How Far Was Institutional Failure the Cause of the Credit Crunch Crisis?

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The Credit Crunch refers to economic crisis which has had a dramatic effect on world financial markets since 2007. There are many reasons for this however the understanding depends on the International Relations theory. There are "different mental sets, different theories and therefore different ways of looking at this crisis" (Pappas, I. & Henderson, W., 1977: 16-17).

The Liberal Credit markets failed for a number of reasons. One in particular was Institutional failure since credit markets carried an uncertain level of risk. Multiple failures caused a downfall on the recession, and this was worsened by speculation and by the uncertainty in future expectations. The Liberalist capital markets that were set up in the 1980s were aimed at provoking growth out of the recession. It encouraged future financial innovation, one of which was the Gaussian Model in the 1990s. This model was mechanised to ensure exponential prosperity in the credit system. Investment bankers' debt accumulation however was over-ridden by their enthusiasm for capital accumulation.

This paper is broken into three parts; first a presentation on the intricacies of the Credit Crunch; Secondly adopting a Neo-Realism perspective to analyse how institutional failure to the economic bust, and in this part also, understand through Liberalism the reasons for this failure; Finally, this essay argues that the mentality to over-rely on an imperfect and unreliable Economic Model may have been the original cause of the institutional failure.

The Credit Crunch Crisis had its most significant negative effects in 2007. During the crisis the number of loans reduced, thus reducing the available credit and long term interest rates. This crisis affected every economic agent. David Murphy (2009) identified three stages in the crisis. Firstly, in the 1990s banks used foreclosure as a means to increase the supply on housing mortgages. Many such loans contained high interest rates and therefore higher risk. Banks were "risk-loving" and therefore welcomed riskier innovative mechanisms inducing high return. The only risk in this was if loans defaulted, which gave the need for banks to be certain of their amount of accessible capital.

Secondly the mortgage system was profitable enough for rating agencies to create a new portfolio system whereby the risk of the loan would be passed onto the buyer. This long term AAA prime mortgage system was the highest bond with the lowest risk (Murphy, D., 2009: 18). It pooled a number of small bonds that ranked differently: the bond with the lower interest rate was the safest and the overspill reached another bond with a higher interest rate, and so on. The higher the interest rate of return, the higher the risk and therefore the higher the return. The riskier (more attractive) bonds were bought with insurances called securitisation. The benefits of the system were so profitable and unique, and insurances were easily accessible that the system induced Moral Hazard[1] on the market. As a result more investors held riskier bonds and higher securities however it increasingly induced an incentive of the loaners to shirk. Home owners did not repay their mortgages, which forced rating agencies to pool low and irregular income consumers into the mortgage system – hence the name sub-prime mortgages. The system of asymmetric information[2] appeared on the market whereby mortgage agencies had higher information about the quality of the good than did the consumers.

Thirdly as a long term consequence of asymmetric information, market failure induced 'the lemons problem'[3].

House prices plummeted and low-quality goods outweighed high-quality goods. More low-income families were reluctant to pay their mortgage since it exceeded the value of house price. Debt repayments froze (Murphy, D., 2009: 25), causing bankruptcy and bailouts

Markets have been 'open' since the 1980s which meant that the crisis geographically spread, but in particular affecting Western nations. This is because their trade system is liberal whereby their economies are open, their regulations are minimal, and each country is interdependent on another's financial services (Brummer, A., 2008: 212). The United State of America (USA) and Britain were originally most affected and their fears of deficit spread geographically.

There are a number of speculations regarding why mortgage debt became an issue of such a scale. Phillip Booth (2009: 47) suggests that the issue in adopting "… securitisation, derivatives and auction-rate securities… " was correct price determination, and the correct value of the bonds. This however is a mathematical calculation which should have been rectified. The problem was that the accumulation of consumer's reluctance to pay their mortgages accumulated speculation. The lack of trust and loss of confidence in the financial system meant that there was less demand for insurances, which increase the cost of future insurances. Thus the increase in risk of systemic economic failure increased the price of bonds which deteriorated the housing market sub-prime lending.

With this information we are able to critically assess the different causal genres. The objective here is to assess whether the ultimate reason of the crisis was institutional failure.

Institutional failure is defined as the Federal Reserve (Fed) losing control over its AAA financial mechanisms. More specifically the Fed was unaware of the failures of their shadow banking system, such as hedge funds, money market funds, and structure investment vehicles. The Collateralised Debt Obligations (CDOs) were a tool for hedge funds to legally separate from other loans in order to buy assets such as corporate bonds and more importantly loans that themselves backed other acquired mortgages. This system was unique and supposedly contained perfect information about the risk, which made it innovatively profitable. The point was to spread the risk portfolio in order to reduce the risk per set of loans, and still carry a higher interest rate of return. Their value depended on: (i) "the risk of default on each of the debt instruments in the asset pool" (ii) "recovery rates" and (iii) the probability that the lender will cluster (MacKenzie, D., 2008, 2009).

The reason why CDOs failed was because rating agencies and institutions did not implement correct regulation. The returns were so profitable in previous exchanges that it seemed to be unreasonable to end the cycle. They therefore lost control of the financial regulation mechanism. There is a certain element here which suggests that countries will pursue wealth that in their own interest, and Neo-Realism helps understand the course of events. The theory believes that states pursue power through capabilities and behaviour because it has a "drive for universal domination" (Waltz, K., 1979: 118). It argues that Politics is a "struggle for power over men" (Morgenthau, H., 1965: 195). States will strive to achieve the maintenance of power and survival is the ultimate goal in the international anarchic system. This power is characterised by wealth and by material arms for building security and defence mechanisms. This in return enables reaching state hegemony above its rivals (Mearsheimer, J., 1990). What can be applied here is that the USA Fed mechanised a financial system which was unique and which gave the USA the status of financial leader. The AAA rating system was a tool for prosperity and economic wealth, and since it was exponentially profitable in the early 2000s, the Fed found no reason to stop. Furthermore the theory suggests that the Balance of Power is essential in the international system because its effectiveness depends on the support of major powers (Waltz, K., 1979: 126). As such, the USA financially collaborated its CDOs with Britain and other Western states through an interdependent system. It is apparent through the Neo-Realism belief that the smaller state (Britain in the late 1990s) attached itself to the hegemon's (USA) economic strength.

What is important however is to understand why these events occurred, and the Liberal approach helps answer this. The approach believes in achieving peace and wealth through interdependence and open economies. For example, in Britain during the 1973 oil-shock, both Aggregate Demand and Short-run Aggregate Supply contracted, causing prices and interest rates to increase, thus; inducing inflation, contracting produced output and accelerating unemployment. In order to overcome this recession, Margaret Thatcher's government in the 1980s manipulated contractionary fiscal and monetary policy. Western countries shifted towards policies which worked “incrementally to render an interdependent, market-based system more stable as a whole” (Ravenhill, J., 2008: 248). This as such was the adoption of Neo-Liberal open-market economies (Dees, R. H., 1993: 568). There was belief in an anarchic “self-made” economic system whereby competition sustained economic security, and this was a form of capitalist global governance. In this, the mentality suited “Liberalism is a means to an end” (Hobson, J. A., 1940) since all would benefit with absolute gains as long as there is compliance and cooperation.

This capitalist system however “rests on foundations of debt” (Ravenhill, J., 2008: 248). The only condition which enables its continuum is when income exceeds future debt repayments. This economically relies on the evaluation of future expectations. If consumers are rational, their expectations are stable and therefore easier to predict. Empirically however speculation hindered such certainty. Furthermore “Liberals … prided themselves for being open to new ideas and new ways of pursuing value, and tolerance breeds openness” (Richard H. Dees, 1993: 575). This encouraged infinite accumulation of financial innovation. There is concern for inaccuracies however in the foundations of those new mechanisms. This was a characteristic of investment bankers in the Credit Crunch: they did not consider the risks of financial accumulation of this scale, and took for granted the Economic Model which was provided to mechanise the system. More importantly, they did not consider ending the accumulation of financial innovation, and this is a characteristic of Neo-Liberal mentality.

The investment banking system relied too heavily on an unreliable Economic Model. It is important first to understand how models are developed. It is difficult to accurately predict present and future outcomes since “Models do not tell the whole truth” (Pappas, I. & Henderson, W., 1977: 46). This is because they rely on imperfect information of past events to determine their assumptions, which in itself gives an inaccurate foundation to the Model. The assumptions are based on the probability that past events will predict future events, but this is only taken as given. In addition, some units are omitted in order to avoid complications of the Model formulation. More importantly the unit outcomes rely fundamentally on expectations. These are mechanised in a way that suggests that past expectations will only determine future expectations if, and only if expectations are certain and consumers are rational. Models are therefore predictions, and “a prediction is a testable proposition derived from a model … it is simply a contingent proposition” (Pappas, I. & Henderson, W., 1977: 39).

It comes to our attention therefore that Models are uncertain since they are theoretically based on predictions that do not represent future reality. In a recession expectations are uncertain which means that expected future outcomes are inaccurate. This applies to the Gaussian Model which was adopted in the financial investment system by David X. Li (1960-). The assumptions of the model should have been predicted over a long interval period in order to assemble accurate historical data. Instead however historical prices from the Credit Default Swap market where used to predict the Gaussian model’s assumptions. Li therefore substituted the long term search for provided data from another market. Naturally Li’s model did not represent the CDO market. Nevertheless the Copula Function was adopted on mechanising the CDO system. This in itself was a fatal mistake whereby theory was used in the wrong reality context (Felix, S., 2009).

Under this model “the bank is no longer required to perform all the functions in the bank intermediation business” (Booth, P., 2009: 139), which means that it has little responsibility to the mechanism of monetary policy. As a result borrower-lender incentives are altered. In addition the Model received a correlation of 0.3 for mortgage-backed securities (MacKenzie, D., 2009). Econometrically this figure is far from 1 and closer to 0 which means that it is relatively safe. The problem with this figure however was the lack of record of default which would provide evidence to suggest clustering was occurring. The prediction was therefore unsubstantial to suggest that pricing and securities correlated, which gives reason to argue that the CDO mechanism was inaccurate and therefore unreliable from the start. Nevertheless the unreliable CDO system was launched.

A further issue, according the Felix, S., (2009) was with the mortgage pool system. In this system, individual interest rate is not fixed. This is because it is the sum of the total number of clients that have defaulted and the total number of clients that have refinanced. Since there is so fixed maturity date, the individual interest rate is determined by the system Function. The reason why rating agencies felt less at risk in this system was because the overall original risk would be divided between the different levels and stages of those involved, which meant that every stage held a lower risk. The system had so much faith that rating agencies believed that the probability that all homeowner would default consecutively would be low; the overall pooling system was safe.

Under Microeconomic theory, economic agents choose their most optimal outcome which maximises their utility (Pappas, I. & Henderson, W., 1977: 52), which is what was in each investment banker's interest. The optimal outcome was CDO investment since it yielded higher return than would safer investments with lower interest rates. No matter the risks of the innovative investment mechanism, there was denial of a sub-prime failure (Brummer, A., 2008, Ravenhill, J., 2008) and the true fragility of the system.

There are reasons for explaining this behaviour. In the past Neo-Liberal markets where prosperous and those involved in the financial system saw no reason to stop. This is why they did not foresee a breakdown of that exponential growth. What had been adopted was an old mechanism which was not safely and accurately adjusted for the current and future financial mechanism. The fact that the mortgage system was mechanised with an inaccurate model, which itself was based on incorrect assumptions, gives reason to argue: the historical change to liberal financial mechanisms altered the mentality in which finances and investments would organised. The mentality was over-powered by growth, capitalism and eagerness for future economic security hegemony. This mentality failed the system and was therefore the source of institutional failure.

In conclusion, this piece of work has critically assessed the extent to which institutional failure was the prime source of the credit crisis. What was examined is on one hand the intricacies of institutional failure, and on the other the alteration in mentalities which explain the institutional problems. The claim that institutional misconduct was the cause of the financial crisis is only partly correct. Both Neo-Realism and Liberalism give a better understanding of the course of events that led up to the financial crisis. The alteration in the West to Neo-Liberal operations affected long term behaviour, and thus mentality of how markets were mechanised. The 1980s measures for growth and economic security hegemony were believed to sustain twenty years later. Investment bankers took for granted an old mechanism and ignored the unit probability of risk in the Economic Model. This mentality played as a catalyst to the failure of institutions, which was what may have caused the financial crisis.

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[1] Situation when one party does not provide full information of the good that he/she is offering in an attempt to earn profit despite the risks involved

[2] In transaction, when one party holds more information about the good/service than the other party

[3] George Akerlof's (1940-) market in which the seller knows more information about the product than does the buyer.

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