Global Banking:
Too Big to Fail or Too Big to Save?

Monday, April 27, 2009
11:00 AM - 12:15 PM
Speakers:

Alan Boyce, CEO, Absalon; President, Adecoagro

Robert Kelly, Chairman and CEO, The Bank of New York Mellon Corp.

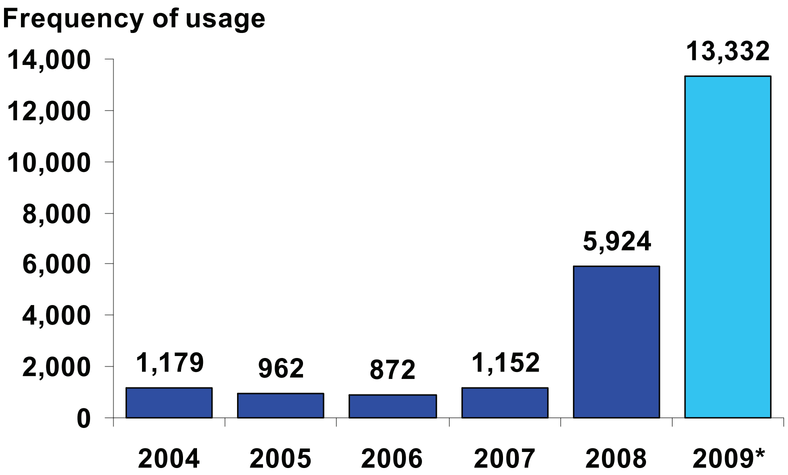
Robert Litan, Vice President, Research and Policy, Ewing Marion Kauffman Foundation

Bo Lundgren, Director General, Swedish National Debt Office; former Minister for Fiscal and Financial Affairs

Moderator:

James Barth, Senior Finance Fellow, Milken Institute; Lowder Eminent Scholar in Finance, Auburn University

“Too big to fail” becomes a popular media phrase



*** Annualized based on Q1 2009 data**

Sources: LexisNexis, Milken Institute.

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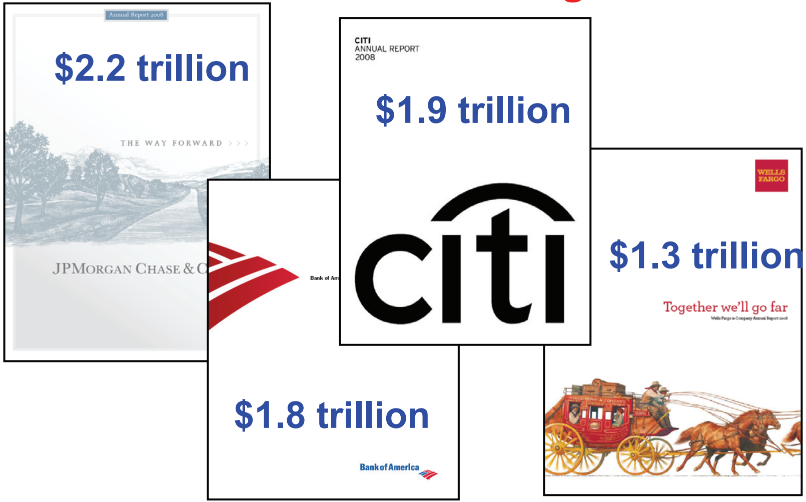
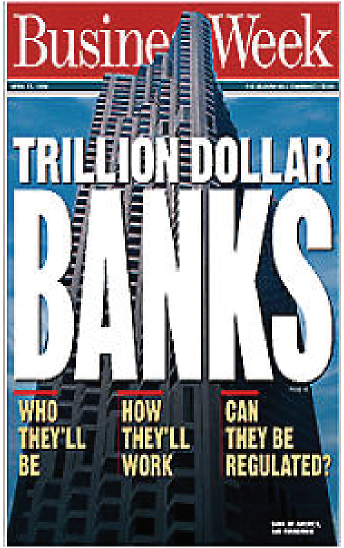
“A ~~billion~~ trillion here, a ~~billion~~ trillion there, and pretty soon you are talking about ~~real money.~~” “too big to fail”





Sources: Company filings, *BusinessWeek*.

Trillion dollar banks worldwide

2008

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	Name	Assets (US$ trillions)	Country
1	Royal Bank of Scotland	3.50	U.K.
2	Deutsche Bank	3.07	Germany
3	Barclays	2.99	U.K.
4	BNP Paribas	2.90	France
5	HSBC	2.53	U.K.
6	Credit Agricole	2.31	France
7	JPMorgan Chase	2.18	U.S.
8	Japan Post Bank	2.12	Japan
9	Citigroup	1.94	U.S.
10	Mitsubishi	1.93	Japan
11	UBS	1.89	Switzerland
12	Bank of America	1.82	U.S.

	Name	Assets (US$ trillions)	Country
13	Lloyds	1.62	U.K.
14	Social Generale	1.58	France
15	Mizuho	1.55	Japan
16	Banc Santander	1.46	Spain
17	Credito Italiano	1.46	Italy
18	ICBC	1.43	China
19	Allianz	1.33	Germany
20	Wells Fargo	1.31	U.S.
21	Sumitomo Mitsubishi	1.12	Japan
22	China Construction Bank	1.11	China
23	Credit Suisse	1.10	Switzerland
24	Bank of China	1.02	China

Sources: Bloomberg, Milken Institute.

Banking exposure to emerging markets

2008

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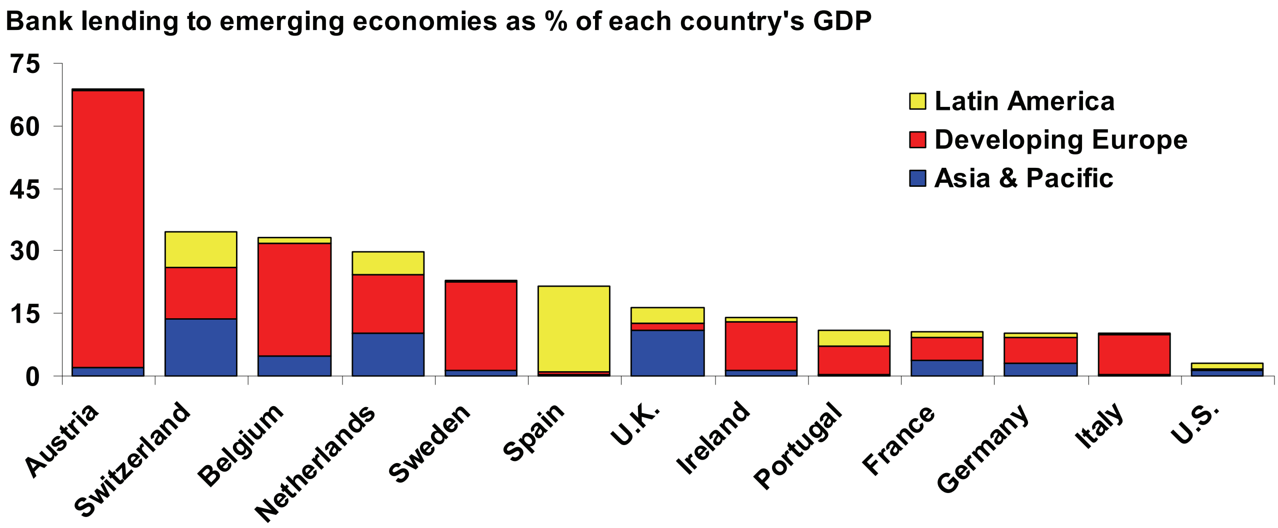
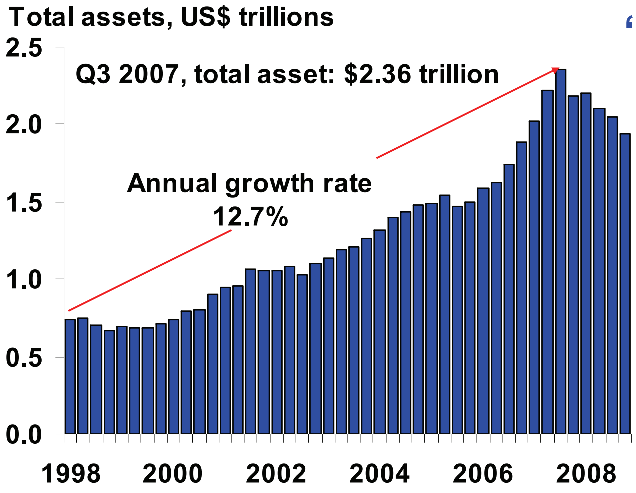


Sources: Bank of International Settlement, International Monetary Fund.

Too big to fail is an old story



"Granted, Citicorp, even before its plan to get hitched to Travelers, was too big to fail. "

Citigroup: Too Big To Fail?
William Pesek, Jr.
April 13, 1998
Barron's

Sources: Bloomberg, Barron's, Milken Institute.

The U.S. regulatory regime: In need of reform?

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Justice Department
- Assesses effects of mergers and acquisitions on competition

Financial, bank and thrift holding companies
- Fed
- OTS

Fannie Mae, Freddie Mac, and Federal Home Loan Banks
- Federal Housing Finance Agency

Federal courts
- Ultimate decider of banking, securities, and insurance products

Fed is the umbrella or consolidated regulator

Primary/ secondary functional regulator

National banks
- OCC
- FDIC

State commercial and savings banks
- State bank regulators
- FDIC
- Fed--state member commercial banks

Federal savings banks
- OTS
- FDIC

Insurance companies
- 50 State insurance regulators plus District of Columbia and Puerto Rico

Securities brokers/dealers
- FINRA
- SEC
- CFTC
- State securities regulators

Other financial companies, including mortgage companies and brokers
- Fed
- State licensing (if needed)
- U.S. Treasury for some products

Federal branch
- OCC
- Host county regulator

Foreign branch
- Fed
- Host county regulator

Limited foreign branch
- OTS
- Host county regulator

Notes:
Justice Department: Assesses effects of mergers and acquisitions on competition
Federal Courts: Ultimate decider of banking, securities, and insurance products
CFTC: Commodity Futures Trading Commission
FDIC: Federal Deposit Insurance Corporation
Fed: Federal Reserve
FINRA: Financial Industry Regulatory Authority
GSEs: Government Sponsored Enterprises
OCC: Comptroller of the Currency
OTS: Office of Thrift Supervision
SEC: Securities and Exchange Commission

Sources: Financial Services Roundtable (2007), Milken Institute.

Financial Stability Forum re-established as the Financial Stability Board *April 2, 2009*

Alongside the current mandate of the FSF, the FSB will:

a) monitor and advise on market developments and their implications for regulatory policy;

b) advise on and monitor best practice in meeting regulatory standards;

c) undertake joint strategic reviews of the policy development work of the international standard setting bodies to ensure their work is timely, coordinated, focused on priorities and addressing gaps;

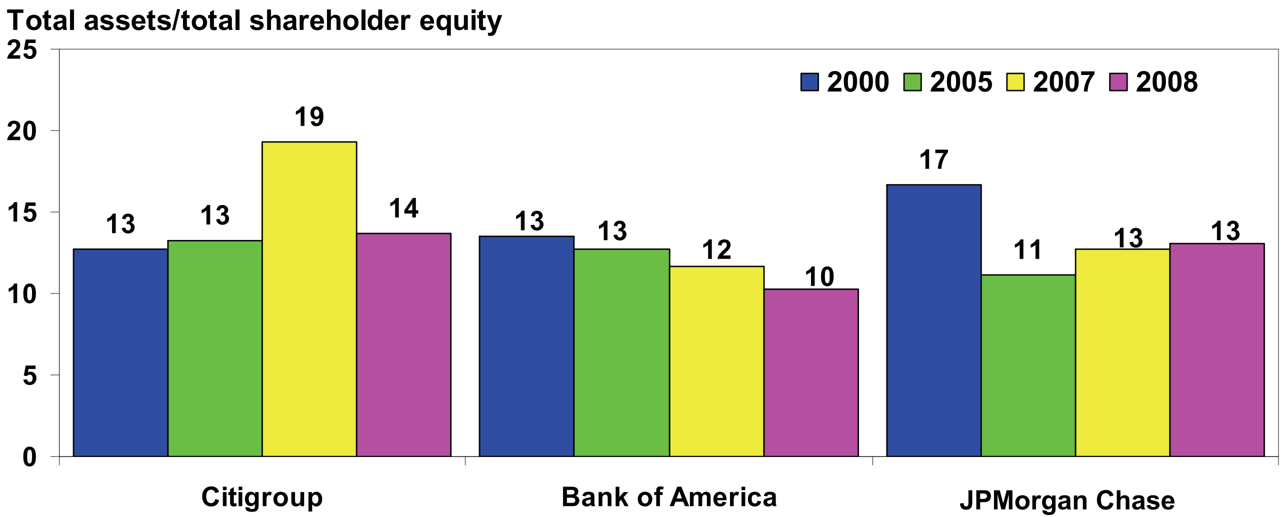
d) set guidelines for and support the establishment of supervisory colleges;

e) manage contingency planning for cross-border crisis management, particularly with respect to systemically important firms; and

f) collaborate with the IMF to conduct Early Warning Exercises.

Too much dependence on debt?

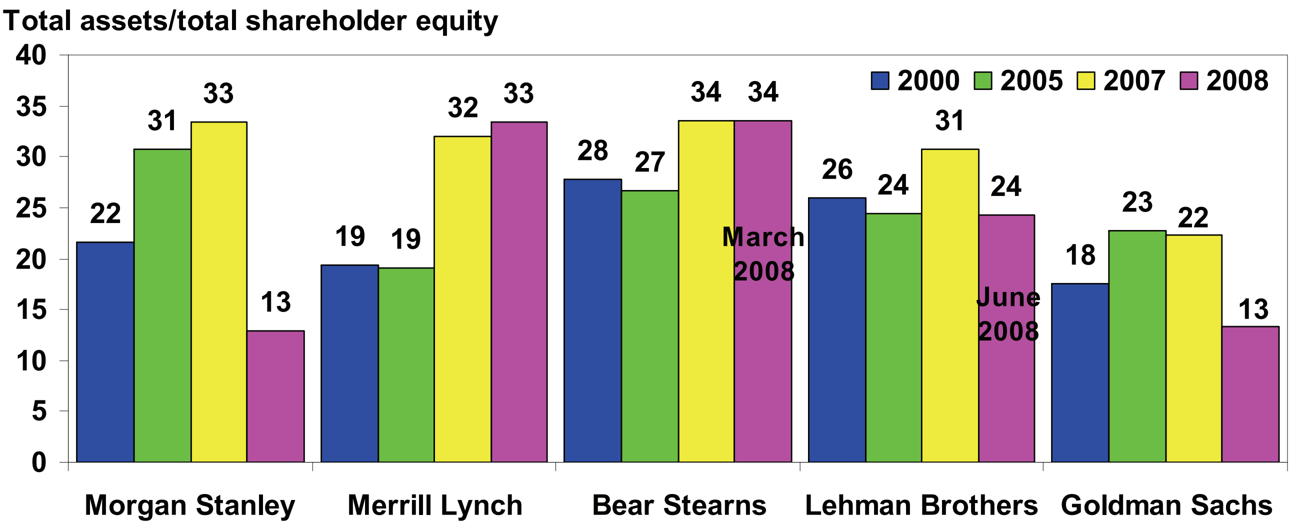
Leverage ratios at bank holding companies



Sources: Bloomberg, Milken Institute.

Too much dependence on debt?

Leverage ratios at biggest investment banks



Sources: Bloomberg, Milken Institute.

Selected information for U.S. banks

December 31, 2008

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Name	Total assets ($US billions)	Deposits to total assets (percent)	Short-term borrowing to total assets (percent)	Long-term borrowing to total assets (percent)	Cash and equivalents to total assets (percent)
JPMorgan Chase	2,175	46.4	18.3	11.3	1.2
Citigroup	1,938	39.8	28.0	14.0	1.5
Bank of America	1,818	48.6	25.6	12.4	1.8
Wells Fargo	1,310	59.7	12.4	16.3	1.8
Goldman Sachs	885	n.a.	38.3	21.0	1.8
Morgan Stanley	659	n.a.	43.9	21.5	11.9
PNC Financial	291	66.3	6.6	14.8	1.5
US Bancorp	266	59.9	16.7	10.5	2.6
Bank of NY Mellon	238	67.2	4.9	9.0	24.5
SunTrust Banks	189	59.9	5.0	14.2	3.0

Sources: Bloomberg, Milken Institute.

Selected information for U.S. banks

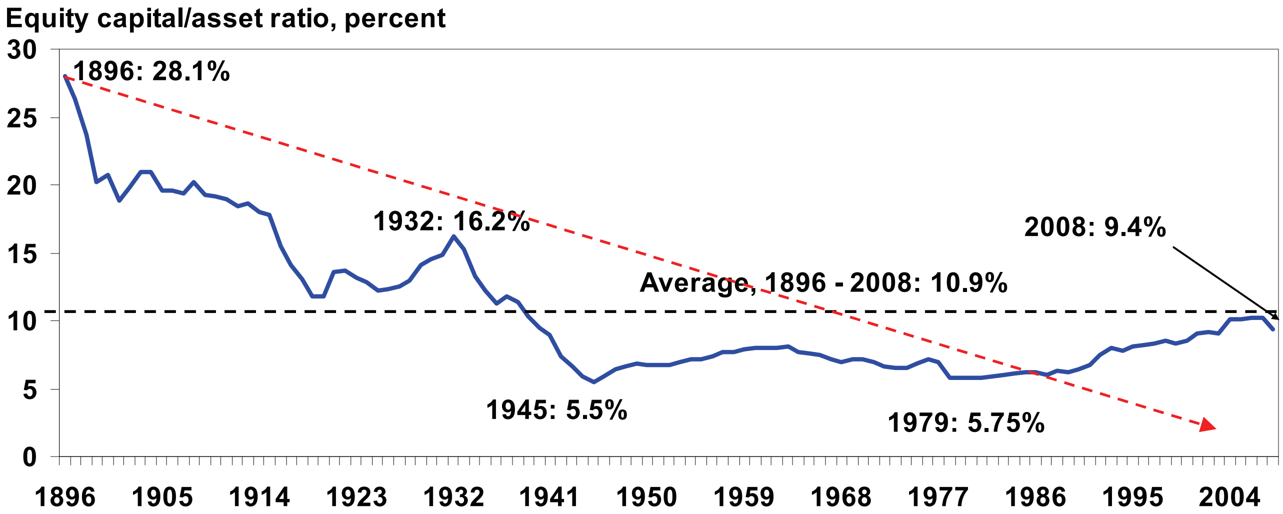
December 31, 2008

Name	Alternative capital ratios (percent)					Market value (as of 4/23/2009) to total assets (percent)
	Total risk-based capital ratio	Tier 1 risk-based capital ratio	Tier 1 risk-based capital ratio without TARP capital	Total equity to total assets ratio	Tangible common equity ratio	
JPMorgan Chase	14.8	10.9	8.9	7.7	3.8	5.7
Citigroup	15.7	11.9	9.9	7.3	1.6	0.9
Bank of America	13.0	9.2	7.9	9.7	2.8	3.1
Wells Fargo	11.8	7.8	5.6	7.6	1.6	6.5
Goldman Sachs	18.9	15.6	13.1	7.5	4.9	7.6
Morgan Stanley	26.8	17.9	14.3	7.7	4.4	3.6
PNC Financial	13.2	9.7	6.6	9.5	1.9	6.2
US Bancorp	14.3	10.6	7.7	9.9	2.6	12.1
Bank of NY Mellon	17.1	13.3	10.7	11.8	1.6	13.0
SunTrust Banks	14.0	10.9	7.9	11.8	5.0	2.8

Sources: Bloomberg, company data, Milken Institute.

Equity capital-asset ratio for commercial banks

Quarterly, Q1 1896–Q4 2008



Sources: Historical Statistics of the United States, FDIC, Milken Institute.

Reserve coverage ratio of all FDIC-insured institutions *Quarterly, Q1 2005–Q4 2008*

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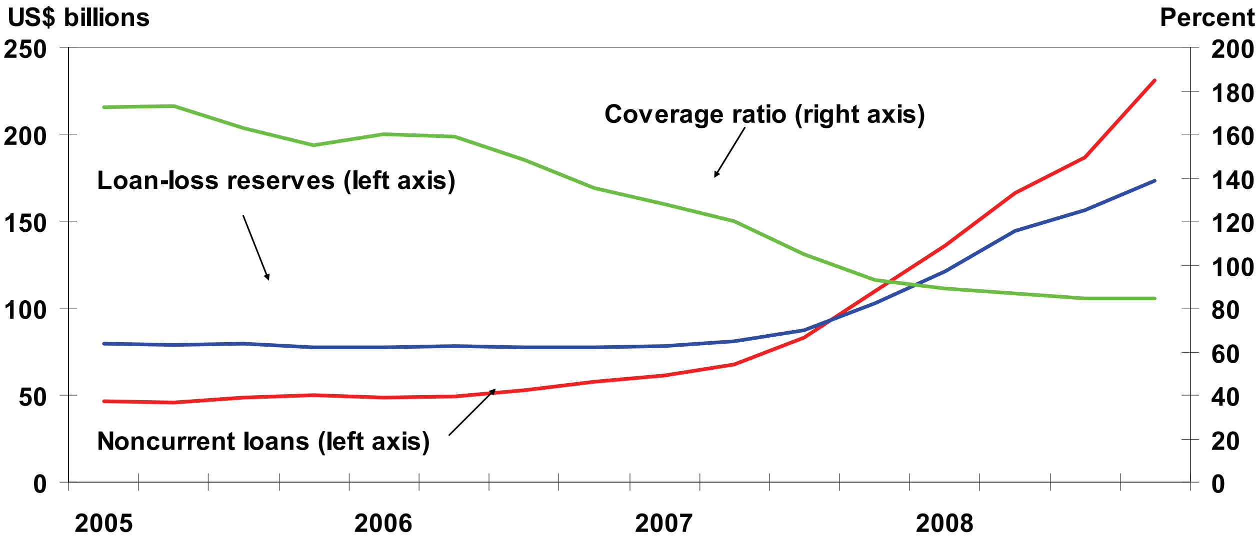

Sources: *Quarterly Banking Profile*, FDIC, Milken Institute .

Bob Litan slides

Choices for systemic regulator

- A new super federal solvency regulator
- The Fed
- A new systemic risk regulator
- College of regulators (PWG)

Key functions

- Identifying SIFIs
  - Size, leverage, degree of inter-connection, other factors
  - Need information from other regulators, including reporting by hedge funds (size, leverage, counter-parties)
  - Procedure for getting off the list, adding new ones
  - Some discretion, otherwise will be gaming
- Setting higher capital, liquidity, risk management standards
  - Capital standards to be anti-cyclical and semi-automatic (Group of 30 suggested ranges)
- Direct supervision of SIFIs; "shadow supervisor"; or "free safety"
- Suggestions for regulation outside of SIFIs? (if worrisome trends)
- Harness discipline of long-term debt, but no guarantees
- Resolution decided/administered elsewhere

Objections

- Moral hazard
  - Offset by tougher regulation, perhaps mandatory long-term debt requirement
- If Fed, compromises monetary policy function
  - To the contrary, gives the Fed another tool
- Regulators failed before, why think they will get it right in the future?
  - We learn from mistakes; financial regulation always has been and will be a game of cat and mouse
  - Canada has proved it's possible

What's the alternative?

- Size Limits
  - None that are non-arbitrary
  - Can apply to mergers, but not organic growth
- Ad Hockery
  - What if this event is not 1-100? But could happen again (think trillion dollar federal deficits as the trigger)

Do Not Let Perfect Be The Enemy of the Good!

Bob Kelly slides

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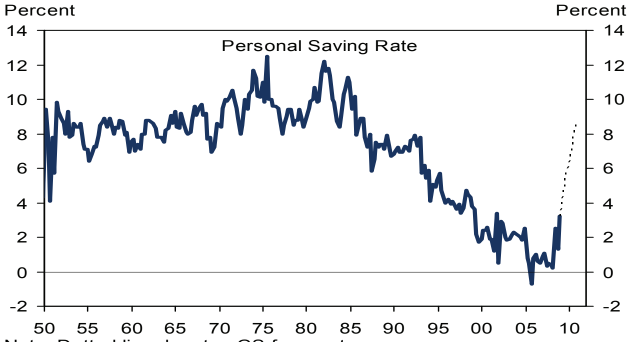
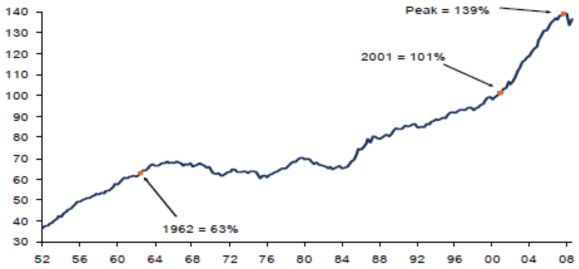
Households are beginning to save more and repay debt

Household Spending



Note: Dotted line denotes GS forecast.
Source: Department of Commerce. Goldman Sachs.

Household Debt-to-Income Ratio



Financial systems: Europe could have more issues than the United States

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Bank Assets : GDP	
U.S.	**1.5 : 1**
Europe	**2.5 : 1**
Switzerland	15.5 : 1
Ireland	4.1 : 1

- In addition, Europe has issues around Central & Eastern Europe

Source: FactSet

Market cap for S&P financials

Year-end 2007 vs. current

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2007
(as of 12-31-07)

Rank	Company Name	Mkt Cap 2007 ($B)
Top 10 (ranked by '07 Mkt Cap)		
1	BANK OF AMERICA	$183.1
2	AIG	$147.9
3	CITIGROUP	$146.6
4	JPMORGAN CHASE	$146.6
5	WELLS FARGO	$101.3
6	GOLDMAN SACHS	$85.5
7	WACHOVIA	$72.3
8	AMERICAN EXPRESS	$60.8
9	MORGAN STANLEY	$56.1
10	**BNY MELLON**	**$55.5**
	Total	**$1,055.8**

Current
(as of 3-31-09)

Rank	Company Name	Mkt Cap 3-31-09 ($B)
Top 10 (ranked by Current Mkt Cap)		
1	JPMORGAN CHASE	$99.9
2	WELLS FARGO	$60.4
3	GOLDMAN SACHS	$49.0
4	BANK OF AMERICA	$43.7
5	**BNY MELLON**	**$32.5**
6	US BANCORP	$25.7
7	MORGAN STANLEY	$24.6
8	TRAVELERS	$23.8
9	METLIFE	$18.6
10	CHARLES SCHWAB	$17.9
	Total	**$367.8**

% change: (65%)

Source: Bank of NY Mellon.

BNY Mellon debt ratings[1]

One of the strongest ratings of major U.S. banks

Company Name	Moody's[2]	S&P[3]
BNY MELLON	**Aa2**	**AA-**
US BANCORP	Aa3	AA
JPMORGAN CHASE	Aa3	A+
WELLS FARGO	A1	AA
NORTHERN TRUST	A1	AA-
STATE STREET	A1	A+
GOLDMAN SACHS	A1	A
PNC FINANCIAL	A1	A
BANK OF AMERICA	A2	A
AMERICAN EXPRESS	A2	A
MORGAN STANLEY	A2	A
CITIGROUP	A3	A

BNY Mellon is the only U.S. financial firm rated AAA at bank level by Moody's

[1] Senior debt ratings at the holding company level as of 3/31/09

[2] Moody's has PNC on Review for Downgrade and a Negative Outlook on JPM, STT, USB, GS and MS

[3] S&P has a Negative Outlook on STT, JPM, WFC, BAC, C, GS and MS

Source: Bank of NY Mellon.

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Tier 1 capital: Impact of TARP capital and 1Q stock performance – BK strong and stable

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	Tier 1 Ratio (Ex. TARP capital)	Tier 1 Ratio (Inc. TARP capital)	Stock Price Change YTD (as of 4-15-09)
State Street	17.4%	20.2%	(9%)
BNY Mellon	10.7	13.3	15
Northern Trust	10.0	13.1	24
Citigroup	9.9	11.9	(41)
JPMorgan Chase	8.9	10.9	3
KeyCorp	8.6	10.9	(2)
Bank of America	7.9	10.7	(26)
SunTrust Banks	7.9	10.9	(47)
US Bancorp	7.7	10.6	(28)
Fifth Third Bancorp	7.6	10.6	(51)
PNC Financial	6.6	9.7	(20)
Wells Fargo	5.6	7.8	(34)
Average	9.1	11.7	
Median	8.3	10.9	

Source: Barclays Capital.

Tier 1 data as of 12/31/08

Financial crisis: What went wrong

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Government	• Very low interest rates + too much liquidity = housing and asset price bubble • Flawed mortgage model (origination, regulation, product design, pricing and GSEs)
Banks & Dealers	• Products too complex, leveraged and illiquid • Did not price or adjust employee compensation for risk • Failed to stress test (liquidity and valuations)
Investors (including banks, dealers and insurance cos)	• Relied on credit ratings (should only supplement internal credit analysis) • Did not charge for risk and liquidity
Rating agencies	• Conflicts of interest • Quality vs. volume
Regulators	• Too many: impacts accountability, quality and efficiency • Narrow scope of institutions • More international cooperation needed • Procyclical accounting
Consumers	• Insufficient savings rate • Too much debt

Source: Bank of NY Mellon.