



## Corporate Governance of Banks

Professor David R. Beatty O.B.E.

**Rotman**



# Welcome to Amsterdam in ~1600



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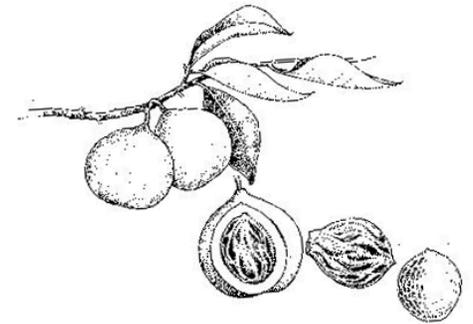
## The home of the Dutch East India Company



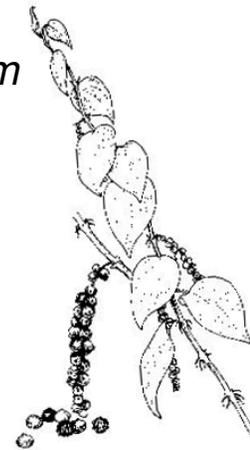
- ⚙️ **21 year exclusive licence to trade in the East Indies**



*Clove*  
*Syzygium aromaticum*



*Nutmeg*  
*Myristica fragrans*



*Pepper*  
*Piper nigrum*

## The Dutch East India Company flagship: Batavia



## The Dutch East India Company flagship: Batavia



The investment challenge  
20% of the ships did not return

Q

VVY ondergheschreven van weghen de Camere der Oost-Indische Compaignietot Amsterdam, bekennen by desen opfanghen te hebben vanden E. Dyndra Roco worden

de somme van ~~20000~~ 20000 guldens

ende dat voor resie van ~~20000~~ 20000 guldens

indes voorsz. Compaignie gheregistreert saet te herideren opt Groot-boeck. vande voorsz. Camere folio 50 Synde hier mede de voorschreven

dyndra Roco — inde voorsz. Compaignie voorde eerste Thien-Iarighe Rekeninghe participeert, ten vollen opgebracht ende betaelt: Ende voorts gheannulleert ende te niere ghedaen alle de Recipissen, over de betalinghen opde ghemelde partye ghedaen, voor desen ghegheven.

Actum den 27 5 septemb. 1606

Arant ten grooten huis

Diederik Keyser

als 26 January a 1609 Statet voor Jansz  
dat 20 July a 1607 Rijshout van de galle

129.3.0

## Dutch East India Company – the board



- ❁ 70 board members
- ❁ Self appointments
- ❁ Private benefits

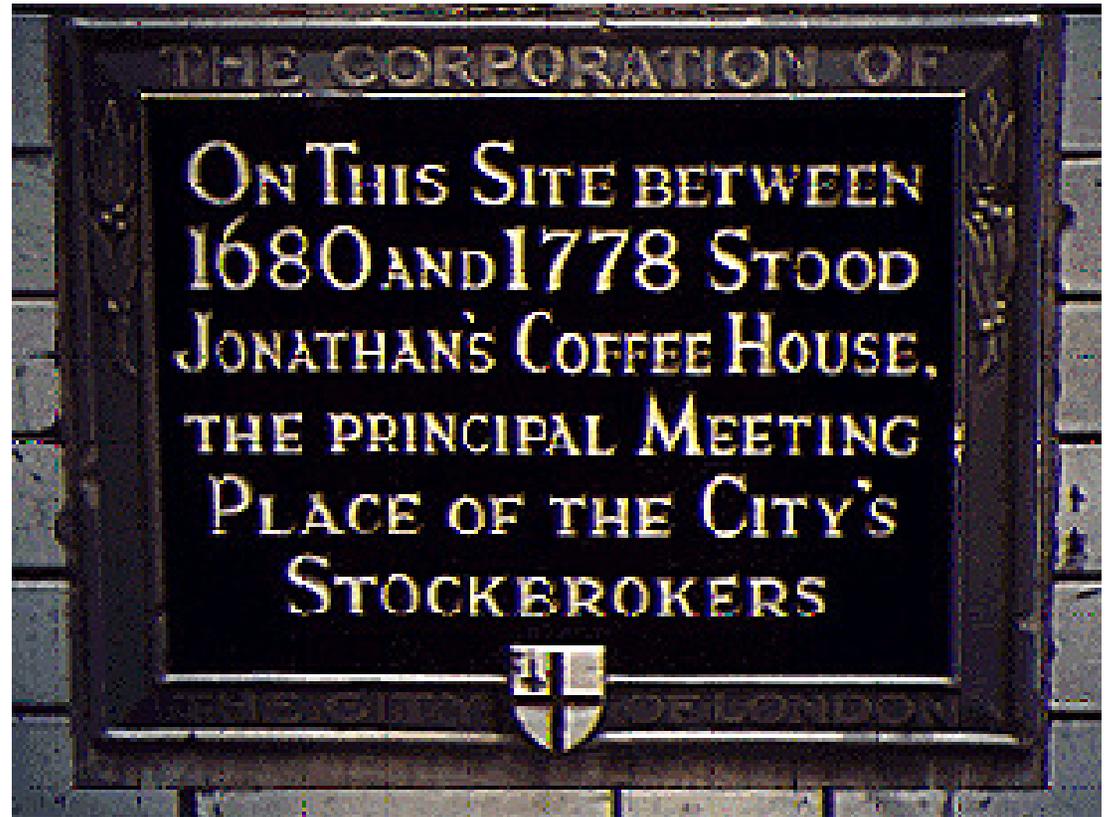
## **Welcome to Amsterdam in ~1620**

The home of the Dutch East India Company – the board became the talk of the town.....

- ❁ **mismanagement at the biggest companies**
- ❁ **insider trading**
- ❁ **misstated profit & loss accounts**
- ❁ **excessive remuneration of executives**
- ❁ **the need for accounting standards**
- ❁ **the need for independent directors**
- ❁ **shredding of internal documents**

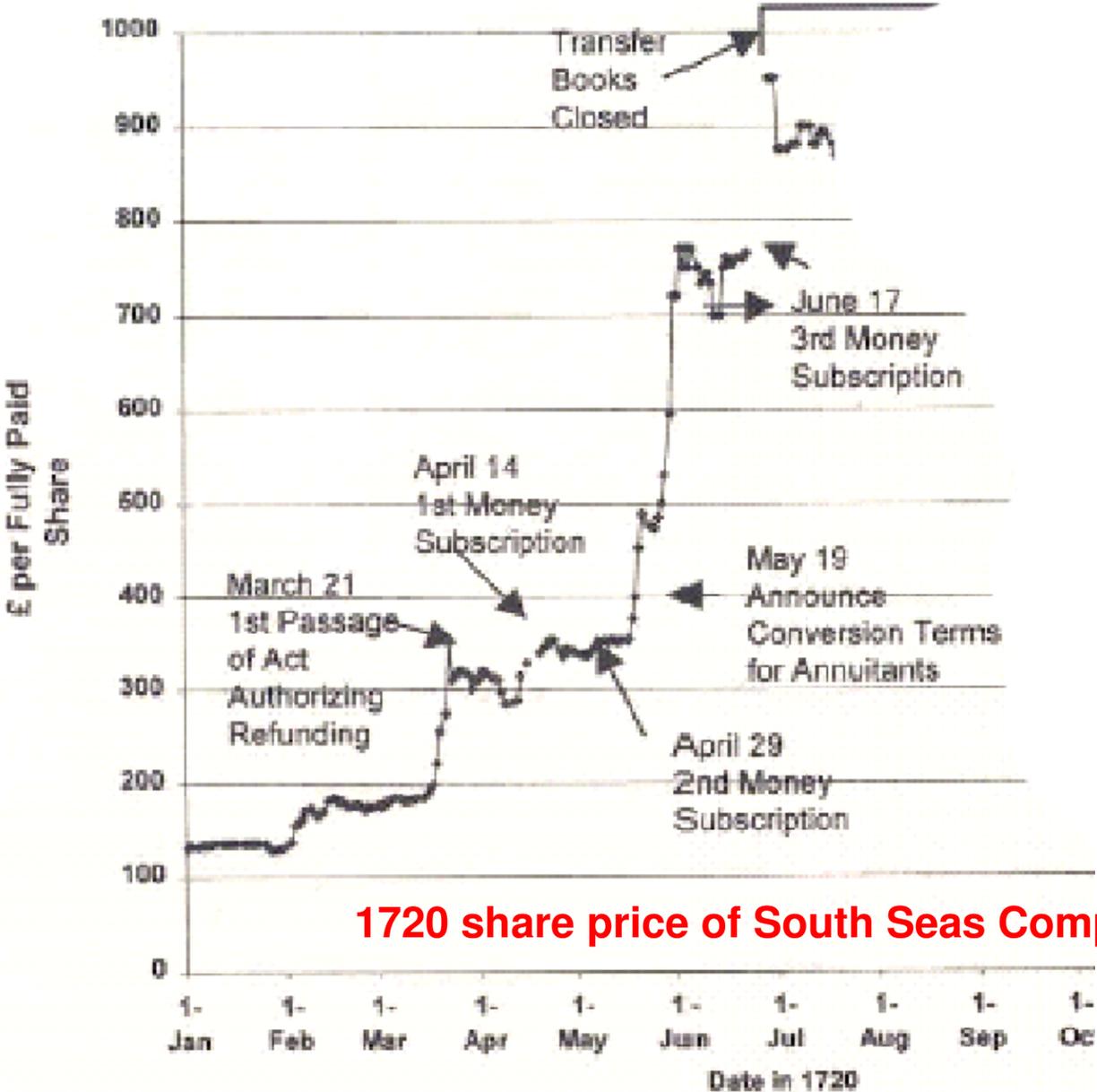


In 1711 the British Prime Minister Robert Harley, first Earl of Oxford did an off balance sheet transaction



London coffee houses like Jonathan's and Garraway's filled Exchange Alley with buzz, excitement and speculative frenzy

In 1720 a speculative frenzy broke out



1720 share price of South Seas Company

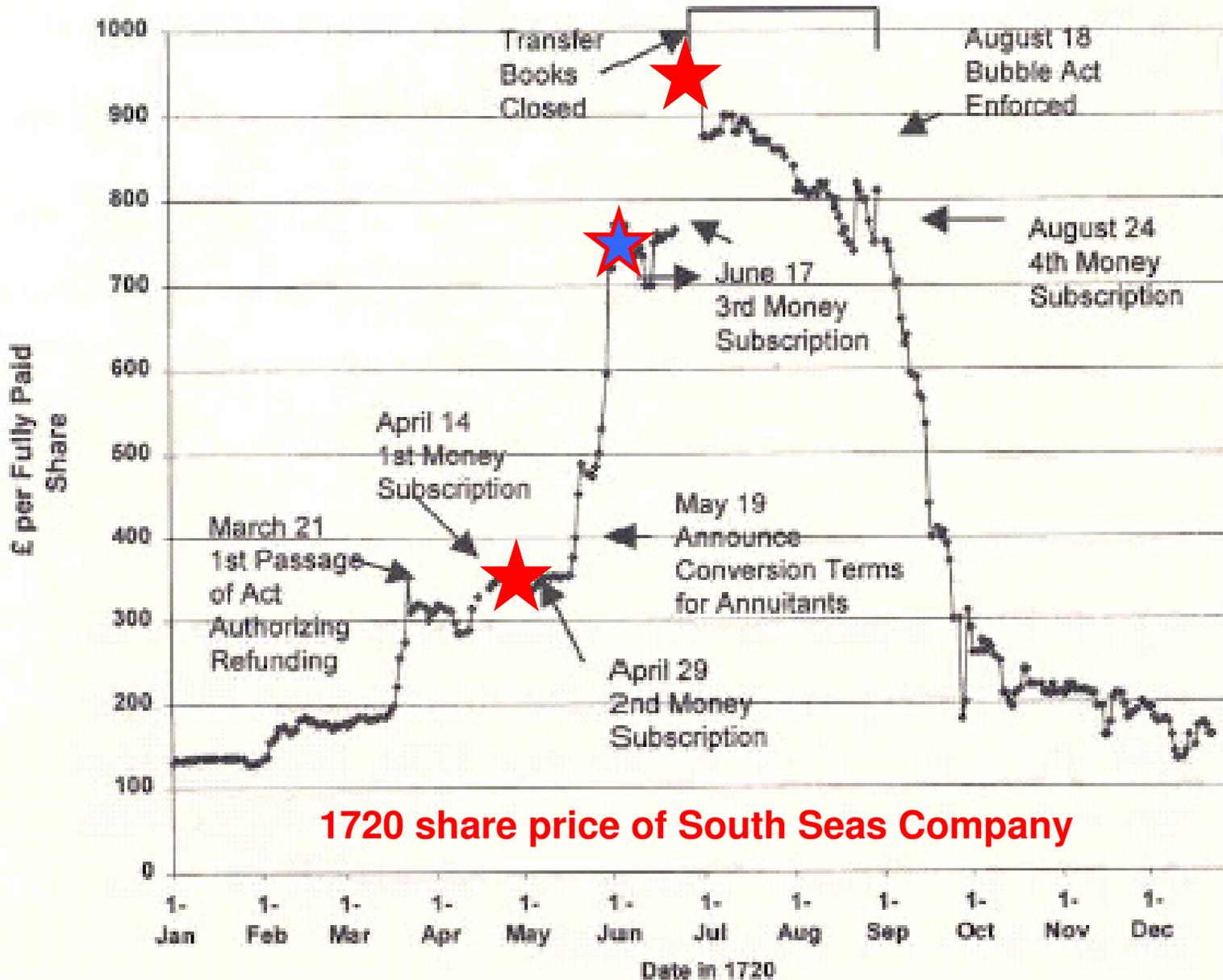
In 1720 a speculative frenzy broke out : one prospectus read

A company for carrying on an undertaking of great advantage: but no one to know what it is.

To raise £500,000 by means of 1,000 shares at £500 per share

- deposit £2
- annual dividend £100 per share

# In 1720 a speculative frenzy broke out ... and then collapsed



## British society was shaken to the core....

**A**t length corruption, like a general flood,  
Did deluge all, and avarice creeping on,  
Spread, like a low-born mist, and hid the sun.  
Statesmen and patriots plied alike the stocks,  
Peeress and butler shared alike the box;  
And judges jobbed, and bishops bit the town,  
And mighty dukes packed cards for half-a-crown:  
Britain was sunk in lucre's sordid charms.  
--Pope.

The Directors were arrested and their estates forfeited

Joint stock companies were banned for almost 100 years

Anthony Trollope was a leading English novelist of the middle 19th Century. He published 47 novels and 16 books in several other genres.



Anthony Trollope (1815-1882)

## ANTHONY TROLLOPE THE WAY WE LIVE NOW



ANTHONY TROLLOPE  
THE WAY WE LIVE NOW



The Chairman  
Augustus Melmotte



The Company

The Great South Central Pacific and Mexican Railway Company

The Quote

Melmotte himself would speak a few slow words...always indicative of triumph, and then everybody would agree to everything, somebody would sign something, and the board would be over



“Directors: the parsley on the fish....decorative but not useful”

IRVING OLDS, CEO U.S. STEEL (1940)



“What, besides the drawing of fees and the drinking of tea, were the duties of a director?”

Soames Forsyte  
White Monkey  
by John Galsworthy (1924)



“Non-executive Directors are Christmas tree decorations”  
TINY ROWLAND, CEO LONRHO (1970)



# WHERE WERE THE DIRECTORS ?



- CEOs IN TROUBLE:**
-  **Sam Waksal**  
— ImClone (former CEO)
  -  **Martha Stewart**  
— Martha Stewart Omnimedia
  -  **John Rigas**  
— Adelphia (former CEO)
  -  **Dennis Kozlowski**  
— Tyco (former CEO)
  -  **Bernard Ebbers**  
— WorldCom (former CEO)
  -  **Philip Anschutz**  
— Qwest
  -  **Joseph Nacchio**  
— Enron (former CEO)

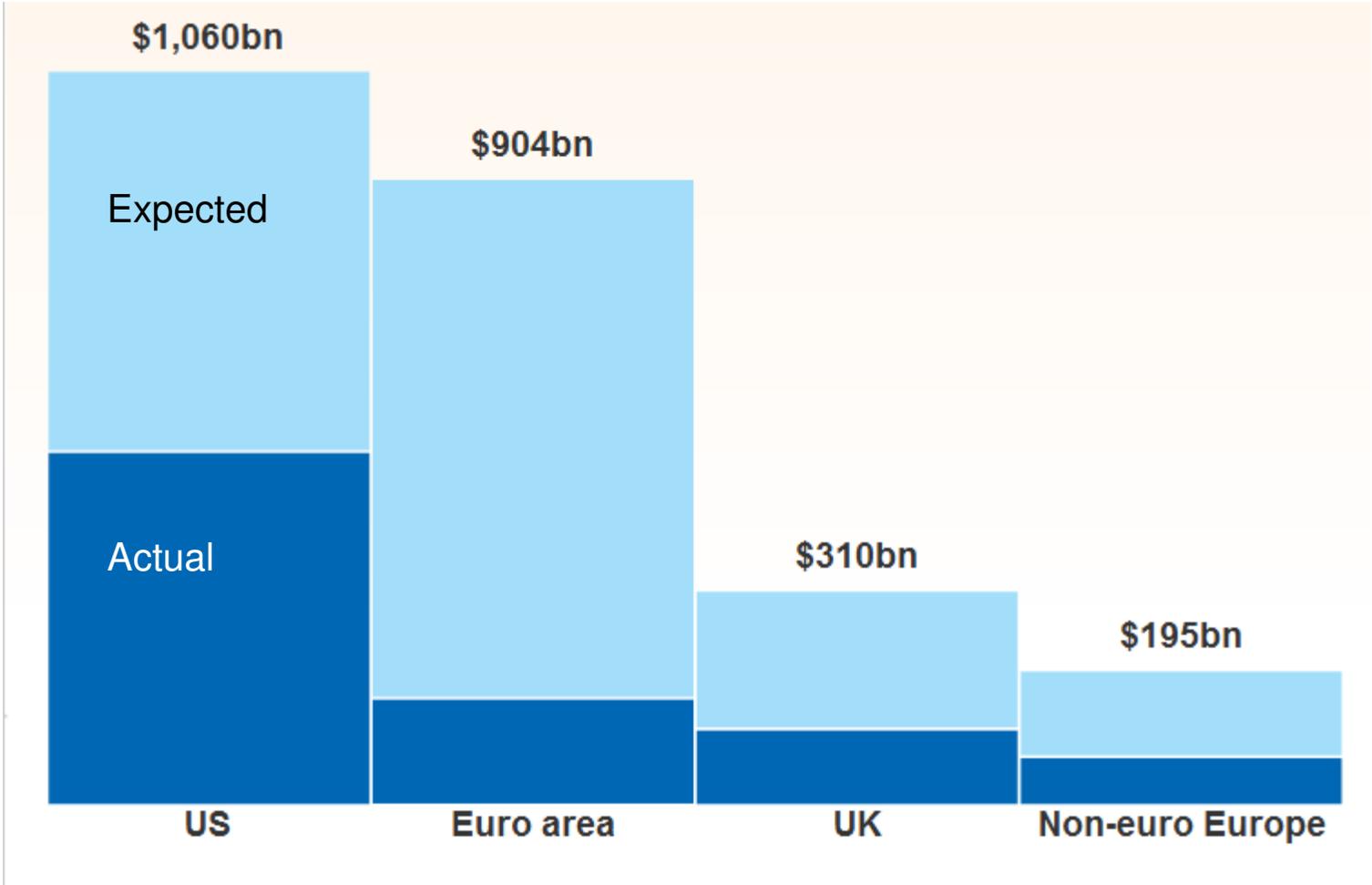


***"[T]he Board of Directors failed, in our judgment, in its oversight duties. This had serious consequences for Enron, its employees, and its shareholders."***

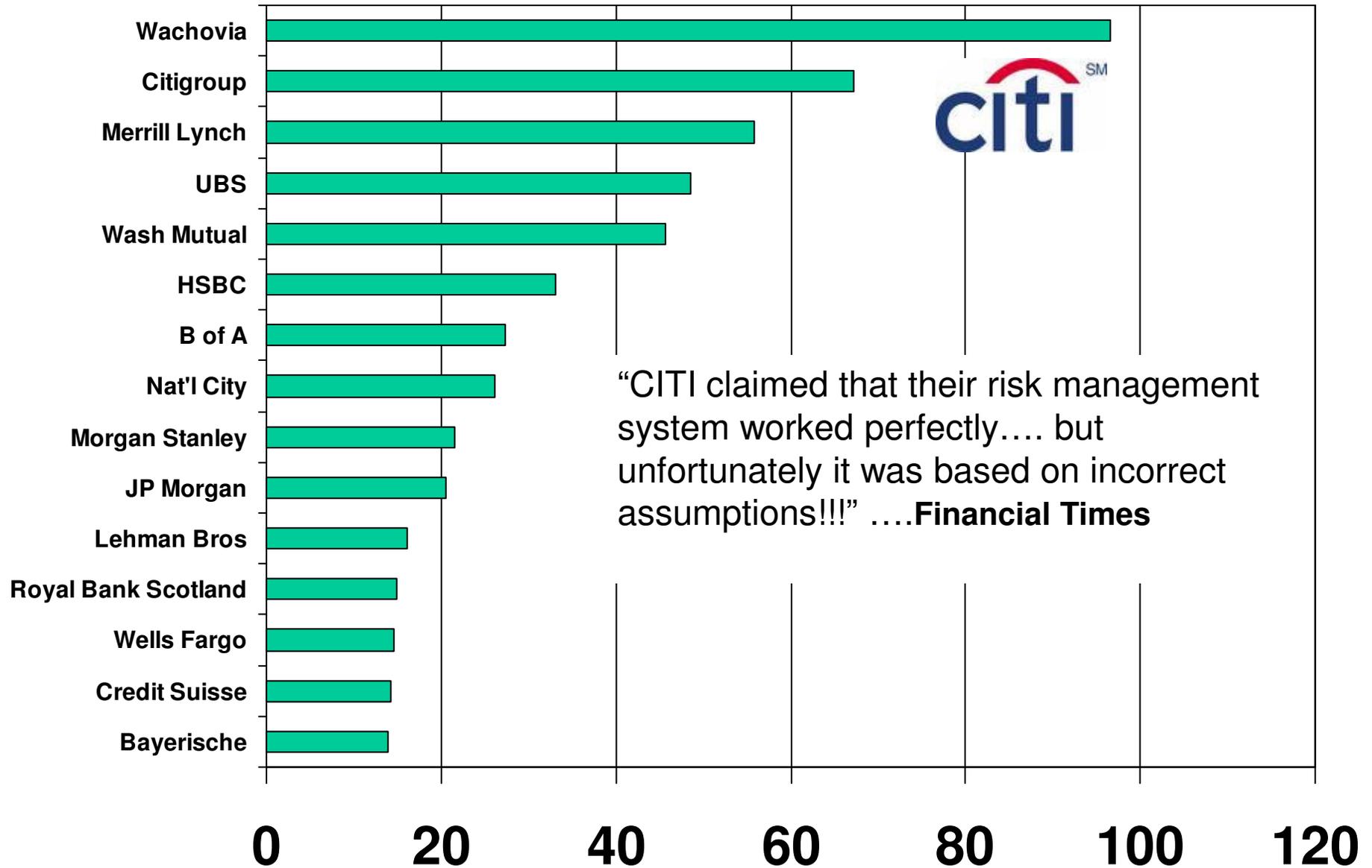
**"Powers Report" to the Board of Directors of Enron Corp. (Feb.1, 2002)**

# The IMF recently released its Global Financial Stability Report

Actual + Expected write banking downs ~\$2.4tn



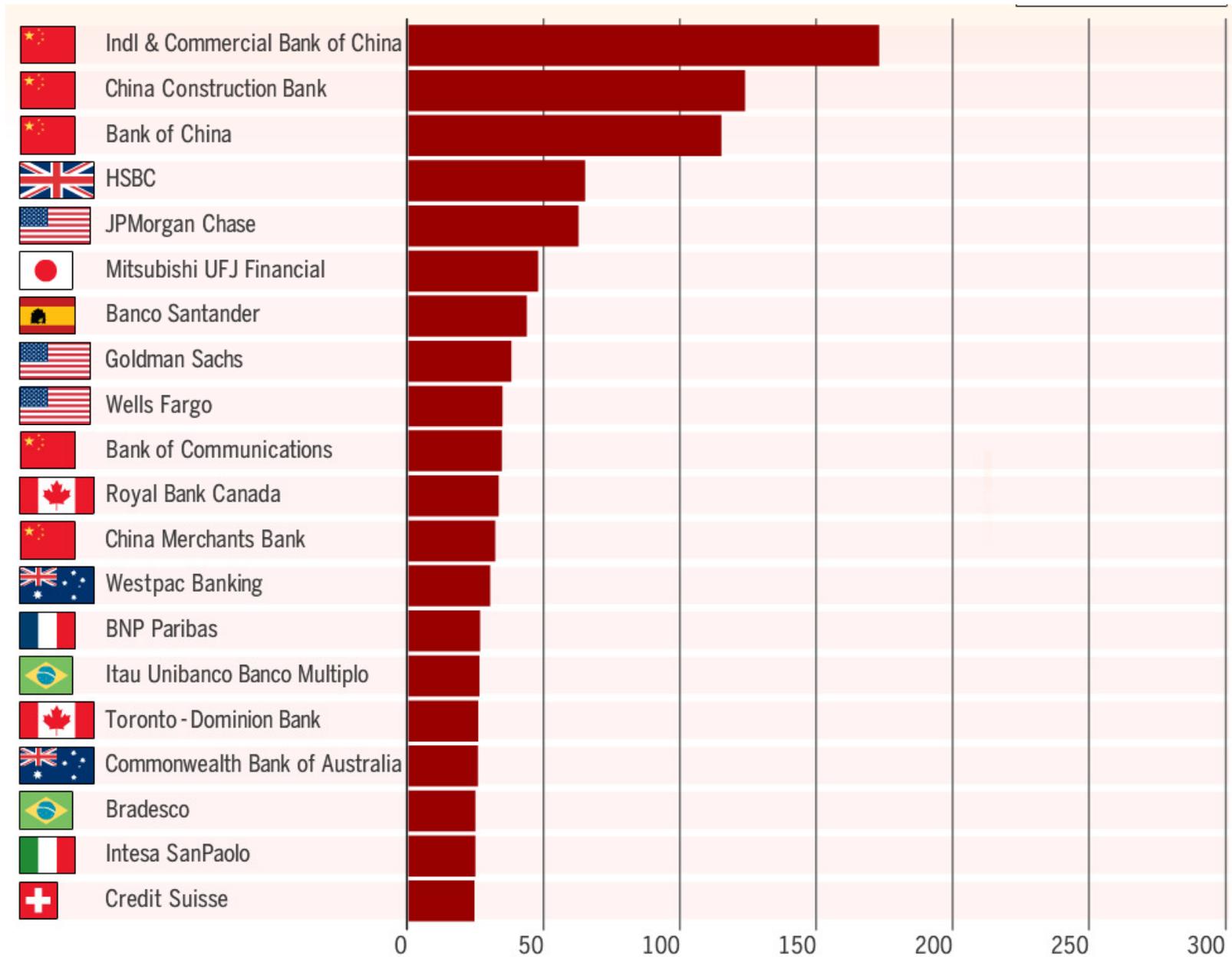
# Write downs & credit losses@ ~\$1,300bn



# Global bank market capitalisations 2007

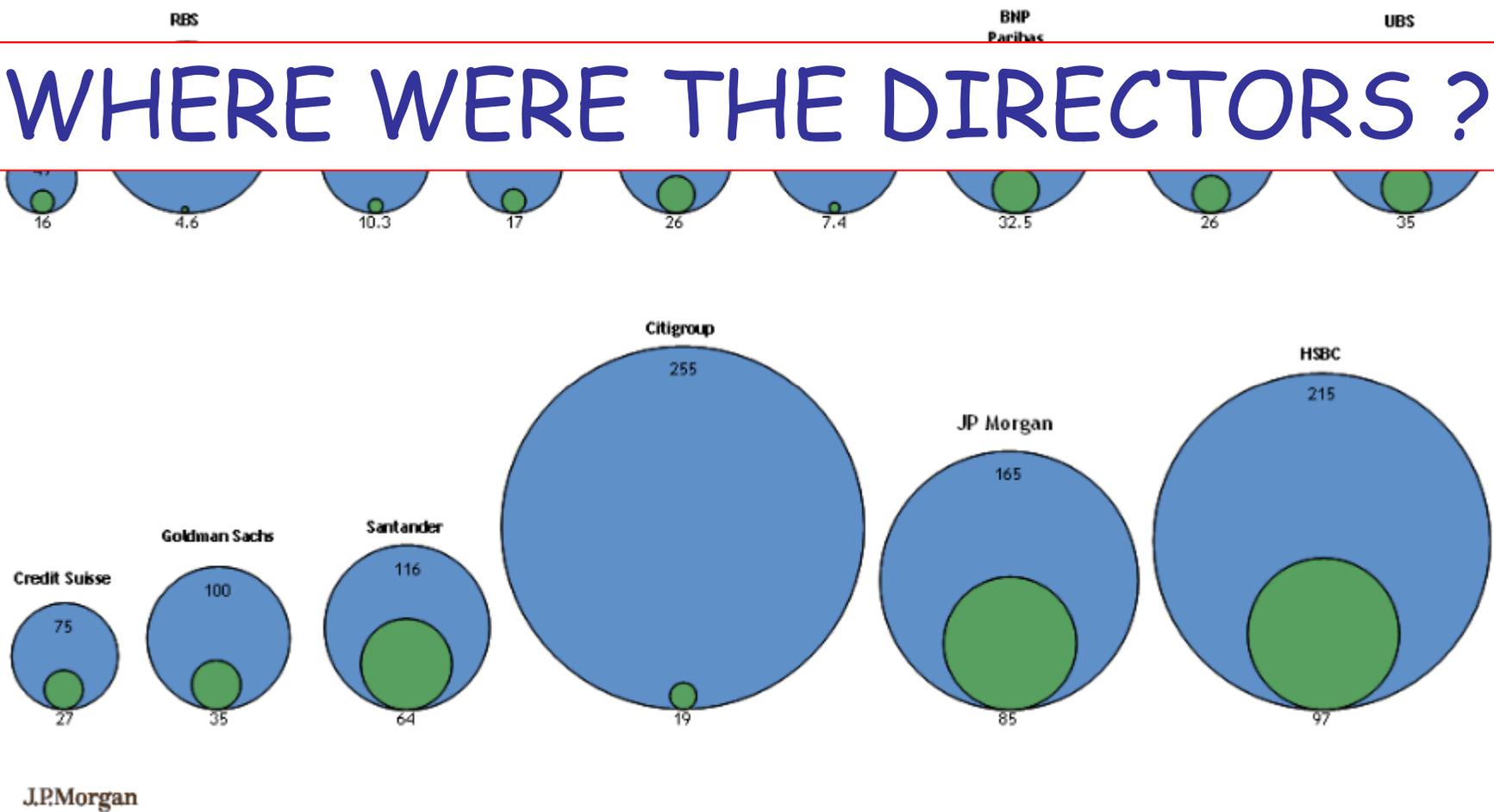


# Global bank market capitalisations 2009



Market cap down by \$1,700,000,000,000 since July 1, 2008

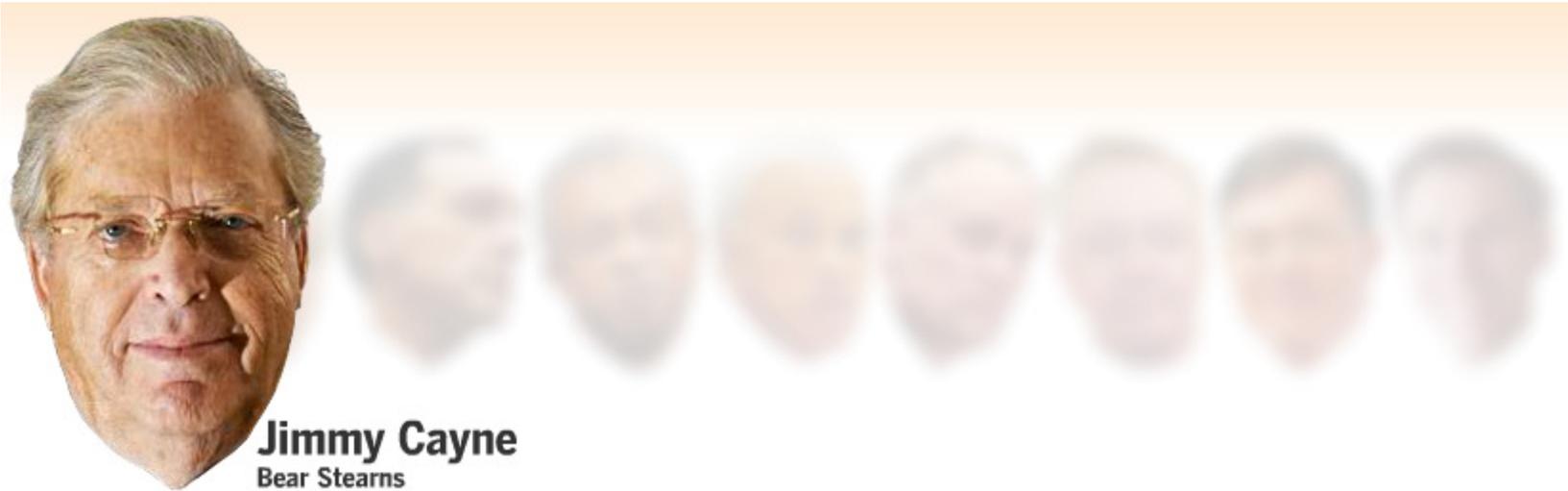
WHERE WERE THE DIRECTORS ?



## The fallen giants of US finance



# The fallen giants of US finance



## The fallen giants of US finance



## The fallen giants of US finance



## The fallen giants of US finance



**Stan O'Neal**  
Merrill Lynch

## The fallen giants of US finance



## The fallen giants of US finance



**Daniel Mudd**  
Fannie Mae

## The fallen giants of US finance



## The fallen giants of US finance



## The fallen giants of US finance



# The fallen giants of US finance – not suffering too badly



**Kerry Killinger**  
Former CEO, WaMu

**Washington Mutual**

No financial titan has fallen further in 2008 than Kerry Killinger. Washington Mutual, which collapsed in September, was only a fraction of the size of Lehman Brothers, which filed for bankruptcy protection two weeks earlier. But in its home town of Seattle, WaMu was a financial giant.

Mr Killinger took over the reins of the bank in 1990 and built WaMu into one of the top US mortgage originators. The real-estate boom, combined with WaMu's willingness to offer subprime mortgages, helped fuel the bank's stunning growth. A charismatic leader with a fondness for playing the trumpet, Mr Killinger revelled in positioning the bank as an upstart. WaMu advertisements featured "rodeo grandmas", a group of four western-clad women who poked fun at more traditional banks. But the rebellious posture didn't wear well when the US real estate bubble burst.

As WaMu's capital position eroded in early 2008, Mr Killinger convinced TPG Capital to lead a \$7bn investment in the bank. But the infusion was too little, too late. In September, Mr Killinger was ousted and the bank sold to JPMorgan Chase. In Seattle, WaMu's implosion has transformed Mr Killinger from local hero to corporate outcast.

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**Comeback rating (out of three)**  


**Latest compensation**  Close  
**\$4.5m**

# The fallen giants of US finance – not suffering too badly



**Ken Thompson**  
Wachovia

**Comeback rating**  
(out of three)

★ ★ ☆

**Ken Thompson**  
Former CEO, Wachovia



In his first few years as chief executive of First Union, later to become Wachovia, Ken Thompson shied away from the aggressive deal making that had characterised the reign of his predecessor, Ed Crutchfield, who stepped down in 2000. Mr Thompson's deals – the merger with Wachovia in 2001 and a joint venture with Prudential Financial in 2003 – were exercised with cautious restraint. But by 2006, when Mr Thompson paid \$25bn to acquire California mortgage lender Golden West Financial, his caution ended. The deal gave him the beachhead he wanted in California, but just as the housing market was beginning to sour. Golden West's home loans, many of them risky products known as option adjustable-rate mortgages, bored holes in Wachovia's balance sheet.

Although Wachovia's board said Mr Thompson's removal after 32 years with the bank was not due to any single event, it came soon after it announced a \$708m first quarter loss and slashed its dividend by 41 per cent.

Under its new chief executive Bob Steel, Wachovia was pushed by regulators to merge with a strong bank in late September. Mr Thompson still lives in North Carolina, said people with knowledge of the matter, and serves on the board of Hewlett Packard.

**Latest compensation**  Close

**\$15m**

# The fallen giants of US finance – not suffering too badly



**Richard Syron**  
Former CEO, Freddie Mac



When Dick Syron was hired in 2003, few would have questioned his qualifications to fix a company still reeling from an accounting scandal in which executives misstated some \$5bn in earnings.

He had previously served as chairman and chief executive of Thermo Electron Corp, as chief executive of the American Stock Exchange, as deputy assistant secretary of the US Treasury and as president of the Federal Reserve Bank of Boston.

His CV has since lost some of its polish. Critics say Mr Syron ignored the dangers of financing mortgages outside Freddie Mac's normal lending parameters. Mr Syron has said that Freddie needed to take additional risks to meet its government mandate to help provide affordable housing.

Mr Syron stepped down as chief executive of the giant US mortgage finance company in September when it was taken over by the government, and few expect the 64-year-old to resurface in another financial services role any time soon.

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**Richard Syron**  
Freddie Mac

**Comeback rating**  
(out of three)



**Latest comeprnsation**  Close

**\$19m**

# The fallen giants of US finance – not suffering too badly



**Daniel Mudd**  
Former CEO, Fannie Mae

**Daniel Mudd**  
Fannie Mae

Comeback rating  
(out of 3)

Latest compensation  Close

★ ★ ☆

\$13.4m



Daniel Mudd is used to high pressure situations. He was a finalist for the US Olympic rowing team when the country boycotted the 1980 Moscow games. He led a marine platoon in Beirut after the barracks bombing in 1981. He was General Electric's man in Mexico after the devaluation of the peso in 1993 and in Asia after its currency crisis in 1996. And when he took the reins of the biggest US mortgage finance company in 2004, Mr Mudd had to steer Fannie Mae through a \$6.3bn accounting scandal.

Mr Mudd stepped down as chief executive of Fannie Mae when the mortgage company, together with its rival Freddie Mac, was taken over by the US government in September, but he remains in the hot seat. Shareholders have filed lawsuits claiming that, under Mr Mudd's leadership, the company took irresponsible risks with its capital position.

Mr Mudd lost millions of dollars as the company's stock declined and his severance payments were revoked under the government takeover, but reaped a 7 per cent rise in pay in 2007 while the company lost \$2.5bn and its shares fell 33 per cent. People familiar with his plans say Mr Mudd often travels to New York for job interviews, but has yet to resurface at another firm.

# The fallen giants of US finance – not suffering too badly



**Angelo Mozilo**  
Countrywide

**Comeback rating**  
(out of three)

★☆☆

**Latest compensation**  Close

**\$132m**

**Angelo Mozilo**  
Former CEO, Countrywide



Angelo Mozilo, a butcher's son who built Countrywide into the largest US mortgage lender, was paid \$52m in 2006, branding him the poster child of financial services excess. The following year, his compensation was worth \$10.8m but, even as his business crumbled, he made a further \$121.5m from cashing in stock options.

Countrywide, which was sold to Bank of America in January, was among the biggest providers of high-risk mortgages to subprime borrowers. Mr Mozilo bowed to heavy pressure from politicians to give up \$37.5m in severance payments and other benefits he was due to receive as a result of the deal. Mr Mozilo left Countrywide in June and has yet to resurface in another role. In 2009, analysts say he is likely to be spending much of his time and personal fortune on his lawyers.

He has been named in a litany of class action lawsuits filed by Countrywide shareholders and bondholders, and is under investigation by the Securities and Exchange Commission for selling Countrywide shares even as the mortgage crisis began. He and Countrywide have also been ridiculed for a so-called "Friends of Angelo" programme, which gave VIP treatment to US senators and other influential people.

# The fallen giants of US finance – not suffering too badly



**Stan O'Neal**  
Merrill Lynch

**Comeback rating**  
(out of three)

★ ★ ☆

**Latest compensation**  Close

**\$162m**

**Stan O'Neal**  
Former CEO, Merrill Lynch



In a way, Stan O'Neal was lucky to go first. His exit from the chief executive post at Merrill Lynch in October 2007 marked him as an early high-profile victim of what was then viewed as the "subprime mortgage crisis".

After five years at the helm, Mr O'Neal then became a symbol for Wall Street's disgrace. But with the failure of Bear Stearns in March followed by Lehman's collapse, Mr O'Neal now has plenty of company in the purgatory to which failed financial titans are banished.

Frustrated investors have filed numerous legal actions against Mr O'Neal. But his actions at the helm of Merrill Lynch don't seem to have attracted the interest of federal prosecutors, as seems to be the case with some of his fallen peers.

Mr O'Neal has reportedly held discussions with Vision Capital Advisors, a New York hedge fund, but has not yet returned to the workforce.

The global financial crisis has helped to push Mr O'Neal out of the spotlight. But at Merrill he remains a source of contempt. At the December 5 meeting where shareholders approved Merrill's sale to Bank of America, the son of one of the firm's founders blasted Mr O'Neal for ripping the soul out of a fabled American brokerage firm. The speech was met with thunderous applause.

# The fallen giants of US finance – not suffering too badly



**Richard Fuld**  
Former CEO, Lehman Brothers

**LEHMAN BROTHERS**

Every weekday, a wiry, immaculately-dressed 62-year-old makes the short journey from his sprawling mansion in the tiny Connecticut town of Greenwich to his office in midtown Manhattan. But, after presiding over Lehman Brothers' collapse into bankruptcy in September, Mr Fuld no longer heads to the top floors of the firm's former headquarters.

Instead executives at Barclays Capital, the UK bank that bought Lehman's US assets, sit in the offices once occupied by Mr Fuld and his "band of brothers" of close allies. But despite the humiliation of seeing a firm he ran for 15 years destroyed, "The Gorilla" – as Mr Fuld was known by friends and foes during his heyday – has not lost his fighting instincts.

As well as pledging to turn up for work until his Lehman contract runs out at the end of the year, Mr Fuld does not plan to spend much time roaming the 20-plus rooms of his Greenwich house. His hopes, though, of setting up a small advisory firm will depend on how he deals with the aftermath of his firm's ruinous slide into oblivion.

Mr Fuld and other Lehman executives have been subpoenaed by federal investigators probing whether managers misled investors over Lehman's financial health in the months before its bankruptcy.

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**Richard Fuld**  
Lehman Brothers

Comeback rating  
(out of three)

Latest compensation  Close

★☆☆

**\$34.4m**

# The fallen giants of US finance – not suffering too badly



## Martin Sullivan

AIG

**Comeback rating**  
(out of three)

★ ★ ★

**Latest compensation**  Close

**\$14.3m**



## Martin Sullivan

Former CEO, AIG

Being downbeat never came naturally to Martin Sullivan. An ebullient character with a colourful turn of phrase, the former chief executive of AIG climbed to the top of the insurer he joined as a 17-year-old thanks to his talents as a talkative salesman.

Even in the dying days of his reign at AIG, Mr Sullivan kept repeating that the company would survive the storm. So the sight of his hangdog expression at a congressional hearing in October was a novelty. A month before the hearing, the government had injected billions of dollars into AIG to pull it back from the brink of collapse.

Opinions on the tenure of Mr Sullivan – who was at the helm from 2005, when he succeeded his mentor Hank Greenberg, until June – are mixed. Many praise his knowledge of insurance and ability to deal with Mr Greenberg's legacy. But his critics argue that he did not tackle the internecine rivalries that had been festering during the decades-long Greenberg regime and, crucially, failed to stop the reckless derivatives bets placed by a little-policed AIG division.

At 54, Mr Sullivan is nowhere near retirement age and his insurance expertise, coupled with his marketing prowess, could make him attractive to a private equity or consultancy group.

# The fallen giants of US finance – not suffering too badly



**Jimmy Cayne**  
Bear Stearns

**BEAR STEARNS**

Former CEO, Bear Stearns

Jimmy Cayne's acumen at bridge did not prepare him for this financial crisis. After resigning last January, Mr Cayne had to stand on the sidelines as the group he had led for 15 years was brought to its knees last March.

At the time of Bear's collapse, which was softened by a government-backed deal for JPMorgan Chase to acquire the group for \$10 a share, it seemed almost unfair for one company to suffer for the credit-related sins of most Wall Street banks. Of Bear's 14,000 employees, half are believed to have lost their jobs after the JPMorgan purchase. But the rest of 2008 turned Bear's fall into something less than outright failure. To the employees of Lehman Brothers, which filed for bankruptcy in September, \$10 a share must have seemed pretty good. And the firm's collapse left Mr Cayne, whose net worth briefly topped \$1bn, with approximately \$60m. Mr Cayne denied to Fortune magazine this summer that he had fiddled while Rome burned. Mr Cayne was at a bridge tournament when Bear's problems first surfaced in the summer of 2007.

His fall from grace at Bear Stearns didn't prevent him from upgrading his circumstances. Last winter, weeks before Bear's demise, Mr Cayne and his wife purchased two luxury apartments at the Plaza Hotel overlooking Manhattan's Central Park.

**Comeback rating (out of three)**  
☆☆☆

**Latest compensation**  Close  
**\$32.1m**

First lesson: We have made no progress from 1620 - 2009

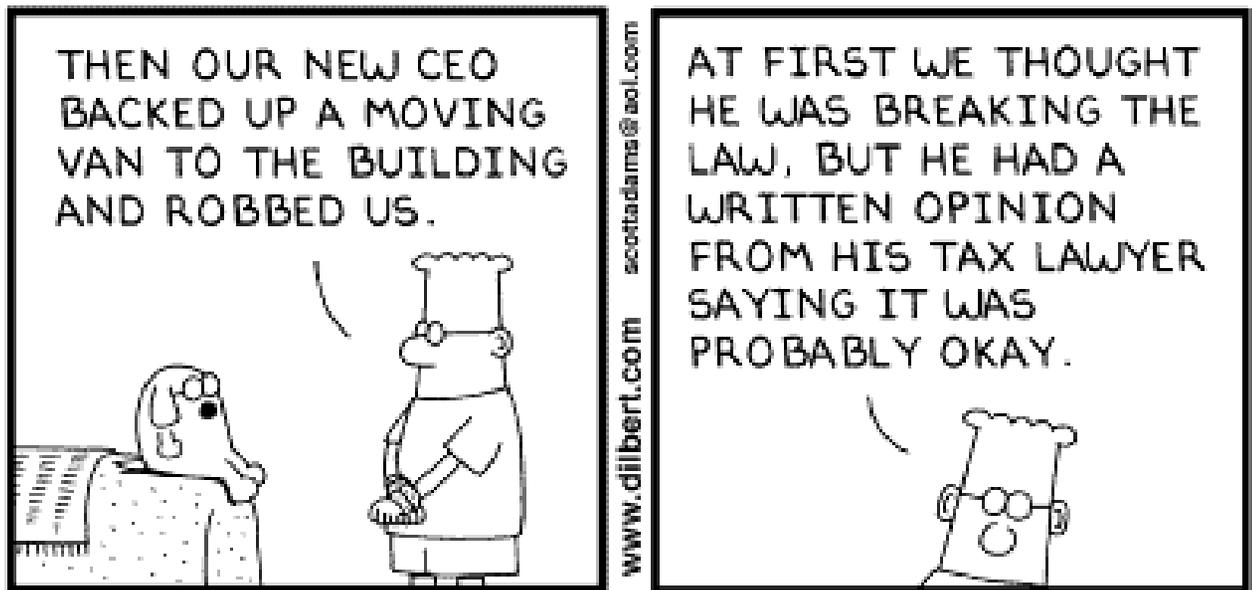
Where were the directors ?



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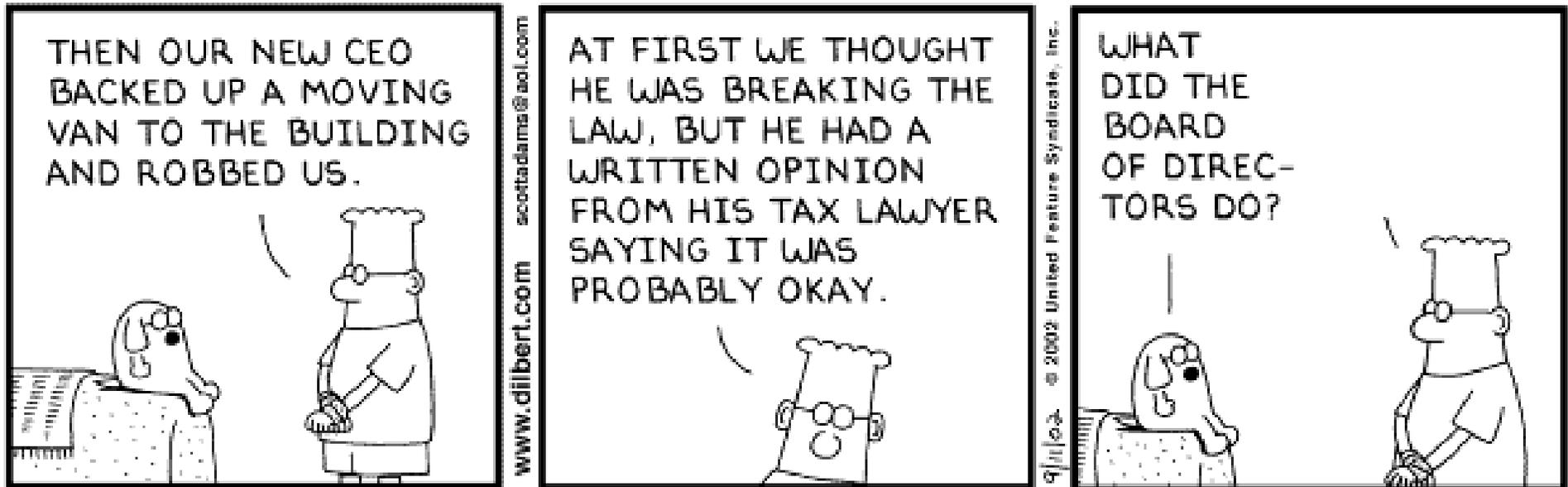
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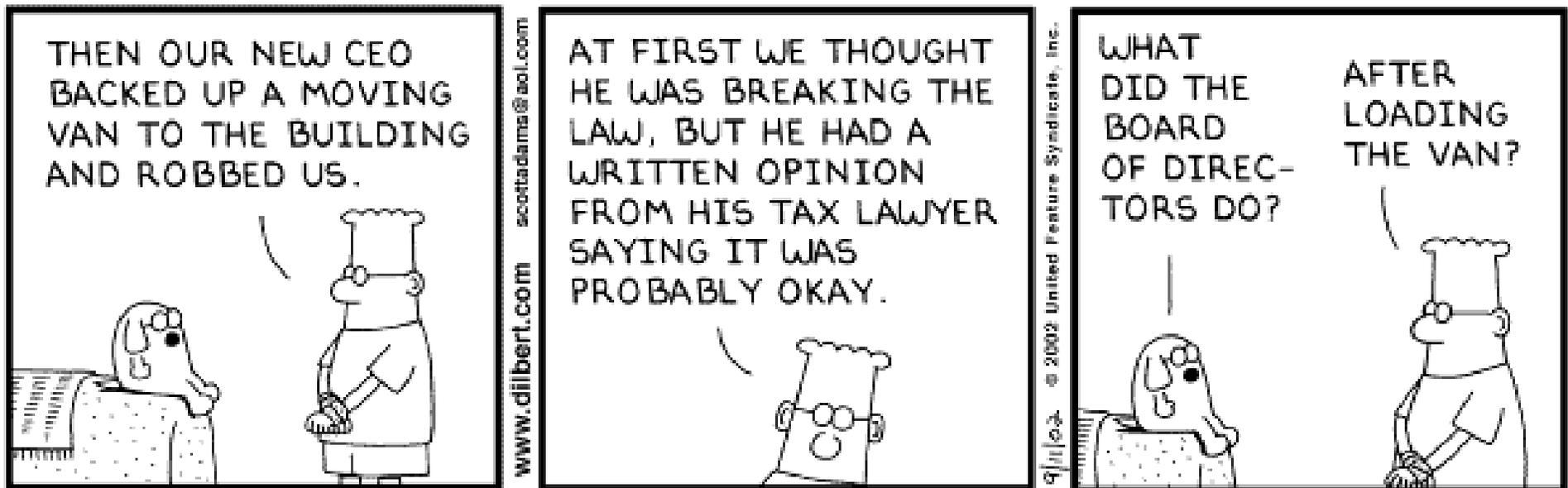
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# First lesson: We have made no progress from 1620 - 2009

Where were the directors ?



# Do U.S. Firms Have the Best Corporate Governance?

## A Cross-Country Examination of the Relation between Corporate Governance and Shareholder Wealth

Finance Working Paper N° . 145/2007

January 2007

Reena Aggarwal  
Georgetown University

Isil Erel  
Ohio State University, Reese Chair of Banking and  
Monetary Economics

René Stulz  
Ohio State University, NBER, and ECGI

# Canada has the “best” corporate governance in the world

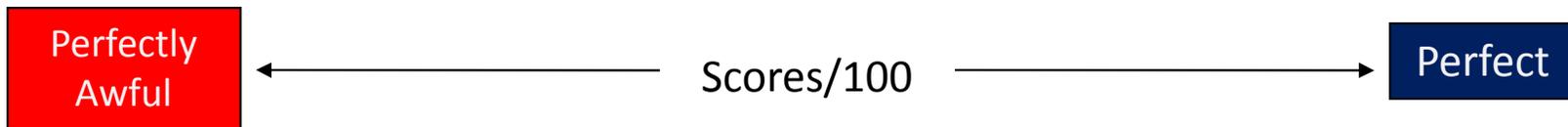
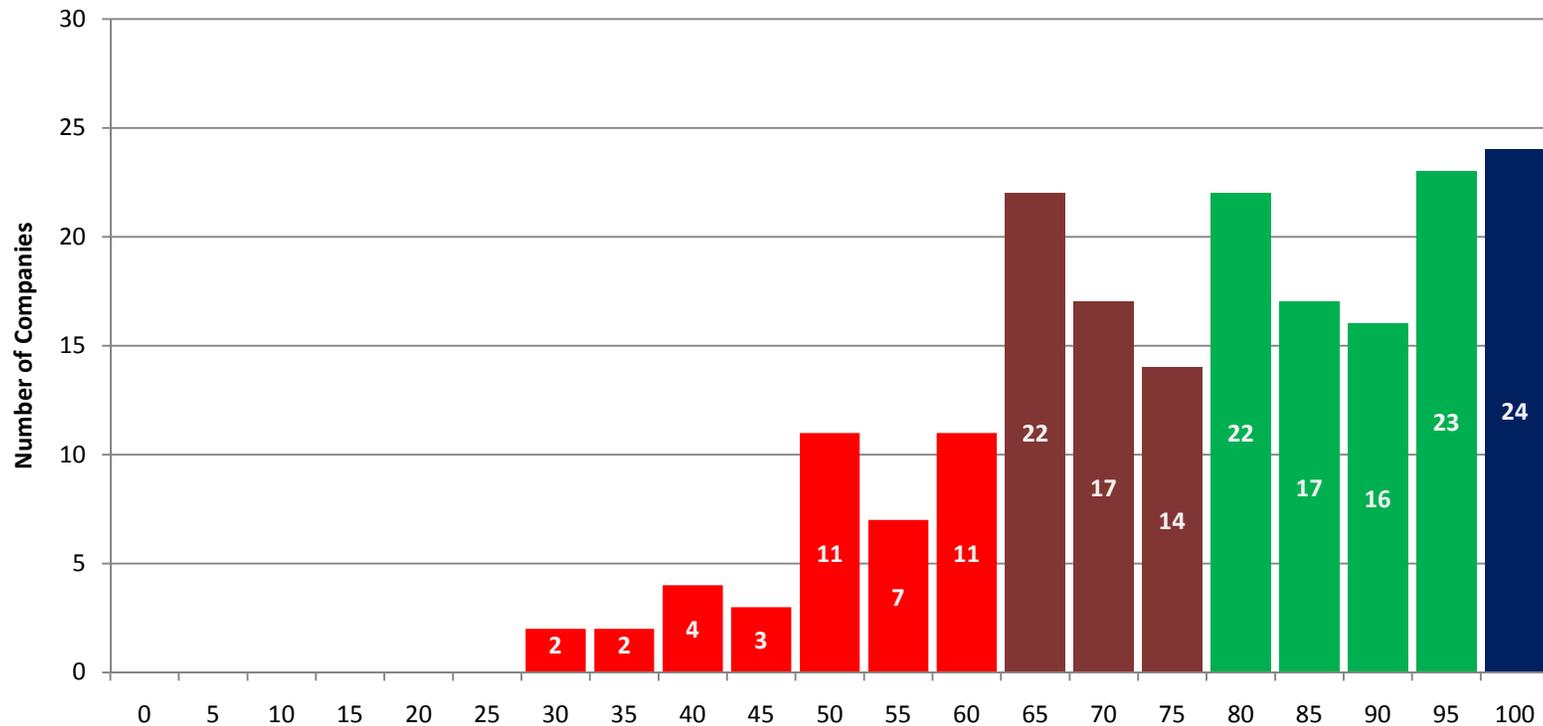


Basis: 5,296 US firms + 2,235 non-US firms in 23 nations using ISS metrics

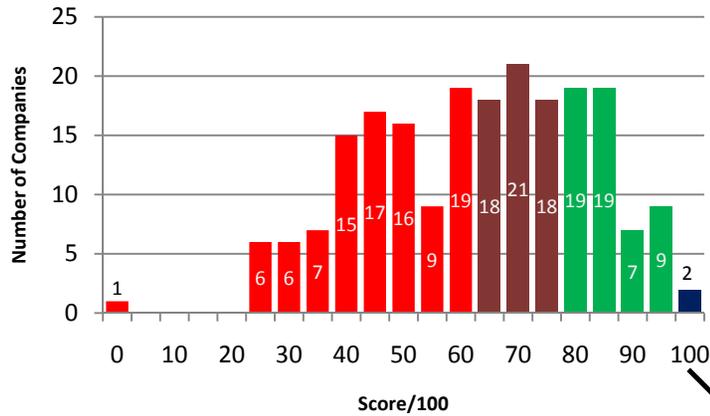
# Report on Corporate Governance in Canada

## 2008 Governance Scores

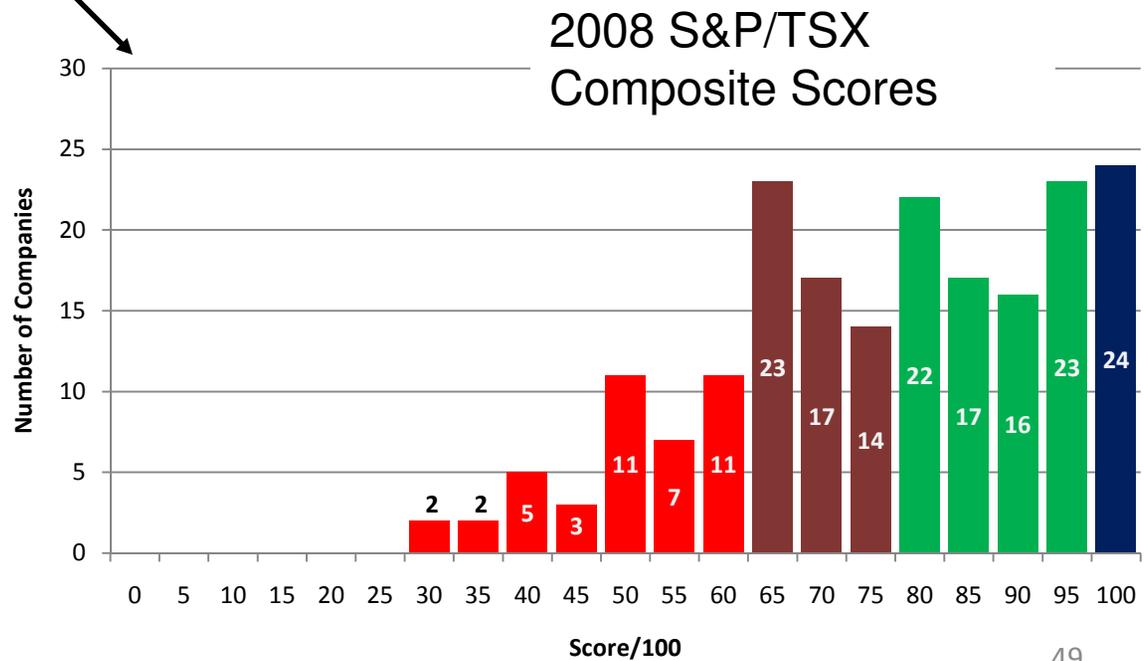
(The 195 S&P/TSX Composite Index listed corporations scored using the Clarkson Centre Metrics)



# Corporate governance in Canada has improved significantly



2002 S&P/TSX Composite Scores



2008 S&P/TSX Composite Scores

## 24 companies received top marks up from 2 in 2002

1. Addax Petroleum
2. Bank of Montreal
3. BCE Inc.
4. Canadian Pacific Railway Ltd.
5. Canadian Western Bank
6. Compton Petroleum Corporation
7. Encana Corporation
8. FirstService Corporation
9. Fortis Inc.
10. Gildan Activewear Inc.
11. Industrial Alliance Insurance and Financial Services Inc.
12. Laurentian Bank of Canada
13. Manulife Financial Corporation
14. MDS Inc.
15. National Bank of Canada
16. Petro-Canada
17. Potash Corporation of Saskatchewan Inc.
18. ProEx Energy Ltd.
19. Royal Bank of Canada
20. Russel Metals Inc
21. SNC-Lavalin Group Inc.
22. TELUS Corporation
23. Toronto-Dominion Bank
24. TSX Group Inc.



Why did Canadian banks escape the worst of the storm?

Canadian consumer not oriented to leverage

Canadian banking operates differently

Canadian regulator (OSFI) is a gorilla



Why did Canadian banks escape the worst of the storm?

Canadian consumer not oriented to leverage

- no tax deductions for mortgages
- no immunity to walk away from mortgage obligations
- possibly more aware of the nature of the obligation

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### Canadian banking operates differently

- more conservative: branch banking
- more origination than in the US (less dis-intermediation)
- securitisation under government guarantees

### Canadian regulator (OSFI) is a gorilla



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### Canadian regulator (OSFI) is a gorilla

- moral suasion is HUGE: only 5 major banks to oversee all in Toronto
- clever strategy: where there is smoke ASSUME FIRE for months
- history of pushing up the Tier 1 capital ratios



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What did BMO do to improve its risk management practices?

**Strengthened the RISK function internally**

- CRO brought in from capital markets and reports directly to CEO
- Hired experienced talent from other leading financial institutions
- Significantly improved timeliness and quality of risk reporting

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**Changed the responsibility for RISK to line**

- Built greater orientation to risk into LOBs leaders: YOUR job as well
- Strategic planning incorporated risk/return thinking
- Risk adjusted returns translate into compensation packages

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### Changed the responsibility for RISK to line

Built greater orientation to risk into LOBs leaders: YOUR job as well

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- Risk adjusted returns translate into compensation packages

### Brought a retired RISK professional onto the board

- LOB leaders part of all discussions of market/liquidity/credit operational risk
- All papers summarised in a ONE page overview by CRO
- In camera meetings at start and end of every meeting

# Top Risks

	Risk	Risk Class	Description of Risk	Management Actions	Impact
1. (1) ↔	<b>Credit Migration &amp; Default Risk</b>	Credit	Recessionary conditions resulting in negative credit migration across commercial and consumer portfolios. Commercial defaults are taking place across the economy and no longer confined to the residential building sector. The US economy is in significantly worse shape than the Canadian economy and this is reflected in portfolio performance. The weak job market and falling house prices in Canada are adversely impacting consumer credit quality.	Limited new business flow is being adjudicated against underwriting standards which reflect the current economic environment. Monitoring has been stepped up across the portfolios in order to identify credit migration at an early stage so that the appropriate management actions can be taken.	
2. (2) ↔	<b>Structured debt</b>	Market / Credit	Three more defaults in Apex portfolios during March which reduced attachment points on a number of portfolios. Further note write downs are anticipated in Q2. Mark to market asset values in Links and Parkland continue to deteriorate.	Detailed credit analysis on the Apex portfolios is being updated monthly. The TRS is being restructured. Limited activity has been practical with respect to the SIVs as asset prices and liquidity continue to be poor.	
3. (3) ↔	<b>Wholesale funding</b>	Liquidity / Funding	Reduced long term funding capacity and C\$ ABCP conduits with auto exposures could force increased reliance on short term funding, increasing liquidity risks. High funding costs impacting earnings.	Monitor contingency plan metrics. Monitor wholesale term funding markets relative to completing F09 requirements of \$5B and F10 requirements of approx. \$15B. Government programs have mitigated some of this risk. Direct funding of ABCP conduits has been factored in Treasury's contingency plans. Loan portfolio being repriced.	
4. (4) ↔	<b>Market illiquidity / Credit Spreads</b>	Market	Funding liquidity is improving but Credit Spreads at historically high levels. Accurate valuation is difficult for structured credit products and the market is still extracting a high transaction premium to liquidate securities. BMO's core credit derivative and non-relationship loan positions being reduced, but at a rate which is slower than desirable. Rapid forced sales would likely result in material losses.	Our independent valuation group (VPC – Valuation Product Control) is continuing to add capacity. The Core Credit and Core Rates trading groups are participating in multilateral netting/unwind services and have been successful in reducing positions to some degree.	
5. (5) ↔	<b>Financial Services Sector</b>	Market / Credit	Credit and liquidity crisis has decimated numerous financial institutions in US and Europe; massive government intervention starting to moderate the crisis, potentially resulting in increased market confidence.	Proactively managing credit exposure including payments risk to Banks and Investment Dealers. Increased focus on institutions which are unable to access government support (due to eligibility or sovereign capability)	
6. (6) ↓	<b>C\$ ABCP market</b>	Liquidity	Investor base for the C\$ ABCP market remains concentrated. Rating agencies are reviewing the conduits with auto exposures. This process could result in the Bank having to fund approximately \$1 billion in specific programs in order to preserve the ratings on the related conduits.	Programs in the six BMO sponsored conduits issuing ABCP are all double rated and currently eligible to be pledged to the Bank of Canada as collateral. Treasury has factored the direct funding of additional programs into its contingency plans. All programs remain on run off.	
7. (7) ↓	<b>Fraud</b>	Operational	Increases in fraudulent activities both internally and externally driven by economic environment.	Additional Collection and Corporate Security resources added. Investment spend approved to update fraud detection capabilities for P&C lending with detailed 5 yr strategy to address fraud in P&C Canada developed. Sharing of intelligence across industry actively occurring. Enterprise Fraud Specialist to be established. Pilot planned for testing of software specializing in the detection of internal fraud.	
8. (8) ↔	<b>Regulatory Compliance</b>	Operational	Market environment leading to increasing regulatory requirements (e.g. Basel) as well as product and client suitability issues, resulting in greater challenge from regulators regarding professional practices e.g. ARS type issues.	Management continues to monitor existing and emerging regulatory requirements to ensure resources are prioritised appropriately (e.g. ISO Mandatory Project process). Cross LOB protocol implemented for identifying responsibilities. Increased focus on assessment/monitoring of product/client suitability issues to ensure appropriate coverage of risks.	



Allow the bank to still maintain desired risk appetite / tolerance



Shift to caution level on risk appetite and tolerance



Approaching upper bound of risk appetite / tolerance



Exceeds upper bound of risk appetite / tolerance

## Performance Relative to Desired Risk Profile

		Metric	Future Trend	Q1 09	Q4 08	Q3 08	Q2 08	Q1 08
Risk Adjusted Performance	Risk Adjusted Performance	Return on Equity	↑	4.7%	14.0%	13.5%	17.9%	6.7%
		Return on Risk Weighted Assets (Basel II)	↑	0.46%	1.19%	1.13%	1.39%	0.57%
		Net Economic Profit Growth	↑	(71.8%)	103.4%	(56.5%)	(7.9%)	(242.7%)
Quantitative Risk Appetite	Credit Quality	Credit Economic Capital/ Exposure at Default	↓	1.89%	1.75%	1.60%	1.62%	1.54%
		Actual PCL/Annual Plan PCL	↔	140%	283%	390%	136%	153%
		Total PCL/ Average Net Loans & Acceptances	↓	0.90%	0.76%	0.66%	0.45%	0.55%
		Allowance for Credit Losses/ Gross Impaired Loans (Coverage Ratio)	↓	65%	73%	83%	73%	91%
		Gross Impaired Loans/ Gross Loans & Acceptances	↓	1.39%	1.26%	1.01%	1.05%	0.79%
	Risk Mix	Qtr/Qtr Change in Economic Capital	↓	12%	11%	1%	2%	9%
		Capital Markets RWA/ Total Bank RWA	↑	52%	52%	53%	56%	N/A
		Qtr/Qtr Change in Market Value Exposure	↑	(0.56%)	7.30%	12.59%	2.26%	(2.36%)
	Capital Adequacy	Market Risk EV/ Net Income	↓	(5.09%)	(2.98%)	(2.31%)	(2.01%)	(1.81%)
		Tier 1 Capital Ratio (Basel II)	↓	10.21%	9.77%	9.90%	9.42%	9.48%
Credit Rating	Tangible Common Equity/ Risk Weighted Assets	↓	7.77%	7.47%	7.44%	7.17%	7.22%	
	S&P Rating / Moody's Rating	↔	A+/Aa1	A+/Aa1	A+/Aa1	A+/Aa1	A+/Aa1	
Liquidity	Short-term Wholesale Funding (0-90 day)	↔	\$35B	\$41B	\$41B	\$37B	\$50B	
	Liquidity Ratio	↔	28.2%	29.1%	29.6%	29.6%	30.7%	
	S&P Survival Horizon	↓	6.0 mos.	5.5 mos.	4.7 mos.	3.7 mos.	4.0 mos.	
Employee Turnover	Voluntary Turnover (%)	↑	11.7%	12.4%	12.6%	13.1%	13.3%	
Qualitative Risk Appetite	Internal Controls	Maintain an effective system of internal control aligned to business objectives and tolerance for risk	↔	On Target				
	Compensation Alignment	Performance management and compensation processes aligned to the risk taking activities of the enterprise <sup>1</sup>	↔	On Target				
	Resourcing Levels	Enterprise resourced to ensure risks are identified, understood, monitored, managed and reported balancing the need to remain cost-effective <sup>1</sup>	↔	On Target				
	Reputation Risk	Maintain business practices and policies to ensure that the reputation of the firm is safeguarded and protected <sup>2</sup>	↔	On Target				



Desired Risk Profile



Management focus is necessary to monitor risk profile and improve if appropriate



Action required or underway to monitor and improve risk profile

Future Trend: ↑ Improving ↓ Worsening ↔ Stable

# Risk Tolerance Ranges

	Dimension	Metric	Green	Yellow	Red
Risk Adjusted Performance	Risk Adjusted Performance	Return on Equity	>15%	>=10% and 15%	<10%
		Return on Risk Weighted Assets (Basel II)	>1.25%	>0.85% and <=1.25%	<0.85%
		Net Economic Profit Growth	>8%	>=0% and 8%	<0%
Quantitative Risk Appetite	Credit Quality	Credit Economic Capital/ Exposure at Default	<1.60%	1.60% and 2.25%	>2.25%
		Actual PCL/Annual Plan PCL	<105%	105% and 120%	>120%
		Total PCL/ Average Net Loans & Acceptances	<= 0.50%	>0.50% and 0.75%	>0.75%
		Allowance for Credit Losses/ Gross Impaired Loans (Coverage Ratio)	>= 115%	>=85% and <115%	<85%
		Gross Impaired Loans/ Gross Loans and Acceptances	<= 1.50%	>1.50% and 2.00%	>2.00%
	Risk Mix	Qtr/Qtr Change in Economic Capital	<0%	>0% and 10%	>10%
		Capital Markets RWA/ Total Bank RWA	<= 40%	>40% and 50%	>50%
		Qtr/Qtr Change in Market Value Exposure	<=5%	>5% and <=15%	>15%
	Capital Adequacy	Market Risk EV/ Net Income	<=2.5%	>2.5% and <=5%	>5%
		Tier 1 Capital Ratio (Basel II)	> 9.75%	>=9.25% and 9.75%	< 9.25%
Credit Rating	Tangible Common Equity/ Risk Weighted Assets	> 7%	>=6.75% and 7%	< 6.75%	
	S&P Rating / Moody's Rating	AA-/Aa1	A+/Aa2	A-/Aa3	
Liquidity	Short-term Wholesale Funding (0-90 day)	< \$50B	>= \$50B and \$67B	>67B	
	Liquidity Ratio	>28%	>= 26% and 28%	<26%	
	S&P Survival Horizon	>4 mos.	>= 2.5 mos. and 4 mos.	<2.5 mos.	
Employee Turnover	Voluntary Turnover (%)	<= 14%	>14% and <=18%	>18%	
Qualitative Risk Appetite	Internal Controls	Maintain an effective system of internal control aligned to business objectives and tolerance for risk	Satisfactory	Satisfactory but significant issues	Unsatisfactory
	Compensation Alignment	Performance management and compensation processes aligned to the risk taking activities of the enterprise	Satisfactory	Satisfactory but significant issues	Unsatisfactory
	Resourcing Levels	Enterprise resourced to ensure risks are identified, understood, monitored, managed and reported balancing the need to remain cost-effective			
	Reputation Risk	Maintain business practices and policies to ensure that the reputation of the firm is safeguarded and protected	Satisfactory	Satisfactory but significant issues	Unsatisfactory

Stakeholder agreement achieved

Green

Desired Risk Profile

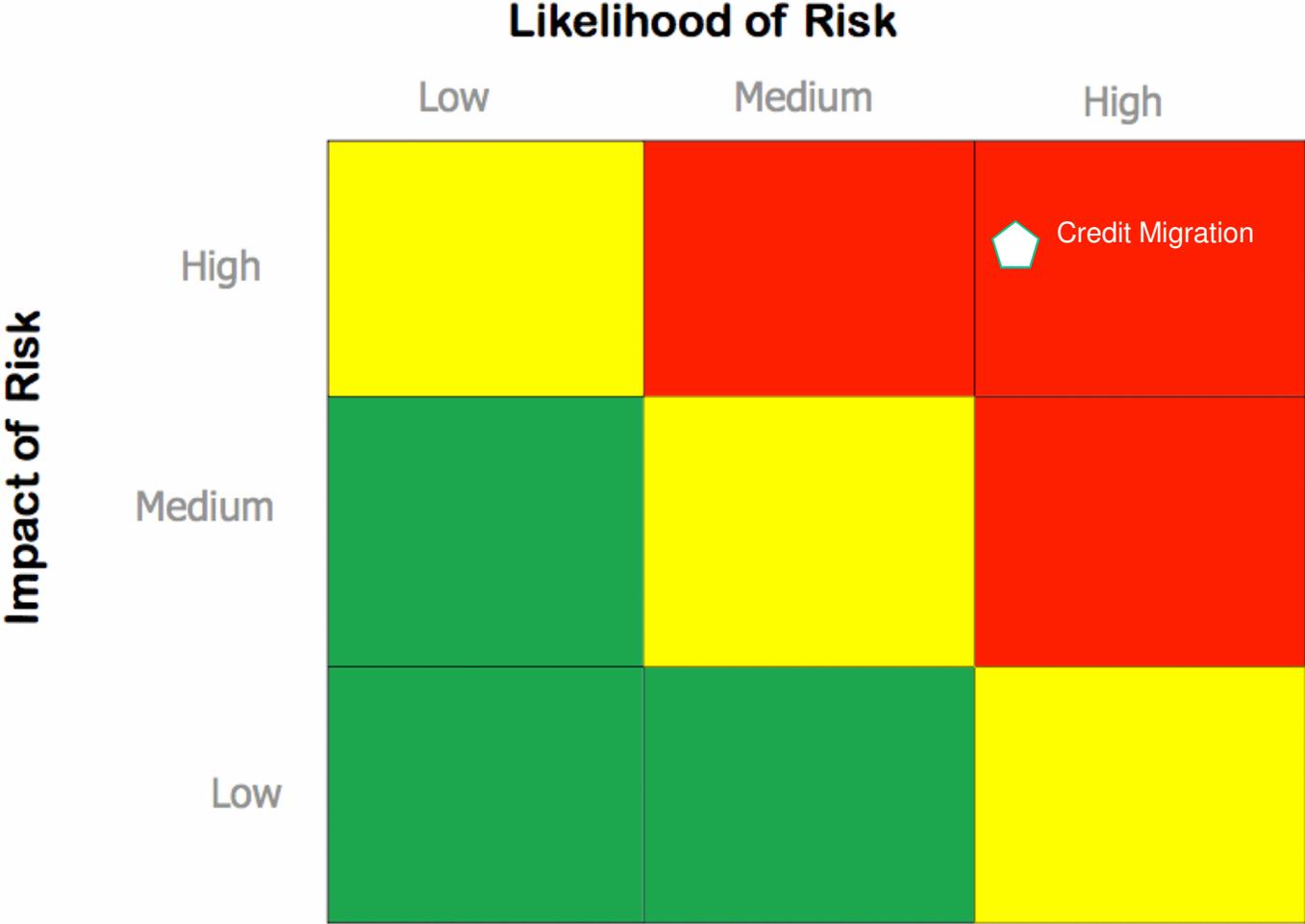
Yellow

Management focus is necessary to monitor risk profile and improve if appropriate

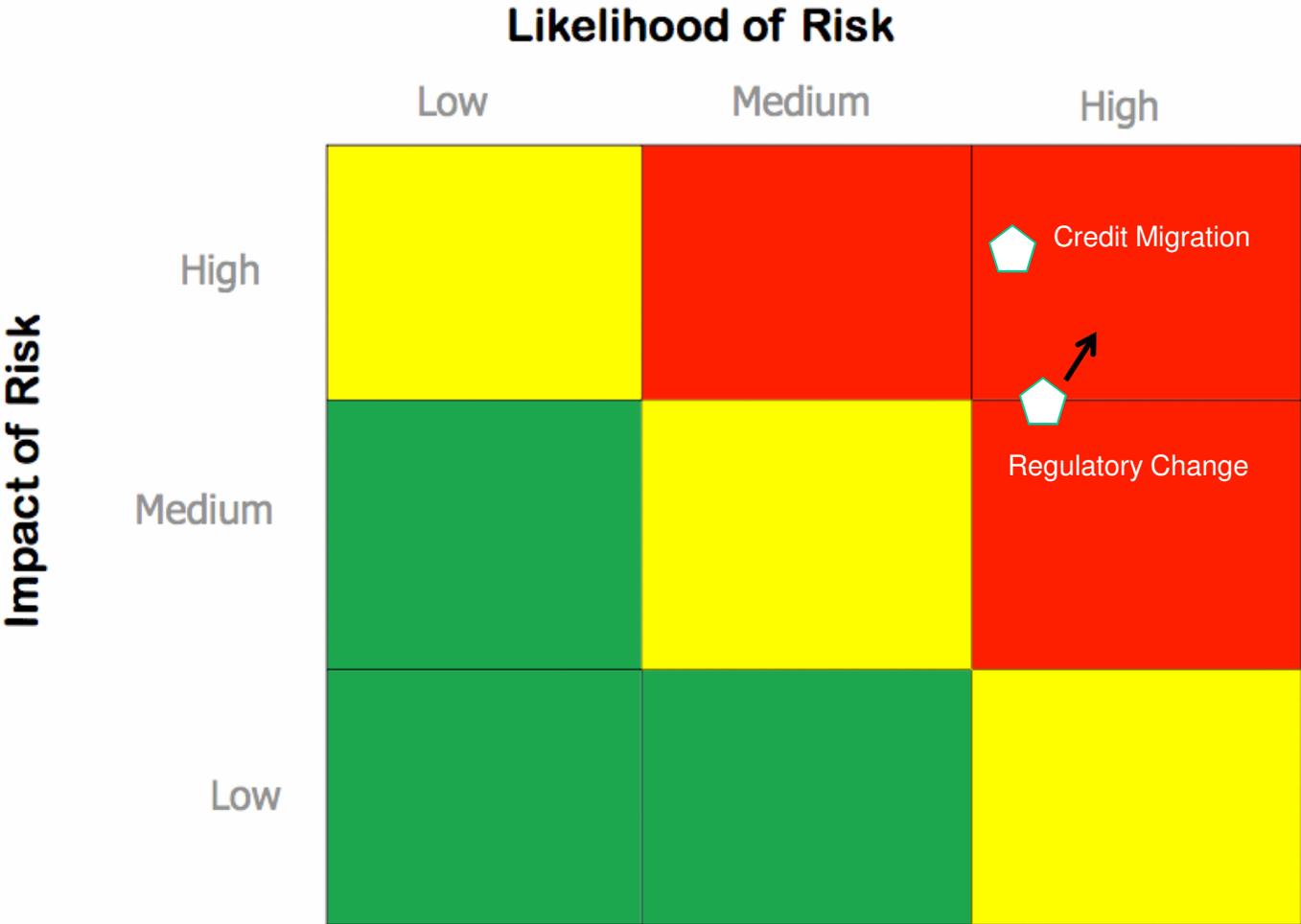
Red

Action required or underway to monitor and improve risk profile

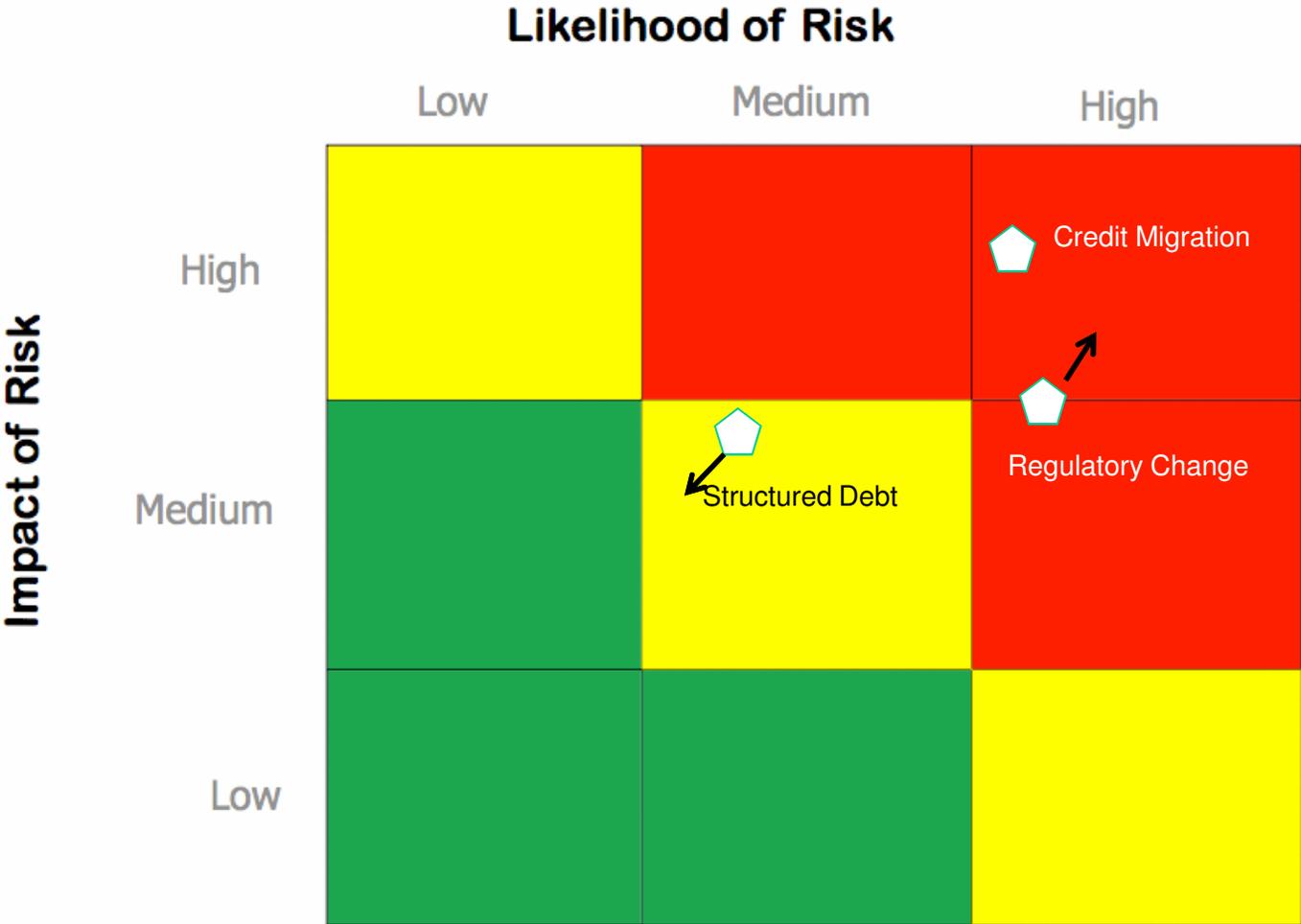
# Recently created a “heat map” of the TOP LINE RISKS



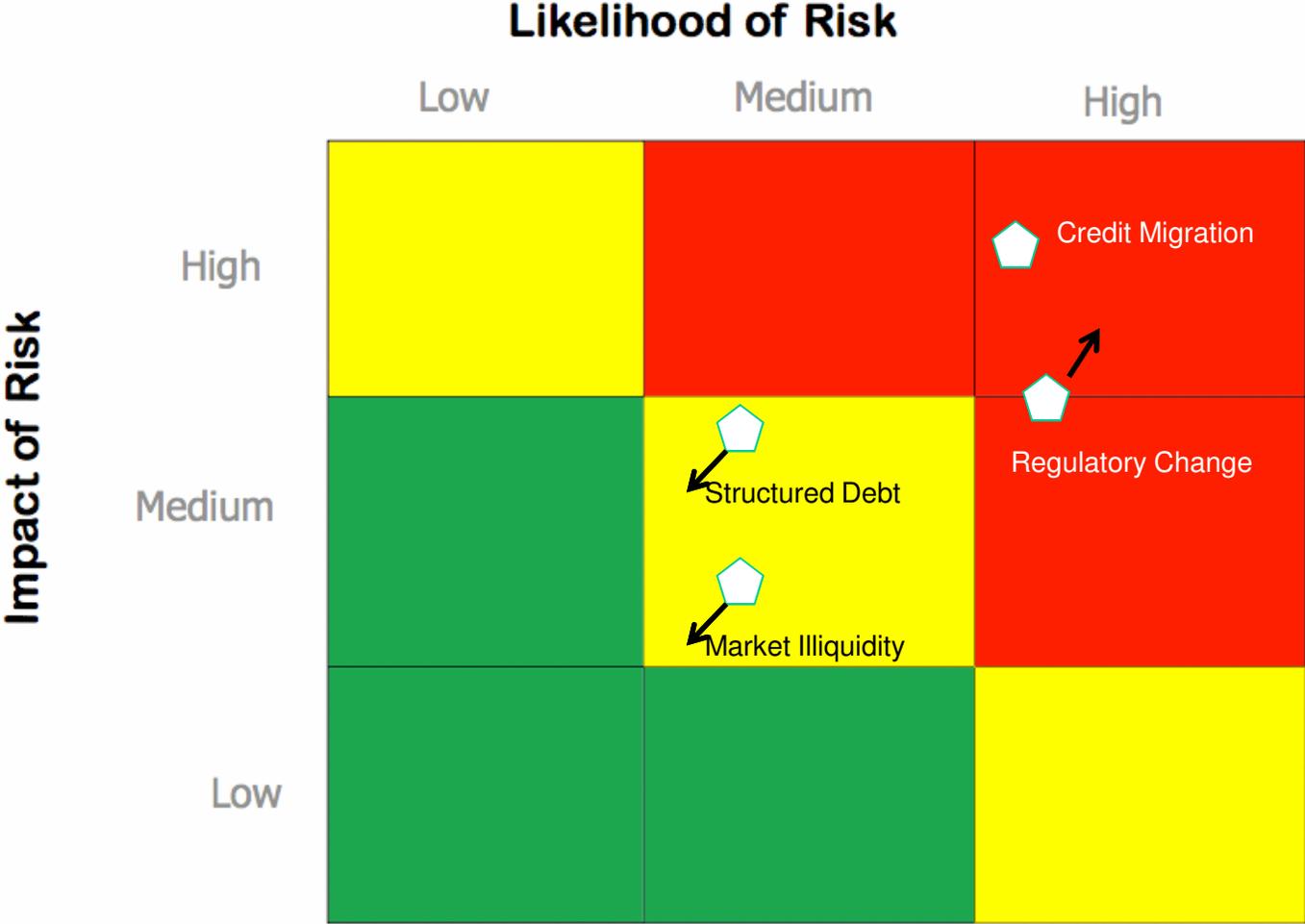
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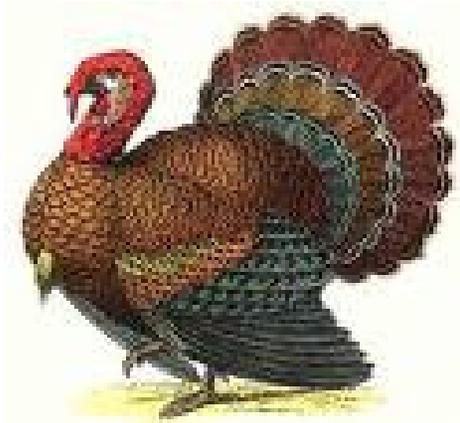
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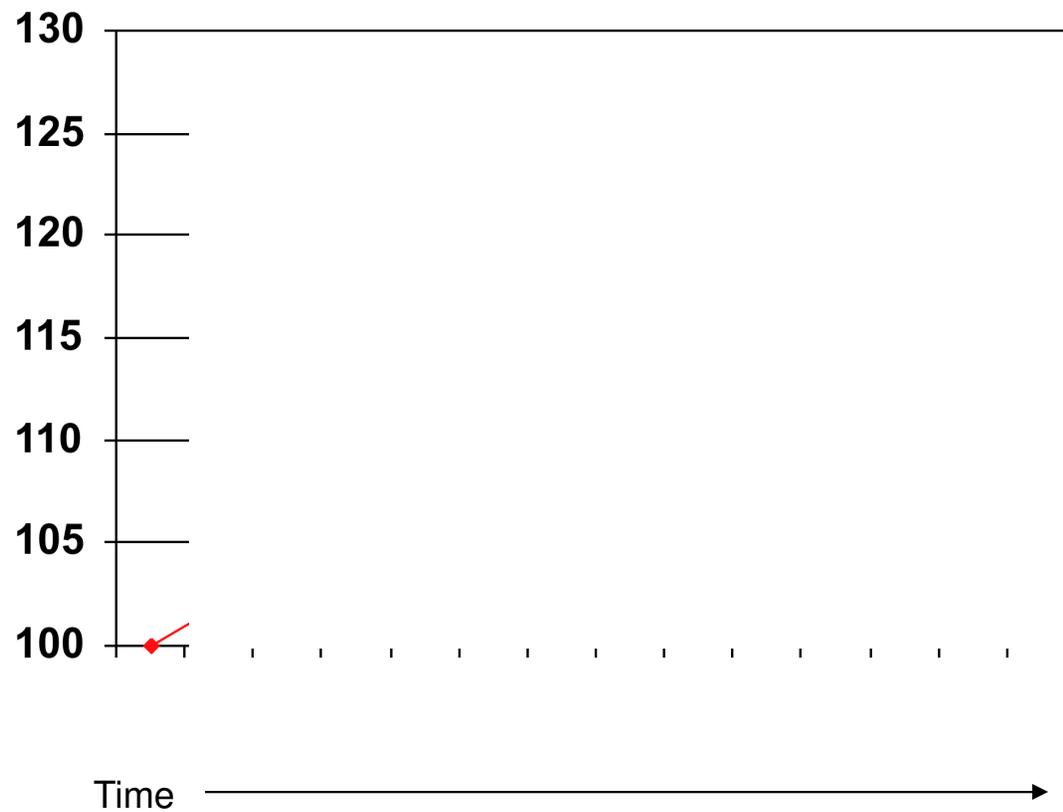
## A Black Swan event is one that has three attributes

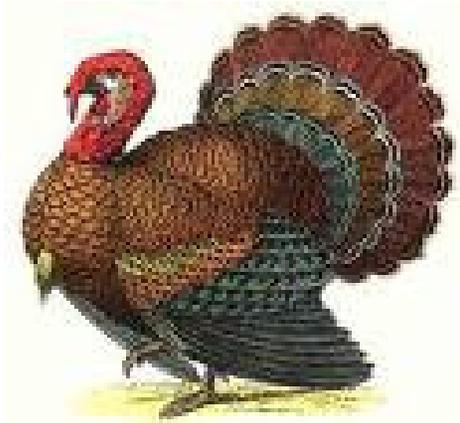
1. Illustrates the severe limitations of learning from observation/experience AND the fragility of our 'knowledge'
2. Carries an extreme impact
3. Increases as the world gets ever more complex



## The Bertrand Russell example

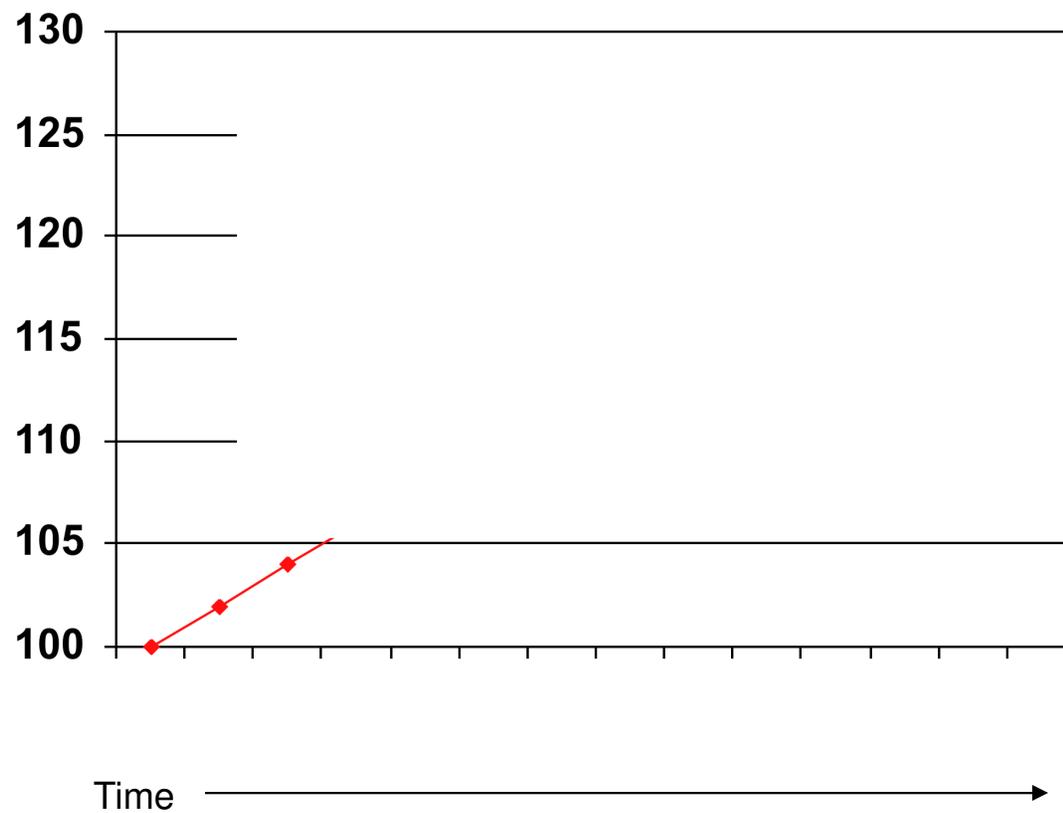
Turkey "Happiness Quotient"





## The Bertrand Russell example

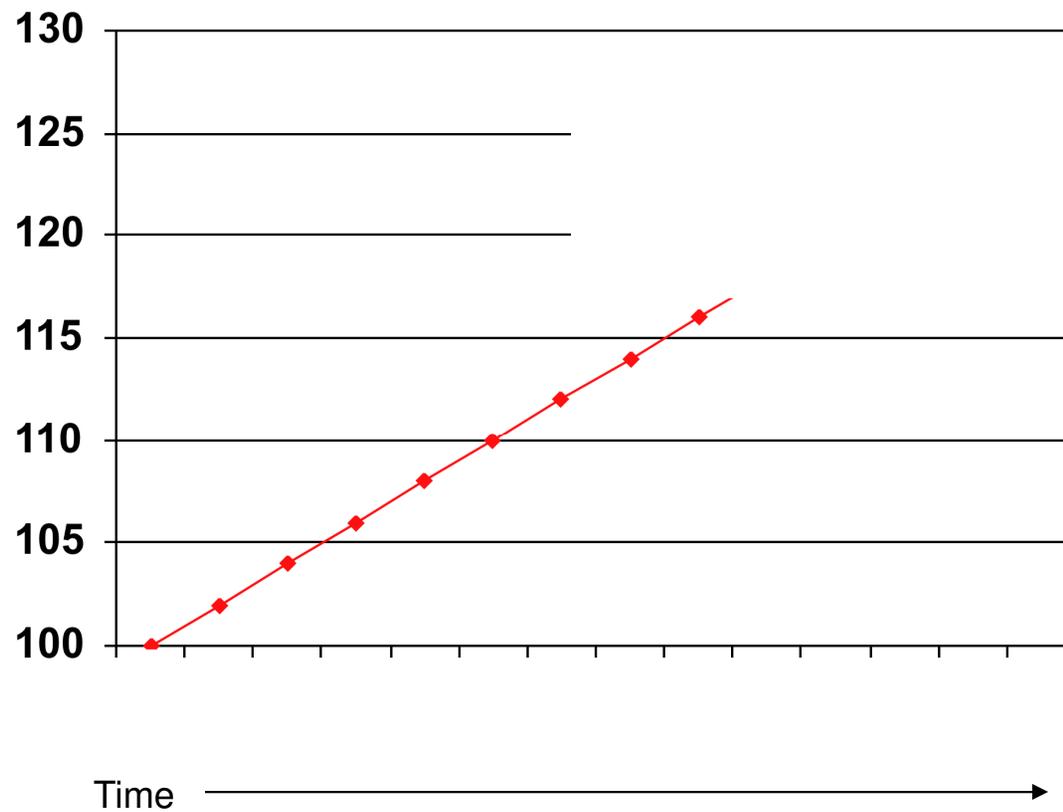
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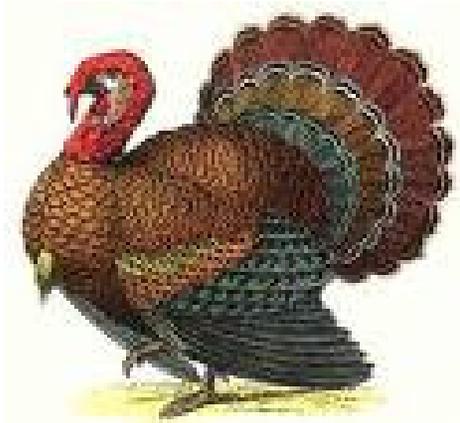




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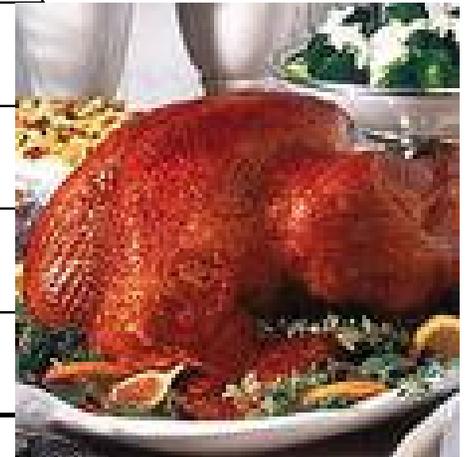
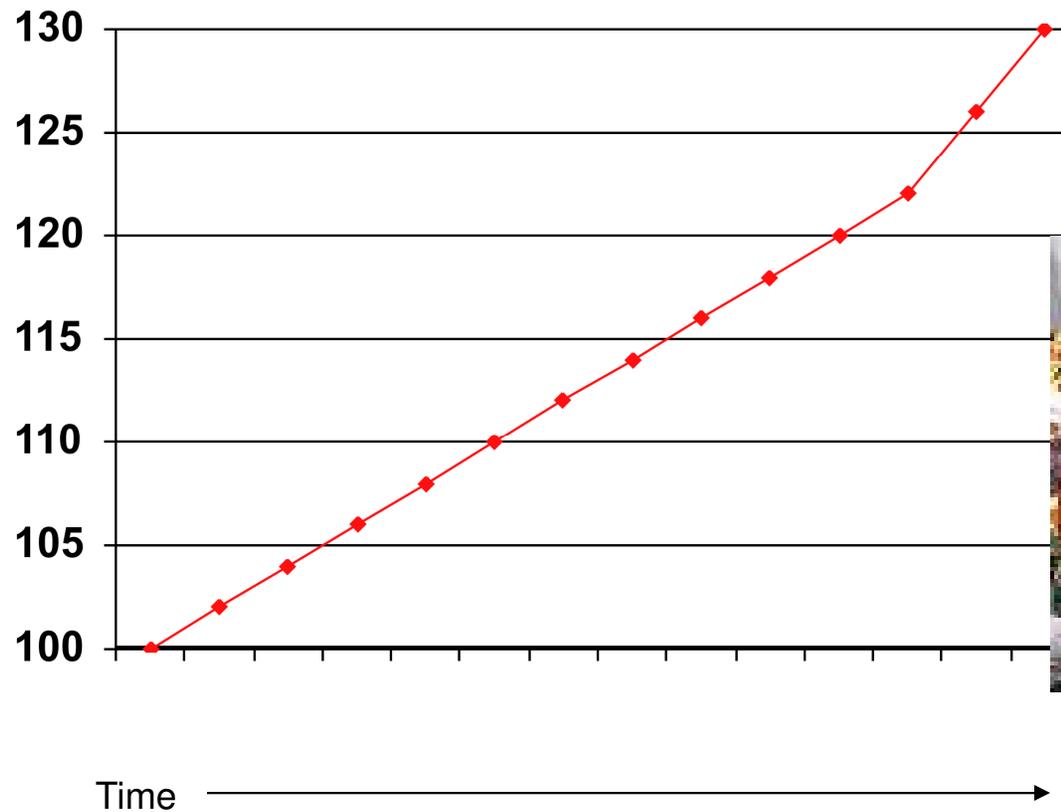




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Nov 26<sup>th</sup>, 2009

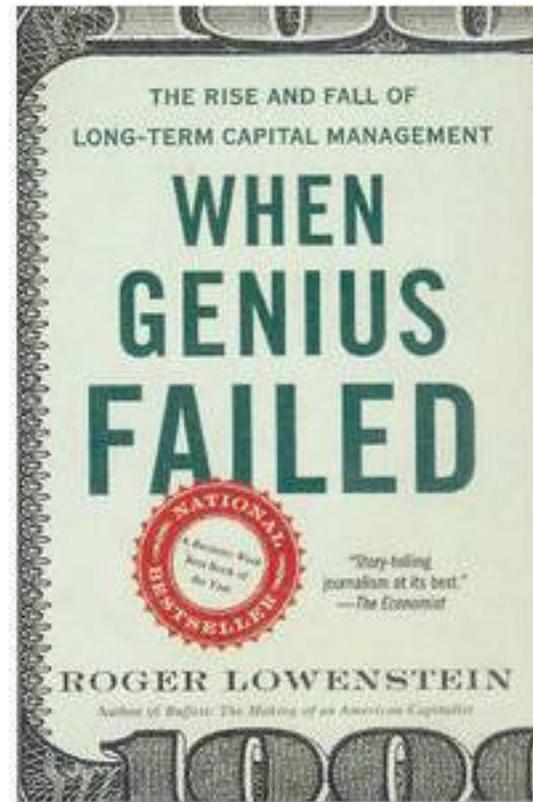


“Black Swan” events you might remember:

1997 Asia: Thai baht contagion

1998 Russian debt repudiation

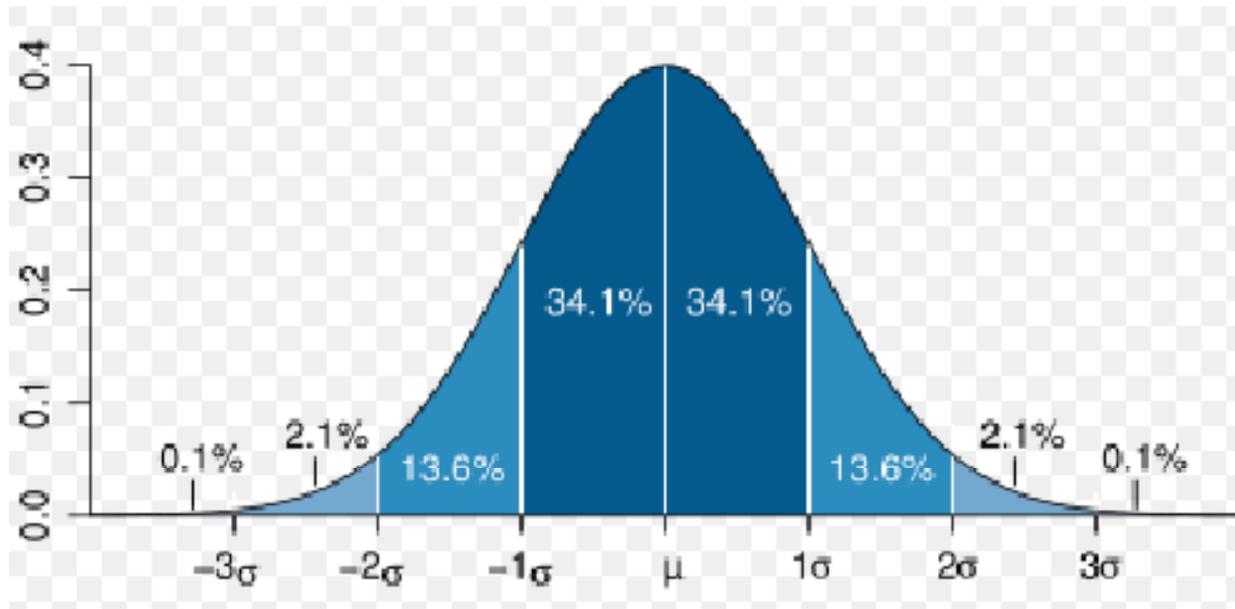
Long Term Credit Management had  
\$100bn in exposures and ‘required’ a  
\$3.65bn bailout



# “Black Swan” events you might remember:



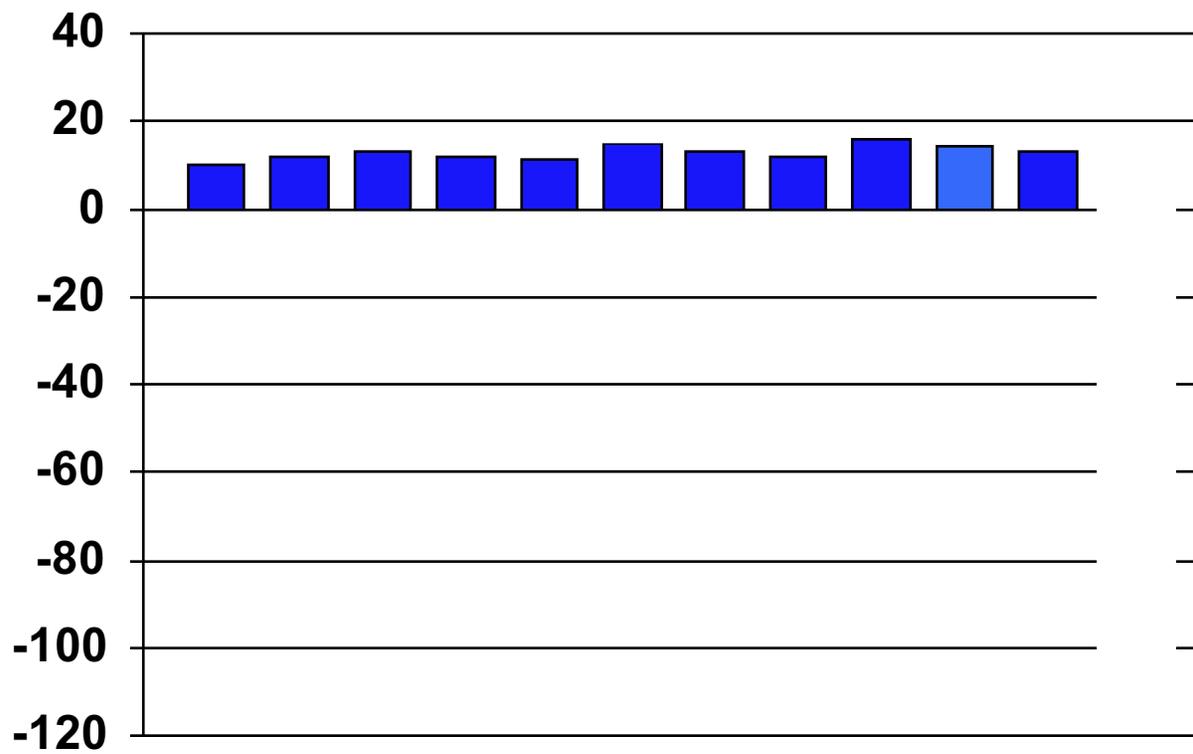
Nothing in socio-economic life looks like this!!!



$\sigma$	68.26894921371%
$2\sigma$	95.44997361036%
$3\sigma$	99.73002039367%
$4\sigma$	99.99366575163%
$5\sigma$	99.99994266969%
$6\sigma$	99.9999980268%
$7\sigma$	99.9999999974%

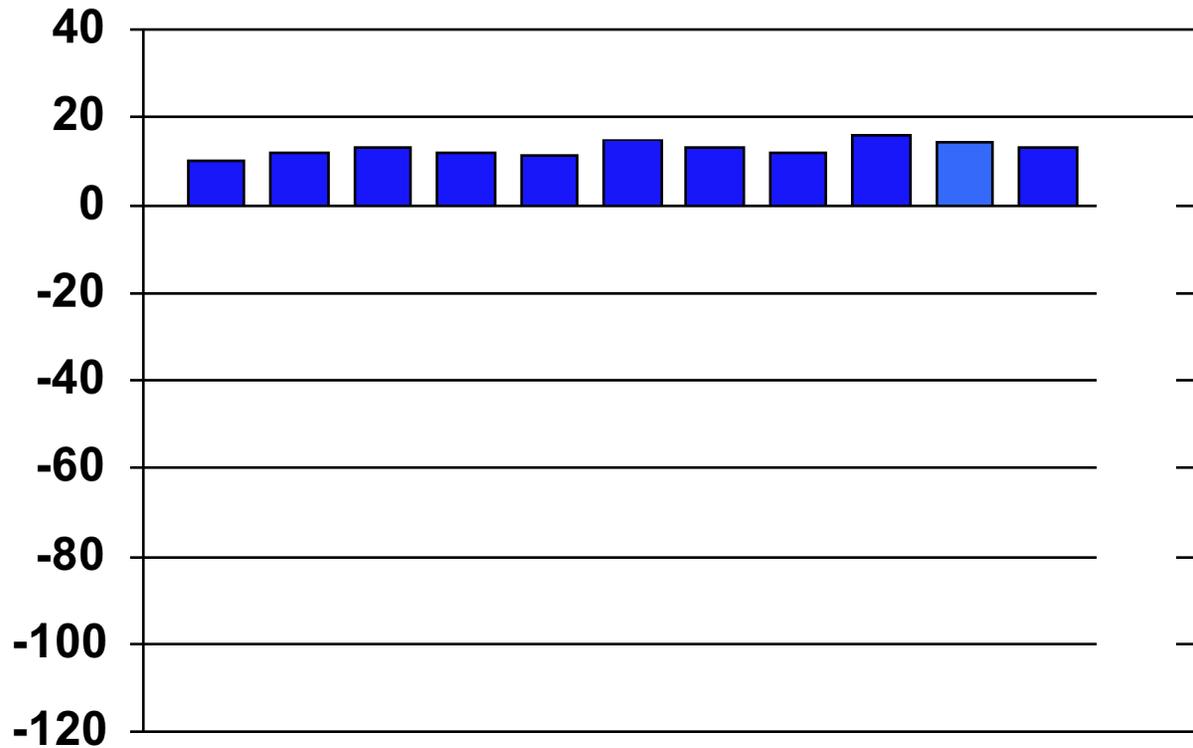
The average can depend so much on one single observation

“Dear investor ..... “

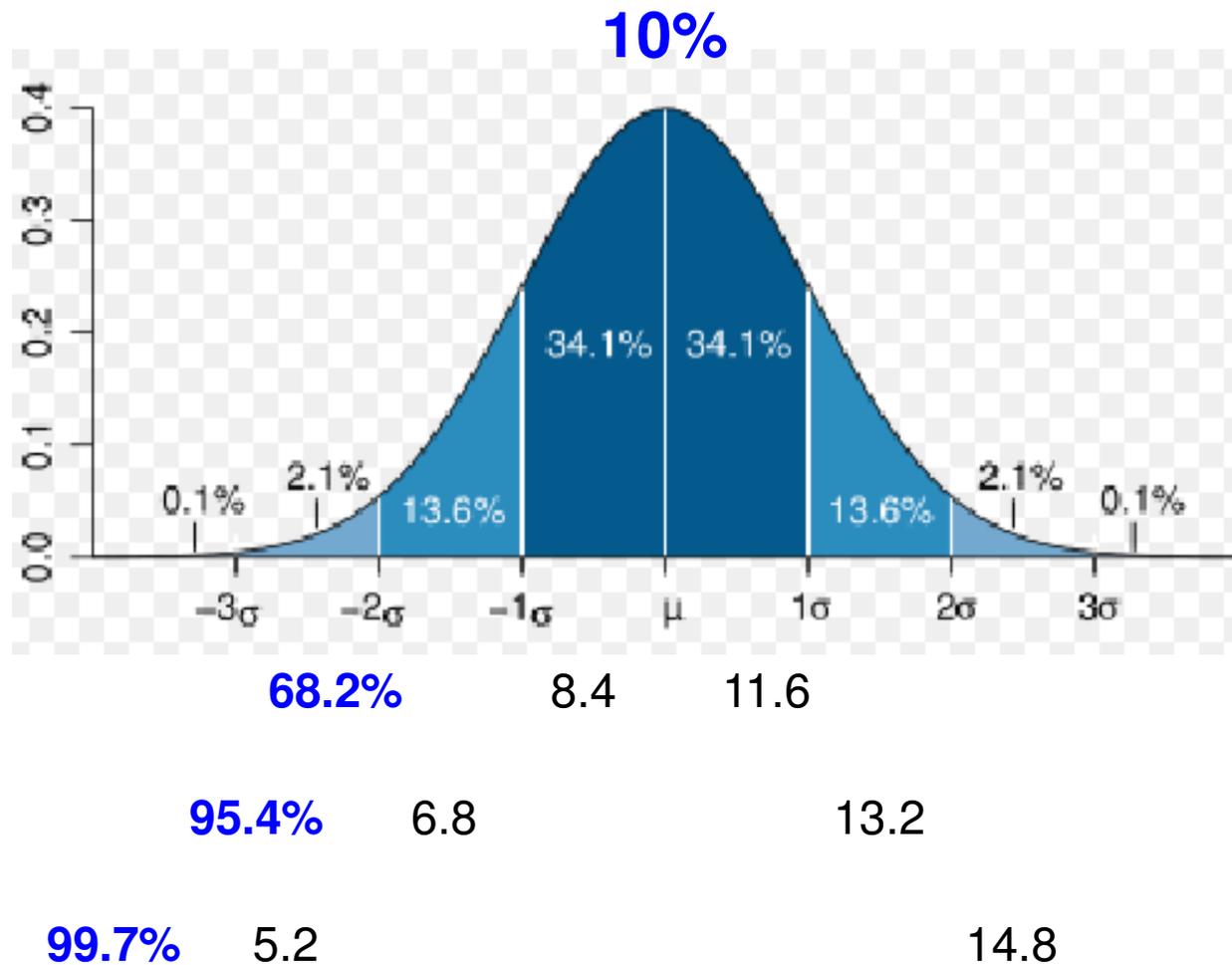


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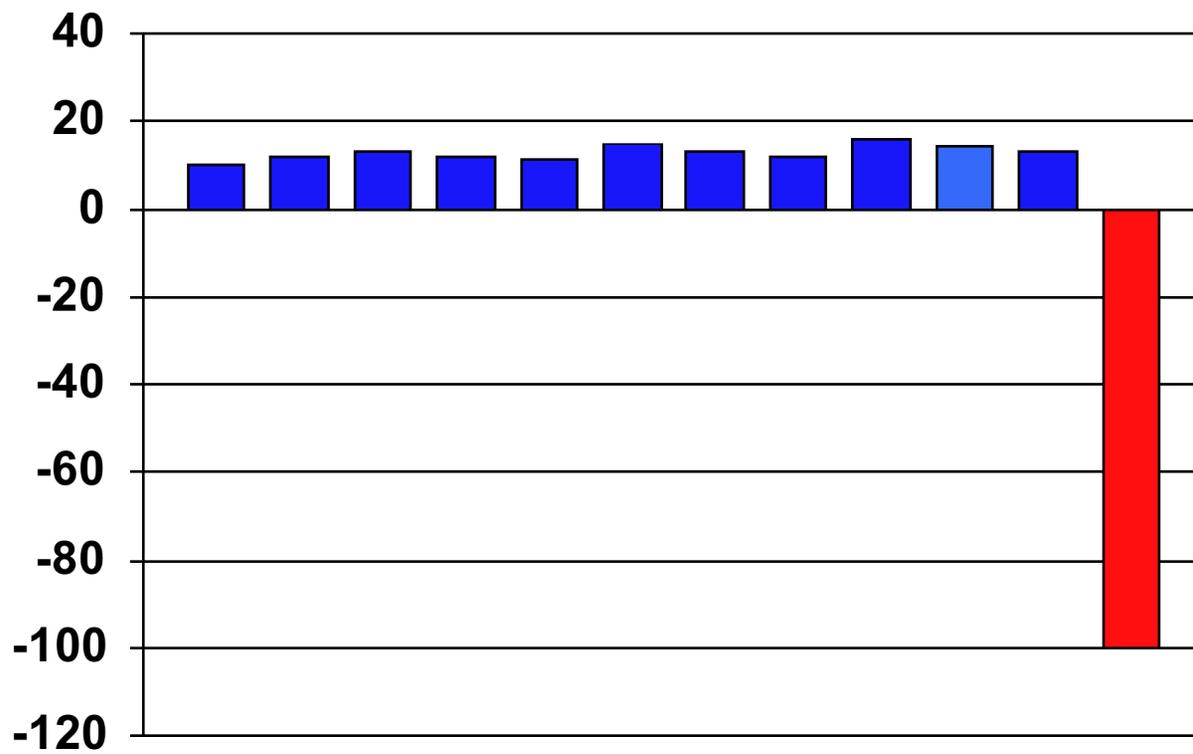
“We have a brilliant track record over the last 11 years ..... “



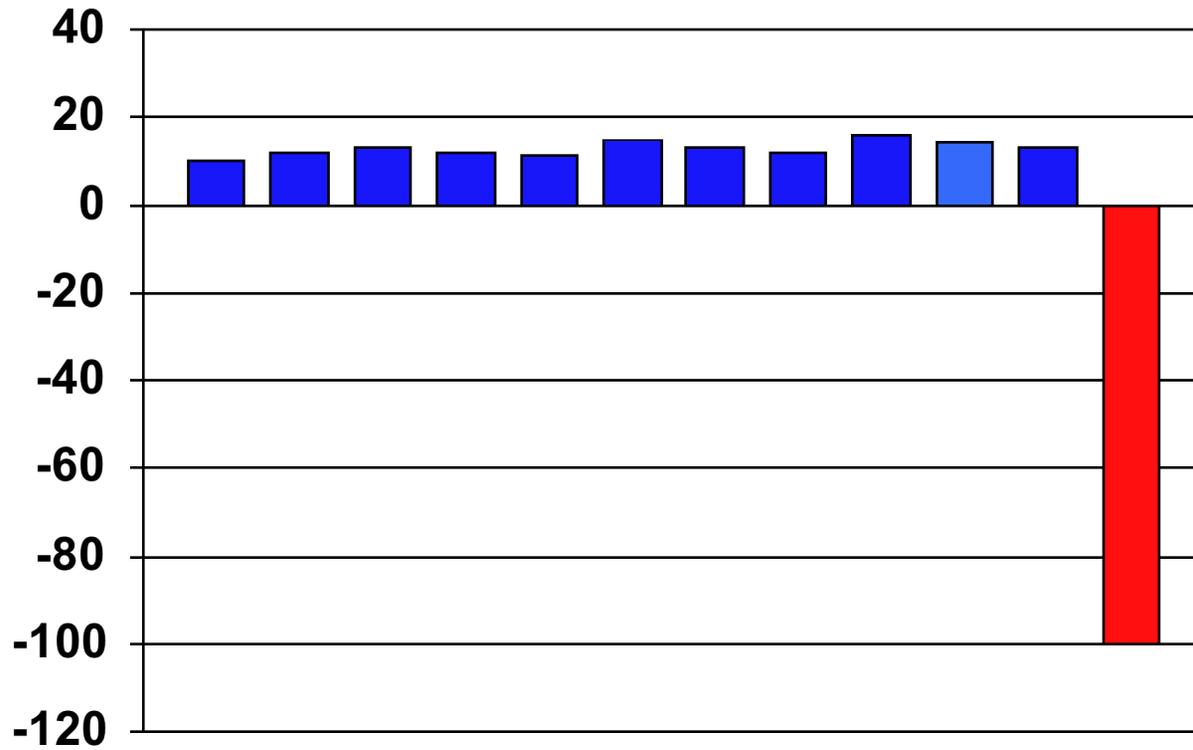
“We have a brilliant track record over the last 11 years .....



“Dear investor ..... “



“Dear investor ..... “



It is obvious that their profits were simply cash borrowed from destiny with some random payback time



A Black Swan event is one that has three attributes ?

1. Illustrates the severe limitations of learning from observation/experience AND the fragility of our 'knowledge'
2. Carries an extreme impact
3. Increases as the world gets ever more complex

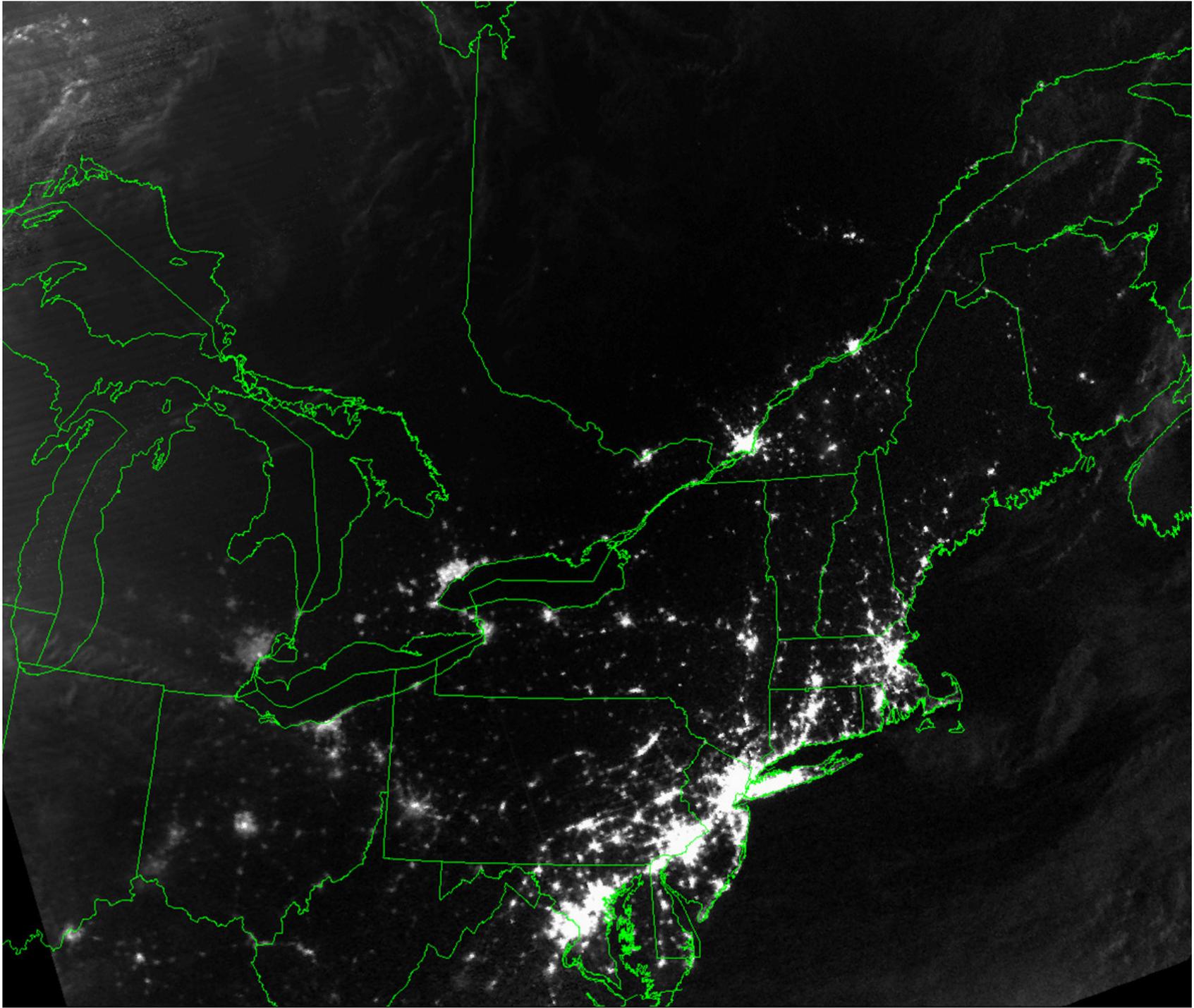
August 14, 2003 Toronto

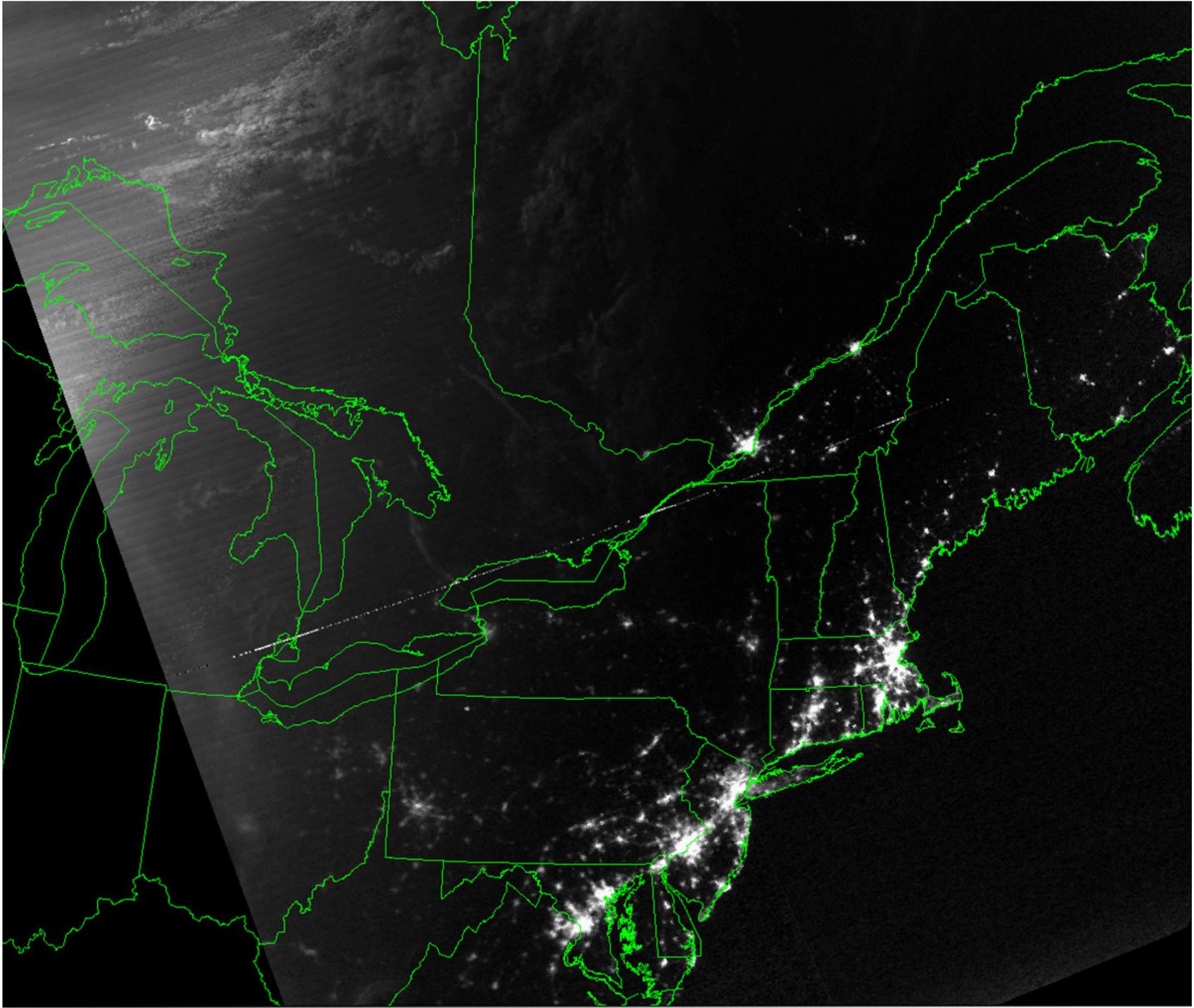


August 14, 2003 Toronto

When the lights go out they go out BIG TIME

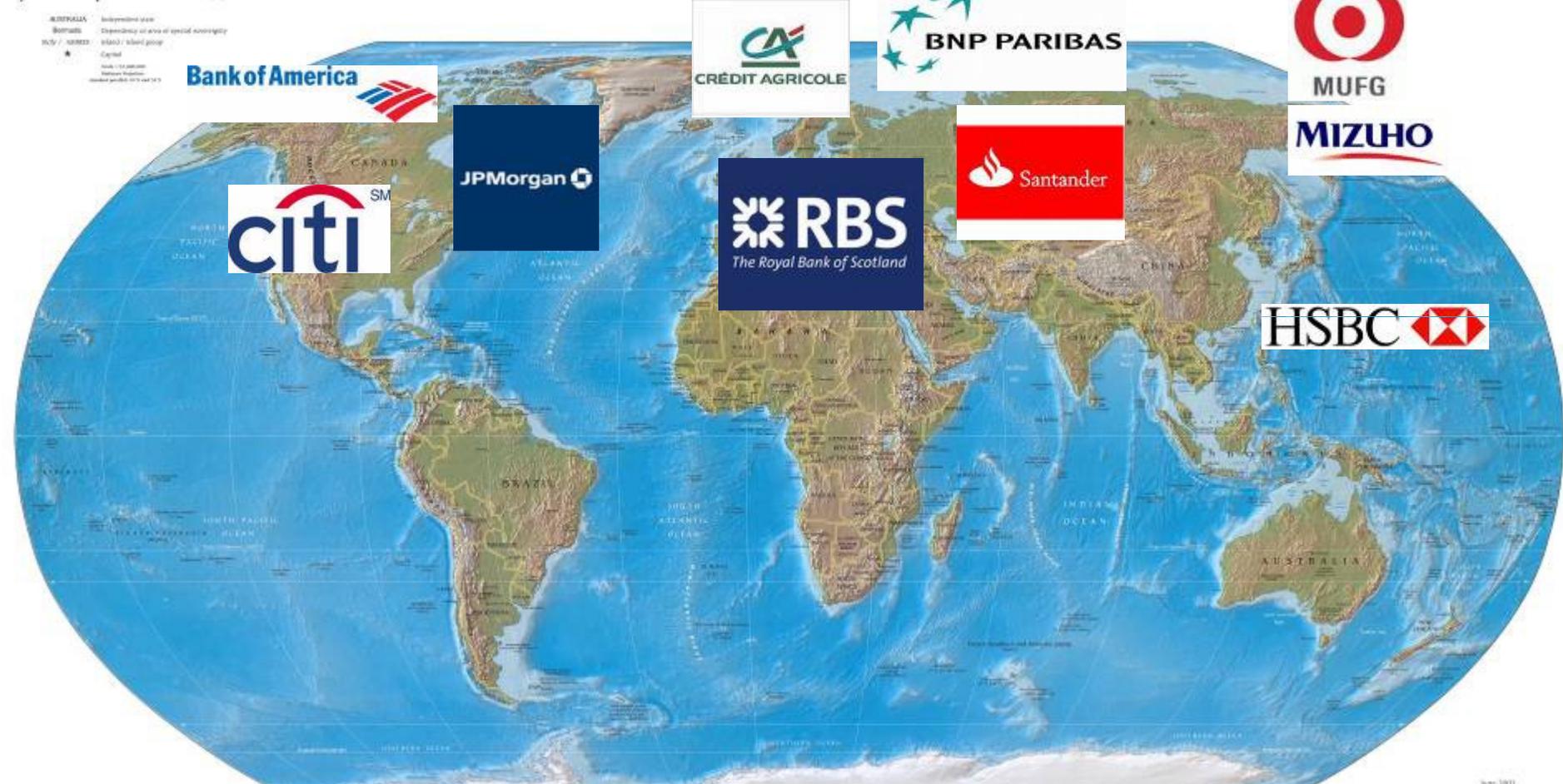






As things get more complex the Black Swans increase and as things get bigger blowouts get more global more quickly

Physical Map of the World, June 2003



...are much more expensive to fix and then take significantly longer to settle down

© 2003  
The map is a reproduction of the map published by National Geographic Society in 2003.

Lots of players now looking at systems risk



## SENIOR SUPERVISORS GROUP

### Leading-Practice Disclosures for Selected Exposures



# So, what's coming ?

Capital Definitions will be harmonised:

- Consistency, transparency and comparability internationally
- Internationally harmonised leverage ratio ( Asset-to-Capital)

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Global Best Practices will be promulgated:

- Governance processes and structures
- Liquidity risk oversight
- Counterparty risk practices
- Stress testing scenarios



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