



After the Storm: Lasting Impact on Global Players

Ingo Walter

Crisis Legacies

- **Recapitalization**
- **Reregulation**
- **Risk management**
- **Reputation**
- **Reconfiguration**



Crisis Legacies

- **Recapitalization**

Write-downs & Credit Loss Reserves Announced by Intermediaries

(since June 2007 as at 16 September 2008)*

Citigroup*	\$ 54.6 billion	SocGen	5.8
Merrill Lynch	51.8 (sold)	Mizuho	5.6
UBS	43.0	Fortis	4.8
AIG**	35.8 (failed)	Goldman Sachs	4.2
Wachovia*	22.0	Fannie Mae (GSE)*	4.2 (failed)
Bank of America*	21.2	Canadian Imperial	4.1
HSBC*	19.5	Bear Stearns	3.2 (failed)
IKB	16.1	WestLB	2.8
Morgan Stanley	15.6	Freddie Mac (GSE)*	2.1 (failed)
RBS	15.5	Swiss Re	1.1
Washington Mutual*	14.8	Dresdner	0.8
Lehman Brothers	14.2 (failed)	BNP Paribas	0.9
JP Morgan*	15.8		
Wells Fargo	10.0	Total to 15.9.08	\$510 k
Credit Suisse	9.7	Total (IMF estimate)	\$1.2 trillion
Credit Agricole	8.4	(approx. 50% in fin. Intermediaries)	
Deutsche Bank	7.7		
BayernLB	6.7		
Barclays	6.0		

* Includes ABS writedowns and credit losses.

** Mainly losses on credit default swaps.

Data: Bloomberg, IMF Financial Stability Report, April 2008. Bank of England. Media reports.

Dilutive Capital Raising Announced by Intermediaries

(\$ billion since June 2007 as at 16 September 2008)*

Citigroup	\$ 49.1	Abu Dhabi, Kuwait, Singapore GIC, Market
Merrill Lynch	30.8	Temasek * (2x), Korea Investment Corp.
		(acquired for \$50 billion by BAC)
UBS	29.7	Singapore GIC, Saudi inv., rights issue
AIG	20.0	Market sale (failed - \$85 billion bailout)
Wachovia	11.0	Market sale
Bank of America	20.7	Market sale
HSBC	3.9	Market sale
IKB	13.3	Capital call
RBS	25.5	Rights issue
Washington Mutual	21.1	TPG & other investors
Morgan Stanley	5.6	China Investment Corp.
JP Morgan	7.9	Market sale of preferreds
Wells Fargo	4.1	Market sale
Credit Suisse	2.7	Qatar Investment Authority
Crédit Agricole	10.1	Rights issue
Lehman Brothers	13.9	Market sale – (Chapter 11 bankruptcy)
HBOS	4.0	Rights issue

* Initial \$4.4 billion invested in December 2007 at \$48/sh with reset clause resulting in \$2.2 billion ML rebate when \$900 million was purchased in July 2008 = \$7.5 billion holding as ML's largest investor.

The New Blockholders in Global Banking

- **Standard Chartered:** Singapore Temasek acquires 19% stake. (Jan 08).
 - **UBS AG:** Singapore GIC and unidentified Saudi investor purchase \$11.5 (12%) stake (Dec. 07).
 - **Morgan Stanley:** China Investment Corporation \$5 billion (9.9%) stake (Dec 07)
 - **Blackstone Group:** China Investment Corporation \$3 billion (10%) stake (May 07).
 - **Barclays:** China Development Bank acquires \$3 billion (3.1%) stake while Singapore Temasek buys \$2.0 billion (2.1%) stake. (July 2007).
 - **Canadian Imperial Bank:** Li Ka-Shing and Caisse de Dépôts du Quebec buy \$2.7 billion (6.1%) stake (Dec. 07).
 - **Bear Stearns:** Citic Securities Co. invests \$1 billion (6%) (Sept. 07).
 - **Fortis:** Ping An Insurance buys \$2.67 billion (4.2%) stake (Nov 07).
 - **Citigroup:** Abu Dhabi Investment Authority, Singapore GIC, Kuwait Investment Authority & co-investors inject \$22 billion for a 12.7% stake (Nov 07).
 - **Credit Suisse:** Qatar Investment Authority allocates \$15 billion for investment in global banks, notably Credit Suisse (April 2008).
-
- **Merrill Lynch:** Singapore Temasek, Korean Investment Corp, Kuwait Investment Authority and co-investors acquired \$12.2 billion (23%) stake. (Oct. 07).
Second recap took Temasek stake to 14% (August 2008).
Result: Severely diluted stakes in BAC.

Dismissed Executives, 2007-08*

Firm	Individual	Position
Citigroup	Chuck Prince	CEO
	Tom Maheras	Cap Mkts
	Michael Raynes	Struct fin head
	Nestor Dominguez	CDO head
Merrill Lynch	Stan O'Neil	CEO
	Ahmass Fakahany	Co-president
Morgan Stanley	Zoë Cruz	Co-president
UBS	Peter Wuffli	CEO
	Huw Jenkins	Inv bkg head
	Clive Standish	CFO
	Marcel Ospel	Chairman
HSBC	Bobby Mehta	US head
	Sandy Derickson	US retail head
	Edward Cahill	CDO head
Barclays Capital	Warren Spector	Co-president
Bear Stearns	Jimmy Cayne	CEO
	Kareem Serageldin	CDO head
Credit Suisse	Werner Schmidt	CEO
BayernLB	Nobuyuki Koga	CEO
Nomura Securities	Wachovia	CEO
G. Kennedy Thompson	Washington Mutual	Chairman
Kerry Killinger	AIG	CEO
Martin Sullivan		

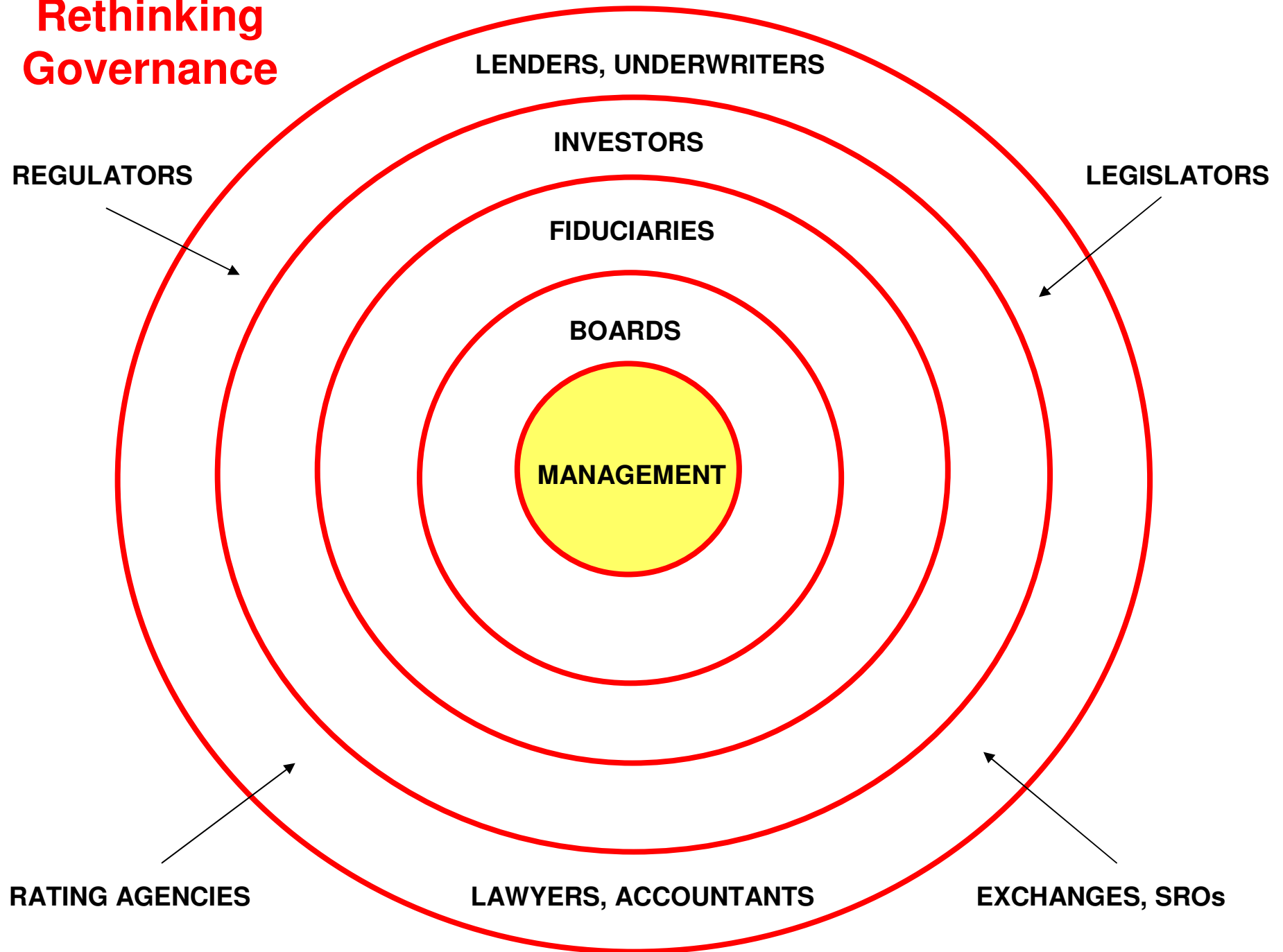
Rethinking the Compensation Model

- ✓ Compensation driven by “fake alpha.”
- ✓ Heads I win, tails you lose – and no givebacks.
- ✓ Incentive to maximize leverage & go-for-broke risk-taking.
- ✓ Compensation expense at US investment banks:

	Revenue	Compensation	Assets / Tangible
Equity			
2002	\$ 64 bil	\$31 bil (31.6%)	30:1
2007	\$110 bil	\$66 bil (60.0%)	41:1
- ✓ Shift to restricted stock & options, averaging 26% ownership stake at start of 2008.
- ✓ Severe losses for employees at Bear Stearns, Lehman Brothers, Merrill Lynch in dilution or firm failure.
- ✓ Discipline less compelling in universal banks & financial conglomerates.

Data: IIF, 2008.

Rethinking Governance



Crisis Legacies

- **Recapitalization**
- **Reregulation**

The Key Question:
**Did the big losers understand the
risks and take them knowingly?**

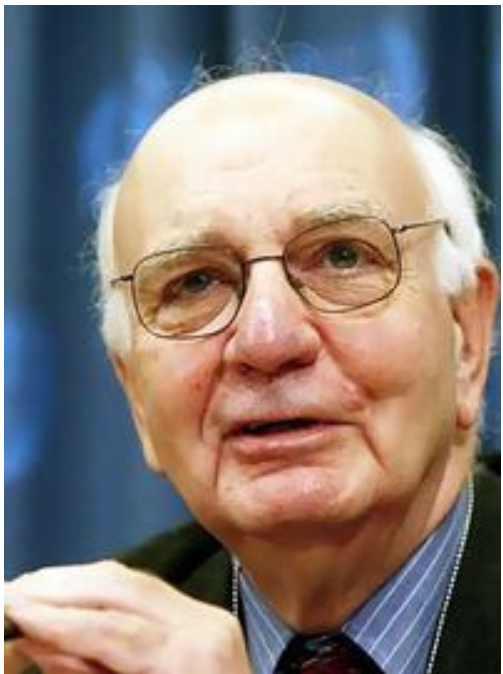
- **If not, then it's back to the drawing board on complexity in product design, financial innovation, and basic competence in risk management.**
- **If so, then there will be big changes in corporate governance, monitoring, supervision and regulation.**

Alternative Views on the Financial System



“Increasingly complex financial instruments have contributed to the development of a far more flexible, efficient and hence resilient financial system than the one that existed a quarter century ago.”

- Alan Greenspan, November 2005

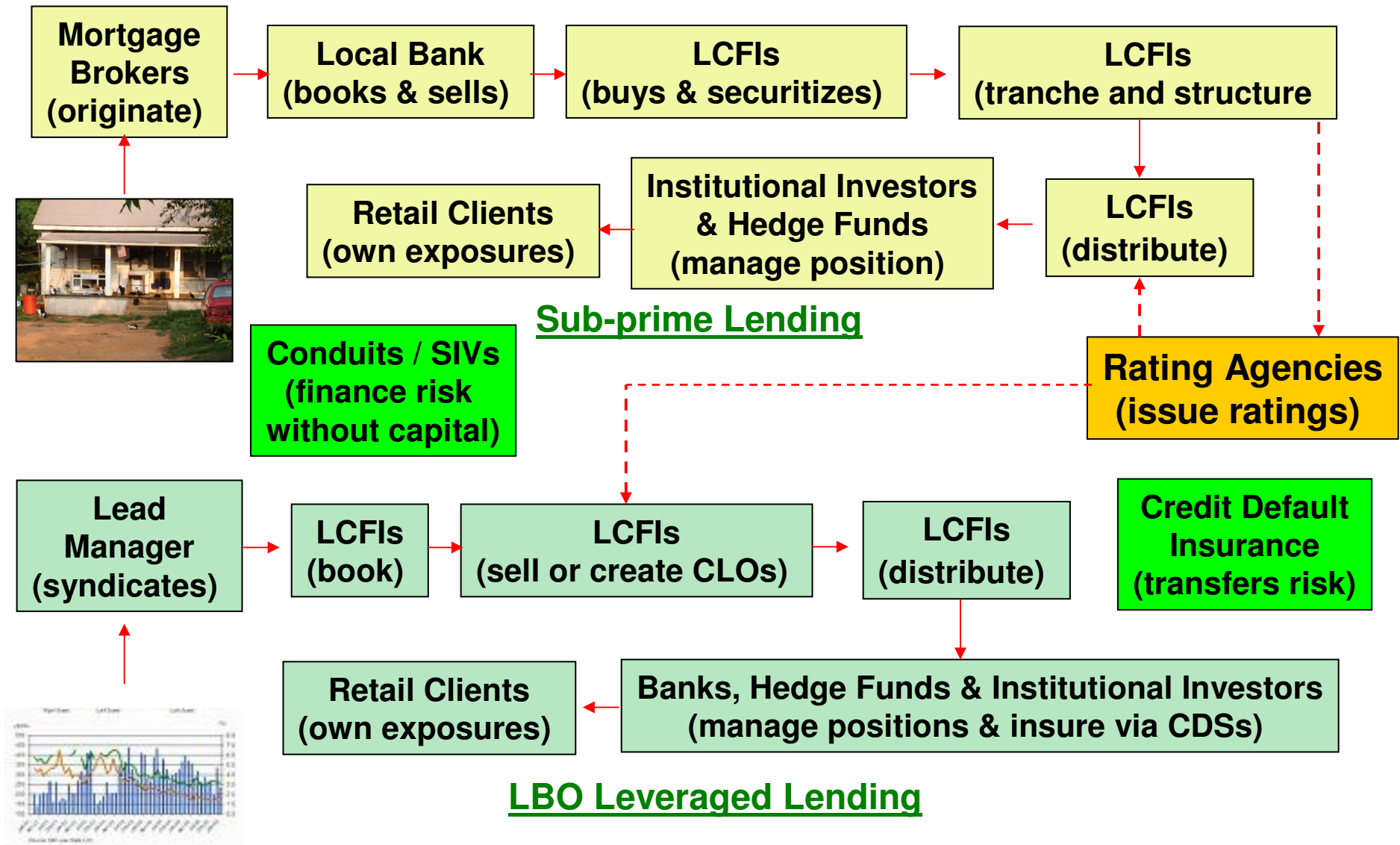


“The bright new financial system – for all its rich rewards and unimaginable wealth for some – has failed the test of the marketplace by repeatedly risking a cascading breakdown of the system as a whole.”

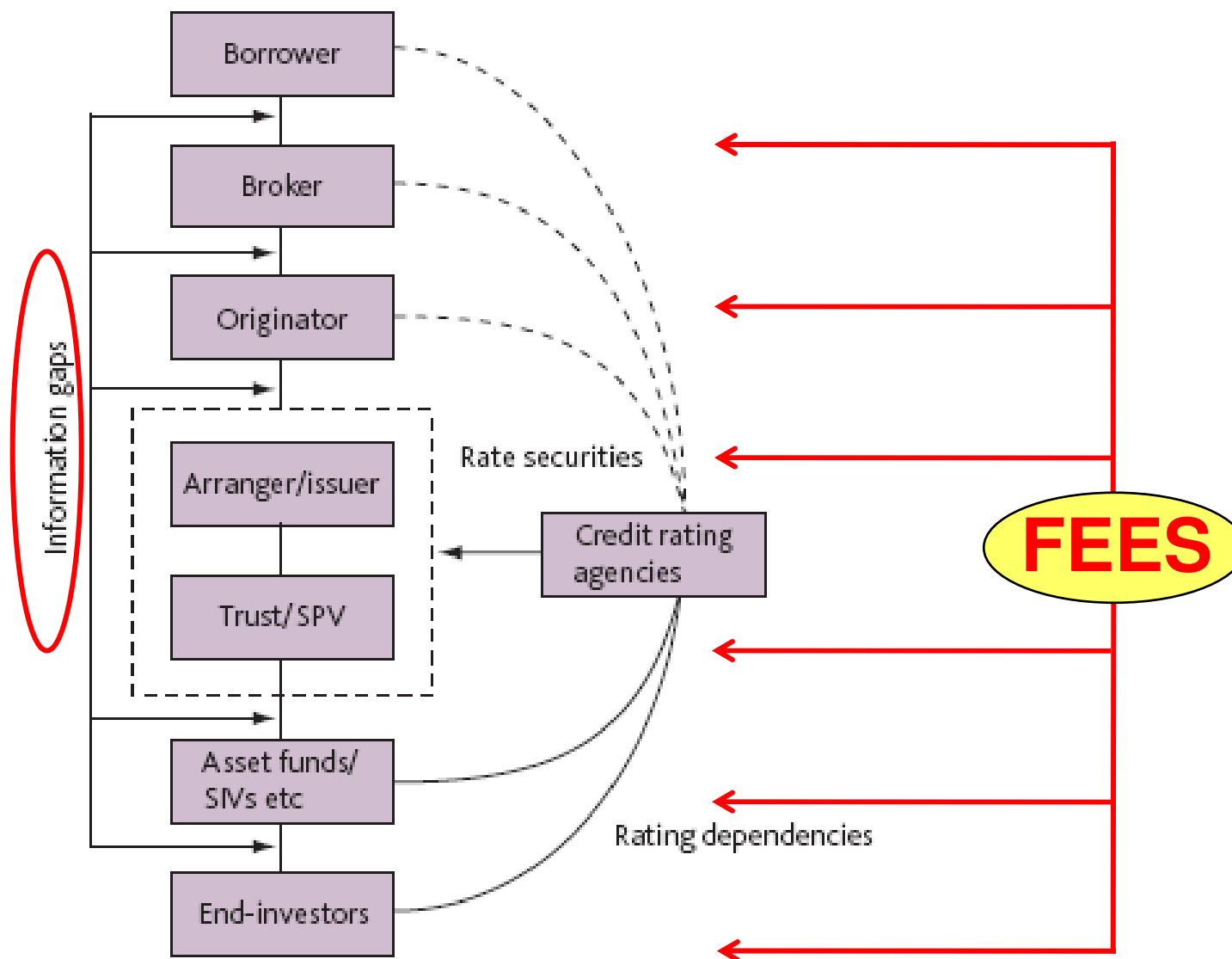
- Paul Volcker, April 2008

The Originate & Distribute Model

Separating Loan Assets from Lenders Ultimate Lenders

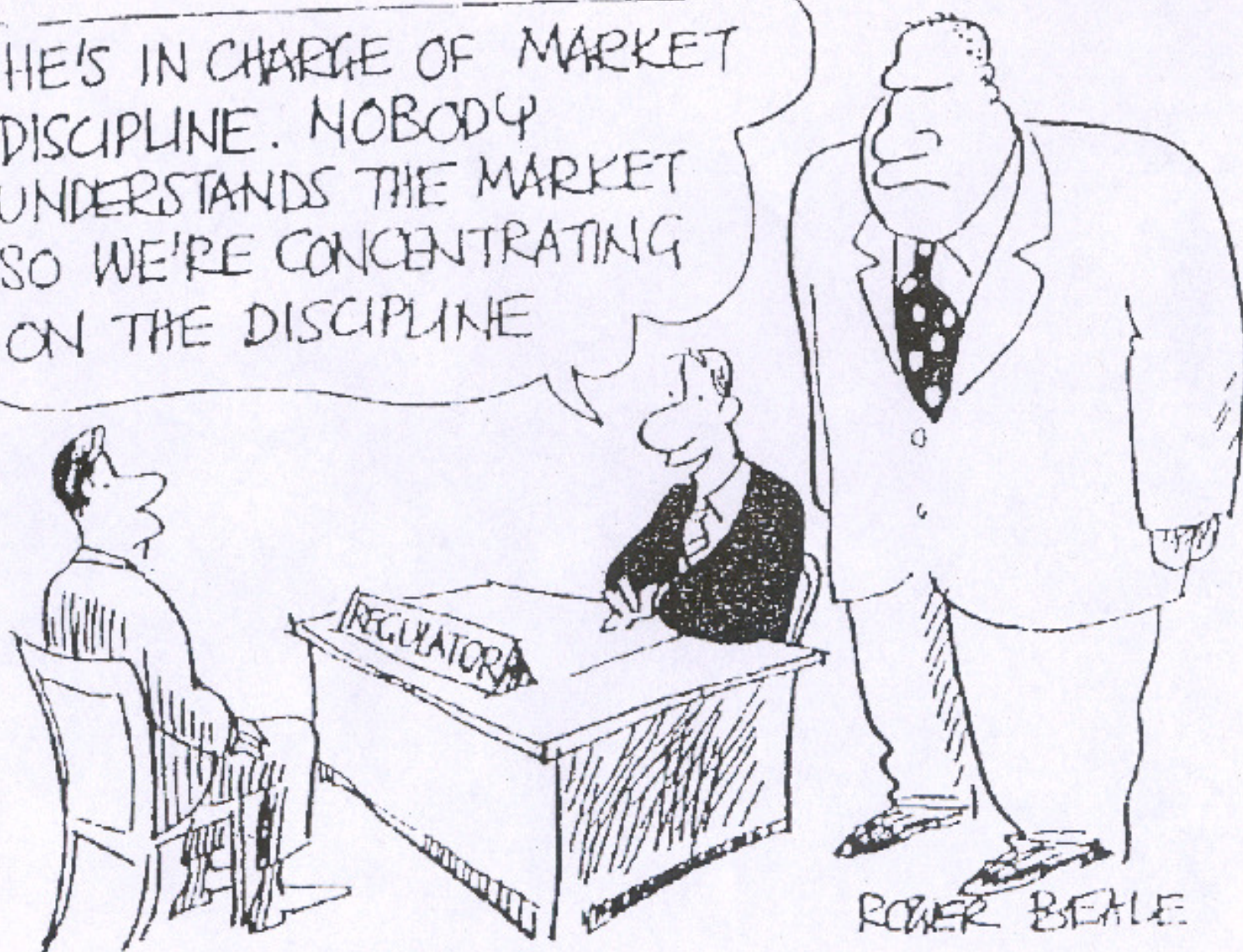


Incentive Structures in a Stylized Securitization Value-Chain



(a) For more detail on the roles of participants in structured finance markets see Committee on the Global Financial System (2005), *The role of ratings in structured finance: issues and implications*, January, available at www.bis.org/publ/cgfs23.htm.

HE'S IN CHARGE OF MARKET
DISCIPLINE. NOBODY
UNDERSTANDS THE MARKET
SO WE'RE CONCENTRATING
ON THE DISCIPLINE



ROVER BEALE

Self-regulation: International Institute of Finance - April 2008



IIF consensus on financial industry weaknesses:

- ✓ **Poor risk management & lack of common sense.**
- ✓ **Massive overreliance on flawed models.**
- ✓ **Inadequate stress-testing of portfolios.**
- ✓ **Recurring conflicts of interest.**
- ✓ **Inadequate concerns about liquidity risk (members ignored previous IIF liquidity recommendations).**
- ✓ **Irrational compensation practices not linked to long-term profitability.**
- ✓ **Public perception of the industry: “Clever crooks and greedy fools.”**

“We must clean our houses first and not leave it to the regulators.”

Self-regulation: The Corrigan III Proposals, August 2008

(supported by all major wholesale firms)

- ✓ **Shift more assets on the balance sheet via consolidated accounting.**
- ✓ **Tighten rules for marketing complex instruments, excluding all but the most sophisticated individual investors.**
- ✓ **Redefine QIBs, possibly excluding of some pension funds and other institutional investors.**
- ✓ **New clearinghouse for CDSs (\$62 trillion outstanding), including same-day settlement, to be created by end-2008.**
- ✓ **Hardwired close-out settlement for CDS and other derivatives.**
- ✓ **Annual meetings between regulators and bank boards of large financial firms to discuss risk management.**
- ✓ **Streamlined internal estimation of market and credit risk exposures across all counterparties.**
- ✓ **Tougher tests for firm liquidity.**
- ✓ **Rethink stress-testing and conduct of reverse stress-tests to identify contagion issues.**

Possible impact: Significant implementation costs & could trigger further wholesale banking industry consolidation.

Regulation of Asset Origination – Federal Reserve Regulation Z

(as amended July 2008)

- Prohibits unfair, abusive or deceptive home mortgage lending practices and establishes advertising standards and requires full mortgage disclosures.
- Apply to all mortgage lenders, not just those supervised and examined by the Fed and level the playing field for lenders and increase competition in the mortgage market.
- Prohibit a lender from making a loan without regard to borrowers' ability to repay the loan from income and assets other than the home's value.
- Require creditors to verify the income and assets they rely upon to determine repayment ability.
- Ban any prepayment penalty if the payment can change in the initial four years. Prepayment penalty period cannot last for more than two years on other loans.
- Require creditors to establish escrow accounts for property taxes and homeowner's insurance for all first-lien mortgage loans.
- Creditors and mortgage brokers are prohibited from coercing a real estate appraiser to misstate a home's value.
- Companies that service mortgage loans are prohibited from pyramiding late fees.
- Creditors must provide a good faith estimate of the loan costs, including a schedule of payments, within three days after a consumer applies for any mortgage loan secured by a consumer's principal dwelling.
- Bans seven deceptive or misleading advertising practices, including representing that a rate or payment is "fixed" when it can change.
- Definition of "higher-priced mortgage loans" captures virtually all loans in the subprime market, but generally exclude loans in the prime market.
- The new rules take effect on October 1, 2009.

Not included: Mandatory loan retention by initial lending bank.

Regulatory Pressure on Ratings Agencies & Investors

- **S&P, Moody's and Fitch – pressure to separate ratings & advisory businesses and tough code of conduct – new SEC rules and NRSRO certification applied in September 2007.**
- **Efforts by agencies to create liquidity/volatility risk ratings.**
- **Hedge fund and private equity transparency pressure, including preemptive codes of conduct.**
- **Review of reliance on prime brokers for hedge fund monitoring.**
- **Limiting mutual funds to exchange-traded paper.**
- **Review of defined benefit pension asset allocation rules.**
- **Greater coordination among banking, securities, insurance and pension fund regulators worldwide.**

Regulatory Pressure on Financial Intermediaries

- Pro-cyclicality of Basel II - to be reexamined
- Review of reliance on proprietary risk assessment under Basel II in view of massive failure of basic risk models.
 - > Disclosure and tracking of market risk exposures & overall leverage ratios.
 - > More intensive tracking of bank liquidity risk exposures.
- New capital/liquidity/leverage requirements for banks and large broker-dealers.
 - > Imposed by national regulators (US, Switzerland, etc.) on Tier 1 and Tier 2 capital.
 - > BIS Incremental Risk Charge (IRC) on trading book to align with loan book and provide for illiquidity.
 - > Mandatory stress-testing of liquidity adequacy for all investment banks.
 - > Prevent regulatory arbitrage by funding long-term illiquid assets on trading book.
 - > Extending VaR calculation from 10 days to 1 year.
 - > Application of gross leverage ratios to capture market/liquidity risk exposures.
- Sharper focus on off-balance sheet exposures and risk-boundaries of financial firms.
 - > Increased capital requirements for off balance sheet vehicles, as proposed by BIS (16 April 2008).
 - > Tighter accounting and disclosure rules for off balance sheet exposures proposed by IASB April 2008.
- “Common template” disclosure (as in sovereign debt in the 1980s)
- Greater transparency and standardization required for structured products and credit derivatives (possible movement onto exchanges to improve transparency and eliminate counterparty risk).
- Mandatory retention of equity tranche by asset securitization underwriters and/or required issuance of uninsured subordinated long-term debt.

Rethinking the Entire Regulatory Architecture: US Example

Prudential Fin. Regulatory Agency

- Absorbs regulatory and monitoring functions of the Fed, FDIC, OCC, and OTS for all intermediaries subject to explicit government guarantees.

Market Stability Regulator

- Fed to monitor systemic threats in Banks, broker-dealers, insurance companies, hedge funds, etc.
- Intervention only if stability is threatened.

Corporate Finance Regulator

- Replaces SEC in corp. disclosure regulation, governance, accounting oversight, etc.

Conduct of Business Reg. Agency

- Absorbs regulatory and monitoring functions SEC and CFTC plus some Fed, FTC and state insurance regulatory functions.

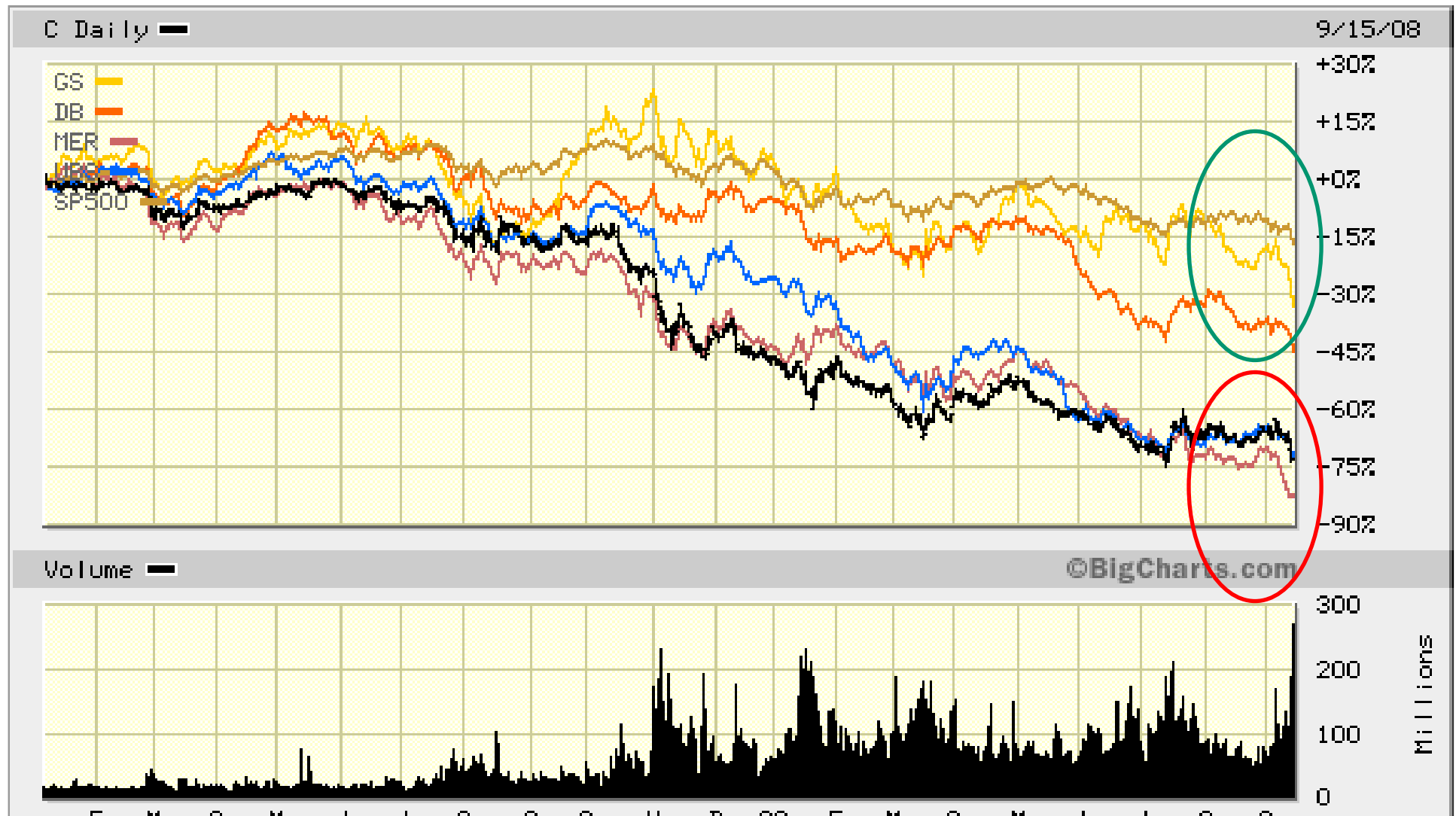
Federal Insurance Guarantee Corp.

- Replaces FDIC and adds insurance guarantee function.

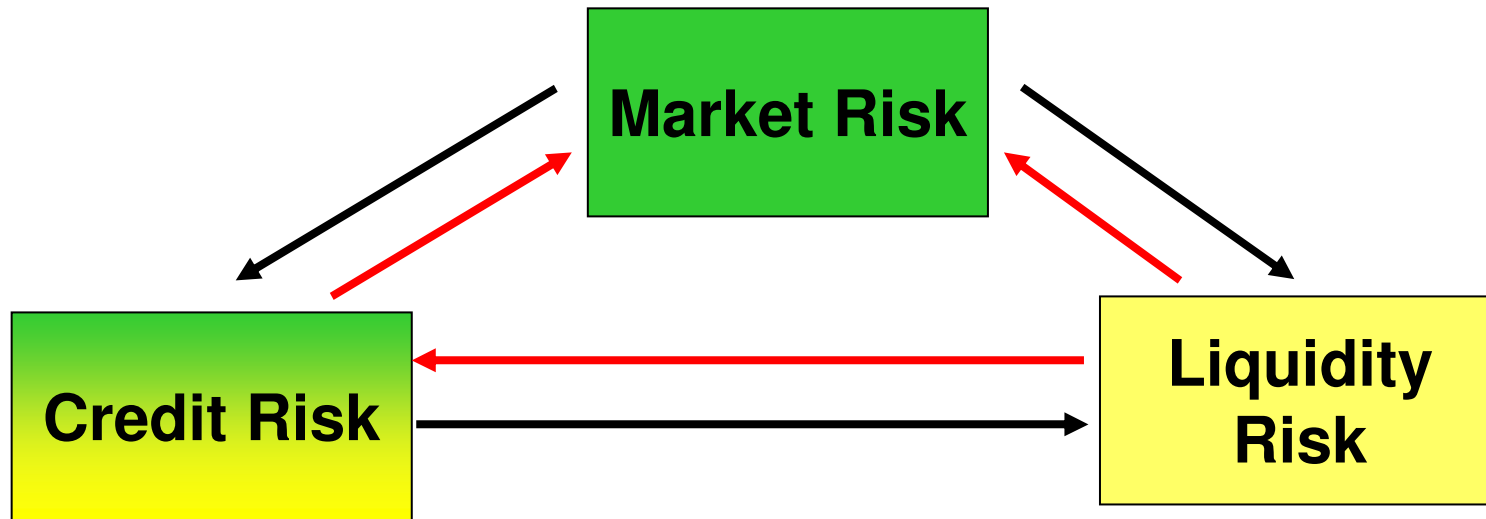
Crisis Legacies

- Recapitalization
- Reregulation
- **Risk management**

Share Prices of Major Wholesale Banks, 2007-08



Domain Linkage Example: Sub-prime, HLT, SIVs and All That



Domain linkages – the Achilles heel?

Data?

Metrics?

Correlations?

VAR application?

RAROC/Return application?

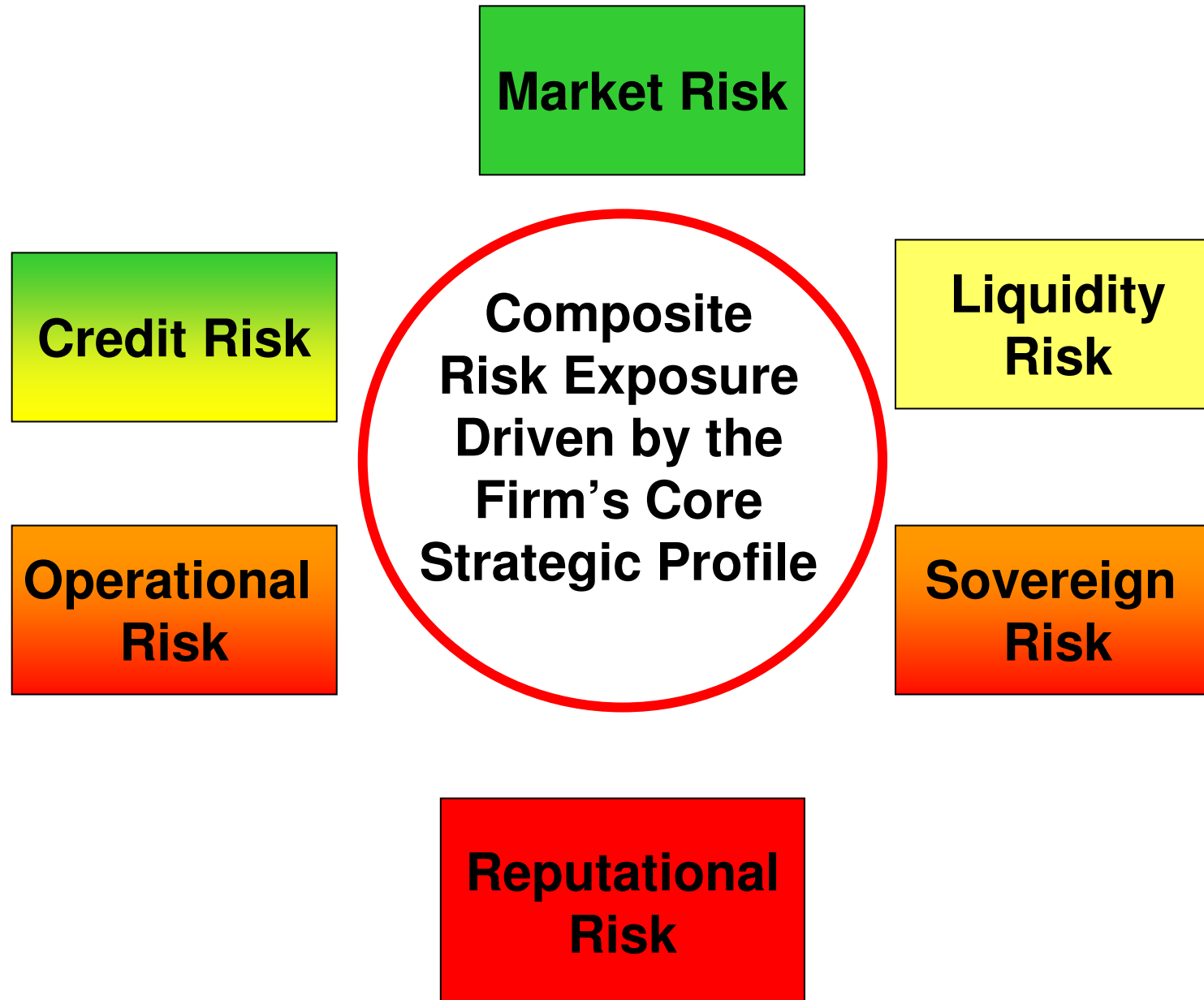


Did the Biggest Players Take the Biggest Hits?

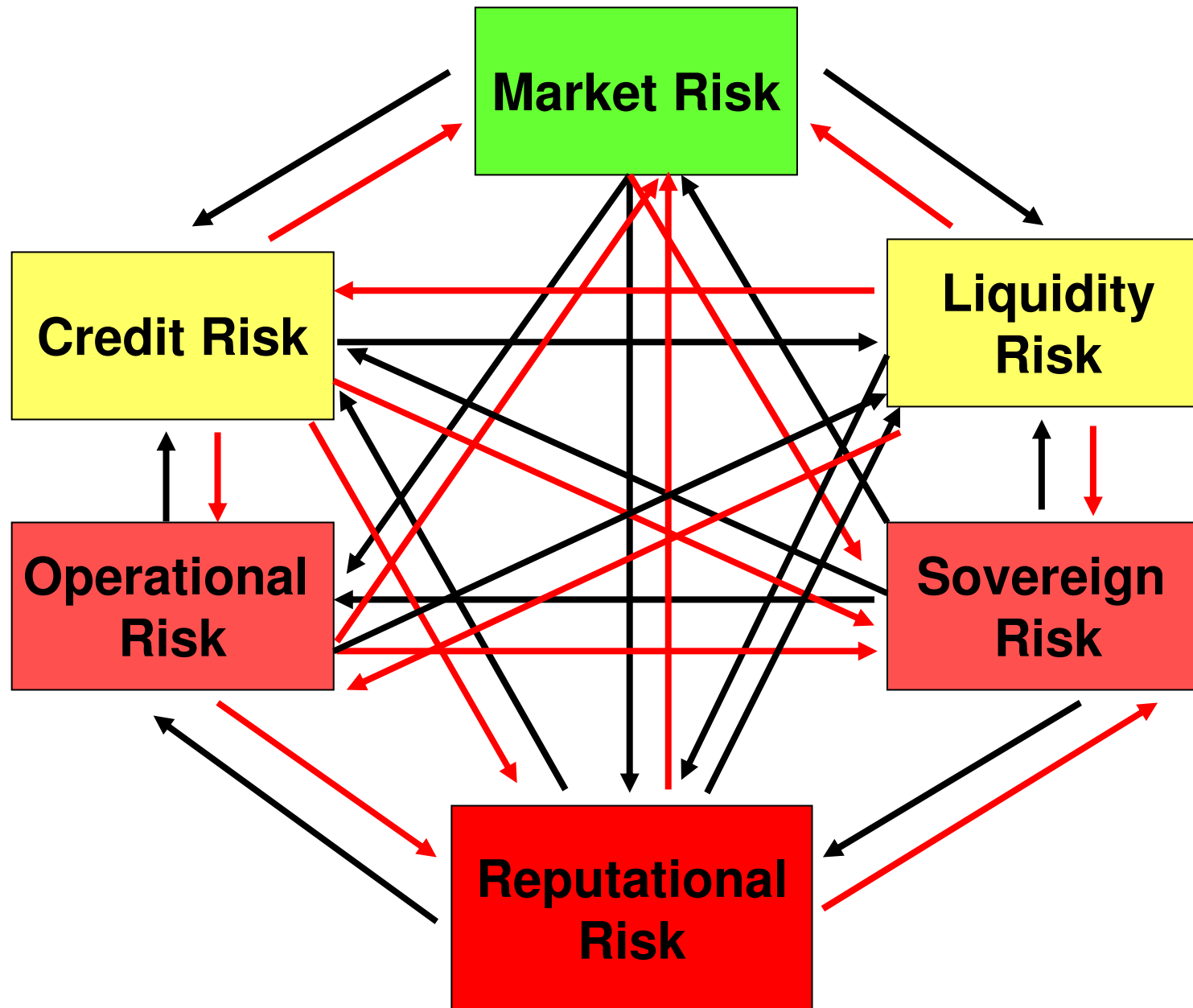
	Writeoff ¹	Rank	GD ²	Rank	Total ³	Rank
Citigroup*	54.6	1	1702	1	7503	1
JP Morgan*	15.8	6	1316	3	7452	2
Goldman Sachs	4.2	12	856	10	5991	3
Morgan Stanley	14.4	7	1087	5	5395	4
Merrill Lynch	51.8	2	1069	6	4571	5
Deutsche Bank	7.7	10	1412	2	4463	6
UBS	43	3	907	9	4201	7
Credit Suisse	9.7	8	1056	7	4096	8
Lehman Brothers	8.2	9	1172	4	3935	9
Bank of America*	21.2	4	853	11	3074	10
BNP Paribas	0.9	13	487	13	2162	11
Barclays	6	11	1047	8	1735	12
HSBC*	19.5	5	641	12	1707	13
Standard correlation			0.3777		0.3633	
Rank correlation			0.2692		0.3077	

1. Writeoffs announced as of 16 September 2008.
2. Cumulative global debt origination ranking 2004-2007.
3. Cumulative global investment banking ranking 2004-2007.

Key Risk Domains



The Challenge Incorporating Reputational Risk Into Integrated Risk Management



One Man's Opinion

“Major banks - and especially financial conglomerates - don't have the remotest idea what their total risk exposure is. This should concern their shareholders as well as the regulators.”



Peter Fisher, October 2002
Former Under Secretary of the Treasury
Senior Managing Director, BlackRock

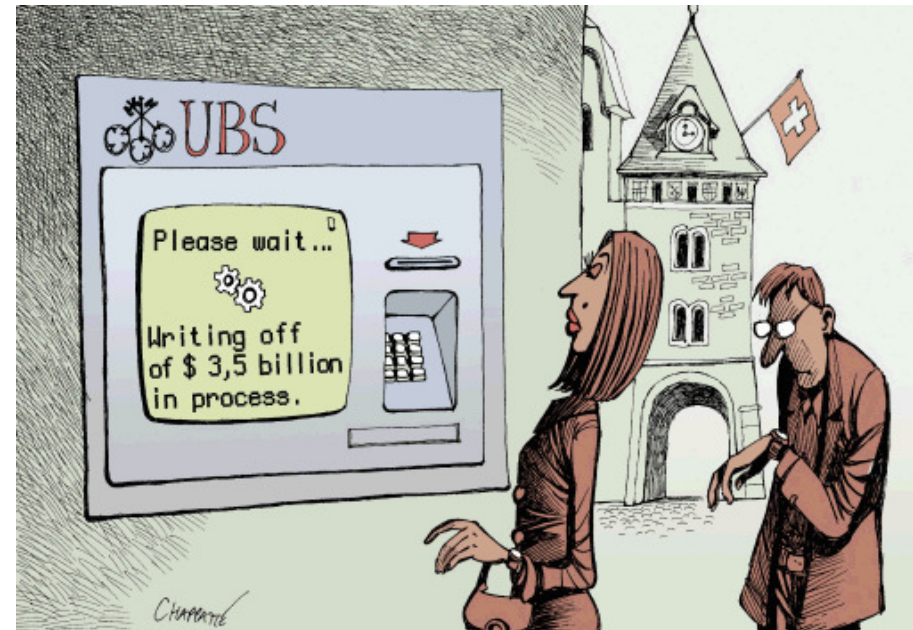
Crisis Legacies

- Recapitalization
- Reregulation
- Risk management
- **Reputation**

**Strategic
Reputation-sensitivity
& Loss-duration**



**“You have turned our bank
into a casino.”
(AGM, Basel, 22 April 2008)**



**Peter Kurer - “We shouldn’t fool ourselves. We can’t pretend that there has been no reputational damage. Experience says it goes away after two or three years.”
– 15 April 2008.**

Mandatory reading: <http://www.ubs.com/1/e/investors/releases?newsId=140339>

How to Define Reputational Risk?

“The risk of loss in the value of a firm’s business franchise that goes beyond accounting losses -- usually reflected in a decline in its share performance metrics -- resulting from failures in strategic execution, professional conduct, conflicts of interest, compliance and incentive systems, leadership, and corporate culture.

Key words:

- Strategic execution
- Professional conduct
- Conflicts of interest
- Compliance and incentive systems
- Leadership and corporate culture

Management:

Reputational risk is usually the consequence of management processes rather than discrete events, and therefore requires different risk control approaches from operational risk.

Reputational-sensitive Events in a Simple Going-concern Valuation Framework

The diagram illustrates the components of the NPV formula and their relationship to reputational-sensitive events. A central equation is shown with three red arrows pointing to its parts: a downward arrow from the left points to the numerator, an upward arrow from the right points to the denominator, and another upward arrow from the bottom right points to the risk premium term in the denominator.

Client defections & revenue erosion ↓

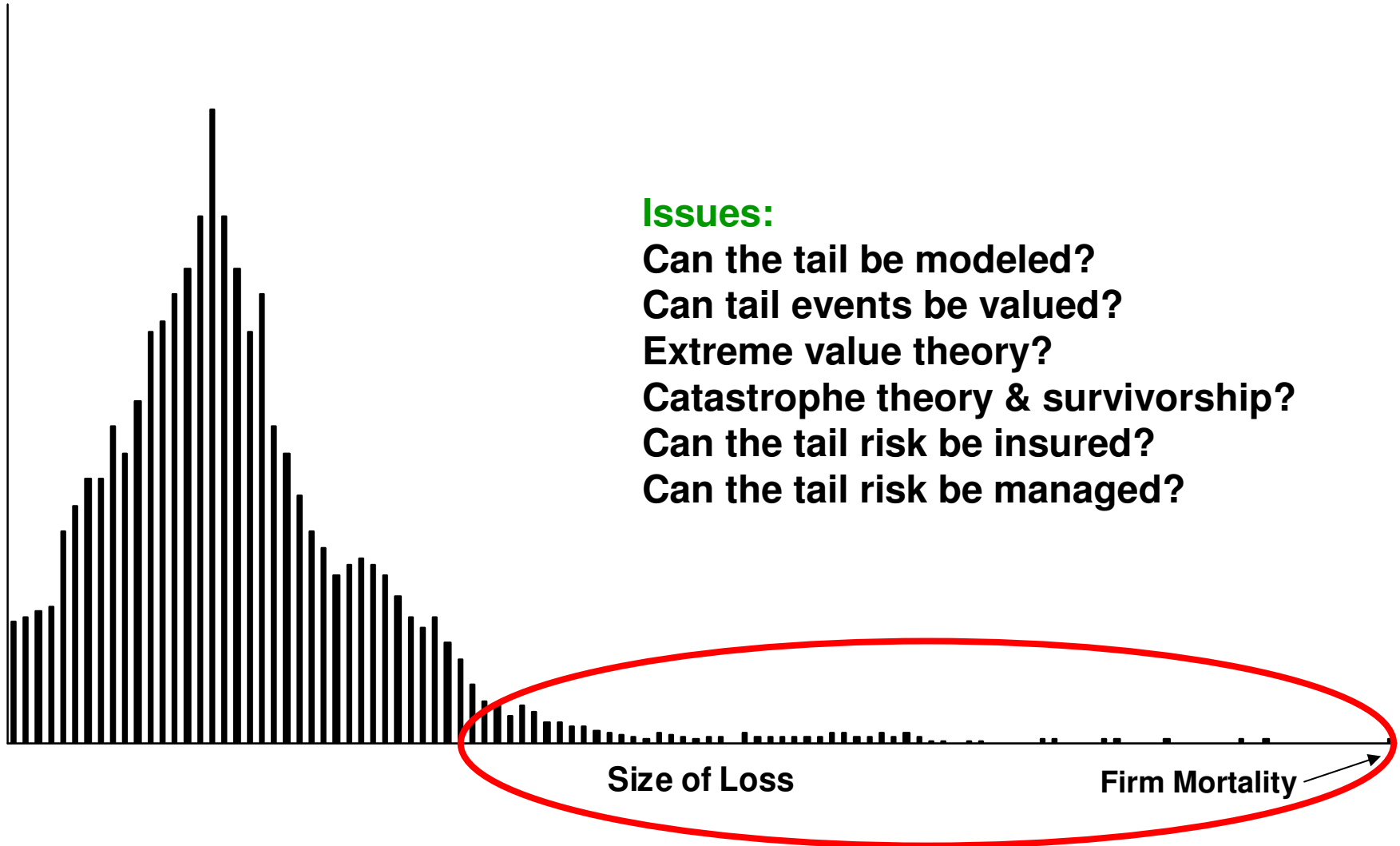
Accounting writeoffs
Compliance costs
Regulatory fines
Legal settlements
Financing costs
Contracting costs
Opportunity costs ↑

$$NPV_f = \sum_{t=0}^n \frac{E(R_t) - E(C_t)}{(1 + i_t + \alpha_t)^t}$$

↑ **Increased firm-specific risk premium**

Reputational Risk As a Fat-tail Problem

Number of Events





Stockholm, 22–24 April 2008

Risk magazine proudly presents

**The premier event for
Risk Management in Europe**

“Equity Derivatives House of the Year 2008”



- **Equity derivatives loss: \$7.2 billion (€4.9 billion).**
- **Forced SG recapitalization via €5.5 billion rights issue.**



Share Price Impact

Date	SocGenMV(E million)		CAC 40 (PI)	
1/11/2008	45,278.9	#VALUE!	5368.2	#VALUE!
1/14/2008	45,740.5	0.0044	5419.33	0.0041
1/15/2008	44,407.0	-0.0128	5315.09	-0.0084
1/16/2008	44,262.5	-0.0014	5265.81	-0.0040
1/17/2008	43,362.6	-0.0089	5242.11	-0.0020
1/18/2008	39,791.0	-0.0373	5183.23	-0.0049
1/21/2008	36,611.1	-0.0362	4819.81	-0.0316
1/22/2008	38,466.8	0.0215	4693.17	-0.0116
1/23/2008	36,872.2	-0.0184	4699.5	0.0006
1/24/2008	35,347.5	-0.0183	4849.54	0.0136
1/25/2008	34,443.0	-0.0113	4929.06	0.0071
1/28/2008	33,128.1	-0.0169	4833.33	-0.0085

-27.57%

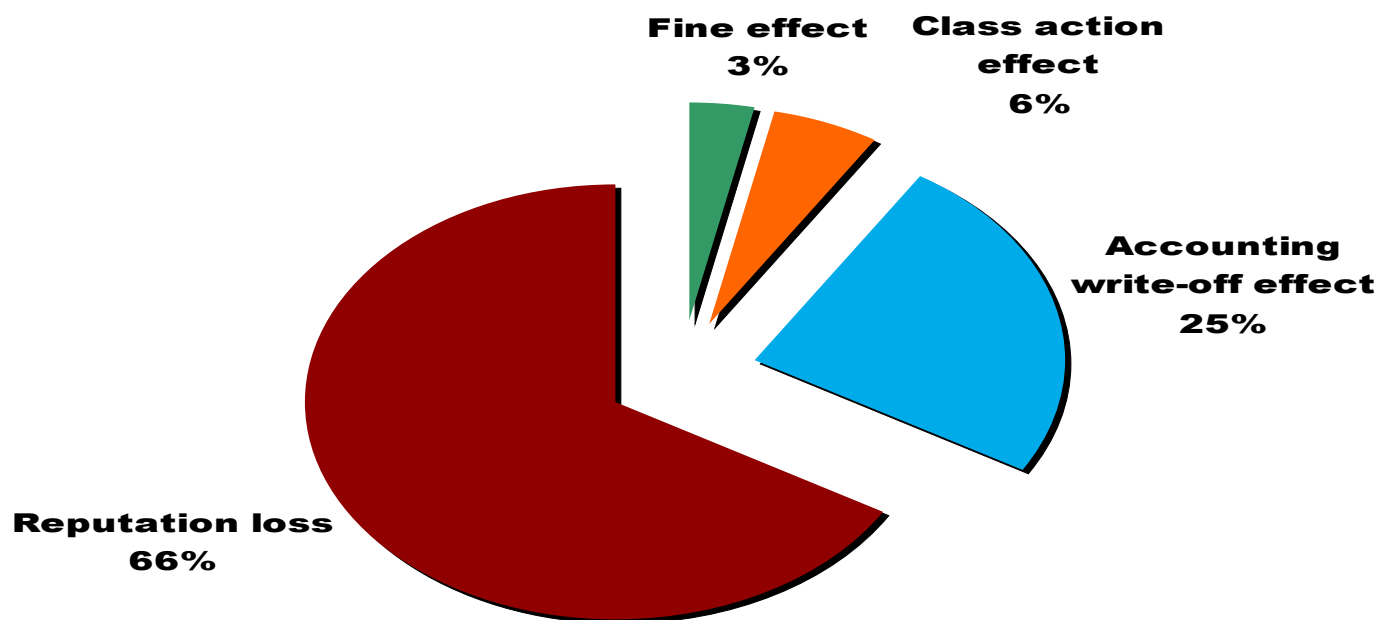
-12,612.4million euros

=12.6 billion euros (estimated book loss: 4.9 billion euros)

Reputational Loss Pilot Study Cumulative CARs

[illegible]

Decomposing CARs Related to Earnings Restatements



Data: All SEC enforcement actions 1978-2002 – 2,532 regulatory events

Actions & penalties tracked through 15 November 2005

Mean CAR -38.06% = mean market value loss \$397 million (24% higher for surviving firms)

Partitioned for sample:

Fines imposed on firms \$5.01 billion

Class action payments \$ 8.59 billion

Accounting write-off \$37.4 billion

Reputation loss \$101.5 billion

Market Cap Erosion Versus Ongoing Write-offs, 2007-08

FIRM	Market capitalization		Chng in mcap	Writeoffs	Incremental val. erosion
	3-Jan-07	27-May-08			
	(\$B)	(\$B)	(\$B)	(\$B)	(\$B)
BANK OF AMERICA CORP	239.5	151.1	-88.4	8.2	80.2
BEAR STEARNS COMPANIES	19.1	1.5	-17.6	1.9	15.7
CITIGROUP INC	271.5	112.8	-158.7	40.1	118.6
GOLDMAN SACHS GROUP INC	85.5	67.9	-17.6	4.2	13.4
JPMORGAN CHASE & CO	166.8	146.1	-20.7	8.0	12.7
LEHMAN BROTHERS HOLDINGS	41.7	20.3	-21.4	1.4	20.0
MERRILL LYNCH & CO INC	82.5	43.1	-39.4	28.2	11.2
MORGAN STANLEY	85.6	46.5	-39.1	13.1	26.0
WACHOVIA CORP	114.3	48.9	-65.3	4.9	60.4
WASHINGTON MUTUAL INC	42.7	8.2	-34.5	5.8	28.7



**Reputational Cumulation
and Share Prices**

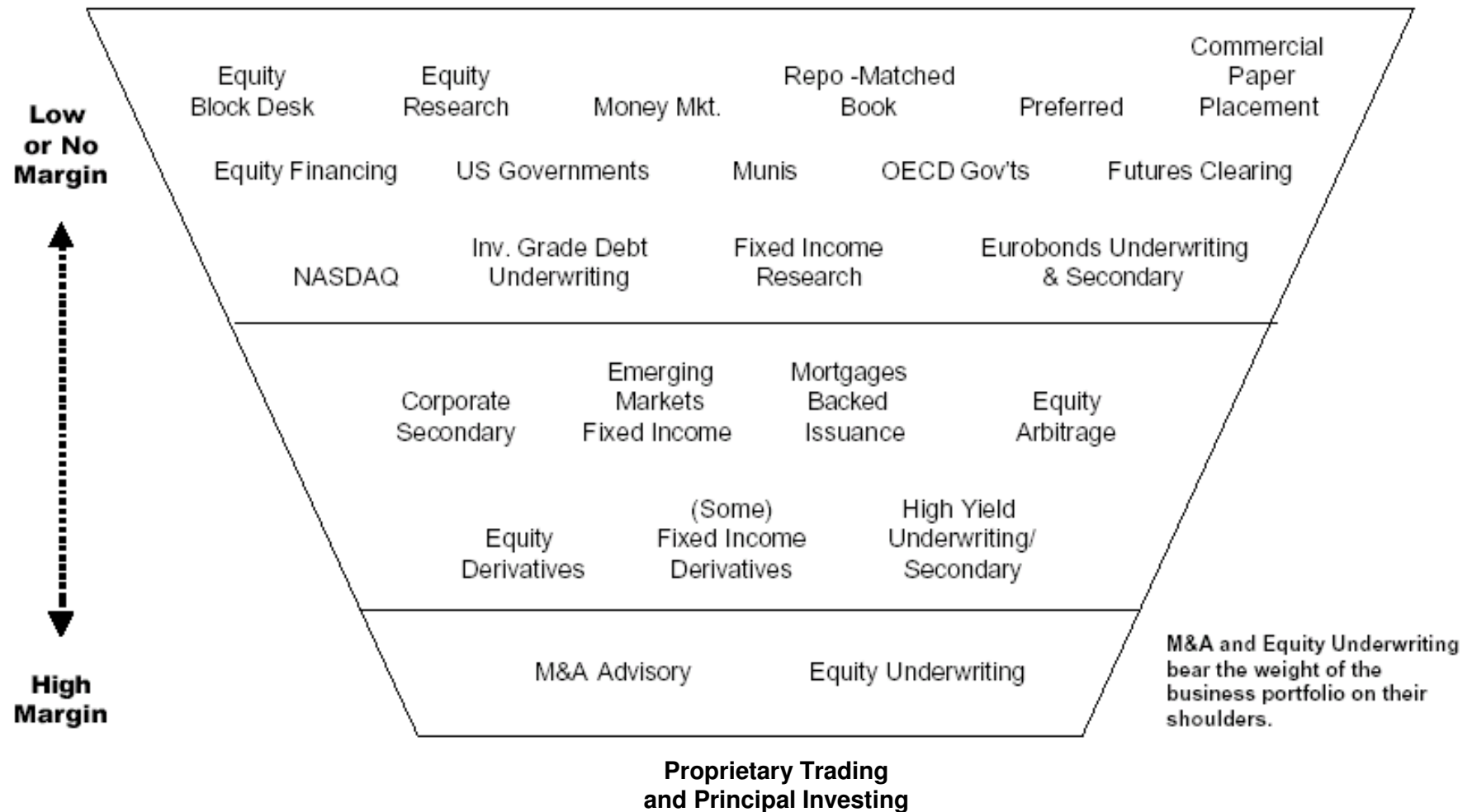
Crisis Legacies

- Recapitalization
- Reregulation
- Risk management
- Reputation
- **Reconfiguration**

Disappearing Investment Banks, 1986-2008

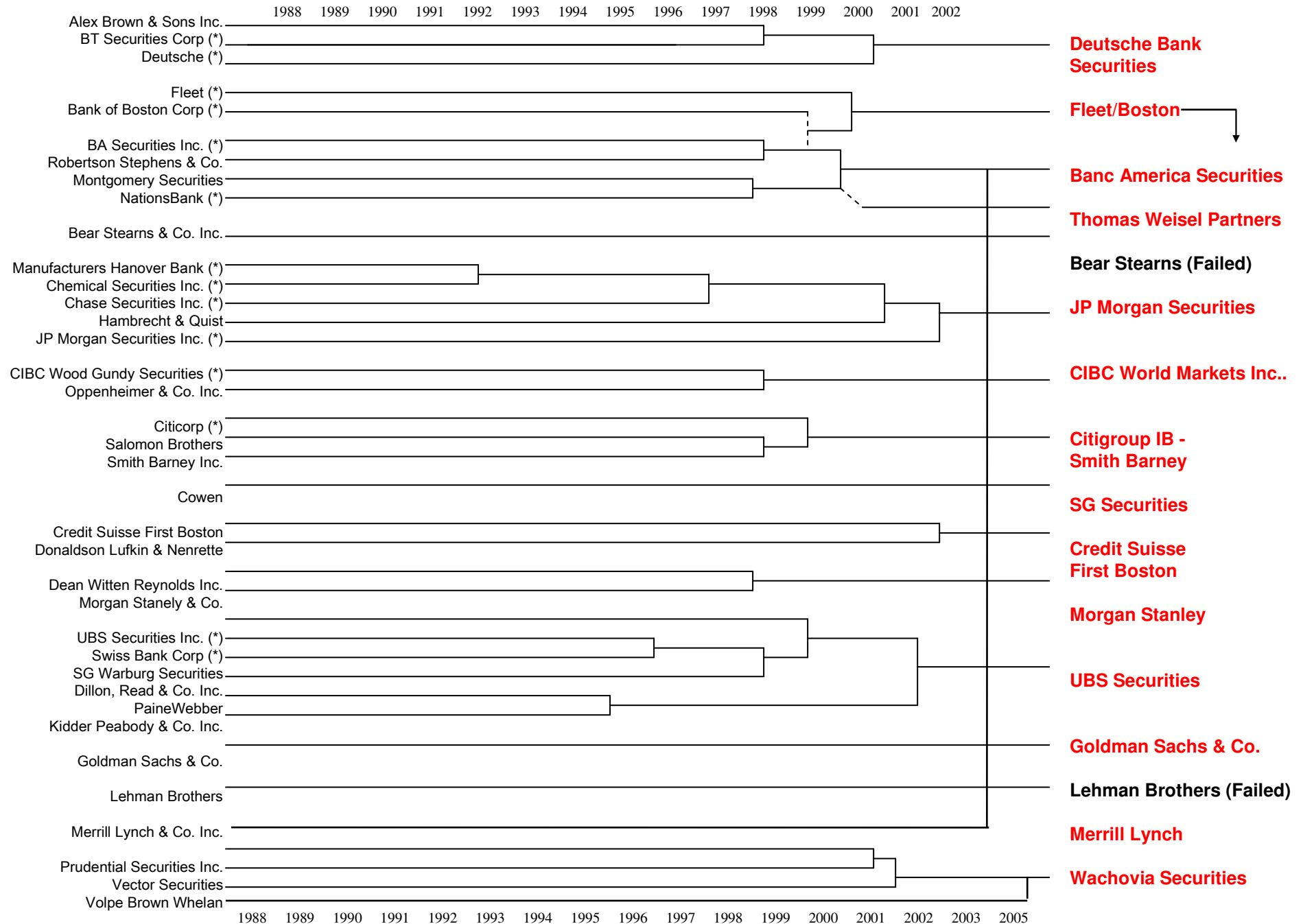
- Kuhn Loeb (1986)
- E. F. Hutton (1987)
- Morgan Grenfell (1989)
- Drexel Burnham (1990)
- Shearson Lehman Amex (1993)
- Kidder Peabody (1994)
- Baring Brothers (1995)
- Kleinwort Benson (1995)
- MeesPierson (1996)
- Alex Brown (1997)
- Dillon Read (1997)
- Hoare Govett (1997)
- Robertson Stephens (1997)
- Montgomery Securities (1997)
- Dean Witter (1997)
- Peregrine Securities (1997)
- Banque Indosuez (1997)
- BZW (1998)
- S.G. Warburg (1998)
- NatWest Markets (1998)
- Cowen & Co, (1998)
- Yamaichi Securities (1998)
- Paribas (1998)
- Hambrecht & Quist (1998)
- Charterhouse (1999)
- Phoenix Securities (1999)
- Bankers Trust Company (1999)
- Furman Selz (1999)
- Schroders (2000)
- Robert Fleming (2000)
- PaineWebber (2000)
- JP Morgan (2000)
- Donaldson Lufkin Jenrette (2000)
- Wasserstein Perella (2000)
- Beacon Group (2000)
- ING Barings (2001)
- Dresdner Kleinwort Wasserstein (2001)
- Robertson Stephens (2002)
- Prudential Securities (2004)
- Cazenove (2004)
- Legg Mason (2005)
- Piper Jaffray (2006)
- AG Edwards (2008)
- Bear Stearns (2008)
- Lehman Brothers (2008)
- Merrill Lynch (2008)

Competitive Dynamics and Risk Exposure in Global Wholesale Banking

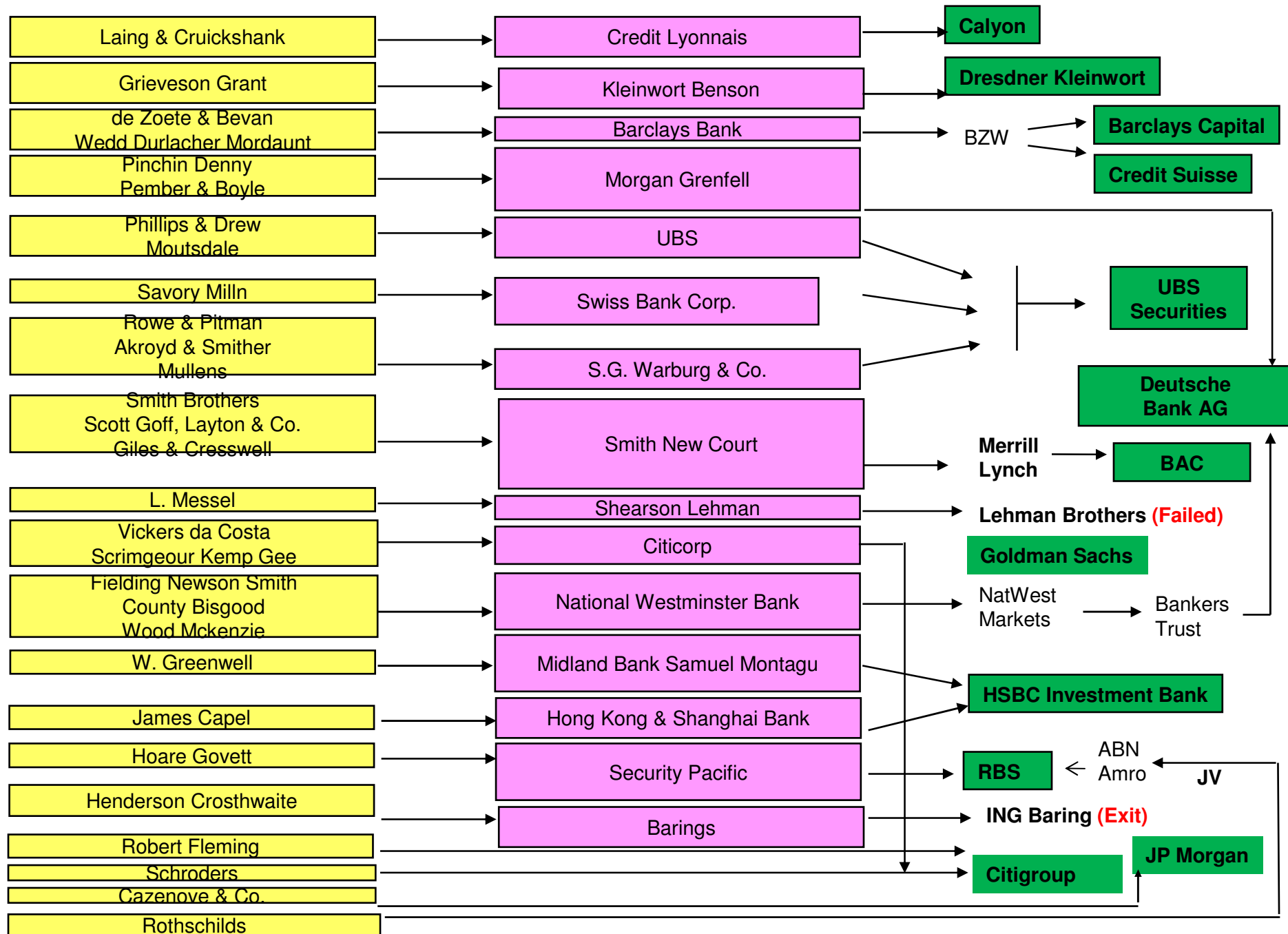


Source: Sanford Bernstein, 2002

US Securities Industry Consolidation 1988-2008



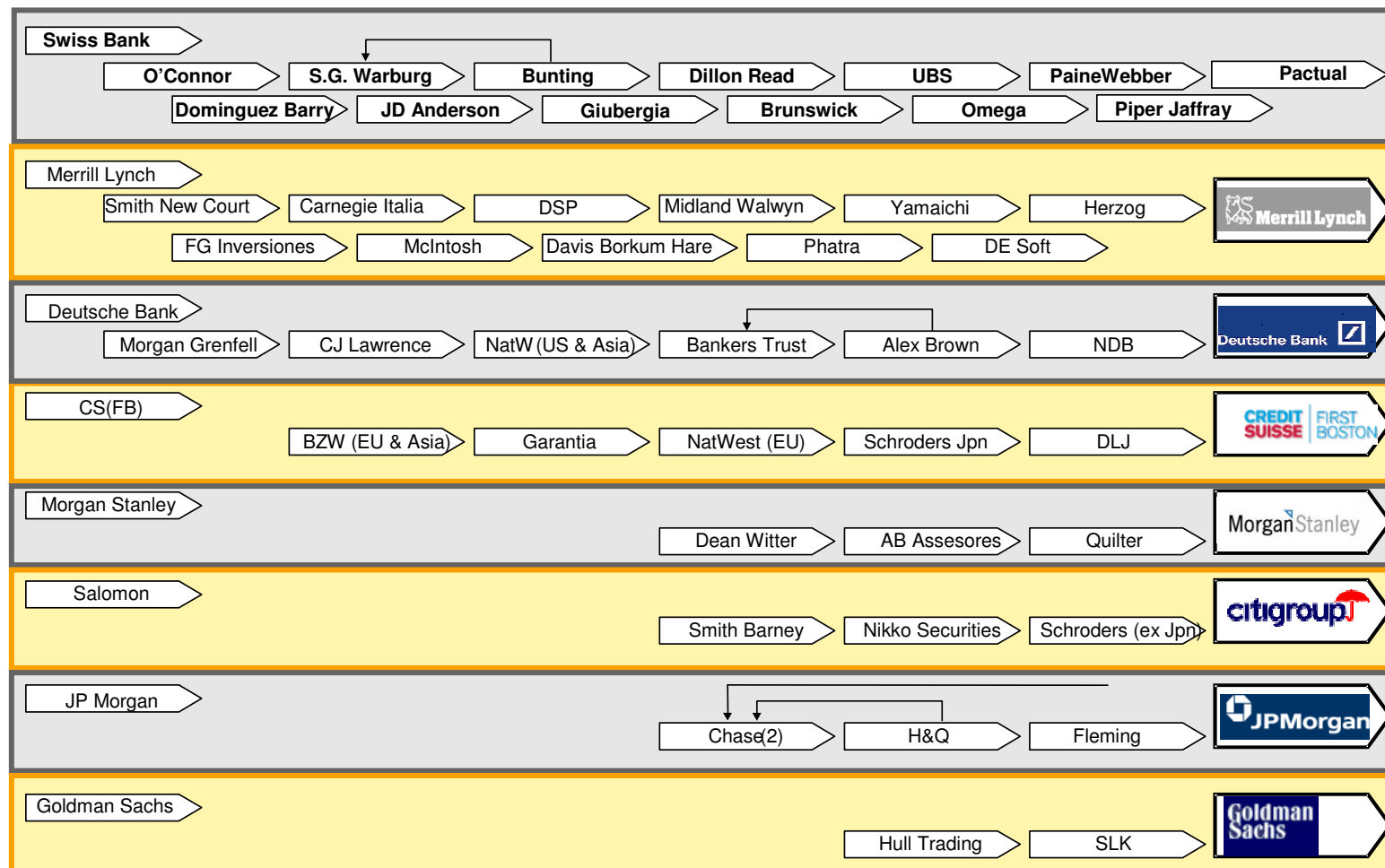
Evolution of British Merchant Banks 1986-2008



Global Investment Banking Consolidation

1990

2008



NOTES: (1) Not including insurance companies and asset management, (2) Chase includes Chemical Bank and Manufacturers Hanover.

Classifying the Major Surviving Wholesale Players

Category	U.S.	European	Asian
Global Wholesale Leaders	Citigroup Goldman Sachs JP Morgan Bank of America Morgan Stanley	Crédit Suisse Deutsche Bank AG UBS AG	
Global Wholesale Contenders		Barclays Capital BNP – Paribas Calyon HSBC RBS	
Regional or Special Focus	Blackstone Evercore Greenhill & Co. Gleacher Partners Lazard Frères Perella & Associates Simon Robertson Assoc. Thomas Weisel	BNP Paribas Commerzbank Société Generale Rothschild RBC Group Santander Investment	Daiwa Nikko-Citigroup Nomura Mizuho MitsuTokyo - UFJ Sumitomo Mitsui CITIC Chinese majors
Withdrawals	Drexel Burnham (failed) Kidder Peabody (closed) Prudential Sec. (sold) Bear Stearns (failed) Lehman Brothers (failed) Wachovia (on ice)	Cazenove (sold to JPM) Lloyds TSB AXA-DLJ (sold to CSFB) ING WestLB	Peregrine - failed Yamaichi – failed LTCB – failed Nippon Credit – failed

Universals and Financial Conglomerates: Battling the Discount

Argument

- Most nonfinancial conglomerates are valued in an efficient equity market at a discount from break-up value.
- Does this also apply to financial services firms?

The reason: Supply-side issues

- Over-investment in value-reducing projects
- Cross-subsidization
- Mis-alignment of incentives between central and operating units

The reason: Demand-side issues

- Conglomerates impede investor portfolio optimization

Nonfinancial evidence

- 13-15% value-loss in nonfinancial conglomerates compared with businesses' stand-alone values

New Evidence on Conglomerate Discount in Financial Services

- **Laeven & Levine:** Robust application of “chop-shop” approach finds 20% average value destruction, comparable to non-financial conglomerates using adjusted Tobin’s q as value measure, outweighing economies of scope.
- **Schmid & Walter:** Controlling for size, profitability, leverage, and capital, functionally diversified firms trade at discount of roughly 21% from SoP value.
- The conglomerate discount exists regardless of functional relatedness - but once a firm is functionally diversified, there is no valuation penalty due to further diversification. Geographic diversification is not associated with a valuation discount. Causality tests verified and TBTF effect dominates.
- **Rommens, Deloof & Jegers:** Additional discount applied to holding companies and pyramid structures.
- Authors attribute conglomerate discount to agency problems, but cannot document it.

*Laeven, Luc & Levine, Ross, 2005. "Is There a Diversification Discount in Financial Conglomerates?" C.E.P.R. Discussion Papers No. 5121. Journal of Financial Economics, forthcoming. *Schmid, Markus M. and Walter, Ingo, "Do Financial Conglomerates Create or Destroy Economic Value?" (September 7, 2006). Available at SSRN: <http://ssrn.com/abstract=929160>. Journal of Banking and Finance, forthcoming. Rommens, An, Deloof, Marc and Jegers, Marc, "Why do Holding Companies in Pyramidal Groups trade At a Discount?" University of Antwerp, Working Paper, January 2005.



Tenth Anniversary of the Creation of Citigroup



“The specific merger transaction has to be seen to have been a mistake....Stockholders have not benefited, employees certainly have not benefited, and I don’t think customers have benefited.”

- John Reed, 8 April 2008 (FT)

