

*Subprime Solution: How Today's
Global Financial Crisis Happened
and What to Do about It*

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Argument

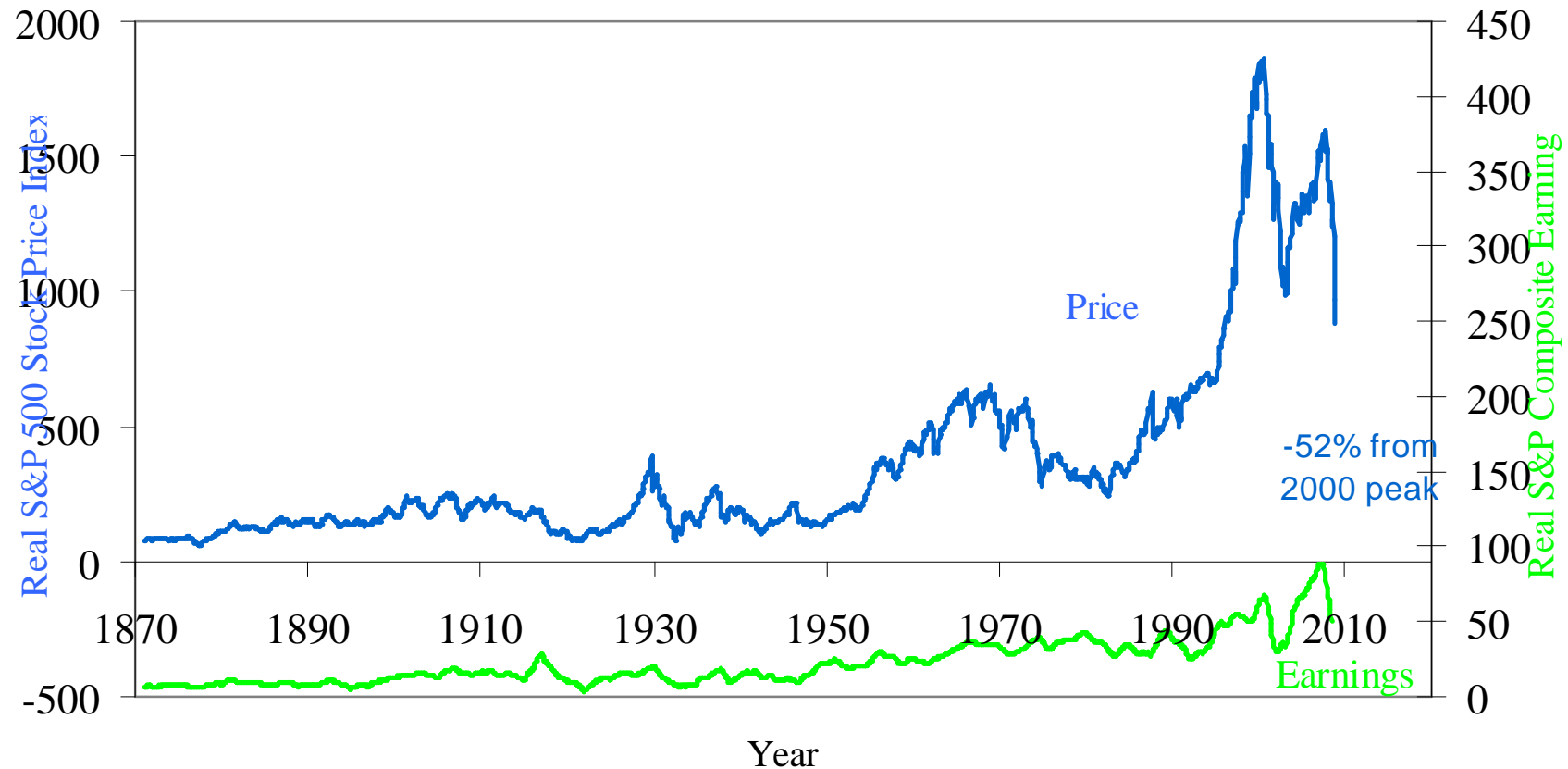
- *Subprime Solution* appeared August 2008, Princeton
- Cause of the Crisis According to G20 Statement November 2008: "weak underwriting standards, unsound risk-management practices, increasingly complex and opaque financial products and consequent excessive leverage (debt)"
- But *Subprime Solution* does not describe these as *ultimate* causes
- Why was crisis not more widely predicted?
- Groupthink, bubbles, waves of confidence
- Remedies that take account of ultimate causes and that advance and democratize our financial technology

Epigraph

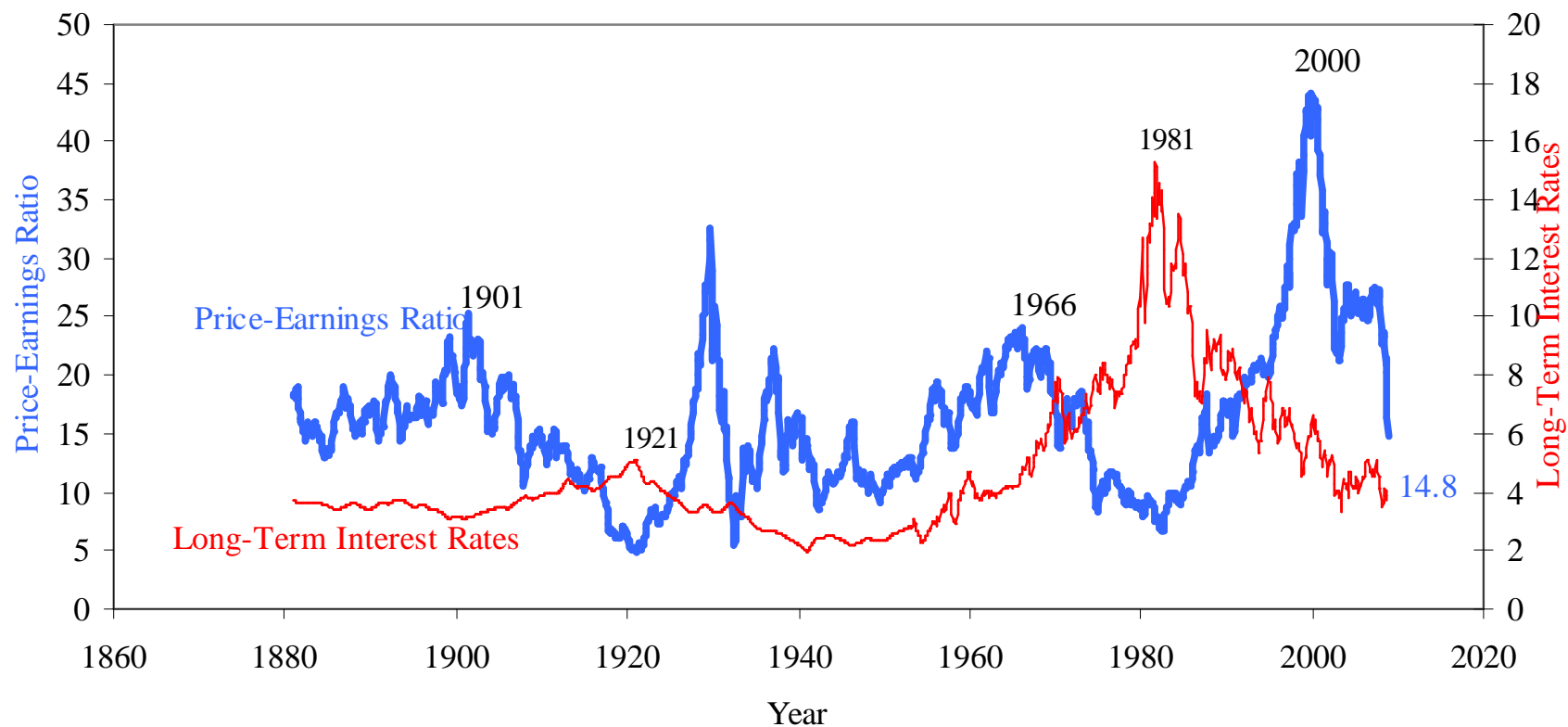
“A general bonfire is so great a necessity that unless we can make of it an orderly and good-tempered affair in which no serious injustice is done to anyone, it will, when it comes at last, grow into a conflagration that may destroy much else as well.”

John Maynard Keynes, *The Economic Consequences of the Peace*, 1919

Real S&P Composite Stock Price Index and Real Earnings Jan 1871-Nov 28, 2008

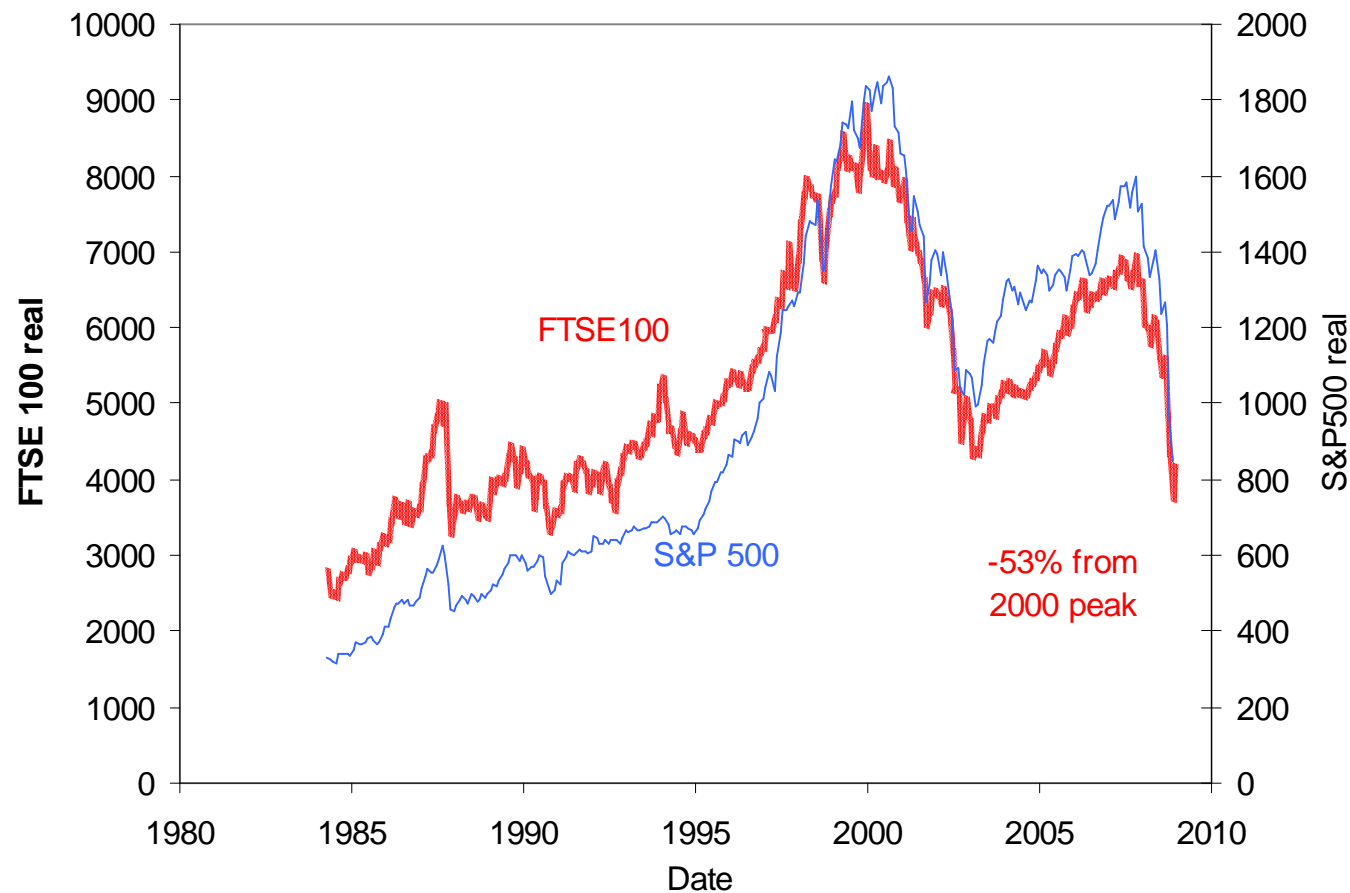


US S&P500 Price Earnings Ratio (10-Year Avg Earnings) Jan 1881 to Nov 24, 2008

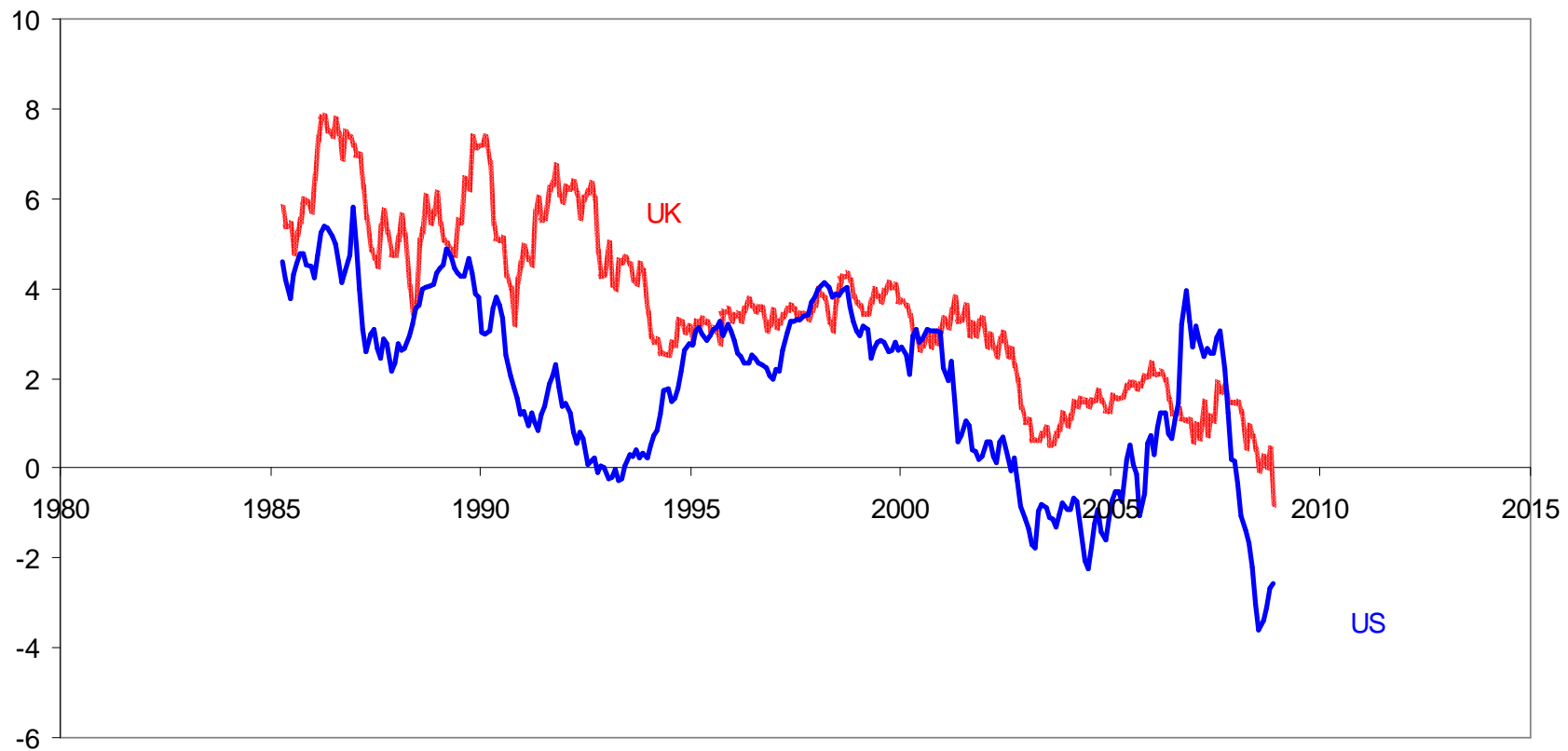


Real FTSE 100 and Real S&P500

April 1984 to Nov 28, 2008

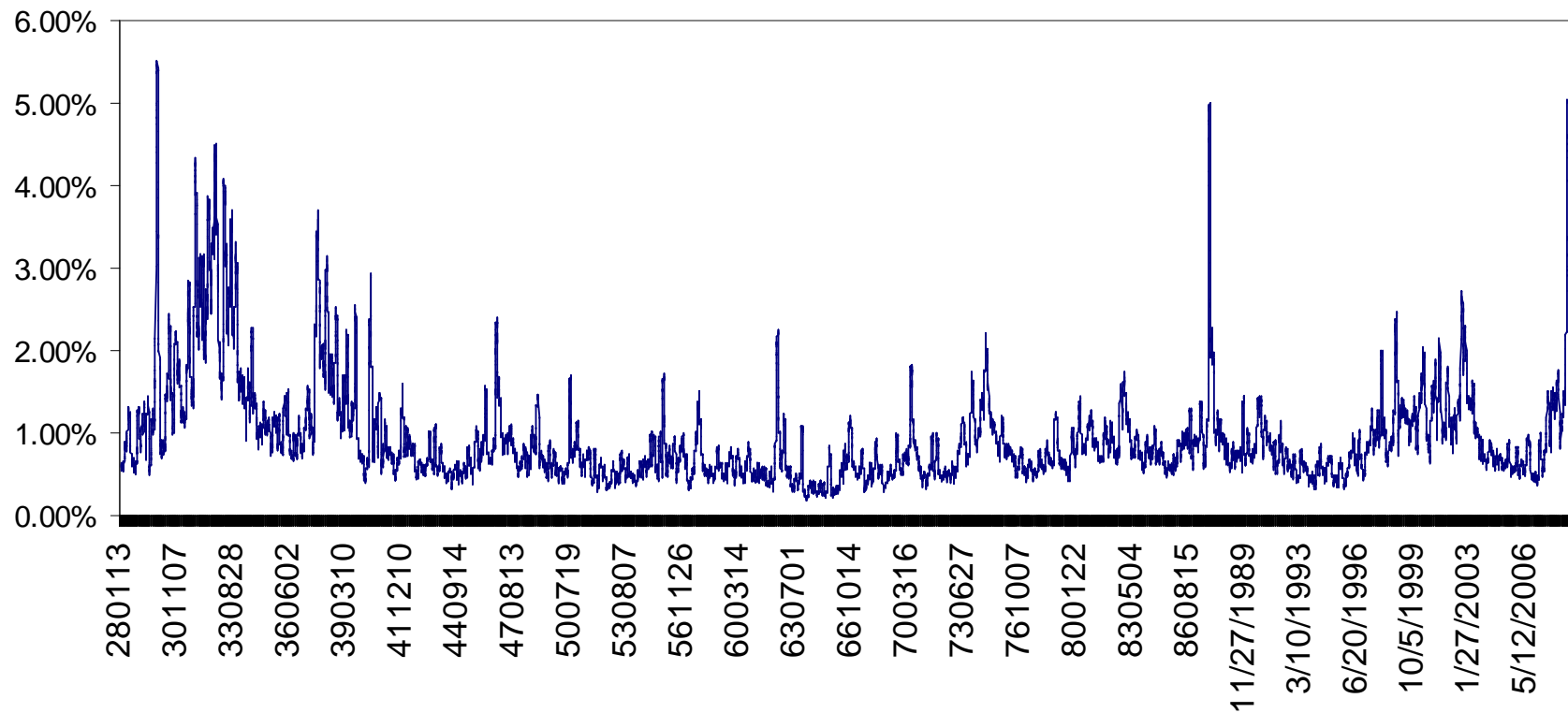


Real US Fed Funds Rate and Real UK Bank Rate April 1985-Nov 2008

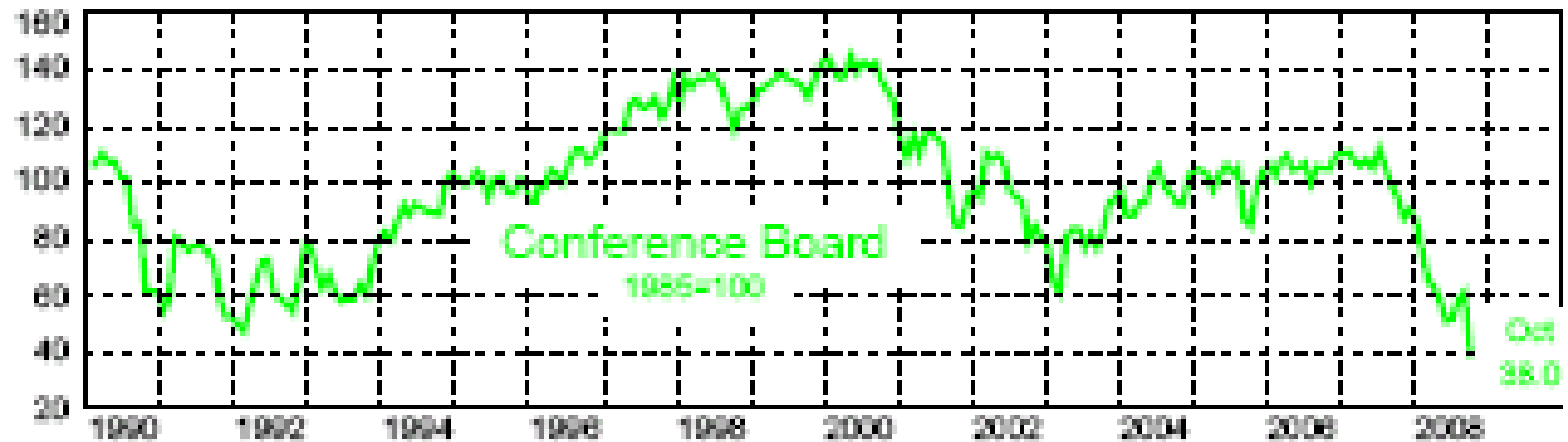


Volatility 1928-2008

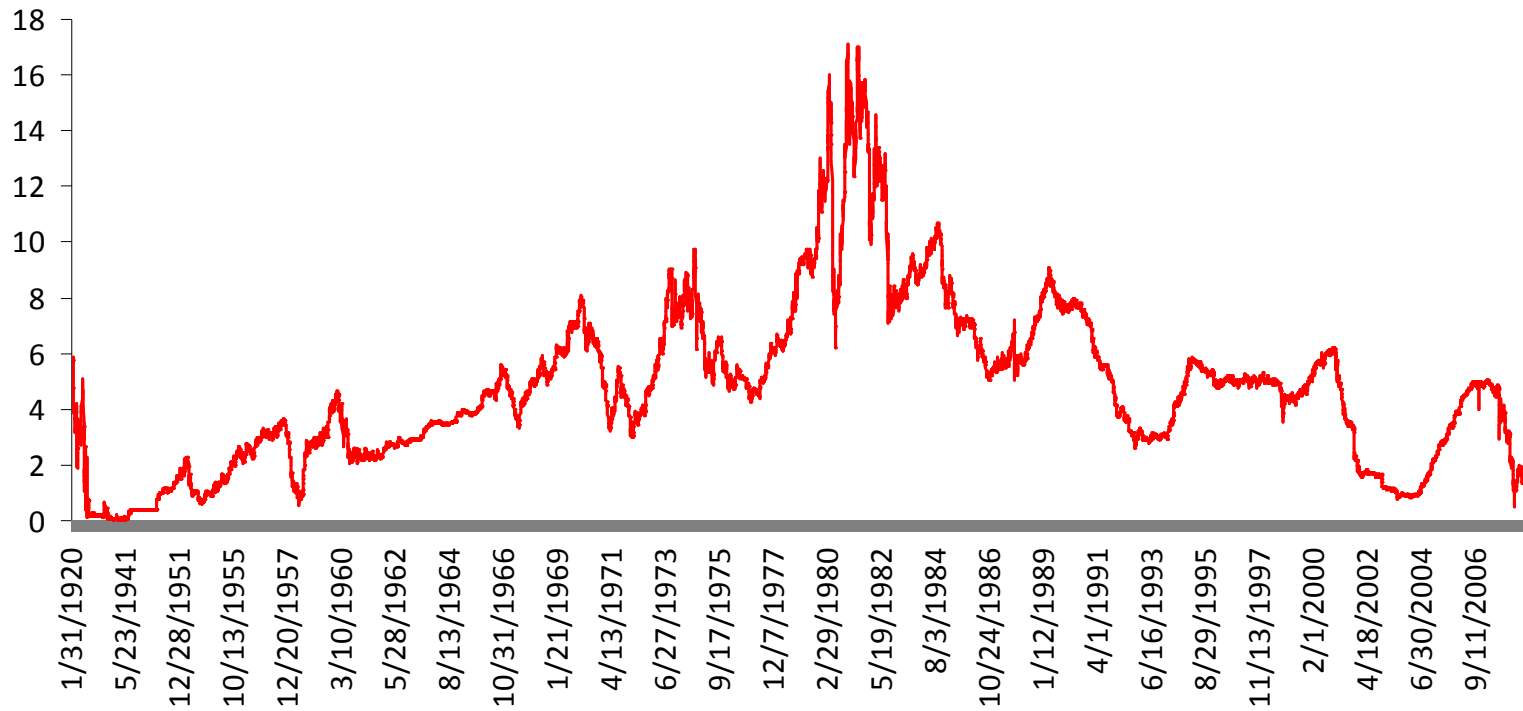
Stock Market Volatility Daily Feb 6, 1928 to Oct 29, 2008
Daily Lagging 30-Day Stdev of One-Day S&P Composite Percent Changes



Conference Board Consumer Confidence 1990-Oct 2008

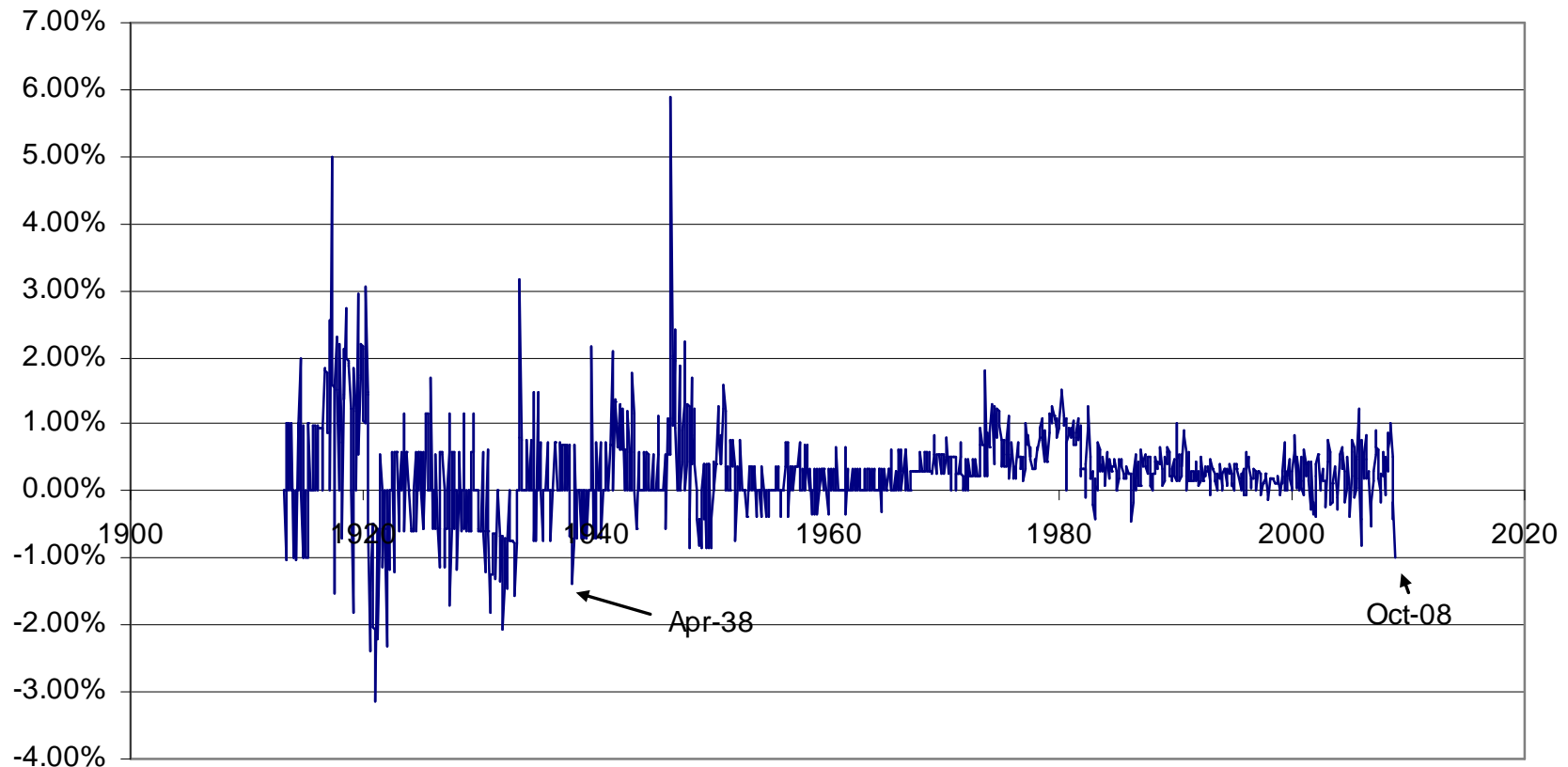


3-Month T-Bill Rate, 1920 to 2008

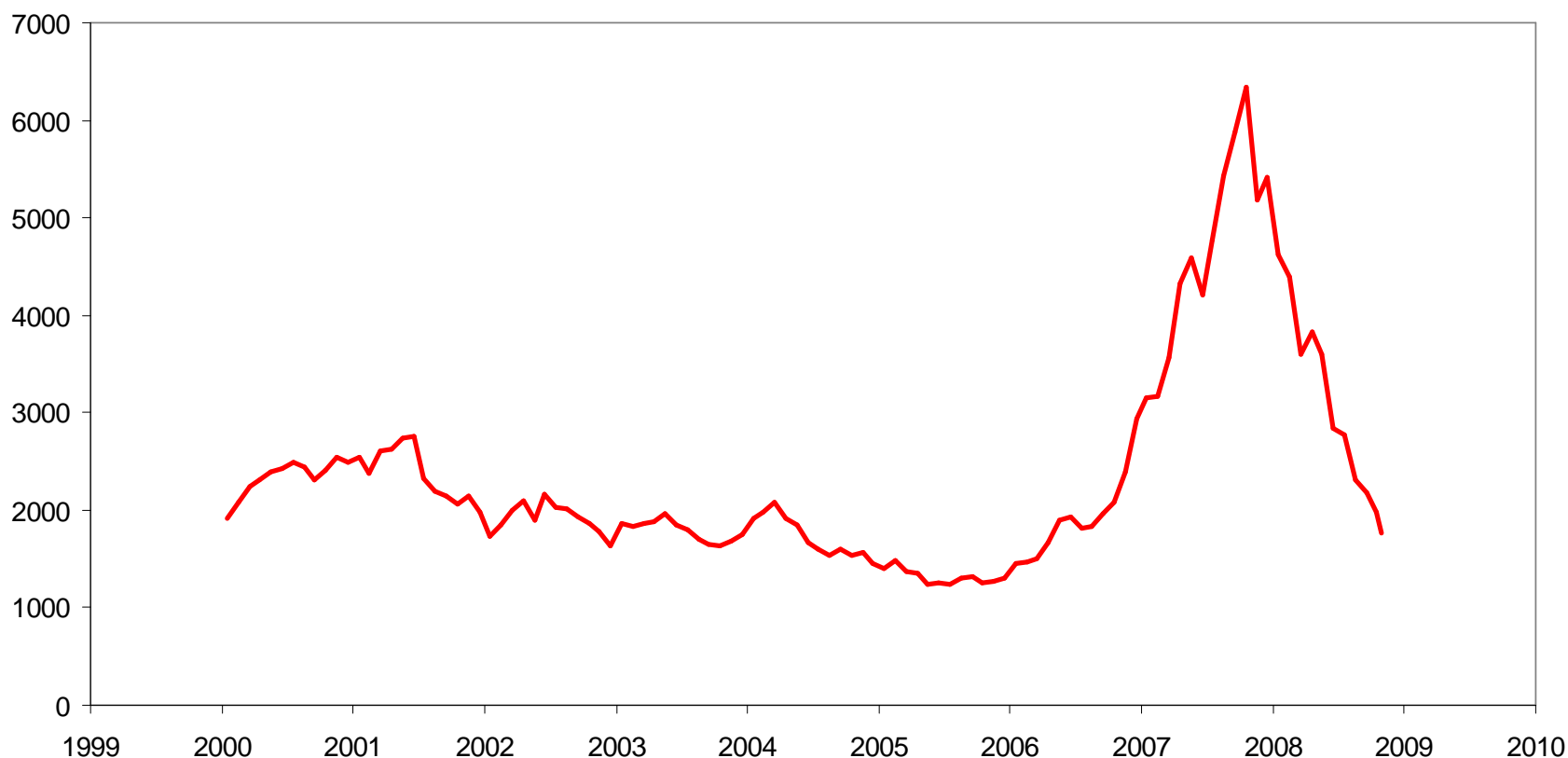


One-Month Inflation Rate (CPI-U)

Feb 1913-Oct 2008

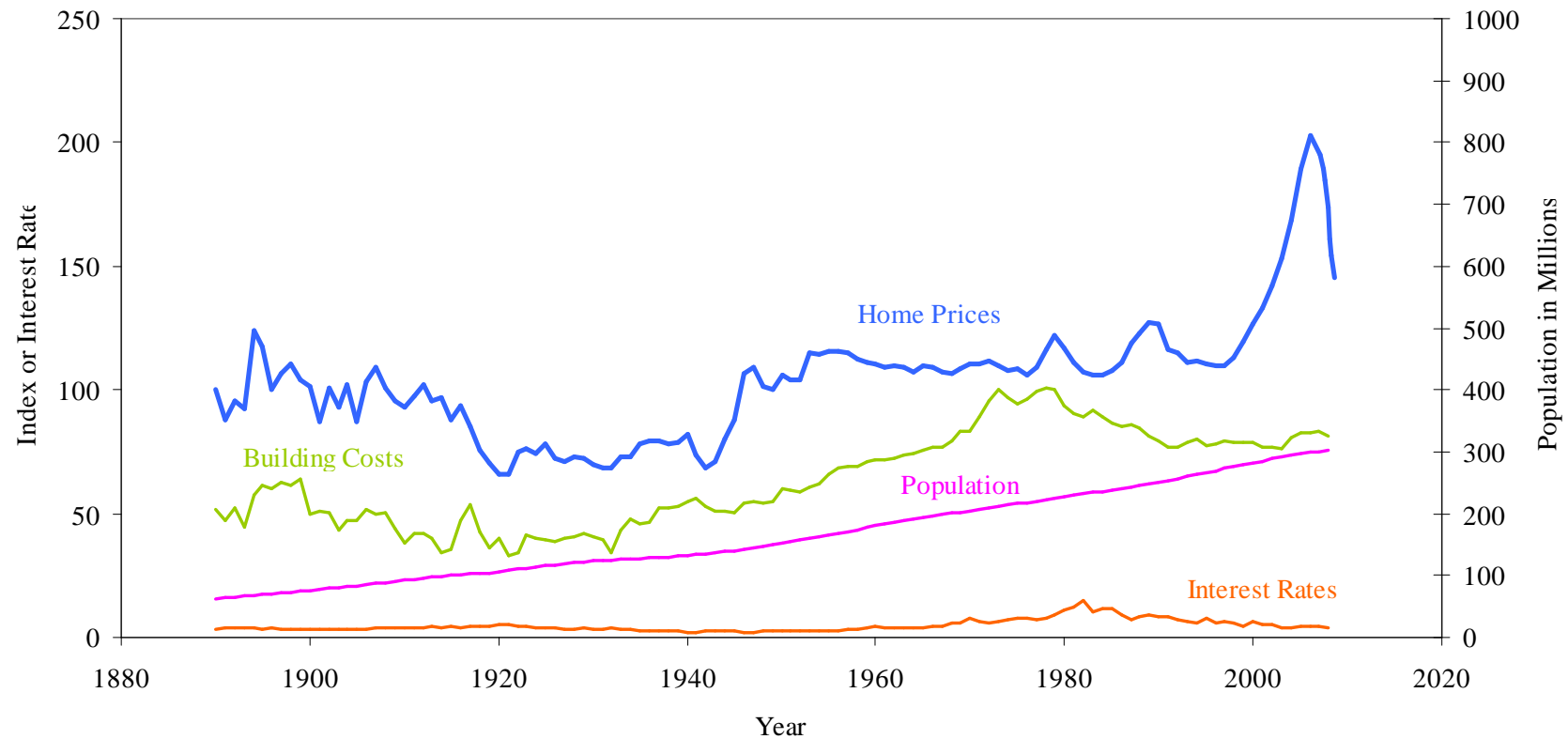


China, Real Shanghai Composite, January 2000 to Oct 10, 2008

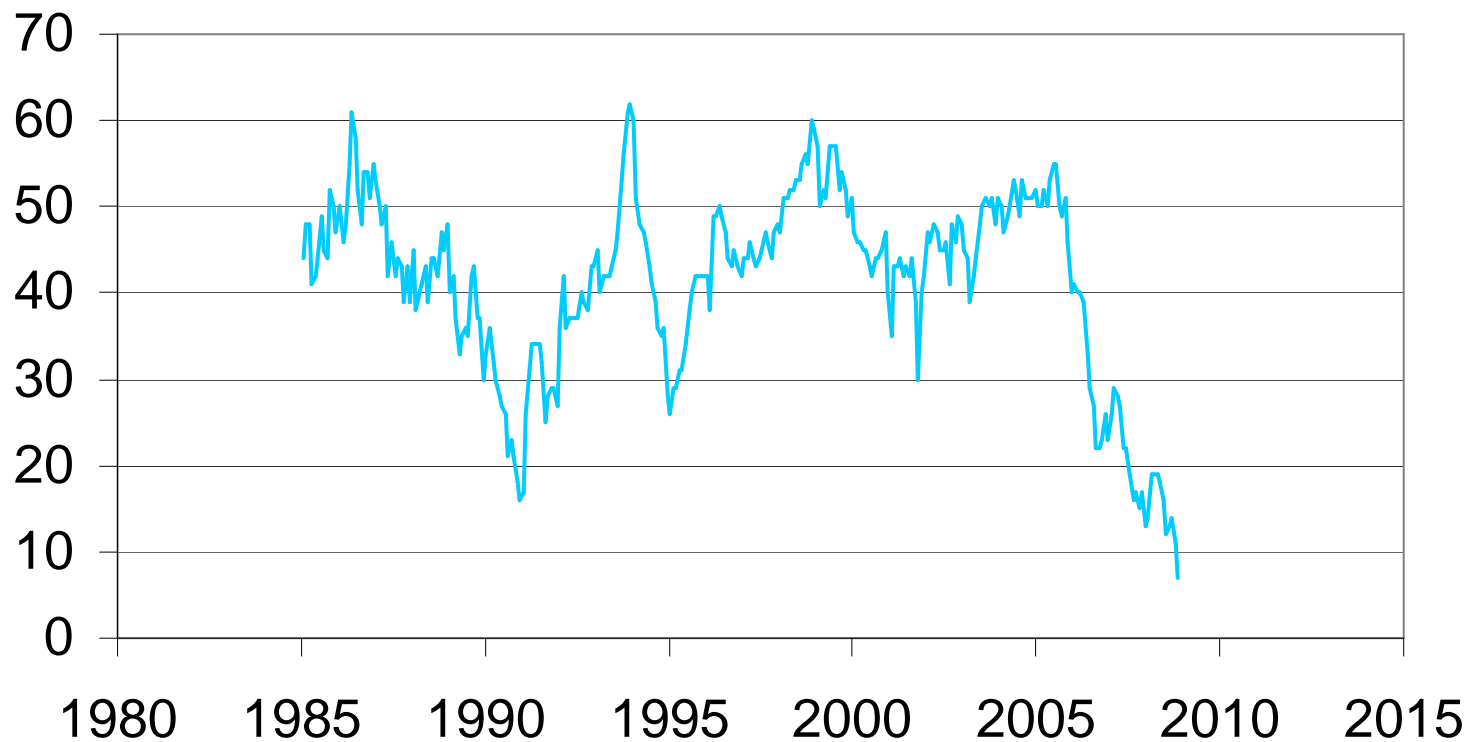


US Home Prices 1890 to 2008 Q3

With Annual Building Costs, Population, Ten-Year Treasury Yield



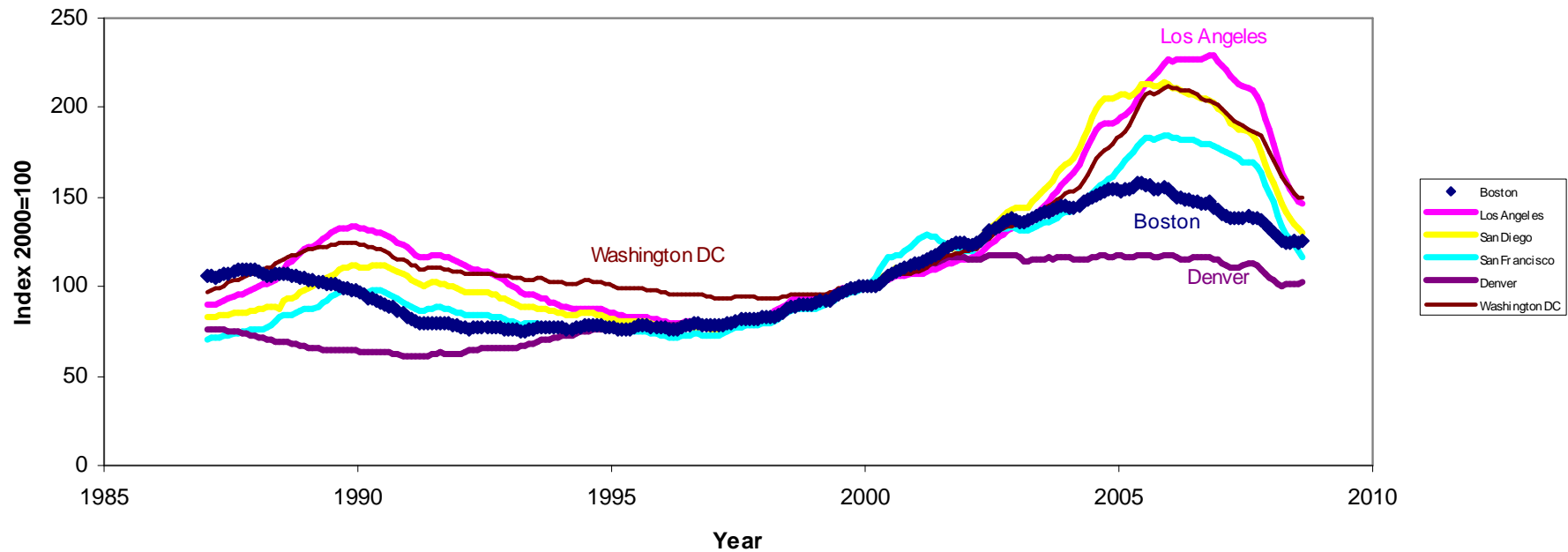
US National Association of Home Builders Traffic of Prospective Home Buyers January 1985-Nov 2008



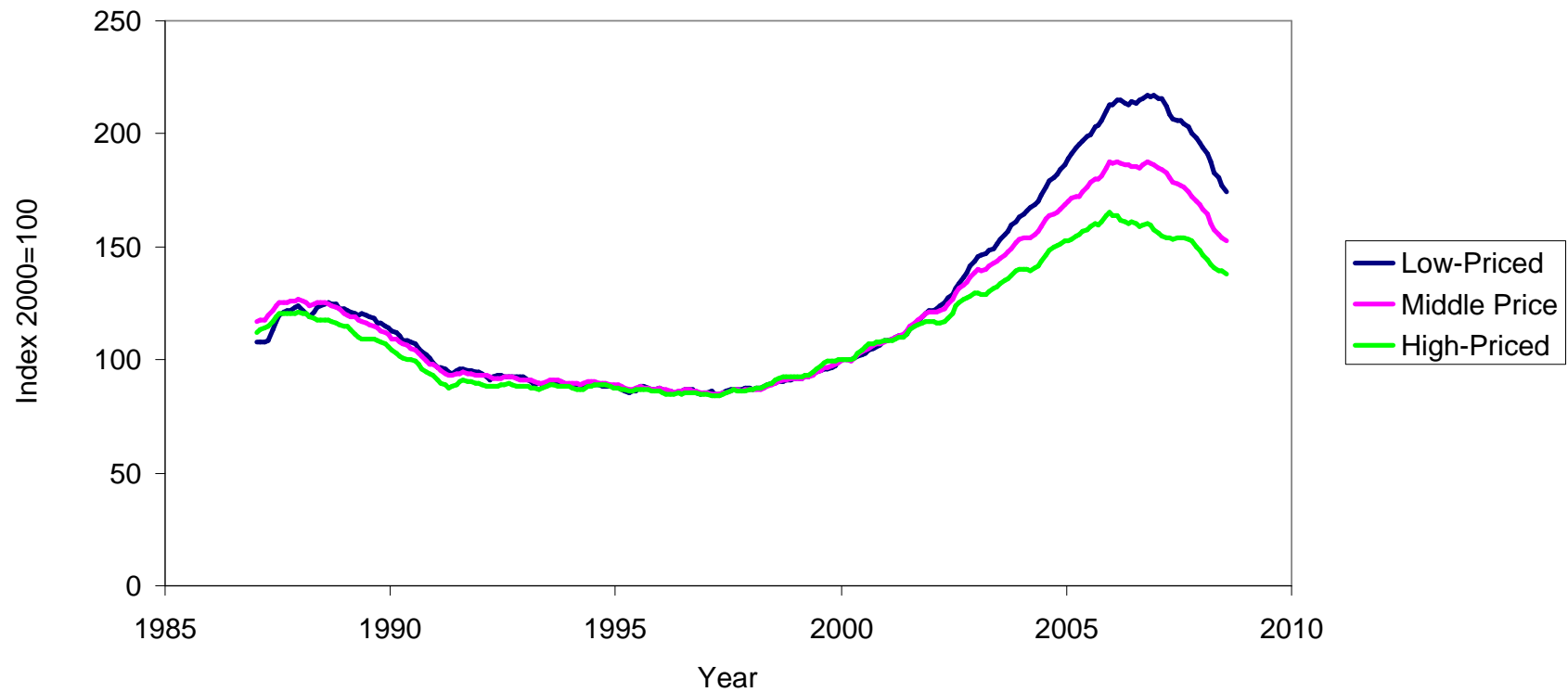
Real Home Prices in Five US Cities

Jan 1987 to August 2008

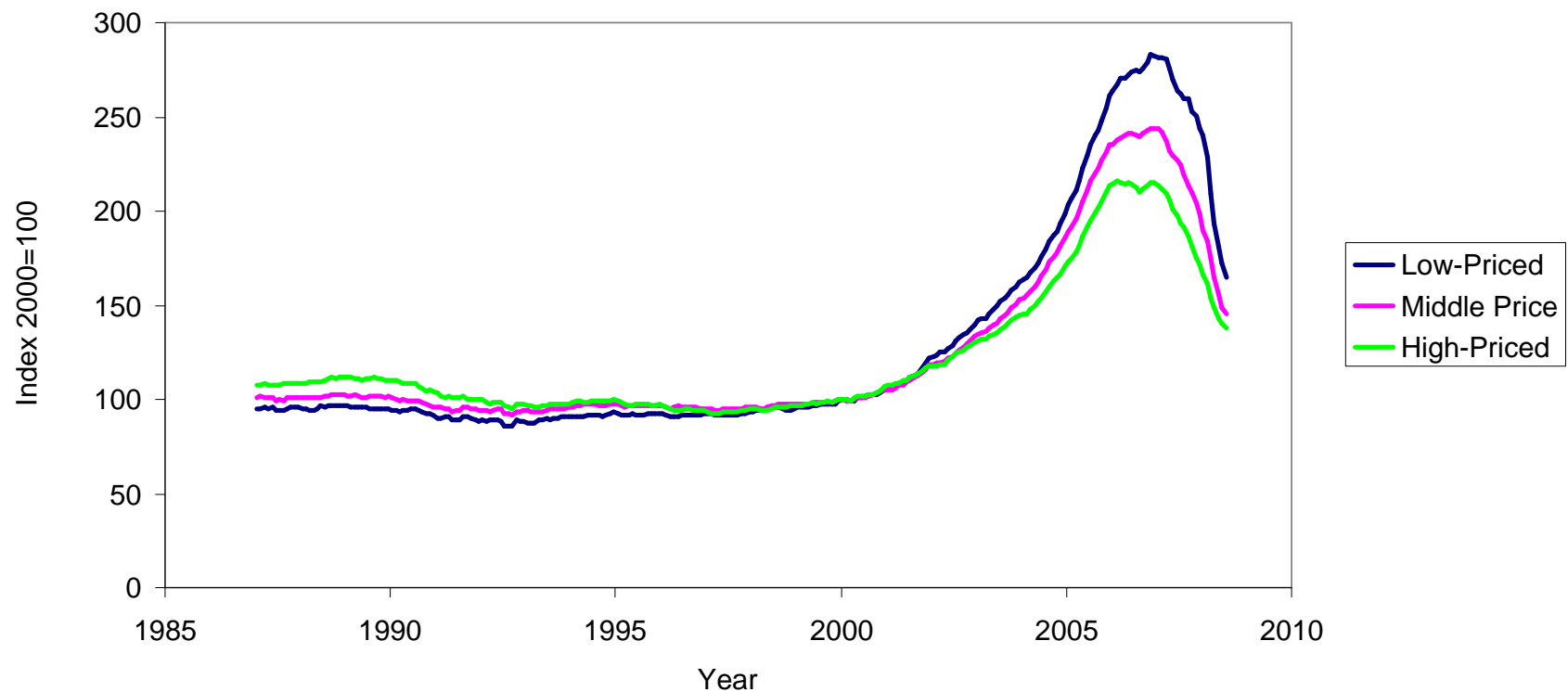
(S&P/Case-Shiller Indices w/ Inflation Correction)



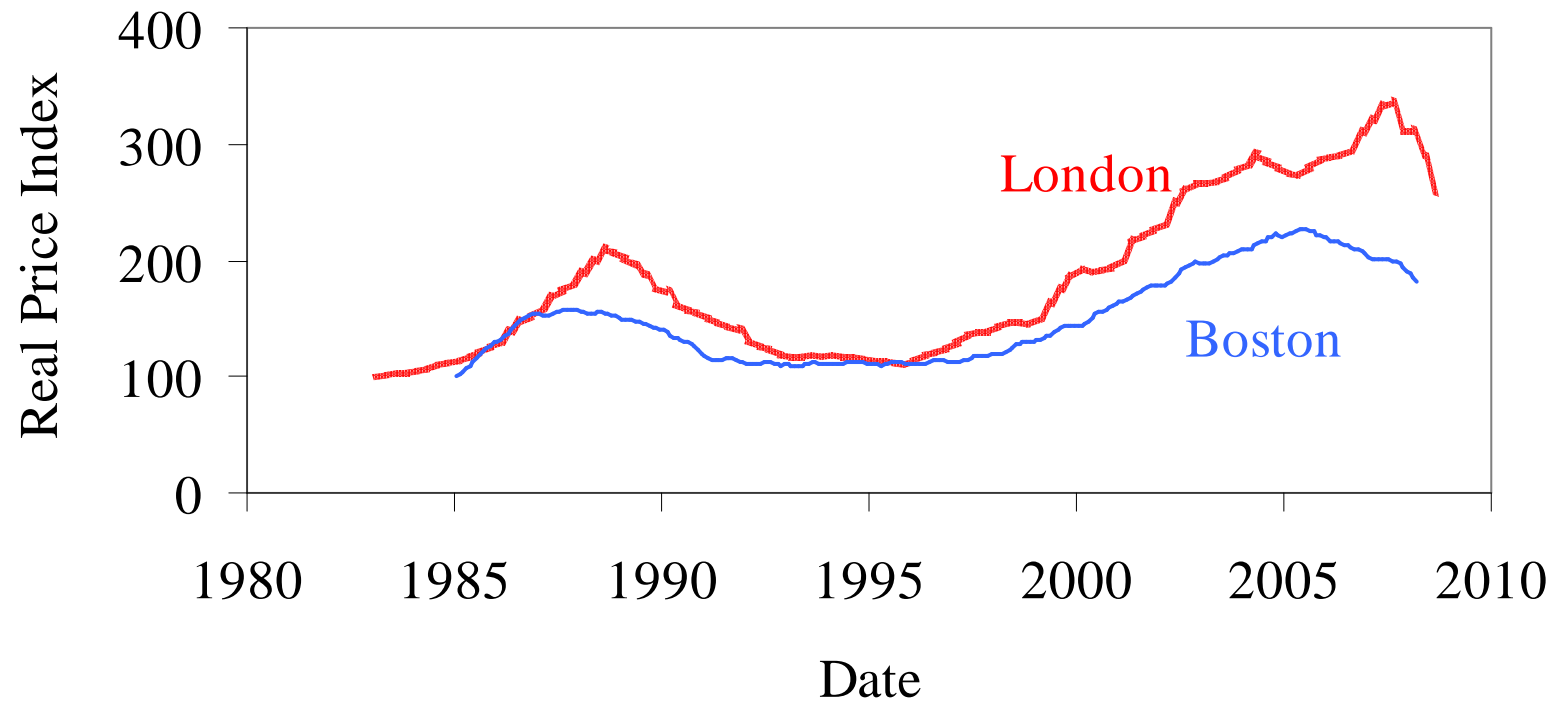
S&P/Case-Shiller New York Commuter Real Home Price Index by Price Tier



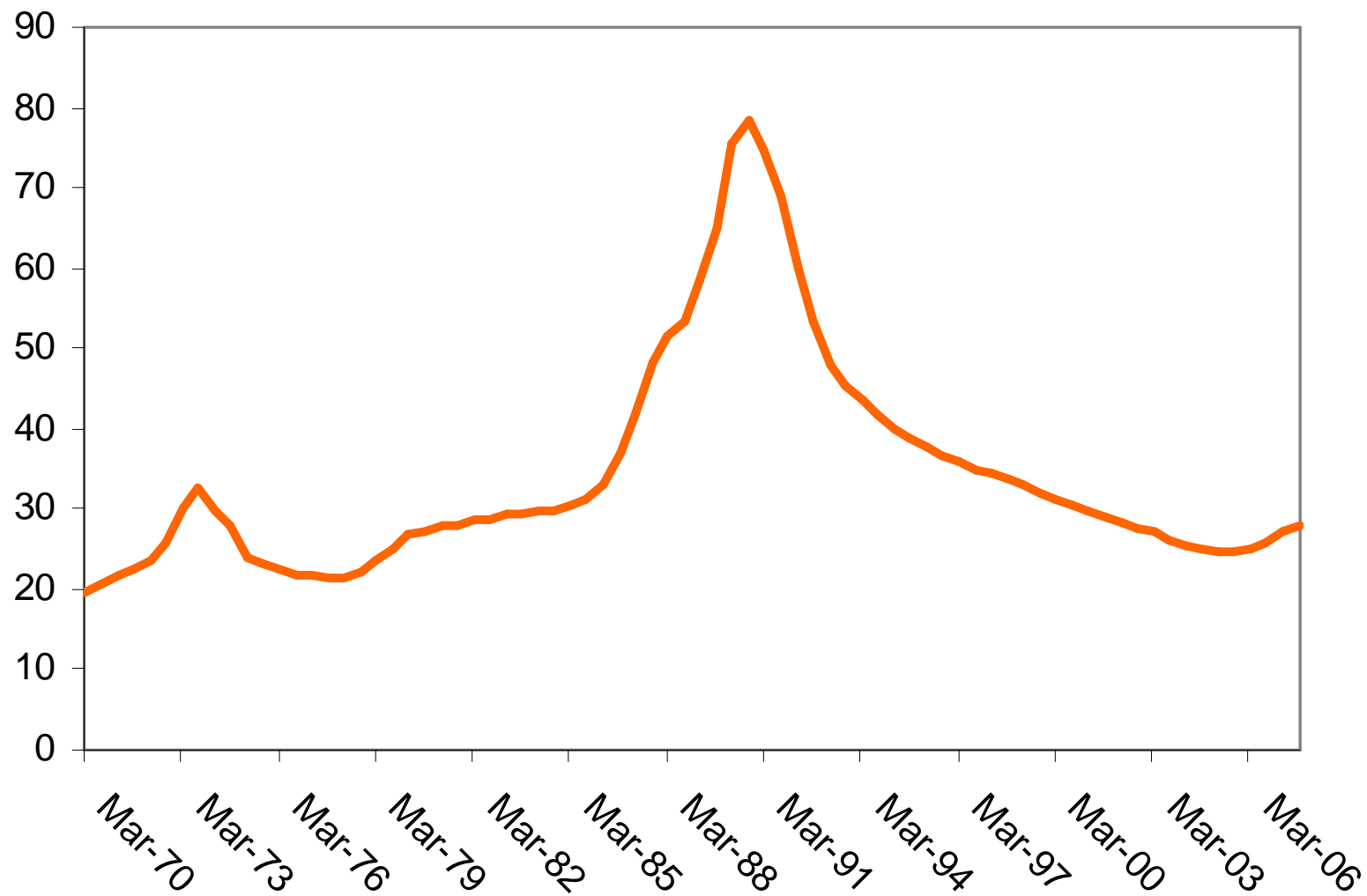
Index, S&P/Case-Shiller Miami Real Home Price Index by Price Tier



Real Home Prices in London and Greater Boston 1983-2008-III (Halifax & S&P/Case-Shiller)



Japan, Real Urban Land Prices, 6 Cities, Semiannual 1970-I to 2007-IV



Sources of the Bubbles (R. Shiller *Irrational Exuberance* 2000, 2005)

- Precipitating factors
- Amplification mechanisms
- Cultural factors
- Psychological factors

Keynesian Stimulus Packages

- US Congress, \$60-\$100 billion package under consideration, Obama proposes two-year stimulus package to produce 2.5 million more jobs by January 2011
- UK Darling unveiled £20 billion stimulus package two years, then higher taxes
- China \$586 billion stimulus
- Japan Taro Aso announced \$51 billion stimulus

Keynesian Multiplier vs. Confidence Multiplier

- Keynesian multiplier: deficit spending $= 1/(1-MPC)$, balanced budget multiplier = 1
- Akerlof-Shiller confidence multiplier (in forthcoming book *Animal Spirits*) suggests contextuality of outcome
- Restoring confidence needs creation of sense of opportunity, trust
- Infrastructure investment, inspiration

Dealing with Systemic (Counterparty Risk) Problems in Finance

- Problem isn't too many derivatives
- Problem is complacency and excessive faith in existing financial institutions
- Clearing house for derivatives
- MacroShares concept, more user-friendly derivatives for long-term investors/hedgers

MacroShares

- Currently Trading
 - MacroShares \$100 Oil Up and \$100 Oil Down (tickers: UOY and DOY)
- Recently filed
 - MacroShares Major Metro Housing Up - tracking upward movement of Housing (NYSE ticker: UMM)
 - MacroShares Major Metro Housing Down – tracking the downward movement of Housing as a hedge to home price decline (NYSE ticker: DMM)
- Accessible on a public exchange, allowing for continuous buying and selling throughout the trading day
- No Counterparty risk – fully backed by U.S. Treasuries and Cash.

Bailouts

- US: TARP \$700 billion, TAF \$150 billion, PDCF, TALF and other new programs announced Nov 25, 2008, \$800 billion, on top of assumption of Fannie-Freddie book of business of \$5 trillion, Citibank \$300 billion in guarantees
- UK: Northern Rock, etc.
- Restoration of confidence, establishment of sense of fairness, trust, requires bailouts of individual home owners as well, but we need to think how to prevent this in future

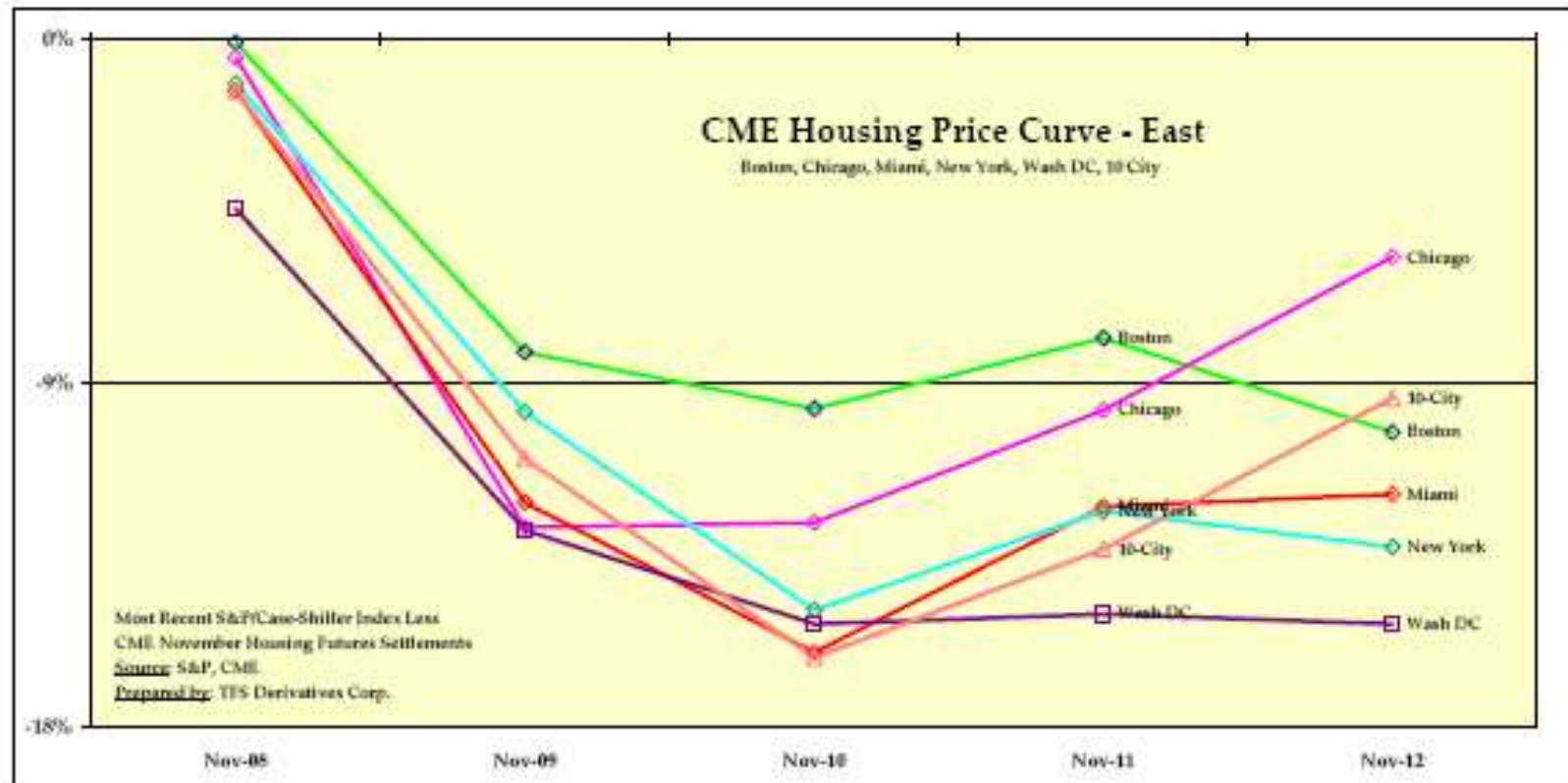
Long-Run Solutions

- New information infrastructure
 - Comprehensive financial advice
 - New financial watchdog
 - Default-option financial planning
 - Improved financial disclosure
 - Improved financial databases
 - New system of economic units of measurement

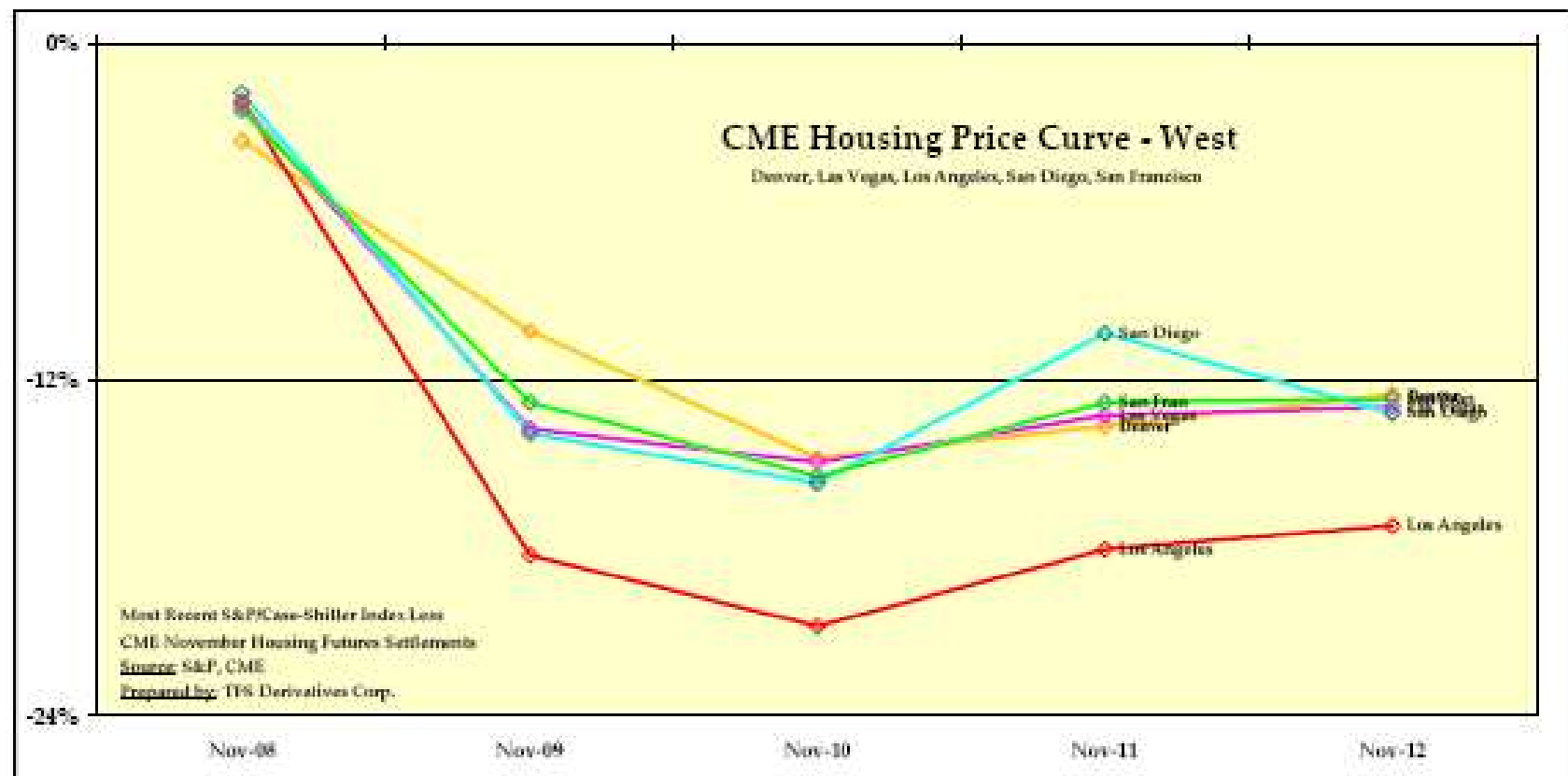
Long-Run Solutions Cont.

- Fundamentally expanding financial markets to cover more risks that really matter
 - Real estate risk markets
 - Long-term claims on incomes
 - GDP and trills

November 11, 2008 Housing Futures Market East Cities (Tradition Financial Services)



November 11, 2008 Housing Futures Market West Cities (Tradition Financial Services)



Long-Run Solutions-Retail Products

- Continuous Workout Mortgages
- Home Equity Insurance
- Livelihood Insurance

Continuous Workout Mortgages

- Workout of mortgage conditioned on economic events is written into initial mortgage contract
- Workout is continuous, happens every month as economic indicators change
- In response to changes in home prices and to changes in income and employment
- Index-based, reduces moral hazard