## Brief History of Economic Crises: A Literature Review

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Financial and Economic Crises are characterized by sharp and steep decline in valuation of one or few of the assets and the speed of decline is so fast that majority of asset holders are not able to liquidate their position except at huge losses. The losses in turn results into economic slowdown which elongates the misery in economic environment. However, history has shown that majority of people do not take lessons from such events and same mistakes are repeated again and again. With improvement in economic conditions the asset valuations also start northward march and people are again attracted towards taking position in the asset. Till this point, there is no serious behvioural irrationality. Beyond this point, the capital gets exhausted and the greed pulls borrowed funds into assets. Aggressive buying of assets shoots up asset prices further and hence igniting the engine which is self-fuelled. This is the situation we commonly known as "bubble". As the sanity returns, the bubble bursts, resulting into financial and economic crises. Through this paper we make an effort to go through literature on various historical economic crises in brief and identify scenario or events which acted as prelude to the respective crisis. We also analyze role of greed, leveraging and cheap money policies of Government in inflating an asset bubble. The paper is intended to serve as refresher to keep reminding fallacies of human behavior, especially greed. Those who intend to further research on the domain may make an attempt to figure out a model or matrix of events/ factors which may help in forecasting formation of an asset bubble.

### "Avarice is always poor"

### Samuel Johnson

Economists have always been fascinated by correction of economic system when it goes into an over drive. The correction, more often, is a steep and sudden decline in economic activity, which we commonly term as a crisis. Through the history, almost all economic crises were preceded by a 'bubbled' growth in economy. A general perception about a bubble being created is when any asset or group of assets trades at a value which is significantly higher than the intrinsic or real value of the asset or group of assets. But the question is: what drives such a gap in perception and reality regarding the asset? Such gap starts building up when one starts to overestimate the expected future gains from holding an asset and rush to acquire the asset, which, in turn, further pushes up the price of asset, providing an alibi for such over estimation and thus the engine of undue price inflation is ignited.

However, the engine will keep running only in two circumstances. One is either the intrinsic value keeps pace with such price rise. If this happens, the increased prices will sustain in long run.

Alternatively, fuel for the engine, in form of liquidity, is continuously pumped in to maintain the demand of asset. Moreover, credit is also created and diverted to finance the buying of the asset (Kindleberger & Aliber, 2005). But as we all know, liquidity is a finite resource and sooner or later, the engine will suck all of the available liquidity from the system. This will bring the phenomenon of price rise to a grinding halt. Once the price rise stabilizes or starts declining, the investors who had invested borrowed funds in the assets with an 'expectation' that they will service their debt from the 'estimated' rise in price of asset, are the first one to panic. Debt servicing becomes real tough and these asset holders initiates distress sale of at lower prices. This action starts a sudden and steep southward march of prices, further aggravating the position of asset holders who had invested the borrowed funds. A situation is soon reached where the borrower starts defaulting on his debt servicing thereby jeopardizing the position of lender whose loan start turning bad. The poison starts trickling into the financial system thereby resulting into 'lack of funds' for real and necessary economic activities, thus, resulting into economic slowdown (Geanakoplos, 2010). The 'greed' to earn more than the worth pays back with catastrophic consequences.

In the subsequent sections we shall turn pages on economic crises recorded in history to find out

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the causes and consequences thereof. We shall also try to figure out subjective relationship between uncontrolled monetary expansions as a prelude to an economic crisis.

### Notable Crises before the 20th Century

The first ever recorded case of an economic crises date back to era of Mahabharata in ancient India where in the greed of winning game of 'chausar' (ancient ludo), the Pandavas lost everything they had, including themselves. The kingdom of Indraprastha was lost to Hastinapur in a game of dice. This might be the first and last case where a kingdom was lost in 'game' of greed.

In Third Century, the Roman Empire was struck by a crisis. The crisis is also known as Military Anarchy or the Imperial Crisis. The greed to expand the army and doubling of legionaires' base pay lead to increased financial burden on the treasury. To finance this expenditure, the coinage was devalued consistently by reducing silver content in coins and increasing content of bronze or copper. Devaluation resulted in hyperinflation in the economy. As currency lost its value, the trade shifted to barter system, which destroyed the internal trade network of Roman Empire and resulted in more localized trade. The 'greed' of expansion and subsequent crumbling of financial system caused a major dent in economy prowess of Roman Empire (Prodromídis, 2006).

One of the most bizarre example of greed turning a flower more expensive than gold was the Tulip Mania of 1637 which sent the Dutch economy into turmoil. As Amsterdam was center for the East India Trade, the traders were rich and affluent and used to show their successes with display of sensational tulips. In early 17th century a viral disease in the flower gave it an exotic colour but squeezed its supply as the production cycle slowed down considerably (Garber, 1990). The supply squeeze pushed the prices to meteoric high and the phenomenon attracted the futures trader in the business. As the greed for speculative profits rose, number and quantum of bets kept on increasing whereas supply kept on ever squeezing. At the height of frenzy, one Tulip bulb commanded price equivalent to a house in one of the best locations in Amsterdam (Business Miscellany, 2006). The bulbs were changing hands ten times a day through futures contract without any physical delivery. In all that heat up, the traders never realized that after all, it was just a flower, and how can it consistently command price tag that is more than that of a house?

On February 3rd, 1637, the contract prices suddenly collapsed, probably because of plague outbreak. The exchange rings had only sellers and no buyers. The prices crashed to 1/200th of 1% of the peak prices. Numerous traders were declared bankrupt due to huge speculative losses and distress in Dutch economy (Garber, 1990). Greed, once again resulted in a bubble, which, when busted, led to losses of extreme magnitude.

The first ever case of corporate scandal triggering an economic crisis, was the South Sea Company Bubble, and its bust in year 1721. The company was created through a royal charter with an objective of exchanging national debt in lieu of stock of the company. In addition, the company was given exclusive right to trade in South American countries. At those times, South American countries were ruled by Spain, and hence, there were no realistic prospects of trade with these countries taking off (Garber, 1990). Through corruption and rigging, the price of stock was inflated exponentially irrespective of the fact that the real objective of the company will never be met. The 'influentials' of UK were investing in the company and their names were publicly showcased to provide a veil of legitimacy to the company. All these factors resulted in prices of stock of the company shooting from £ 100 to £1,000 in period of one year. In 1721, the company defaulted on first two installments which had fallen due and default of a similar Mississippi Scheme in France triggered decline in shares of the company and by September 1721 the prices had fallen to £150 (Bayne, 2005). The losses resulted into massive bankruptcies which triggered huge losses for banks and gold smiths who had lent for buying of the stock. The scale of losses can be gauged from fact that in 1714 itself, more than half of UK's issued equity was invested in South Sea Company (Carswell, 2002). The south sea company bubble presents another fitting example of greed making people chase an investment whose intrinsic value is significantly lower than market valuation.

The panic of 1819 in United States, which resulted into massive bankruptcies, was also a result of excessive monetary expansion which spiked speculative tendency in the economy. The forced contraction, afterwards, resulted in bankruptcies, bank runs and bank failures (Gouge, 1926). The panic of 1825 in Great Britain was also characterized by expansionary monetary policy resulting into excessive risk taking in stock markets. Surging stock markets attracted liquidity and soon bank lending was also channelized towards the stock markets and the phenomenon soon turned into a stock market

bubble. As the bubble went bust, Bank of England, surprisingly, raised interest rates which further suffocated the banks which were already suffering because of their loans going bad. Bank of England also closed its door for other banks and thus refusing to act as banker of last resort. Cumulative impact of these events resulted into bankruptcy of approximately 64 banks in UK and the economy went into recession with high unemployment rates (Neal, 1998). The panic of 1857 in the US was characterized by destabilization of the banking system when the rail-road sector started to underperform. At that time, United States was on bimetallic gold and silver standard, discovery of massive reserves of gold resulted in monetary expansion which in turn resulted in excessive financing and credit to rail-road sector causing the crisis in 1857. After the panic, the United States moved on the classical gold standard. The panic of 1873 also originated due to excessive investments and capacity building in rail-road industry (Shachmurove, 2011). The Baring Crisis or the panic of 1890 was caused due to failure of Barrings Bank which had huge investments in high risk countries like Argentina (Körnert, 2003).

An early prototype of the recently happened financial crisis was the Australian banking crisis of 1893 where banking system, including the federal bank, was ruined because of heavy lending to real estate market which became troublesome when the property prices collapsed (Hickson & Turner, 2002).

# Crises in 20th Century and early 21st Century

Advent of 20th Century was marked with path breaking innovations in communication systems and modes of transportation. These innovations meant increased trade and economic interdependence between countries. The crises during this era were more international in nature in a sense that economic events in one country had notable impact on economies of other country or countries. Even the measures taken to avert the crisis or remedy the situation were globally integrated. However, uncontrolled monetary expansion and channelizing of excess liquidity into risky ventures remained the primary cause of almost all the crisis.

The first crisis in the 20th century surfaced in 1907 in USA (commonly known as panic of 1907). Seasonal liquidity fluctuations and shortage of gold inflow in USA set the prelude for the crisis. The panic was triggered when a strategy to corner stock

of United Copper Company failed horribly and exposed the nexus of the chief strategist of scheme F. Augustus Heinze and the banks and trust companies in which he was holding prominent positions. These banks and trust companies had extensive exposure to the cornering scheme and hence their survival became questionable. The resultant bank runs and bankruptcies choked the financial system. The panic of 1907 set the foundation of establishment of US Federal Reserve (Bruner & Carr, 2007) and (Kindleberger & Aliber, 2005).

In 1928, the stock prices on Wall Street increased at an annual rate of 36% and in first few months of 1929, at an annual rate of 53%. In totality, from 1920, when the great Bull Run started, till 1926, Dow Jones Industrial Average had grown 5 times. The spectacular performance was fuelled by extensive participation of American public in stock markets and margin facility offered by brokers to their respective clients. An amount equivalent to \$8.5 billion was out on loan for buying stocks (Lambert, 2008). The amount was equivalent to the total currency circulating in United States during those times. The crash sparked bankruptcies and bank runs which sent the economy into a tailspin. The economic turmoil which followed the crash is known as the Great Depression of 1929-33. In 1932, the DJIA touched a low of 41.22, almost 89% down from its all-time high in 1929 (Lim & Sng, 2011). Again, excess liquidity was the perpetrator which fuelled the greed. The Glass-Steagall Act was enacted to break the broker-banker nexus that had fueled fueled speculative leveraging and thus leading to economic bubbles.

The OPEC oil price shock in 1973 stands out from the earlier crises in a sense that it was not triggered from monetary expansion but because of geo-political crisis in the Middle East. The crisis resulted in a fourfold increase in oil prices immediately. The crisis resulted into global recession, massive unemployment, high interest rates and stock market crash (Reid, 2004). The crisis prompted change in outlook towards global energy security by the western nations.

The banking crisis of 1973-75 in UK was similar to the recently faced sub-prime crisis where the banks were on verge of bankruptcy as their lending in real estate market started turning bad because of sharp downturn in value of assets vis-à-vis amount lent. The Bank of England interfered and acted as lender of last resort and bailed out/ assisted almost 60 banks and taking a hit of approximately £100 mn (Bank of England, 1974).

From 1985 89 the NIKKEI index of Tokyo Stock Exchange had tripled from 13,000 to 39,000 and real estate prices had quadrupled. To systematically deflate this speculative bubble, the monetary policy was tightened to prepare economy for soft landing. However, the speed of deflation was surprising which lead to crash landing of economy. NIKKEI was down by 50% by one year. The Japanese economy entered into a decade which is often termed as the lost decade. From 1990-2003, the Japanese economy grew by an annual rate of 1% and NIKKEI was down to 7000 points by end of 2003 (Fletcher, 2012).

On October 19, 1987 the DJIA crashed by nearly 22 % in single day, its largest ever recorded decline. Although the primary reason of crash is stated to be 'program trading' or 'algo trading' but the undercurrent for the crash had started to build due to overheating of stock valuations, attempt to restrict mergers and acquisitions, rising interest rates and international policy conflicts. Inaccurate announcement from SEC regarding portfolio insurance data was also one of the contributing factors in the crash. On the dreaded day, the portfolio hedgers shorted the futures in massive volumes which resulted into sharp dip in futures price (Wigmore, 1998). This phenomenon prompted excessive selling in spot market which resulted in annihilation of markets. Although markets stabilized and recovered after sometime but the impact was so immense that concept of circuit breakers was established in stock exchanges. The day is infamously remembered as Black Monday of Stock Markets.

India faced a dire situation in India with depleted forex reserves and out of control fiscal deficit in 1991. India's current account position worsened during the period starting from 1985 by the mid of 1991. External borrowings doubled from \$35 bn to \$69 bn in the abovementioned period. The Gulf War in 1991 resulting in ballooning of oil import bill and simultaneous slowdown of world economy resulted in worsening of India's balance of trade (Cerra & Saxena, 2002). India had to pledge its gold reserves with IMF and Union Bank of Switzerland to obtain \$2.2 bn funding with a condition to initiate economic reforms. In July 1991 the currency was significantly devalued vis-à-vis basket of major foreign currencies. Fiscal reforms put India on recovery path and a full blown crisis was averted. Monetary expansion was not the primary reason for the crisis. It was more of fiscal indiscipline and regulatory environment rather than monetary expansion.

The greed to grow faster resulted into the Asian Currency Crisis of 1997. Many South Asian countries such as Thailand, Indonesia, Malaysia, etc. had increased their interest rates to attract foreign capital. However, there was no corresponding increase in factor productivity (Krugman, 1994) resulting into capital getting channelized towards speculative activities which created asset price bubbles. These countries were also maintaining fixed exchange rates which made the monetary policy ineffective and hence pushing up the cost prices and severely impacting the export sector. High interest rates prompted borrowings from outside country and subsequent lending in domestic market leading to unhedged debt exposure susceptible to exogenous shocks. This resulted in a highly leveraged economy which could have been jolted with slight downturn in activity (Corbett & Vines, 1999). When the reverse capital flow started, it started hurting domestic economies and putting further pressure on pegged exchange rates and balance of payment status. Unable to manage the fixed rates, the currencies of Asian countries like Thailand, Indonesia, etc. were allowed to float against dollar resulting into 50% drop in the exchange rate with Thai Baht depreciating 100% against US Dollar (Kawai, 1998). This made the situation worse as the value of external debt in terms of domestic currency increased significantly. This triggered further bankruptcies and near collapse of financial system. IMF had to intervene to restore the battered currencies and bail out financial system of affected countries.

One of the classic examples of herd behavior resulting into bubble and its subsequent bust was the dot-com bubble of 2000. USA had experienced tremendous economic run in the decades of 80's and 90's. The value of stocks climbed vis-à-vis GDP rose from 0.6 times in 1982 to 3 times in 1999 with stock market falling only in 1 year in the aforementioned time period. Almost all the vital economic parameters improved with unemployment reducing and growth rate improving. However, the trade deficit widened and domestic savings rate declined alarmingly. Technology revolution reduced cost of transaction dramatically and internet trading attracted millions of Americans who became the home based day traders. Technology revolution was fuelled by venture capitalists putting funds for new ideas and selling their share via IPO when the venture became profitable. Almost all the IPO's were getting listed at price which was significantly higher than issue price. The gap in issue price had three consequences,

firstly, there was rush of investors to invest in IPO's, secondly, it attracted even more venture capital and thirdly, more and more investment banks were attracted with the fees of bringing firms to public. The phenomenon also resulted in pricing IPO's at lesser price so that the price gap on listing is high. However, promoters used to issue very less quantity of shares at that price. Less price and constrained supply pushed the price gaps. This resulted in high valuation of shares remaining with them and hence giving significant boost to their 'book wealth'. Due to aftermath of Asian currency crisis and collapse of Long Term Capital Management, the monetary policy in US was eased which fuelled the mad rush. Within one year after June 1998, market valuation of stocks traded at NYSE rose by 40% and those of NASDAO (primarily information technology stocks) jumped by a whopping 90% indicating 'irrational exuberance' (a term coined by Chairman by US Fed Allan Greenspan in 1996). The inflow of capital into US pushed up prices of dollar denominated securities, appreciated US dollar and reducing inflation as foreign goods became cheaper. As the liquidity was subsequently reduced to balance the fiscal position and deficits, the bubble went bust resulting into massive bankruptcies, especially, in IT sector and as capital and savings were evaporated, the economy entered into recession in the new millennium (Kindleberger & Aliber, 2005). The dot-com bubble is often cited as one of the best examples to study the impact of behavior biases resulting into creation of bubbles.

Global economy went through one of the scariest phases, since The Great Depression, during the sub-prime crisis of 2007-09. The list of factors which led to sub-prime crisis seems to be infinite. It was a deadly combination of greed supported by financial innovation, regulatory lapses, monetary

expansion and global inter-linkage. Unlike in other crises (except the Tulip Mania) the derivative instruments had multiplier effect on leveraging of the US economy. To make the matter worse, the collateral for the leverage were the sub-prime loans, which had increased multiple times to their long term average levels (Iqbal, 2010). One can imagine the weakness of inverted pyramid with the lower most building blocks being fragile. As the real estate prices collapsed the loans started turning bad. This is a general and expected phenomenon. But the defining factor was that the financial institutions had created multiple times leverage based upon those loans with help of derivative instruments like Credit Default Swaps (Petrova, 2009). The losses on account of extremely high leveraged position wiped off capital of large financial institutions and the dominos effect threated to deterge the American financial system. The shockwaves from the crisis were felt across the global stock markets and global economy slowed down (Lee, 2012). The crisis resulted in some of the largest bankruptcies ever, including the notable one of Lehman Brothers. The painful deleveraging of excess provided a new insight on risk management practices and regulatory structure to curb the excesses. Once again, greed played a spoil sport in the global economic progress (Dhiman, 2008).

Soon after the sub-prime crisis, we witnessed crisis where the greed took the next level. This time, the culprit was neither the public nor the institutions. This time the governments themselves were the culprit. The excessive expenditure vis-à-vis the GDP by Greece took its fiscal deficit to an extent where default of sovereign debt became imperative which would result into huge losses to financial institutions across the world holding those instruments. Similar situation was faced by other countries like Spain, Portugal and Italy. The

### Generalized Phases of an Economic Crisis Phase of Irrational Increase in Economic Prices Stabilize/ Declines **Exuberance** Activity De-Leveraging with Bad Monetary Expansion Greed/ Rush/ Frenzy Bank Runs/ Bankruptcies Leveraging Economic Slowdown Regulatory Lapses Intrinsic Value trailing far behind Price Phase of Growth Collapse

populists Governments did not have enough courage to control their fiscal deficit which resulted into their respective economies reaching on verge of bankruptcy (Haidar, 2012). Intervention by IMF and European Union has somewhat stabilized the situation in Europe but crisis is far from over.

### Conclusion

After going through a plethora of crises from ancient times, it becomes exceedingly clear that greed drives the rational interests to irrational exuberance. Governments play an active role in fuelling the greed by easing the money supply so that the 'abnormal' growth continues infinitely. However, while going through the euphoria, people, institutions and Governments forget a basic tenet of economics long run everything returns to 'normal'. Hence, abnormal growth will be neutralized by abnormal decline so the events are 'normalized'. Phases of an economic crisis can be summed up with help of following figure: It is desired that regulators preempt the overheating of economy and take necessary precautions that easy money is not available to fuel the bubble. Free markets promote efficiency and competitiveness but are also prone to wild swings in economic cycles. An effective and efficient regulatory system along with economic foresightedness will go a long way in protecting the people at large from pain of unwinding of economic excesses.

### References

- Bank of England. (1974, July). The Supervision of Banks. Retrieved from www.bankofengland.co.uk: http://www.bankofengland.co.uk/about/Documents/history/bankhistory1974.pdf
- Bayne, K. (2005, August 11). The South Sea Bubble. Days That Shook Business. United Kingdom: The Times.
- Bruner, R. F., & Carr, S. D. (2007). Lessons from the Financial Crisis of 1907. Journal of Applied Corporate Finance, 115-124.
- $Business\,Miscellany.\,(2006),\,Bubbles\,That\,Burst.\,150\text{-}154.$
- Carswell, J. (2002). South Sea Bubble. Sutton Publishing.
- Cerra, V., & Saxena, S. C. (2002). What Caused the 1991 Currency Crisis in India? International Monetary Fund.
- Corbett, J., & Vines, D. (1999). Asian Currency and Financial Crises: Lessons from Vulnerability, Crisis and Collapse. The World Economy, 155-177.
- Dhiman, S. (2008). Present Financial Crisis and Human Greed: Some Musings. Business Renaissance Quarterly, 145-152.
- Fletcher, W. M. (2012). Dreams of economic transformation and the reality of economic crisis in Japan: Keidanren in the era of the 'bubble' and the onset of the 'lost decade,' from the mid-1980s to the mid-1990s. Asia Pacific Business Review, 149-165.

- Garber, P. M. (1990). Famous First Bubbles. Journal of Economic Perspectives, 35-54.
- Geanakoplos, J. (2010). Solving the present crisis and managing the leverage crisis. Economic Policy Review, 101-131.
- Gouge, W. M. (1926). Short History of Paper Money and Banking in the United States. New York: Augustus M Kelly Publishers.
- Haidar, J. I. (2012). Sovereign Credit Risk in the Eurozone. World Economics, 123-136.
- Hickson, C. R., & Turner, J. D. (2002). Free banking gone awry: the Australian banking crisis of 1893. Financial History Review, 147-167.
- Iqbal, B. A. (2010). Global Financial Crisis: Causes, Emerging Trends and Strategy. IBA Business Review, 35-50.
- Kawai, M. (1998). The East Asian Currency Crisis: Causes and Lessons. Contemporary Economic Policy, 157-172.
- Kindleberger, C. P., & Aliber, R. Z. (2005). Manias, Panics and Crashes: A History of Financial Crisis. Hampshire, New York: Palgrave Macmillan.
- Körnert, J. (2003). The Barings crises of 1890 and 1995: causes, courses, consequences and the danger of domino effects. Journal of International Financial Markets, Institutions & Money, 187-209.
- Krugman, P. (1994). The Myth of Asia's Miracle. Foreign Affairs, 62-78.
- Lambert, R. (2008). Crashes, Bangs & Wallops. Financial Times.
- Lee, H.-Y. (2012). Contagion in International Stock Markets during the Sub Prime Mortgage Crisis. International Journal of Economics & Financial Issues, 41-53.
- Lim, C.-Y., & Sng, H.-Y. (2011). The Great Depression, The Great Recession and the Next Crisis. WORLD ECONOMICS, 163-190.
- Neal, L. (1998). The Financial Crisis of 1825 and the restructuring of the British Financial System. Review, 53-76.
- Petrova, I. (2009). Derivatives as the World Financial Crisis Factor. Journal of Business Management, 75-84.
- Prodromídis, P. I. (2006, February). Another View on an Old Inflation: Environment and Policies in the Roman Empire up to Diocletian's Price Edict. Discussion Paper. Athens, Greece: CENTRE OF PLANNING AND ECONOMIC RESEARCH.
- Reid, K. (2004). 1973 Oil Crisis. National Petroleoum News, 18-19.
- Shachmurove, Y. (2011). A historical overview of i nancial crises in the United States. POZNAŃ UNIVERSITY OF ECONOMICS REVIEW, 28-47.
- Vyasa, V. (n.d.). Feature Stories. Retrieved from harekrsna: http://www.harekrsna.com/sun/features/07-06/features360.htm
- Wigmore, B. A. (1998). Revisiting the October 1987 Crash. Financial Analysts Journal, 36-48.