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# **ENDING TOO BIG TO FAIL:** FACTS AND FIGURES ON SIZE AND CONCENTRATION OF U.S. COMMERCIAL AND INVESTMENT BANKS

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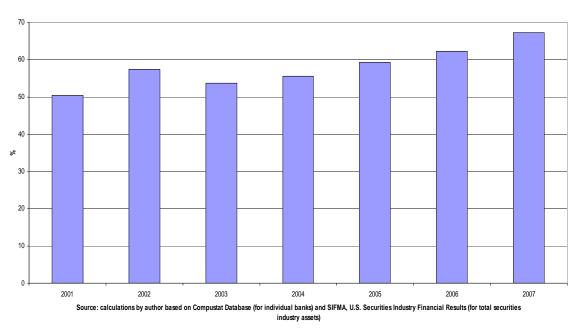
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Much of the material in this paper is taken directly from James Crotty's earlier paper, "The Bonus-Driven "Rainmaker" Financial Firm: How These Firms Enrich Top Employees, Destroy Shareholder Value and Create Systemic Financial Instability"

### I. Investment Banks

Note: We end the data for investment banks in 2007 because in 2008, the top investment banks became commercial banks, were merged into commercial banks, or went bankrupt (Lehman Brothers).

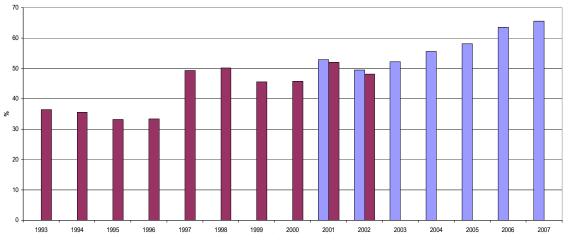
Figure 1 Share of total assets held by top 5 investment banks in total assets held by the US securities industry (USA, 2001-2007)



- By 2007, the year the crisis hit, the share of total assets of investment banks held by the top 5 investment banks was over 65%
- Concentration as measured by the share of total revenue of the top five investment banks went up significantly between 1993, when it was about 36%, and 2007, when it was over 63%.

Figure 2

Share of total revenue of the top 5 investment banks in total revenue of the US securities industry (1993-2007)



Source: calculations by author based on Compustat Database and SIFMA. Total revenue is revenue of all broker-dealers doing a public business (NYSE, NASD). Imputed revenue is based on NYSE revenue and its share in all broker-dealers registered with the SEC

■ by total revenue ■ by total revenue, imputed

Table 1

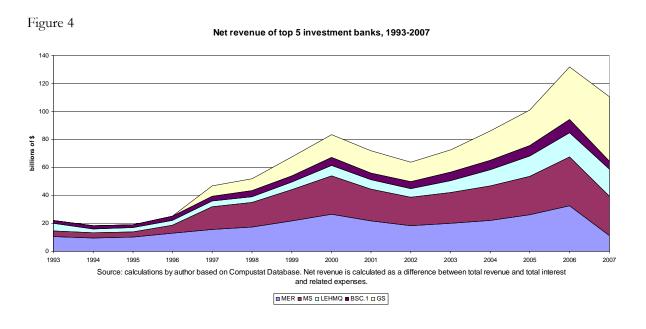
	Concentration ratio, in %			
	by assets	by total revenue	by total revenue, imputed	
1993			36.43	
1994			35.53	
1995			33.30	
1996			33.31	
1997			49.36	
1998			50.09	
1999			45.55	
2000			45.68	
2001	50.41	52.92	51.95	
2002	57.46	49.56	48.18	
2003	53.70	52.17		
2004	55.54	55.56		
2005	59.32	58.19		
2006	62.18	63.60		
2007	67.13	65.61		

• Investment banking size of the top 5 investment banks (Merrill Lynch, Morgan Stanley, Bear Stearns, Lehman Brothers, Goldman Sachs) has grown dramatically since 1993, growing 800% (8 fold) in dollar terms over that period while prices only grew by 45% and the size of the economy (GDP) only doubled during that period.

Total assets of top 5 investment banks, 1993-2007

Source: Compustat Database.

• The net revenue of the top 5 investment banks, grew from \$20 billion in dollar terms in 1993 to \$120 billion, a six fold increase just before the crash in 2007.



### II. Commercial Banks

Data on size and concentration are presented below. In each year, we chose the top 3, 5 and 7 commercial banks. So the particular banks in the group differ from year to year depending on where they are in the rankings for that year.

50
45
46
40
36
36
30
38
25
20
1992 1993 1994 1995 1996 1997 1998 1999 2000 2011 2002 2003 2004 2005 2006 2007 2008 2009
Source: Calculations by author based on FDIC Statistics on Depository Institutions (SDI) (for data on individual institutions), Historical Statistics on Banking (for total assets and deposits), and Statistics on Banking (for aggregate June 2009 data).

 $Figure \ 5$  Share of total deposits held by top 3, 5, and 7 commercial banks (USA, 1992-2009)

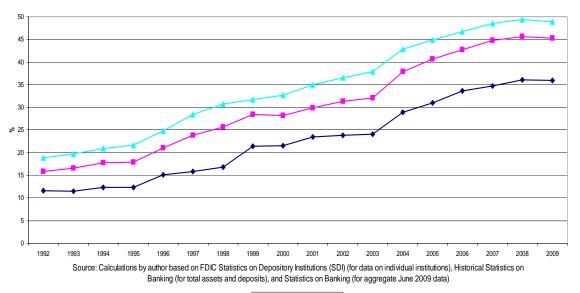
• The share of total deposits held by the top 3 commercial banks grew from 11% in 1993 to almost 34% in 2009. (See also table 3) This is above the standard 10% statutory share limit for each individual bank.

→ top 3 — top 5 → top 7

Table 2

	Share of total deposits held by top 3, 5, and 7 banks, in %			
	top 3	top 5	top 7	
2009	33.91	44.00	47.79	
2008	34.22	43.77	47.85	
2007	32.12	43.09	46.63	
2006	30.84	40.72	44.61	
2005	28.41	39.16	43.43	
2004	26.93	36.85	41.75	
2003	22.71	30.65	36.52	
2002	22.02	29.39	34.77	
2001	22.36	28.76	33.69	
2000	21.46	27.54	30.89	
1999	21.17	26.82	29.80	
1998	15.64	24.48	27.89	
1997	15.00	20.70	24.46	
1996	14.48	18.52	21.22	
1995	11.94	15.79	18.58	
1994	11.56	15.40	17.89	
1993	11.30	15.21	17.66	
1992	11.14	14.81	17.07	

Figure~6 Share of total assets held by top 3, 5, and 7 commercial banks (USA, 1992-2009)



→ top 3 — top 5 → top 7

Table 3

r	ı			
	Share of total assets held by top 3, 5, and 7 banks, in %			
	top 3	top 5	top 7	
2009	35.98	45.23	48.85	
2008	36.11	45.65	49.36	
2007	34.75	44.78	48.51	
2006	33.64	42.73	46.69	
2005	31.00	40.69	44.96	
2004	28.92	37.90	42.81	
2003	24.06	32.09	37.91	
2002	23.82	31.40	36.53	
2001	23.53	29.95	34.96	
2000	21.51	28.20	32.71	
1999	21.48	28.40	31.72	
1998	16.81	25.63	30.80	
1997	15.87	23.79	28.48	
1996	15.14	21.07	24.81	
1995	12.30	17.95	21.61	
1994	12.31	17.76	20.92	
1993	11.54	16.56	19.77	
1992	11.59	15.90	18.94	

• All of the largest 5 bank holding companies had total assets above 5% of GDP at the end of 2009. Bank of America had more that 15% and J.P. Morgan Chase is not far behind a 14%.

Table 4

Assets of the largest 5 bank holding companies as a share of GDP				
December 2009	Total assets, billions of \$	Total assets as a percent of GDP		
Bank of America Corp.	2,224.54	15.39		
JPMorgan Chase & Co.	2,031.99	14.06		
Citigroup Inc.	1,856.65	12.85		
Wells Fargo & Company	1,243.65	8.60		
Goldman Sachs Group, Inc.	849.28	5.88		
US GDP	14,453.80			

Source: FDIC, National Information Center, NIPA, Table 1.1.5. Calculations by authors.

The share of the total revenue of the top commercial banks doubled between 1992 and 2009. For example, the share of the top 3 went from less than 15% in 1992 to over 30% in 2009. (Figure 7 and Table 5).

Figure 7
Share of total revenue of the top 3, 5, and 7 commercial banks (USA, 1992-2009)

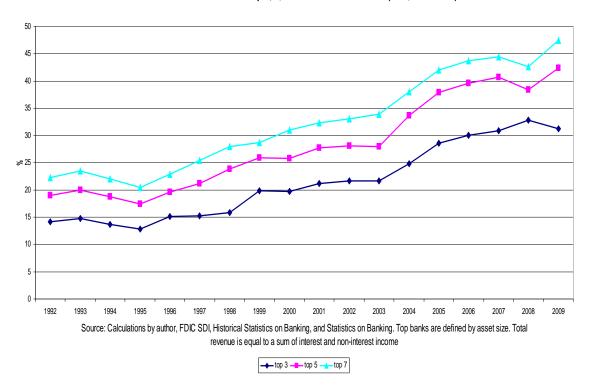


Table 5

	Share of total revenue of the top 3, 5, and 7 banks, in %			
	top 3	top 5	top 7	
2009	31.24	42.37	47.43	
2008	32.83	38.34	42.67	
2007	30.92	40.69	44.37	
2006	29.98	39.59	43.67	
2005	28.61	37.89	42.04	
2004	24.85	33.60	38.07	
2003	21.67	27.97	33.86	
2002	21.63	28.09	33.05	
2001	21.23	27.67	32.32	
2000	19.75	25.76	30.95	
1999	19.84	25.88	28.69	
1998	15.88	23.89	27.98	
1997	15.28	21.15	25.48	
1996	15.12	19.66	22.82	
1995	12.78	17.38	20.41	
1994	13.71	18.71	22.00	
1993	14.74	20.03	23.43	
1992	14.21	19.05	22.23	

## III. Derivatives

Derivatives trading is very highly concentrated. As Table 5 shows, at the end of 2009, the top 5 commercial banks sold 96.9% of the value of derivatives contracts.

Table 6

Derivative trading: top 5 commercial banks notional amount of derivative contracts, fourth quarter 2009				
by type of contract (for top 5 combined)			by bank	
	billions of \$	% of all derivatives		billions of \$
futures & forwards	24,573	11.5	JPMorgan Chase	78,545
swaps	139,056	65.3	Bank of America	44,316
options	29,338	13.8	Goldman Sachs	41,596
credit derivatives	13,215	6.2	Citibank	37,546
total	206,182	96.9	Wells Fargo	4,179
			top 5 banks	206,182
			all commercial banks	212,807

Source: OCC's Quarterly Report on Bank Trading and Derivatives Activities, Fourth Quarter 2009

These banks make significant profits from trading in derivatives and other products. As an extreme case, 72% of Goldman Sachs' net revenue in the fourth quarter of 2009 came from trading, including trading in derivatives.

### IV. Update

Here we present some basic information on increasing financial size and concentration since the crisis began.

The degree of competition in markets dominated by the largest investment and commercial banks has actually diminished as a result of the crisis they caused and the bailout that ensued, increasing market control by the surviving giants. The crisis thinned out the ranks of powerful commercial and investment banks, while increased government support for the remaining giants solidified their market power. It is now even less likely than it was before the crisis that the forces of market competition will force large banks to end their destructive compensation policies.

Today the "top four banks have combined assets of \$7.4 trillion, or 56% of the U.S. banking sector's total. A decade ago, the top four's \$2 trillion of assets accounted for 38% of the total" (*Wall Street Journal*, "Solving Everything but the Problem," December 16, 2009). S&P predicts that Morgan Stanley and Goldman Sachs will now be more dominant in investment banking. "While principal risk may decline, they should be able to take market share in advice, underwriting, trading and prime brokerage owing to less risk-taking by their peers and fewer competitors in the marketplace" (*S&P Industry Surveys* 2009a, p. 3). JPMorgan has become Wall Street's biggest derivative player. Its contracts were recently 40% of the derivatives held by all banks. The top five banks control 95 percent of the over-the-counter derivative market (Taibbi 2009). The credit default swap market is now more tightly controlled by the top banks than it was just a few years ago. Five banks now control half of the global credit default swap market. "This concentration has increased since the beginning of the financial crisis, as several counterparties have exited the market" (*Financial Times*, "A stronger infrastructure will cut CDS vulnerability," October 20, 2009). Four banks accounted for 60% of worldwide M&A activity in the first three quarters of 2009 (S&P 2009b).

A New York Times piece argued that "a new order is emerging on Wall Street after the worst crisis since the Great Depression – one in which just a couple of victors are starting to tower over the handful of titans that used to dominate the industry." It continues: "one may be forgiven for thinking little has changed in banking since 2007, except a move toward state-sanctioned oligopoly" ("Two Giants Emerge from Wall Street Ruins," July 16, 2009). A Financial Times article concludes: "The traumatic upheaval that has roiled Wall Street during the past two years has produced – surprisingly quickly – a widely acknowledged new pecking order in the world of high finance: Goldman Sachs in trading and

<sup>&</sup>lt;sup>1</sup> They are clearly wrong about principal risk: Goldman reported surprisingly high profits in the second quarter of 2009 based primarily on successful gambling with Goldman money.

<sup>&</sup>lt;sup>2</sup> Cited in Robert Reich's blog of July 16, 2009, http://robertreich.blogspot.com/2009/07/goldman-and-jpmorgan-two-winners-when.html .

<sup>&</sup>lt;sup>3</sup> See Financial Times, "The ghosts of AIG prosper" September 24, 2009.

JPMorgan Chase in banking, have become the undisputed industry leaders, with a hand in nearly every deal or trade. Clients can try to avoid these two, but only at their own peril." ("A new battle looms on Wall Street." August 4, 2009.)

After Bear Stearns failed, Merrill Lynch was absorbed by Bank of America, and it was clear that the Treasury and the Fed were going to force Lehman Brothers into bankruptcy, John Mack, CEO of Morgan Stanley said the following:

"all of the competitors have basically been eliminated. ... Just think about this: Every one percent in equity market share we gain is billion dollars in revenues... I think that once this turmoil abates, and it will settle down, the opportunities going forward are unbelievable. ... I believe with all my heart that this firm and our competitor, Goldman, have unique opportunities now."

His chief financial officer observed that: "There is Darwinism here....Weak people are being taken out. Strong people, I believe, are going to do very, very well" (Sorkin 2009, p. 377).

When Goldman announced third quarter 2009 profits that were four times larger than in the preceding year, the Financial Times noted that this "underscored its status as one of the winners from a crisis that eliminated two rivals - Lehman Brothers and Bear Stearns - and hobbled others such as Citi, Merrill Lynch and UBS" ("Goldman and Citi highlight divide," October 16, 2009). A Financial Times editorial warns of rising market power in investment banking:

"As with the wider banking market, the investment banking field has contracted thanks to the crisis. Two large players -Lehman and Bear Stearns- have disappeared, while others have been forced to contract. Fee levels are rising in some areas. The U.K. insurer Prudential is paying \$1 billion to underwrite its \$20 billion rights issue. A few years ago, underwriting fees were closer to 2 percent than 5 percent" ("Fat fees, fewer banks," March 21, 2010).

Consumers also confront banks with greater market power. According to the Washington Post, the four largest banks now issue one of every two mortgages and about two-thirds of credit cards.<sup>4</sup> The Wall Street Journal reports that more than half of U.S. residential mortgages are being made by just three large banks. At 52%, their share was "just over double these banks' market share in 2005." In servicing [mortgages], their share is 49%, compared with 22% in 2005 ("Uncle Sam Bets the House on Mortgages," September 18, 2009). The rise in market power affects almost all important areas of finance.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> In Washington Post, "Banks 'Too Big to Fail' Have Grown Even Bigger: Behemoths Born of the Bailout Reduce Consumer Choice," August 28, 2009.

<sup>&</sup>lt;sup>5</sup> It is difficult to get coherent up-to-date data on concentration in financial markets. Representative Maurice Hinchy (Democrat, New York) made the following assessment of the current situation. "Today, just four huge financial institutions hold half the mortgages in America, issue nearly two-thirds of credit cards, and control about 40 percent of all bank deposits in the U.S. In addition, the face value of over-the-counter derivatives at commercial banks has grown to \$290 trillion, 95 percent of which are held at just five financial institutions. We cannot allow the security of the American economy to rest in the hands of so few institutions" (Scheer, 2009).

The Financial Times capital markets editor Gillian Tett argues that "the system is drifting into a pattern where the most dominant lenders are becoming more dominant than ever" (Tett 2009). A Financial Times editorial concludes that "the real problem in finance is a lack of competition, as the consistently high profit margins of banks suggest" margins fattened in part by an exceptionally low cost of borrowing by financial institutions whose debt is guaranteed by the US government ("A mighty financial sector is less troubling if banks can be allowed to fail safely," August 28, 2009). Senior Financial Times columnist Martin Wolf argues that "in some ways, the oligopolistic banking system that has emerged from the crisis is riskier than the one that went into it" (Financial Times, "The challenges of managing our post-crisis world," December 30, 2009).