

Entry Restriction and Shadow Banking

Morgan Ricks
Vanderbilt Law School

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England: 1708

AND it is hereby further enacted by the Authority aforesaid That during the Continuance of the said Corporation of the Governor and Company of the Bank of England it shall not be lawful for any Body Politick or Corporate whatsoever erected or to be erected (other than the said Governor and Company of the Bank of England) or for any other Persons whatsoever united or to be united in Covenants or Partnership exceeding the Number of Six Persons in that Part of Great Britain called England to borrow owe or take up any Sum or Sums of Money on their Bills or Notes payable at Demand or at any less Time than Six Months from the borrowing thereof

New York State: 1804*

I. Be it enacted by the people of the state of New-York, represented in senate and assembly, That it shall not be lawful for any person, association of persons, or body corporate, from and after the first day of August next, to keep any office of deposit for the purpose of discounting promissory notes, or for carrying on any kind of banking business or operations, which incorporated banks are authorised by law to carry on, or issue any bills or promissory notes, as private bankers, unless thereunto specially authorised by law:

*as amended 1818

United States: 1865*

SEC. 19. That every person, firm, association other than national bank associations, and every corporation, State bank, or State banking association, shall pay a tax of ten per centum on the amount of their own notes used for circulation and paid out by them.

*as amended 1875

Today

(a) After the expiration of one year after June 16, 1933, it shall be unlawful—

(2) For any person, firm, corporation, association, business trust, or other similar organization to engage, to any extent whatever with others than his or its officers, agents or employees, in the business of receiving deposits subject to check or to repayment upon presentation of a pass book, certificate of deposit, or other evidence of debt, or upon request of the depositor, unless such person, firm, corporation, association, business trust, or other similar organization (A) shall be incorporated under, and authorized to engage in such business by, the laws of the United States or of any State, Territory, or District, and subjected, by the laws of the United States, or of the State, Territory, or District wherein located, to examination and regulation, or (B)

Policy Justifications for Entry Restriction

- Stability (regulation/supervision)
- Monetary control
- Cabining seigniorage

“Deposit”

The term “deposit” means—

(1) the unpaid balance of money or its equivalent received or held by a bank or savings association in the usual course of business and for which it has given or is obligated to give credit, either conditionally or unconditionally, to a commercial, checking, savings, time, or thrift account, or which is evidenced by its certificate of deposit, thrift certificate, investment certificate, certificate of indebtedness, or other similar name, or a check or draft drawn against a deposit account and certified by the bank or savings association, or a letter of credit or a traveler’s check on which the bank or savings association is primarily liable: *Provided*, That, without limiting the generality of the term “money or its equivalent”, any such account or instrument must be regarded as evidencing the receipt of the equivalent of money when credited or issued in exchange for checks or drafts or for a promissory note upon which the person obtaining any such credit or instrument is primarily or secondarily liable, or for a charge against a deposit account, or in settlement of checks, drafts, or other instruments forwarded to such bank or savings association for collection.

Department of Justice: 1979

It is patent from the quoted statutory language that a depositor is only a creditor of his depository (a debtor in the case of an authorized overdraft, which indebtedness he must liquidate by a "deposit"). It is equally patent that one who invests in a money market fund is an owner pro tanto of the fund

Inasmuch as investors in a money market fund are, in our view, owners of the fund and not mere depositors, we perceive no violation of section 21(a), Glass-Steagall Act, supra, in

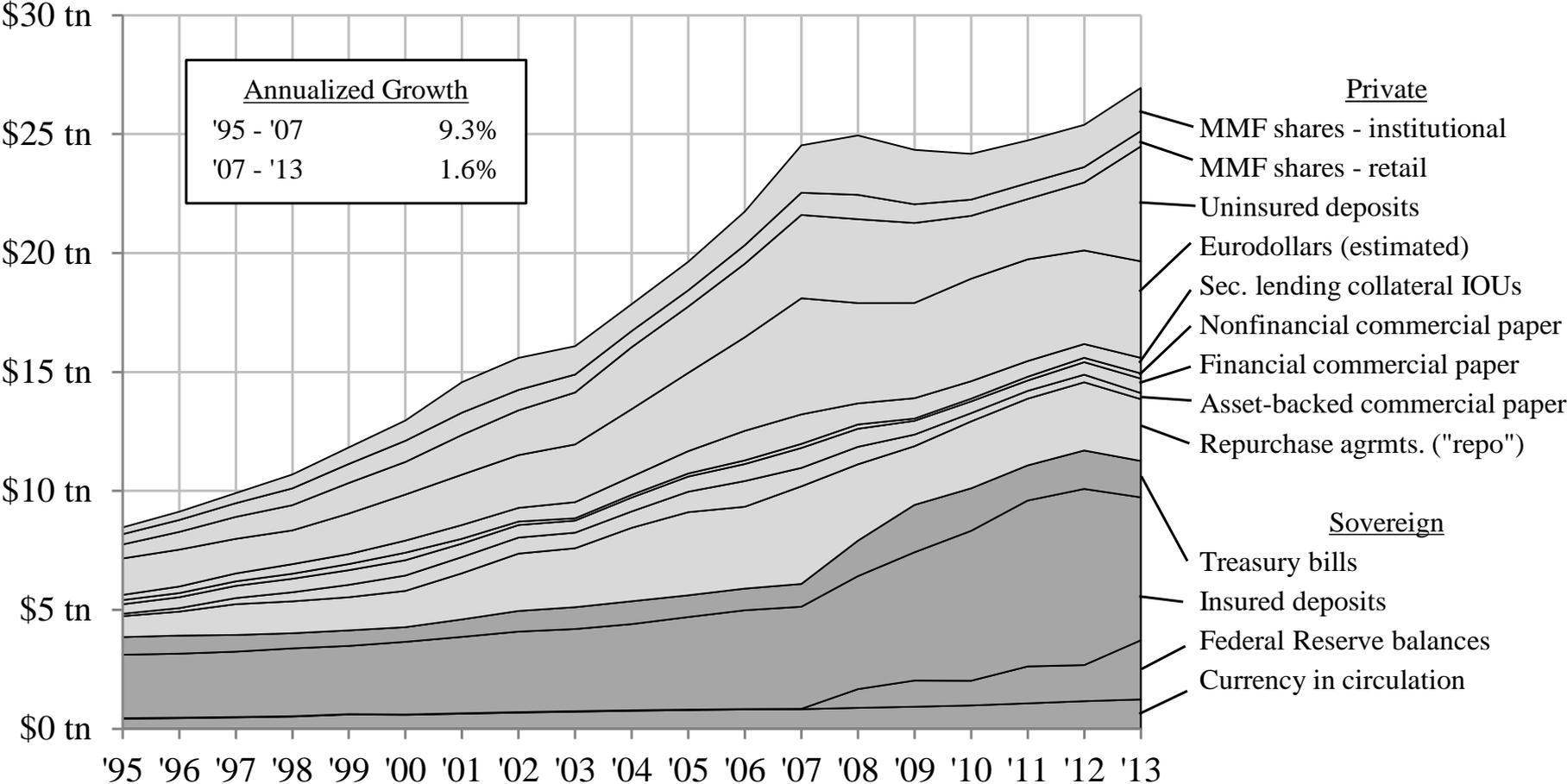
Money Creation Today (and “Shadow” Banking)

- Truism: commercial banks create money (transaction accounts)
- Increasingly recognized: “shadow banking system” creates money too
- The short-term liabilities of shadow banks – deposit substitutes – serve a distinctly monetary function (longer-term securities don’t)
- “Cash equivalents,” “near monies,” monetary aggregates, “money market”

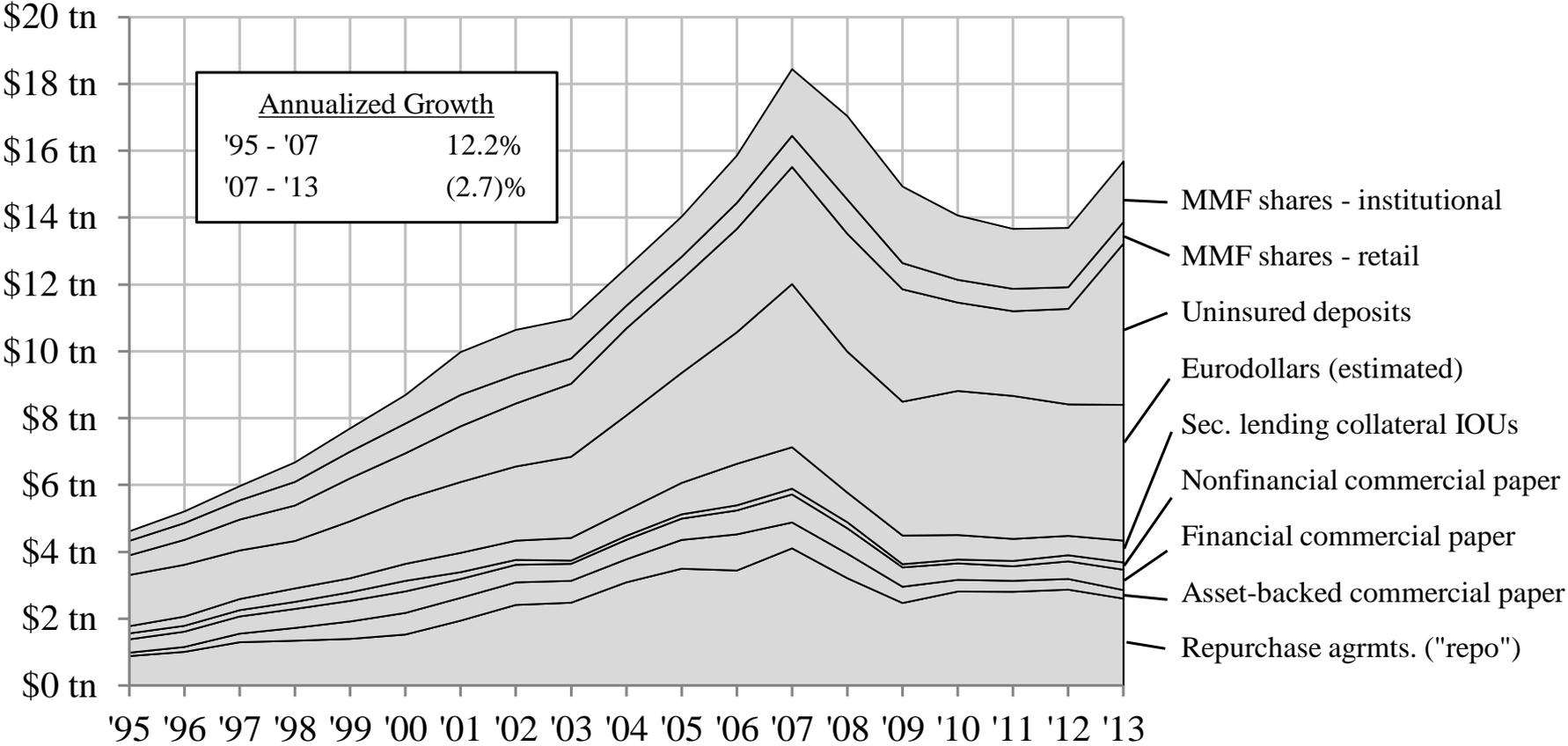
Not a New Concept

- Simons (1934): “short-term debts ... are ... closely akin to money”
- Keynes (1936) suggested 3 month maturity cutoff between money and bonds
- Hicks (1946): short-term debt instruments “very close substitutes” for money, have “moneyness”
- Friedman & Schwartz (1970): “moneyness”

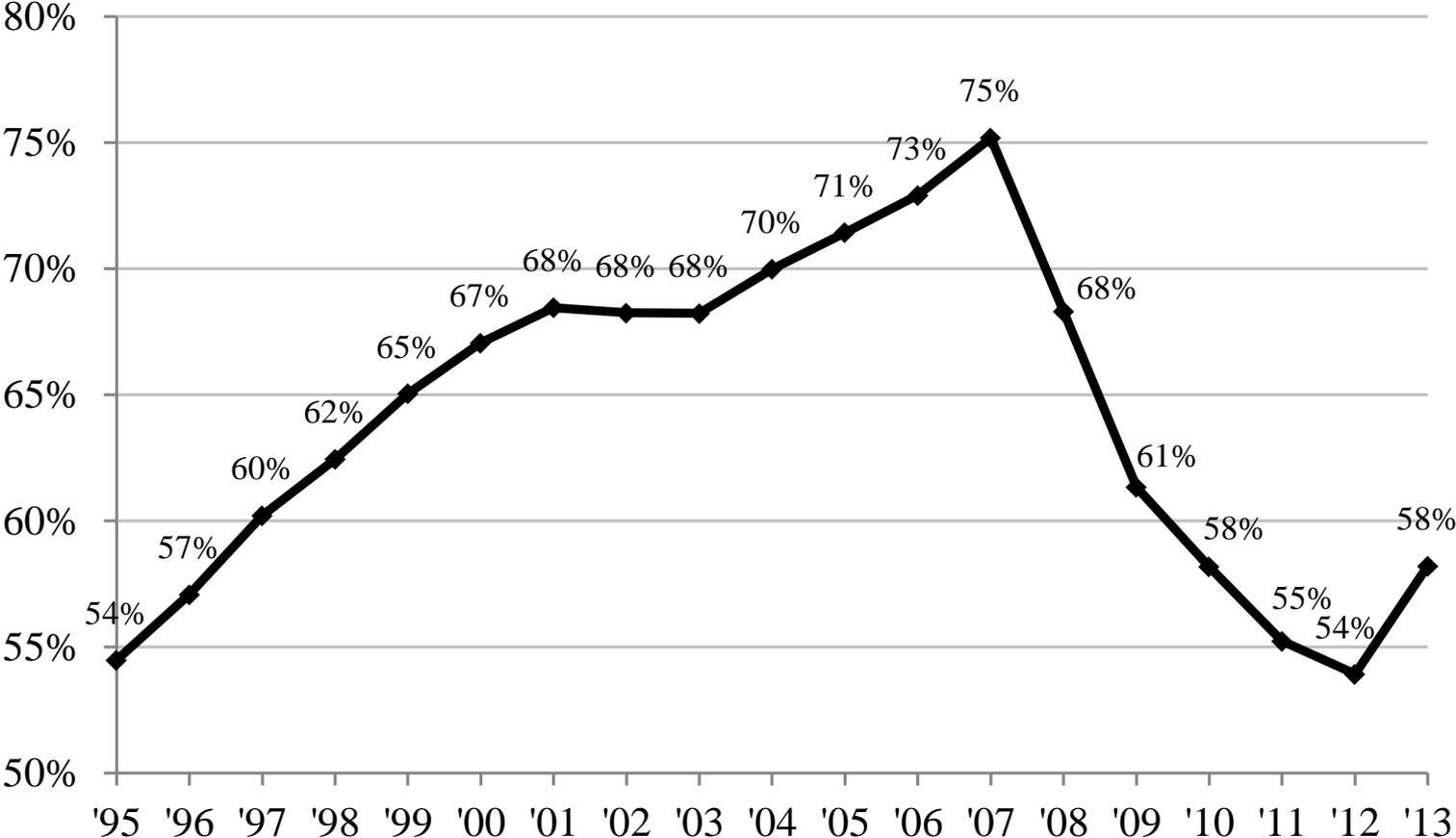
Gross Money-Claims Outstanding



Gross Private Money-Claims Outstanding

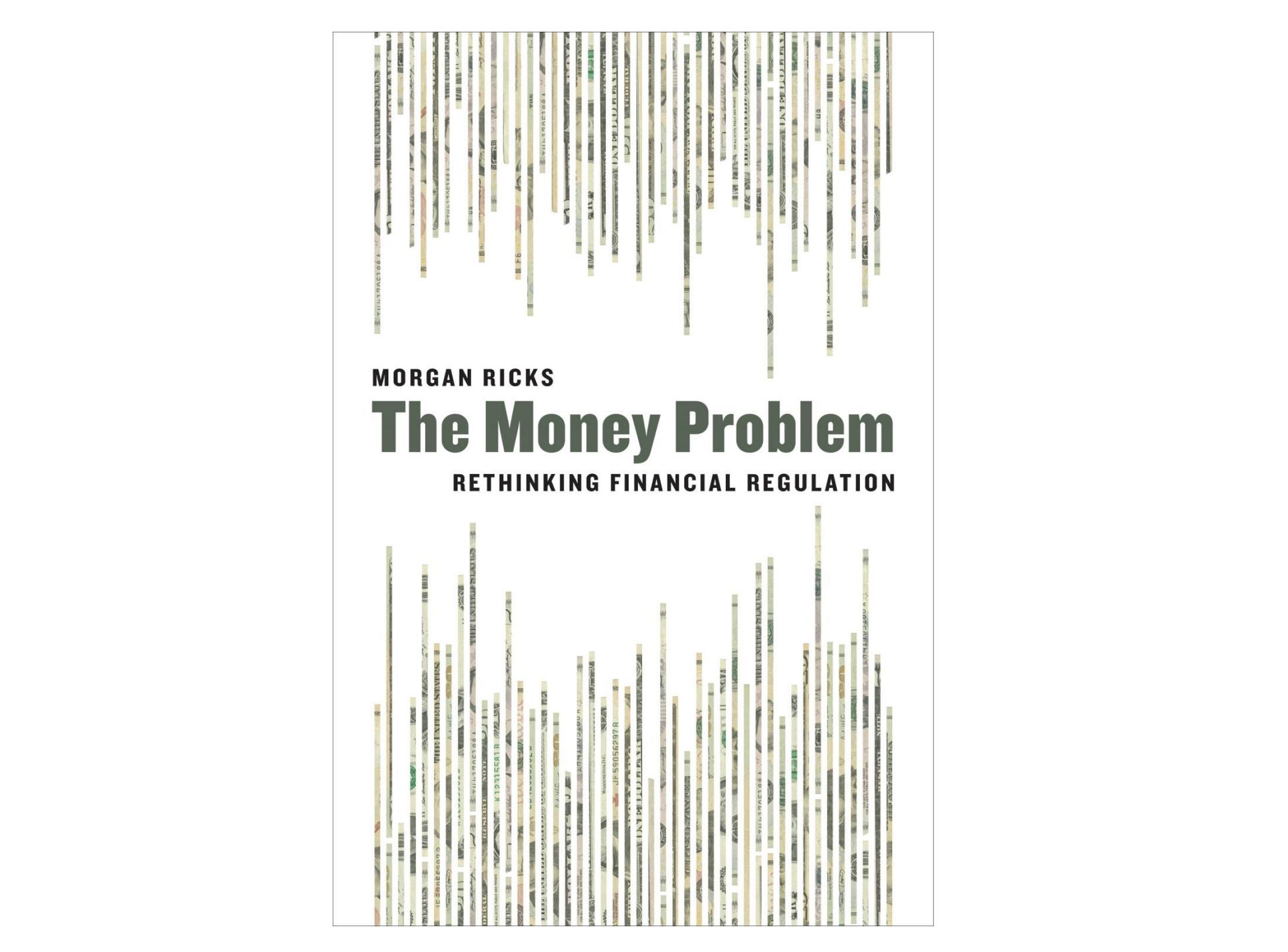


Private Money-Claims as % of Total



Grave Threat to Real Economy

- Bagehot (1873): “Of the many millions in Lombard street, infinitely the greater proportion is held by bankers or others **on short notice or on demand** If any large fraction of that money really was demanded, our banking system and **our industrial system too** would be in great danger.”
- Simons (1936): “The **economy becomes exposed to catastrophic disturbances** as soon as **short-term borrowing** develops on a large scale.”
- Gorton (2010): “Quiet Period”



MORGAN RICKS

The Money Problem

RETHINKING FINANCIAL REGULATION

Modernizing Entry Restriction

- Would say: can't use "money creation" funding model without a bank charter
- This funding model (broad money issuance) would be the privilege that a bank charter conveys
- Need to specify precise contours
- Defining money creation functionally rather than formalistically

Advantages

- Stability (regulation/supervision)
- Monetary control
- Cabining seigniorage

Advantages (cont'd)

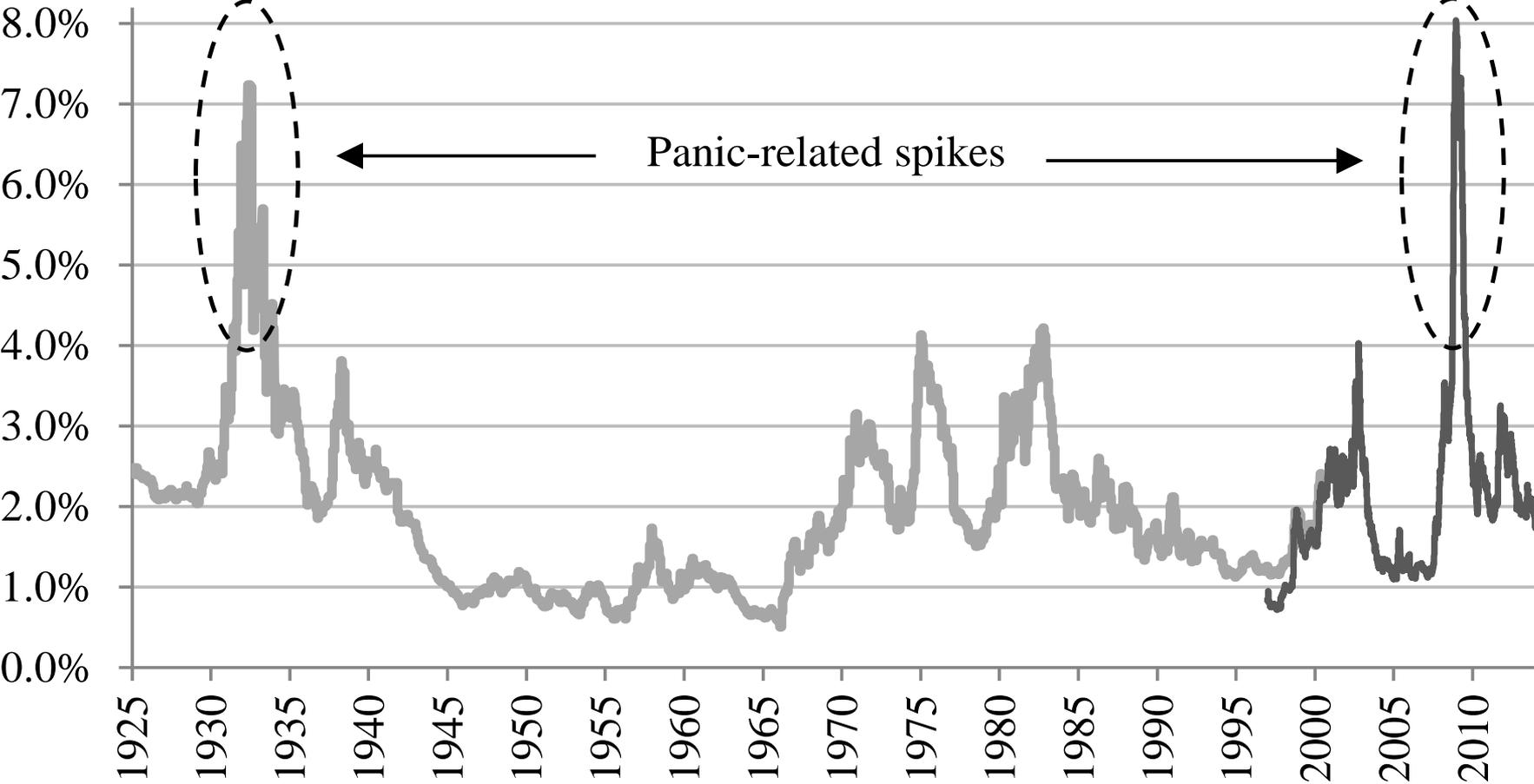
- Too Big To Fail
- Scale back/simplify other forms of financial stability regulation

Objections

- Regulatory arbitrage
- Moral hazard
- Costliness (costs of capital, economic growth)
- Are short-term funding panics really the main problem?
- Other alternatives (e.g., margin requirements, LOLR)

Appendix

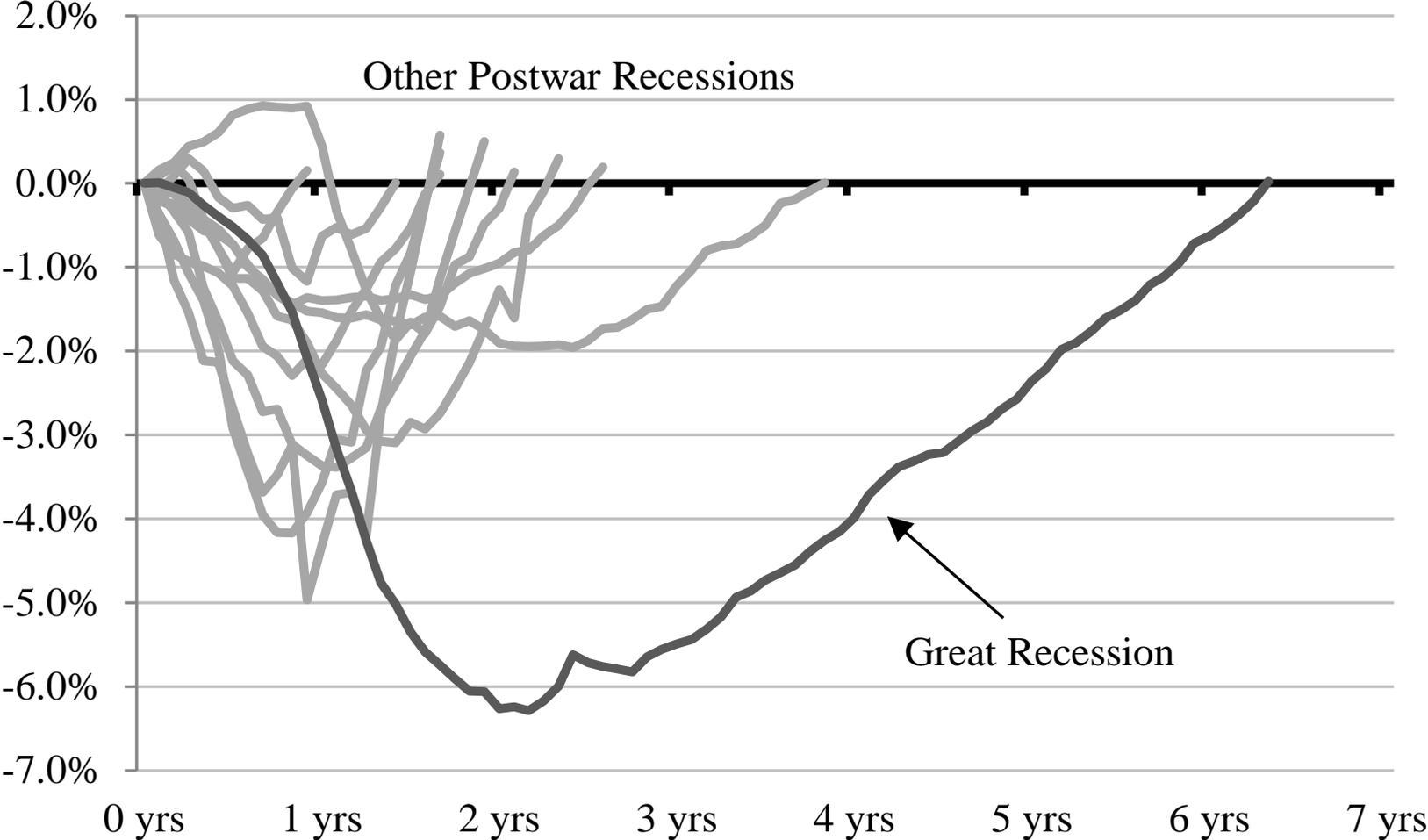
BBB-rated Corporate Bond Spreads



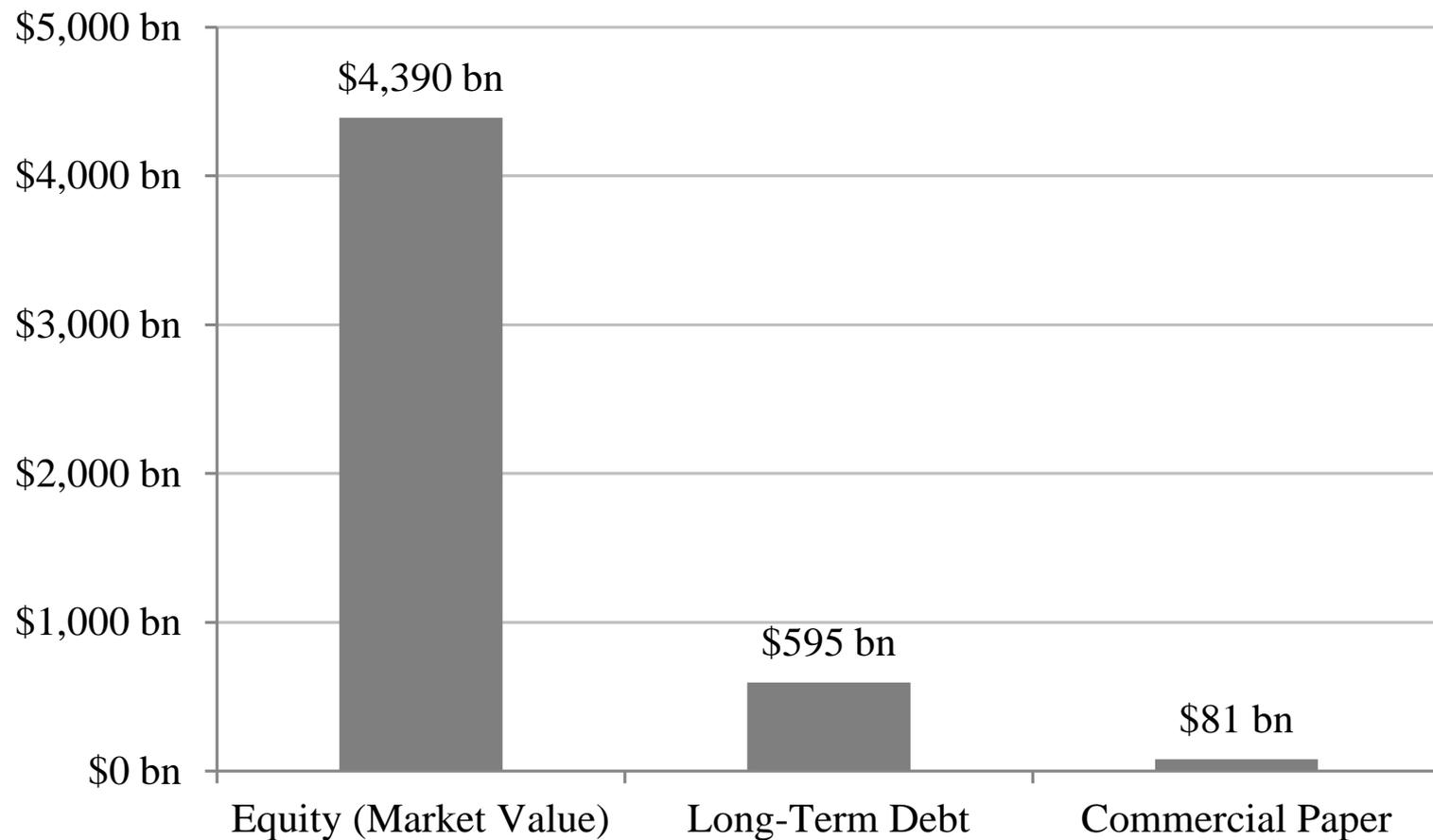
— Monthly Series (1925 to 2000)

— Daily Series (1997 to 2013)

Change in U.S. Employment in Postwar Recessions



Selected Sources of Financing for Top 25 US Nonfinancial Public Companies

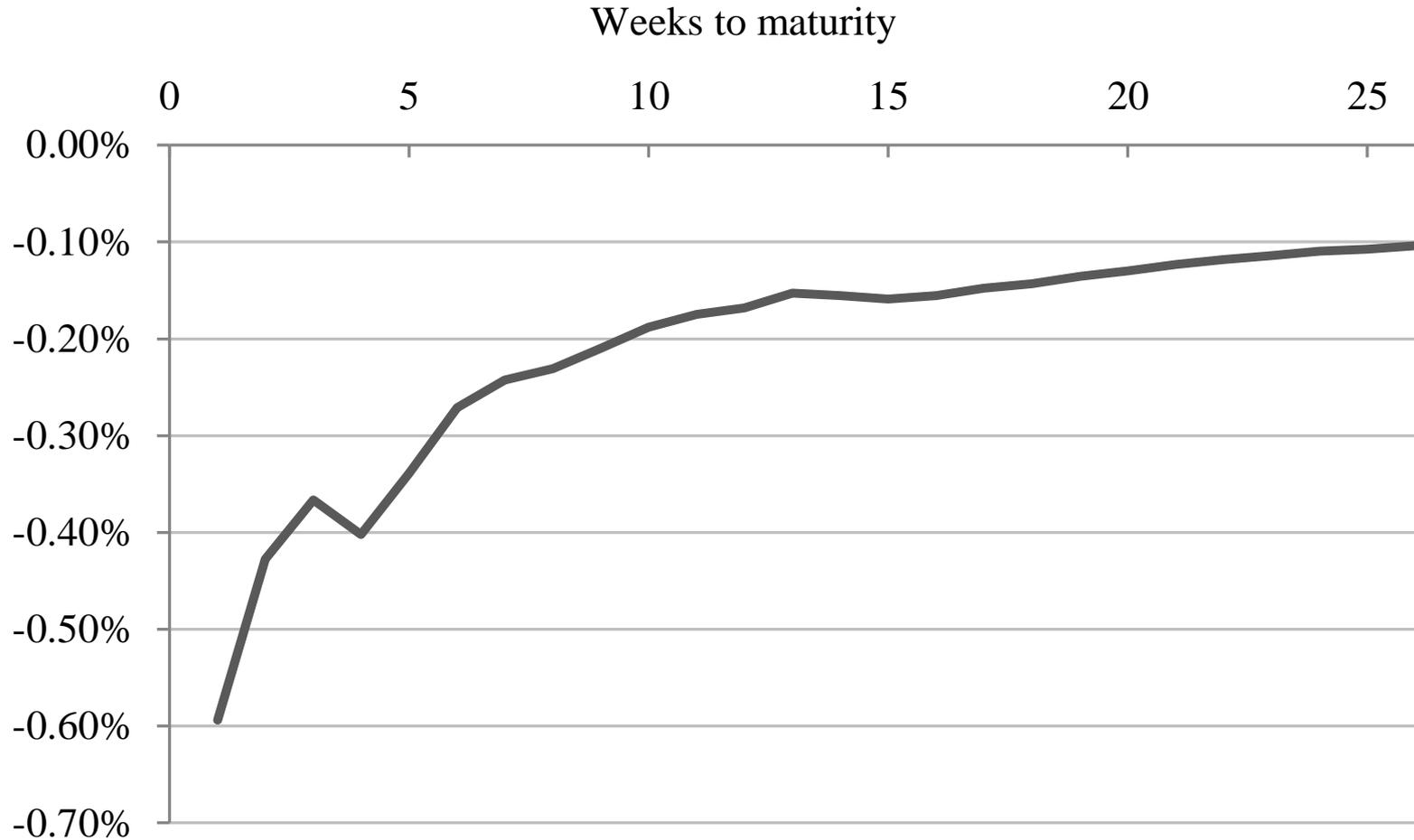


Top 50 Non-Gov't Borrowers from Prime MMFs (May '12)

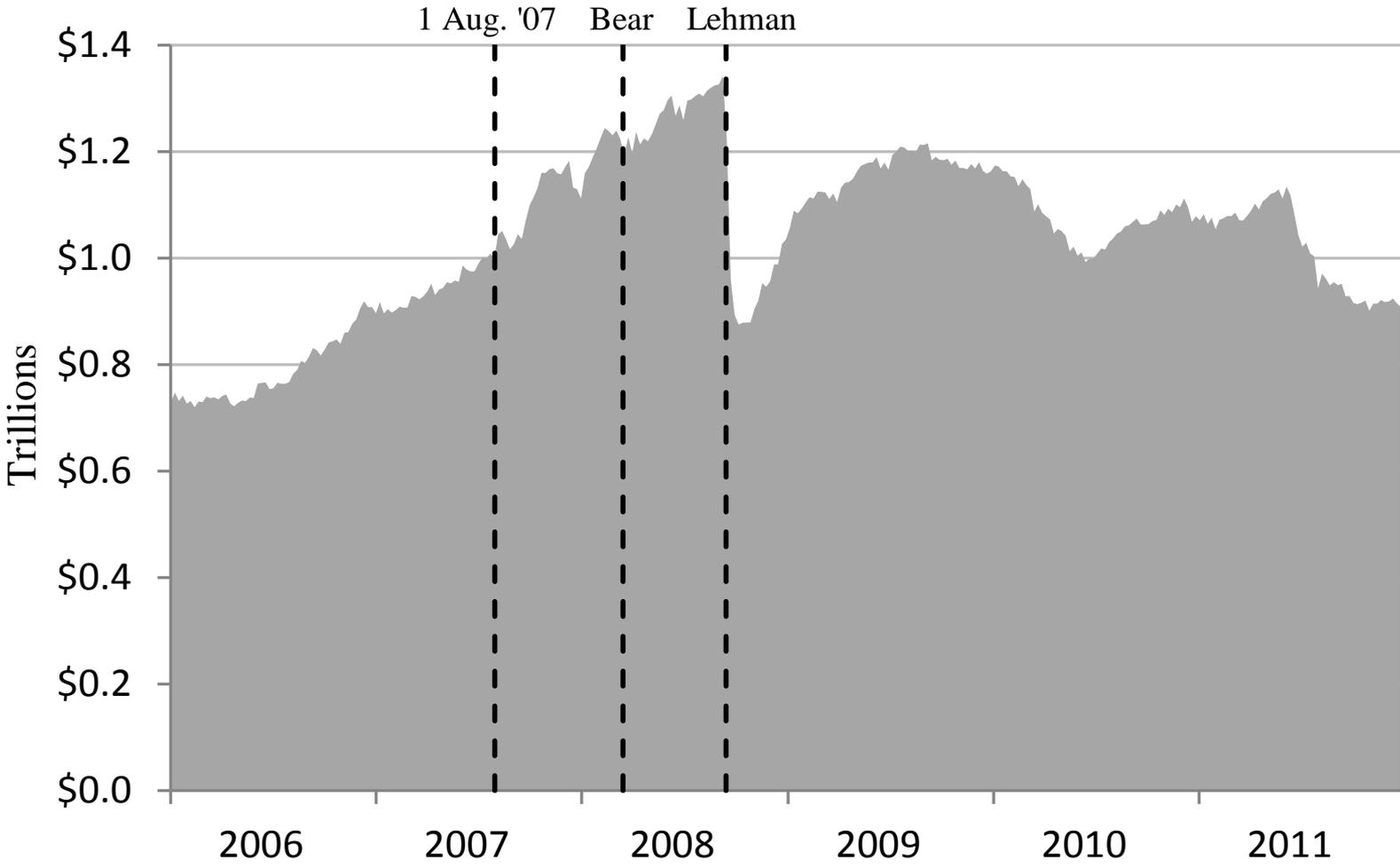
Rank	Issuer	May 2012 (USD billions)	Percent of MMF Assets	Rank	Issuer	May 2012 (USD billions)	Percent of MMF Assets
1	Barclays Bank	56.8	3.99%	26	HSBC	17.4	1.22%
2	Deutsche Bank AG	52.1	3.66%	27	DnB NOR Bank ASA	15.8	1.11%
3	Bank of Tokyo-Mitsubishi UFJ Ltd	45.4	3.19%	28	BNP Paribas	15.2	1.07%
4	Bank of Nova Scotia	42.9	3.01%	29	Skandinaviska Enskilda Banken AB	14.5	1.02%
5	Sumitomo Mitsui Banking Co	42.6	2.99%	30	Canadian Imperial Bank of Commerce	14.1	0.99%
6	National Australia Bank Ltd	41.4	2.91%	31	Australia & New Zealand Banking Group Ltd	13.7	0.96%
→ 7	JP Morgan	40.4	2.84%	32	Credit Agricole	13.4	0.94%
8	Credit Suisse	40.2	2.82%	33	Straight-A Funding LLC	11.6	0.81%
9	RBC	37.8	2.66%	34	FMS Wertmanagement	11.4	0.80%
10	Rabobank	37.6	2.65%	35	ABN Amro Bank	10.4	0.73%
11	Bank of America	37.1	2.60%	36	Norinchukin Bank	10.3	0.72%
12	Westpac Banking Co	28.9	2.03%	37	Lloyds TSB Bank PLC	9.6	0.68%
13	Citi	28.5	2.00%	38	Toyota Motor Credit	9.2	0.64%
14	ING Bank	25.8	1.81%	39	State Street	9.1	0.64%
15	Mizuho Corporate Bank Ltd	25.7	1.81%	40	Wells Fargo	8.9	0.62%
16	RBS	23.5	1.65%	41	Natixis	7.7	0.54%
17	General Electric Capital Corp.	22.9	1.61%	42	NRW Bank	6.6	0.46%
18	Bank of Montreal	22.6	1.59%	43	Morgan Stanley	6.3	0.44%
19	Svenska Handelsbanken	22.4	1.57%	44	Nestle	6.2	0.43%
20	Commonwealth Bank of Australia	21.6	1.52%	45	MetLife Insurance Company	5.5	0.39%
21	Toronto-Dominion Bank	20.9	1.47%	46	US Bank	5.2	0.36%
22	UBS AG	20.1	1.41%	47	Swedbank AB	4.9	0.34%
23	Societe Generale	19.6	1.38%	48	Coca-Cola Co	4.5	0.31%
24	Nordea Bank	19.4	1.36%	49	Branch Banking & Trust Co	4.3	0.30%
25	Goldman Sachs	17.5	1.23%	50	Oversea-Chinese Banking Co	4.1	0.29%

Source: Sam Hanson, David Scharfstein, and Adi Sunderam, "An Evaluation of Money Market Fund Reform Proposals" (May 2014)

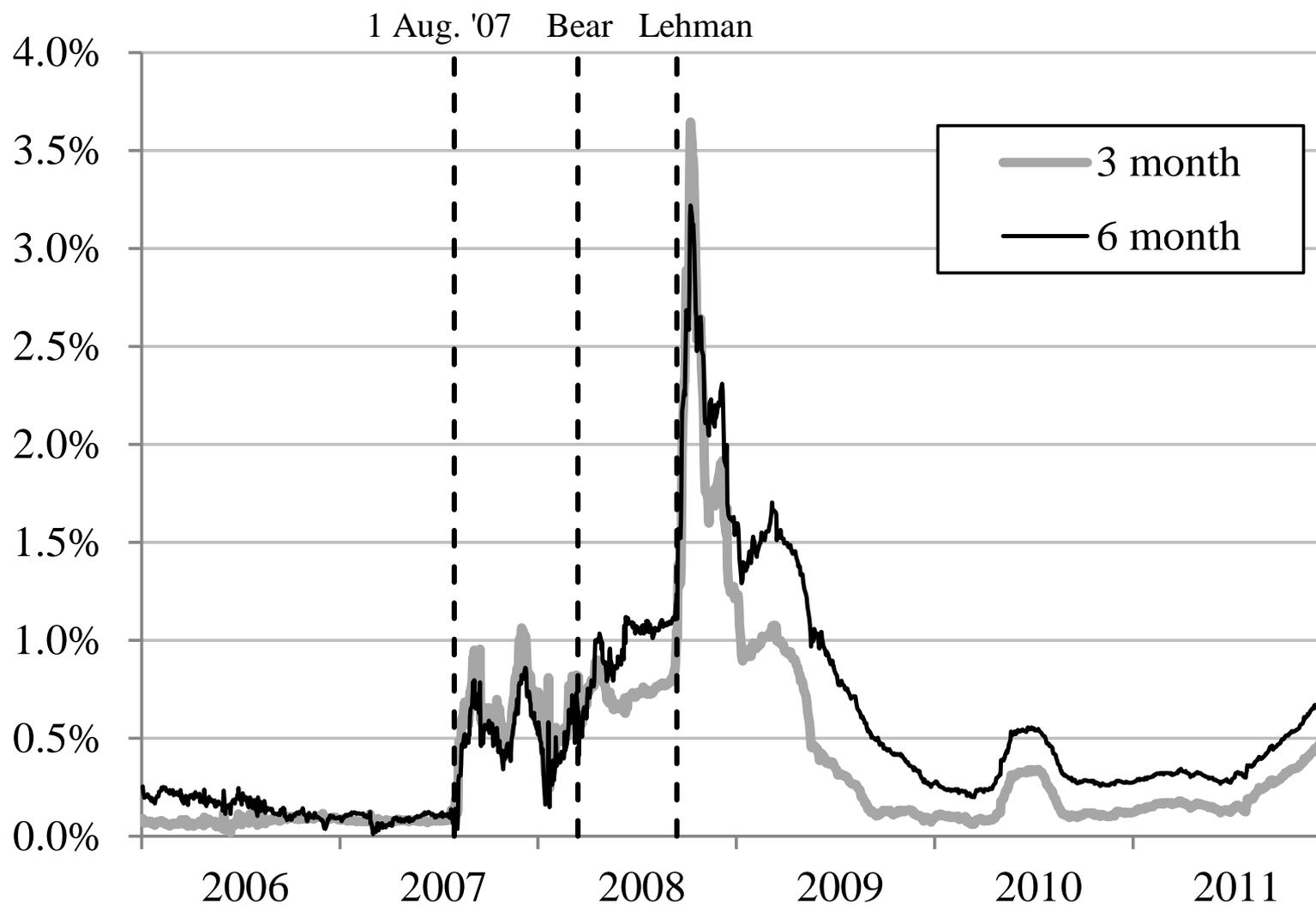
The Money Premium on Short-Term Treasuries



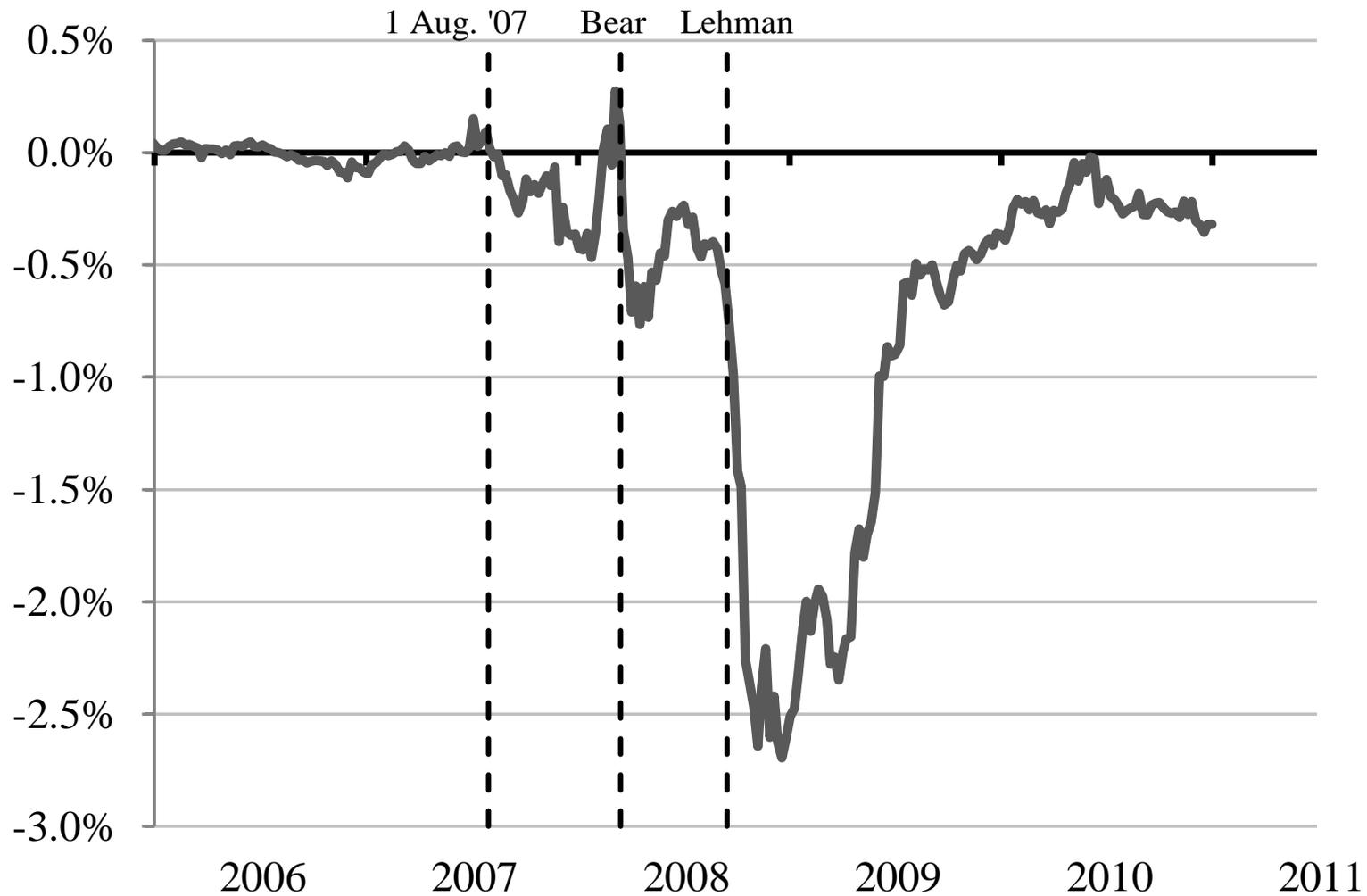
The Run: Prime Institutional MMF Shares Outstanding



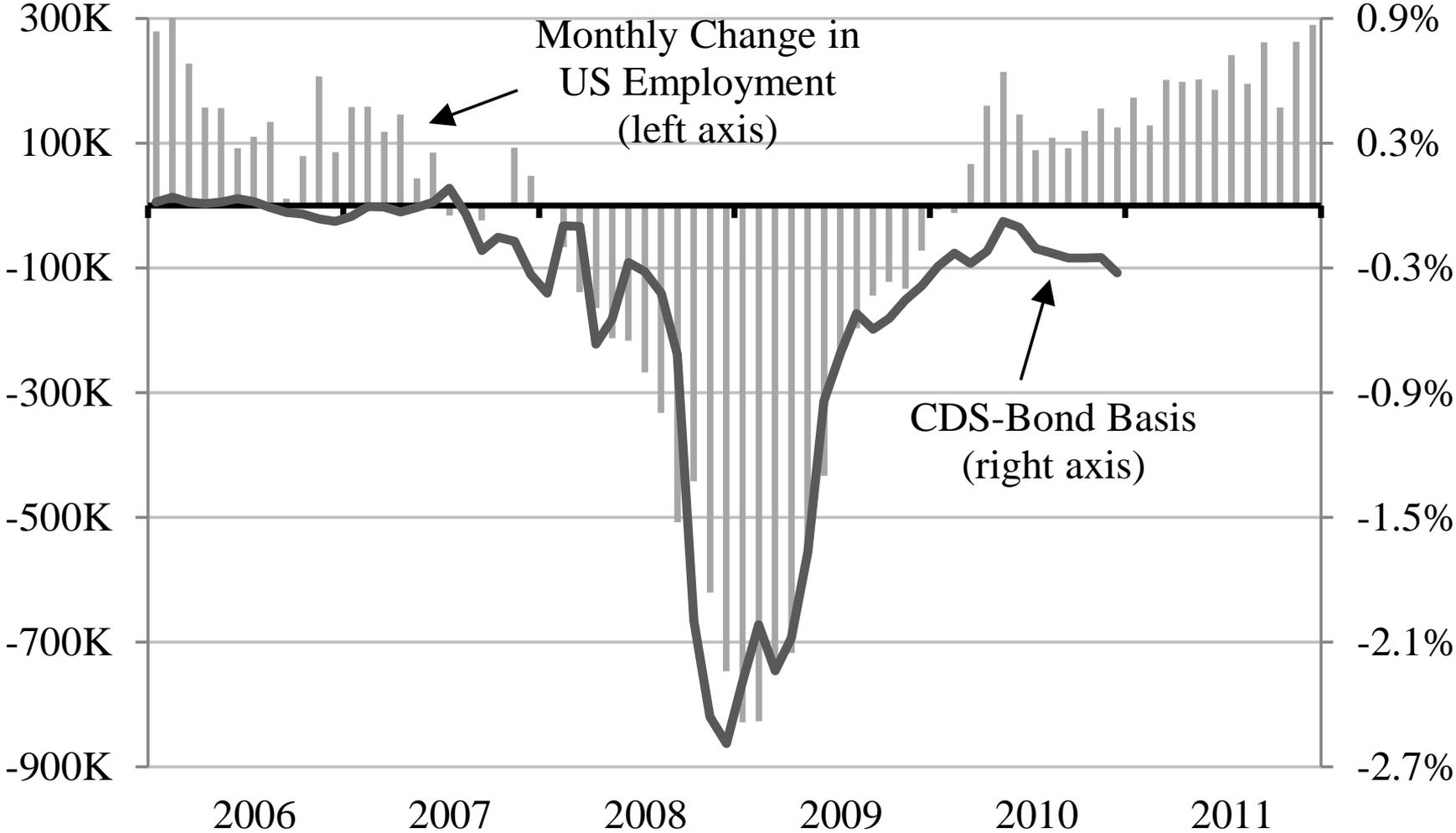
Short-Term Funding Spreads



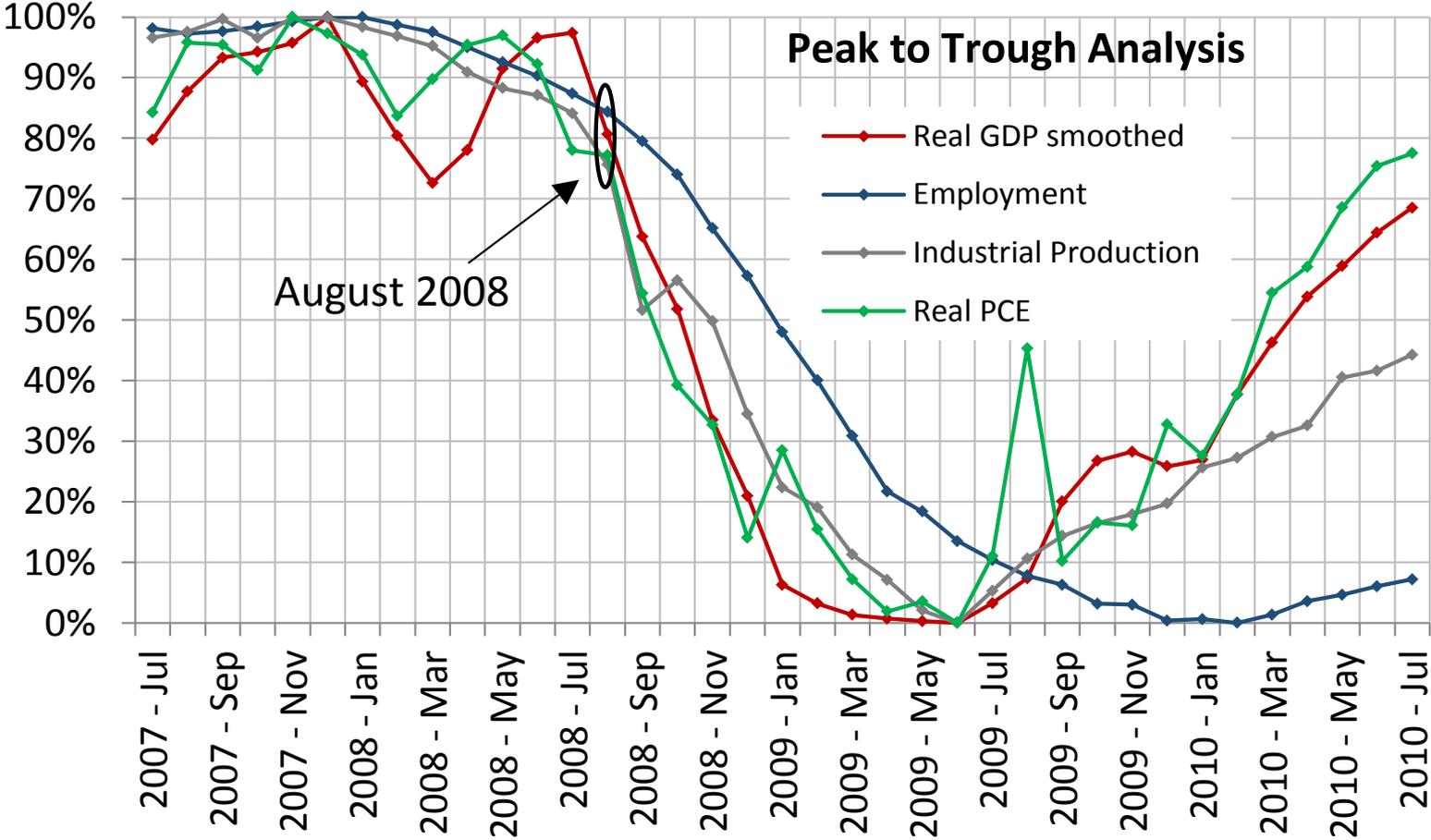
CDS-Bond Basis (High Grade Corporate)



CDS-Bond Basis and Job Losses

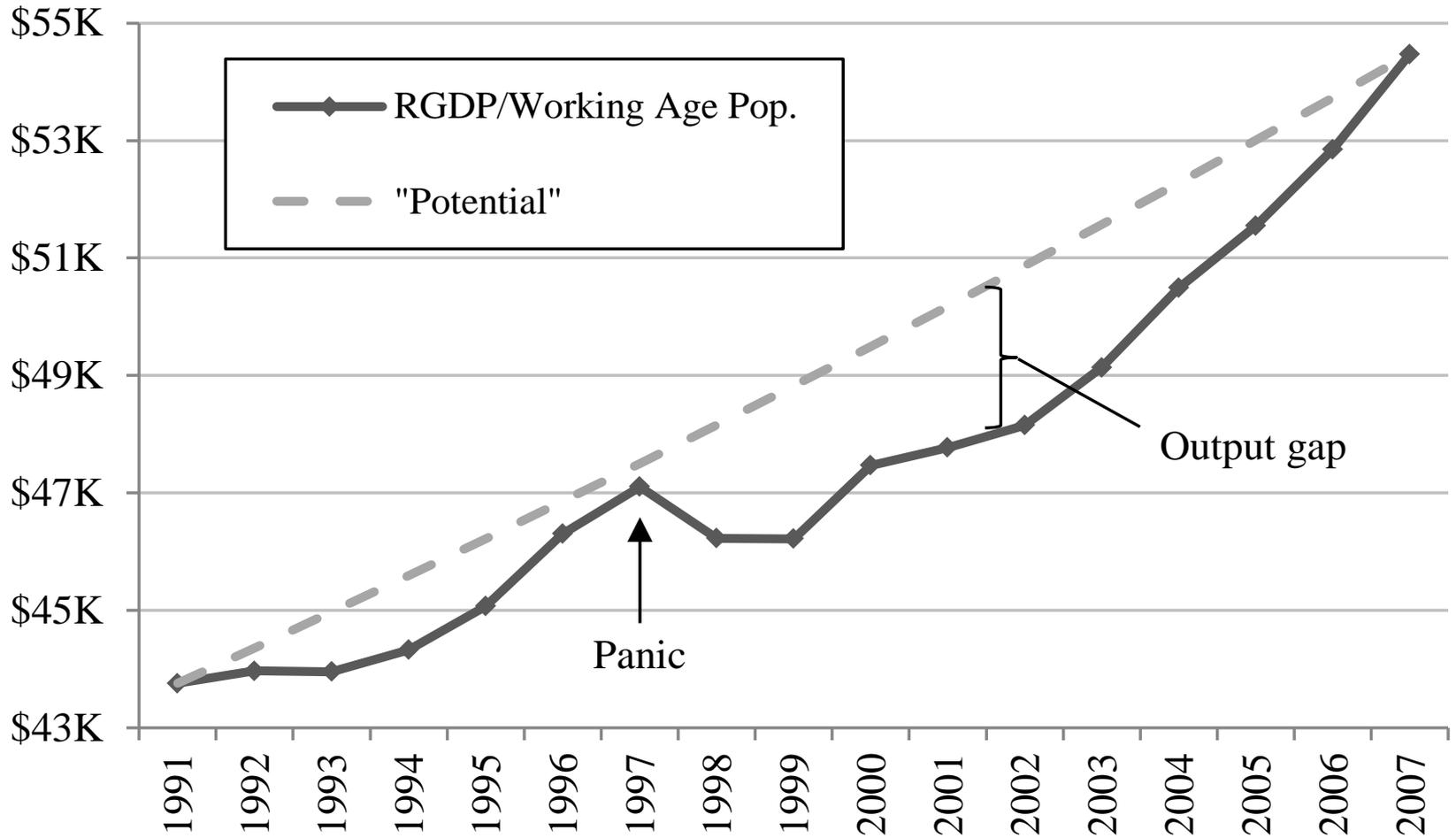


Peak to Trough Analysis – Macro Indicators

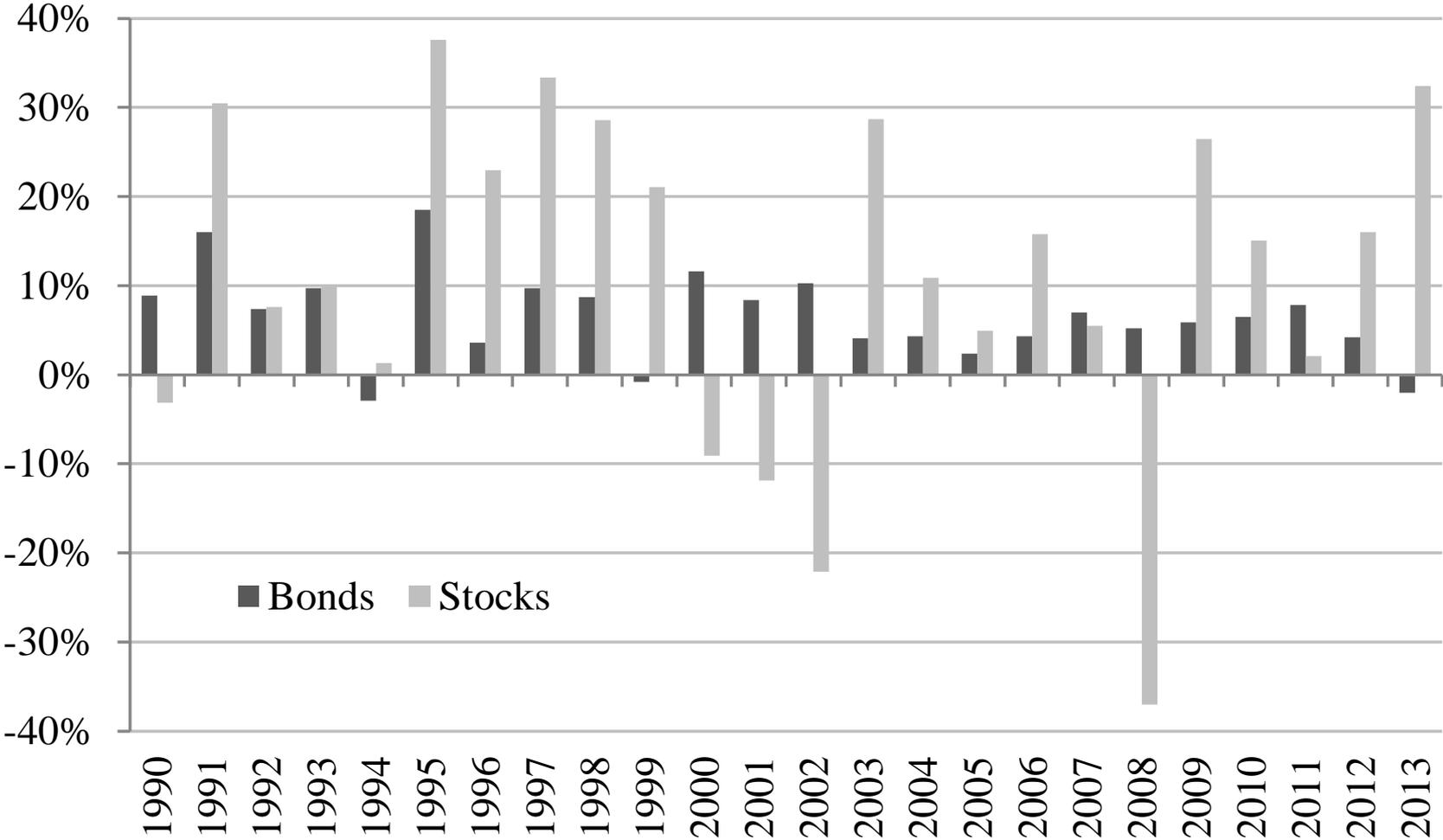


Note: "Real GDP Smoothed" is three-month centered moving average of monthly GDP series from Macroeconomic Advisers

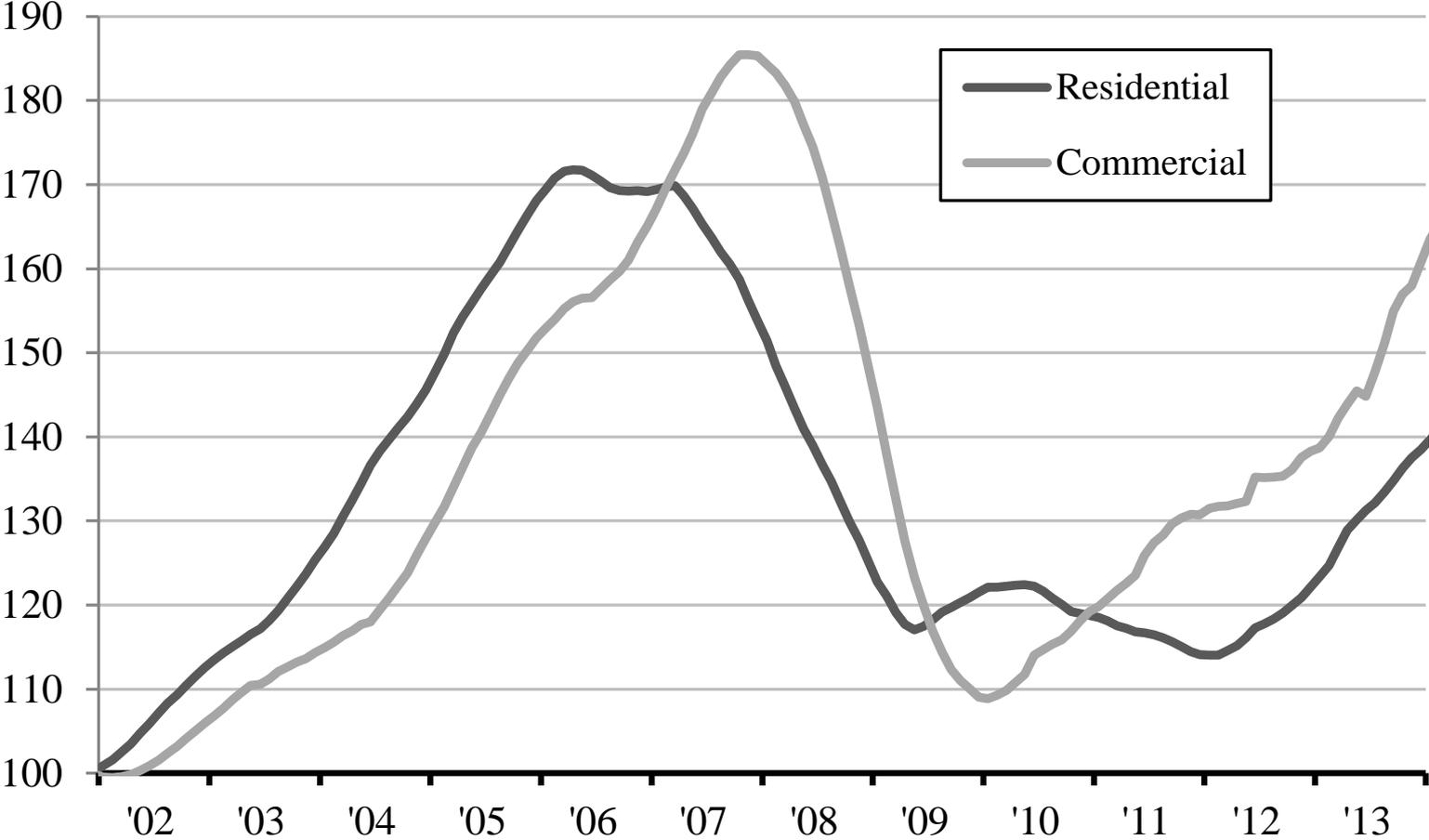
Japan's Inferred Output Gap



Bond vs. Stock Returns



US Real Estate Prices



Pershing Square Presentation, May 2007 (page 1 of 2)

Leveraged Lending Mirrors Sub-Prime

Sub-Prime	LBOs
▶ Higher LTVs	▶ Higher Debt / EBITDA
▶ I/O, Negative amortizing loans	▶ Covenant lite & PIK toggle notes
▶ Cash-out Re-fi	▶ Dividend Re-Cap
▶ “Liar” loans, limited documentation	▶ Credit for “pro forma” cost savings
▶ 0% down	▶ Lenders providing equity bridges
▶ Home Appreciation	▶ Purchase multiple expansion

Commercial Real Estate Mirrors Sub-Prime / LBO

- ▶ **Loan-to-Values of > 100%**
- ▶ **Negative debt service coverage**
- ▶ **Non-recourse financing on projected NOI in years 5 & 6**
- ▶ **Dividend Yield on U.S. Real Estate Index declining from high of ~8.0% in September 2002 to 2.8% today**
- ▶ **Credit market supported by CMBS and CDO bid**