MBHS Economics Club

Market Cycles Notes

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The Greece Beast

- Many economists predicted the crash in Greece before it even happened.
    - The fat (debt) that greece was putting on from grease (borrowing incessantly and lying about it, then borrowing more to pay the interest on those loans) would only lead to heart failure (what it sounds like) when it could no longer borrow money (the analogy has broken down.)
    - They were no longer able to borrow money after the interest rates hikes post 2008. As mentioned last week, the Greek disaster was precipitated by the 2008 economic crash.
- Greece may have been able to keep borrowing if the market had remained stable, but...
- Due to the inherent nature of a capitalist system, we have what are called market cycles. These guarantee market crash at some point in time.

Fig 1.0: Josh Park. He is a beast.
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2008 Is Not Alone
There has been a long history of crashes, stretching back to the 1630s. The more interesting major ones include:

- **2008 crash and recession**
- Millennium (2000) Dot-Com Bubble
- Japanese Asset Bubble (1991)
- Black Monday (1987)
- **The Great Depression** (1929)
- A billion 19th century "panics"
- The Mississippi bubble and **South Sea bubble** (1720)
- **Tulipmania** (1637) — this is widely accepted as the very first market crash.

The 2008 crash is nowhere near, in real terms, the largest of these. The great depression saw significantly worse economic impacts and drastically higher unemployment, and the Mississippi Bubble is often blamed for the collapse of the French monarchy seventy years later.

Market cycles: Alternating periods of growth and decline in an economic system.

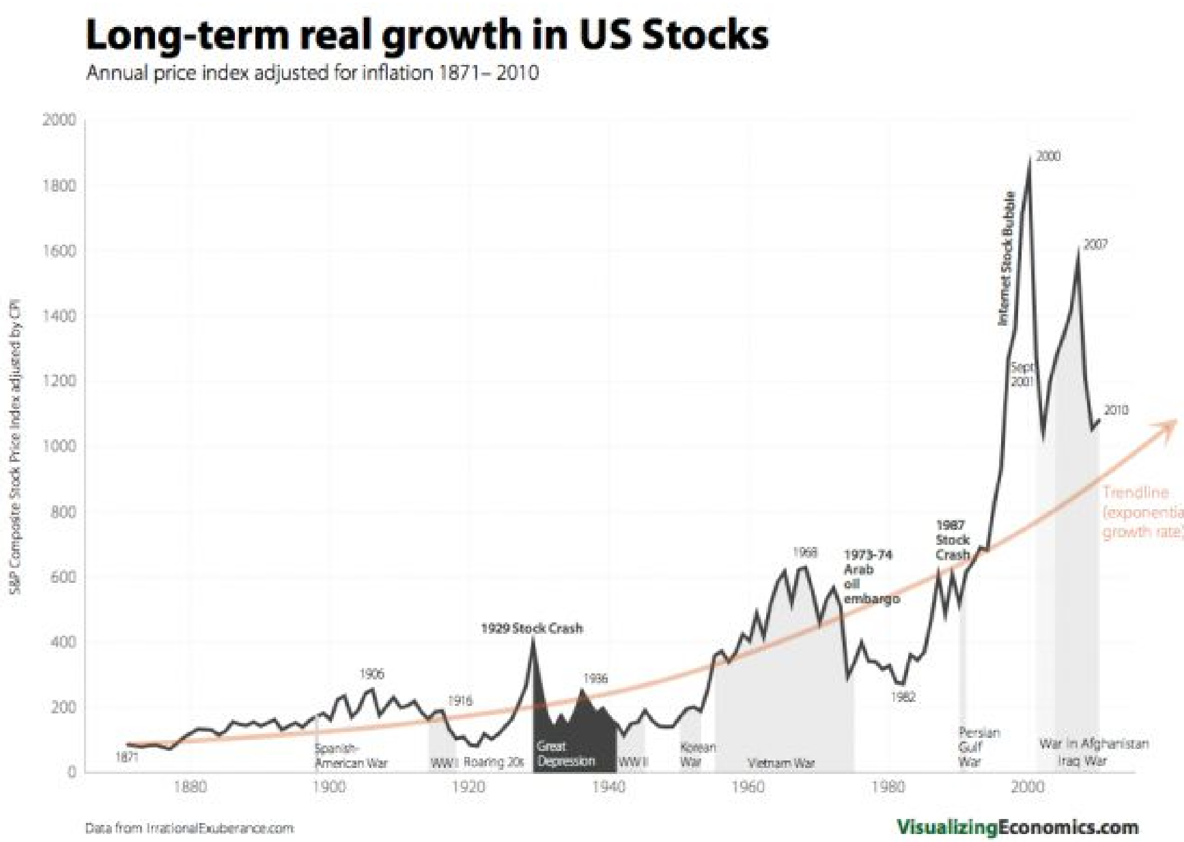

Fig 2.0: Try to identify some of the American crashes we listed above!

Types of Market Cycles

All Business cycles have four major parts: Boom, Recession, Slump, and Recovery. They are all what they sound like.

- **Kitchen Inventory Cycle (repeats every 3-5 years)**
    - Focuses on an individual firm.
    - When a firm does well commercially, output increases, often by hiring more workers.
    - This continues to the point where supply outpaces demand.
    - Excess stock begins to accumulate.
    - This information takes time to hit the executives in full.
    - The executives take time to realize that production should be decreased.
    - The firm sells excess stock.
    - The price at which it sells excess stock is right, and the firm continues doing well commercially.
- **Juglar Cycle (repeats every 7-11 years)**
    - Focuses on investment in fixed capital versus employment for a region.
    - Decreases in production and employment costs, favorable credit, etc. draw in investors.
    - As more investors are drawn in, labor, land, etc. have higher demand and shorter supply.
    - Interest rates rise, and actual and expected profits decrease.
    - People begin drawing out of the real market and invest in financial funds.
    - Loss of investment leads to unemployment, decreased production, etc.
- **Pork Cycle**
    - A model for describing fluctuations in livestock prices.
    - Occurs on very short timescales, and is a result of the delay between investment and payoff based on breeding times.
    - Repeats every time you're hungry. (Repeats constantly for Eric.)
        - Okay, maybe it doesn't repeat every time you are hungry. But it does repeat on fairly short time scales. This is just to show that there are short cycles (quite a few in fact), most economists don't particularly care about them.
- **Kuznets Cycle (15-25 years)**
    - Focuses on demographic and buildings shifts.
    - Kuznets's proposal:
        - The infrastructure for a given region is initially more than enough to support the number of people in that region.
        - Immigrants pour into that region because of this.
        - The infrastructure is no longer sufficient to support the number of people living in that region.
        - The government responds by building more infrastructure. Immigration to that region decreases.
        - The infrastructure is more than enough to support the people there.

- Some modern economists argue that the cycle is actually caused by fluctuations in the value of land.
- Regardless, the fact that this trend exists is undisputed, even if its cause isn't.

- **Kondratiev Cycle (a.k.a. super cycles) (45-60 years)**
  - Probably caused by technological innovation that focuses on the entirety on an economic system.
  - A singular technological breakthrough/innovation is made.
  - Other advancements are quickly made off of the back of this breakthrough.
  - This cluster of technological innovation propels industry and investment in certain fields, creating booming growth.
  - The innovation can only propel industry so far, and eventually growth slows down. Investment does not.
  - Overinvestment in stagnating industries inevitably causes the economy to decline.
  - Another singular technological breakthrough/innovation is made.
  - Controversial nature:
    - Many different explanations exist for why this trend exists.
    - The trend itself is also weaker than the others. (It occurs over a large timescale, for which we have less data. There also other, larger cycles, which are even more iffy.)
    - It implies that technological innovation causes little net growth in an economic system. (It was invented by a Soviet economist.)
    - Only important to innovation-based, development, and evolutionary economics.

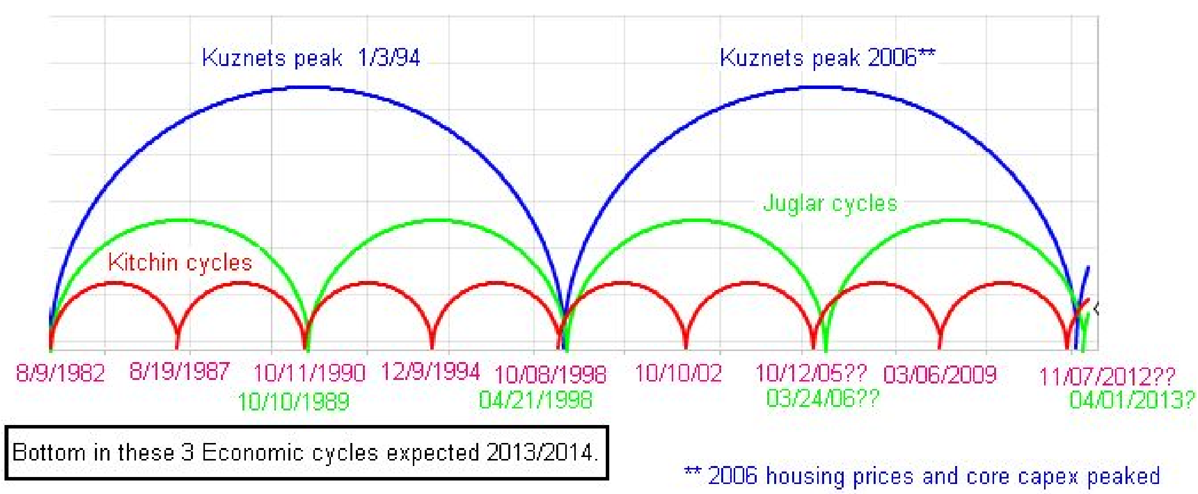

Fig 3.0: These cycles tend to repeat within each other. There are usually 2 Kitchin cycles per Juglar cycle, 2 Juglar cycles per Kuznets cycle, and 2-4 Kuznets cycles per super cycle.

Depending on who you ask, these cycles change the economy in different ways. Most modern economists agree that the net result of these graphs looks something like x+sinx (i.e. it trends upwards.) Marxists will argue, however, that the curve looks like xsinx, and has more and more violent fluctuation until the capitalist system unravels. One of these views has significantly more support in the literature. We'll leave it up to you to guess which.

Market/economic crash (a.k.a. bubble): A situation where market prices are determined are impossible odds and are opposite to intrinsic value.

- **Intrinsic value:** A rigorous value determined by fundamental analysis; what a commodity truly is worth.
- Basically, prices for a commodity are ridiculously high and in no way reflect that commodity's true worth.
- Prices are determined by a positive feedback mechanism, rather than negative feedback.
- Prices are highly volatile (unstable) and are impossible to determine only from supply and demand.
- Mostly determined in retrospect (i.e. the Great Recession — people didn't start calling it "the Great Recession" until after it happened).

Case Studies of 5 Major Crashes

- **Tulipmania (1634-1637)** — the very first in human history (not counting some currency shenanigans during the Thirty Years' War):
    - In the 1630s, tulips were introduced into the Netherlands and became incredibly popular.
    - As the tulip supply was initially very limited (tulips came from Asia and the Middle East) and demand was huge, a speculative craze started for investing in tulip futures, ballooning the price of a single bulb to several times a year's wages for a craftsman.
    - When supply rebounded from the delay and a bulb went unsold at an auction, a market correction started and the whole thing fell apart.
    - All subsequent market crashes have followed the same general sequence as Tulipmania (not necessarily in this order):
        - Introduction of a novel concept
        - Initial hype
        - Supply-demand equilibrium
        - Overvaluation
        - Overproduction
        - The market crashes

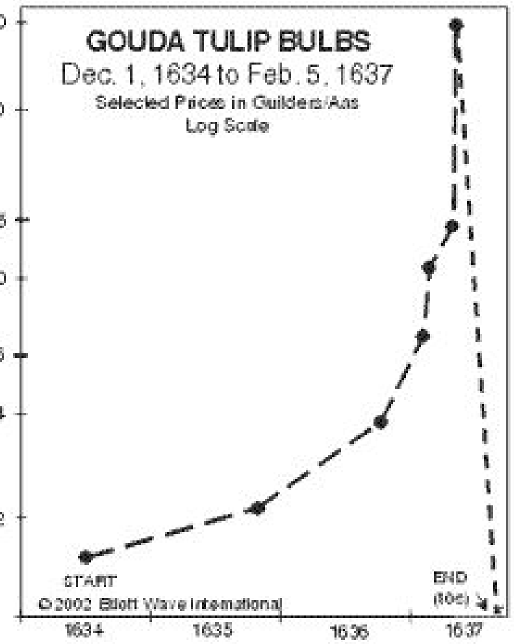

Fig 4.0: Select prices of Gouda tulip bulbs in guilders.

- **South Sea Bubble (1720)**
  - After the War of Spanish Succession (don't worry about it), the newly-formed Kingdom of Great Britain had an enormous national debt.
    - The Kingdom of Great Britain was formed with the Acts of Union 1707, which merged the countries of England and Scotland.
    - After parliamentary elections, the new Secretary of the Exchequer (finance minister-type thing) realized just how enormous the debt was and how most of it was due in the next couple of years, and might lead to a complete financial collapse.
    - So, he hired a dude named John Blunt to take care of it.
  - Blunt and the Secretary of the Exchequer convinced Parliament to charter a new government-based trading corporation, known as the South Sea Company, similar to the famous East India Company.
    - The idea was that government debt holders would be given the opportunity to exchange their debt for stock in the South Sea Company, which would be issued on approval of Parliament relative to the amount of debt the company would take on.
    - To convince debtholders to do this, the company had to have some way of paying dividends which would be seen as more valuable than government bonds, so the company was granted exclusive trading rights to ports in South America.
    - The only problem with that was that all of the ports in South America were owned by Spain, a rival of Great Britain…

    - Regardless, John Blunt was so good at building hype and pulling B.S. that people actually believed that South Sea was about to become as profitable as the East India Company, and stock prices steadily rose.
    - Then, the King himself invested in the Company after successfully defeating a rebellion, and with his backing and even more baseless hype, prices went through the roof.
    - At the frenzy's peak, the South Sea Company's stock was evaluated to be worth more than all currency in circulation in Great Britain and its colonies.
        - Meanwhile, the South Sea Company had sent a grand total of three ships to trade, and had only lost money…
        - Also, to increase stock prices, Blunt had begun to offer partial payment plans for stocks, which greatly broadened what part of the population could invest and drove up demand, and thus price, but at the loss of income. This concept of 'buying on credit', will come up more in economic crashes.
    - Finally, someone realized that there was nowhere left for the stock to climb, and the whole shifty affair came crashing down. Consequences were numerous, but to give a sense of perspective, in 2014, the British government began a payment to pay off the last part of the debt left over from the collapse of the company.
- **Great Depression (1929-1939/43, depending on how you count)**
    - Was NOT precipitated by the Wall Street Crash of 1929!!!
        - The stock market had recovered by the early 1930s, but the depression itself dragged on for much longer than that.
        - [Why the crash didn't precipitate the depression.]
    - New manufacturing technologies were invented which boosted production.
    - High rate fixed capital investment overbuilt industry.
        - **High rate fixed capital investment:** Large volume investment in non-liquid assets, usually physical (e.g. machinery, factories, land, robots, etc.)
        - This is in contrast with investing in labor, tech, financial assets, etc.
    - This saturated the market with goods, which was indicated by the surplus of automotive production at the time.
    - Economic gains led to speculation.
    - In order to invest more in the market, businesses tried to inflate profits.
        - Workers [read 'consumers'] had minimal wage gains, despite increased productivity.
        - People had the same amount of money, but wanted more goods, which stretched people thinner — causing many to take loans.
        - The relative decline of mass purchasing power.
    - Then the market crashed and stuff went downhill, fast.

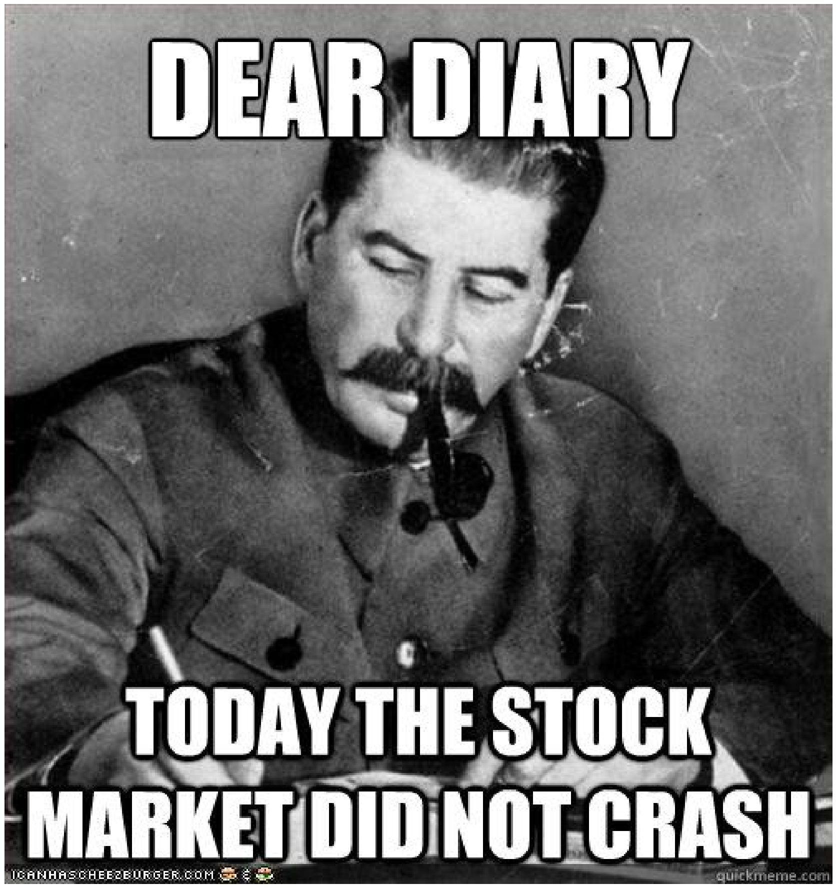

Fig 5.0: There are some benefits to a dictatorial command economy—
If you ignore the people starving in the streets and the mass murders.