

United States House of Representatives
Committee on Financial Services

*Examining the Impact of the Volcker Rule on Markets,
Businesses, Investors, and Job Creation, Part II*

Written Testimony by James R. Barth, Lowder Eminent Scholar in Finance, Auburn University;
Senior Finance Fellow, Milken Institute; and Fellow, Wharton Financial Institutions Center

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Chairman Bachus, Ranking Member Frank and members of the committee, thank you for the opportunity to testify today on section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, also known as the Volcker Rule. I would like to note that my testimony is not offered on behalf of any institutions that I am affiliated with but represents my own view.

My opinions are based on my experience as an academic studying financial institutions and markets and as an official at bank regulatory agencies. I am now on the faculty at Auburn University and previously was on the faculty at George Washington University. In addition, I have served as director of the Office of Policy and Economic Research of the Federal Home Loan Bank Board and chief economist of the Office of Thrift Supervision. I have also held positions as visiting scholar at the Congressional Budget Office, the Federal Reserve Bank of Atlanta, the Office of the Comptroller of the Currency, and the World Bank. In my scholarly research and government service, I have studied the performance of hundreds of financial institutions, including the causes of distress for many that failed. In addition, I recently published several articles and books on financial crises, their causes, and their lessons.

The Volcker Rule prohibits banking entities from engaging in proprietary trading activities and limits their ability to invest in, or have certain relationships, with hedge funds and private equity funds. Certain activities are exempted from these prohibitions subject to prudential backstop provisions. The rule's purpose is to prohibit activities that could create excessive risks for banking entities and conflicts of interest.

I believe the Volcker Rule is based on an incorrect premise, will be extremely difficult to implement, and, worse, will produce harmful economic effects.

There is no evidence to support the belief that proprietary trading was a cause of the recent or any other financial crisis. In fact, all the evidence points to the contrary. The most recent crisis was triggered by poor lending and underwriting practices in the real estate sector, and excessive leverage by and insufficient liquidity at banking entities, not by proprietary trading by banks.

The implementation of the Volcker Rule will require regulators to distinguish between prohibited proprietary trading and permissible activities such as market marking, hedging, and underwriting on behalf of customers. Because these permissible activities sometimes appear similar to proprietary trading, it may be virtually impossible for regulators to draw a bright line between the prohibited and permissible activities that is not arbitrary. To the extent that regulators err on the side of restricting beneficial trading activities, or that the regulation deters banks from engaging in some permissible activities, the result will be banks providing less liquidity in the market. This, in turn, will increase the bid-ask spread on securities: Issuers will pay higher interest rates in the primary market to raise capital, and investors will pay more to purchase securities and receive less when selling them in the secondary market. All these developments harm markets, businesses, investors, and job creation.

As banks are denied the opportunity to engage in profitable trading activities, they may be driven to engage in ever more risky activities in an attempt to provide investors with an acceptable return. The Volcker Rule may therefore lead to riskier, not less risky, banks. The rule may also place U.S. banks at a competitive disadvantage to banks in other countries. In addition, the rule—while attempting to limit risk-taking at banks—may shift this risk-taking to less-regulated parts of the financial system that are less resilient should losses arise.

Let me elaborate on this last point. The January 2012 Report of the Financial Stability Oversight Council notes that even before the rule has been imposed, “major banking entities have taken or announced steps to sell, spin off, or close down their standalone ‘bright line’ proprietary trading businesses.” What will happen to these proprietary trading businesses? They will be conducted at non-banks. This seems to be starting already. The media has reported on proprietary traders moving from banks to non-banks and to hedge funds in particular, with headlines like “Banks move high risk traders ahead of U.S. rule” (Reuters), “Billion-Dollar Traders Quit Wall Street for Hedge Funds” (Bloomberg), “Deutsche Bank Head Debt Trader Cornut Leaves for Hedge Fund” (Bloomberg) and “Traders flee big-bank regulations to start own hedge funds” (New York Post).

If proprietary trading simply carries on at hedge funds and other non-banks including non-financial firms, the question then becomes: Is the forced migration of proprietary trading from banks to non-banks more likely to increase or decrease financial stability? To address this issue, I recently conducted a preliminary examination of 22 years of very large individual trading losses with Donald McCarthy, an economist based at Econ One Research. We found that these trading losses were in no way limited to banks or financial services firms. Rather, they occurred at a range of firms, including banks, investment banks, hedge funds, and manufacturing firms. Even a local government authority was involved. We also found that these individual losses at banks —while as large as or larger than losses at non-banks —were smaller by far as a share of equity capital. That is, the losses at banks were less threatening to solvency than the losses at non-banks.

This raises the possibility that instead of increasing financial stability, the Volcker Rule may actually decrease financial stability by shifting risk-taking activities from banks, which by and large have been more successful at absorbing the trading losses identified, to non-banks, which have been much less successful at absorbing losses, judging by our examination of the past several decades.

Since 1990, we identified at least 15 instances when individual traders lost at least \$1 billion (in 2011 dollars). These 15 trading losses totaled nearly \$60 billion and ranged from a low of \$1.1 billion on ill-fated foreign exchange derivatives at a Japanese Shell Oil subsidiary to a high of \$9 billion on credit default swaps at Morgan Stanley. News coverage of trading losses tends to focus on their size; and it is this information that I present in Table One.

It should be noted that just four of the 15 firms were banks: Société Générale, JPMorgan Chase, Union Bank of Switzerland (UBS), and Deutsche Bank. The rest were non-banks. Two were investment banks (Morgan Stanley, which became a bank the year after the loss, and Barings Bank); two were hedge funds (Long Term Capital Management and Amaranth Advisors); and one was a local government (Orange County). Fully six of the 15 were manufacturing or petrochemical firms: Sumitomo Corporation (a Japanese diversified industrial conglomerate), Aracruz Cellulose (a Brazilian wood pulp processor), Kashima Oil (a Japanese oil refiner), CITIC Pacific (a Chinese diversified industrial conglomerate), Metallgesellschaft (a German manufacturer), and Showa Shell Sekiyu (a Japanese oil refining subsidiary of Shell).

Table One
Magnitude of Trading Losses
Absolute Losses 1990 - 2012

Name of Company	Type of Company	Year of Loss	Size of Loss (2011 Dollars)	Share of Total
(1)	(2)	(3)	(4) (Millions)	(5)
1. Morgan Stanley	Investment Bank	2007	\$ 9,605	16%
2. Société Générale	Bank	2008	7,546	13%
3. JP Morgan Chase	Bank	2012	7,500	13%
4. Amaranth Advisors LLC	Hedge Fund	2006	6,567	11%
5. Long Term Capital Management	Hedge Fund	1998	5,828	10%
6. Sumitomo Corporation	Manufacturer / Oil refiner	1996	3,544	6%
7. UBS	Bank	2011	2,300	4%
8. Aracruz Celulose	Manufacturer / Oil refiner	2008	2,224	4%
9. Orange County	Government	1994	2,127	4%
10. Kashima Oil	Manufacturer / Oil refiner	1994	2,127	4%
11. Barings Bank	Investment Bank	1995	2,028	3%
12. CITIC Pacific	Manufacturer / Oil refiner	2008	1,983	3%
13. Metallgesellschaft	Manufacturer / Oil refiner	1993	1,882	3%
14. Deutsche Bank	Bank	2008	1,879	3%
15. Showa Shell Sekiyu	Manufacturer / Oil refiner	1993	1,520	3%
			58,661	

Sources: Press reports, company annual and quarterly reports.

It is perhaps surprising that almost half the losses by individual traders were not at financial services firms but at the types of institutions that typically are thought to use financial products not for speculation but for hedging purposes with very little risk. However, in both the number of trading losses and the size of these losses, non-financial firms loom large. In terms of total losses, 26 percent occurred at manufacturing or petrochemical firms or local governments, and 74 percent occurred at financial services firms. Of this 74 percent, 33 percent of losses occurred at banks, 21 percent at hedge funds, and 20 percent at investment banks. The losses of non-financial firms tended to be smaller in absolute terms than the losses of financial services firms. Yet, it is quite clear that the trading problem is not limited to Wall Street or the City of London; Main Street firms are at risk of trading losses as well.

While the magnitude of these losses is staggering, some perspective is appropriate. Trading losses that risk eroding a firm's capital in its entirety are more important—to the institution, to other market participants, and (in the case of banks) to the federal deposit insurance fund or to taxpayers—than bigger losses at larger and better-capitalized firms. Other things being equal, a better-capitalized institution can sustain bigger trading losses, so it is less likely to fail and impose costs on counterparties, taxpayers, and (in the case of systemically important institutions) the financial system in general and perhaps on the economy as a whole.

Table Two
Magnitude of Trading Losses
Relative Losses 1990 - 2012

Name of Company	Size of Loss (2011 Dollars)	Loss as Share of		
		Percent of Assets	Percent of Equity	Percent of Tier 1 Capital
(1)	(Millions) (2)	(3)	(Percentage) (4)	(5)
1. Morgan Stanley	\$ 9,605	0.9%	28.8%	26.2%
1. Société Générale	7,546	0.4%	12.0%	15.4%
2. JP Morgan Chase	7,500	0.5%	6.1%	8.5%
3. Amaranth Advisors LLC	6,567	65.0%	260.0%	n/a
4. Long Term Capital Management	5,828	3.4%	93.6%	n/a
5. Sumitomo Corporation	3,544	5.2%	n/a	n/a
6. UBS	2,300	0.1%	3.8%	5.3%
7. Aracruz Celulose	2,224	19.1%	52.0%	n/a
8. Orange County	2,127	7.3%	19.7%	n/a
9. Kashima Oil	2,127	n/a	n/a	n/a
10. Barings Bank	2,028	n/a	298.7%	n/a
11. CITIC Pacific	1,983	16.8%	36.9%	n/a
12. Metallgesellschaft	1,882	13.0%	n/a	n/a
13. Deutsche Bank	1,879	0.1%	4.0%	3.9%
14. Showa Shell Sekiyu	1,520	13.2%	66.2%	n/a

Sources: Press reports, company annual and quarterly reports.

Table Two presents the same 15 trading losses from a different perspective. In addition to the absolute magnitude of the losses, they are presented relative to the total assets, equity, and—for banks—tier one (core) capital the institutions had at the time the losses were recognized. Both equity and tier one capital are measures of a firm's ability to absorb losses without being pushed into insolvency, which occurs when the value of a firm's total assets is less than the value of its total liabilities. When a firm has a large equity cushion, other things being equal, it is more able to absorb trading losses. Tier one capital essentially consists of equity and retained earnings less certain types of intangible assets. Regulators in the United States and abroad set capital adequacy standards based on tier one capital and monitor the ratio of a bank's tier one capital to total assets. Seen through this lens, the losses at banks appear less worrisome than those at non-banks.

Three of the 12 firms for which we have information about their equity suffered individual trading losses of at least \$1 billion nearly equal to or greater than their equity cushions. All three were non-banks (hedge funds Amaranth Advisors and LTCM and investment bank Barings Bank), and all three either failed or were bailed out. LTCM was bailed out by a government-arranged consortium of its trading counterparties, while Amaranth Advisors arranged a transaction whereby JPMorgan Chase and hedge fund Citadel Investment Group took over its energy portfolio and then liquidated

the rest of its holdings—a failure in form if not in name. Barings Bank—one of the UK’s oldest financial institutions at the time—was allowed to fail by the Bank of England, and administrators were called in to dispose of its assets.

All of the remaining firms for which we have information about their equity suffered losses smaller than their equity cushions. Four of the nine had losses of 25 percent or more of equity, and two had losses between 10 percent and 25 percent of equity. All four institutions with losses of 25 percent or more of equity were non-banks: Showa Shell Sekiyu, Morgan Stanley, Aracruz Celulose, and CITIC Pacific. All survived, however, with the possible exception of Japanese oil refiner Showa Shell Sekiyu, although each was forced to seek additional funding from outside investors to rebuild its capital or to seek capital from its parent corporation.

Of the two institutions with losses between 10 percent and 25 percent—Orange County and Société Générale—one failed. Orange County suffered bankruptcy despite the fact that its counterparty in the ill-fated trades—Merrill Lynch—loaned Orange County \$2 billion of a \$2.5 billion credit line after the losses. Société Générale was the only bank to suffer an individual trading loss of this magnitude relative to its capital, and it increased its capital by some 5.5 billion euros (more than \$8 billion) after the discovery of the losses by issuing additional rights to stockholders at a steep discount to the market price.

The remaining three institutions—JPMorgan Chase, UBS, and Deutsche Bank—suffered losses of less than 10 percent of equity. JPMorgan Chase’s losses, while vast, were not large enough relative to its equity cushion to present a solvency problem and did not compel the bank to raise additional capital. Similarly, the huge losses at UBS were substantially less than its equity capital and presented no solvency problem for the Swiss banking giant. Thus, while the Swiss Financial Market Supervisory Authority (in conjunction with the U.K.’s Financial Services Authority) initiated formal administrative enforcement proceedings against UBS in February, the focus was on “assess[ing] ... the adequacy of the controls that were in place to prevent and detect unauthorized trading,” and UBS has not been required to raise additional capital. Deutsche Bank’s losses also presented no solvency problems and did not require it to raise additional capital. In addition, the “tier [one] capital ratio [to risk weighted total assets] of the bank has remained at over 10%” in 2008, according to its financial statements. As with UBS and JPMorgan Chase, the losses primarily presented an earnings problem for the bank, which lost 5.7 billion euros in 2008 before taxes (about \$8.4 billion).

Table Three compares the relative magnitude of the individual trading losses identified at particular types of firms to the relative magnitude of losses in general for the period 1990–2012. It is no surprise that the banks’ losses, accounting for 0.2 percent of total assets and 5.3 percent of their equity, posed relatively little risk to solvency. Investment banks are considerably riskier with losses equal to 0.9 percent of total assets and 34 percent of equity. This suggests that the leverage of the investment banks experiencing losses between 1990 and 2012 was considerably higher than that of the banks with losses over the same period.

It may surprise critics of the financial services industry that the next most risky firms in terms of solvency are manufacturing and petrochemical firms—firms that typically are end-users of derivatives and other financial products. However, this class of institutions experienced average losses of 9.5 percent of total assets and 47.9 percent of equity. Unlike investment banks that lost money, the issue is not clearly one of leverage, but of the size of the losses relative to both total assets and equity of the firms. Finally, the most risky are hedge funds, which experienced losses equal to 7 percent of total assets and 140 percent of equity. The issues would appear to be largely one of debt for LTCM, which was leveraged about 25 times, and one of the size of losses relative to total assets for Amaranth Advisors, which was leveraged just four times.

Table Three
Magnitude of Trading Losses
Relative Losses 1990 - 2012

	Size of Loss (2011 Dollars)	Share of Total Losses	Losses as Share of	
			Total Assets	Net Equity
	(Millions)			
Bank	\$ 19,225	33%	0.2%	6.5%
Hedge Fund	12,395	21%	6.8%	141.6%
Investment Bank	11,633	20%	0.9%	34.2%
Manufacturer / Oil refiner	13,281	23%	9.5%	47.9%
Government	2,127	4%	7.3%	19.7%
Total	\$ 58,661	100%	0.6%	14.2%

Sources: Press reports, company annual and quarterly reports.

Table Three should give pause to those who believe the Volcker Rule will enhance our country’s financial stability. Trading appears to be less risky when carried out at banks than at non-banks. The important point of this exercise, however, is that one should not focus on trading losses per se, but on potential trading losses relative to equity capital, which reflects a firm’s ability to absorb losses. Excessively leveraged firms are clearly less able to absorb trading losses—or any losses, for that matter. Moreover, some large trading losses did occur during the financial crisis, but mortgages

based on poor lending and underwriting quality were largely to blame rather than the trading itself. And the most leveraged firms suffering these losses were in the greatest jeopardy of insolvency.

The focus of regulation should therefore be on ensuring that banking entities have sufficient capital commensurate with their risk, not on separating some investment bank activities from commercial banking.

Furthermore, as noted earlier, proprietary trading per se was in no way the cause of the last financial crisis, nor was it the cause of any financial crisis in the United States or abroad of which I am aware. The more regulators prohibit or limit banking activities, the more they may create incentives for these activities to move to non-banking firms. In addition, such regulations may make banks less profitable and more willing to engage in other more risky activities. This may well have the effect of making banks less sound and decreasing overall financial stability.

In conclusion, I see very little, if any, upside to the Volcker Rule, but substantial costs to markets, businesses, and investors. That the rule is well-intentioned and banks may survive it is not the issue. The issue is whether the benefits exceed the costs. There is no evidence that this is the case, and my reading of the evidence is to the contrary. It is therefore difficult to justify such a major organizational change in banking.