

Are the Biggest Banks Too Complex?

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The views expressed here are mine alone, and do not necessarily represent the views of the Federal Reserve Bank of St. Louis or of the Federal Reserve System. Special thanks to Julia Maues, Jim Fuchs and Andy Meyer.



DIALOGUE WITH THE FED

Beyond Today's Financial Headlines

Are the Biggest Banks Too Complex?

Two Points of View



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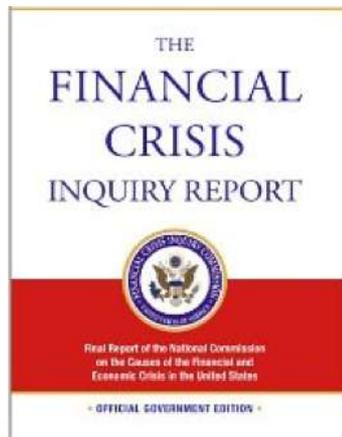
Why We Need Big Banks

“America’s largest businesses operate around the world and simply have to work with international banks. If they can’t work with a global bank based in America, then they will work with one based overseas.”

- William B. Harrison Jr., former CEO of JPMorgan Chase (1999-2006), Aug. 22, 2012

Why Big Banks Are a Big Problem

“These banks are too big to fail. They’re too big to manage. They’re too big to regulate. They’re too complex to understand and they’re too risky to exist. And the bottom line is they offer very little benefit.”



- Phil Angelides, Co-Chair of the Financial Crisis Inquiry Commission, May 31, 2012

Why Big Banks Are a Big Problem

“Too-big-to-fail banks are a perversion of capitalism ... and a clear and present danger to the U.S. economy ... [resulting in] an erosion of faith in American capitalism.”



– Richard Fisher, President of the Federal Reserve Bank of Dallas, April 2, 2012

Why Big Banks Are a Big Problem

“We do not need these companies to be as big as they are. We should say we want smaller institutions so they can safely fail if they need to fail.”



– James Bullard, President of the
Federal Reserve Bank of St. Louis,
May 17, 2012

Tonight's Agenda

- Big banks misbehaving
- Why do big banks exist?
- Dealing with large, complex banks
- Is there a better way?
- Your questions and comments

Part 1

- Big banks misbehaving



- And more...

Robo-signing



- How foreclosures are supposed to work
- What many mortgage-servicing firms actually did
- How they were found out
- What's happening now

How Foreclosures Work: Judicial vs. Non-Judicial



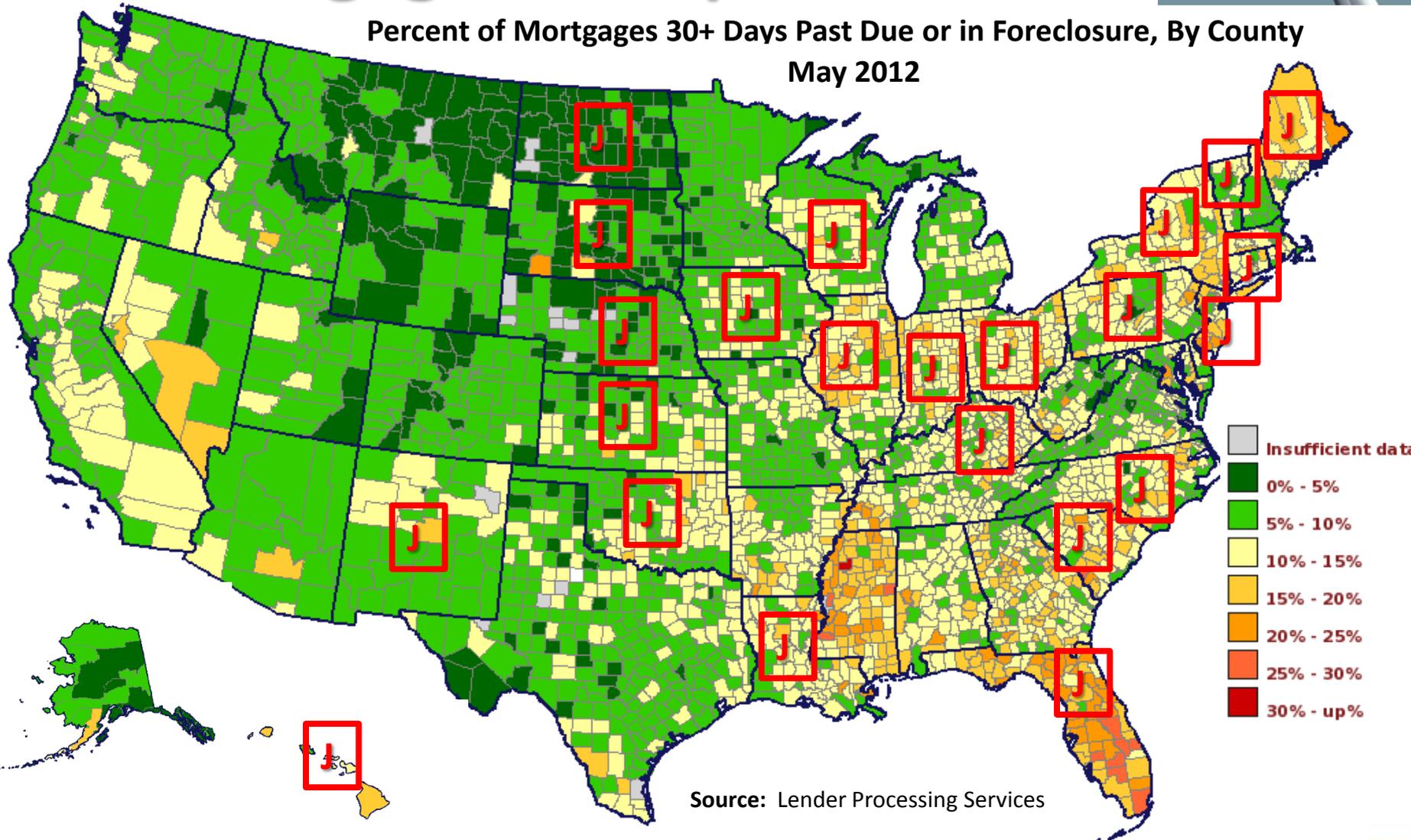
- In non-judicial foreclosure states (including Missouri), foreclosure is relatively quick and easy.
 - No court involvement.
 - Foreclosure takes several months.

- In judicial-foreclosure states (including Illinois), foreclosure is relatively slow and costly.
 - Lender must prove to a court that it owns a mortgage on the property.
 - Foreclosure can take several years.

Judicial-Foreclosure States and Mortgage Delinquencies

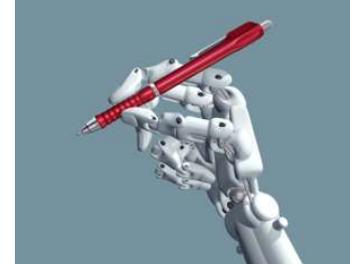


Percent of Mortgages 30+ Days Past Due or in Foreclosure, By County
May 2012



Source: Lender Processing Services

Foreclosures in Judicial States (including Illinois)



- Usually, a mortgage-servicing company prepares the court documents on behalf of the lender or lenders.
- The servicer submits an affidavit (a signed written statement) asserting that the signatory has personally reviewed the mortgage documents and believes them to be accurate.

What Went Wrong



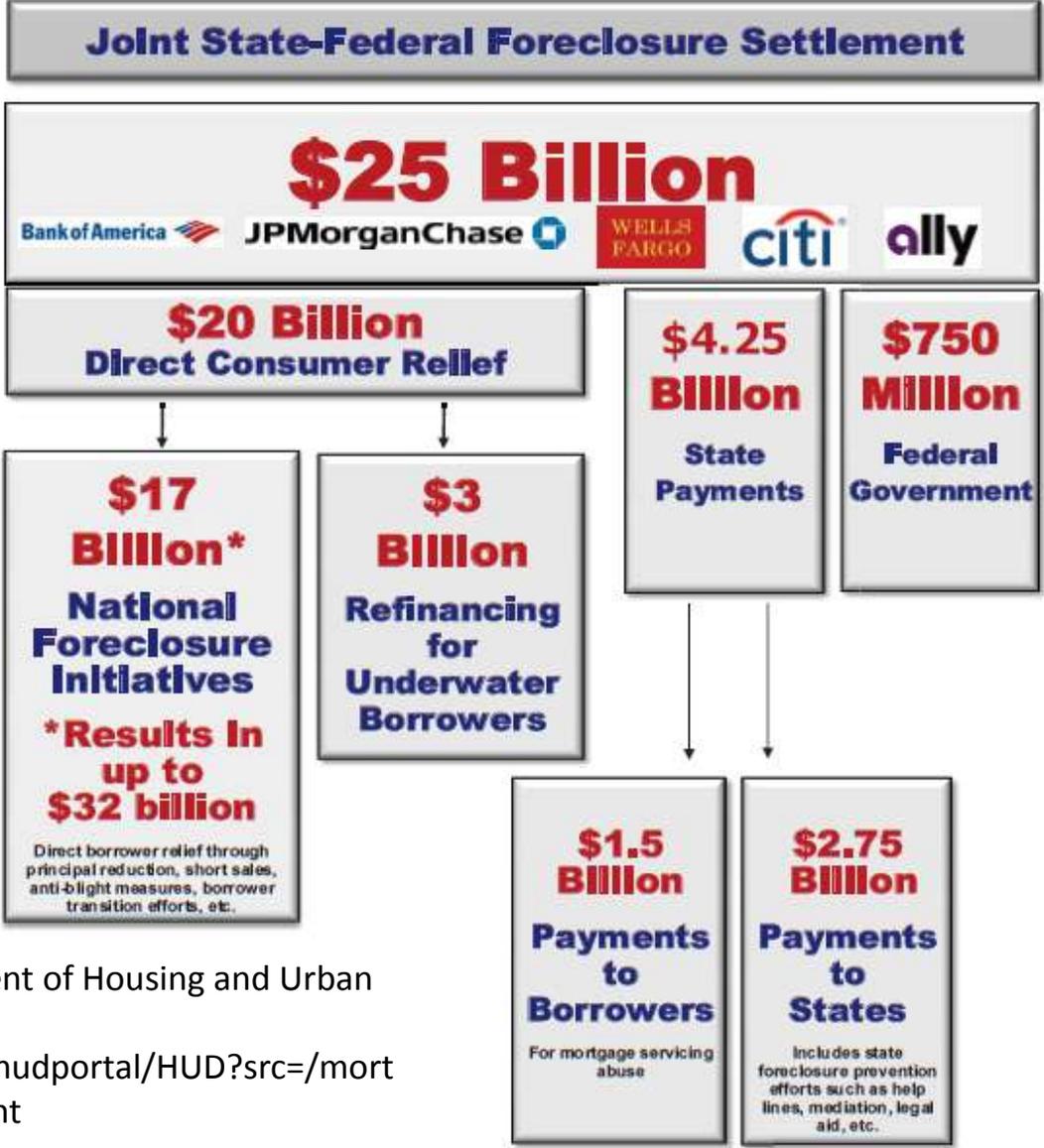
- Inundated with defaults, some servicers ordered employees to sign affidavits without investigating the documents, creating “robo-signers.”
- Facing wrongful-foreclosure lawsuits, GMAC Mortgage (part of Ally Financial) halted foreclosures in 23 judicial-foreclosure states in September 2010.
 - GMAC employee Jeffrey Stephan stated in sworn depositions that, for a period of 10 months, he had signed about 500 foreclosure affidavits each day in his office in Fort Washington, Penn.

What's Happening Now



- A joint state-federal mortgage-servicing settlement was signed with five major mortgage servicers on Feb. 9, 2012.
 - These mortgage servicers agreed to change many of their foreclosure practices.
 - \$20 billion of relief will be provided to eligible mortgage borrowers and \$5 billion will be paid to federal and state governments.
- Negotiations are proceeding with other servicers.

The Settlement Flowchart



Source: U.S. Department of Housing and Urban Development,
<http://portal.hud.gov/hudportal/HUD?src=/mortgageservicingsettlement>

Botched Hedging



- How hedging is supposed to work
- What JPMorgan Chase's Chief Investment Office actually did
- How they were found out
- What's happening now

Hedging in Theory and Practice



- A perfect hedge eliminates risk *and profit*.
- JPMC's London-based Chief Investment Office (CIO) sometimes employed imperfect hedges.
 - The bank believed its traders could make profits for the bank by identifying mispriced assets.
- Is this hedging or “proprietary trading?”

How They Were Found Out



- Rumors began in early 2012 that a single trader—dubbed the “London Whale”—was taking extremely large, market-moving positions in certain derivatives markets.
- JPMorgan Chase CEO Jamie Dimon said in March 2012 that rumors that JPMC could lose a lot of money on the trades were a “tempest in a teapot.”
- JPMC reported about \$2 billion of losses on the positions in May 2012.

What's Happening Now



- The latest loss estimates are about \$6 billion; JPMC restated its first-quarter earnings in July.
- Many JPMC employees have left the bank, including Bruno Iksil (the London Whale); Ina Drew, the head of the CIO; and others.
- CEO Jamie Dimon testified before several congressional committees in June.
- Investigations are underway at several federal and state agencies in the U.S. and in the U.K., targeting inadequate or misleading disclosures.

Rate-Rigging



- How LIBOR is supposed to work
- What Barclays and some other banks actually did
- How they were found out
- What's happening now

How LIBOR is Supposed to Work



- London Inter-Bank Offered Rate (LIBOR): A daily publication of indicative short-term, uncollateralized inter-bank interest rates (i.e., not actual offers) covering 15 maturities, from 1 day to 12 months, in 10 currencies.
- The British Bankers Association (BBA) collects a full set of rate estimates from a panel of banks in each currency (18 banks are on the U.S. dollar panel).
- After excluding the highest and lowest 25 percent of submitted rates, the BBA publishes the averages.

What Barclays and Some Other Banks Actually Did



- According to a regulatory settlement with Barclays (see Slide 30), the bank sometimes submitted false LIBOR estimates:
 - To increase the bank's profit in other markets (e.g., derivatives) that use LIBOR as a reference rate.
 - To signal stronger bank health than was true during the financial crisis (important because individual bank submissions are published).



E-Mail Evidence of Manipulation

- “We have another big fixing tom[orrow] and with the market move I was hoping we could set [certain] Libors as high as possible.”
 - Barclays trader to LIBOR submitter

Source: CFTC and FSA June 27, 2012, orders filling and settling charges against Barclays

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E-Mail Evidence of Manipulation

- “[...] when I retire and write a book about this business your name will be written in golden letters.”
 - Barclays trader to LIBOR submitter
- “I would prefer this [to] not be in any book!”
 - Submitter

Source: CFTC and FSA June 27, 2012, orders filling and settling charges against Barclays

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E-Mail Evidence of Manipulation

- “Dude. I owe you big time! ... I’m opening a bottle of Bollinger.”
 - Barclays trader to LIBOR submitter
- “We’re clean but we’re dirty-clean, rather than clean-clean.”
 - Barclays executive to another executive

Source: CFTC and FSA June 27, 2012, orders filling and settling charges against Barclays

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LIBOR Was Long Known to be Imperfect



- Criticisms of the LIBOR rate-setting process go back to the early 1970s, at least.
 - Creators of short-term interest-rate futures contracts in Chicago rejected LIBOR as a reference rate; they considered it unreliable and subject to manipulation.
 - Eurodollar futures contracts switched years later after LIBOR had gained wide acceptance elsewhere.
- The Bank for International Settlements (BIS) and others publicly criticized the LIBOR process in 2008.

How They Were Found Out



- Barclays admitted in June 2012, as part of a settlement with the Commodity Futures Trading Commission (CFTC), the Department of Justice (DOJ) and the U.K. Financial Services Authority (FSA), that it knowingly had submitted false LIBOR estimates over a multi-year period.
- Barclays agreed to pay \$450 million and forced out CEO Bob Diamond; the board chairman, Marcus Agius; and the CFO, Gene Donnelly.

What's Happening Now



- Many banks are under investigation in the U.S., the U.K. and elsewhere in connection with LIBOR rate-rigging.
- Regulators, including the Federal Reserve, are being criticized for knowing about, but not aggressively acting upon, bank manipulation of LIBOR.
- On Sept. 28, 2012, the FSA stripped the BBA of its LIBOR oversight role and announced that a new LIBOR administrator would be appointed within the next 12 months.
- “We would be fooling ourselves to assume that trading manipulation was limited to LIBOR trades.”
 - Paul Tucker, deputy governor, Bank of England

Part 2

- Why do big banks exist?

Why Are There Banks at All? Two Key Economic Functions They Perform

- Payments: To keep track of who owns the economy's money and to facilitate trade in goods, services, and assets
- Credit: To make the payments system more flexible and to connect longer-term savers and borrowers

Why Are There Big, Complex Banks?

Perhaps in Order to Exploit:

- Economies of scale: When the unit cost of doing something is lower if you do more of it.
 - Example: Your fee per dollar of an ATM withdrawal is lower when you take \$200 instead of \$100.
- Economies of scope: When the unit cost of doing two different things is lower if you do them together.
 - Example: You use less gas if you deposit checks and withdraw cash on a single trip to the ATM.

Economies of Scale in Banking

- Deposit-account administration
 - Spread the cost of your computer system
- Payments clearing and settlement
 - Only need to pay out the net amount owed
- Diversification of default risk in the loan portfolio
 - Don't put all of your eggs in one basket
- Raising funds
 - Cookie-cutter branches; reputation in capital markets

How Big Does a Bank Need to Be to Fully Exploit Scale Economies?

- Economic research at the St. Louis Fed suggests most scale economies are captured by banks that have no more than \$30 billion to \$50 billion in assets.
- Examples of banking companies in this range:
 - First Horizon National Corp., Memphis (\$25 billion)
 - BOK Financial Corp., Tulsa (\$26 billion)
 - Zions Bancorp., Salt Lake City (\$53 billion)
 - Comerica Inc., Dallas (\$61 billion)

Size of the Seven Largest U.S. Financial Holding Companies (FHCs)

As of 2011: Q4	Consolidated Total Assets (billions of \$)	Percent of Total	Number of Subsidiaries	Percent of Total
JPMorgan Chase & Co.	\$2,266	15.8%		
Bank of America Corp.	\$2,137	14.9%		
Citigroup Inc.	\$1,874	13.1%		
Wells Fargo & Co.	\$1,314	9.2%		
Goldman Sachs Group Inc.	\$924	6.4%		
MetLife Inc.	\$800	5.6%		
Morgan Stanley	\$750	5.2%		
All 4,660 bank holding cos.	\$14,359	100.0%		

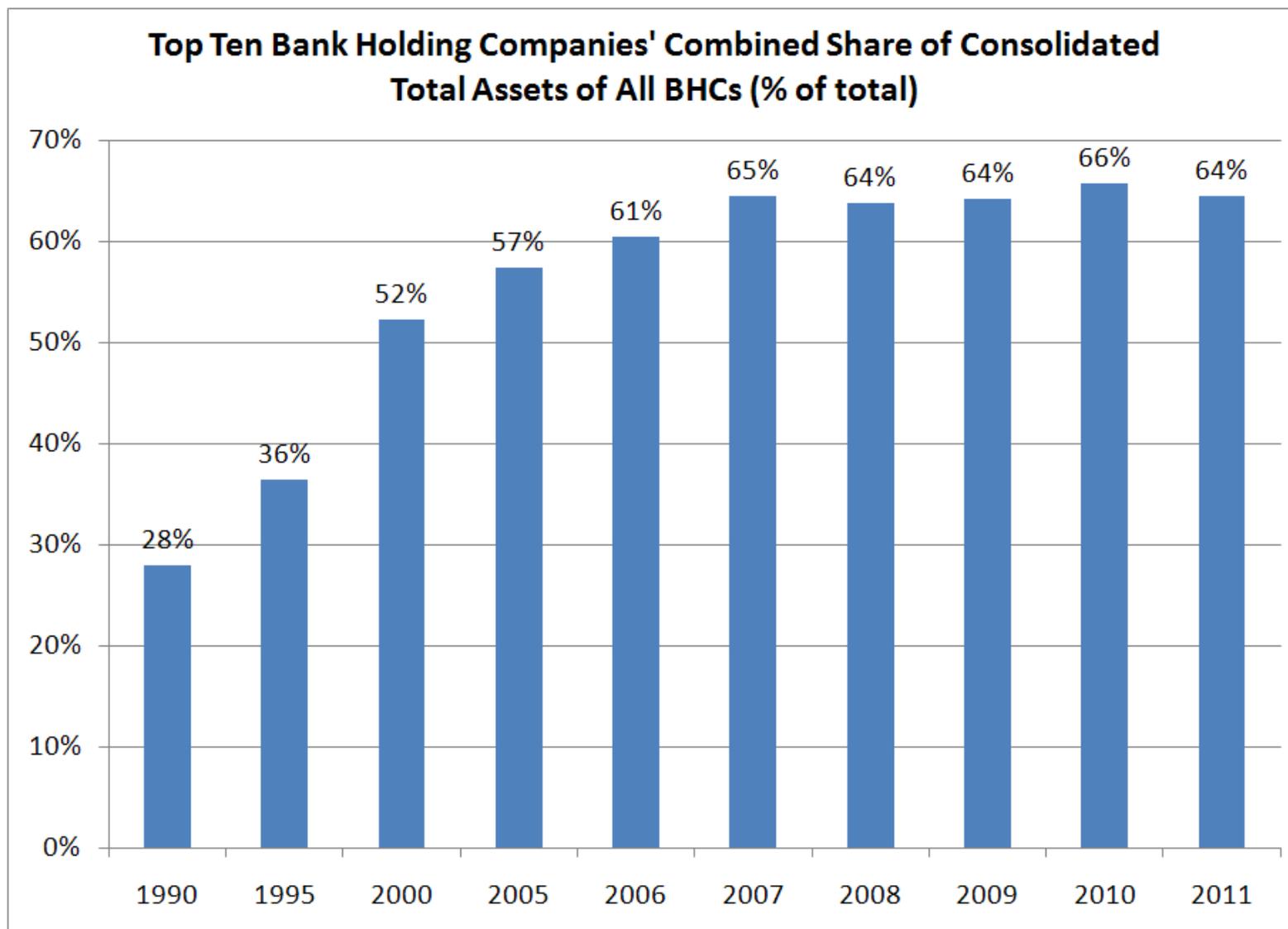
Source: Avraham, D., P. Selvaggi and J. Vickery, "A Structural View of U.S. Bank Holding Companies," *FRBNY Economic Policy Review*, July 2012.

Size of the Seven Largest U.S. Financial Holding Companies (FHCs)

As of 2011: Q4	Consolidated Total Assets (billions of \$)	Percent of Total	Number of Subsidiaries	Percent of Total
<u>Top seven companies combined</u> : JPM, BAC, C, WFC, GS, MET, MS	\$10,065	70.1%		
All others	\$4,294	29.9%		
All 4,660 bank holding cos.	\$14,359	100.0%		

Source: Avraham, D., P. Selvaggi and J. Vickery, "A Structural View of U.S. Bank Holding Companies," *FRBNY Economic Policy Review*, July 2012.

U.S. Banking Consolidated Rapidly Before Crisis



Source: Avraham, D., P. Selvaggi and J. Vickery, "A Structural View of U.S. Bank Holding Companies," *FRBNY Economic Policy Review*, July 2012.

Economies of Scope in Banking

- Payments and credit
 - The essence of what we call a bank
- One-stop financial shopping?
 - NOT PROVEN
- Commercial and investment banking?
 - NOT PROVEN
- Banking and insurance?
 - NOT PROVEN
- Market-making and own-account trading?
 - NOT PROVEN

Size and Complexity of the Seven Largest U.S. Financial Holding Companies (FHCs)

As of 2011: Q4	Consolidated Total Assets (billions of \$)	Percent of Total	Number of Subsidiaries	Percent of Total
JPMorgan Chase & Co.	\$2,266	15.8%	3,391	17.3%
Bank of America Corp.	\$2,137	14.9%	2,019	10.3%
Citigroup Inc.	\$1,874	13.1%	1,645	8.4%
Wells Fargo & Co.	\$1,314	9.2%	1,366	7.0%
Goldman Sachs Group Inc.	\$924	6.4%	3,115	15.9%
MetLife Inc.	\$800	5.6%	163	0.8%
Morgan Stanley	\$750	5.2%	2,884	14.7%
All 4,660 bank holding cos.	\$14,359	100.0%	19,603	100.0%

Source: Avraham, D., P. Selvaggi and J. Vickery, "A Structural View of U.S. Bank Holding Companies," *FRBNY Economic Policy Review*, July 2012.

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<u>Top seven companies combined</u> : JPM, BAC, C, WFC, GS, MET, MS	\$10,065	70.1%	14,583	74.4%
All others	\$4,294	29.9%	5,020	25.6%
All 4,660 bank holding cos.	\$14,359	100.0%	19,603	100.0%

Source: Avraham, D., P. Selvaggi and J. Vickery, "A Structural View of U.S. Bank Holding Companies," *FRBNY Economic Policy Review*, July 2012.

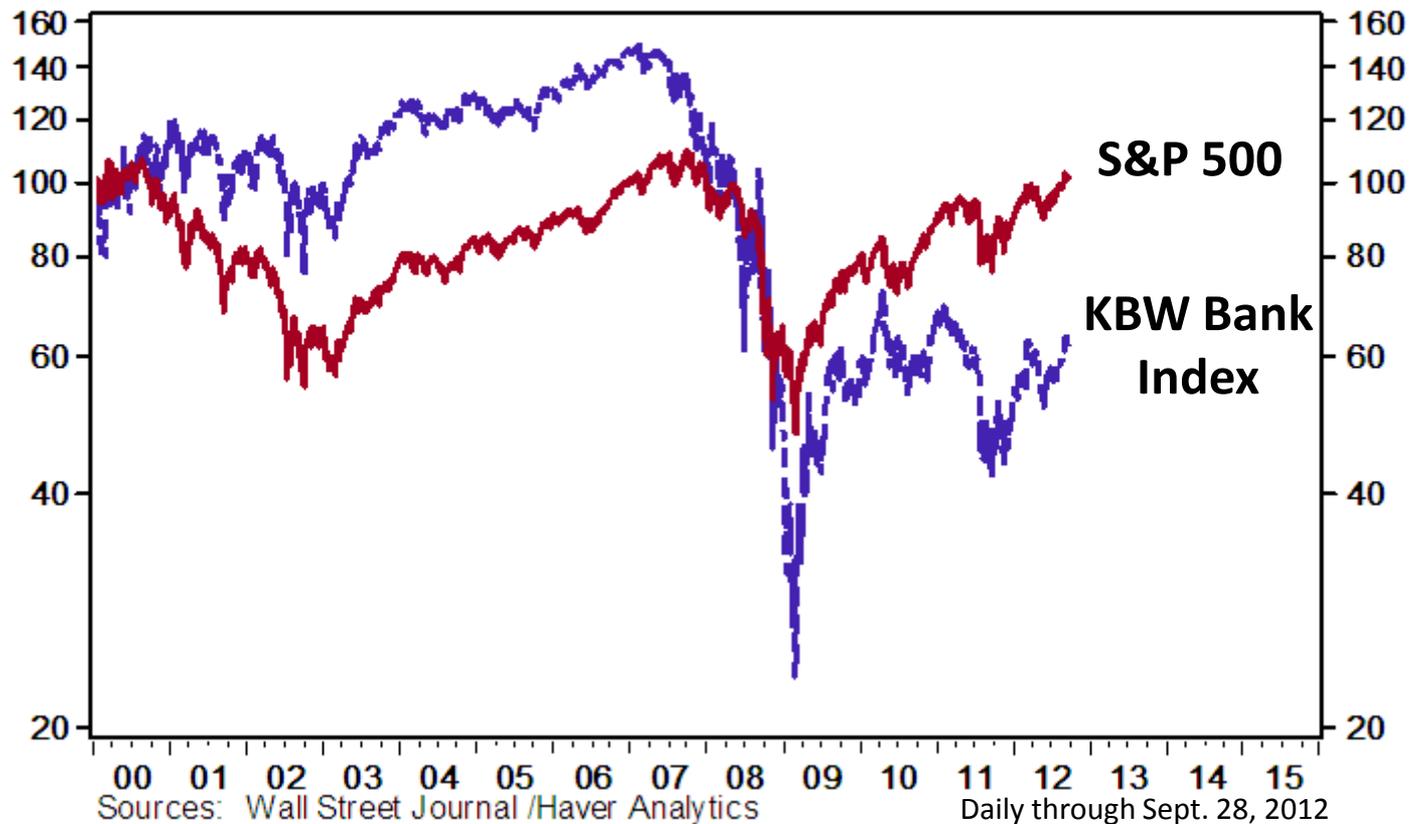
Does a Bank Need to Be Complex to Succeed?

- Economic research suggests there are few, if any, significant efficiency gains associated with combining traditional banking (payments and credit) with any other financial service.
- Why do banks become complex? According to New York Fed research, it may be because:
 - Size and complexity go hand in hand
 - Subsidiaries are created to mitigate or avoid regulation (both domestic and foreign)
 - It may be easier to reduce tax liabilities
 - May be able to shift risk to other creditors in bankruptcy
- While privately optimal, none of these objectives increases the general welfare of society.

Big-Bank Stocks Have Performed Poorly Despite Massive Government Support

Standard & Poor's 500 Stock-Price Index
Index value: Average daily closing price in 2000 equals 100

KBW Bank Stock-Price Index
Index value: Average daily closing price in 2000 equals 100



In Sum: Banks Don't Appear to Grow Very Large and Complex Purely for Reasons of Economic Efficiency

- Scale economies maximized by \$50 billion
- Scope economies minimal when combining traditional banking with other financial activities
- Some evidence of inefficiencies associated with very large scale and scope

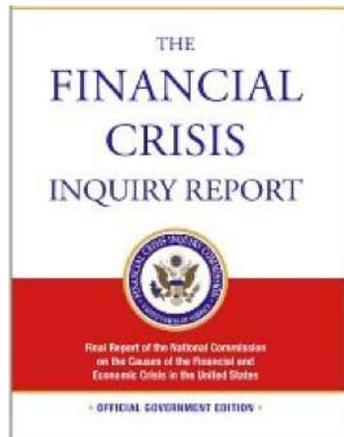
Do Big and Complex Banks Create Any Special Problems?

- Yes—They create systemic risk.
- Definition of a Global Systemically Important Financial Institution (G-SIFI):
 - An internationally active financial institution the failure or impairment of which could send shocks through the financial system which, in turn, could harm the real economy.

Source: Basel Committee on Banking Supervision, Bank for International Settlements, July 2011

Any Other Things Not to Like?

“[I]n the course of our commission’s work and thereafter, I was taken aback at the immense political power of the financial industry. ... I have been stunned at the raw and crude exercise of power by Wall Street to achieve its means over the public interest.”



– Phil Angelides, co-chair of the Financial Crisis Inquiry Commission, May 31, 2012

The Big Banks' Arguments

- Big-bank supporters say the academic research that finds no or limited benefits to large size and complexity may be flawed:
 - Too few megabank data points exist to measure their effectiveness compared to smaller banks.
 - Studies may be measuring the wrong things, such as short-run profitability or simplistic operating efficiency.
- More importantly, big and complex banks have “passed a market test:”
 - Multinational companies need multinational banks.
 - If shareholders didn't like the way these companies are run, they would change them.

My Responses to the Megabanks

- On the fallibility of research: Granted—Case not proven.
- On “passing a market test:” Not convincing.
 - Most, if not all, of the megabanks would have failed without government support during the financial crisis.
 - Returns to big-bank shareholders have been poor over long periods of time.
 - Large companies are lukewarm supporters of big banks, at best.

Big Companies Are Not Fans of Big Banks

“Is it going to have a material detrimental impact on corporate America if they were broken up? I doubt that. ... I have not heard any support for big banks nor any demand for a breakup.”

– Jeff A. Glenzer, Association for Financial Professionals (representing corporate financial executives)

Why Haven't Shareholders Acted?

- Bank shareholders haven't downsized/simplified megabanks because the “market for corporate control” doesn't operate well among megabanks.
- Who would discipline and restructure a megabank?
 - Another U.S. bank? All are at nationwide deposit ceiling already; so, they're too-big-to-merge.
 - A non-bank financial company? Don't want to be subject to bank holding-company regulation by the Federal Reserve.
 - A foreign bank? Would run into protectionist objections; and plausible candidates are too-big-to-fail, themselves.
 - A group of private-equity firms or hedge funds? Radical restructuring by non-BHCs unwelcome by bank regulators.

Part 3

- Dealing with large, complex banks

Dealing With Complex Banks

- Forms of internal governance
 - Corporate culture
 - Board oversight
 - Managerial self-interest

- Forms of external governance
 - Product-market discipline
 - Shareholder discipline
 - Depositor, bondholder and counterparty discipline
 - Supervision and regulation

Forms of Internal Governance

- Corporate culture: “Do the right thing” is the norm
- Board oversight: Making sure employees are serving shareholders’ interests and respecting other stakeholders, too
- Managerial self-interest: Monetary and career concerns lead you to build a good personal reputation

Corporate Culture at Big Banks

Survey questions	Percent answering yes
“Do you think a financial-services professional must engage in <u>unethical or illegal conduct</u> to succeed?”	24%
“Do you have any first-hand knowledge of <u>wrongdoing</u> in your workplace?”	24%
“Would you commit a <u>trading-related crime</u> if you thought you would not be caught?”	16%
“Do you think some of your competitors <u>cheat</u> ?”	39%
“Do you think your firm’s <u>compensation practices</u> create pressure to compromise your ethical standards?”	30%

Respondents: 500 senior employees at U.S. and U.K. financial-services firms

Survey conducted by: Populus, a British survey-research firm

Sponsored by: Labaton Sucharow, a New York law firm

“Duty of Care” vs. “Buyer Beware”

“It has sometimes seemed that we had not only the wrong kind of bank, but the wrong kind of banker. At some stage the customer relationship drifted from duty of care to buyer beware.”

- Martin Taylor, former CEO of Barclays (1994-98), member of UK’s Independent Commission on Banking (Vickers Commission, 2011)

Which Forms of Governance Appear To Be Effective for Complex Banks?

Corporate-Governance Mechanisms		
Internal governance mechanisms	In the best corporations	Among U.S. megabanks
▪ Corporate culture		
▪ Board oversight		
▪ Managerial self-interest		
External governance mechanisms		
▪ Product-market discipline		
▪ Shareholder discipline		
▪ Depositor/bondholder/counterparty disc.		
▪ Supervision and regulation		
Overall effectiveness of governance		

Forms of External Governance

- Product-market discipline: A firm that cannot compete in the market will disappear
- Shareholder discipline: Shareholders will sell the stock if corporate performance is poor
- Depositor, bondholder and counterparty discipline: You can't raise money or trade with anyone if your solvency is doubted
- Supervision and regulation: Government stands in for weak, uncoordinated depositors

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Which Forms of Governance Appear To Be Effective for Complex Banks?

Corporate-Governance Mechanisms		
Internal governance mechanisms	In the best corporations	Among U.S. megabanks
▪ Corporate culture	✓	
▪ Board oversight	✓	
▪ Managerial self-interest	✓	✓
External governance mechanisms		
▪ Product-market discipline	✓	✓
▪ Shareholder discipline	✓	✓
▪ Depositor/bondholder/counterparty disc.	✓	
▪ Supervision and regulation		✓
Overall effectiveness of governance		

Part 4

- Is there a better way?

Why Did We Rescue the Megabanks?

- “Too big to fail” matters most during a crisis.
- By then, it’s too late to do anything about it—by definition, we must rescue them to save the financial system and the economy.
- We were caught flat-footed in 2008, when the financial system almost collapsed and we had no safe, effective way to wind down failing megabanks.

Can We Solve the TBTF Problem?

- Two broad approaches to reform
 - Radical reform proposals
 - Break up the megabanks
 - Create “narrow banks”
 - Regulatory reforms
 - Dodd-Frank Act
 - Basel III
 - A “death-penalty” regime for failing banks

Radical Reform Proposals

- Break up the megabanks
 - Reduce complexity: Revive the Glass-Steagall Act of 1933, which prohibited the combination of commercial banking with investment banking or insurance underwriting.
 - Gramm-Leach-Bliley Act of 1999 partially repealed Glass-Steagall.
 - Reduce size: Allow current range of business activities, but limit banks' assets or deposits at a level below far below current size.
 - Riegle-Neal Act of 1994 allowed interstate branching.

Radical Reform Proposals

- Create “narrow banks”
 - Separate the payments functions of banks from all other financial activities.
 - A long-standing reform idea popular among some economists.
 - Would narrow banks be viable? Probably not.
 - Could we keep other firms out of the payments system? Probably not.

Dodd-Frank's Anti-TBTF Provisions

- **Title I: Financial Stability**
 - Financial Stability Oversight Council (FSOC)
 - Office of Financial Research (OFR)
 - Enhanced leverage and risk-based capital requirements
 - Living-will requirement for designated firms
 - Annual stress tests, conducted by the Board, for all SIFIs.
Annual company-run stress tests required for institutions with between \$10-\$50 billion in total assets
 - Risk-based assessments will be imposed on all SIFIs to repay the Treasury for resolving a troubled SIFI

Dodd-Frank's Anti-TBTF Provisions

- **Title II: Orderly Liquidation Authority (OLA)**
 - An alternative to bankruptcy
 - A roadmap for winding down SIFIs
- **Title VI: Improvements to bank regulation**
 - Volcker Rule prohibiting proprietary trading
 - Tightened internal governance requirements
- **Title IX: Investor Protections**
 - Annual disclosure of incentive compensation arrangements for “covered” institutions (\$1 billion or more in total assets)
 - Boards of directors must approve all compensation arrangements; requires deferral of incentive-based compensation for executives at SIFIs

Basel III

- Improve the quality of bank capital
 - Exclude “hybrid” forms of equity from regulatory capital
 - Harmonize capital definitions across countries
 - Limit the ability of intangible assets to count toward capital requirements
- Raise risk-based minimum capital requirements
- Introduce a U.S.-style leverage ratio (non-risk-based capital standard) for all countries
- Require countercyclical capital buffers
- Add a capital buffer for liquidity risk
- A number of technical changes designed to improve the measurement of banks’ risks