2008 STOCK MARKET COLLAPSE
A FINANCIAL INSTITUTION PERSPECTIVE
“In one way, I’m Sympathetic to the institutional reluctance to face the music...”

- Warren Buffet (Fortune 8/16/2007)
October 9th, 2007: Dow Jones Industrial Average hit its all-time high closing at 14,164.43

March 5th, 2009: it had fallen more than 50% to 6,594.44

2nd largest stock market crash in history

Largest was the Great Depression with a 90% hit over 3 years

However, 2008 only took 8 months
HOW DID WE GET HERE?

- Subprime lending
- Growth of the housing bubble
- Financial innovation
- Deregulation
- Over-leveraging
SUBPRIME LENDING

- Strong competition between mortgage lenders
- Eased underwriting to accept riskier borrowers
- Government Sponsored Enterprises (GSEs) such as Fannie Mae and Freddie Mac relaxed ratings to catch up to private lenders
- Freddie Mac’s use of easy-to-qualify automated underwriting and appraisal systems
U.S. Subprime Lending Expanded Significantly 2004-2006

Subprime Share of Mortgage Originations (%)

Home Ownership Rate (%)

Sources: U.S. Census Bureau; Harvard University- State of the Nation's Housing Report 2008
Between 1998 and 2006, the price of the typical American house increased by 124%.

- Refinancing of homes
- “Giant Pool” of money in mortgage market
- No safe income generating investments
Median and Average Sales Prices of New Homes Sold in the U.S.
1963-2011 Annual Data

*Sales price includes land, not inflation adjusted
Source: U.S. Census Bureau New Sales Residential Index
To meet the new demand financial institutions created new products

- Securitization
- Mortgage-backed securities (MBS)
- Collateralized debt obligations (CDO)
DEREGULATION

- Regulation did not keep pace with financial innovation
- New products included securitization and derivatives that have never been seen before in the market
- Jimmy Carter’s Depository Institutions Deregulation and Monetary Control Act
- Bill Clinton’s Gramm-Leach-Bliley Act
- SEC’s net capital rule
- Shadow banking systems
OVER-LEVERAGING

- Investment banks increased their riskiness through leveraging
- Off-balance sheet securitization and derivatives
- Increasingly vulnerable to losses
- Vulnerability increased the economic downturn
- Resulted in government bailout
KEY FINANCIAL INSTITUTIONS

- Bear Stearns
- Lehman Brothers
Global investment bank focused on capital markets, wealth management, and global clearing

Former CEO: Alan Schwartz

Major shareholders as of December 2007: Barrow Hanley Mewhinney & Stauss, Joseph C. Lewis, Morgan Stanley

April 2005 Bear Stearns was the 7th-largest securities firms in terms of total capital
High usage of derivatives and leverage
$11.1 billion supported $395 billion in assets
Leverage ratio of 35.6 dampened consumer confidence
High use of securitized asset-backed securities (MBS, CDO)
July 16th 2007, Bear Stearns disclosed two subprime hedge funds
August 1st, 2007 investors sued Bear Stearns
March 14th, 2008: Federal Reserve Bank of New York agreed to $25 billion loan, however the bailout was revoked

March 16th, 2008: Bear Stearns signed a merger with JP Morgan chase

Stock swap was $2 a share (less than 7% of Bear Stearns’ market value 2 days earlier)

“Bear Stearns collapse was due to a lack of confidence, not a lack of capital”

-Christopher Cox SEC Chairman
LEHMAN BROTHERS

- Global financial services firm focusing on investment banking, private equity, private banking, and equity and fixed income sales and trading
- Former CEO: Dick Fuld
- In 2008 Lehman Brothers was the 4th largest investment bank in the U.S.
Significant amount of funds was tied to housing making them vulnerable to the market downturn

Leverage ratio went from 24:1 in 2003 to 31:1 in 2007

Did not have sufficient capital which led to illiquid

2007 closed its subprime lender, BNC Mortgage

2008 Lehman faced an unprecedented because of positions in subprime and lower-rated mortgage tranches

2nd quarter in 2008 Lehman reported a $2.8 billion loss and sold $6 billion in assets

First half of 2008 Lehman stock value loss of 73%
LEHMAN BROTHERS

- September 13th, 2008 FRB of New York called meeting in which Lehman reported selling to Bank of America and Barclays
- Barclays and Bank of America ultimately declined
- September 15th, 2008 Lehman filed for Chapter 11 bankruptcy protection
- Lehman Brothers cited $639 billion in assets
- Largest bankruptcy in American history
NEW REGULATIONS

- May 20th, 2010 Dodd-Frank Wall Street Reform Act passed
- Regulate credit cards, loans and mortgages
- Oversee wall street
- Stop banks from gambling
- Regulate derivatives
- Bring hedge funds into the light
- Oversee credit ratings
- Supervise insurance companies
- Reform the federal reserve
WHAT WE HAVE LEARNED

- Real Estate is an incomplete market
- Leverage is risky
- Liquidity drives perception
- Underwriting matters
- Regulation needs to match innovation
- “Too big to fail” is too big
QUESTIONS