

Financial Wealth

Amitava Bose
November 2008

Paper and Reality

- Financial Wealth = 'claims', promises, entitlements, etc.
- Is a paper = the real thing?
- Is selling a house the same kind of thing as selling a share?
- If not, what's the difference?

Market Psychology

- Financial transactions are supported by a network of 'beliefs', expectations, trust.
- These define market psychology or 'confidence'.
- Beliefs may be proved wrong.
- I may then stop believing in 'promises'.
- The result is shrinking of financial instrumentation and markets.

'Justifiable' Beliefs

- In order for confidence levels to be high, is it essential that 'beliefs' be founded on 'solid facts'?
- Promises relate to the future.
- Failures may not be the result of *cheating* – though that is sometimes the case.
- The economic future is yet to be created.
- A good forecast is not like using a powerful telescope.

'Ponzi' Schemes

- Borrowing from 'B' to repay 'A'. Borrowing from 'C' to repay 'B', and so on.
- Example (borrowed from Shibram Chakraborty)
- Possibility of perpetual indebtedness depends on collective belief that borrower will repay.
- Named after Charles Ponzi.

Charles Ponzi (1882-1949)

Born Carlo Ponzi in Italy. Migrated to the US
In 1903.
Champion
swindler.



Example: Government Debt

- A large part of additional government borrowing goes to finance repayments.
- International payments crises relating to sovereign debt is often the result of borrowing from 'A' to repay 'B'.
- As long as there is *always* a willing lender, no one suffers.
- A very fragile system of *beliefs*.

Beliefs and Stock Market

- Stock market bubbles – sustained by the belief that it won't crash before I get out : The Cinderella effect.
- In financial markets the nature of 'risk' is not related to 'states of nature', but to the 'states of mind'.
- If everyone feels that prices will rise, then they will.
- A 'bubble' could be a 'self-fulfilling prophecy'

The Beauty Contest

- First insightful study was by John Maynard Keynes – ch.12 of General Theory on ‘The State of Long-run Expectations’
- Compared the stock market to predicting winner of a newspaper ‘beauty contest’.

Beauty Contest and Stock Market

- Newspaper prints 100 photographs.
- Readers say which six faces they liked most.
- Winner is the one who picks the most *popular* face.

Keynes on the Stock Market

- “It is not a case of choosing those [faces] which, to the best of one’s judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees.” (Keynes).

Common Knowledge (Geanakoplos)

- Moriarty: “All I have to say has already crossed your mind.”
- Holmes: “Then possibly my answer has crossed yours.”
- Moriarty’s limited mastery over interactive thinking allowed Holmes & Watson to escape from the train. Moriarty went on to Paris after calculating that Holmes would *normally* go on to Paris, failing to deduce that Holmes had deduced that he would deduce what Holmes would normally do and therefore get off earlier.

Definition of Common Knowledge

- An event is common knowledge among a group of agents if each one knows it, each one knows that others know it, each one knows that each one knows that others know it, and so on.
- Thus common knowledge is the limit of a potentially infinite chain of reasoning.

Interactive Knowledge in the Stock Market

- Prospective buyer has information suggesting the price would go up.
- Must consider that seller might have information indicating that the price will go down.
- If buyer further considers that the seller is willing to sell the stock after having taken into account that the buyer is willing to purchase the stock, then the buyer must ask whether buying is still a good idea.

Agree to Disagree?

- Q: Can 'rational agents' agree to disagree?
- Is this question connected to whether rational agents will speculate in the stock market?
- How might the degree of rationality of the agents, or the length of time they talk, influence the answer to this question?

What is a stock market 'bubble'?

- Isn't it the case that a player tries to figure out how much dividends the company will be paying over time? This yields the 'fundamental value' of the stock.
- 'Last player' would get this amount.
- Excess of market price over fundamental is 'bubble'. Example:
- Cash

Is Cash Wealth?

- Suppose that 'A' absentmindedly drops his wallet full of cash into the Ganga. He is clearly poorer, but is India poorer?
- How can India *not* be poorer – after all 'A' was an Indian?
- But why should India be poorer since all real resources that money can buy are intact:
 - If 'A' can't buy them, someone else will.

Are Bonds Wealth?

- In the same vein, suppose that 'A' had kept some 'bearer bonds' issued by the government in his drawer – but they were eaten by termites.
- 'A' is poorer, but what difference does this make to the economic system?
- Suppose a company takes a loan to finance some project. Are the loans given assets for the *economy*?