, the more money they stood to make."[62]

It was these factors that led to explosive growth in securitization activity: As of year-end 2006, there were $6.5 trillion of securitized loans outstanding, compared to $4.3 trillion in U.S. Treasuries. Total MBS issuance shot up to $2.4 trillion last year from $738 billion in 2000, a greater than three-fold increase.[63]

Overall, the explosion in mortgage originations, aided by the infusion of liquidity and risk-transference in the secondary market, helped inflate the housing bubble — and aggravate the current bust — in several ways, as follows:

1. Securitization removed, minimized, or postponed the consequences of poor lending decisions from those making those decisions.

The ultimate credit risk of many home mortgages is no longer borne by originating lenders — lenders who in the past would typically be far more familiar with the borrower's financial condition. Instead, it often lands in the laps of distant investors who know little about each individual borrower or mortgage. In her testimony before the House Committee on Financial Services, FDIC Chairman Sheila Bair explained that

> "Prior to the widespread use of securitization, home finance typically involved a bank or savings institution granting a loan to a borrower. The lending institution would make the decision to grant credit, fund the loan, and collect payments. In the event of borrower default, the same institution could choose to restructure

[62] Mark Whitehouse, "Subprime Aftermath: Losing the Family Home," The Wall Street Journal, May 30, 2007, available at http://online.wsj.com/article/SB118047548069017647-search.html?KEYWORDS=mortgage+broker&COLLECTION=wsjie/6month.

[63] Securities Industry and Financial Markets Association, *Research Quarterly*, February 2007, available at http://www.sifma.org/research/pdf/Research_Quarterly_0207.pdf.

> the loan or foreclose on the property. The lender also might have an established relationship with the borrower, and, thus, be able to evaluate the relative long-term benefits of various alternatives. This relatively simple relationship between the borrower and lender illustrated in the diagram below has given way to a far more complicated securitization structure which includes multiple parties, each with unique and often divergent interests. ...
>
> "Securitization takes the role of the lender and breaks it into separate components. Unlike the more traditional relationship between a borrower and a lender, securitization involves the sale of the loan by the lender to a new owner — the issuer — who then sells securities to investors. The investors are buying 'bonds' that entitle them to a share of the cash paid by the borrowers on their mortgages. Once the lender has sold the mortgage to the issuer, the lender no longer has the power to restructure the loan or make other accommodations for its borrower. That becomes the responsibility of a servicer, who collects the mortgage payments, distributes them to the issuer for payment to investors, and, if the borrower cannot pay, takes action to recover cash for the investors."[64]

In short, the risk inherent in originating lower-quality loans is handed off to other parties via the securitization process. That is not to say that lenders and brokers who originate poorly performing mortgages will never suffer any consequences for their actions. As outlined in Part 1 of this paper, rationality and discipline are now returning to the securitization marketplace. But they are doing so primarily on the heels of significant trauma: Some lenders have been forced to abandon the higher-risk lending business with substantial losses, while others have filed for bankruptcy.

The primary issue: Under the current mortgage finance system, the consequences of poor lending decisions may not reverberate among the decision makers for months, quarters, or even years. And by that time, hundreds or even thousands of low quality loans may have already been extended, dooming many borrowers to likely foreclosure, depressing property values, and creating a vicious cycle that can perpetuate the crisis. [65]

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[64] Statement of Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation, Before the House Committee on Financial Services, April 17, 2007, available at http://www.fdic.gov/news/news/speeches/chairman/spapr1707.html.

[65] For more on this topic, see the Joint Economic Committee's report: "Sheltering Neighborhoods from the Subprime Foreclosure Storm," published on April 11, 2007 and available online at http://jec.senate.gov/Documents/Reports/subprime11apr2007revised.pdf.

2. Securitization stresses quantity over quality.

With many of today's securitized mortgages, the ultimate performance of those loans has little or no direct impact on compensation for the parties involved:[66]

- **Lenders** no longer get their revenues over time, from interest charged on the loans; they make their money from origination fees and the sale of loans into the secondary market.

- **Mortgage brokers**, who originate roughly two-thirds of all U.S. mortgages, earn commissions and fees that vary with loan rate, loan type, and loan size, not whether the loan ends up going delinquent.[67]

- **Investment banks and ratings agencies** also make their money from buying, bundling, rating, and selling mortgages. Again, the emphasis is on transaction *volume*, not the ultimate performance of those mortgages.

In a traditional portfolio lending model, originating lenders hold the underlying loans until maturity, or until they're paid off in the event of a sale or refinancing.

Thus, the emphasis in portfolio lending is on long-term business relationships and long-term loan performance. Originating lenders must concern themselves with credit quality and borrower stability because they are the ones on the hook when borrowers default or are in foreclosure.

In contrast, in the booming investor and securitization model, the end investor is now the primary party in the mortgage food chain that is directly impacted by poor loan performance. But the investor is also the furthest removed from factors that might cause such poor performance.

Chapman University School of Law professor Kurt Eggert recently explained the situation in the following manner:

> "Rating agencies and other securitizing entities have an interest in increasing the number of loan pools that are securitized, since that is how the securitizers increase their income. This self-interest encourages rating agencies and other securitizers to focus excessively on the quantity of loans securitized, in contrast to traditional regulatory agencies, which focus more on the quality of loans made by depository institutions. Rating agencies do of course also examine the quality of loans in the pools that they rate.

[66] In certain instances, investors do have some recourse with lenders, and lenders with brokers, such as with loans that default very early or are found to contain fraudulent documentation. But in our view, that's rarely a long-term concern. Too often, the focus is strictly on short-term financial performance.
[67] Estimate from Wholesale Access. Further details on the group's 2004 mortgage broker study and its findings are available at http://www.wholesaleaccess.com/7_28_mbkr.shtml.

> However, the recent loosening of underwriting standards and the accompanying defaults demonstrates that that examination has not been sufficient.
>
> "Securitization thus emphasizes quantity of loans over quality in several parts of the securitization process. To the extent that originators of loans can transfer the risk of default to investors or minimize that risk, then securitization encourages originators to make as many loans as possible, provides them with the funds to make the loans, and reduces the risk of poor loans. At the same time, securitization rewards the de facto primary regulators of those same originators for that increase in the quantity of loans, furnishing another incentive to value quantity over quality."[68]

3. The securitization boom made it more profitable and easier for lenders and brokers to lead borrowers to inappropriate loan products.

Why would lenders and brokers dole out more expensive, exotic mortgages to borrowers at a time when home prices were surging and home affordability was plunging? It was partly because borrowers were demanding creative loans that would allow them to buy otherwise unaffordable homes.

But it was not solely tied to their zeal to meet borrower demand. It was also driven by the willingness of investors to pay more for higher-risk, higher-yielding mortgage paper. That, in turn, drove up the financial rewards for lenders and brokers who sold higher-risk mortgages.

Or, as Bair explains in separate Congressional testimony in March 2007,

> "Reputable mortgage brokers can be a tremendous help to borrowers, offering them access to options they have difficulty finding on their own. However, mortgage brokers generally do not have a duty to find the most appropriate loan for a borrower, and they are not directly compensated based on benefits to the borrower. Moreover, mortgage brokers have no financial risk if the loan eventually defaults because they are compensated by lenders who in turn offer incentives based on the lender's preference for products it wishes to hold or sell. For example, a broker compensated with yield spread premiums (YSPs) — the difference between the par rate for a loan (the minimum acceptable interest rate) and the interest rate actually paid by the borrower — has an

[68] Testimony of Kurt Eggert, Professor of Law, Chapman University, Before the Senate Banking, Housing, and Urban Affairs Committee's Subcommittee on Securities, Insurance, and Investments, April 17, 2007, available at http://banking.senate.gov/_files/eggert.pdf.

> incentive to encourage a borrower to take a product with a higher interest rate.[69]
>
> "Lenders that retain the mortgages they originate have interests more aligned with those of borrowers in the products offered and in the structuring of loans, because they bear a substantial financial risk if the borrower defaults. However, in the case of loans sold on the secondary market ... the lender's preferences are heavily influenced by what market investors want to buy, which may not match what is appropriate for the borrower."[70]

Thus, borrowers may end up with higher cost loans than merited, in part because the securitization process makes it more profitable for brokers and lenders to originate them.

For instance, the *Los Angeles Times* chronicles how some borrowers, who were sold higher-rate, higher-fee nonprime loans, could have qualified for lower-rate, higher-quality mortgages.[71] The *Times* maintained that 1 in 5 borrowers who were given higher-priced loans could have qualified for conventional, prime-credit financing, up from a range of 10% to 15% in the early 2000s.

Similarly, in February 2000, I noted how banks that owned subprime lending divisions generally did not have "refer up" policies in place. In other words, borrowers with good credit who went to the subprime financing arms of the banks in question wouldn't automatically be given the top-tier rates and terms offered directly through those banks. As a result, they could end up paying much more for a mortgage.[72]

4. Securitization, when coupled with excess liquidity, resulted in distorted market price signals.

In theory, sophisticated investors who purchase bundles of home loans in the secondary market have the knowledge, discipline, and expertise to accurately assess risk and price it accordingly. But judging by recent market activity, that theory failed to hold up in practice.

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[69] It should be noted that yield spread premiums can be used legitimately by upright mortgage brokers. Specifically, a borrower might not want to pay his mortgage closing costs out of pocket. He can agree to pay a higher interest rate on the loan instead. The lender pays the broker a premium for the higher-yielding mortgage. That premium money is used to cover the closing costs.
[70] Testimony of Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation, on Subprime and Predatory Lending: New Regulatory Guidance, Current Market Conditions, and Effects on Regulated Institutions, Before the House Subcommittee on Financial Institutions and Consumer Credit of the Committee on Financial Services, March 27, 2007, available at http://www.fdic.gov/news/news/speeches/chairman/spmar2707.html
[71] Mike Hudson and E. Scott Reckard, "More Homeowners With Good Credit Getting Stuck With Higher-Rate Loans," Los Angeles Times, October 24, 2005.
[72] Michael D. Larson, "If you have good credit, get your loan from the parent bank, not its subsidiary," Bankrate.com, February 24, 2000, available at http://www.bankrate.com/brm/news/mtg/20000224.asp.

First, the excess liquidity in global capital markets kept money flowing into the secondary mortgage market long after it was readily apparent that delinquency rates were surging and that foreclosures were starting to rise sharply. Consider this excerpt from a Dow Jones story published in September 2006:

> "Despite all the bad news about subprime mortgages**,** investors just can't seem to get enough of them.
>
> "Fueled largely by demand from investors in Europe and Asia, bonds backed by subprime loans are riding high, even as the stocks of companies that make these loans are getting crushed amid reports that more borrowers are falling behind on their payments."[73]

Second, it is abundantly clear that investors misjudged the risks inherent in the subprime mortgage market. Several investment funds, including those operated or overseen by Bear Stearns, UBS AG, United Capital Markets Holdings, and Cambridge Place Investment Management, have reportedly suffered severe financial difficulties in 2007. Those difficulties include investor withdrawals, redemption requests, and steep losses on the value of investment holdings.

Ultimately, losses on subprime mortgage bonds alone may total as much as $90 billion, according to one estimate.[74] Losses on collateralized debt obligations (CDOs), investment vehicles created from slices of various mortgage-backed securities and asset-backed securities, may total billions more. One published estimate puts the figure at $20 billion for the $135 billion in CDOs issued since 2003 that invest in the highest-risk mortgage slices.[75]

To sum up,

1. Global investors enjoyed a flood of excess liquidity.

2. Debt securitization provided them with a channel whereby this excess liquidity could be poured into the mortgage market.

3. That, in turn, often distorted important market signals. It gave the mortgage boom an unnaturally long life, pushing out the day of reckoning for subprime lenders who were making highest-risk loans and giving them the opportunity to effectively entrap many more borrowers.

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[73] Allison Bisbey Colter, "Subprime loans are still hot property in bond market," Dow Jones Newswires, September 1, 2006.
[74] Jody Shenn and Jenny Strasburg, "United Capital's Devaney Halts Hedge Fund Withdrawals," Bloomberg News, July 3, 2007, available at http://www.bloomberg.com/apps/news?pid=20601087&sid=aN3b7B63L55U&refer=home.
[75] Al Yoon, "Subprime risks come home to roost for hedge funds," Reuters, July 6, 2007, available at http://www.reuters.com/article/reutersEdge/idUSN0659493120070706?pageNumber=1.

Or as Michael D. Calhoun, President of the Center for Responsible Lending, puts it:

> "In the simplest terms, the secondary market has enabled the subprime crisis. Much of the growth in subprime lending has been spurred by investors' appetite for high-risk mortgages that provide a high yield. While investors eventually do react and become more conservative when losses mount, the problem is that the market reaction occurs only after foreclosures are already rampant and hundreds of thousands, if not millions, of families have lost their homes, or have been placed into unsustainable loans that will lead to the same result."[76]

**Borrowers and Trade Groups
Also Share Some of the Blame.**

Although monetary policymakers and mortgage lenders bare the brunt of the responsibility for the crisis, borrowers must also accept their share. Just a few short years after they sacrificed their nest eggs on the altar of Nasdaq riches, many of these same investors jumped headlong into residential real estate speculation.

They bought houses and condos by the half dozen. They participated in lotteries held for the choicest plots of land. And they mortgaged themselves to the hilt, often using the most aggressive types of financing to buy investment property that generated negative cash flow — all based on the assumption that "inevitable" price appreciation would protect them from financial ruin.

As Nancy Cardone, an official with the real estate firm Illustrated Properties, declared, "We unlocked the doors and the whole world came pouring through."[77]

Naturally, some excesses are to be expected in any cycle. What distinguishes this cycle is that speculation was overtly condoned and encouraged by professional organizations and housing advocacy groups, all of which routinely pooh-poohed warnings of a bubble.

Reminiscent of major Wall Street firms who persisted in issuing "buy" ratings on stocks like Enron and WorldCom as they tumbled toward bankruptcy, these groups generally ignored blatant signs of weakness and often assumed the role of cheerleaders for speculation. For example,

- In May 2004, a presentation by the Chief Economist of the National Association of Realtors showed pictures of winged houses flying through the air on $100 bills, forecasting the housing would boom for the rest of the decade.[78]

[76] Testimony of Michael D. Calhoun, President, Center for Responsible Lending, Before the House Committee on Financial Services Subcommittee on Financial Institutions and Consumer Credit, May 8, 2007, available at http://www.responsiblelending.org/pdfs/Sec_Market_Testimy-Calhoun-FINAL-_2_.pdf.
[77] Paul Owers, "Condo Units Create Rush at Abacoa," Palm Beach Post, March 22, 2004.

- In September 2005, the Mortgage Bankers Association (MBA) released its own paper, entitled "Housing and Mortgage Markets, An Analysis." While the MBA did acknowledge that investor activity had picked up in some places and that borrowers had increased their risk exposure, the group also maintained that:

  > "Positive economic fundamentals, including low mortgage rates at the national level and strong employment growth rates at the local level, can explain much of the recent increase in house prices and much of the differentials in appreciation rates across the country ... *[and]* Innovative mortgage products enable consumers to become homeowners. Mortgage lenders have provided a wealth of new products to meet the affordability requirements, cash flow needs, and risk tolerances of a range of borrowers. This range of choices is a clear benefit to consumers."

The analysis concludes that "the mortgage market is fundamentally working: lenders are innovatively creating mortgage products that meet the needs of borrowers, while taking appropriate measures to manage risk" ... and that "Increased concentration of activity in the hands of the public home builders has helped maintain discipline" in terms of construction and inventory build up.[79]

But it was apparent to us, and to other independent analysts, that risk was not being properly managed; that many innovative mortgage products were putting an inordinate amount of risk on the shoulder of inexperienced borrowers; and that public home builders, just like their private counterparts, were overbuilding substantially.
In April 2005, we explained it to our subscribers this way:

> "The equity of American homeowners has attracted predatory lenders like moths to flame. These lenders are charging exorbitant fees, pushing mortgages with cryptic and exotic adjustable-rate provisions, and targeting some of the most vulnerable populations."[80]

We also warned about the dangers of hidden mortgage fees, low teaser rates that soon adjust higher, payment option ARMs, and inflated appraisals — precisely the issues causing much of the trouble in the mortgage and housing markets today.

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[78] David Lereah, "Housing Expansion Has Wings!" National Association of Realtors, May 13, 2004.
[79] Michael Fratantoni, Douglas G. Duncan, Jay Brinkmann, Orawin Velz, James Woodwell, "Housing and Mortgage Markets, An Analysis," Mortgage Bankers Association, September 6, 2005, available at http://www.mortgagebankers.org/files/News/InternalResource/29899_HousingandMortgageMarkets-AnAnalysis.pdf.
[80] Martin D. Weiss and Mike Larson, "Part 1. How to Wade Through the Mortgage and Real Estate Cesspool," Safe Money Report, Weiss Research, April 2005. Later, in June 2005, we told our readers to liquidate stocks exposed to a real estate collapse and we reiterated our earlier warning to do the same with any residential real estate investments. That issue, entitled "Final Stage of the Real Estate Bubble!" was published one and three months, respectively, before new and existing home sales peaked.

Other analysts, including Yale University economist Robert Shiller, were also among the first to see the dangers and say so unambiguously. In May 2005, Shiller declared:

> "I think this is actually the biggest [real estate] bubble in U.S. history and possibly even world history."[81]

But as we saw earlier with respect to regulators, even after it was abundantly evident that the housing market had begun to turn down, the NAR still did not offer strong enough cautionary advice to market participants.

For instance, in November 2006, the NAR launched a $40-million media campaign based on the claim that "It's a great time to buy or sell a home."[82] In its fact sheet for the campaign, NAR stated that:

> "The latest economic forecasts suggest that the real estate market correction is coming to an end, offering consumers a once-in-a-lifetime buying opportunity. The time for prospective buyers to enter the market is right now."[83]

Since that time, for-sale inventory has surged to a record high, home sales have slumped to their lowest level in almost four years, and home prices have continued to decline.

In Sum, No Major Participants Took Major Steps to Help Avoid or Even Mitigate a Boom And Bust.

Specifically:

- The Federal Reserve failed to heed several early warning signs that the housing market was entering dangerous speculative territory. And when it became apparent that something was seriously awry, the Fed failed to take the proper steps to tame the bubble.

- Many lenders plunged into high-risk mortgage lending, offering loans on ridiculously easy terms to borrowers who should not have been buying homes in the first place. Niche loan programs were converted into "affordability" products.

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[81] Shawn McCarthy, "Mania over real estate spurs fears of a crash," Globe and Mail, May 24, 2005, available at http://www.theglobeandmail.com/servlet/ArticleNews/TPStory/LAC/20050524/RBUBBLE24/TPBusiness/TopStories.
[82] Details on the campaign are available at NAR's website: http://www.realtor.org/home_buyers_and_sellers/buy_now_ad.html.
[83] The fact sheet can be accessed at http://www.realtor.org/files/home_buyers___sellers/buy_now_fact_sheet.pdf.

- The rapid growth in securitization facilitated poor lending decisions in the primary mortgage market by allowing lenders to shunt risk off to end investors and by giving an incentive to originators to devise and sell high-risk mortgage products.

- Many individual investors made poor investment decisions, failing to learn the lessons of the dot-com boom and bust.

- Major trade associations and other groups active in the mortgage and housing markets failed to recognize the bubble in a timely manner and failed to alert the public to the dangers of a bust strongly enough even when they did.

Part 5: Recommendations

We believe any solutions should adhere to the following overarching principles:

First and foremost, in order to preserve scarce resources for the primary *victims* of the crisis, steps that directly or indirectly funnel bail-out funds to the primary *perpetrators* of the crisis must be avoided.

Second, also to be avoided are steps that interfere with the process whereby market forces reassert their role of rewarding prudent decision making and of disciplining excessive risk taking.

Currently, several lenders who originated many of the extreme financing alternatives are going out of business. Loan officers who lured borrowers into unsuitable mortgages are being demoted or dismissed. Investment funds that bought bundles of subprime mortgage debt are losing money. And real estate speculators who took on too much debt to buy too many properties are suffering severe setbacks. Provided extremes are avoided, these must generally be viewed as healthy processes that help restore balance to the marketplace.

Third, reforms that would serve to artificially prop up inflated home values should be recognized as devices that perpetuate one of the underlying factors that generated the crisis.

Specifically, the Federal Reserve failed to raise interest rates soon enough, or by a large enough margin, to suppress extreme house price inflation in the early 2000s. As a result, price growth greatly surpassed growth in income, employment, and population. Potential home buyers were subsequently pressured to use high-risk loans to afford a home. And speculators, seeking short-term profits, piled in, driving prices up even more.

It was a classic asset bubble, one that has left home prices hovering at levels above what the underlying fundamentals would support. If we try to support these artificial price levels too in order to minimize losses for lenders and speculators, it merely risks stimulating more over borrowing by future home buyers.

Indeed, in many parts of the country, declining home prices may be part of the solution. They should help make homes more affordable for prudent home buyers earning average salaries and borrowing with traditional mortgage loans.

Fourth, we should recognize that the continuing cycle of boom-bust-bailout is perpetuating a moral hazard conundrum. Unless we allow the price and credit excesses to be wrung out of the housing and mortgage markets, the players will learn, again, that they don't have to face natural consequences of their actions. Worse, speculators are likely to conclude that the government stands ready to bail them out of bad investments.

In conformity with these principles, and with the goal of avoiding quick fixes and fostering a healthy, long-term recovery, we offer the following proposals to federal regulators and legislators:

Proposal #1: Monitor Asset Price Inflation.

- The Federal Reserve should consider adopting a broader interpretation of inflation, with more attention paid to runaway asset price growth. Rapid appreciation in stocks, homes, commercial real estate, or any other asset class, should be tracked and flagged as an indicator of excessive liquidity in the marketplace and possibly an overly expansive monetary policy.

- Intervening earlier in asset bubbles should also help limit future inflation in the real economy. The housing price bubble, for instance, helped drive up the price of commodities and finished goods that go into homes. It also stimulated excessive consumer spending by promoting "MEW" — Mortgage Equity Withdrawal.[84]

- Amend the Consumer Price Index in order to better capture real-world home prices being paid by real-world citizens, rather than imputed rents. The CPI would thus reflect big increases in the cost of owning a residence earlier on in a boom.

Proposal #2: Better enforcement of existing predatory lending statutes.

Pursue and prosecute lenders, brokers, appraisers, and other parties for fraud and/or predatory lending under existing statutes. If law enforcement fails to aggressively pursue these situations, it is unlikely that any new legislation designed to protect consumers can be very effective.

Proposal #3: A proven model for protecting borrowers.

To help protect borrowers who have unwittingly or unfairly been placed in unaffordable mortgages, we recommend following a model akin to the one recently established in a supervisory agreement between the Office of Thrift Supervision (OTS) and three subsidiaries of American International Group. According to that agreement,

A) The OTS determined that an AIG subsidiary failed to adequately consider borrower creditworthiness, while also charging excessive broker and lender fees between 2003 and 2006.

B) AIG will provide financial remediation to at-risk borrowers, including "without limitation: (i) providing loans to borrowers on affordable terms and/or (ii) reimbursement of fees."

[84] Alan Greenspan and Fed economist James Kennedy estimate that cash withdrawn from home equity financed just 0.6% of overall consumer spending between 1991 and 2000. That almost tripled to 1.75% in 2005. See Brian Blackstone, "Greenspan Sees Spending Link to Home Equity," Wall Street Journal, April 24, 2007, available at http://online.wsj.com/article/SB117734315504079111.html?apl=y.

C) The costs will be covered by a $128 million reserve. AIG will also donate $15 million to promote financial literacy and credit counseling.[85]

In short, lenders should willingly modify loans for borrowers stuck in abusive or unaffordable mortgages. Companies should consider refunding excessive origination fees, waiving prepayment penalties, waiving or reducing accumulated, negatively amortized interest, or lowering loan interest rates.

The advantage of modifying existing loans, rather than leaving borrowers to refinance into new loans, is two-fold:

1) It eliminates the need for borrowers to seek out new lenders, pay new rounds of fees, and potentially increase their overall amounts of indebtedness and

2) It results in some degree of financial loss for the original lender. That is an appropriate financial penalty and economic signal that should deter future lending abuses. Also, the cost of modifying loans should be significantly less than the cost of foreclosing on them – for lenders, local economies, and innocent neighboring homeowners.

Finally, government funding should be increased for community groups that assist with borrower counseling and/or who negotiate with mortgage companies on behalf of troubled borrowers. And as with the AIG, lenders that are compelled to provide borrower remediation should also be required to increase spending on pre-foreclosure intervention programs.

Proposal #4: Regulators should focus their examination and remediation efforts on banks and thrifts whose mortgage performance measures are showing the most stress.

By evaluating in detail the origination, underwriting, risk-management, and portfolio investment strategies of these institutions, they could identify possible patterns of lending behavior that most closely correspond to future defaults, delinquencies, and foreclosures.

In Part 2 of this paper, we have provided lists of institutions with high ratios of nonperforming 1-4 family mortgage and home equity loans to overall mortgage and home equity loans. We have also listed the top 20 banks and thrifts, ranked by total nonperforming residential mortgage and home equity loans to risk-based capital.

Proposal #5: Develop suitability requirements for the mortgage lending industry.

In the stock brokerage industry, practitioners are required to evaluate the suitability of an investment for their clients. For instance, when recommending customers buy or sell

[85] Supervisory Agreement with AIG Federal Savings Bank, Wilmington Finance and American General Finance, Office of Thrift Supervision, June 8, 2007, available at: http://www.ots.gov/docs/4/480958.pdf.

securities, members of the private securities regulator NASD must "have reasonable grounds for believing that the recommendation is suitable for such customer upon the basis of the facts, if any, disclosed by such customer as to his other security holdings and as to his financial situation and needs." An evaluation includes an analysis of the customer's "financial status," "tax status," and "investment objectives."[86]

Home mortgages are much larger financial commitments than most stock or bond purchases. But mortgage brokers have no financial obligation to make similar evaluations as securities brokers or investment advisors.[87] Indeed, mortgage industry representatives maintain that suitability requirements are not appropriate for their business and that the imposition thereof could make credit less available.[88] Our view is as follows:

> 1) A broad suitability standard would be more effective at curbing lending abuses than very narrowly targeted rules prohibiting specific lending practices or loan programs.
>
> Specific lending programs, such as stated income loans, can be appropriate for certain borrowers in certain circumstances. Banning them altogether would be detrimental for those borrowers.
>
> Establishing a suitability standard instead would encourage brokers and lenders to perform a more thorough evaluation of a borrower's financial situation and mortgage goals. They would presumably think twice about putting borrowers — for whom these types of loans are inappropriate — into such programs if they knew that those borrowers could sue for damages or otherwise pursue remuneration.
>
> 2) To avoid slowing down the flow of credit to worthy borrowers, the language of any suitability requirement legislation or regulation should be carefully laid out. It should follow the general outline used by regulators and private-sector oversight groups in other industries whose practitioners are subject to those requirements.
>
> It *is* possible that during a transition period from the old way of doing business to this new one, some lenders may choose to cut back on lending and some borrowers may not be able to obtain financing. But we believe that is a small price to pay to promote safer, sounder lending over time.
>
> Clearly, there is no shortage of stock brokers, investment advisors and other securities industry representatives active in the market today. That demonstrates

[86] NASD Manual, Rule 2310. Recommendations to Customers (Suitability). Full text available at http://nasd.complinet.com/nasd/display/display.html?rbid=1189&element_id=1159000500.
[87] James R. Hagerty, "Mortgage Brokers: Friends or Foes?" Wall Street Journal, May 24, 2007, available at http://online.wsj.com/article/SB117997159688112929-search.html?KEYWORDS=mortgage+broker&COLLECTION=wsjie/6month
[88] See Mortgage Bankers Association, "Suitability — Don't turn back the clock on fair lending and homeownership gains," MBA Policy Paper Series Policy Paper 2007-1, available at http://www.cmla.com/Suitability.pdf.

to us that well thought-out rules will not hinder the flow of legitimate mortgage credit over time – while restricting the origination and underwriting of inappropriate home loans.

Proposal #6: Avoid banning specific lending practices.

Federal Reserve policymakers and members of Congress have focused on specific lending practices that they feel should be banned or curtailed. Our general view, as described in proposal five, is that we should instead implement a suitability standard for mortgage originators.

Specifically,

- With regards to loans that include prepayment penalties, especially those that extend beyond the initial, low-rate period of an adjustable rate mortgage, or stated income and low documentation mortgages, the primary issue is not the specific riskiness of the mortgages per se, but rather whom they're being offered to and how they're sold. Stated income loans and mortgages with prepayment penalties can be appropriate for borrowers in certain circumstances, such as those described in Part 3. The troubles arise when they are sold to uninformed borrowers, or used as affordability products.

  Consequently, rather than seeking to ban these types of loans, regulators and/or legislators should focus on ensuring that lenders who underwrite these products sell them to borrowers for whom they are appropriate. At the same time, risk disclosures on non-traditional mortgages should be clearer and presented at the point of sale.

- Regarding stated income loans, regulators could do a better job of ensuring the stated incomes are roughly accurate. Lenders could be required to cross-check a certain percentage of stated income loan applications against IRS tax records, for instance, or use a salary estimating engine to confirm that the stated figures are reasonable.

- Subprime borrowers with combined loan-to-value ratios of 80.01% or higher should be required to escrow for taxes and insurance. Borrowers with lower loan-to-value ratios should be permitted to opt out of the escrow requirement.

- All borrowers should be qualified based on their ability to pay the fully indexed, fully amortizing payment on any mortgage, including option ARMs, traditional ARMs, and interest only mortgages. That replaces the current, riskier approach, whereby some lenders qualify borrowers based on their ability to make the initial payments.

Proposal #7: Devise and enact federal training, education, licensing, and testing standards for mortgage lenders.

Currently, it is far too easy to get into the business of mortgage lending, given the large sums of money involved in any home loan transaction.[89]

Proposal #8: Assignee liability for secondary market buyers of home loans should also be seriously considered.

It would allow homeowners who are sold unsuitable or abusive loans to receive compensation or pursue redress not only from their original lenders, but also from the end investors who purchased the loans.

Any legislation should not be structured in such a way as to give borrowers an open-ended license to sue for unlimited damages. But with proper restrictions, a well thought-out assignee liability bill would act as a viable solution to tamp down on excess liquidity and reckless funding of high-risk mortgages in the secondary market.[90]

Another option: Enact a tax or fee on lenders who securitize their mortgages. It would feature a sliding rate that adjusts higher or lower depending on the credit performance of the securitizing lender's past mortgages. The money collected could be distributed to community and local government groups for pre-foreclosure and pre-origination counseling and education.

Proposal #9: Focus more on developing programs that promote *saving* for a down payment.

Rather than encouraging and enhancing the reach of mortgage programs that help borrowers *avoid* making down payments, legislation and regulation should promote saving.

For instance, government funds provided to community groups could encourage programs to match down payment contributions from low-to-moderate-income home buyers. Participants could be required to attend credit counseling classes and agree to save for a specified period of time before becoming eligible.

[89] The Joint Economic Committee's report: "Sheltering Neighborhoods from the Subprime Foreclosure Storm,"notes that 39 states have no testing requirements for loan originators, brokers, or lending executives. Another 17 states do not license individual brokers and lenders. For more information, see http://jec.senate.gov/Documents/Reports/subprime11apr2007revised.pdf.

[90] The American Securitization Forum recently released a paper titled "Assignee Liability in the Secondary Mortgage Market," available here: http://www.americansecuritization.com/story.aspx?id=1743. It generally comes down against assignee liability as "an unwise and unfair mechanism for remedying the problems in the subprime loan origination process." The paper states that pushing liability onto the secondary market would cause mortgage credit to dry up at precisely the time borrowers with high-risk mortgages need to refinance. It also contains several recommendations of ways to limit assignee liability.

This approach should help reduce the need for increasingly aggressive mortgage financing programs. It should also help overcome concerns related to proposals to loosen lending standards on the Federal Housing Administration (FHA) loan program.

The idea behind this reform is to allow FHA mortgages, which have lost market share over the past few years, to fill the financing gap left by the implosion of several private market lenders. That would preserve refinance opportunities for stretched borrowers. It would also help formerly qualified home buyers, who can no longer purchase homes because of tighter private market lending standards, to qualify with FHA financing.

But when so many private mortgages are going sour so quickly because of their high-risk nature, we question the wisdom of reducing the 3% FHA down payment requirement. [91]

These proposals won't lead to a quick turnaround in the housing market. Nor will they necessarily prevent all future excesses. But they can go a long way toward reducing the current burden on borrowers and lenders. More importantly, they can lay the groundwork for a sustainable recovery.

We have the means to create an environment in which buying a home can once again be viewed as the American dream in the years ahead. What we need most is the wisdom and the will to make the needed sacrifices now.

[91] A separate FHA proposal, referenced in the aforementioned JEC report, puts forward the idea of an FHA "rescue fund." This fund would buy failed mortgages and try to work them out. It's an intriguing idea since any workout would presumably come after the original parties involved took a financial loss (the government would buy these loans at a steep discount, necessitating a loss for the holder). Still, it must not violate any of the broad principles spelled out earlier.

Appendix A: The Data Tables Behind Our Risk Analysis of Banks and Thrifts Active in Mortgage Lending

Table #7: Details on the top 20 banks ranked by nonperforming mortgage loans as a percentage of risk-based capital

Bank	City	State	Nonperforming mortgages/ Risk-based capital (%)	Total Assets ($1,000s)	Nonperforming mortgages ($1,000s)	Total Risk-based capital ($1,000s)	Street.com Rating
Miami Valley Bk	Quincy	OH	**182.83**	157,234	18,340	10,031	E-
NBank NA	Commerce	GA	**66.93**	112,258	3,249	4,854	E-
Home Town Bk of Villa Rica	Villa Rica	GA	**30.85**	276,058	6,915	22,416	C
R-G Premier Bk of PR	San Juan	PR	**23.03**	7,918,047	122,991	533,949	D+
Lincoln Park Svgs Bk	Chicago	IL	**21.17**	253,280	5,376	25,394	D
Heritage Banking Group	Carthage	MS	**19.70**	192,798	3,150	15,993	E+
First NB of AZ	Scottsdale	AZ	**19.66**	2,766,512	54,219	275,766	C-
Northpointe Bk	Grand Rapids	MI	**19.24**	339,571	6,422	33,377	C-
Georgia Banking Co	Atlanta	GA	**18.06**	138,560	4,075	22,565	B
Oxford Bk	Oxford	MI	**17.63**	511,851	9,571	54,300	D
First NB in Tremont	Tremont	IL	**14.70**	105,480	1,440	9,795	C-
Central Bk of Jefferson Cnty	Louisville	KY	**14.33**	178,918	2,119	14,783	C
First Mariner Bk	Baltimore	MD	**14.24**	1,168,107	15,412	108,220	D-
Arlington Bk	Upper Arlington	OH	**14.12**	191,040	3,098	21,941	B-
First St Bk	Eastpointe	MI	**13.76**	755,069	10,887	79,146	C
Brickyard Bk	Lincolnwood	IL	**13.66**	174,083	1,838	13,460	D+
Emigrant Bk	New York	NY	**13.65**	11,518,347	128,451	941,174	B-
First Commercial Bk	Bloomington	MN	**13.38**	206,590	1,924	14,383	D
Lowell Co-Op Bk	Lowell	MA	**13.12**	124,577	1,303	9,932	D-
Oriental B&TC	San Juan	PR	**13.07**	5,224,073	39,966	305,741	C

Table #8: Details on the top 20 thrifts ranked by nonperforming mortgage loans as a percentage of risk-based capital

Thrift	City	State	Nonperforming mortgages/ Risk-based Capital (%)	Total Assets ($1,000s)	Nonperforming Mortgages ($1,000s)	Total Risk-based Capital ($1,000s)	Street.com Rating
Eastern Svgs Bk FSB	Hunt Valley	MD	**117.77**	981,924	153,404	130,254	D
EverBank	Jacksonville	FL	**77.45**	4,693,569	249,543	322,212	B-
Midfirst Bk	Oklahoma City	OK	**66.34**	11,361,502	590,270	889,803	B
NetBank	Alpharetta	GA	**55.82**	3,249,096	102,263	183,209	E-
Inter Svgs Bk FSB	Maple Grove	MN	**29.39**	930,947	22,285	75,838	C-
Ameribank Inc	Welch	WV	**29.33**	167,961	5,460	18,613	D-
Lafayette Svgs Bk FSB	Lafayette	IN	**23.86**	361,747	8,801	36,880	D
Cenlar FSB	Ewing Twp	NJ	**20.89**	531,723	7,011	33,561	C-
Cardunal Svgs Bk FSB	W Dundee	IL	**18.77**	180,737	2,377	12,661	D
Suburban FSB	Crofton	MD	**18.55**	412,919	6,242	33,654	C-
Lehman Brothers Bk FSB	Wilmington	DE	**17.24**	20,200,916	350,561	2,033,730	C+
Brattleboro S&LA FA	Brattleboro	VT	**16.31**	158,039	2,150	13,186	C-
Home FS&LA of Collinsville	Collinsville	IL	**15.98**	141,223	2,528	15,816	C+
New South FSB	Irondale	AL	**15.81**	1,812,175	24,900	157,495	C
Home Loan Investment Bank, FSB	Warwick	RI	**14.95**	226,202	2,882	19,273	B+
Gateway Bk FSB	San Francisco	CA	**14.94**	416,210	5,377	35,994	B
Platinum Community Bk	Rolling Meadows	IL	**14.73**	112,282	1,252	8,501	D
Horizon Bank	Oskaloosa	IA	**13.49**	129,451	999	7,406	E-
IndyMac Bk FSB	Pasadena	CA	**13.26**	29,088,796	255,751	1,929,433	C+
Ohio Svgs Bk FSB	Cleveland	OH	**13.12**	17,939,345	193,071	1,471,610	B

Table #9: Details on the top 20 banks ranked by nonperforming mortgage loans as a percentage of total mortgage loans

Bank	City	State	Nonperforming /Total Mortgages (%)	Total Assets ($1,000s)	Total Mortgage Loans ($1,000s)	Nonperforming Mortgages ($1,000s)	Street.com Rating
Sun West Bk	Las Vegas	NV	**58.62**	413,560	10,236	6,000	D+
Bankfirst	Sioux Falls	SD	**23.66**	641,199	23,924	5,661	D+
Citrus Bk NA	Vero Beach	FL	**23.39**	132,613	5,823	1,362	C
Equity Bk	Dallas	TX	**22.92**	158,249	7,152	1,639	D-
Home Town Bk of Villa Rica	Villa Rica	GA	**18.92**	276,058	36,544	6,915	C
Wells Fargo Bk Northwest NA	Ogden	UT	**16.88**	15,003,000	77,000	13,000	C+
New Millennium Bk	New Brunswick	NJ	**16.21**	151,758	3,423	555	D+
Miami Valley Bk	Quincy	OH	**15.38**	157,234	119,272	18,340	E-
Corn Belt B&TC	Pittsfield	IL	**14.80**	335,329	26,013	3,850	C-
Terrabank NA	Miami	FL	**14.66**	295,911	26,076	3,822	D-
First Bk of OH	Tiffin	OH	**14.13**	115,996	1,748	247	A
Biltmore Bk of Arizona	Phoenix	AZ	**13.70**	232,885	29,201	4,000	B-
Premier Bk	Wilmette	IL	**13.42**	217,285	18,260	2,450	B+
Brickyard Bk	Lincolnwood	IL	**13.41**	174,083	13,703	1,838	D+
San Joaquin Bk	Bakersfield	CA	**13.12**	760,194	19,052	2,500	C+
Security Bk of North Metro	Woodstock	GA	**13.01**	208,760	8,719	1,134	D
North Houston Bk	Houston	TX	**11.69**	341,522	5,729	670	A-
First NB of AZ	Scottsdale	AZ	**10.49**	2,766,512	516,974	54,219	C-
Washita St Bk	Burns Flat	OK	**10.00**	209,358	2,060	206	B-
NBank NA	Commerce	GA	**9.93**	112,258	32,721	3,249	E-

Table #10: Details on the top 20 thrifts ranked by nonperforming mortgage loans as a percentage of total mortgage loans

Thrift	City	State	Nonperforming/ Total Mortgages (%)	Total Assets ($1,000s)	Total Mortgage Loans ($1,000s)	Nonperforming Mortgages ($1,000s)	Street.com Rating
Eastern Svgs Bk FSB	Hunt Valley	MD	**24.99**	981,924	613,837	153,404	D
Midfirst Bk	Oklahoma City	OK	**21.97**	11,361,502	2,686,669	590,270	B
Cenlar FSB	Ewing Twp	NJ	**11.33**	531,723	61,895	7,011	C-
NetBank	Alpharetta	GA	**7.99**	3,249,096	1,279,561	102,263	E-
EverBank	Jacksonville	FL	**7.98**	4,693,569	3,126,791	249,543	B-
Lafayette Svgs Bk FSB	Lafayette	IN	**6.01**	361,747	146,492	8,801	D
Ameribank Inc	Welch	WV	**5.67**	167,961	96,237	5,460	D-
Washington Svgs Bk FSB	Bowie	MD	**5.32**	430,793	86,356	4,594	B
Inter Svgs Bk FSB	Maple Grove	MN	**4.16**	930,947	535,992	22,285	C-
New South FSB	Irondale	AL	**4.11**	1,812,175	605,416	24,900	C
First Trust Bk for Svgs	Brentwood	TN	**4.06**	364,423	147,938	6,005	C
Home Federal Bk of Hollywood	Hallandale	FL	**3.71**	108,272	30,116	1,117	C
Home Loan Investment Bank, FSB	Warwick	RI	**3.58**	226,202	80,589	2,882	B+
Home FS&LA of Collinsville	Collinsville	IL	**3.57**	141,223	70,729	2,528	C+
Fidelity Bk	Wichita	KS	**3.50**	1,790,098	351,901	12,305	C+
United Midwest Savings Bank	De Graff	OH	**3.33**	215,437	99,184	3,304	D+
Coastal Bk	Merritt Island	FL	**3.29**	150,590	38,192	1,255	B+
Cardunal Svgs Bk FSB	W Dundee	IL	**3.22**	180,737	73,768	2,377	D
Shelby County Bk	Shelbyville	IN	**3.12**	140,693	52,963	1,654	C-
M & I Bk FSB	Las Vegas	NV	**2.62**	1,079,295	492,516	12,881	B

Table #11: Details on the banks with the highest total of mortgage loan charge-offs:

Bank	City	State	Net Charge-offs of Total mortgages ($1,000s)	Total Assets ($1,000s)	Net Charge-offs: 1-4 - First Lien ($1,000s)	Net Charge-offs: 1-4 - Jr. Lien ($1,000s)	Net Charge-offs: Home Equity Loans ($1,000s)	Street.com Rating
Citibank NA	Las Vegas	NV	**111,000**	1,076,949,000	70,000	13,000	28,000	B-
JPMorgan Chase Bk NA	Columbus	OH	**90,000**	1,224,104,000	43,000	18,000	29,000	C+
National City Bk	Cleveland	OH	**79,907**	131,741,508	58,678	4,304	16,925	C+
Wells Fargo Bk NA	Sioux Falls	SD	**73,000**	396,847,000	3,000	15,000	55,000	C+
SunTrust Bk	Atlanta	GA	**27,572**	184,810,394	10,692	2,192	14,688	B-
Wachovia Bk NA	Charlotte	NC	**27,000**	518,753,000	17,000	1,000	9,000	B
US Bk NA	Cincinnati	OH	**26,037**	219,825,070	11,387	6,803	7,847	B-
Bank of America NA	Charlotte	NC	**22,101**	1,204,471,773	5,450	534	16,117	B-
Fifth Third Bk	Grand Rapids	MI	**16,060**	47,845,701	729	2,804	12,527	B+
HSBC Bk USA NA	Wilmington	DE	**13,269**	169,010,168	10,462	384	2,423	C
Fifth Third Bk	Cincinnati	OH	**12,527**	51,561,153	8,333	531	3,663	B+
Regions Bank	Birmingham	AL	**9,898**	133,224,309	3,929	751	5,218	B
Charter One Bank, NA	Cleveland	OH	**8,822**	45,954,950	1,716	1,626	5,480	C+
Branch Bkg&TC	Winston-Salem	NC	**7,921**	118,083,229	3,668	1,996	2,257	B
Keybank NA	Cleveland	OH	**7,462**	89,408,200	327	3,466	3,669	B-
PNC Bk NA	Pittsburgh	PA	**6,465**	90,405,030	14	2,887	3,564	B
Wells Fargo Financial Bk	Sioux Falls	SD	**6,350**	4,225,751	0	0	6,350	C+
First Tennessee Bk NA	Memphis	TN	**6,159**	38,522,657	704	795	4,660	B-
Irwin Union Bk	Columbus	IN	**5,928**	5,431,259	101	3,466	2,361	C-
Huntington NB	Columbus	OH	**5,618**	34,489,760	1,149	-66	4,535	C

Table #12: Details on the thrifts with the highest total of mortgage loan charge-offs:*

Thrift	City	State	Net Charge-offs of Total mortgages ($1,000s)	Total Assets ($1,000s)	Net Charge-offs: 1-4 - First Lien ($1,000s)	Net Charge-offs: 1-4 - Jr. Lien ($1,000s)	Net Charge-offs: Home Equity Loans ($1,000s)	Street.com Rating
Washington Mutual Bank	Henderson	NV	**98,698**	318,295,206	71,816	4,929	21,953	B-
Countrywide Bank, FSB	Alexandria	VA	**26,850**	94,671,124	5,473	2,752	18,625	B
E*Trade Bank	Arlington	VA	**12,193**	54,999,199	674	5,751	5,768	C+
Ohio Svgs Bk FSB	Cleveland	OH	**5,411**	17,939,345	5,406	0	5	B
Peoples Community Bank	W Chester	OH	**3,995**	1,011,372	3,668	18	309	D
Lehman Brothers Bk FSB	Wilmington	DE	**3,952**	20,200,916	3,862	90	0	C+
Flagstar Bk FSB	Troy	MI	**3,762**	15,400,036	150	1,824	1,788	C+
IndyMac Bk FSB	Pasadena	CA	**2,938**	29,088,796	3,454	78	-594	C+
USAA FSB	San Antonio	TX	**2,829**	27,822,069	-736	1,213	2,352	B
Progressive-Home FS&LA	Pittsburgh	PA	**1,882**	49,416	1,882	0	0	D
Mid America Bk FSB	Clarendon Hills	IL	**1,695**	10,343,276	-6	55	1,646	B
Sovereign Bk	Wyomissing	PA	**1,543**	82,087,707	629	663	251	C+
World Svgs Bk FSB	Oakland	CA	**1,393**	143,932,616	1,327	-1	67	B
State Farm Bk, FSB	Bloomington	IL	**1,206**	13,625,631	174	59	973	C-
Guaranty Bank	Milwaukee	WI	**716**	1,911,434	-92	197	611	D
ING Bank FSB	Wilmington	DE	**678**	68,072,956	678	0	0	B-
Downey S&LA FA	Newport Beach	CA	**647**	15,237,612	647	0	0	A-
Chevy Chase Bk FSB	Mc Lean	VA	**614**	14,320,079	509	13	92	C-
Guaranty Bk	Austin	TX	**612**	15,745,632	66	554	-8	C+
First Place Bank	Warren	OH	**599**	3,077,258	399	102	98	B

* One thrift in our top 20 charge-off list has less than $100 million in assets.

TheStreet.com Ratings Definitions

A Excellent. The institution offers excellent financial security. It has maintained a conservative stance in its business operations as evidenced by its strong equity base, top notch asset quality, steady earnings and high liquidity. While the financial position of any institution is subject to change, we believe that this institution has the resources necessary to deal with *severe* economic conditions.

B Good. The institution offers good financial security and has the resources to deal with a variety of adverse economic conditions. It comfortably exceeds the minimum levels for all of our rating criteria, and is likely to remain healthy for the near future. Nevertheless, in the event of a *severe* recession or major financial crisis, we feel that this assessment should be reviewed to make sure that the institution is still maintaining adequate financial strength.

C Fair. The institution offers fair financial security, is currently stable and will likely remain relatively healthy as long as the economic environment avoids the extremes of inflation or deflation. In a prolonged period of adverse economic or financial conditions, however, we feel this institution may encounter difficulties in maintaining its financial stability.

D Weak. The institution currently demonstrates what we consider to be significant weaknesses which could negatively impact depositors or creditors. In an unfavorable economic environment, these weaknesses could be magnified.

E Very Weak. The institution currently demonstrates what we consider to be significant weaknesses and has also failed some of the basic tests that we use to identify fiscal stability. Therefore, even in a favorable economic environment, it is our opinion that depositors or creditors could incur significant risks.

F Failed. The institution has been placed under the custodianship of regulatory authorities. This implies that it will be either liquidated or taken over by another financial institution.

\+ **The plus sign** is an indication that the institution is at the upper end of the letter grade rating.

\- **The minus sign** is an indication that the institution is at the lower end of the letter grade rating.

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