

February 6-8, 2008

AGC's Meeting
Surety Bonding and Construction Risk Management

**Reading the Tea Leaves:
Surety & General Liability Losses and What
They Portend for the Future**

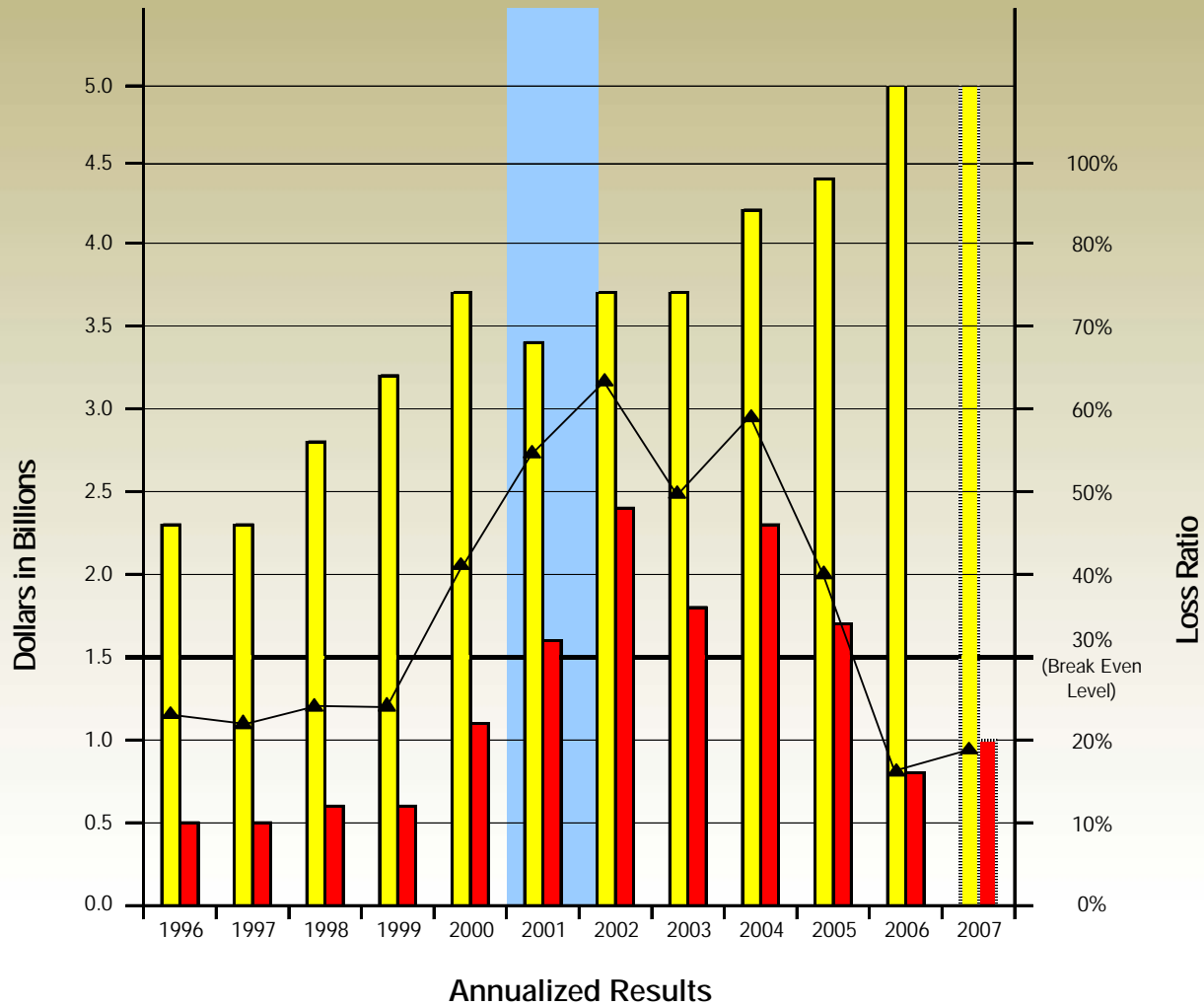
William J. McConnell P.E., President
Vertex Construction Services Inc.
vertexeng.com



I. A macro view of the
surety industry.

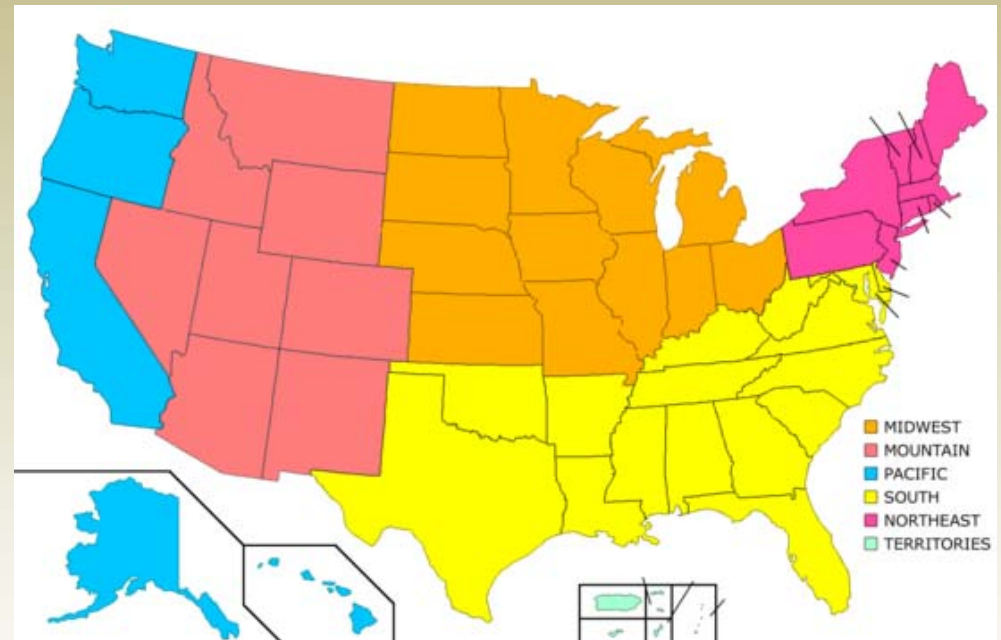


10 Years of Surety Performance



2006 Surety Losses by Region

- Northeast : \$221 Million
- Southeast: \$377 Million
- Midwest: \$122 Million
- Mountain: \$69 Million
- Pacific: \$93 Million





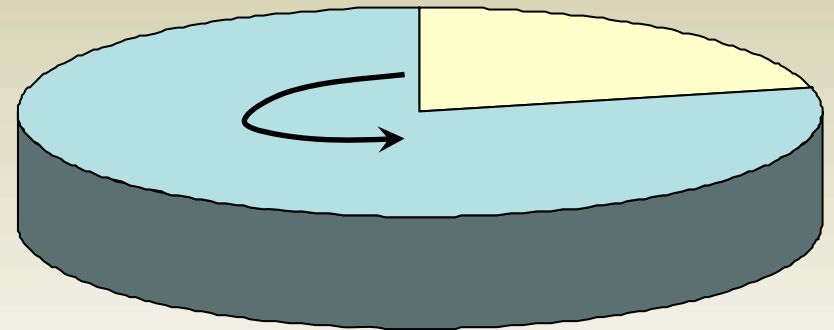
Consolidation of the Surety Industry

1980: 21%

1990: 42%

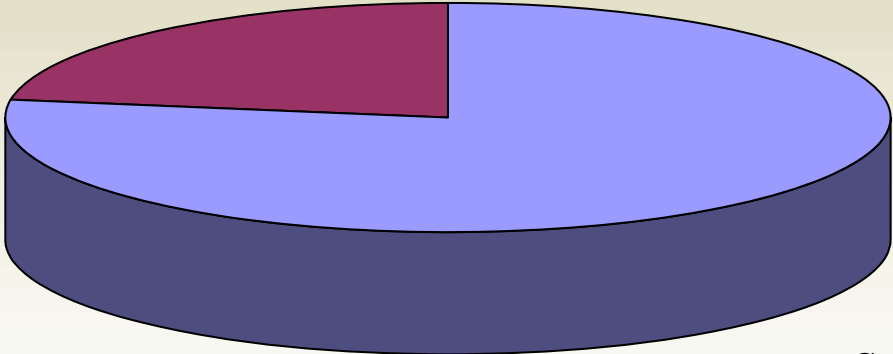
2003: 74%

2006: 74%



Public vs. Private Construction

Public Construction
\$261 billion
22%

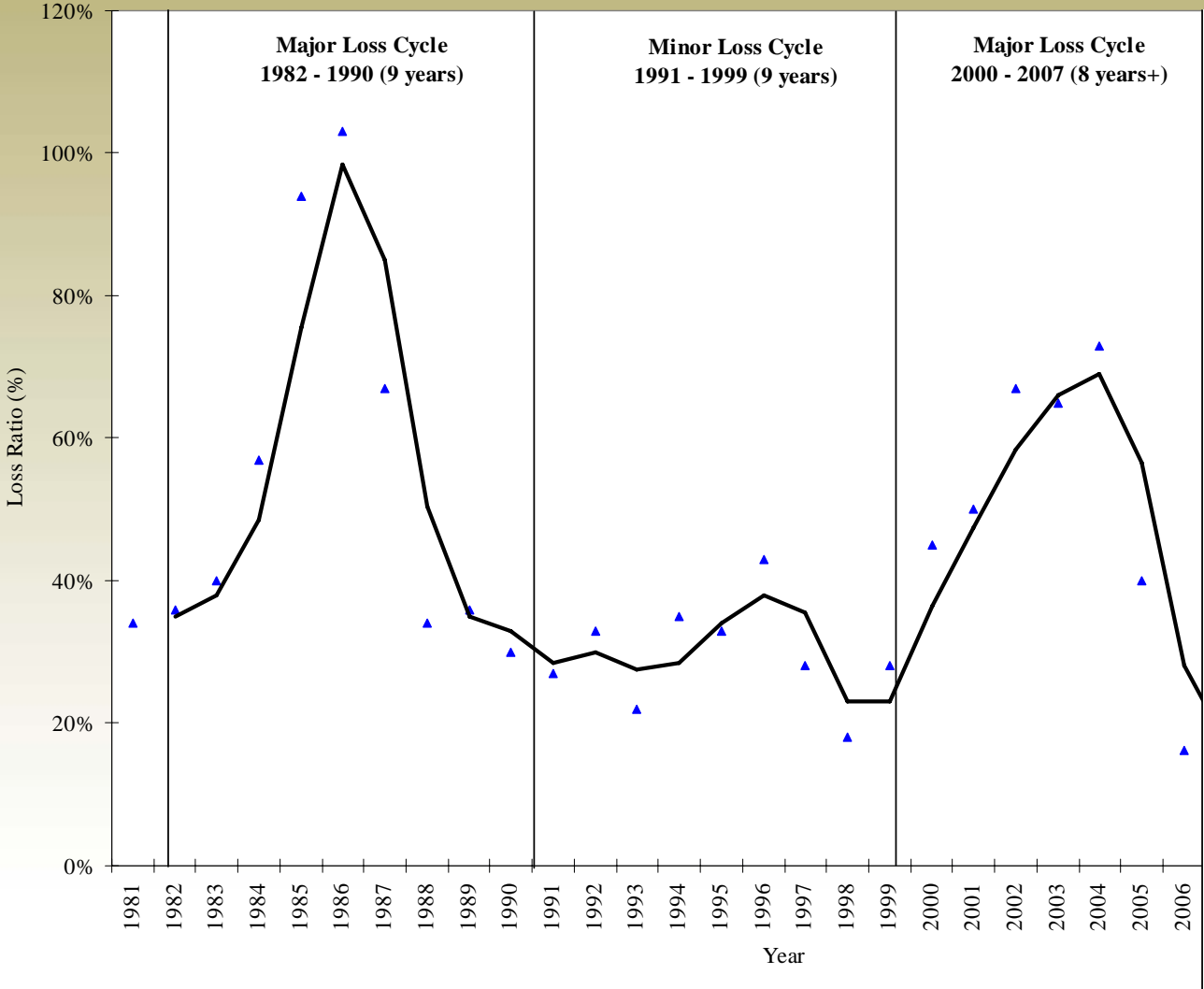



Private Construction
\$904 billion
78%



II. How do you predict future performance of the surety industry?

Surety Loss Cycles (1980 – 2006)





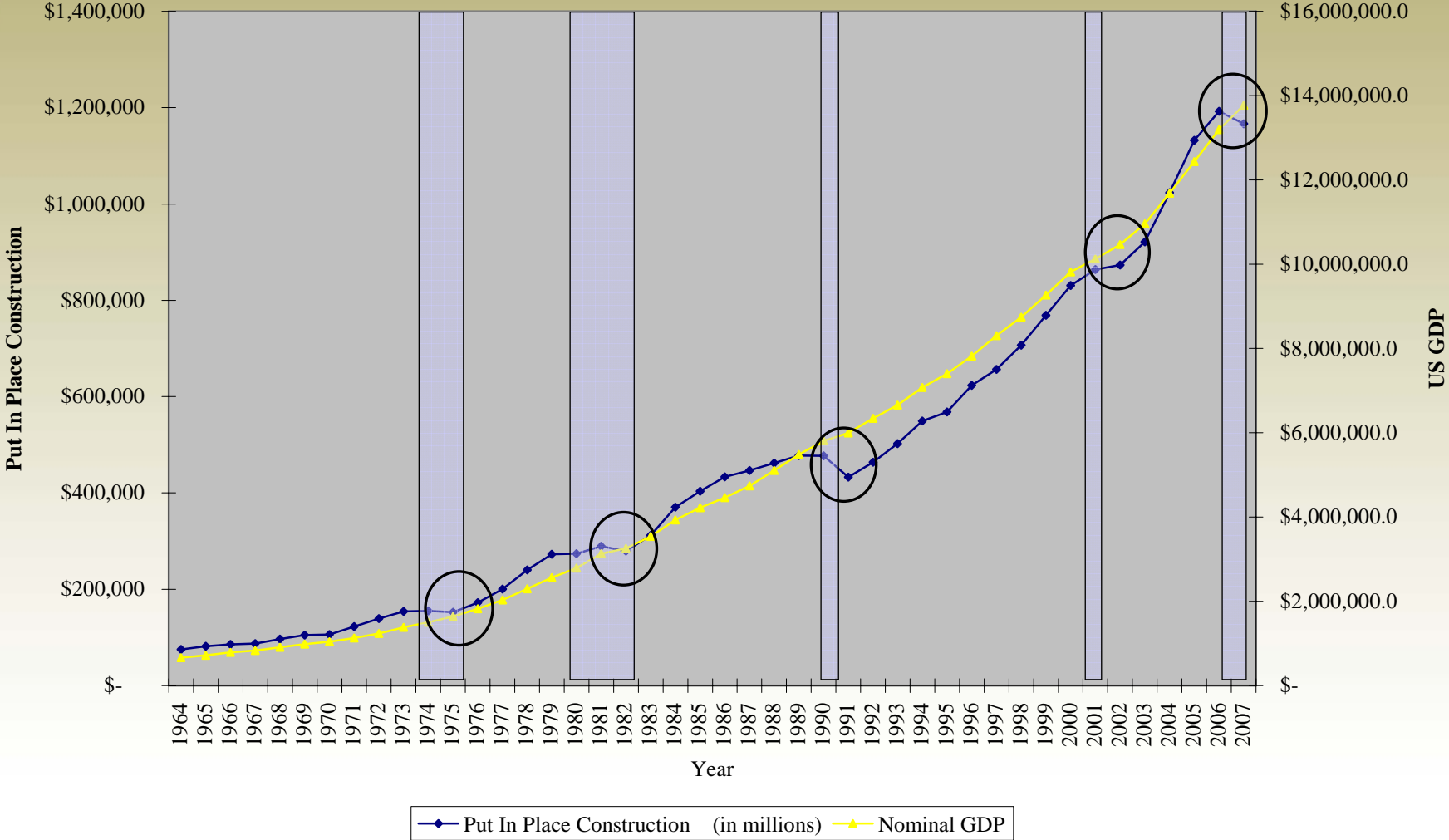
III. As the U.S. economy goes...so goes the construction industry.


a simple formula:

A recession or correction leads to an increase in contractor losses and, consequently, surety losses.

Construction Revenue v. US GDP

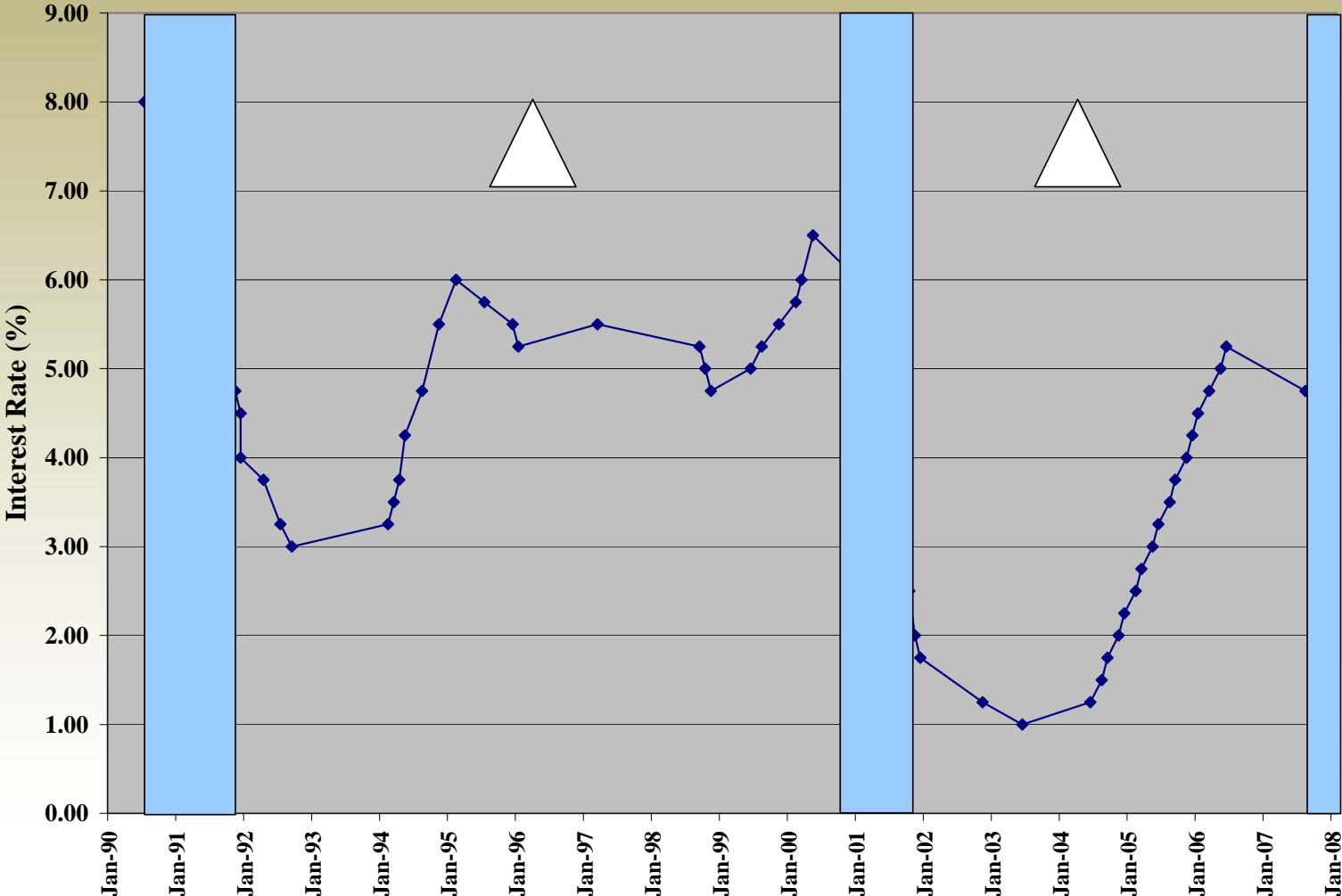
1964 - 2007





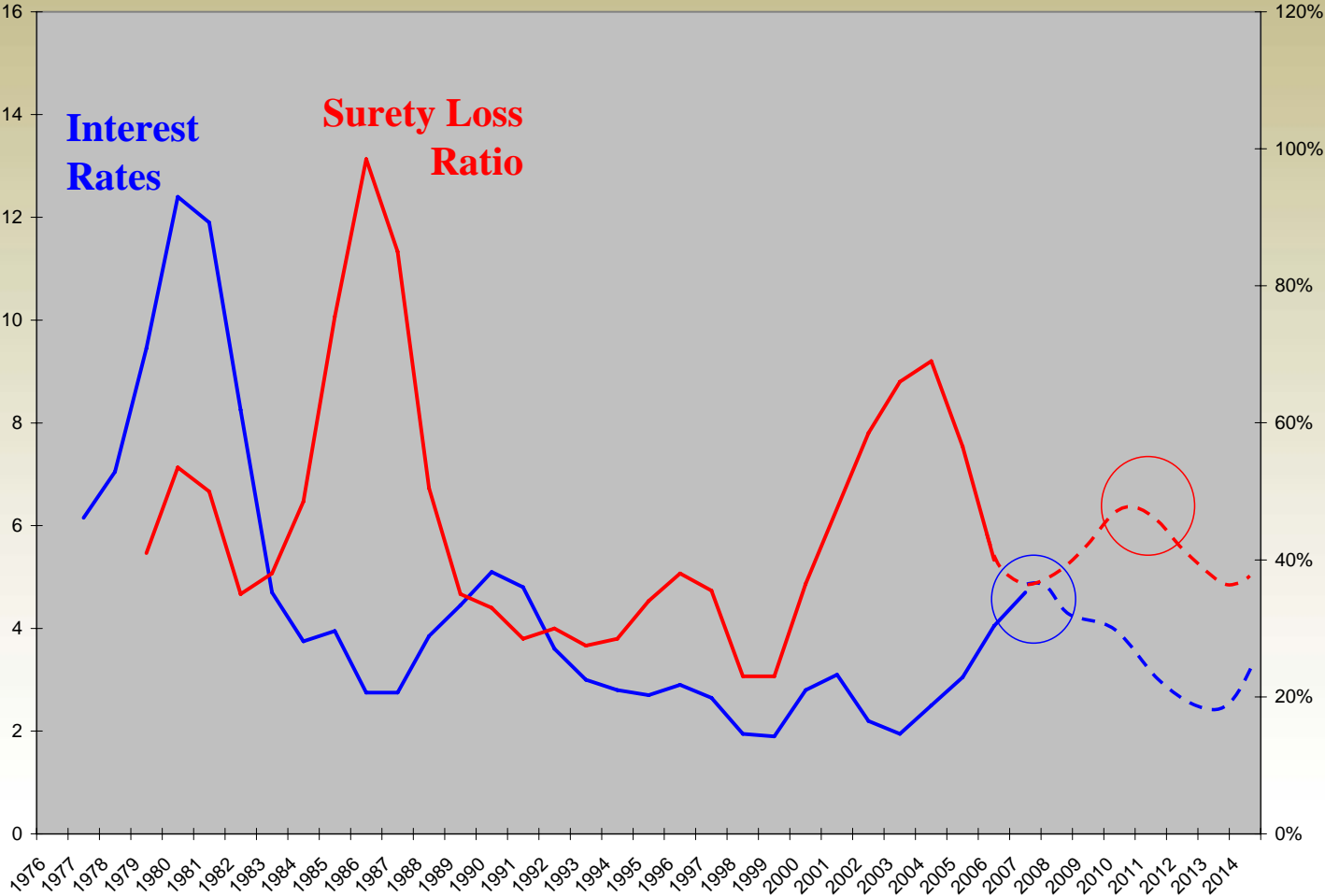
IV. When interest rates start to drop...look out.

Federal Funds Rate Movement



Surety Losses & Interest Rates

Future Surety Loss Ratio Projections





V. When contractor profits start to trend downwards... look out.



Construction is a fragmented industry

- Construction Employment:
7.7 million
- Construction Establishments: 818,000
- Percent of establishments with fewer than 20 workers: 91%

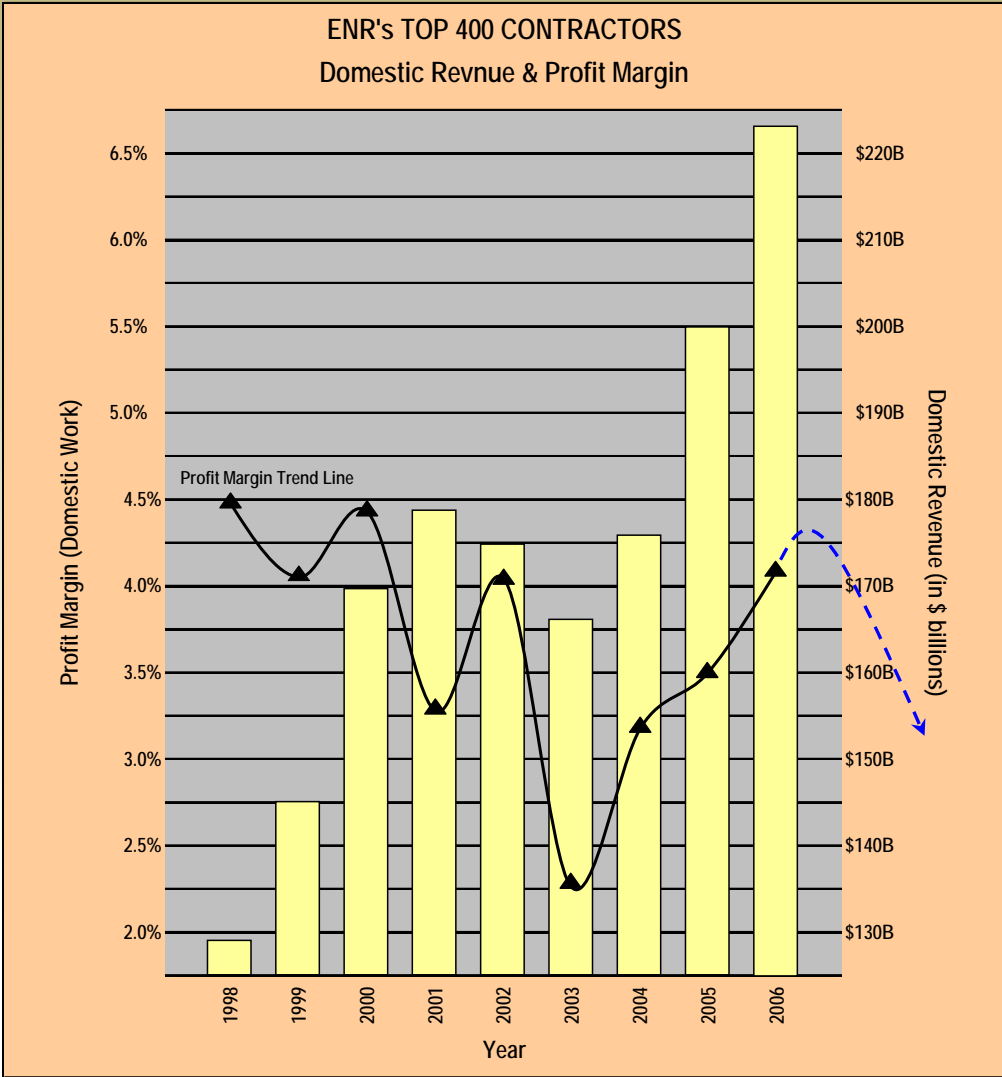


Industry Sector Profit Margin Review

NET PROFIT MARGINS Yahoo Finance Industry Browser

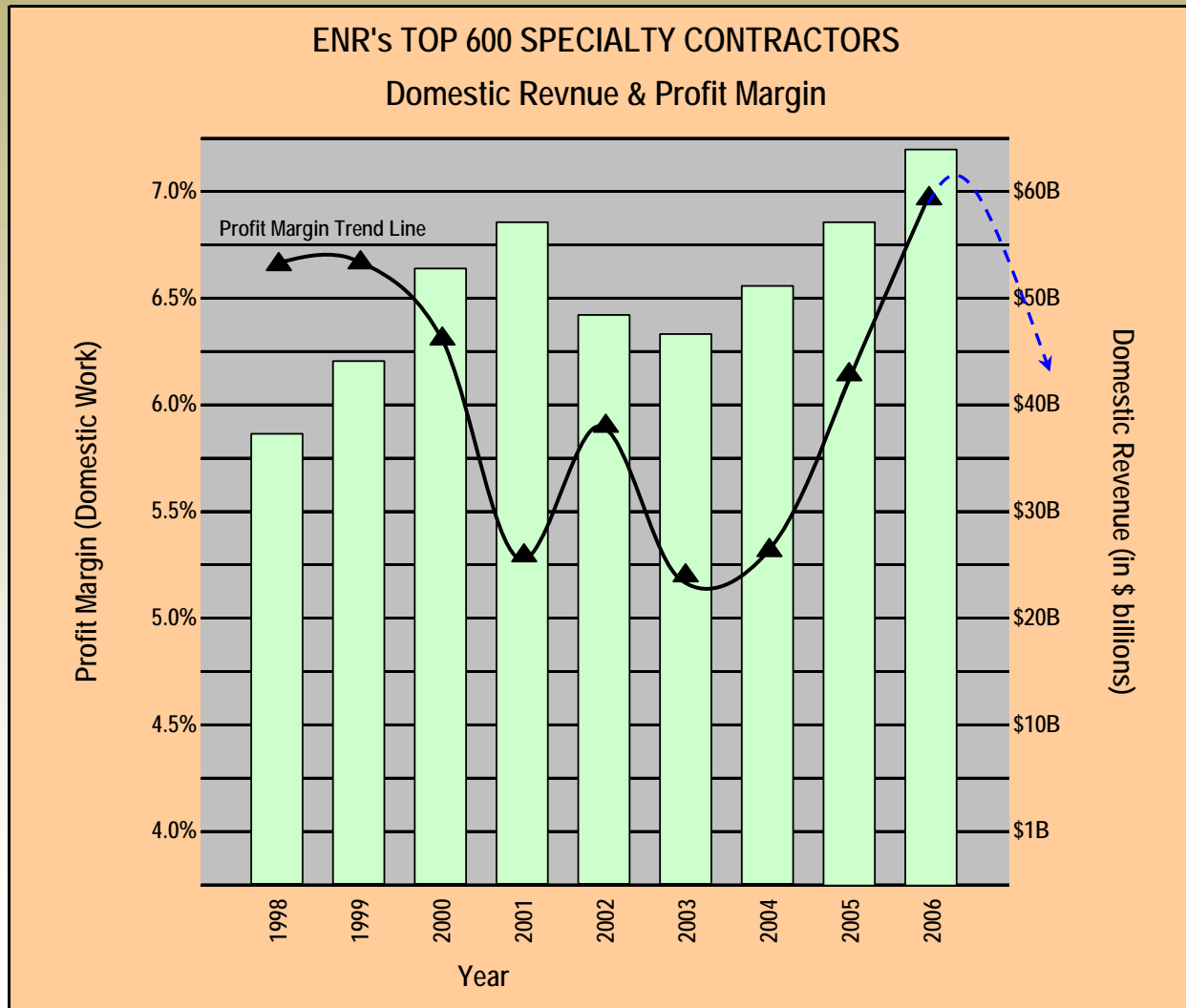
Industry	2004	2005	2006	2007
General Contractors	-0.30%	1.70%	1.50%	3.20%
Heavy Contractors	1.20%	1.50%	2.50%	4.20%
Residential Contractors	8.00%	8.80%	9.30%	-0.10%
Engineering Companies	3.65%	1.90%	2.95%	3.10%
Property & Casualty Insurance		6.40%	7.20%	12.50%


Top 400 Contractor Profit Margin Projections





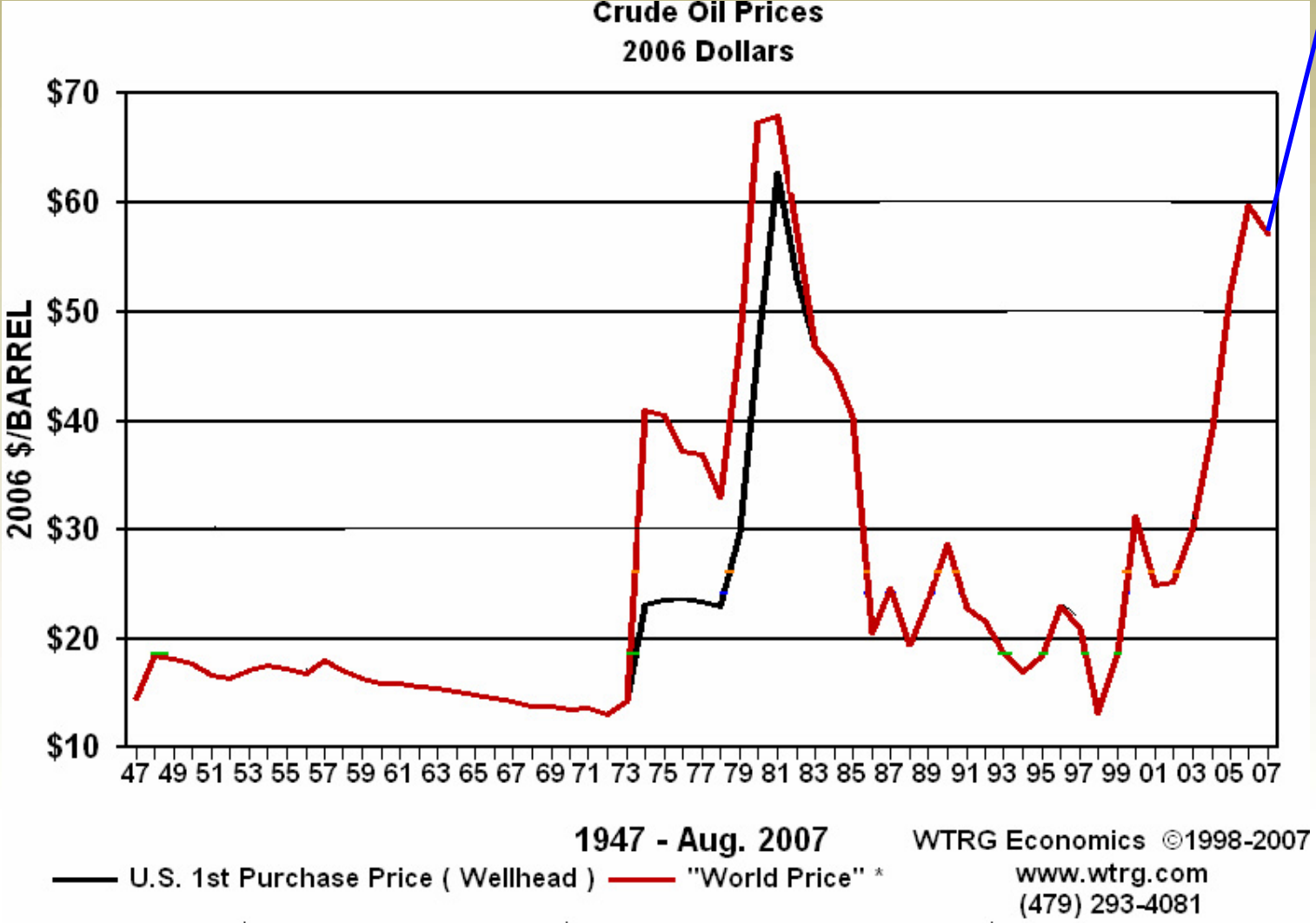
Top 600 Specialty Contractor Profit Margin Projections





VI. When energy prices increase
drastically...
look out.

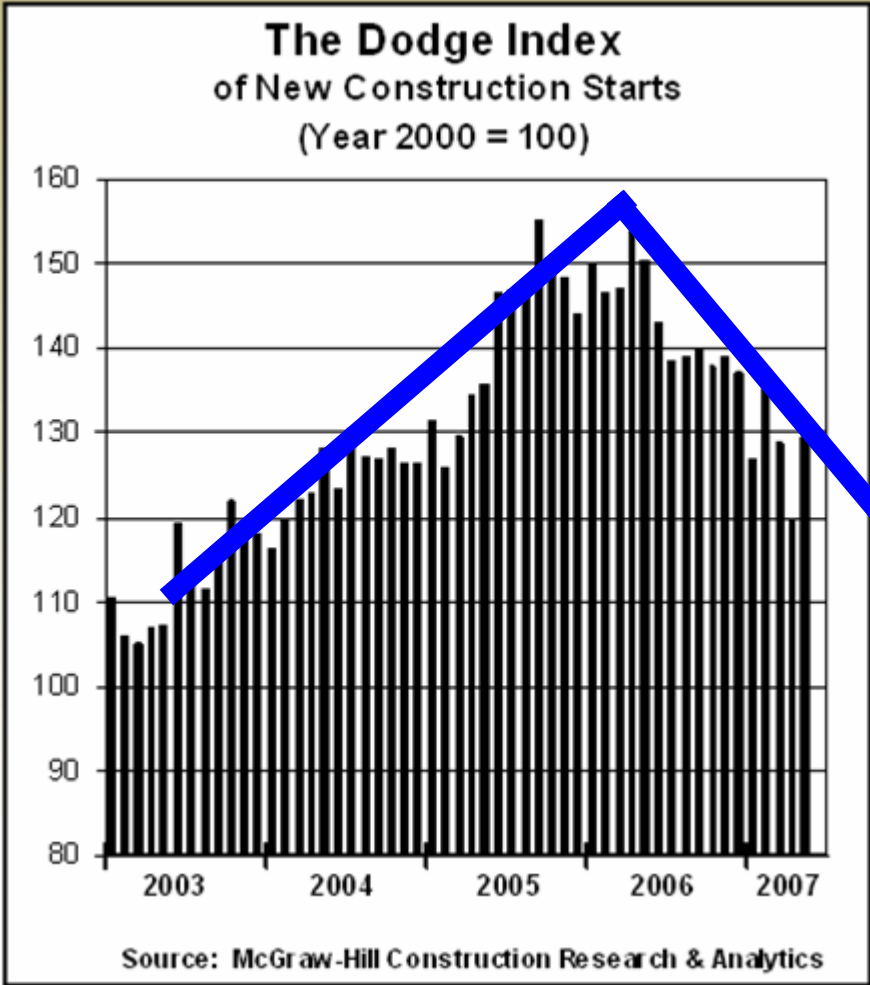
Crude Oil Price Timeline





VII. Once construction starts begin to slow...look out.

Construction Starts Trend

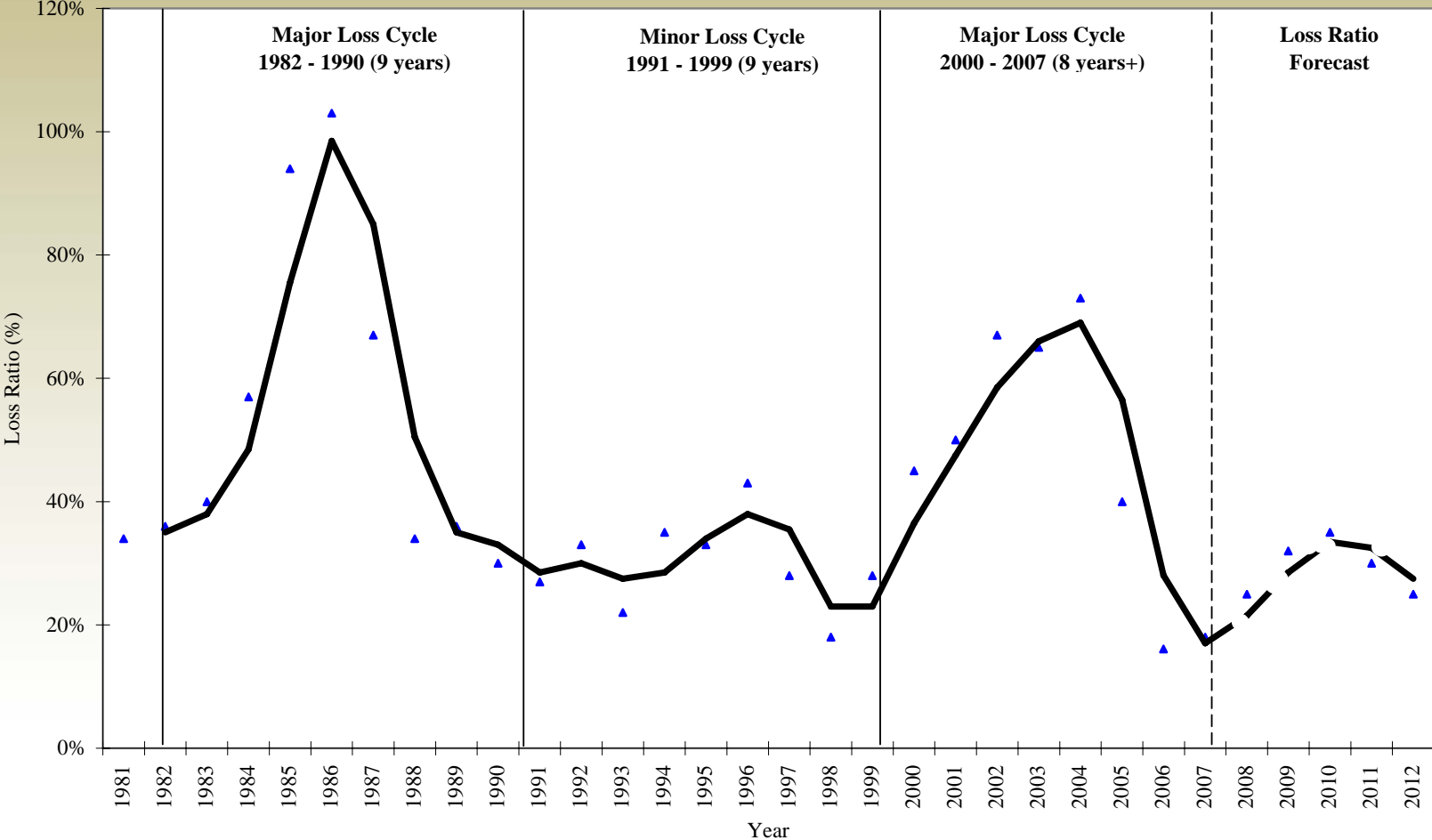





VIII. What do these trends tell you about future surety performance?

Future Loss Projections

Contract Surety Loss Ratio Cycles





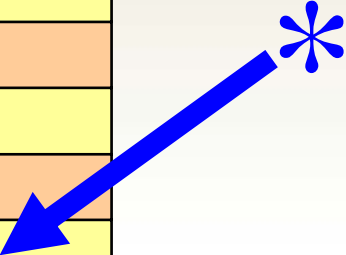
What is the main cause of contractor failure during economic slowdowns?

- During an economic boom, contractors grow infrastructure and overhead to manage increases in backlog.
- When the economy slows, less projects are available to chase.
- Rather than downsize, contractors tend to pursue work more aggressively to maintain a required amount of revenue.
- Due to reduced margin and reduced revenue, cash flow tightens.
- Problems tend to multiply in these situations (contractors tend to: manage projects different, expand to regional markets, and diversity service areas).
- **BOTTOM LINE: Contractors fail to downsize during economic downturns.**


2007

Construction Sector Review

Type of Construction	% Change 06 to 07
Lodging	68%
Power	30%
Transportation	24%
Office	20%
Communication	19%
Amusement & Recreation	18%
Education	17%
Healthcare	14%
Highway & Street	14%
Sewerage & Waste Disposal	14%
Commercial	10%
Manufacturing	10%
Water Supply	8%
Residential	-18%
Total Construction	-0.1%




Source: U.S. Dept. of Commerce – “Put In Place” Construction



Sequence of a construction downturn.

- The supply of money has tightened, causing the residential market to shrink by \$50B in '07.
- The residential drag has affected the single family market and high rise residential.
- Construction that typically follows residential development, such as utility work, treatment plants, retail, etc., begins to slow after shrinkage of the residential markets.
- Public construction has remained strong in '07, but a shrinkage in tax base reduces public funding and will reduce revenue growth over the next several years. Construction legislation is being edited down.
- Consumer spending, which drives private, nonresidential construction, begins to slow after the residential markets.



IX. How is the strength of the
Property/Casualty Industry
measured?



Top 10 Losses Incurred for Major Catastrophic or Terrorism Events

- Hurricane Katrina, Aug-05 (\$40.6 billion)
- Hurricane Andrew, Aug-92 (\$15.5 billion)
- World Trade Center, Pentagon, Sep-01 (\$18.8 billion)
- Northridge, CA Earthquake, Jan-94 (\$12.5 billion)
- Hurricane Wilma, Oct-05 (\$10.3 billion)
- Hurricane Charley, Aug-04 (\$7.5 billion)
- Hurricane Ivan, Sep-04 (\$7.1 billion)
- Hurricane Hugo, Sept-89 (\$4.2 billion)
- Hurricane Rita, Sep-05 (\$5.6 billion)
- Hurricane Frances, Sep-04 (\$4.6 billion)

Source: Insurance Services Office (ISO)



Policyholder Surplus

- Surplus is the balance sheet difference between the assets the insurers have and the liabilities insurers maintain.
- Key Measure: Net Premiums Written (premium minus reinsurance) to Surplus
- Example: If insurer has \$100 in premium and only \$10 in surplus (a ratio of 10 to 1), a ten percent error in pricing the risk would bankrupt the insurer. If the insurer has \$100 in surplus (a 1 to 1 ratio), the error in pricing would have to be equal to 100% of the premium to bankrupt the insurer.
- Regulators have historically frowned upon ratios greater than 3 to 1.



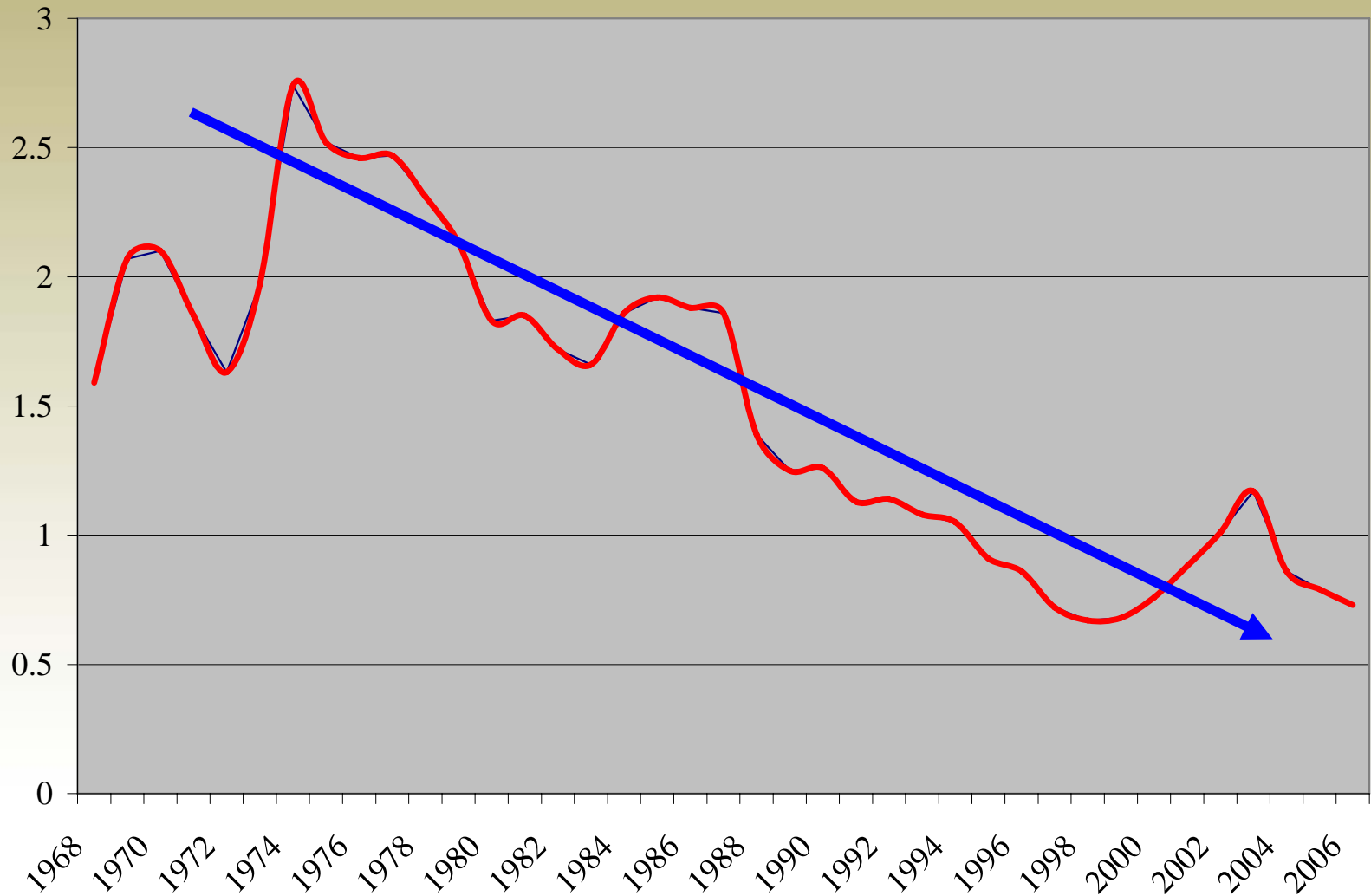
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Net Premiums Written v. Surplus Ratio

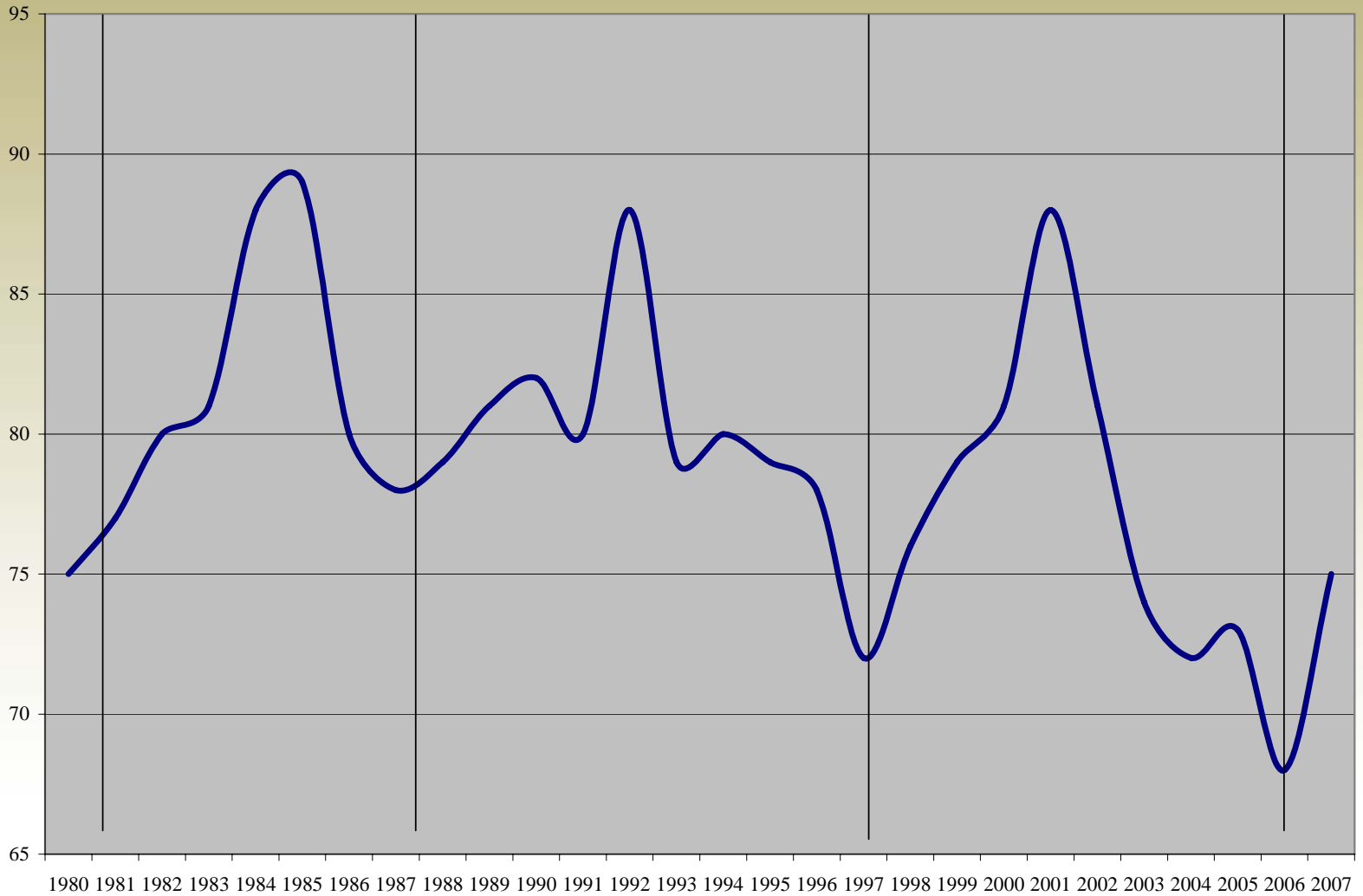




IX. How do you predict Property
Casualty losses?



P/C Insurance Loss & LAE Ratio



Q&A

