

After the storm: current perspectives in financial mathematics

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Fields Institute AGM
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Is it over ?

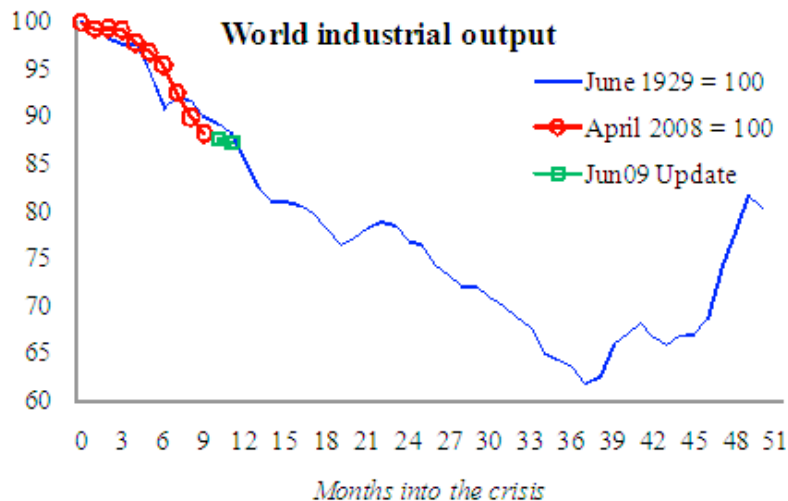


Figure: Eichengreen and O'Rourke 'A tale of two depressions', 2009

What about the stock market ?

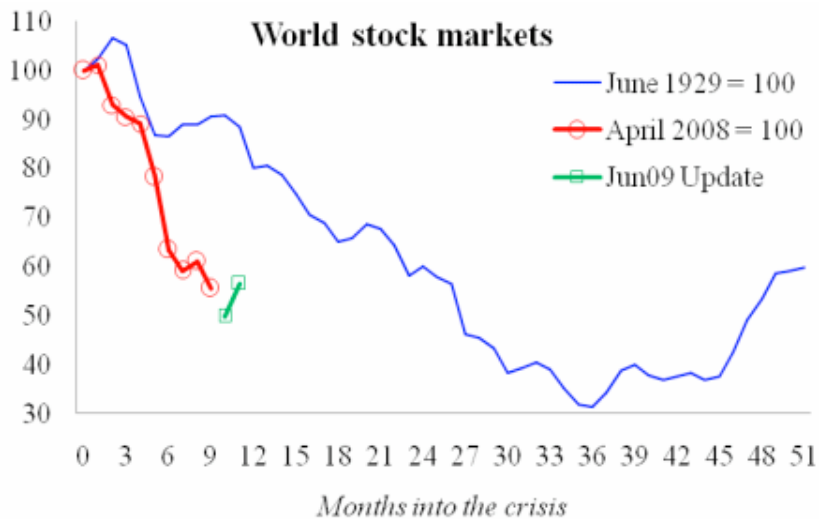


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- ▶ “...the general trend of securitization, of which collateralised debt obligations (CDO's) and general asset backed securities are particularly important examples, offers a new level of mathematical complexity guaranteed to keep MF vigorous, useful and fascinating well into its twilight years.”

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- ▶ Beginning of Second World Depression !

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- ▶ **Financial Innovation**

Monetary policy

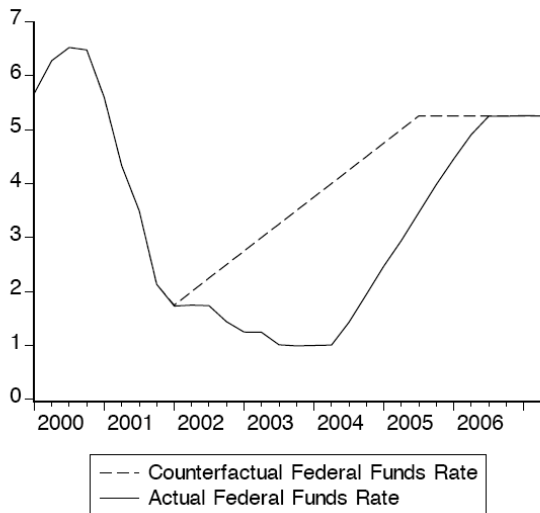


Figure: John Taylor, 2007

Shadow banking

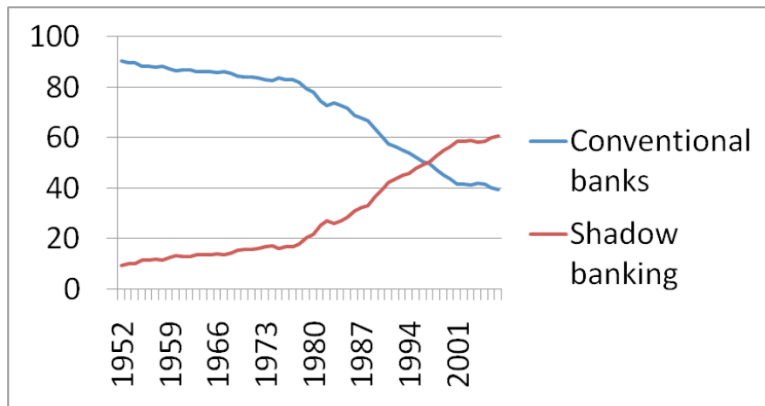
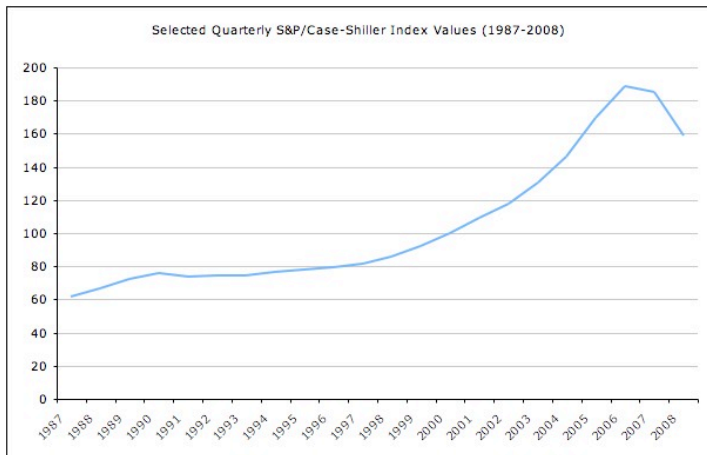


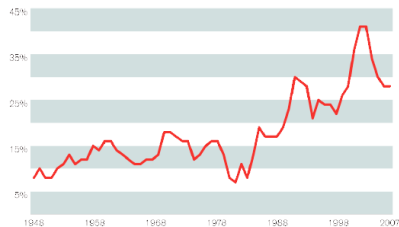
Figure: Paul Krugman, 2009

Housing Bubble



Financial Innovation

**FINANCIAL-INDUSTRY PROFITS
AS A SHARE OF U.S. BUSINESS PROFITS**



**PAY PER WORKER IN THE FINANCIAL SECTOR AS
A PERCENTAGE OF AVERAGE U.S. COMPENSATION**

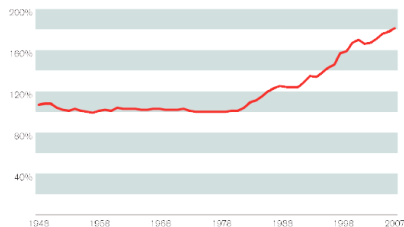


Figure: Johnson and Kwak , 2009

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- ▶ The financial innovation at the core of the crisis (securitization) was overused without sufficient theoretical understanding.

THE
SECRET FORMULA
That Destroyed Wall Street

$$\mathbf{P} = \Phi(\mathbf{A}, \mathbf{B}, \gamma)$$

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- ▶ Paul Volcker: I will not accept the Nuremberg excuse.
- ▶ Nassim Taleb: we have to unmask the charlatans of risk like Myron Scholes. This guy should be in a retirement home doing Sudoku. His funds have blown up twice. He shouldn't be allowed in Washington to lecture anyone on risk.

Defending quants

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- ▶ Carmona and Sircar: In fact, these geeks should have been listened to instead of being ignored or quarantined.

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- ▶ Hopefully society won't pass the following judgment on us:

IT'S A WONDERFUL LIFE (UPDATED)



THANK YOU !