

Crunch Time

An Economic and Market Update

Chicago Association for Business Economics, May 2008

Carl Tannenbaum

Vice President, Risk Specialist Division

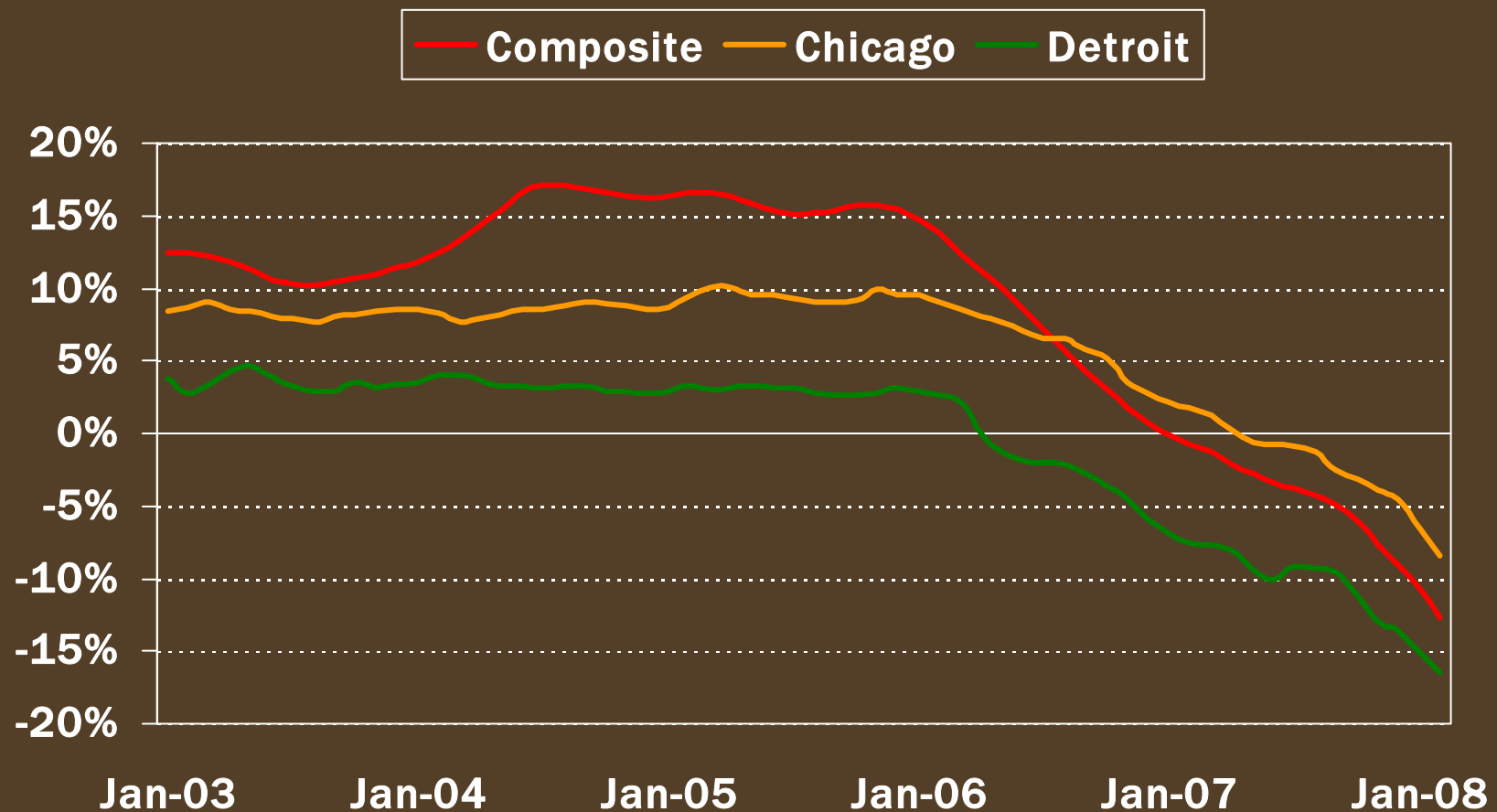
Federal Reserve Bank of Chicago

Outline

- **Underlying Trends: The “Real Economy”**
- **The State of the Financial Sector**
- **Will There Be a Feedback Loop to the “Real Economy?”**
- **Lessons Learned**

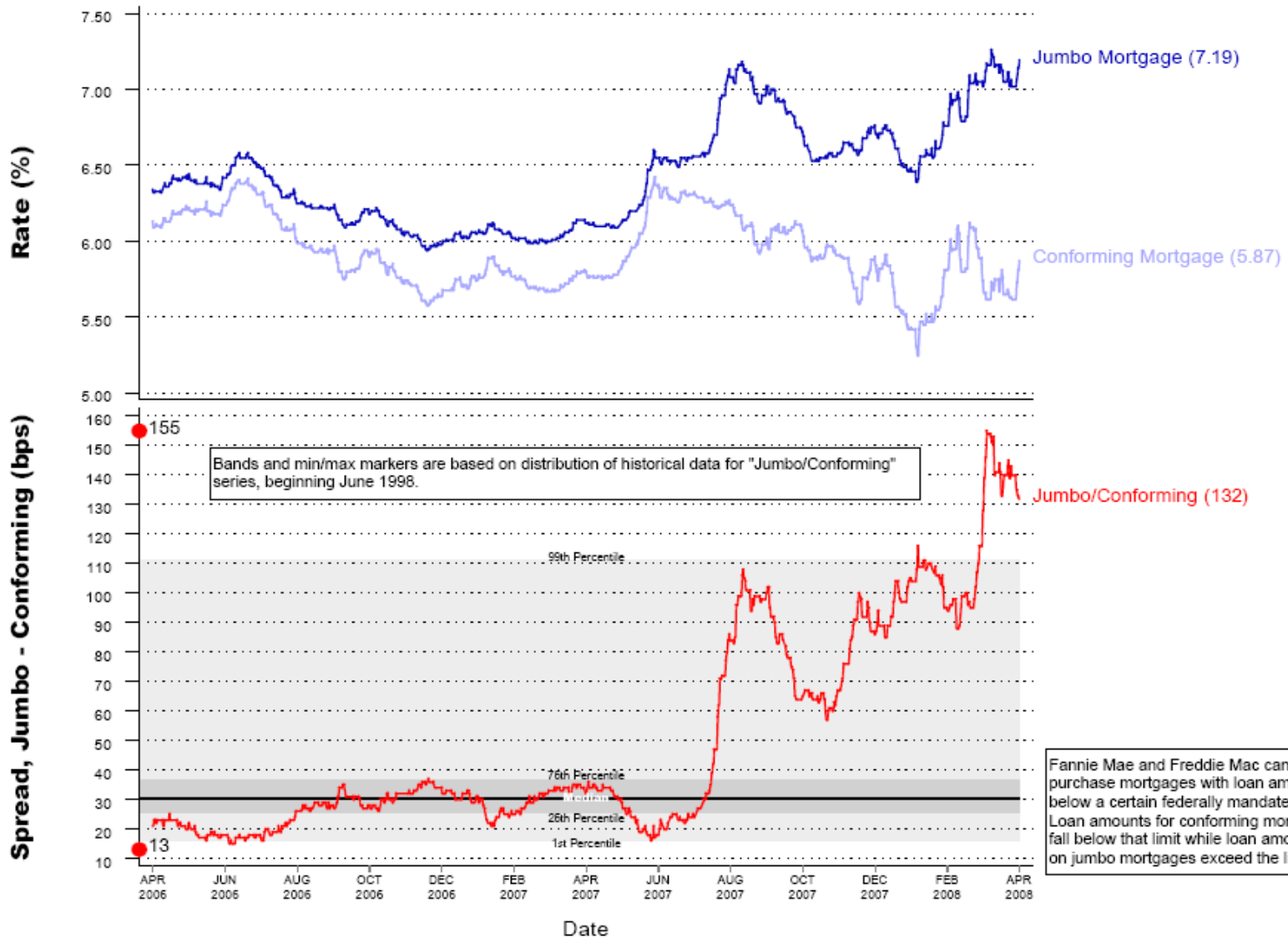
Home Prices

Year over Year Change, Case-Shiller Index



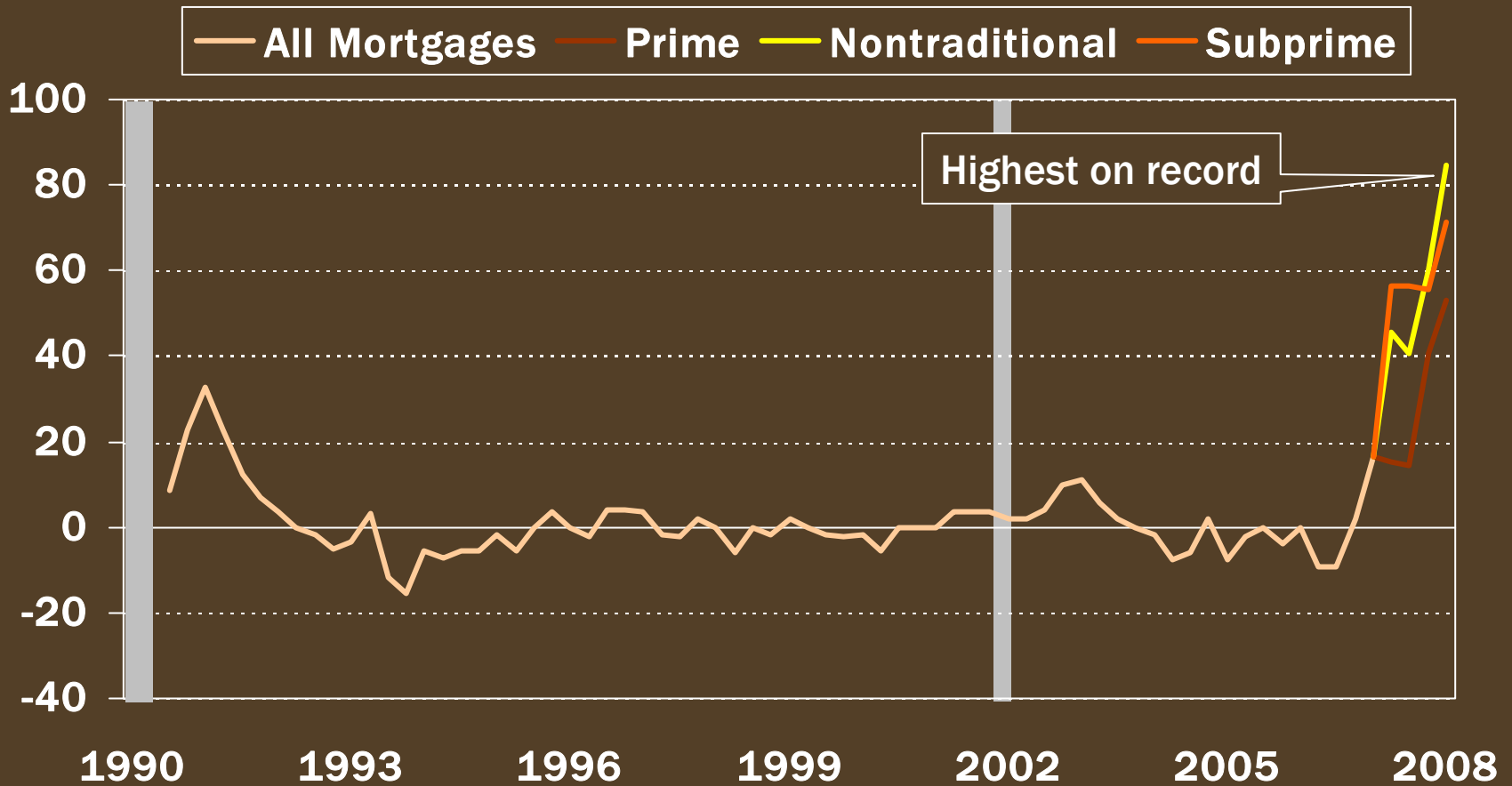
Spread between Jumbo and Conforming 30yr. Fixed Mortgage Rates⁴

Weekdays, April 17, 2006 to April 17, 2008, (Value for most recent date in parentheses)



Senior Loan Officer Survey: Home Mortgages

Net Percentage of Respondents Tightening Credit



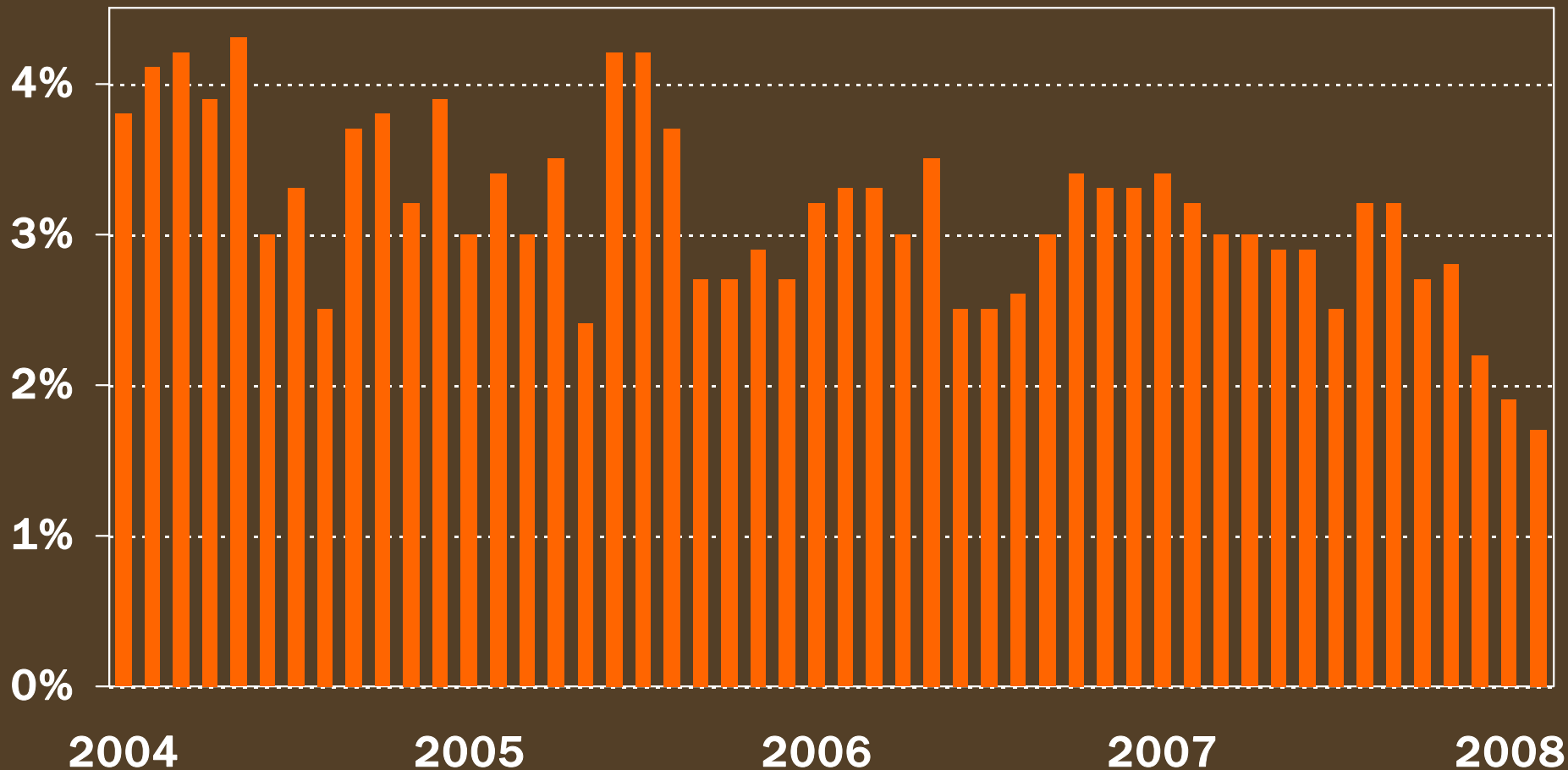
Source: Federal Reserve

Fallout from Housing

- **Significant drop in construction**
 - Affects building materials, trades
- **Broad pressure on home values**
 - Negative “wealth effect”
- **Shivers roll through financial markets**
 - Potential for a credit crunch
- **Risk of ill-advised regulation**
 - A potent political issue

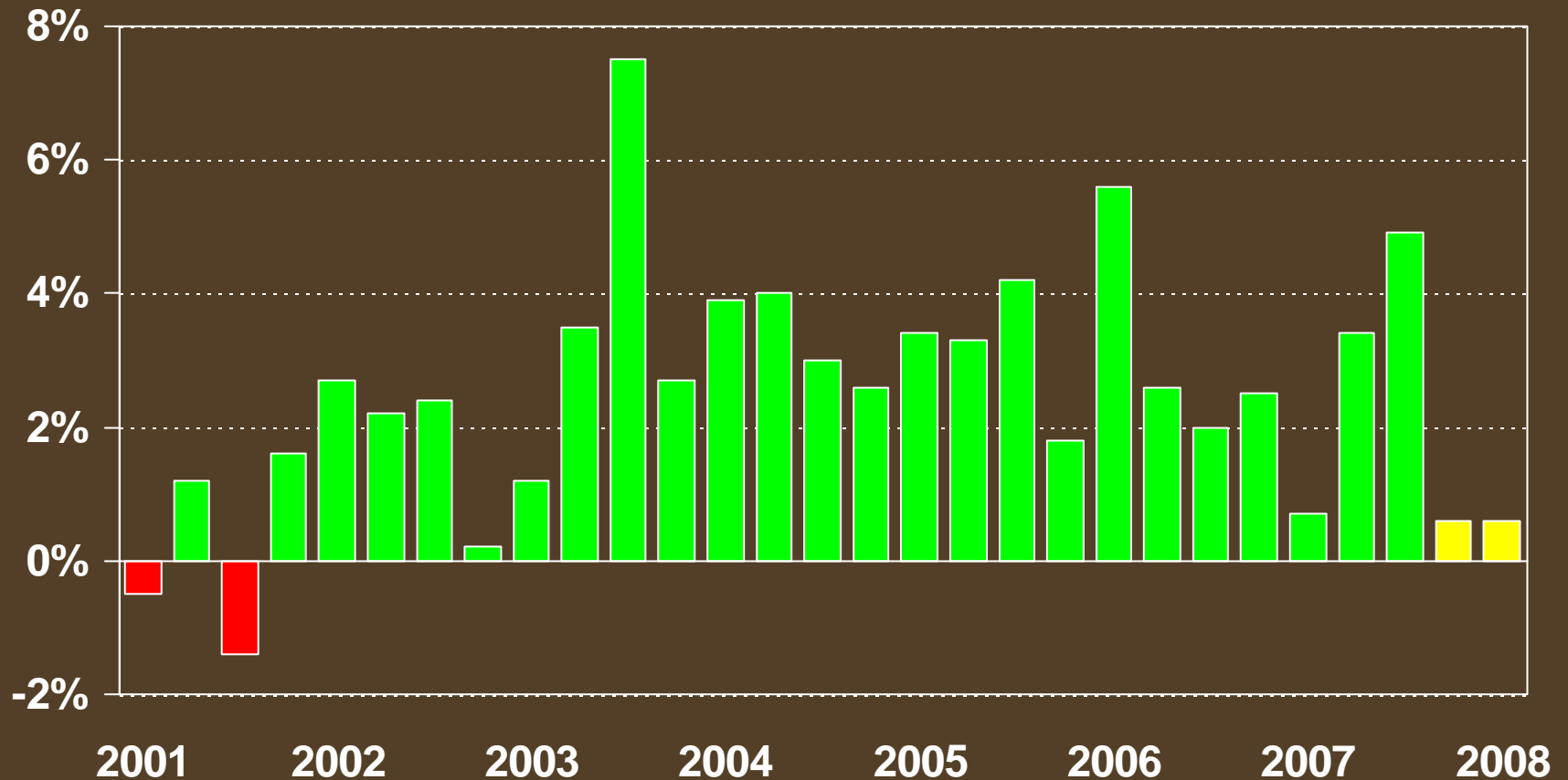
Real Personal Consumption

Year over Year Change

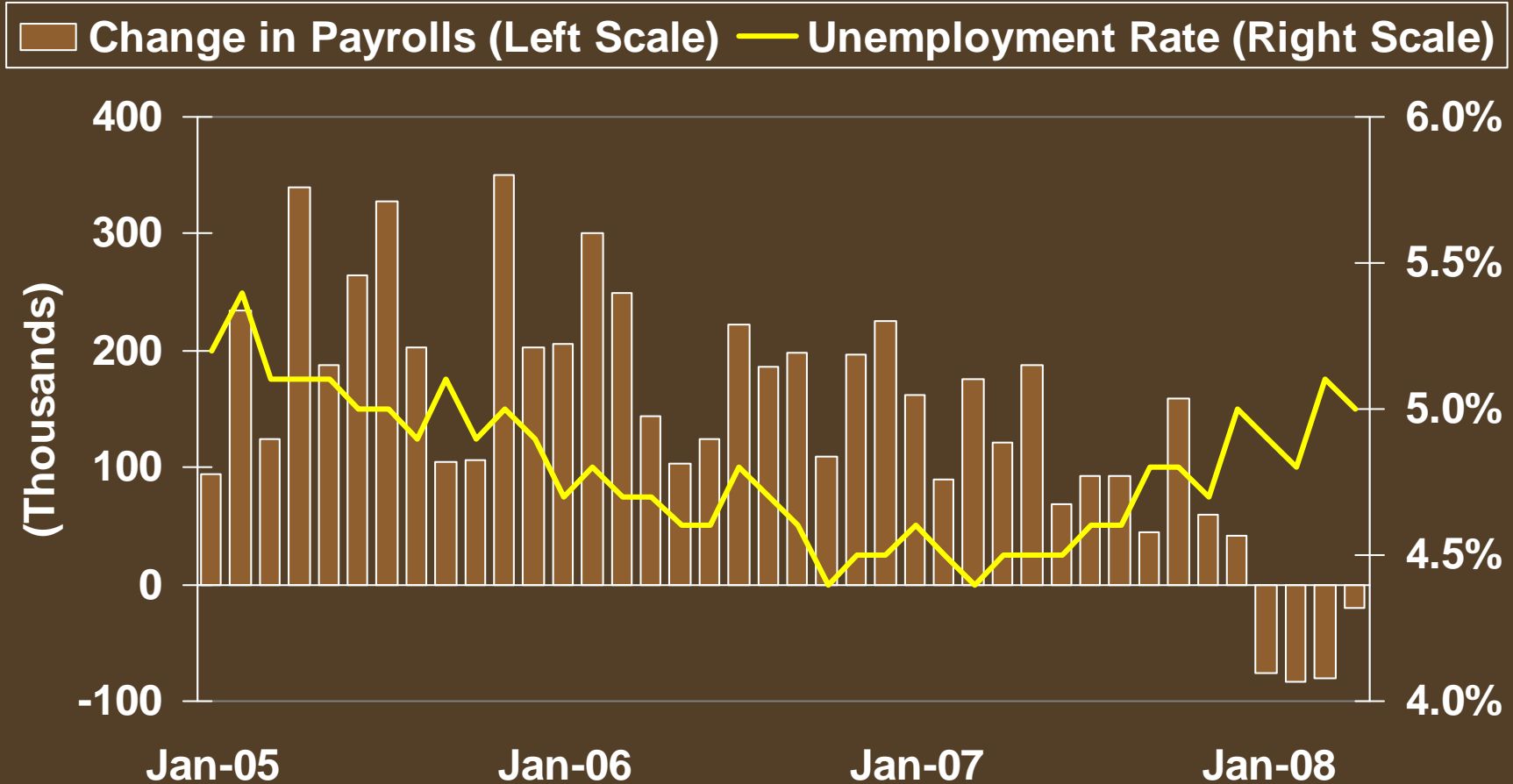


Is the Expansion Over?

Quarterly Change in US GDP, Annualized



Employment Trends

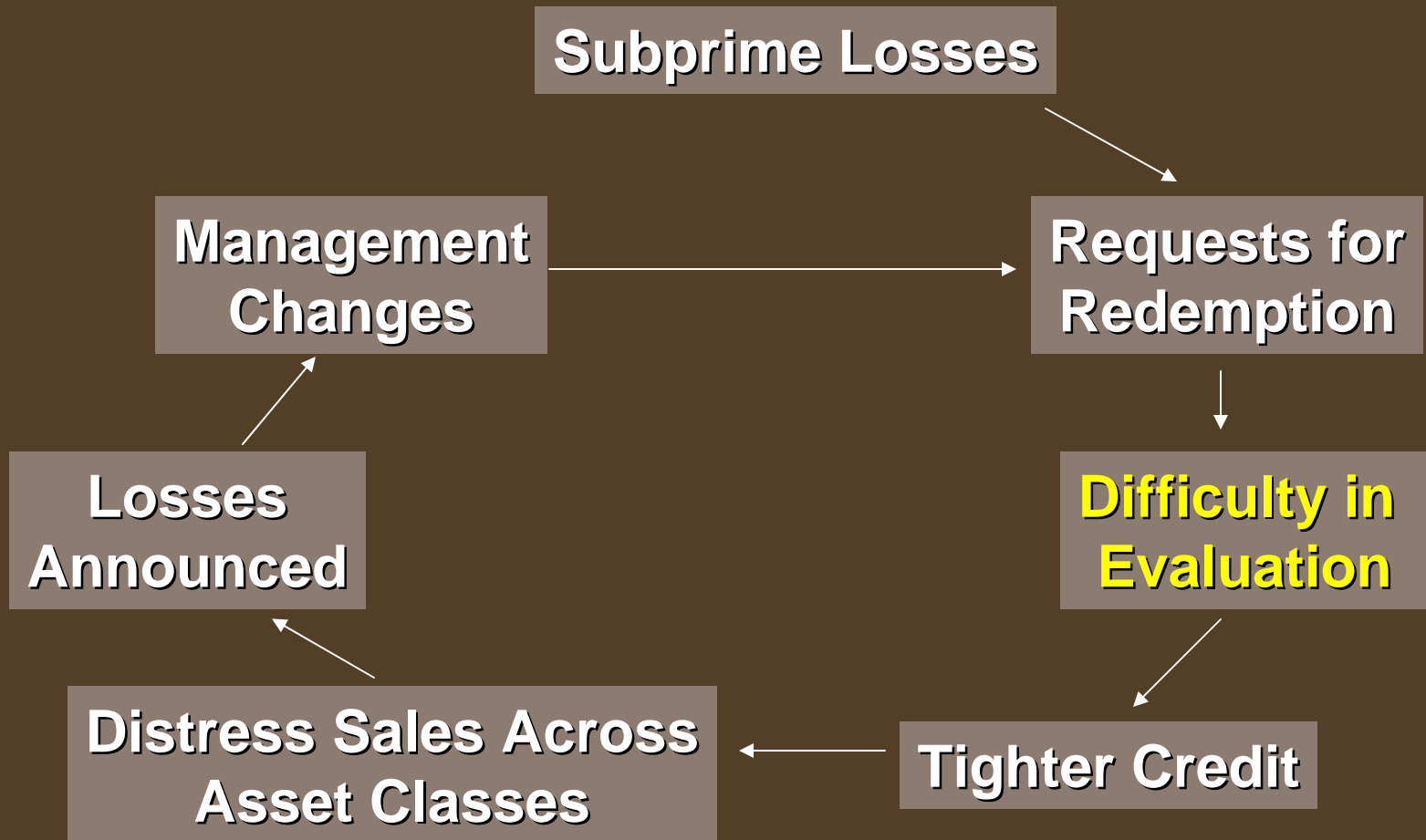


Source: Bureau of Labor Statistics

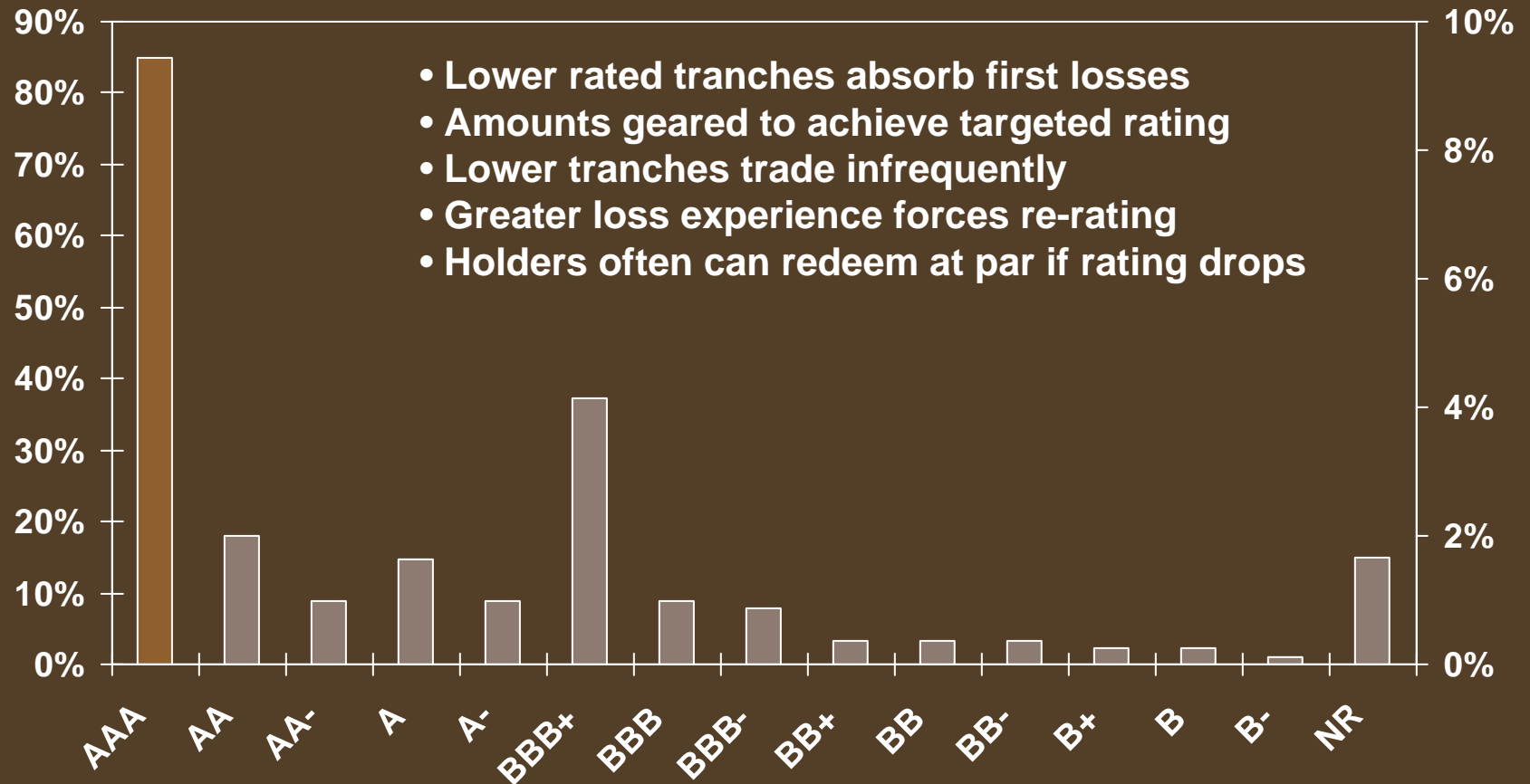
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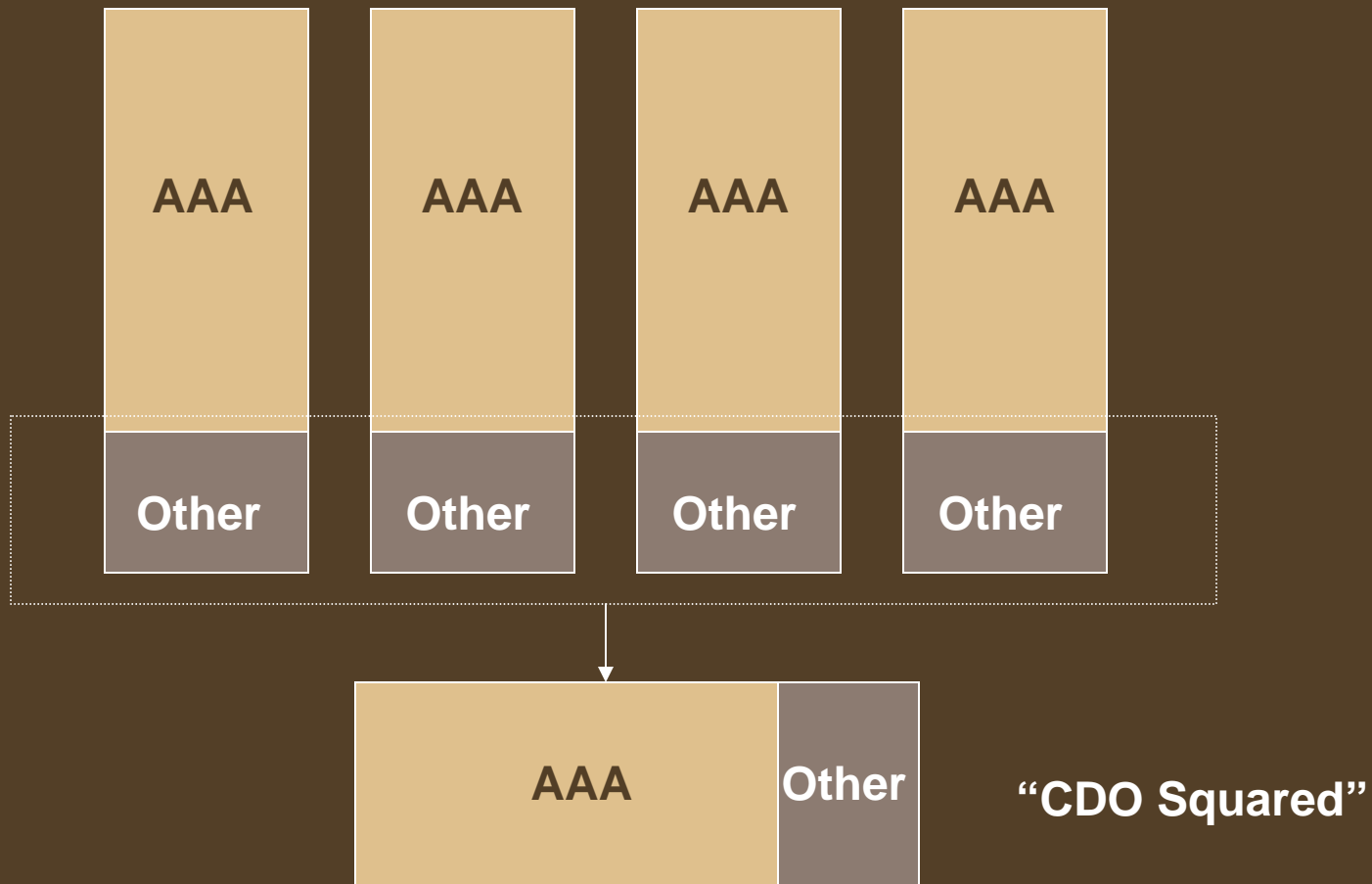
Spiraling Downward



Inside a CDO



Doubling Down



“Marking to Muddle”

- Structuring has met very specific risk/reward demands, but has created a very heterogeneous market
- Many sectors don't trade fluidly or frequently
- Few analogs available
- Information infrastructure has fallen behind
- Modeled results increasingly invalid
- Is impairment temporary?
- **The problem: what's the alternative? Current discussions over the ALLL will be just as hard**

Did Market Value Accounting Help or Hurt?

Helped

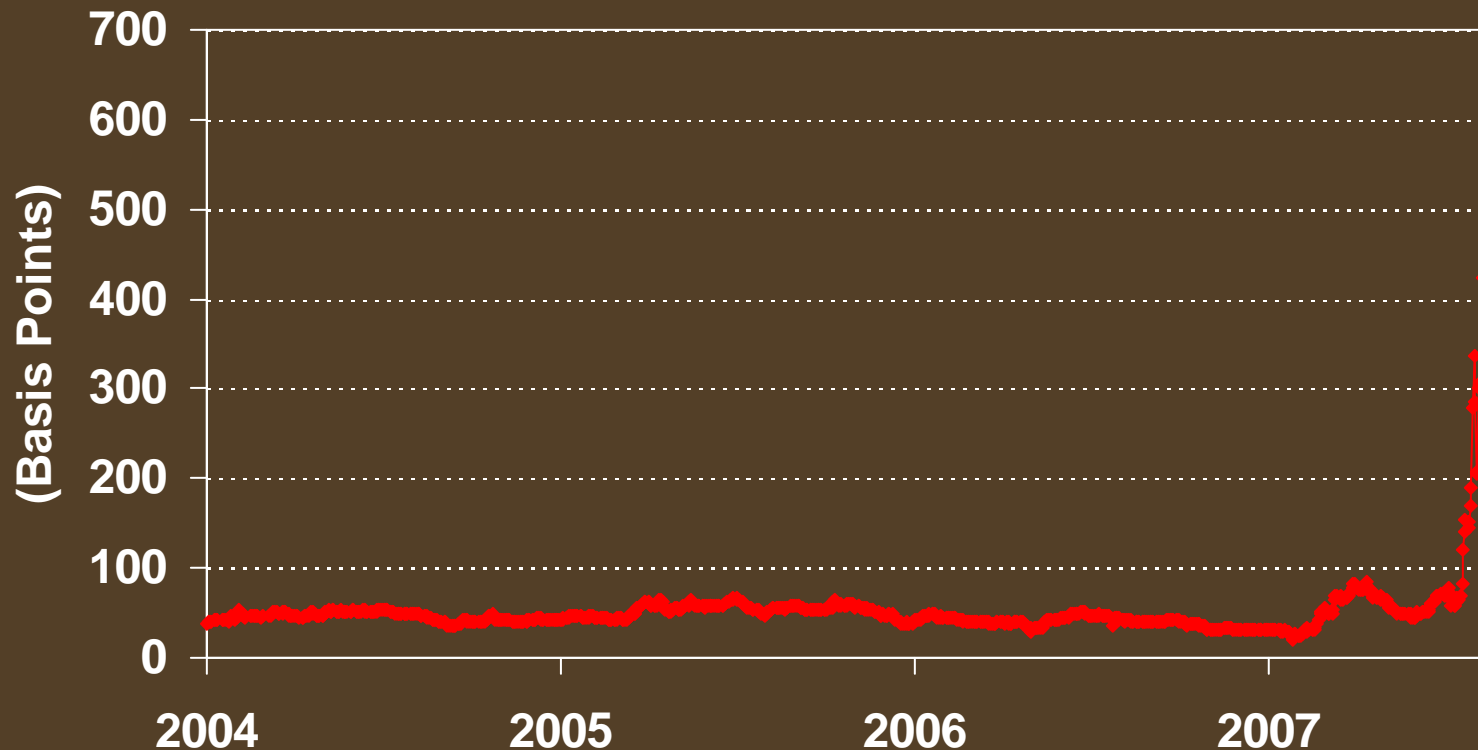
- Takes a long view
- Is unaffected by the vagaries of accrual accounting
- Puts embedded options into clear relief
- Better reflects actively managed positions
- An early warning system

Hurt

- Suffers from the vagaries of market pricing
- Ties with earnings are often hard to define
- Rules mark assets but not liabilities (the perversion of distressed debt)
- Does not distinguish between expected losses and illiquidity

VaR and the Market Cycle

Countrywide Credit Default Swap

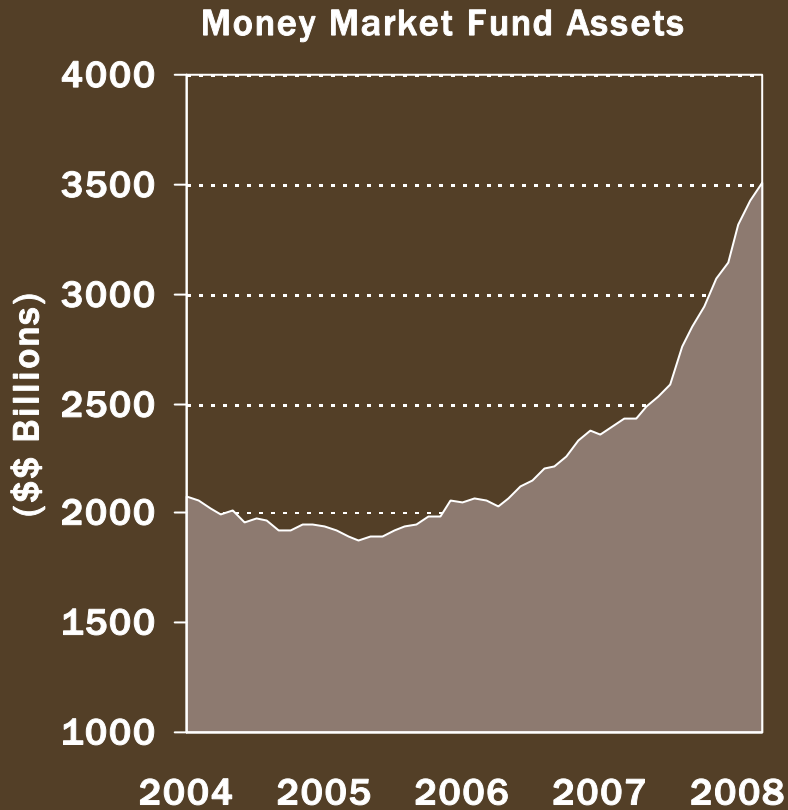


- Increasing absorption of risk limits crowds out new financing
- Banks pull back at exactly the time credit may be most needed!

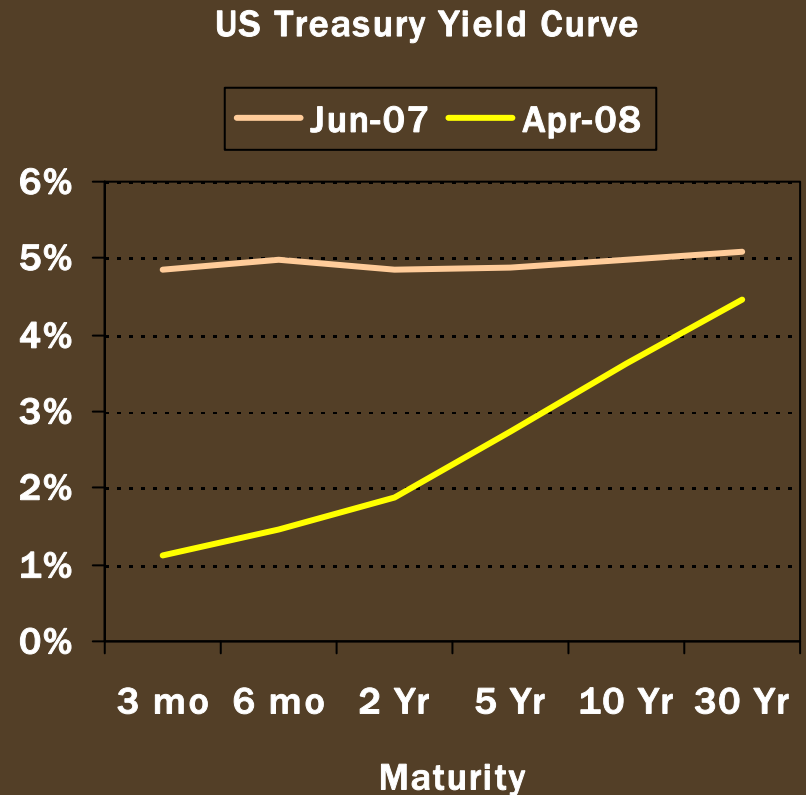
Other Accelerants

- Computer-guided stop-loss provisions
- Compensation schemes promote profit taking while the profits are still there
- Institutional inexperience
- Short time horizons
- Speed of trading and money movement
- Shrinking risk appetites
- Breakdown of correlations and portfolio effects
- **Modern risk management techniques are coming under great fire**

Signs of Investor Conservatism



Source: ICI



Source: Bloomberg

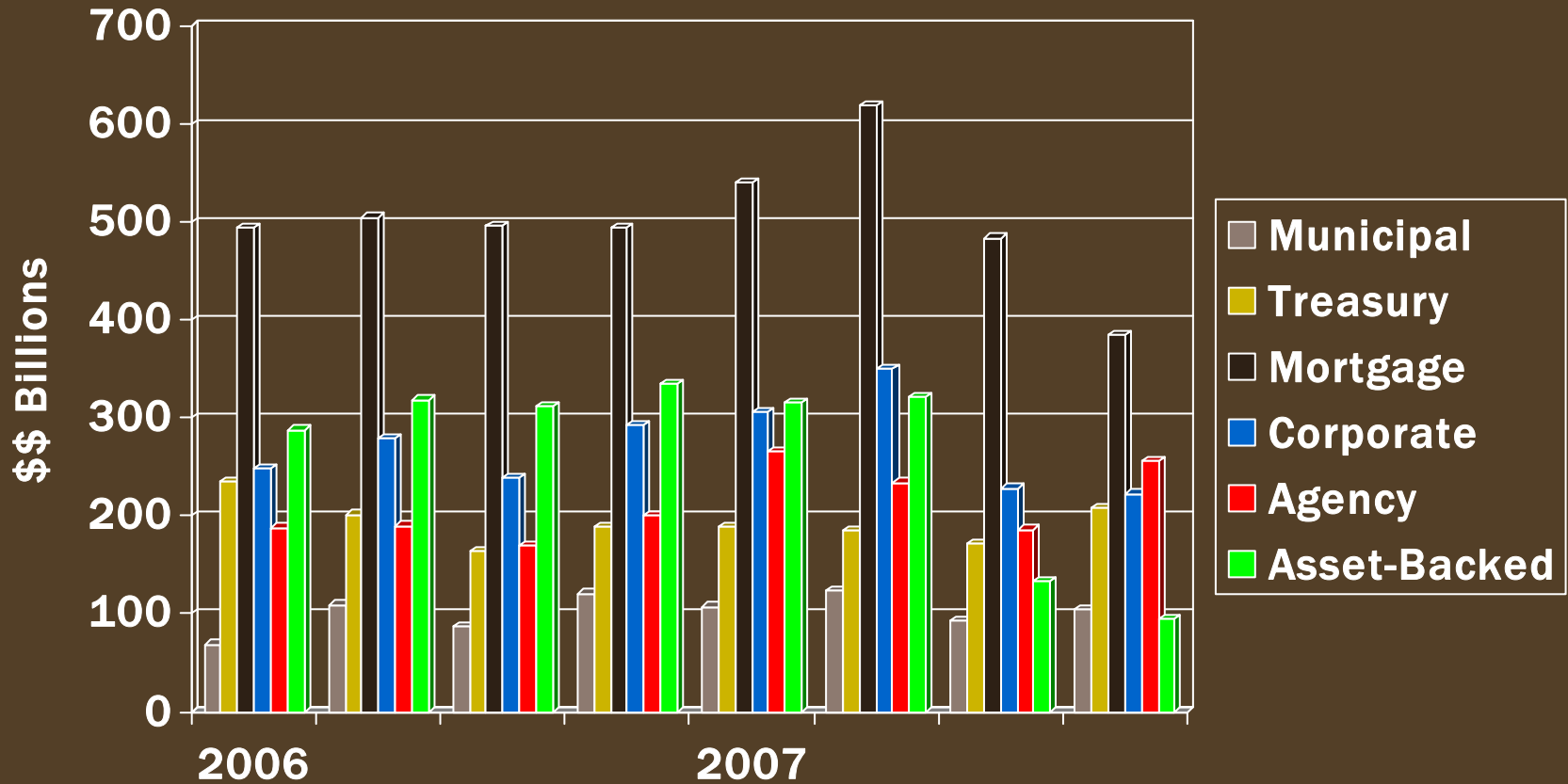
• *This money will eventually have to go back to work!*

Credit Conditions: May 2008

Summary Comments

- Short-term financing pressures persist
- Market credit stress remains significant; worse, in spots, than last fall
- Bank balance sheets have swollen with assets that would normally be securitized
- Banks are moving to ration available capital and liquidity by tightening credit standards
- Signs point to extreme concern over counterparty exposure
- Rating agencies and credit committees are rapidly reassessing
- Modern corporate finance is, perhaps, even more pro-cyclical than the system it replaced
- There is every chance that the growing credit crunch will make recovery more difficult

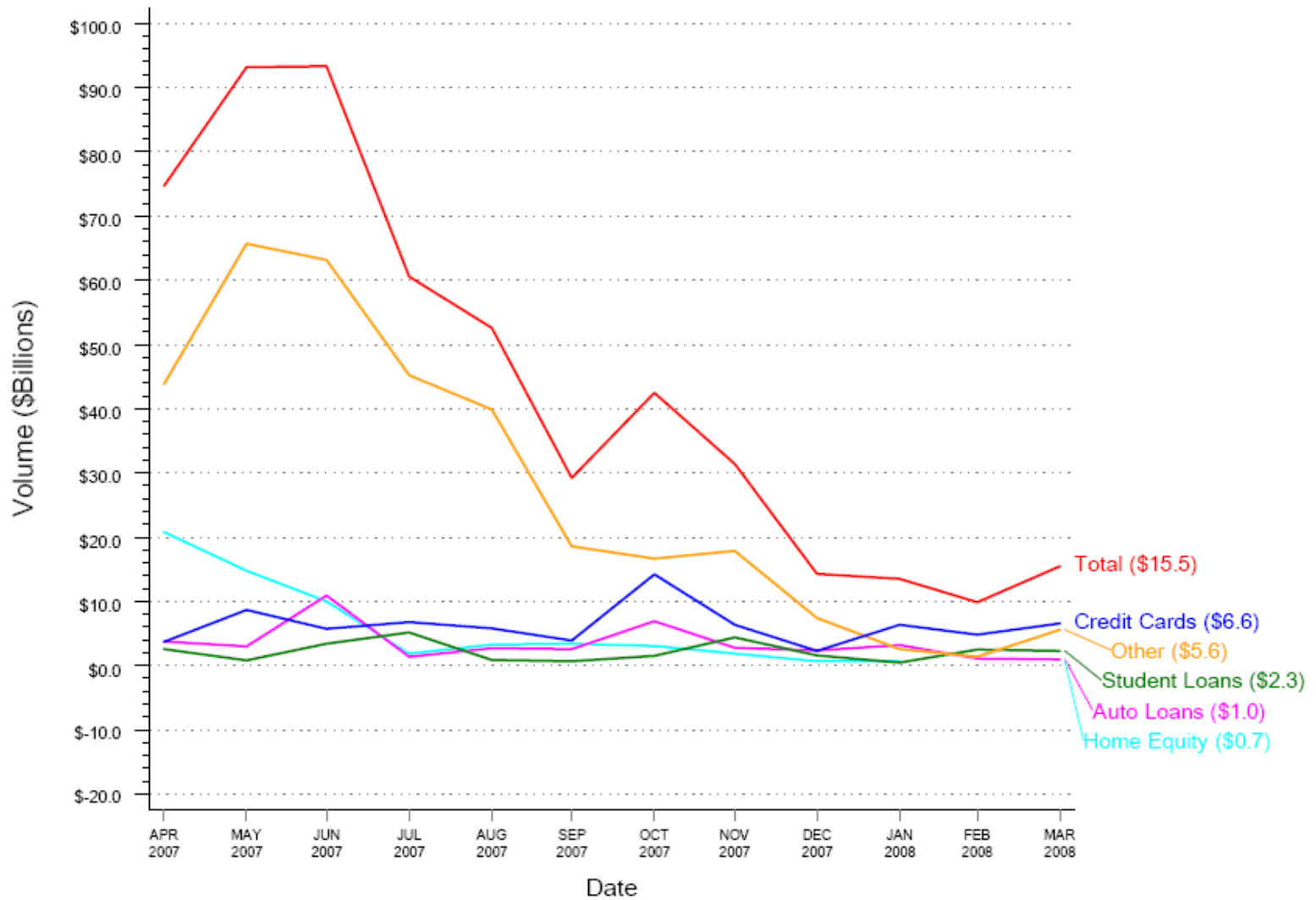
New Debt Issues



Source: SIFMA

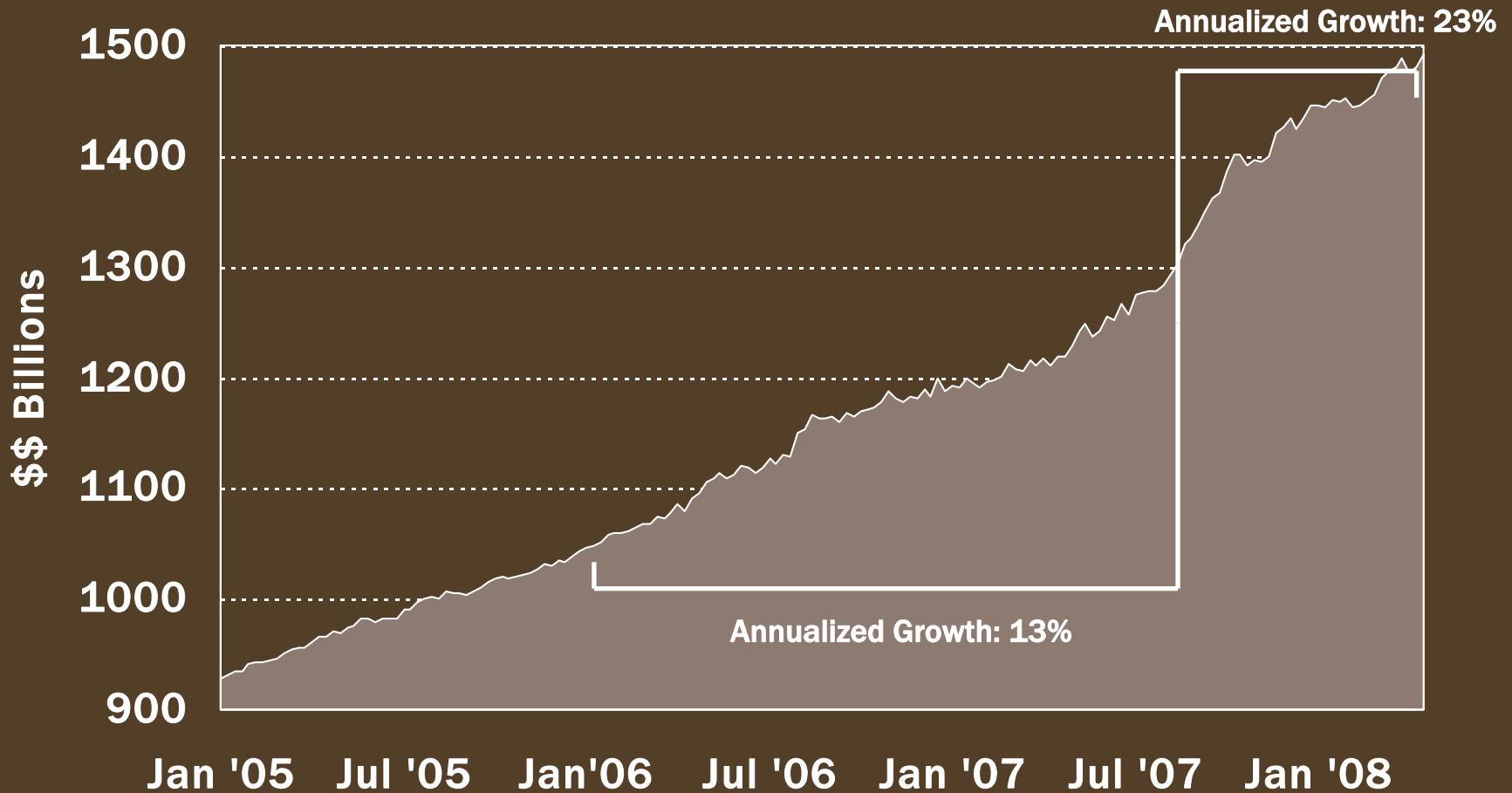
Issuance of Asset-Backed Securities by Type of Collateral

Monthly, April 30, 2007 to March 31, 2008, (Value for most recent date in parentheses)



Commercial and Industrial Loans

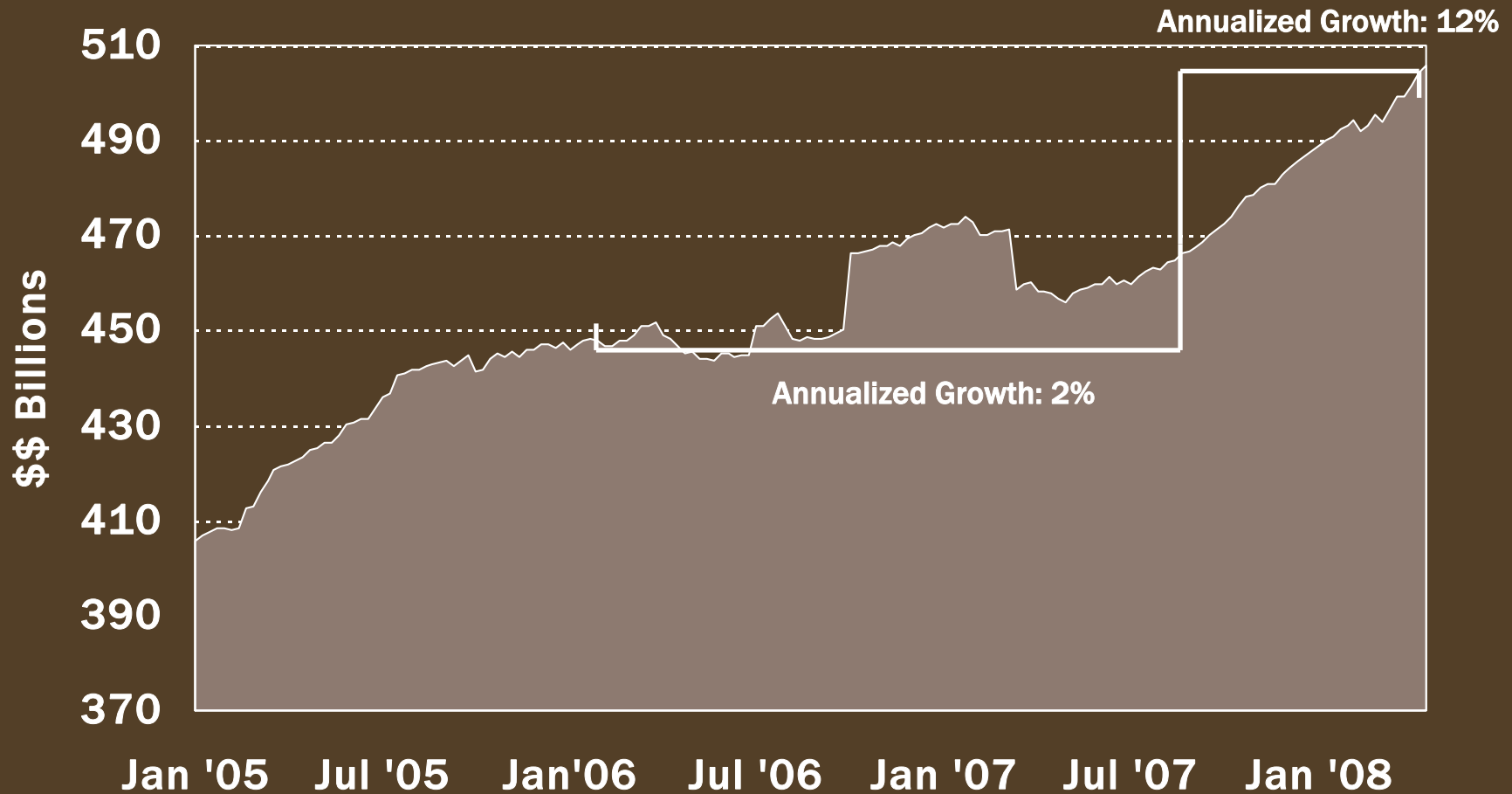
All Commercial Banks



Source: Federal Reserve

Home Equity Lines of Credit

All Commercial Banks

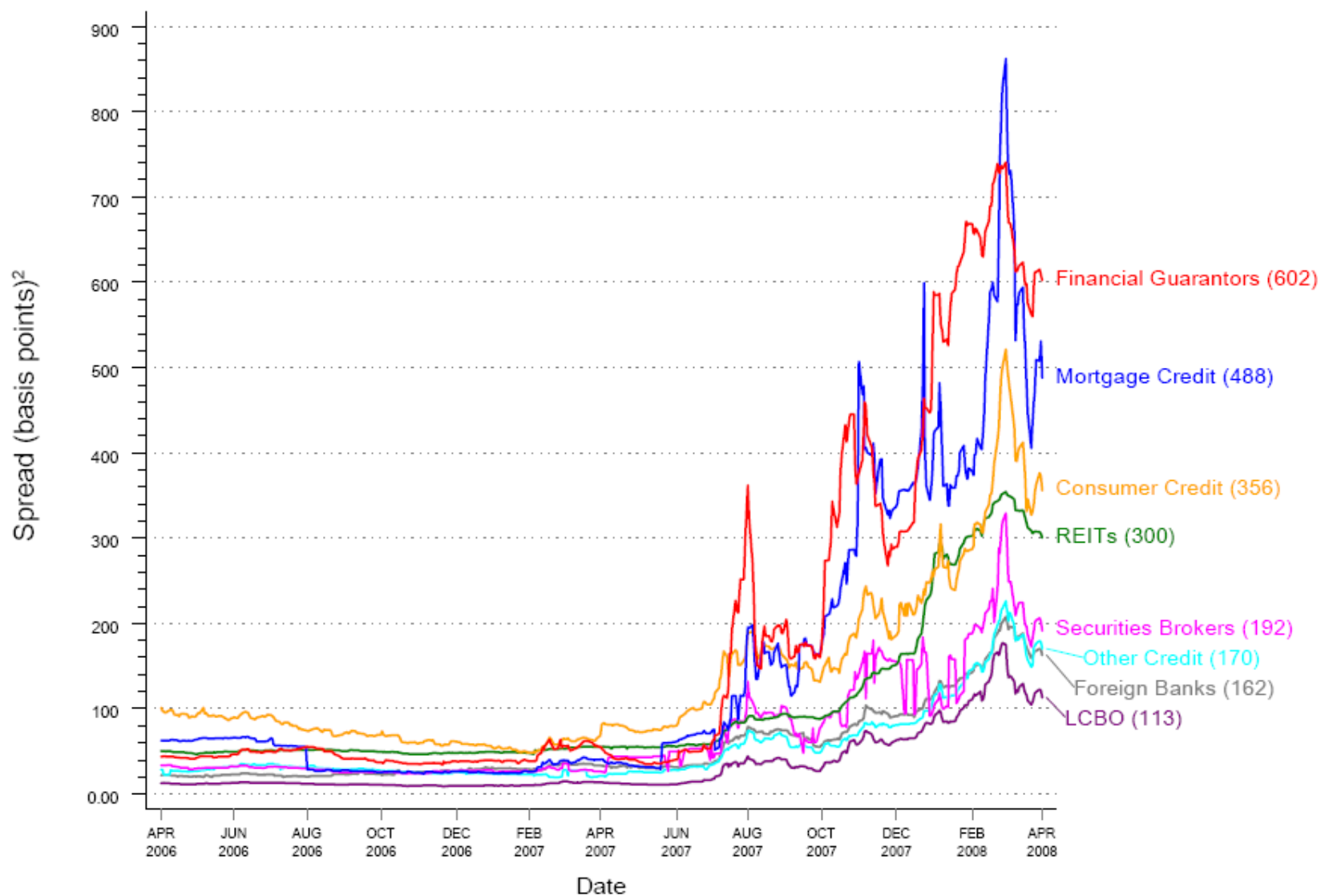


Source: Federal Reserve

Average Credit Default Swap (CDS) Spread for Financial Sector Industries¹

Internal

Weekdays, April 16, 2006 to April 16, 2008, (Value for most recent date in parentheses)



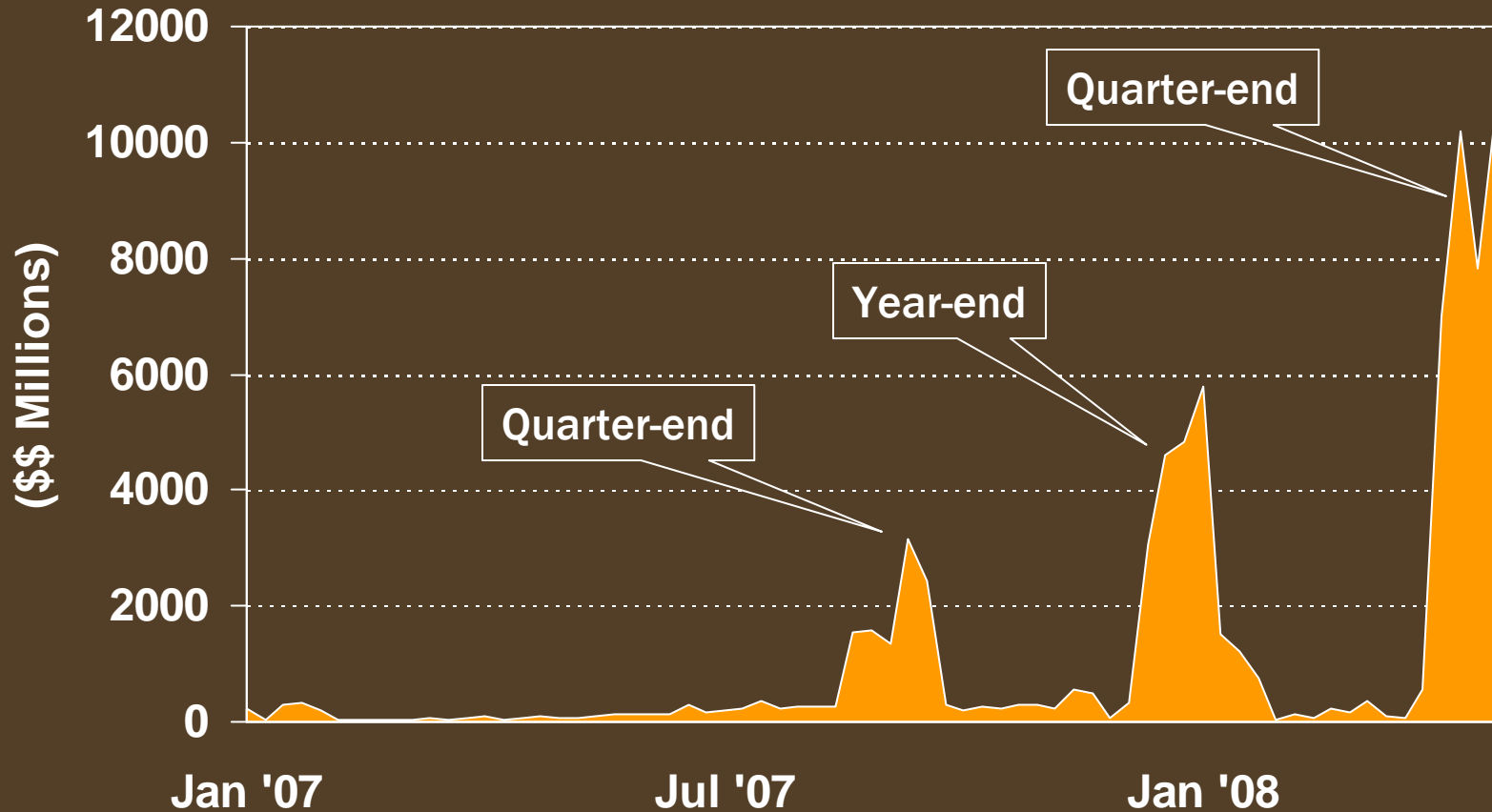
New FRB Programs

Term Discount Window Program	Same as traditional DW, but borrowing can go up to 90 days
Term Auction Facility (TAF)	28-day borrowings, with price determined by auction
Primary Dealer Credit Facility (PDCF)	Overnight borrowing made available to investment banks, expanded collateral
Term Securities Lending Facility (TSLF)	For investment banks, exchange of Treasuries for a range of collateral for periods of 28 days

http://www.newyorkfed.org/markets/Forms_of_Fed_Lending.pdf

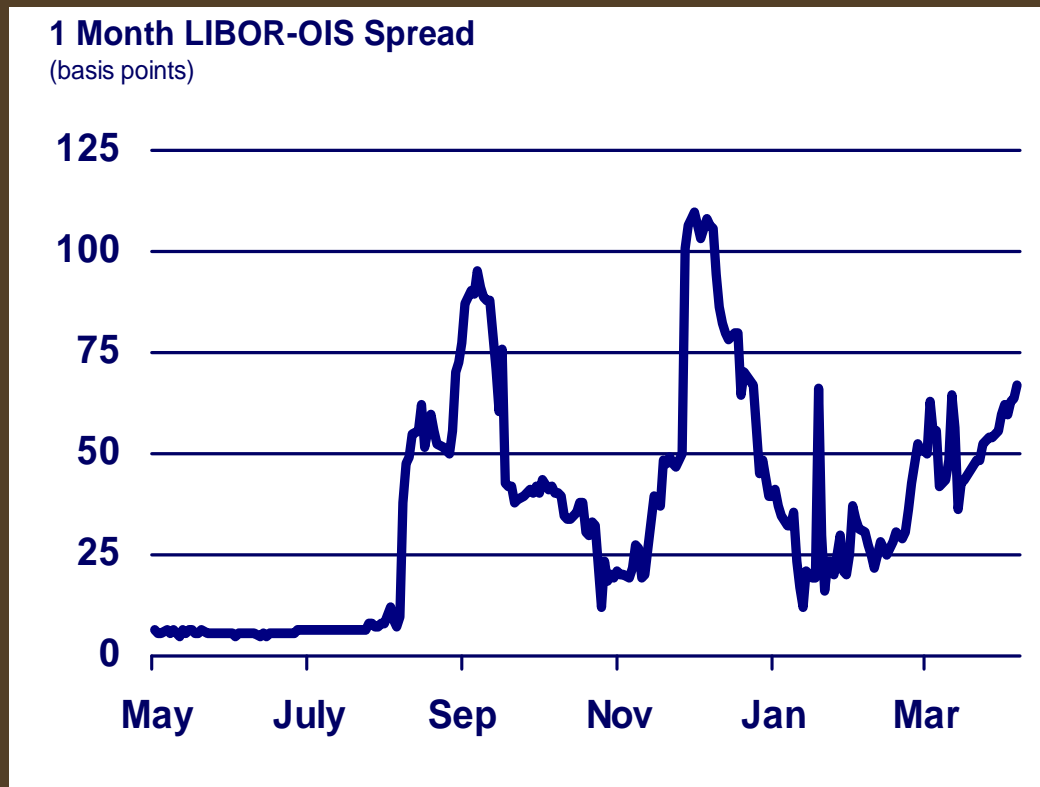
Discount Window Borrowing

Still Significant



Source: Federal Reserve

Overnight Funding Conditions: Far From Settled



- Questions about the quality of LIBOR have arisen

Bear Market



Lessons for the Young

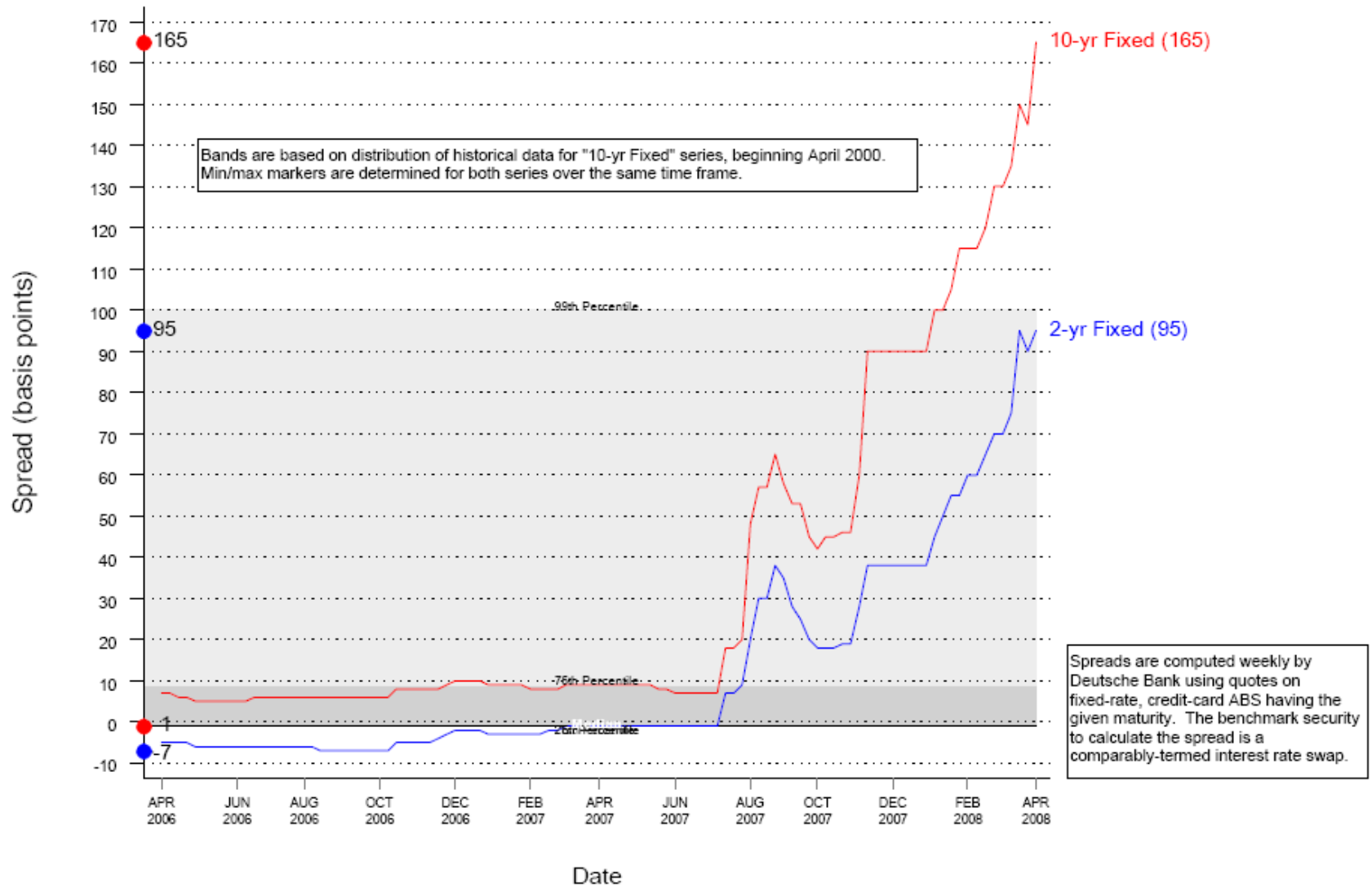
- **Sometimes the skill in using models is knowing when to turn them off**
- **When things go bad, all correlations go to one**
- **Counterparty performance is inversely related to the value of the contract (mortgages, credit default swaps)**
- **You always have plenty of liquidity...until you don't**
- **No amount of capital can protect you from a liquidity crisis**

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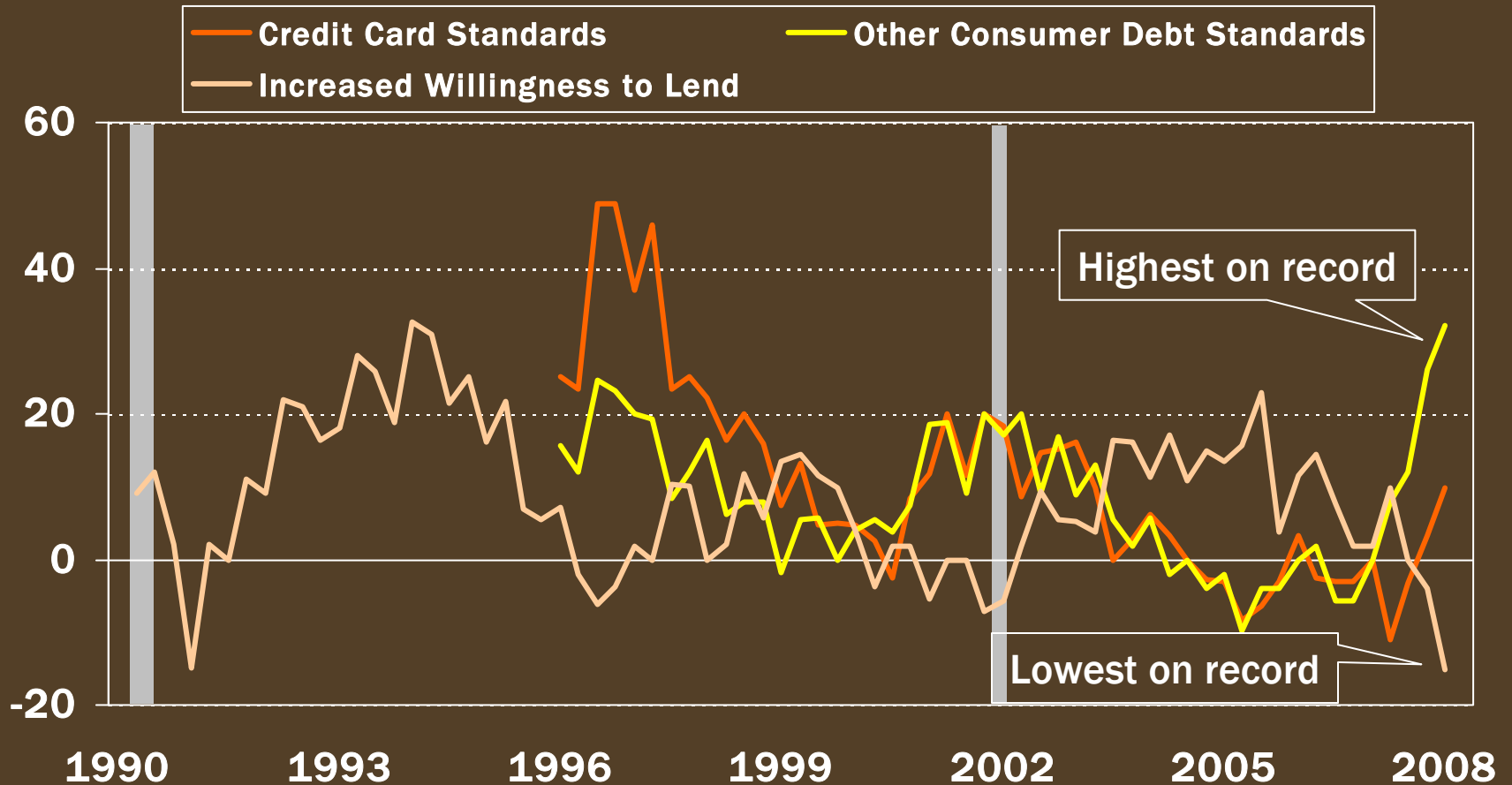
Spreads on ABS Backed by Credit Card Receivables⁴

Weekly, April 15, 2006 to April 15, 2008, (Value for most recent date in parentheses)



Senior Loan Officer Survey: Consumer Debt

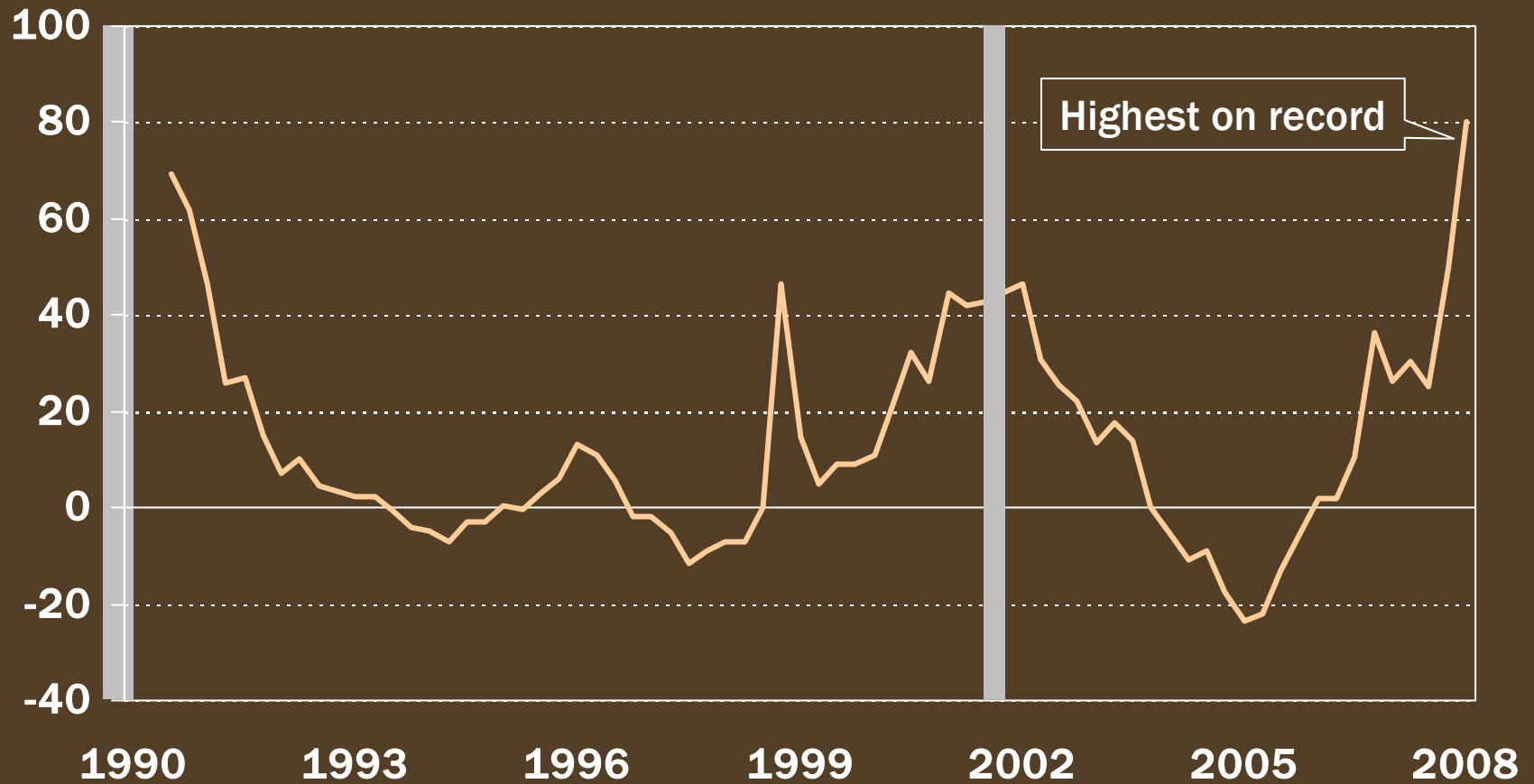
Net Percentage of Respondents Tightening Credit



Source: Federal Reserve

Senior Loan Officer Survey: Commercial Real Estate

Net Percentage of Respondents Tightening Credit



Source: Federal Reserve

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Some Observations

- **What we're experiencing is the result of animal spirits, not rational analysis**
- **Leverage capital gains ground against risk-based capital**
 - **New requirements for investment banks?**
 - **Is Basle II in trouble?**
- **Re-regulation is gaining steam; some good ideas, some very bad ones**
- **Liquidity risk is getting renewed (and overdue) attention**
- **Still largely a big bank story, but the trickle-down effect is taking root**
- **Down-side risk is still significant**

Some Interesting Reading

- **Senior Supervisors Group, “Observations on Risk Management Practices During the Recent Market Turbulence”**

<http://www.ny.frb.org/newsevents/news/banking/2008/rp080306.html>

- **FRB Governor Kevin Warsh on “Market Liquidity: Definitions and Implications”**

<http://www.federalreserve.gov/newsevents/speech/warsh20070305a.htm>

- **IMF Report on Funding Illiquidity:**

<http://www.imf.org/External/Pubs/FT/GFSR/2008/01/pdf/chap3.pdf>

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