cpb

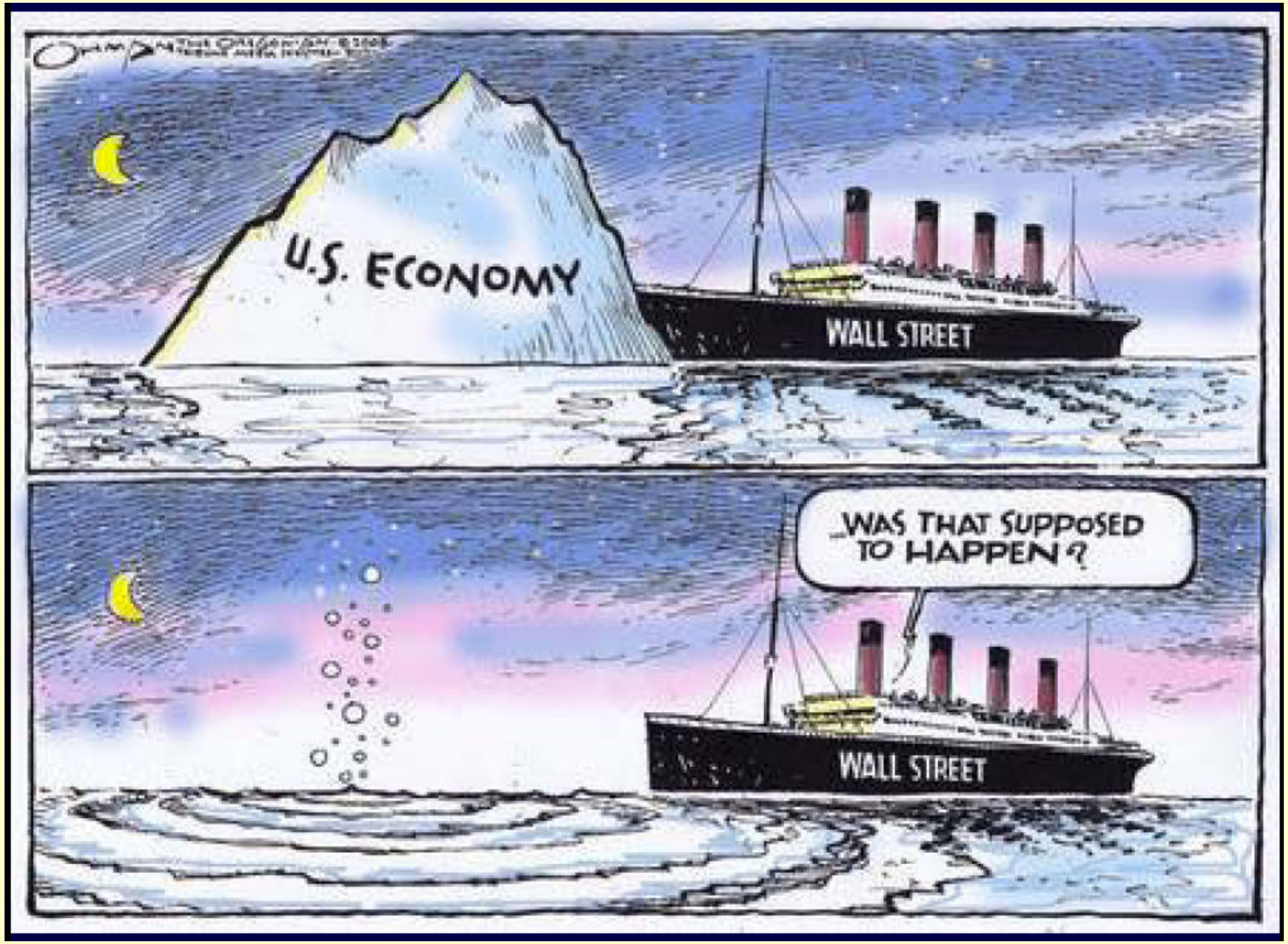
Economics and Financial Crisis

Economics
and the financial crisis

Coen Teulings

Amsterdam
6 oct 2010

Cartoons


U.S. ECONOMY
WALL STREET
..WAS THAT SUPPOSED TO HAPPEN?
WALL STREET

10 theses

1. Rationality ≠ Efficiency
2. We are not rational
3. Non-rationality not needed to explain crisis
4. A good theory: *bad luck* or *long term process*?
5. Forcecasting crisis: Rajan, Jackson Hole 2005
6. Monetarism was a big success
7. Was the price of risk too low?
8. Main externality: free riding in monitoring
9. Fix the banking system
10. Do not blame shareholders

1. Rationality ≠ Efficiency

- Non-economist think rationality = efficiency

- Example: prisoners dilemma
  - Defect = rational strategy
  - Defect-defect = inefficient outcome

2. We are not rational

- Lots of empirical evidence

- Examples:
  - Hyperbolic discounting
    - 1 apple today – 2 apples tomorrow
    - 1 apple in 356 days – 2 apples in 366 days
  - Loss aversion (≠ risk aversion)

- Fundamental issue for discipline
- Relates economics to biology

3. Non-rationality and crisis

- But: limited value added of non-rationality in explaining the crisis
- Speculative bubbles are not irrational
- Technically:

  financial markets model = 2-boundary value problem
  - Requires initial condition
  - … and terminal condition
  - Buiter’s auctioneer in infinity needed for equilibrium
- Underlines the point: Rationality ≠ Efficiency

4. ***Bad luck*** or ***Long term process***

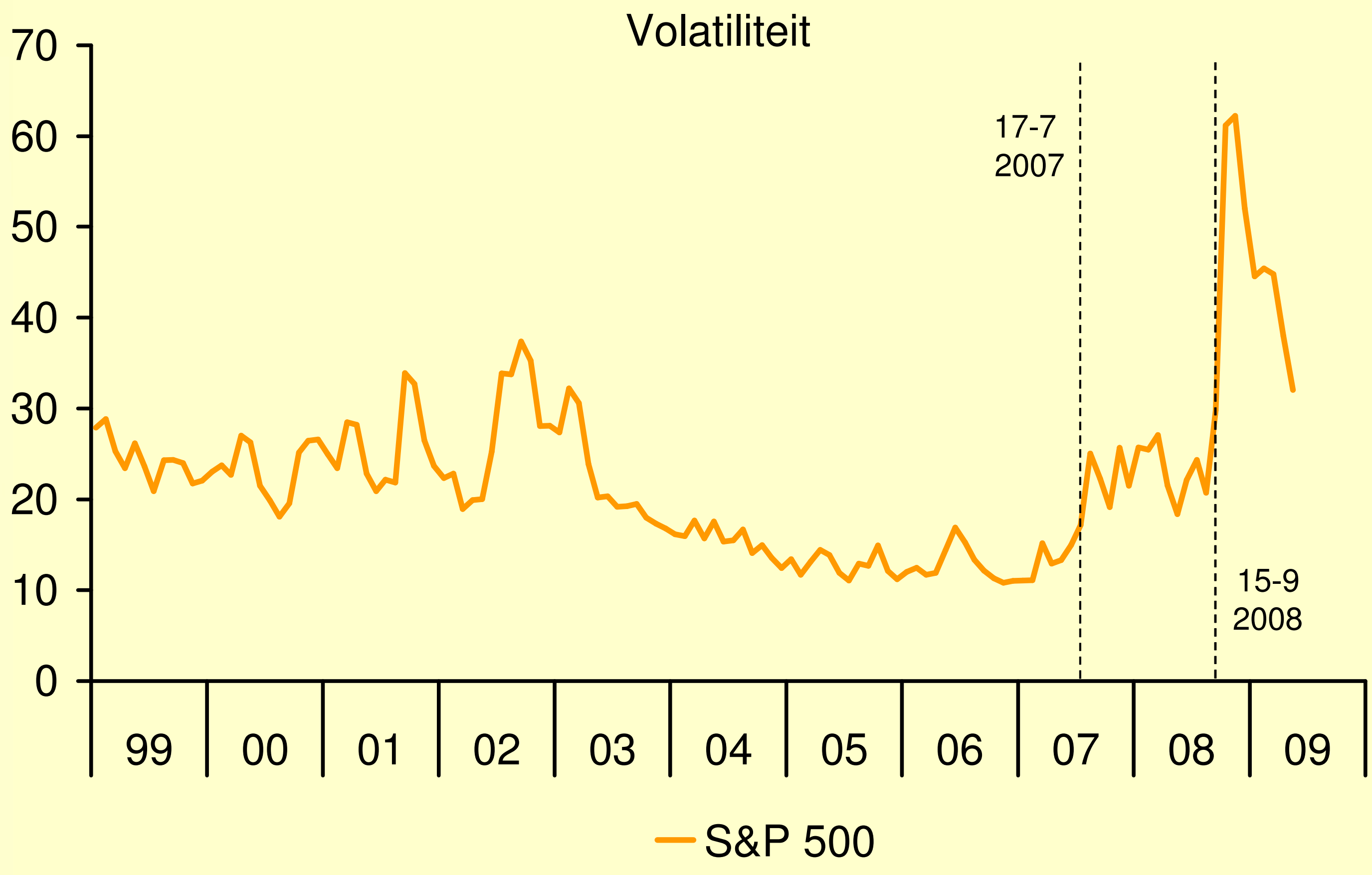
Philosophical problem: What theory for crisis?

1. Bad luck?
   - Random shock
   - .. magnified by coordination failure
   - E.g. sudden collapse in trust, see graph

2. Long run process that would inevitably derail?
   - Like trend to higher leverage in banking sector
   - A proper scientific argument should by reproducible
   - But: if you are so smart, why are you so poor?

Fire prevention analogy

Stock market volatility



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5. Forcecasting crisis

- Did economists fail to forecast the crisis?
  - Sure, I failed (like Sweder)
  - Rajan did not! (Jackson Hole 2005)
  - By the way: I don’t know whether this made him rich
- Lesson: most mechanisms were in literature
  - Admittedly, mostly as a far-fetched scenario

6. Monetarism was a big success

- Popular reasoning:
  this is consequence of monetarism

- Nonsense
  - Crises of ’70ties
  - Friedman, and later Thatcher, Reagan, Lubbers
  - Excessive union power
  - Policy switch around 1982
  - Use monetary policy against inflation and
  - .. unemployment against excessive wage demands

- Result: Great Moderation

7. Was the price of risk too low?

- Hard question
  - Great Moderation: risk was low!
  - Clearly, there was excessive leverage
  - … due to liberalisation / regulation failures
  - … which is not logically implied by monetarism
  - Clearly, risk is high today: see stock markets
  - Might high risk be a coordination failure?
  - We are all nervous, since everybody else is nervous
- Back to Keynes' core: animal spirits
- Away from Patinkin's neoclassical synthesis
  - Which focussed on wage rigidity
  - Its credibility was undermined by monetarism

8. Free riding in monitoring

- Market failure = externality
  - = effect of (trans)action on player that is not involved
  - Hence: its interest not “priced” in decision
- What is the mean externality in financial crisis?
  - Free riding in monitoring, e.g.
    - Teacher in classroom (marking exams is costly)
    - You buying an asset on the stock market
    - *All information is in the price*? Impossible!
    - Subprime mortgages
    - Hence: banks, economize on monitoring
    - Hence: rating agencies (that is why they are paid by the debtor)

9. Fix the banking system

- Increase capital and liquidity requirements
  - Equity financing is expensive
  - Hence: higher capital requirement makes credit expensive?
  - Incorrect! Modigliani-Miller theorem (?)
  - Basel III: 7 %, better 20 %?
- Separate bankruptcy law financial institutions
  - To protect competitors, and the tax payer
  - Commitment problem supervisors
  - Force to act, with the help of market signals
- All nice applications of game theory

10. Do not blame shareholders

- Popular game: bashing shareholders
  - Private equity = *spinkhanen*
  - Managers complaint
    "Excess openness of Dutch corporations"
  - Strive back to '80ties, at the expense of '90ties
  - Rhineland above Anglo Saxony
  - Shareholder = short run, we need long run capital

- Nonsense
  - We need more, not less equity
  - Equity and hold-up problem
  - "How the hell do I know that I get my money back"
  - Hence: protect shareholders interest

The end

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