Financial crises

Speculation manias

How do we reconcile historical *de facto* financial bubbles and manias with the rational expectations assumption in mainstream economic theory ?

Rationality:

1 Completeness (aPb, cPd …)

2 Transitivity (aPb & bPc => aPc)

3 Non-saturation (more is better)

4 Optimality

And in case of ‘uncertainty’

5 Maximize expected utility

Presupposes uncertainty => risk

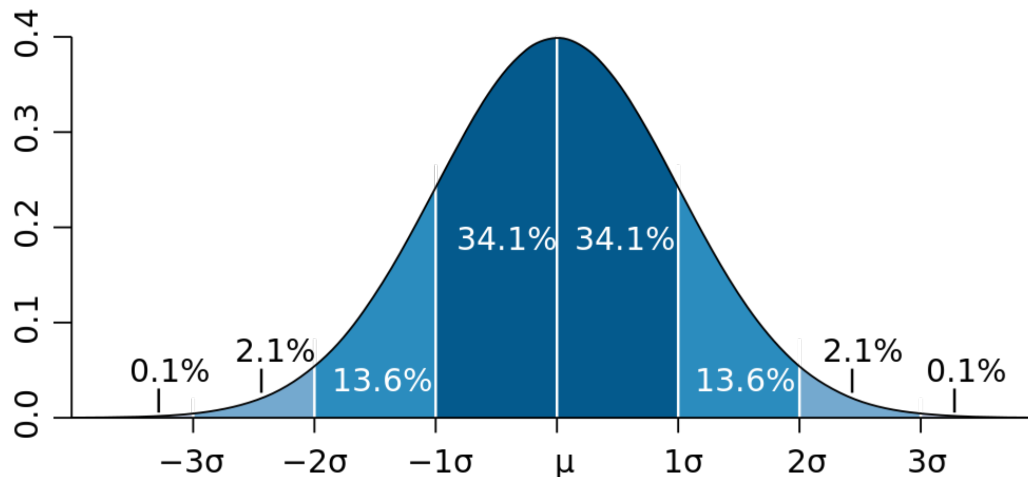
[Throw a dice

Prob(•) = 1/6

Prob(• & ••) = 1/6 x 1/6 = 1/36

μ = 1/6(1 + 2 + … 6) = 3,5]

=> when we buy assets



Two objections:

1 Black swans (fat tails)

2 Probability distribution *realiter* unknown

But **REH** assumes all asset values follow the normal distribution curve and that all agents know that (=> subjective expectations = objective expectations = mainstream economic theory)

⇒ **Crisis are impossible**

[Destabilizing speculation impossible (Friedman)

$D_{painting}$ ↑ => $P_{painting}$ ↑ => $D_{painting}$ ↓

Selling painting when P ↓ => you loose money]

"Macroeconomics was born as a distinct field in the 1940s (sic!), as a part of the intellectual response to the Great Depression. The term then referred to the body of knowledge and expertise that we hoped would prevent the recurrence of that economic disaster. My thesis in this lecture is that macroeconomics in this original sense has succeeded: **Its central problem of depression-prevention has been solved, for all practical purposes, and has in fact been solved for many decades**."

Robert Lucas (2003)

=> Effective Market Hypothesis **(EMH)**

Prices are f(fundamentals)

speculation => stability (arbitrage)

Against this stands what history, again and again, has shown:

Financial crises have to do with mass psychology:

•1 People change (rationality => irrationality)

•2 Different groups have different rationality ("noise traders", "insider-outsider")

•3 All fall pray to the *atomistic fallacy*

Σ > parts (e.g. lowering wages)

Individual rationality => market irrationality

•4 When others act 'crazily' we also have to do it (risks when going against the market alone too large => go

- 5 Stability leads to instability and waves of exaggerated optimism/pessimism (Minsky)
- 6 Expectations on asset markets are different from those on ordinary goods markets, making destabilizing speculation possible:

$D_{painting} \uparrow \Rightarrow P_{painting} \uparrow \Rightarrow D_{tpainting} \uparrow$

if you expect prices to continue upwards

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.

J M Keynes *General Theory*

A typical finance bubble

[Bubble = exaggerated speculation/expectations => prices diverging from “fundamentals”]

- New era (‘displacement’)
  expectations of continual growth =>
- Demand and supply of finance resources increase =>
- Increased indebtedness and risk taking, increased investments, diminishing sentiment of uncertainty =>
- Interest rates up (D>S), asset prices increase (no one wants to hold money when uncertainty is perceived to have diminished) =>
- Euphoria ceases **or** transforms into pure speculation and Ponzi finance via new financial instruments =>
- Speculation of continuing price increases =>
- Boom =>
- Crash

Warning signs

- 1 Large increases in valuation of shares, real estate, raw materials
- 2 Falling household savings rates
- 3 Increased share of floating rate loans
- 4 Unusually low risk premia (small 'spreads')
- 5 Slacker credit and cost controls
- 6 Tendency towards Ponzi finance (borrowing to pay interests)
- 7 Protracted stable growth

Financial instability (Fisher-Keynes-Minsky)

1 **Hedge** (cash inflow > cash outflow; high degree of self-financing)

2 **Speculative** (cash inflow < cash outflow, renegotiating loans)

3 **Ponzi** (new loans to pay old loans, ”Pyramid game”)

1 => 2 => 3 =>

4 **Minsky moment** (selling old assets to get cash; basically liquidity problems, not insolvency)

If not enough and the crisis not solved =>

5 **Debt-deflation**

> Prices and wages lower => real debt burden increases => profits and expectations lower => investments lower => GDP decreases and unemployment increases =>

6 **Depression**

To get out of this =>

> **Big Government** (deficits, ”lender of last resort”, bailout, increasing investments and consumptionen) and **Inflation**

Conclusions

- Learn from history
- Financial crisis are endogenous and recurring phenomena in market economies

Solutions (?)

On a small scale:

1 ”Let it burn”

(creative destruction -- Schumpeter-Hayek)

2 Bailouts

(when taxpayers pay shouldn’t they also own the banks and companies?)

3 ’Keynesian’ economic policies

(ceiling on public expenditures, requirement of public budget surplus, lender of last resort, etc.)

On a middle scale:

4 Keynes-Tobin transaction tax

> The introduction of a substantial government transfer tax on all transactions might prove the most serviceable reform available, with a view to mitigating the predominance of speculation over enterprise in the United States.
>
> J M Keynes *General Theory*

5 More regulations

(reserve quotas, amortization requirements, etc.)

6 Socialising investments and banks

7 Debt relief (”jubilee-year”)

More utopian:

8 Economy as a whole --

Marx – abolish capitalism

9 Monetary reforms

LETS (local echange trading systems),

bitcoin, etc.

[Self-chosen exclusion, substitut⇔ complement]

10 Interest free economy

Islamic banking

(how appealing when i = 0-1%?)