

Regulating OTC Derivatives for Financial System Development, Financial Institutions Stability, and Financial Innovation

by

Dr. Joseph R. Mason

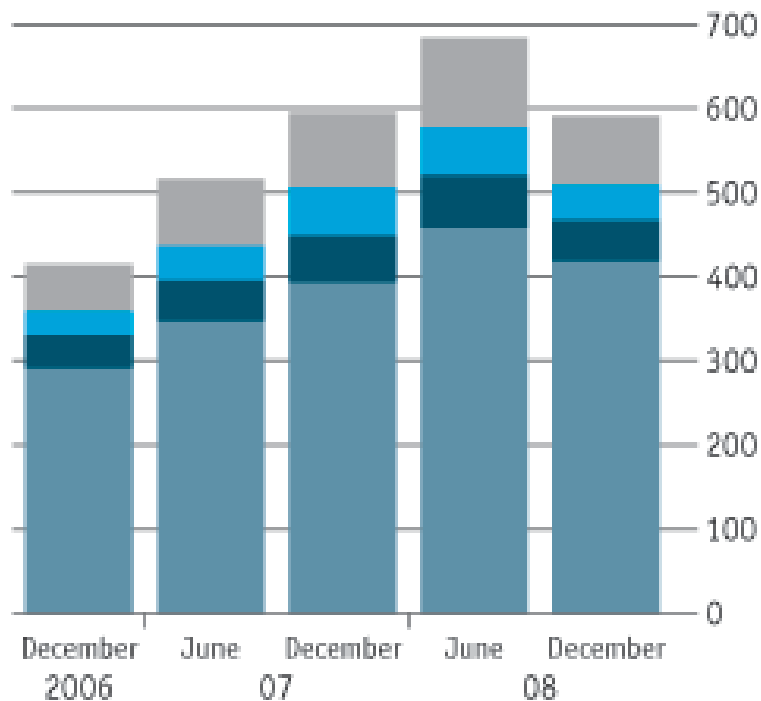
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Global OTC derivatives

Notional amounts outstanding, by type, \$trn



Source: Bank for International Settlements

“...counterparty risk is theoretically present in all asset classes: FX derivatives, interest-rate swaps, OTC equity derivatives, and credit derivatives.” (Barclays, Feb 2008)

Counterparty Risk

- **Liability exposure:** Gross negative value of contracts minus all legally enforceable bilateral netting agreements & assigned cash collateral. Thus if X fails at T_0 , the liability exposure is the counterparty risk to the financial system at T_0

OTC Counterparty Risk

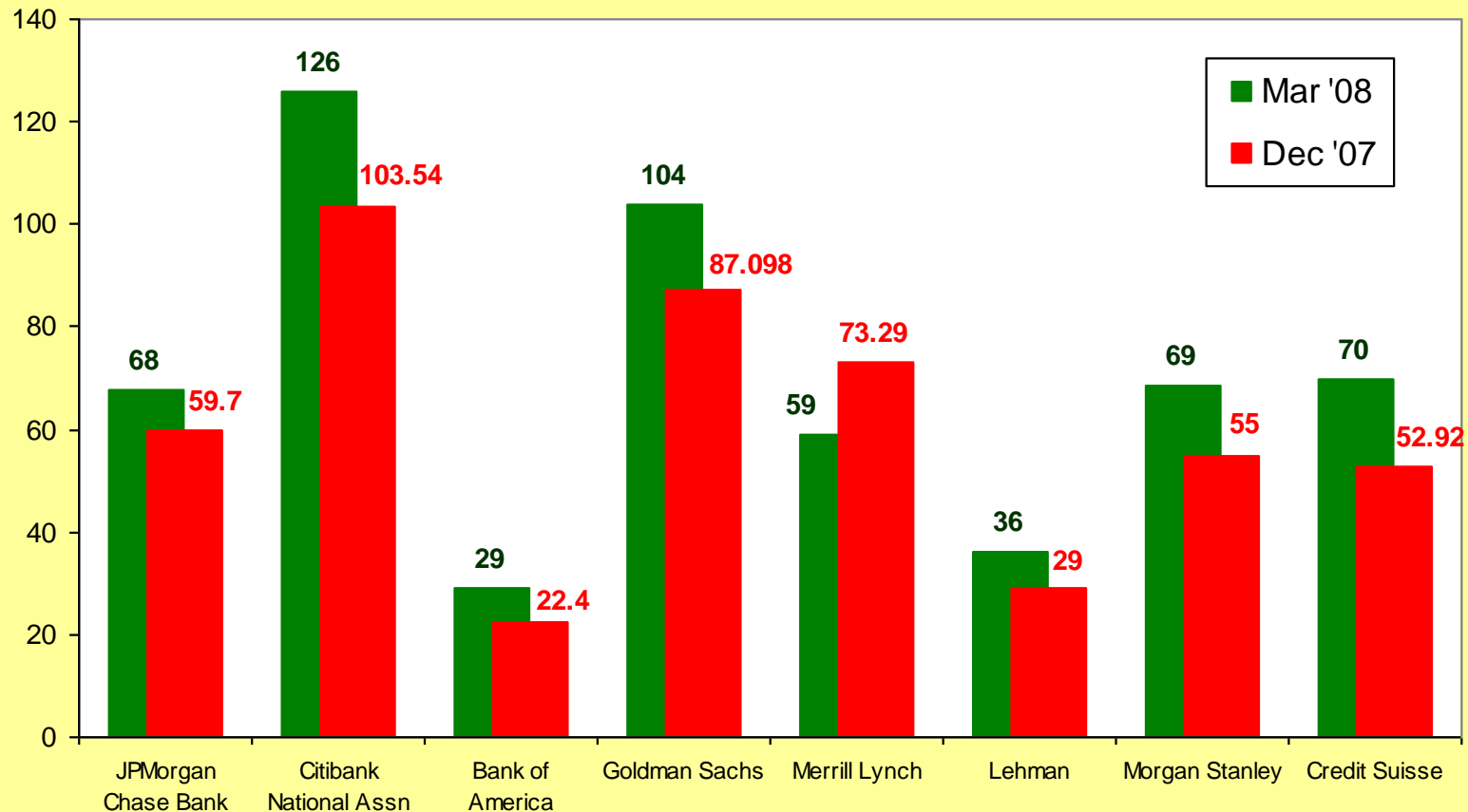
- FX contracts: \$1.8 trillion
- Interest rate contracts: \$7.1 trillion
- Equity-linked contracts: \$1.12 trillion
- Commodity contracts: \$753 billion
- CDS contracts: \$2.0 trillion

Source: BIS OTC Derivatives Survey, May 2008 (gross market values before netting and before cash collateral)

OTC Counterparty Risk

- BIS's global OTC derivative survey (of 60 banks, non-financials and dealers) shows a \$3.2 trillion netted counterparty positions, including counterparty assets and liabilities.
- These could be lower if cash collateral is deducted.
- Because BIS is the largest sample, netted counterparty liabilities in aggregate should not be very different from netted counterparty assets.
- So \$1.6 trillion is assumed to be the netted counterparty liabilities. (...and even lower if cash collateral was reduced. BIS study does not do this.)

Counterparty Liabilities

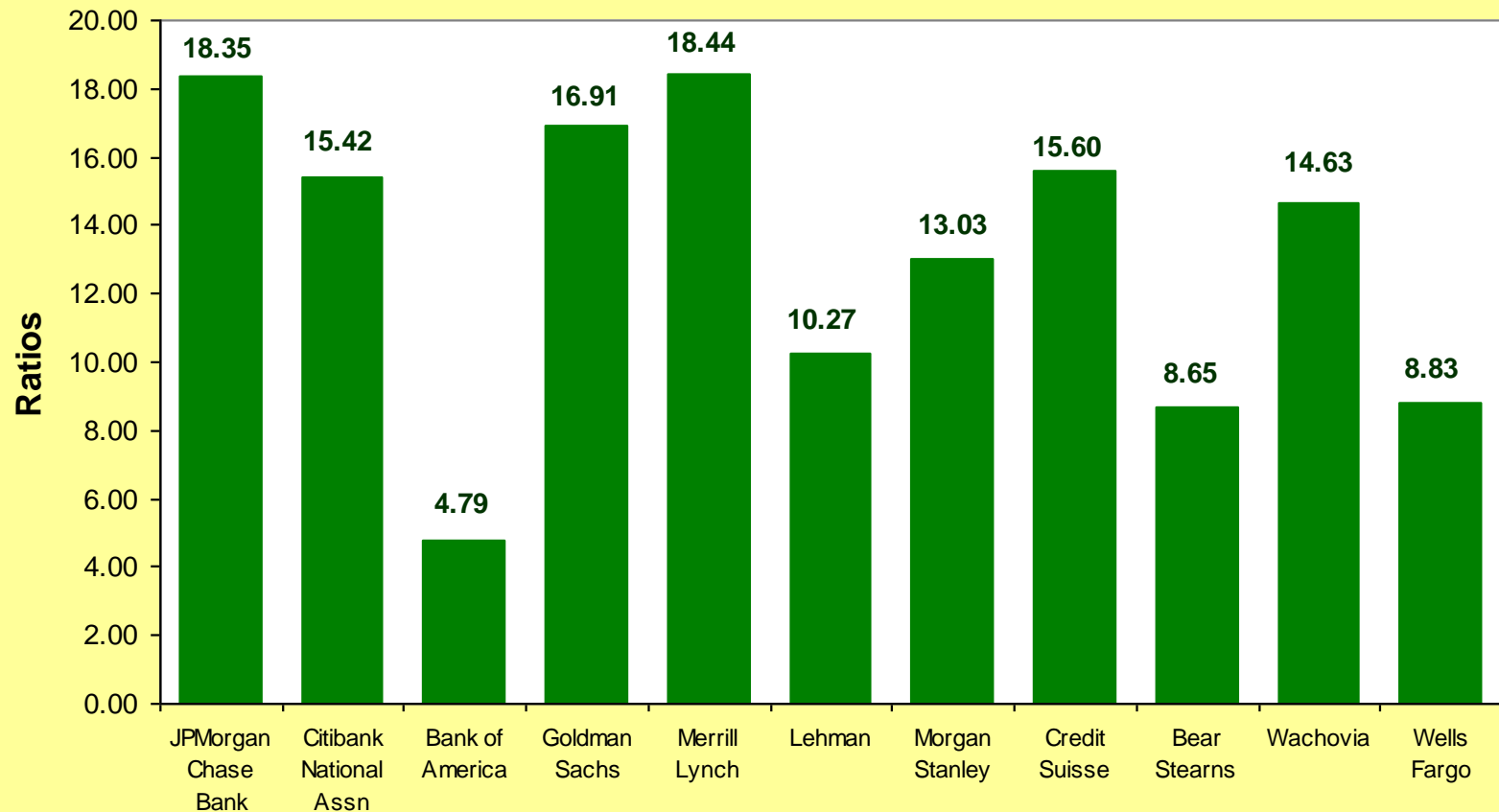


sources: 10Q reports, Call Reports from FDIC and staff estimates in a couple of cases.

For Credit suisse March 31 exchange rate CHF 1= \$1.132.

Source: Segoviano and Singh, IMF WP 08/258. Data from 10Q filings, Call reports, ISDA, OCC, BIS and conversations with investor relations of the banks/primary dealers and ex-traders in the sample.

Counterparty Risk/Current Assets (March '08)



sources: 10Q reports, Call Reports from FDIC and staff estimates in a couple of cases.

For Credit suisse March 31 exchange rate CHF 1= \$1.132.

What is CP Risk?

- Market Risk
- Credit Risk
- Interest Rate Risk
- FX Risk
- Operational Risk
- Liquidity Risk
- Brand Risk
- Reputational Risk
- Sovereign Risk
- Regulatory Risk
- Weather Risk
- Catastrophic Risk
- Technology Risk
- Fraud Risk
- Political Risk
- Interactions

Systemic Risk

Functional View of Regulation

Transparent			Translucent			Opaque	
Gov't Bond Market	Stock Market	Futures and Options Markets	Unit Trusts	Mutual Funds	Pension funds	Finance Companies	Insurance Companies Commercial Banks

Financial Markets

• **Asymmetric information** between investors and firm low

- Sophisticated investors don't need third party monitor
- Monitoring information must be communicated to each investor: complex
- Regulation to ensure **transparency**
- Minimal regulation provides efficient, if harsh, incentives
- ***Seasoned Firms**

Financial Institutions

- **Asymmetric information** between investors and firm high: Intermediary may have other sources of information, such as deposit or payment relationships
- Acts as **delegated monitor** for unsophisticated investors
- Monitoring information need only be communicated to institution: simple
- Regulation to ensure **safety and soundness** and protect unsophisticated investor
- Regulation such as deposit insurance may breed **moral hazard**
- ***Unseasoned Firms**

Functional View of Regulation

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Three Areas of Importance:

- Development (Pecking Order or APR)
- Innovation
- Stability

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Innovations:

- Assets
- Liabilities

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Ignore Innovation at your Peril:

- Great Depression
- Thrift Crisis
- Today

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Manage the Process:

- Protect *Regulated* Intermediaries
- Foster Maturity
- Create Next Generation

Functional View of Regulation

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Today's Asymmetric Information:

- Used Wrong Structures
- No True Sale/Risk Transfer
- Other Perverse Incentives

Does Recourse Violate GAAP?

- Many understand that recourse violates the spirit, if not the word, of GAAP and FASB 140.

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Asset Sales Report

March 31, 1997

SECTION: Vol. 11; No. 13; Pg. 1

LENGTH: 482 words

HEADLINE: Will Sales Treatment Survive A Recession?

BODY:

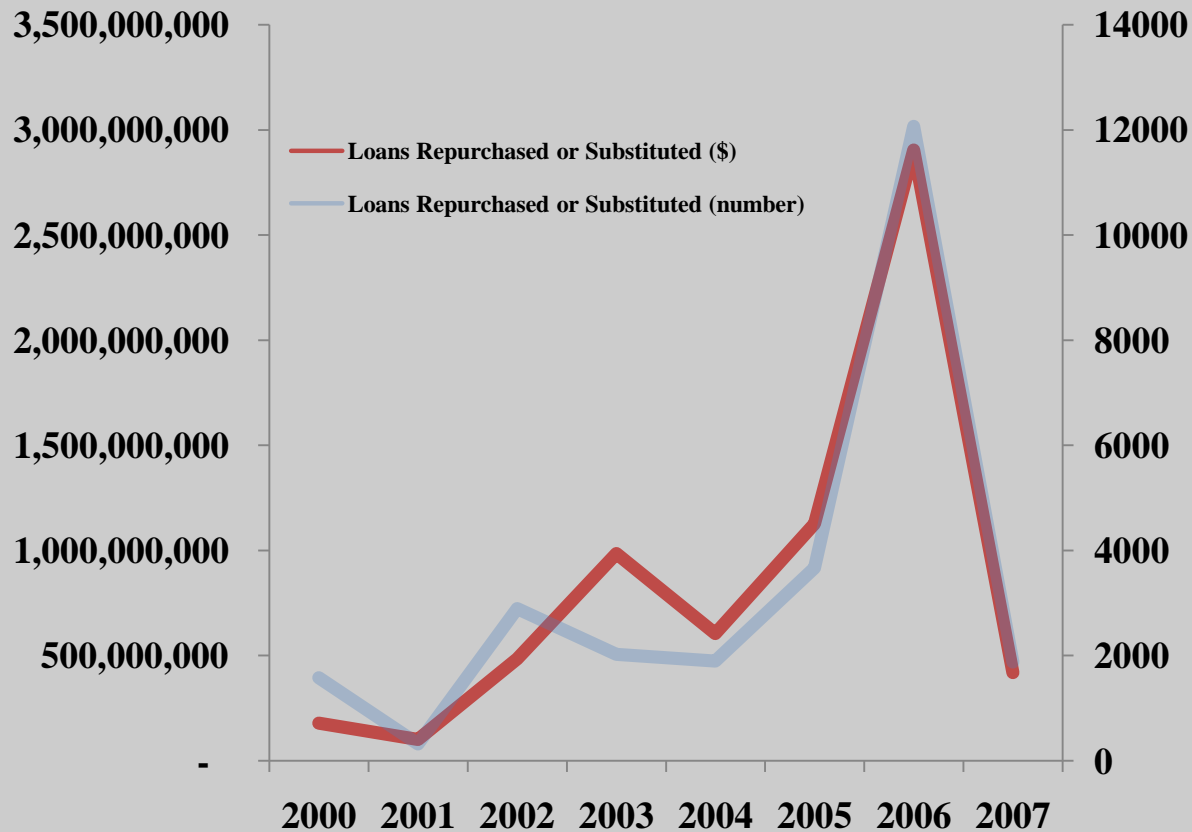
In light of BancOne's recent high credit card chargeoffs and subsequent decision to boost credit enhancement in its securitized pools, Lawrence W. Cohn, a senior vice president of equity research at PaineWebber, said in his March research report that sales treatment for securitization may not survive the next recession. What follows is an excerpt.

We have long been of the opinion that credit card securitizations are financing mechanisms rather than bona fide sales of assets...We certainly have no problem with banks using the securitization markets as a source of funding. But pretending that the assets have really been sold is another matter. Banks want sales treatment because they don't have to put up capital against securitized assets, and they don't have to post loss reserves either. But clearly the risks of ownership have not passed to buyers of securitized paper. In theory, every securitization is supposed to stand on its own. The issuer puts up sufficient excess receivables or in some other fashion enhances the pool as to garner investor confidence. In fact, if buyers and sellers miscalculate, the seller has always made up the difference rather than expose the buyers to risk. Thus, the putative seller in fact passes on none of the risks of ownership.

We don't know how long the fiction of sales treatment will last. BancOne's prolonged discussions with regulators indicate to us that the regulators are starting to think about these issues.

We are convinced that sales treatment of credit card securitizations will not survive the next recession. Historically, loss rates on cards have risen 50% to 100% in periods of recession. Virtually every existing credit card securitization will have to be significantly strengthened when that happens in order to avoid early amortization. We think accountants and regulators will be unable to maintain the sales fiction in the face of the massive support the issuers will be forced to undertake to protect the securitized pools.

So which banks (among those PaineWebber follows) are most exposed and what is the potential impact of losing sales treatment? Not surprising, we believe Citicorp, First Chicago and BancOne (pro forma for First USA) will be the most affected. For BankAmerica, Chase, First Union and Mellon, loss of sales treatment would have no significant impact. But the impact on BancOne, Citicorp, and First Chicago would be more substantial.



	Total \$ Amount	# of Loans	Avg Loan size	Rank (\$)
Countrywide	\$ 3,234,770,231.52	6,295	\$ 513,863.42	1
IndyMac	\$ 1,986,292,928.86	19,883	\$ 99,899.06	2
Greenwich Capital	\$ 965,036,312.72	4,958	\$ 194,642.26	3
Goldman Sachs	\$ 581,899,010.03	4,457	\$ 130,558.45	4
First Horizon	\$ 321,216,980.82	776	\$ 413,939.41	5

Office of the Comptroller of the Currency

Board of Governors of the Federal Reserve System

Interpretive Letter #988

July 28, 2003

April 2004

12 CFR 3

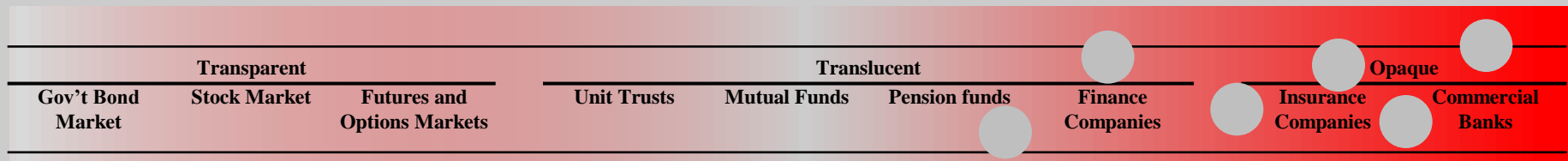
REVISED ANNEX

Minimum Conditions that Sponsoring Institutions Must Meet to Obtain the Synthetic Securitization Capital Treatment

Condition 1: Demonstration of Transfer of Virtually All of the Risk to Third Parties

Not all transactions structured as synthetic securitizations transfer the degree of credit risk needed to receive a reduced ~~20 percent~~ risk weight on the retained senior position. To demonstrate that a ~~transfer of virtually all of the~~ *risk transference* has been achieved, institutions must:

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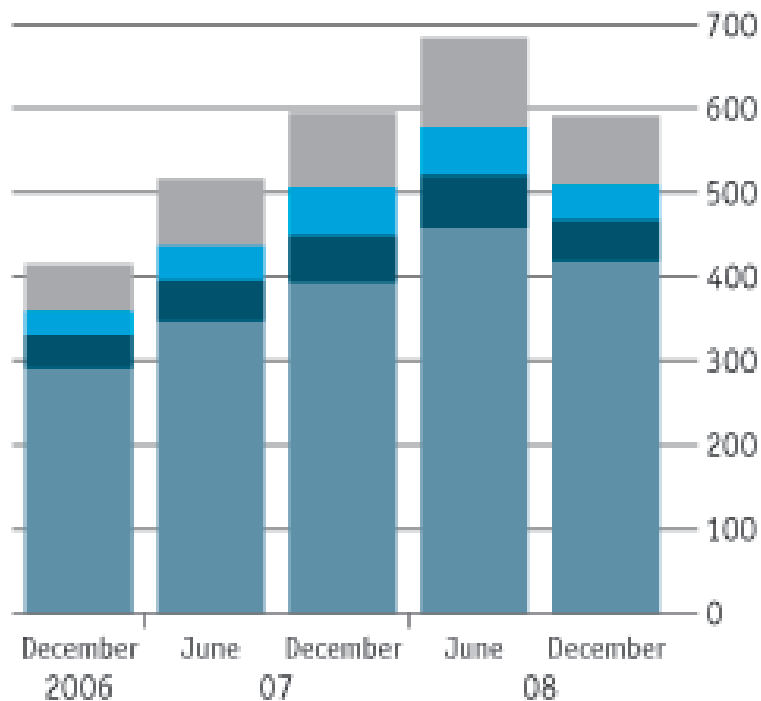
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Big Cost of Getting it Wrong:

- Asymmetric Information Crisis
- Insolvency, not Illiquidity
- Different from Bagehot's Rule

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