Int’l Financial Crisis
(and what does it mean for M&A attys?)

Professor Luke Froeb
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It is indeed impressive how rapidly the economists who failed to predict this crisis — or predicted the wrong crisis (a dollar crash) — have been able to produce such a satisfying story about its origins.

--Niall Ferguson, NY Times (15 May, 2009)

If I really knew, would I tell you?

You get what you pay for.
Credit without blame: ideas and slides stolen from clear thinkers

- Roger Brinner  
  - Parthenon Group
- Michael Doane  
  - ERS Group (my consulting partner)
- Bob Hall & Susan Woodward  
  - Stanford University, Sand Hill Econometrics
- Catherine Mann  
  - Brandeis International Business School
- Donald Marron  
  - Former CBO and CEA
- David Marshall  
  - Federal Reserve Bank of Chicago
- David Parsley  
  - Vanderbilt University
- Ford Scudder  
  - Laffer Associates
- Jon Shayne  
  - aka “Merle Hazard”
- Bill Spitz  
  - Former Treasurer, Vanderbilt University
Iceland: canary in the coal mine
Inflationary expectations

- If prices are expected to rise
  - Buyers accelerate purchases (demand increases)
  - Sellers delay sales (supply decreases)
  - Both cause price to rise

- Self-fulfilling expectations

- If prices expected to rise faster than rate of interest, then
  - Borrow as much as you can, ...
    - ...in order to buy as much as you can
Deflationary expectations

- If prices are expected to fall
  - Buyers delay purchases (demand decreases)
  - Sellers accelerate sales (supply increases)
  - Both cause price to fall

- Self-fulfilling expectations

- Negative real interest rates
  - Put your money in a mattress
  - Keynes called this a “liquidity trap”
Real estate bubble

Price-to-Rent Ratio, Q1 1997 = 1.0
National Case-Shiller Home Price Index and Owner Equivalent Rent

http://www.calculatedriskblog.com/
Stock market bubble

Price/Earnings Ratio of U.S. Stocks, 1881-2009
(Using 10-Year, Inflation-Adjusted Earnings)

Average: 16.8

Graph: Shayne & Co., LLC. The graph shows the monthly value of the general U.S. stock market, as measured by the S&P 500 (and comparable predecessor indices), divided by the average of the earnings per share for the prior 10 years. Earnings are inflation-adjusted. Graph ends on May 15, 2009 with a market closing price of 882.88; P/E at that price was 15.2.
Bubbles emerge at times when investors profoundly disagree about the significance of a big economic development, such as the birth of the Internet.

Once they get going, financial bubbles are marked by borrowing, and big increases in trading.

Only when skeptical investors act simultaneously -- a moment impossible to predict -- does the bubble pop.
Effects of bubble mis-pricing

- High real estate prices caused increase in construction

- High securities prices caused I–bankers to increase production of securities
  - High asset prices imply small risk premia ➞ investors willing to bear risk without compensation
Investors confused the absence of volatility with the absence of risk

- Risk never went away, investors were just ignoring it
- Black Swans & fat tails
  - *I have nothing against economists: you should let them entertain each others with their theories and elegant mathematics, [But]...do not give any of them risk-management responsibilities.*
  - --Nassim Nicholas Taleb
Who was dumb enough to lend us money during a bubble?
Who was dumb enough to lend us money?, II

### Foreign Holdings of Treasury Securities

- Foreign Holdings of Treasury Securities
- Total Foreign Holdings as share of U.S. treasury securities held by the public

### Foreign Exchange Reserves

- Japan: 21%
- China: 20%
- Other: 31%
- Mexico: 2%
- Malaysia: 3%
- Singapore: 3%
- Hong Kong: 3%
- India: 4%
- Korea: 5%
- Taiwan: 6%

But now trade is shrinking

World Trade Shrinks
Year-over-year change in total exports from 15 major exporters. Data are through February 2009, in U.S. dollars.


Sources: National governments, via Haver Analytics
And we need to borrow more
And we need to borrow more, II
CBO’s Long Term Spending Projections (Dec. 2007)
As does the rest of the world

- 21 of 27 EU nations will break 3% deficit ceiling
  - Ireland, Britain, Latvia will have gaps in double digits.
  - Next year, it will be 23 countries with bigger deficits.

- Milton Friedman: “EU will not survive recession”
  - EU's "disciplinary action" against France, Spain, Malta, Greece, Latvia and Ireland could result in fines.
    - Greece and Portugal have been fined but never paid a penny

- Could any prime minister win re-election under EC policy?
  - spending cuts, public sector wage cuts and tax increases to bring deficit down
  - Riots/Protests
In the midst of de-leveraging

Figure 3
Leverage ratios

Japan:
nonfinancial
corporate debt/GDP
peak = 1989

U.S. households:
debt/disposable income
peak = 2007

Years from peak
Future borrowing problems?

Yield Curve: Difference between Yield for Ten- and Two-Year Treasury

Recession vs. Yield Curve

http://www.calculatedriskblog.com/
Should you “sit” on the sidelines?

- Mergers in downturns **add 8.3% to value**
- Mergers in upturns **subtract 6.2% from value**
  - Roger Brinner, The Parthenon Group, (March, 2009)

- More targets from which to choose during downturns?

- **AOL–Time Warner**
  - 2001: Acquired for $124B
  - 2009: Spun off for $3B
Everyone else will (US merger filings)
Antitrust challenges are acyclic
New Antitrust Regime?
FTC Merger Challenges, 98–07

![Bar chart showing the number of markets for different merger ratios (2 to 1, 3 to 2, 4 to 3, 5 to 4, 6 to 5, 7 to 6, 8+ to 7+) with bars representing 'Enforced' in red and 'Closed' in green.](image-url)
Can you time the market?

Stock vs Bond, Cumulative Relative Performance, 1801-2009

- 20-Year-Span, 1929-49, Bonds Beat
- 41-Year-Span, 1968-2009, Bonds Beat Stocks
- 68-Year-Span, 1803-71, Bonds Beat Stocks

- Equity vs 20-Year Bond Rel Rtn
- Last High Water Mark
Can you time the downturn?

Recession starting July 1981, rescaled and redated

Current Recession

Payroll employment
Fools and fanatics are certain of themselves; wiser people are full of doubt

- Most people don’t learn from their mistakes. The bursting of the housing bubble was as predictable as the bursting of the Tulip bubble in 1637.
- The global economy is closely linked—who would have thought that a decline in US housing prices would cause all 3 Icelandic banks to fail?
- Anyone who depends upon short-term borrowing is exposed to serious survival risk—just ask Bearn Stearns or Wachovia.
- Market tops occur when most people believe that good times will last forever.
- Market bottoms occur when everyone believes that things will continue to get worse.
  - --Bill Spitz, former Treasurer of Vanderbilt
Watch for changes in tax law

- "Limiting deferral and further restricting foreign tax credits would simply increase the U.S. corporations’ tax bill based on their overseas operations, making them less competitive against their foreign-based competitors."

- But it also creates motive to sell overseas operations to foreign firms.
Watch for changes in tax law, II

- **US**: budget deficit of 13%
  - Dividend rate from 15% to 20% (planned)
  - Top income tax rate from 35% to 39.6% (planned)
  - Keep corporate tax rate at 35% (highest in OECD)
  - **States**: Illinois, NY, CA vs. North Dakota, Missouri, Oklahoma

- **Ireland**: budget deficit of 13%
  - Capital gains rate from 22% to 25%,
  - Top income tax rate from 41% to 43.5%,
  - Keep corporate tax rate at 12.5%

- **UK**: budget deficit of 12%
  - Top income tax rate from 40% to 50% (>£150,000)
  - Keep corporate tax rate at 28.5%

- **China**:
  - Sales tax on stocks from 0.1% to 0%
  - Sales tax on cars from 10% to 5%

- **Sweden**:
  - Corporate tax rate from 28% to 26.3%
Back-up Slides
Keynesian Stimulus: Targeted?
Keynesian Stimulus: Temporary?

Rebates Failed to Jump-Start Consumption

- Disposable Personal Income
- Personal Consumption Expenditures

Source: Bureau of Economic Analysis
Keynesian Stimulus: Timely?
Would Keynes be part of the Keynesian Consensus?

- Organized public works, at home and abroad, may be the right cure for a chronic tendency to a deficiency of effective demand. But they are not capable of sufficiently rapid organisation (and above all cannot be reversed or undone at a later date), to be the most serviceable instrument for the prevention of the trade cycle.
  -- Keynes, *Collected Writings*, vol. XXVII, p.122