Modern finance: current crisis and policy debates IV

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Map of topics

1. "Classical" vs. Keynesian macro logics
2. Bretton Woods system - Financial stability without globally-induced macro stimulus
3. Financial markets and large banks: escape from regulation, phase 1
4. Hyman Minsky's financial instability hypothesis:
5. After the breakdown of Bretton Woods – a cold plunge into Neoliberal era
6. Minsky's theory of crisis and crisis resolution in historical context
7. Financial crisis in the global South: Orthodox and heterodox explanations
8. The Neoliberal overseas lending/crisis cycle
9. Power in Finance 1: Hegemonic power and TBTF
10. The Subprime Crisis: From financial exclusion to predatory inclusion
11. Power in Finance 2: Financial exploitation and access to credit
12. Post-crisis pressures, debate, and reform efforts
13. **Impacts of the global financial crisis on economies in development**
14. **Shadow banking: escape from regulation, phase 2**
15. **Power in Finance: Challenges of global regulation**
16. **Financial regulation**

Lecture 4: Global trends, global regulatory challenges

13. Impacts of the global financial crisis on economies in development
14. Shadow banking: escape from regulation, phase 2
15. Power in Finance: Challenges of global regulation
16. Financial regulation

13. Impacts of the Global Financial Crisis on Economies in Development

1. Global banking and shadow banking, "systematically important institutions" still unbeaten

- Too-big-to-fail megabanks, City of London vs. Wall Street vs. Frankfurt competition
- New terrain for securitization: rentals on foreclosed houses, natural resources (water, food)

2. Global aggregate demand shortfall

- The globalization of Japanese stagnation
- Global embrace of austerity
- China's economic slowdown: decline in resource-dependent global-South growth (Brazil, Argentina, Chile, etc.)

Impacts of the Global Financial Crisis on Economies in Development

3. The taming of sovereign nations' possibilities

- Unsustainable national debt/GDP levels?
- Unresolved structural crises of banking, firm, household debt
- Frozen investment markets, unmet social needs
- Devolution of policy to local, regional scales – without macro stimulus: the "creative city"

4. Quantitative easing and its aftermath

- Carry trade and rehypothecation in complexly layered money markets
- Artificially high exchange rates for affected nations

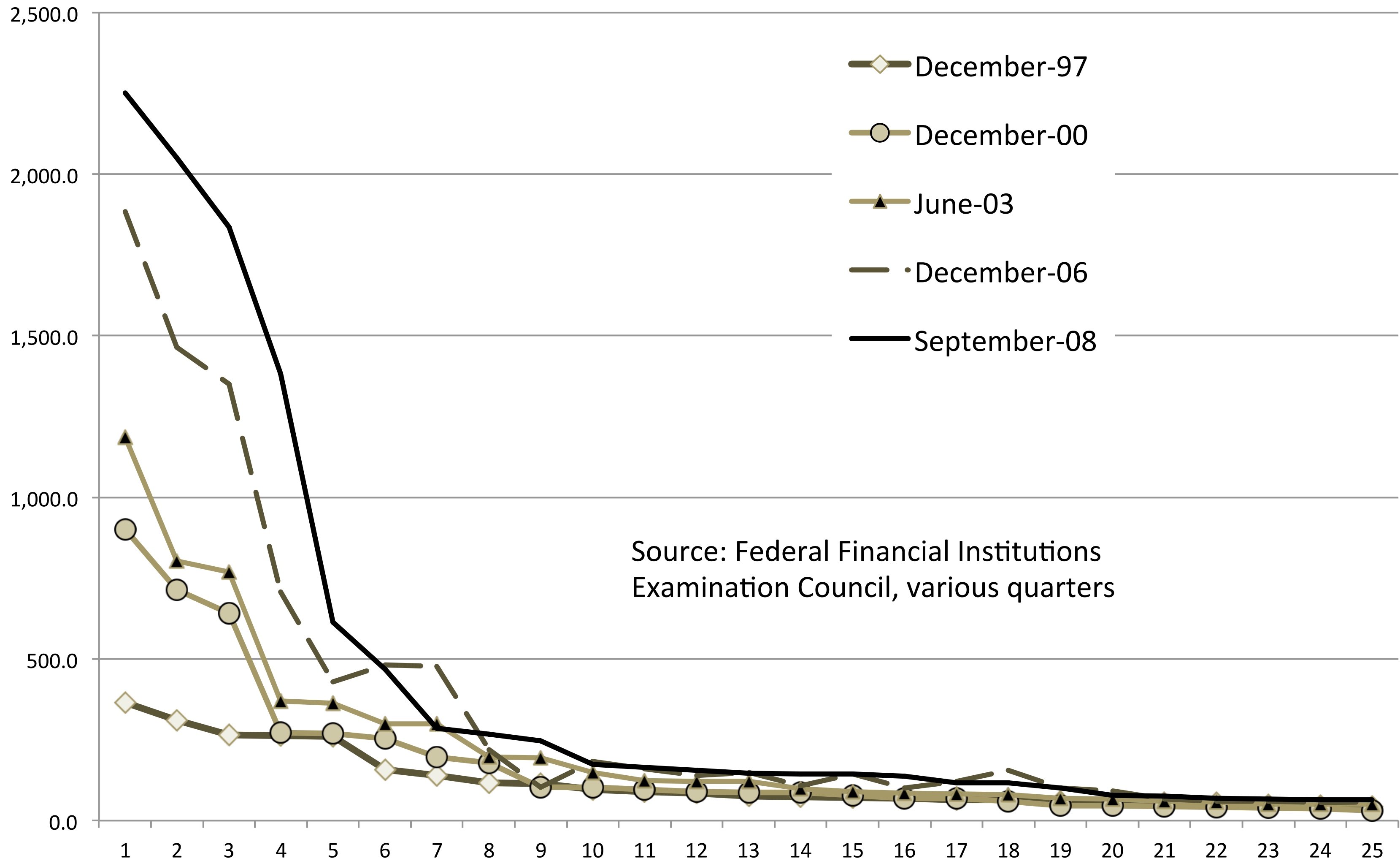

Figure 1: Asset Size of 25 Largest Bank Holding Companies, December 1997 to September 2008 (Figures in US$Million)
2,500.0
2,000.0
1,500.0
1,000.0
500.0
0.0
1
2
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December-97
December-00
June-03
December-06
September-08
Source: Federal Financial Institutions Examination Council, various quarters

Emerging markets: Brazil, India, and power in finance?

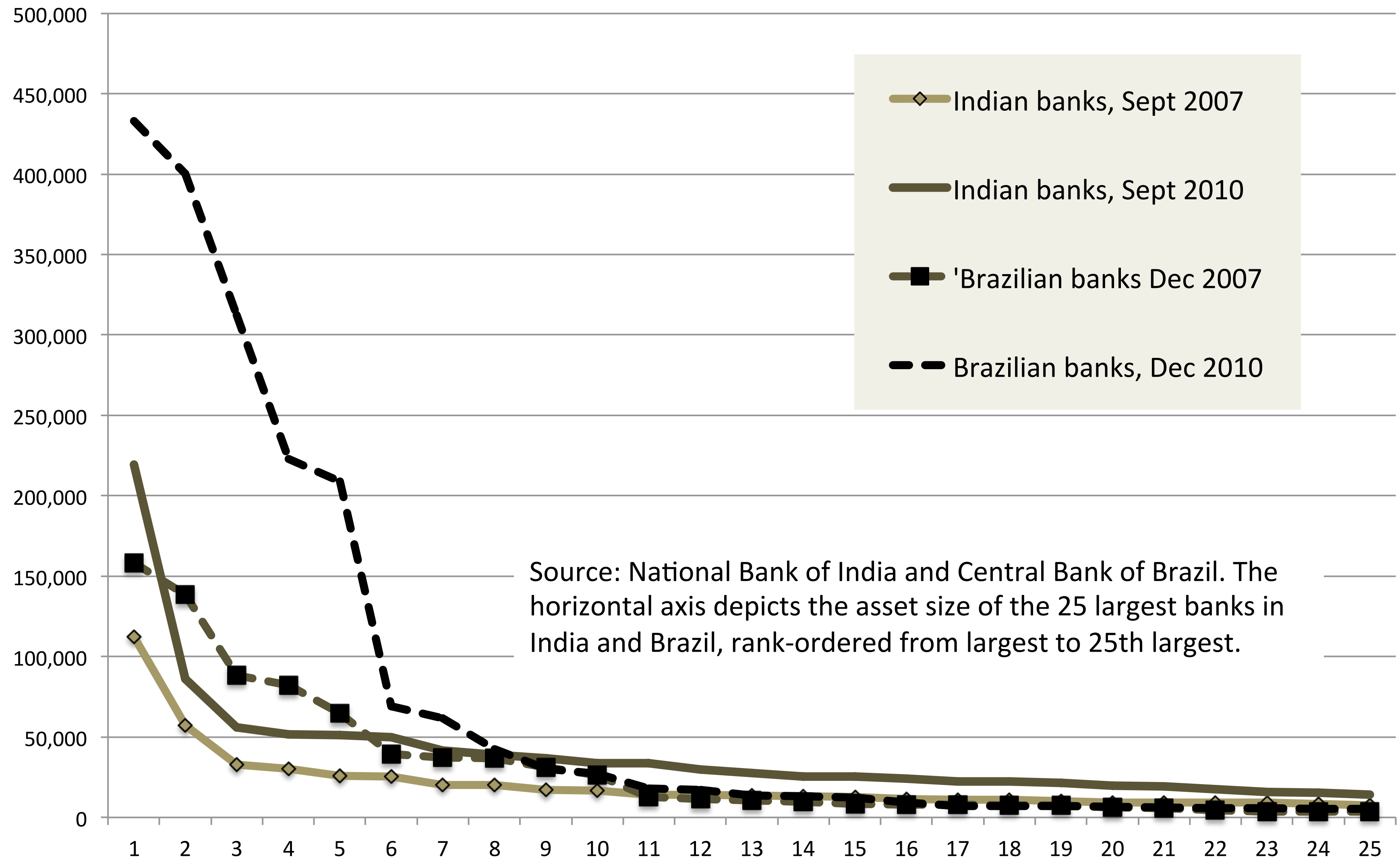
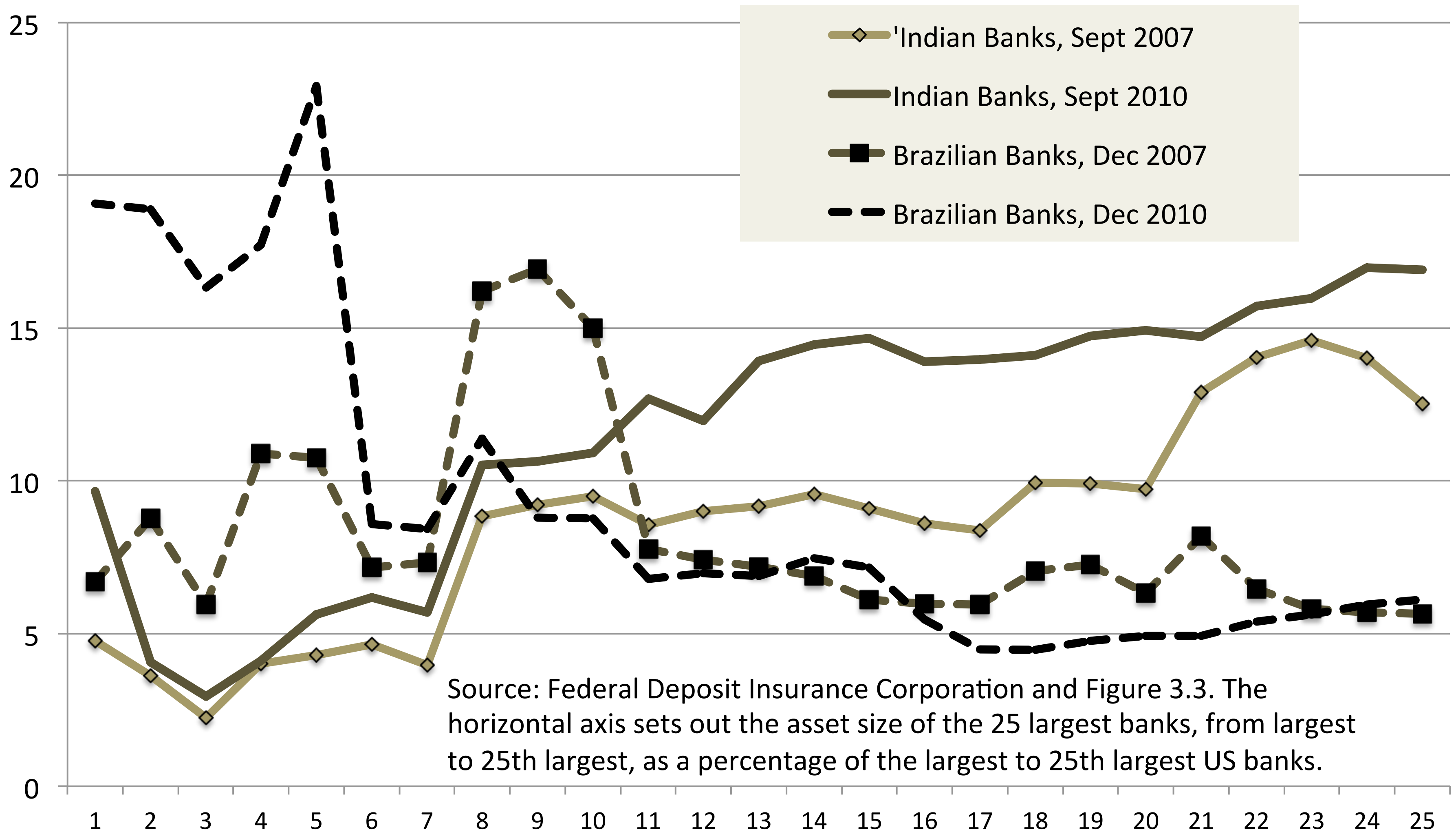


Figure 3.4: Bank Assets for 25 Largest Indian and Brazilian Banks, 2007 and 2010, as a Percentage of US Bank Assets



Source: Federal Deposit Insurance Corporation and Figure 3.3. The horizontal axis sets out the asset size of the 25 largest banks, from largest to 25th largest, as a percentage of the largest to 25th largest US banks.

14. Shadow Banking

Elements:

- Four definitions
- The conceptual basis of shadow-banking

Models:

- Shleifer and Vishny
- Gary Gorton

Post Keynesian perspectives: Shadow banking and endogenous money, monetary production approaches

Four definitions of shadow banking

1. PIMCO economist Paul McCulley originated the term "shadow banking" in his September 2007 investor newsletter: the "shadow banking system" [consists of] "the whole alphabet soup of levered up non-bank investment conduits, vehicles, and structures."
2. Pozsar *et al*. (2010): "financial intermediaries that conduct maturity, credit, and liquidity transformation without explicit access to central bank liquidity or public sector credit guarantees." The Financial Stability Board (2012) defines shadow banking as "credit intermediation that involves entities and activities outside the regular banking system."

Four definitions of shadow banking

3. Cerotelli, Mandel, and Mollineaux (2012). They suggest focusing on "intermediation as a decentralized rather than a bank-centered system, one in which the matching of the supply of and demand for funds occurs along an extended credit intermediation chain, with specialized markets and nonbank institutions playing a part along the way" (p. 2).
   - Note the criteria for "globally systematically important banks" used by the Basel Committee on Banking Supervision (2013): cross-jurisdictional activity; size; interconnectedness; substitutability; complexity, including "level 3 assets," whose "value cannot be determined using observable measures"; and securities held for sale.
   - Numerous shadow banks (hedge funds, money market funds, and so on) would qualify as systematically important under these criteria, just as the subunits of many megabanks deemed systematically important would qualify as shadow banks

Four definitions of shadow banking

4. The Securities Act of 1933 and Uniform Securities Act permit two principal categories of exemption under federal and state law, exempt transactions and exempt securities. Securities exempted from federal registration include Regulation D, or private placement offerings, offerings to accredited investors and Regulation A public offerings not exceeding $5 million within a 12-month period.
   - Transactions exempt from state registration include unsolicited brokerage transactions, underwriter transactions, non-issuer transactions in outstanding securities, transactions with institutional investor transactions and, again, private placements.
   - Securities exempted from state registration include government securities, depository institution securities and commercial paper.

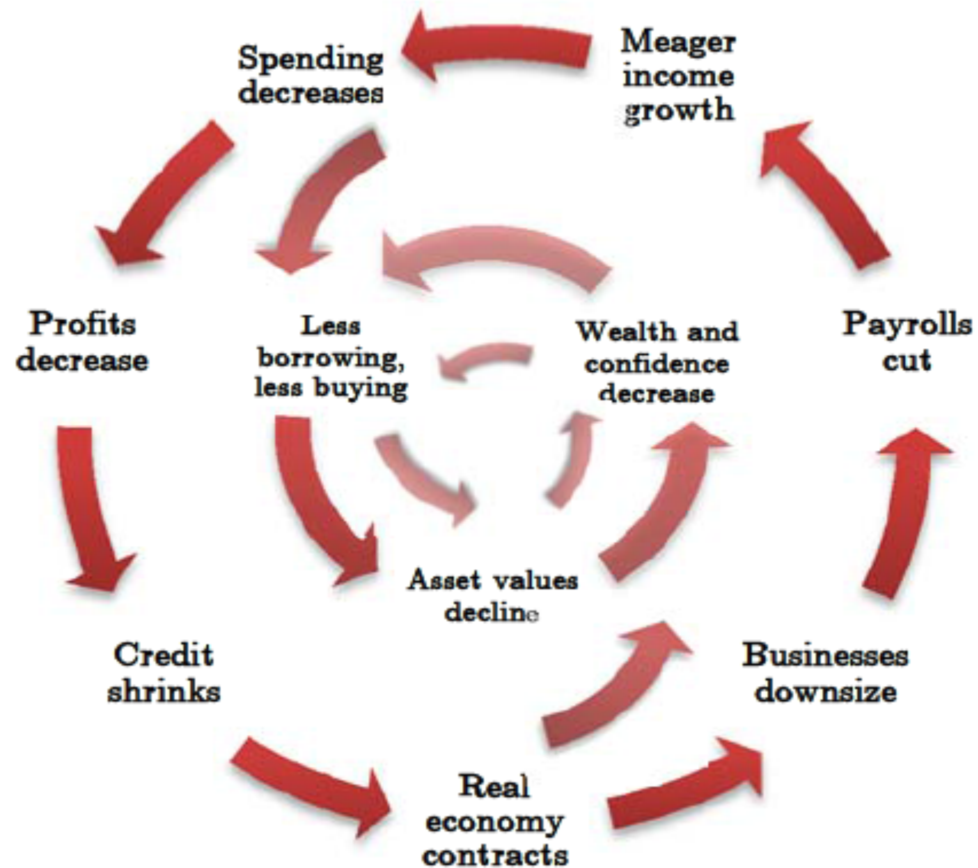
Four definitions of shadow banking

- So we can define shadow banking as the space captured by unregulated or extraordinarily-regulated transactions and securities that can be used by intermediaries (banks, funds, and trusts) operating in the financial sector.
- This definition clarifies that the point of shadow-banking activity is to avoid oversight. These Acts along with the Securities Exchange Act of 1934, and the Investment Advisors Act of 1940, define the shape of US securities law to this day.
- Exemptions or ambiguities under these acts have been used as the basis of creating shadow banking entities such as hedge funds and private-equity funds.

Understanding the Risks Inherent in Shadow Banking:
A Primer and Practical Lessons Learned

Staff papers No. 18, Dallas Federal Reserve Bank, Nov. 2012 – Luttrell, Rosenblum, Thies

Figure 1: Negative Vortex



This image is used to describe systemic risk from a dysfunctional financial system.

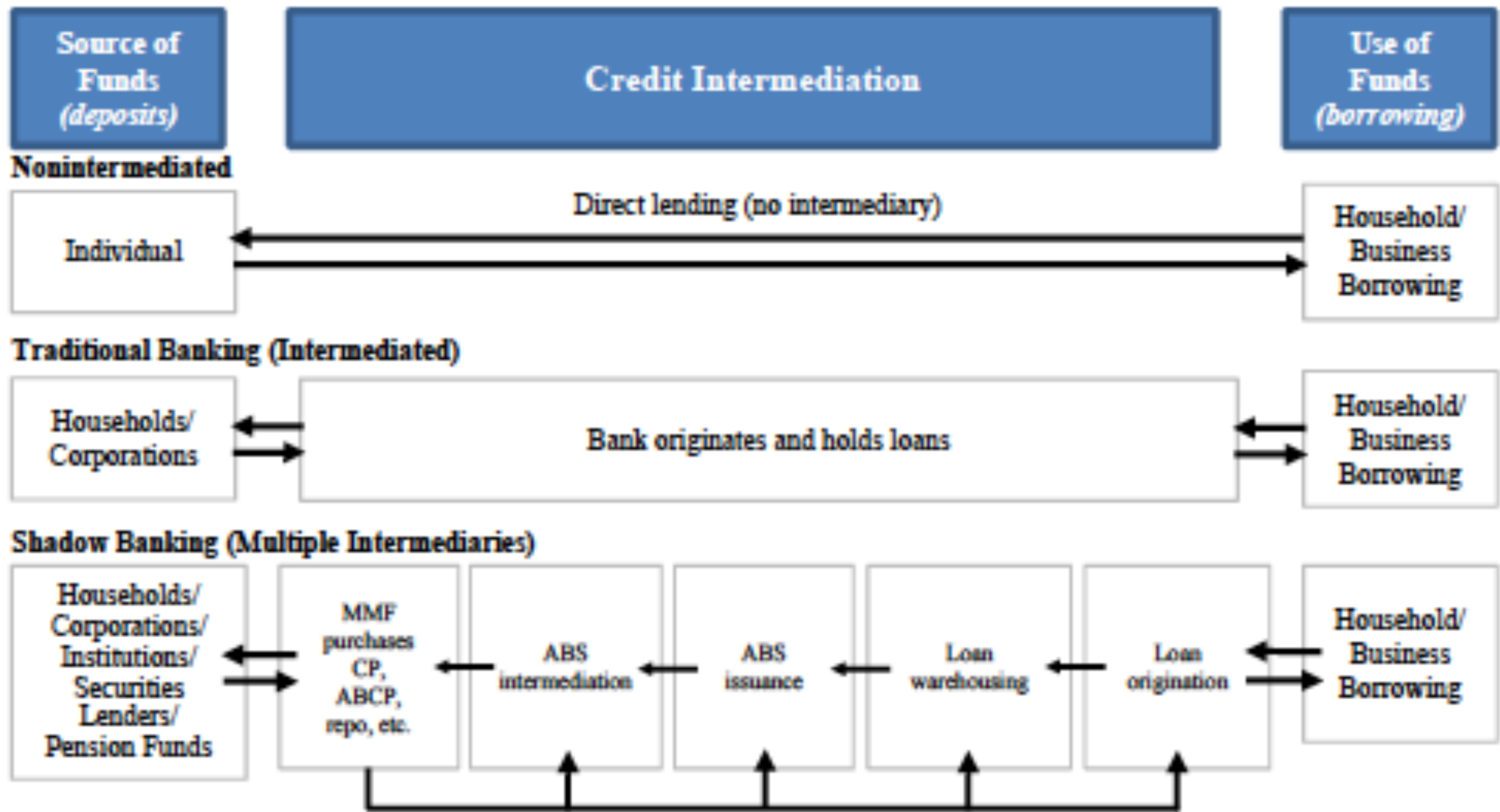


Figure 2: Channels of Financial Intermediation

NOTE: MMF is money market mutual fund, CP is commercial paper, ABCP is asset-backed CP, repo is repurchase agreement, and ABS is asset-backed securities. See Glossary for definitions.

This interconnectedness makes it very difficult to draw clear lines between traditional and shadow credit intermediation. However, the distinguishing characteristic remains the absence of explicit public-sector backstops, leaving shadow intermediation activities susceptible to runs.

Figure 1: A Simple Financial Intermediation Framework

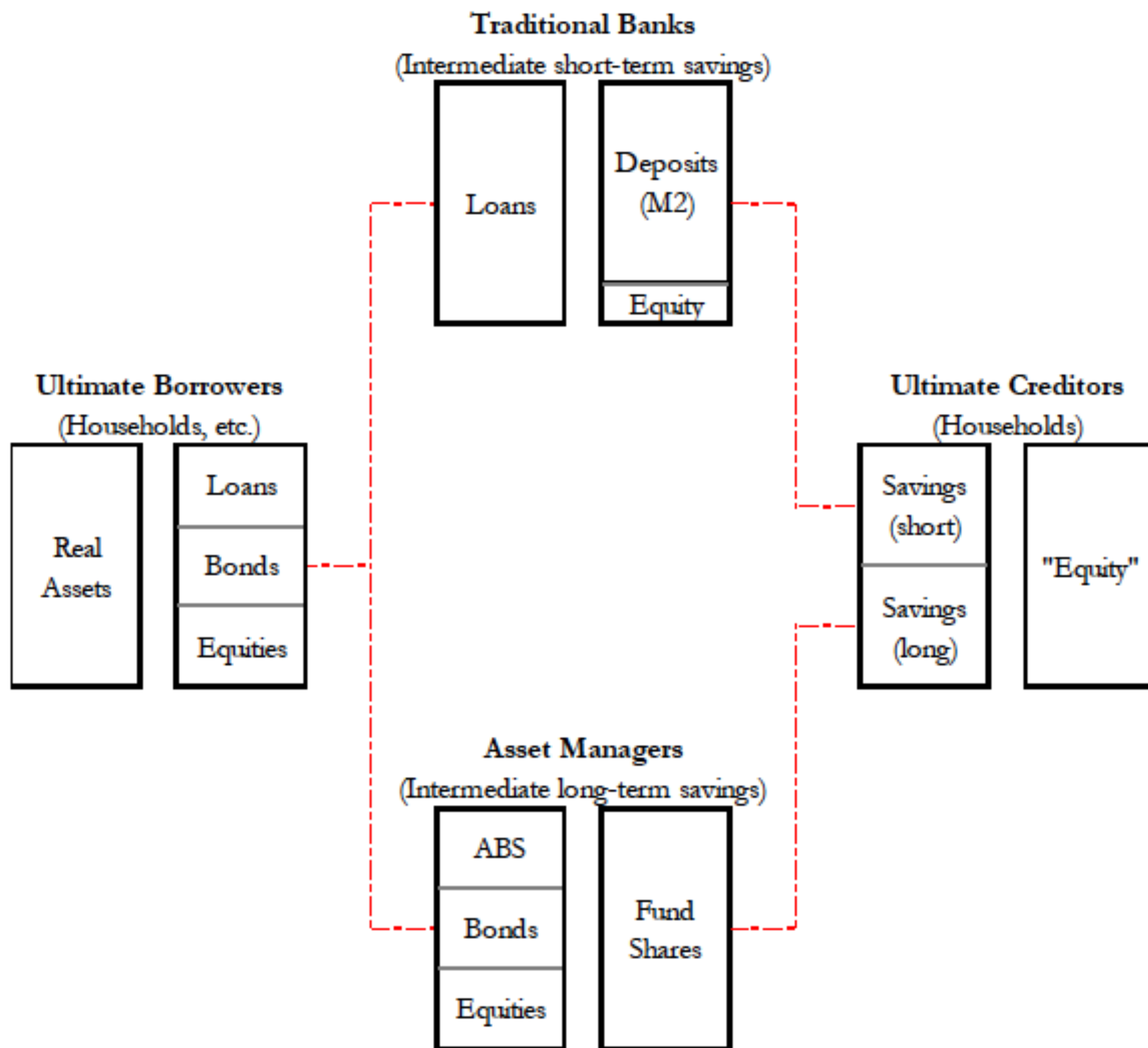
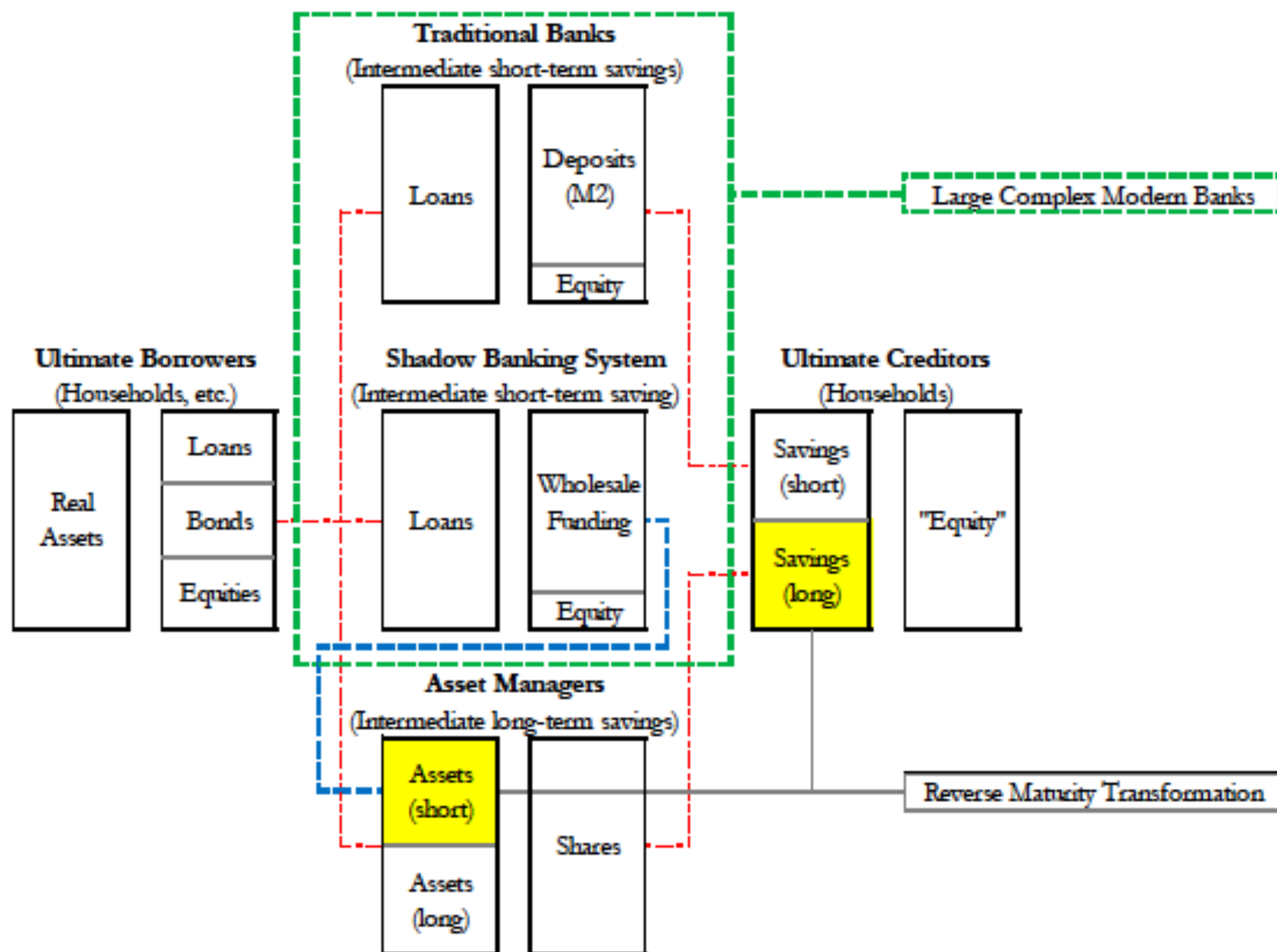


Figure 2: A (more) Comprehensive Financial Intermediation Framework



The conceptual basis for structured finance

- Jobst (2003): "As the origination of loans and portfolio investment is unbundled, the risk-oriented determination of credit conditions and increased efficiency in the lending process through standardized credit terms are essential components of a new organizational model of bank lending." (pp. 79-80)
- Oldfield: "A structured finance transaction transforms a pool of more or less similar loans into a set of derivative instruments collateralized by the pool. An underwriter who structures a transaction has a simple purpose: to sell the set of derivatives for more money than a direct sale of the pool or a pass-through instrument alone would fetch. The underwriter accomplishes a transaction by establishing an independent entity, usually a trust, which becomes the mechanism for structuring the derivatives. This entity represents a passive financial intermediary" (2000, p. 446).
- "Briefly, an underwriter must defeat arbitrage between pass-throughs and derivatives" (2000, p. 445).

The conceptual basis for structured finance

- Oldfield (market-completion): Completing financial markets through offering hitherto-unavailable risk-return combinations requires Oldfield's 'passive intermediary' to assemble a dizzying array of derivative and stripped assets.
- Indeed, "If the underwriter has accurate information about investors' particular demands, the proceeds from selling derivative instruments exceed the underwriter's costs of buying the collateral, structuring the trust's claims, and selling the derivative instruments" (2000, p. 446).
- .. in Oldfield' s argument, the only way an SIV can offer unique risk-return combinations to the market is by creating opaque combinations of the risk-return characteristics of the underlying securities. Leaving aside economies of bundling, something is wrong in this calculus, even in efficient-market terms.

The conceptual basis for structured finance

Fender and Mitchell (2005a):

- "This paper … argues that certain structural features of structured finance products raise special governance issues and create important risks that are not directly related to the default risk of the assets comprising the underlying portfolios, but which may ultimately be as important to the performance of structured finance products as are the default properties of the asset pool." (1)
- "… structured finance instruments also transform risk in unique ways via the tranching of claims, generating exposures to different, transaction-specific "slices" of the underlying asset pool's loss distribution. As a result of this "slicing" and the contractual structures needed to achieve it, tranche risk-return characteristics can be quite difficult to assess." (2)

The conceptual basis for structured finance

Fender and Mitchell (2005a): " 'non-default' risks" arise: "risks that are unrelated to defaults in the collateral pool but which nevertheless affect the credit risk of the issued tranches. … such risks often aris[e] from incomplete contracting problems, [and] also exist for other instruments of credit risk transfer such as credit default swaps. Yet, the tranching involved in SF instruments multiplies these risks, in addition to introducing standard adverse selection and moral hazard problems resulting from the conflicting interests of differing participants and noteholders." …

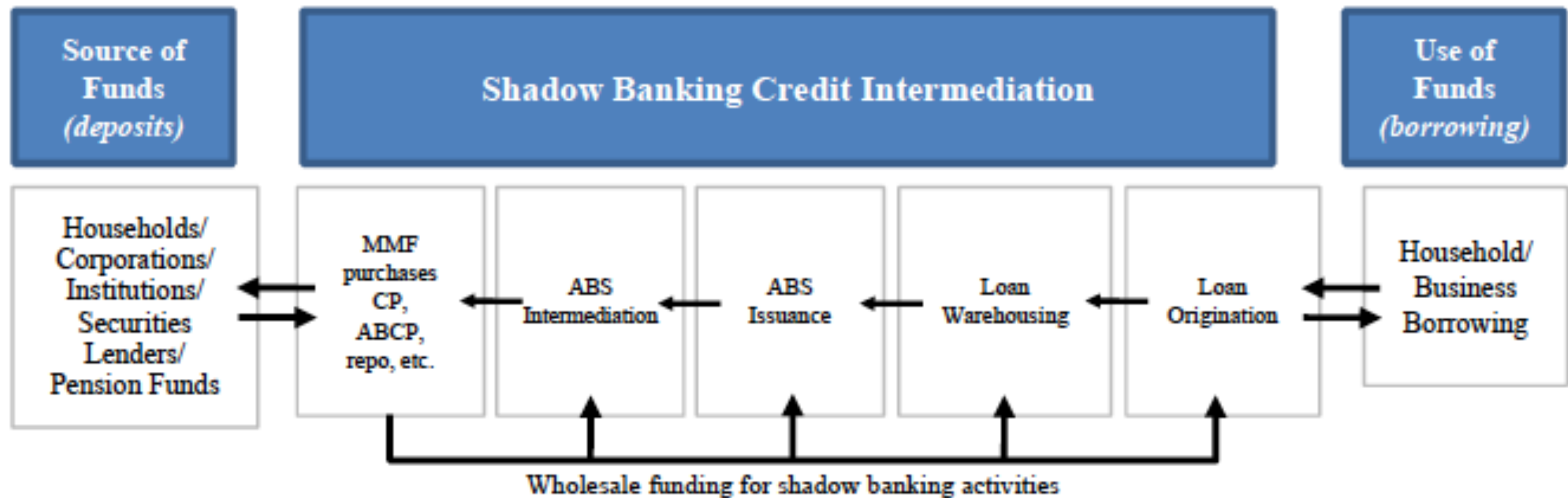
- "Ratings, though important, are argued to be inappropriate for gauging the risk of structured securities, despite the fact that the complexity of structured finance transactions gives investors incentives to rely more heavily on ratings than for other types of rated securities."

The conceptual basis for structured finance

Fender and Mitchell (2005b): Rewriting this for the *BIS Quarterly Review*. The closest passage is:

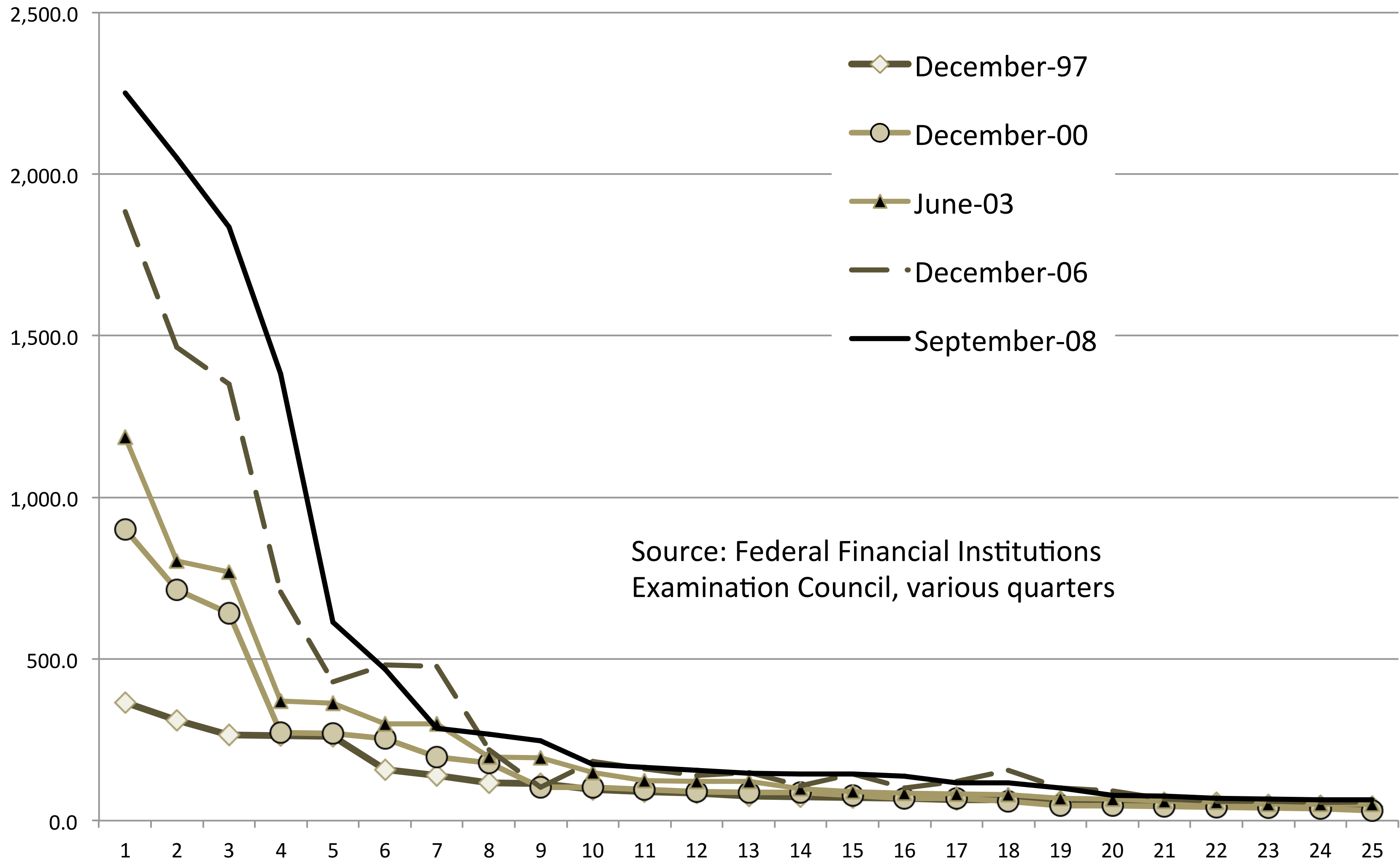
- "It is argued that structured finance ratings, though useful, have intrinsic limitations in fully gauging the risk of these products, even as their complexity creates incentives to rely more heavily on ratings than for other rated securities.
- Market participants and public authorities need to take account of this in their assessments of structured finance instruments and their markets."

Figure 4: Credit Intermediation via the Shadow Banking System



NOTE: See Glossary for definitions.

At each step in the process of shadow intermediation, the true quality of the underlying collateral is further obscured. As more links are added to the chain, more loans are included. The end buyer holds a very small slice of a very large number of loans. In theory this diversifies risk because any single loan going bad will have little effect on the total pool's value. However, this also complicates the evaluation of individual pieces, leaving investors to rely on aggregate data to assess the riskiness of assets. In the recent crisis, these data were often manipulated and unreliable … Even when data are reliable, the process remains difficult to analyze ... This complexity leads to a decline in underwriting standards because the loan originator has little stake in the long-term performance of a loan that is quickly sold to be wholesaled, wharehoused, and repackaged in a pool.



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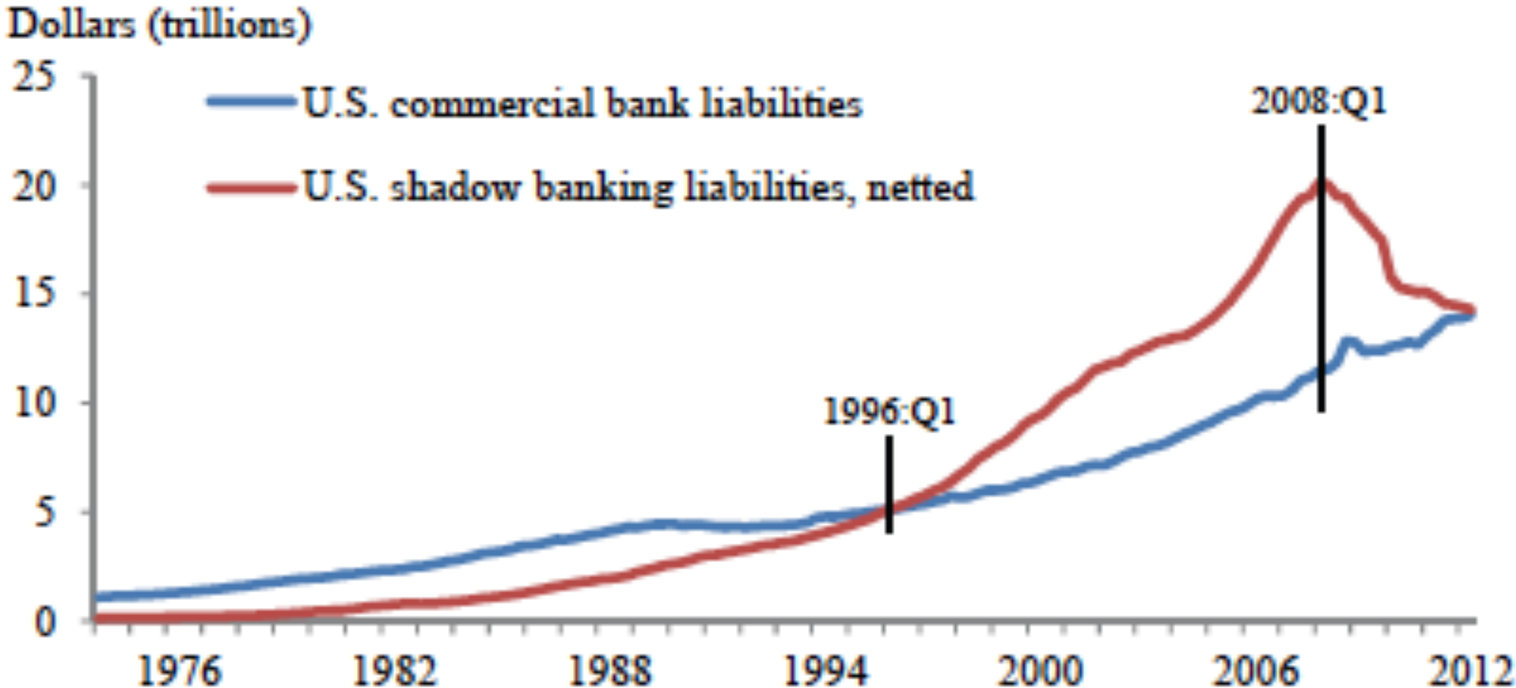
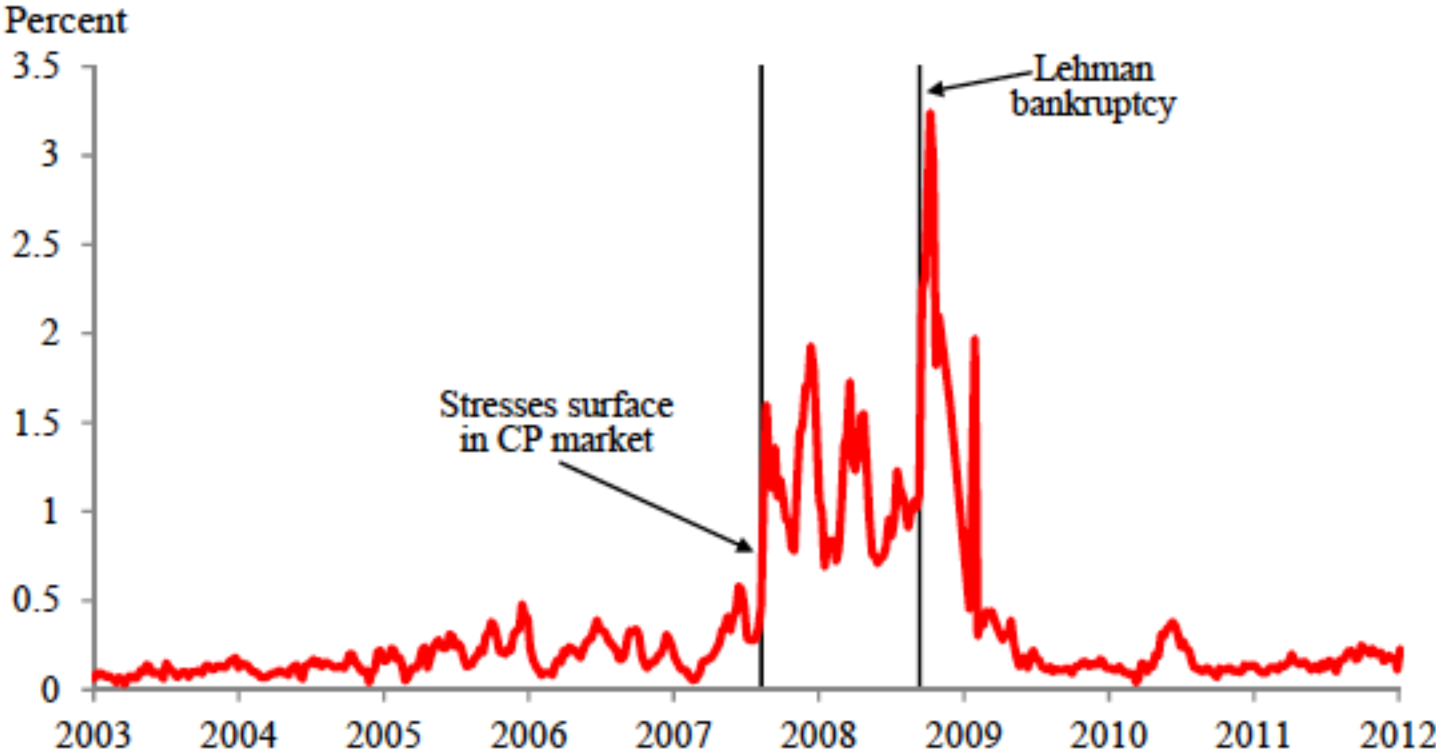
Source: Federal Financial Institutions Examination Council, various quarters
2,500.0
2,000.0
1,500.0
1,000.0
500.0
0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Figure 3: Shadow Banking Exceeds Commercial Banking Activity



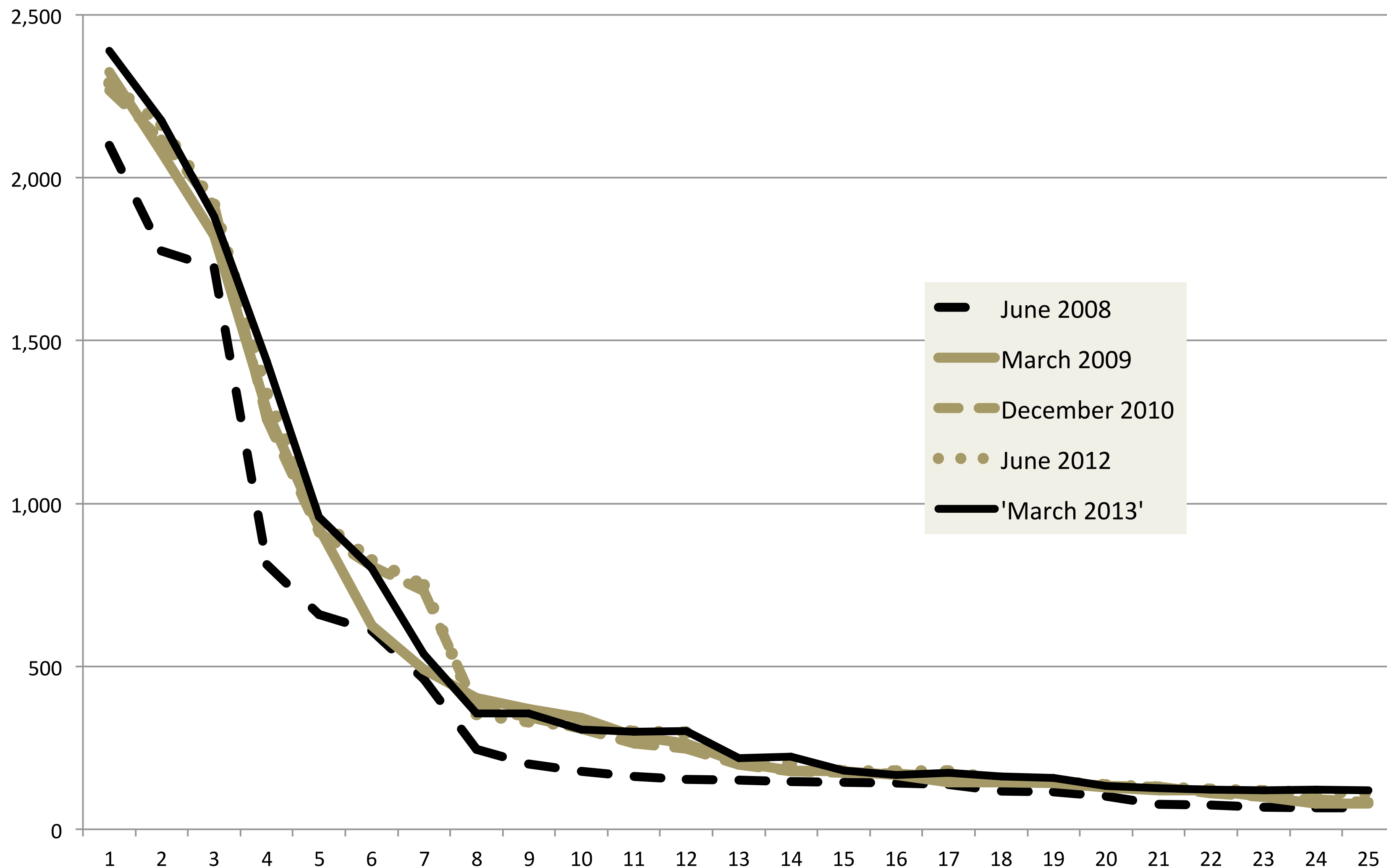
NOTE: U.S. shadow banking liabilities equal the sum of the following liability items from the flow of funds accounts: CP, repos, borrowed securities, agency- and GSE-backed securities, mortgage pools, ABS, and MMFs, minus commercial banks' federal funds (excess reserves), repos, and CP. See Glossary for definitions.
SOURCE: Federal Reserve flow of funds; defined by Pozsar, Adrian, Ashcraft, and Boesky (2012).

Figure 5: Commercial Paper Spread Exhibits Run on Shadow Banking



NOTE: Three-month AA (highly rated) financial CP rate minus three-month Treasury bill yield.
SOURCE: Federal Reserve Board.

Figure 5: The 25 Largest US Commercial Banks, June 2008-June 2012, rank-ordered by asset totals ($B, FFIEC)



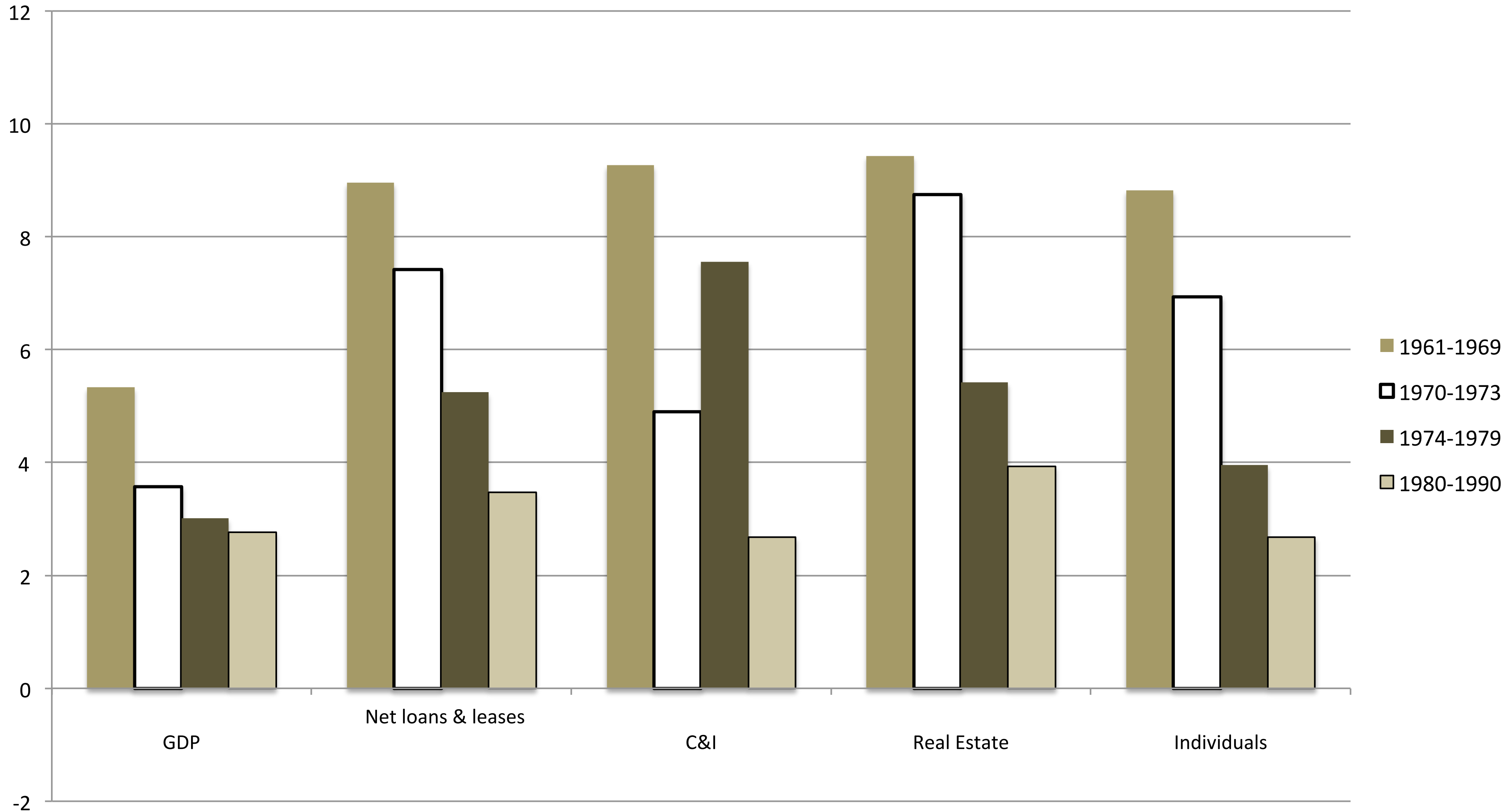


Figure 2A: Trough-to-Peak GDP and Loan Growth, U.S. Commercial Banks, Average annual % change, Five-year time-spans, 1961-1990
12
10
8
6
4
2
0
-2
GDP
Net loans & leases
C&I
Real Estate
Individuals
1961-1969
1970-1973
1974-1979
1980-1990

Figure 2B: Trough-to-Peak GDP and Loan Growth, U.S. Commercial Banks, Average annual % change, Five-year time-spans, 1991 to present

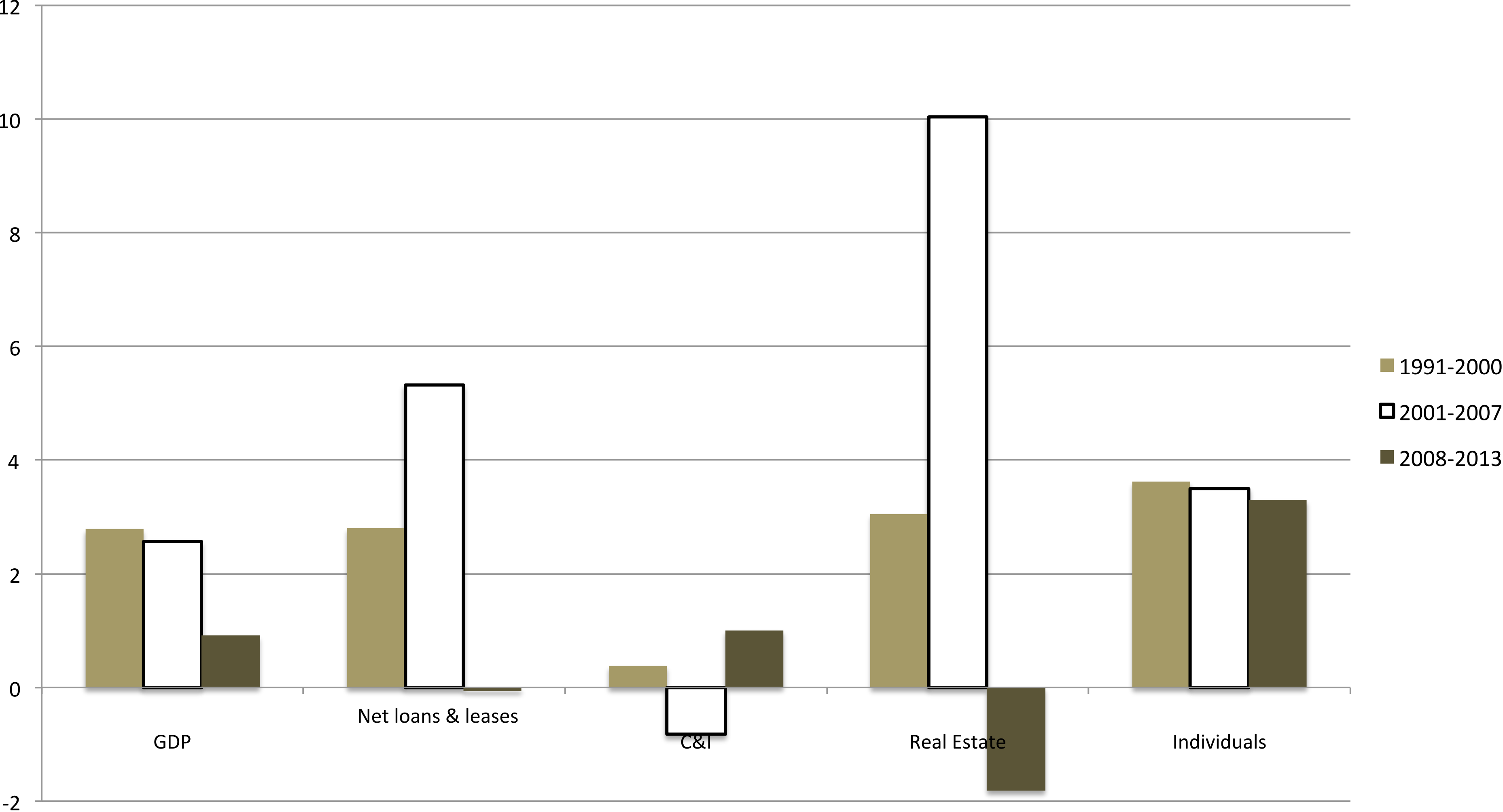
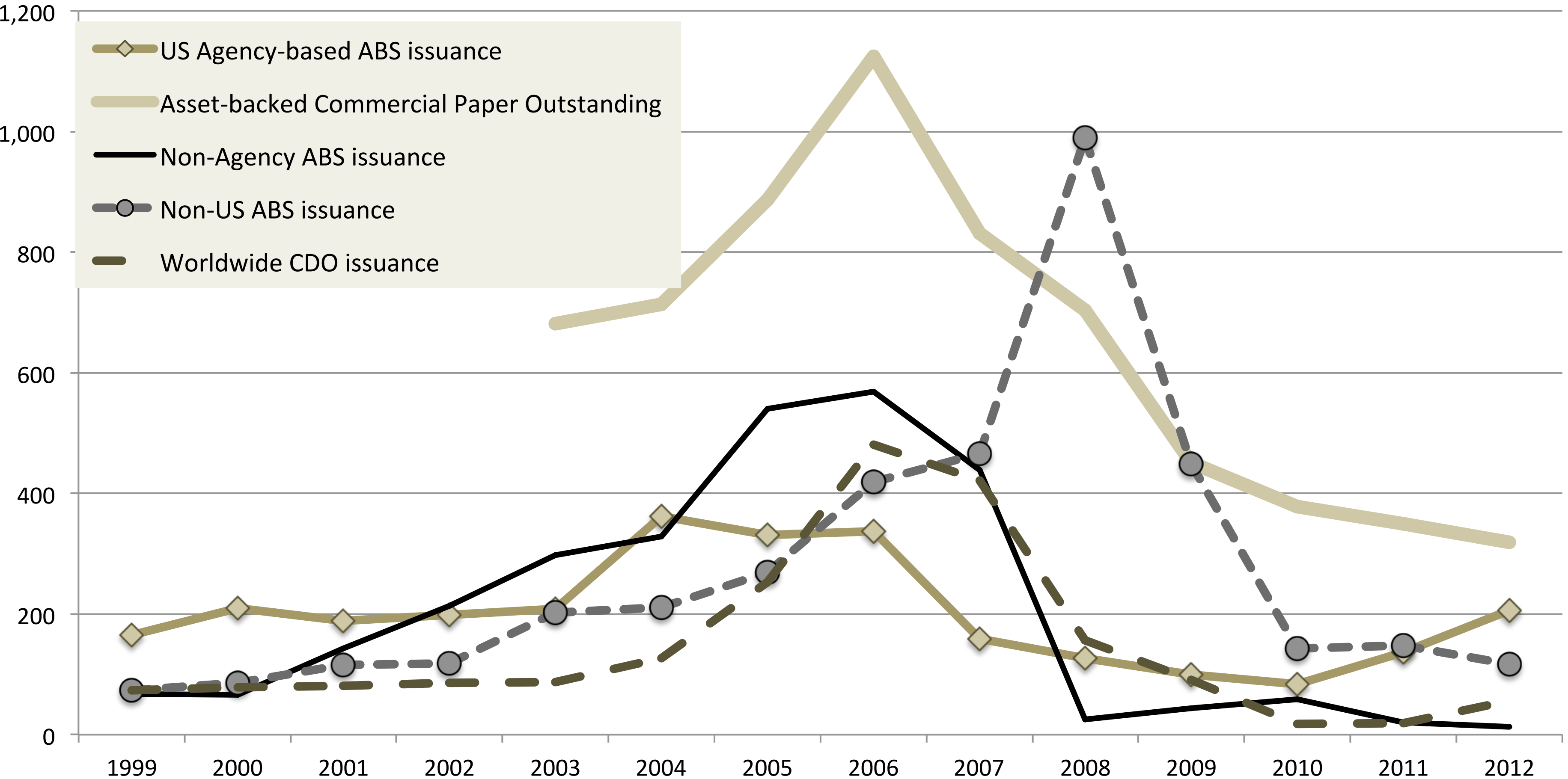


Figure 4: Volume of Asset-Backed Securities and CDOs Issued, and Asset-backed Commercial Paper Outstanding, 1999-2012 (US$B)



Source: ABS, CDO data, Asset-Backed Alert market statistics, available at www.abalert.com/market_statistics.php; CP data, US Federal Reserve.

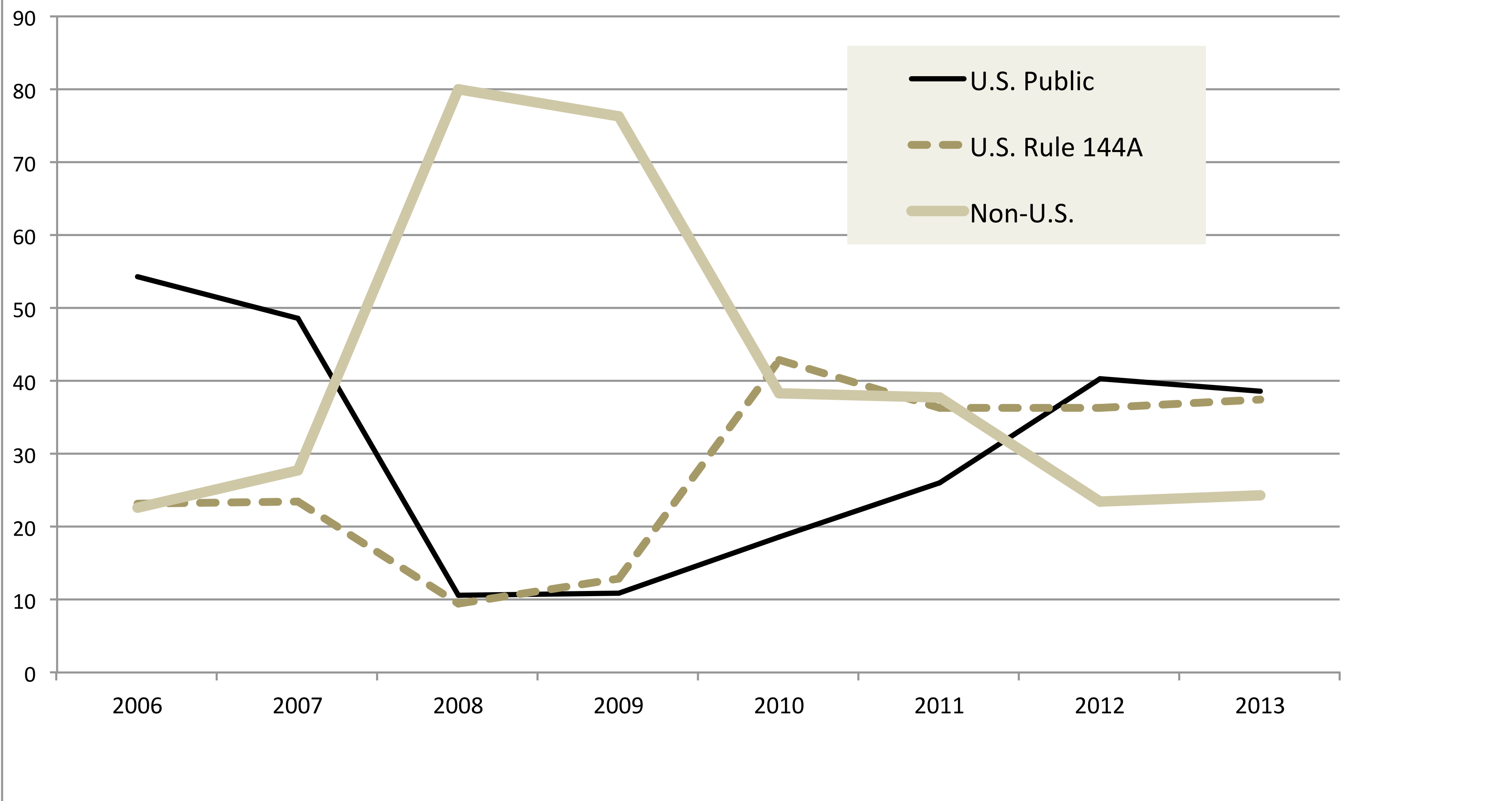
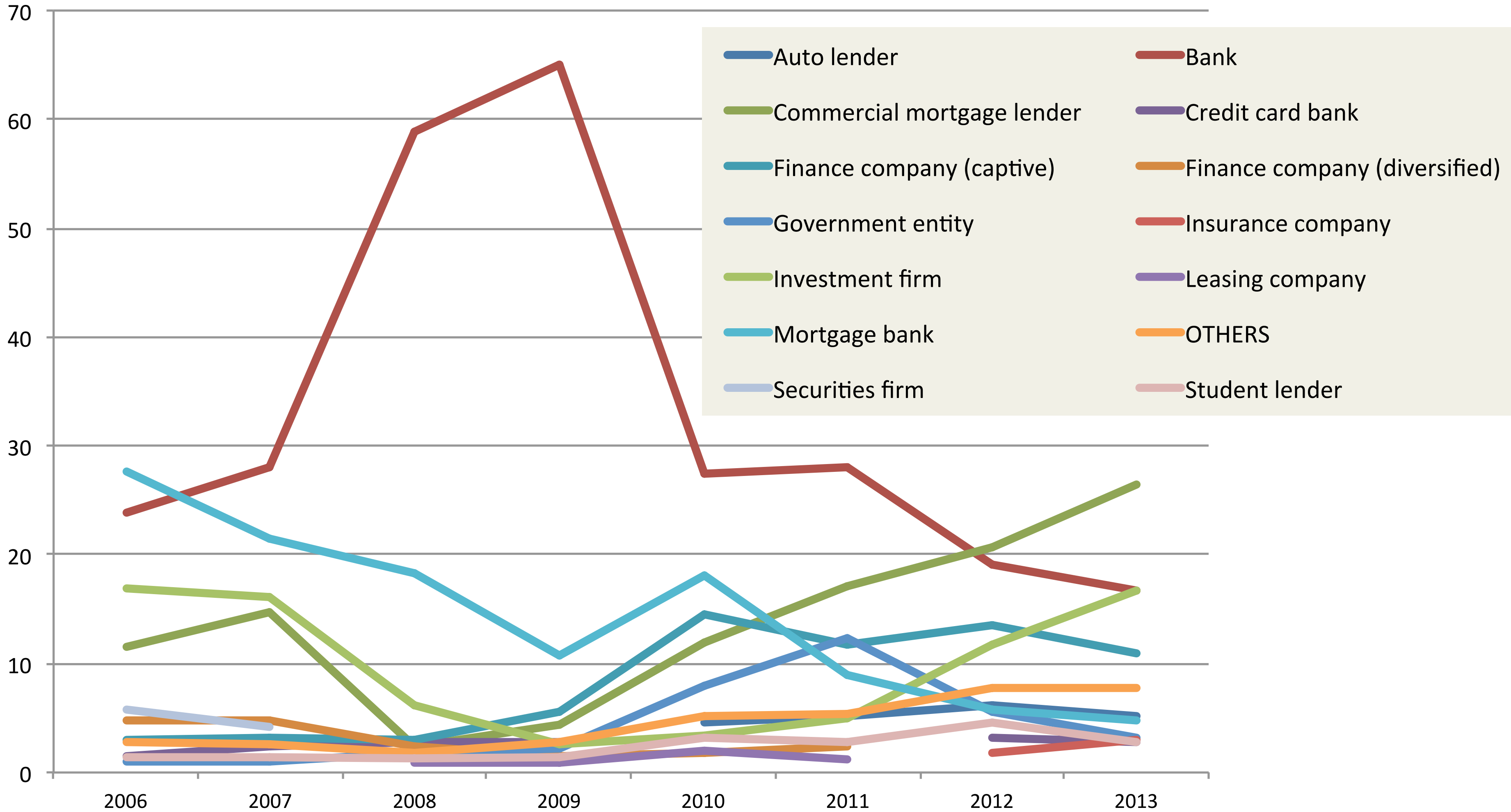


Figure 8(b): Summary of worldwide securitization, 2006-13:
Percentage share of market by security type
90
80
70
60
50
40
30
20
10
0
2006
2007
2008
2009
2010
2011
2012
2013
U.S. Public
U.S. Rule 144A
Non-U.S.



Market Share by Securitizing Entity (% of total, each period):
Source: Asset-Backed Alert (www.abalert.com)
70
60
50
40
30
20
10
0
2006
2007
2008
2009
2010
2011
2012
2013
Auto lender
Bank
Commercial mortgage lender
Credit card bank
Finance company (captive)
Finance company (diversified)
Government entity
Insurance company
Investment firm
Leasing company
Mortgage bank
OTHERS
Securities firm
Student lender

Modeling shadow banking

A Model of Shadow Banking

NICOLA GENNAIOLI, ANDREI SHLEIFER, and ROBERT W. VISHNY*

ABSTRACT

We present a model of shadow banking in which banks originate and trade loans, assemble them into diversified portfolios, and finance these portfolios externally with riskless debt. In this model: outside investor wealth drives the demand for riskless debt and indirectly for securitization, bank assets and leverage move together, banks become interconnected through markets, and banks increase their exposure to systematic risk as they reduce idiosyncratic risk through diversification. The shadow banking system is stable and welfare improving under rational expectations, but vulnerable to crises and liquidity dry-ups when investors neglect tail risks.

Modeling shadow banking

Unstable banking ☆

Andrei Shleifer[a,*], Robert W. Vishny[b]

A B S T R A C T

We propose a theory of financial intermediaries operating in markets influenced by investor sentiment. In our model, banks make, securitize, distribute, and trade loans, or they hold cash. They also borrow money, using their security holdings as collateral. Banks maximize profits, and there are no conflicts of interest between bank shareholders and creditors. The theory predicts that bank credit and real investment will be volatile when market prices of loans are volatile, but it also points to the instability of banks, especially leveraged banks, participating in markets. Profit-maximizing behavior by banks creates systemic risk.

Securitized banking and the run on repo ☆

Gary Gorton[a,b,*], Andrew Metrick[a,b]

15. Power in Finance: Challenges of global regulation

- Asymmetric access to resources leads to conflict between those with privileged claims and alternatives, and those without an exit option.
- It becomes important to examine both the economic plumbing and the social construction of creditworthiness and of financial relations in the new financial world.
- The links between institutionalized power, inequality, financial crises should be visibilized.
- Practices that rely on global power asymmetries, such as the carry trade and vulture funds, should be called into question.
- Privileged entities that are, at the same time, too big to fail (or linked to those who are), and too complex to unwind; so when they fail, costs are shifted onto public fisc, reducing "policy space." This leads to:

Power in Finance: Déjà vu all over again

[Disempowered state + disempowered people]

vs.

[Empowered, mobile, surplus-extracting,
fee-generating financial capital]

The cautious re-regulation of finance by the US and Europe has to be encouraged. But analytical models that render power and justice dimensions, and that make dysfunctional or rent-seeking financial practices visible, are needed.

It must be remembered that the disempowering of national governments has been a long time in the making in global finance. Let's revisit the Latin American debt crisis…

“Conflict of laws” and bankers’ collusion

- Buchheit and Reisner (1988):

  “For example, the hundreds or thousands of credits that purport to be covered by a restructuring request will have been separately negotiated between borrowers (both public and private sector) and individual banks or, in some cases, ‘syndicates’ of banks lending pursuant to a single loan agreement. These banks, located in countries all over the world, are subject to differing regulatory and disclosure regimes, and have distinct lending and credit review policies and widely divergent practices in important areas such as loan loss reserve provisioning.”

“Conflict of laws” and bankers’ collusion

Lee Buchheit (1988):

- “The enormity and complexity of sovereign debt problems preclude individual banks from negotiating adjustments to their own credit exposure in isolation from fellow lenders.
- “patterns of accepted inter-creditor behavior in these circumstances have evolved without any statutory or regulatory guidelines for reorganizing the financial affairs of a sovereign borrower comparable to domestic bankruptcy or insolvency laws.' What has happened, therefore, has happened only through a consensus among the participants, without the benefit of any outside policy-making authority or enforcement mechanism.”

"Conflict of laws" and bankers' collusion

Lee Buchheit (1988):

- "The effect of the sovereign debt crisis on inter-creditor relationships has been dramatic and rapid. The international banking community has learned to act as a more or less unitary creditor group. The international banking community has also devised methods to suppress anxieties regarding preferential treatment of certain individual banks, encourage unanimous participation in exercises that are by their nature unanimously unpopular, and discipline those members of the community who may show tendencies toward unacceptably unilateral behavior."
- What is crucial is that "credit agreements should reflect the banks' entitlement to regard themselves as lenders to the country as a whole, not just separate borrowers within the country"

Lee Buchheit, fairy godmother to finance ministers in distress

Go-to expert for debt-ridden nations on why Spain is the euro's biggest problem, and why he prefers working for debtors

Josephine Moulds
The Guardian, Tuesday 12 March 2013 13.28 EDT

Lee Buchheit: 'The market moves so fast. Hedge funds have the attention span of a Peruvian chinchilla' Photograph: Karen Robinson

Global finance: a higher power

- The principles laid down – bankers' unity in constituting a distinct interest; the opacity of banks' deals to preserve the integrity of the financial relationships they have constructed; the priority given to private negotiations in globalized financial markets, over those of the citizenry in borrower nations – define an approach to the co-existence of global finance and nation-states that subjects national governments to the prior claims of what is evidently a higher power, in the neoliberal era.
- 1992: NAFTA
- 1992: Maastricht treaty: the "Single European Act," revising the 1957 Treaty of Rome
- 1994: World Trade Organization (Uruguay round)
- 2015: Trans-Pacific Partnership (TPP)
- 2016: Transatlantic Trade and Investment Partnership (TTIP)

16. Reimagining Financial Regulation

- The Dodd-Frank Act (2010) is still only partially implemented in the US. The post-crisis debate in the UK and Europe – around FTT, ring-fencing, capital adequacy – is unresolved.
- European Union reforms: Banking Markets Union, Capital Markets Union
- We are in need of a deeper reform agenda whose objective is an economically functional, socially productive financial system that contributes to sustainable and inclusive growth.

The banality of the excesses documented here pushed the banking system to a point where its most powerful players denied and rebelled against their principal economic functions.

> "In our market-making function, we are a principal. We represent the other side of what people want to do. We are not a fiduciary. We are not an agent. Of course, we have an obligation to fully disclose what an instrument is and to be honest in our dealings, but we are not managing somebody else's money"
>
> - Lloyd Blankfein, Goldman Sachs CEO, February 2010 statement to the Financial Crisis Investigation Commission.

"Goldman Sachs Chief Regrets Leveraged Transactions: Report," REUTERS, May 20, 2010

MUMBAI (Reuters) - Goldman SachsChief Executive regretted having participated in transactions that brought too much leverage into the world, he said in an interview to India's Economic Times newspaper published on Friday.

"I regret that we participated in transactions that brought too much leverage into the world. It led to people taking too much leverage. But those were the standards of the moment," Lloyd Blankfein told the newspaper, while on a four-day trip to India.

Reform of European banking and financial market regulation

1. Eliminate excess financial risk-taking.
2. Rein in the activities and size of too-big-to-fail megabanks.
3. Gain regulatory control of shadow banking and offshore financial tax-havens.
4. Limit destabilizing interconnectedness across national borders.

Structure and functioning of European banking and financial markets

5. Encourage pluralistic banking systems to better meet local needs.
6. Retool the European Investment Bank (EIB) to better facilitate European economic and social development; and create national development banks as strategic allies of the EIB and of national governments.
7. Reform the mandate of the European Central Bank (ECB) to include employment targets, and make the ECB democratically accountable.
8. Rethink the forms, extent and terms of Europe's financial integration with financial centres and firms in the rest of the world.

The financial rights and financial security of everyday Europeans

9. Set trans-European limits on predatory lending.
10. Establish the concept of financial citizenship for Europeans.