

Market inefficiencies. a case study of financial recession 2007

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Introduction

2007 was dubbed the year the current financial recession started. Initially signs developed with the bailout of Northern Rock in August 2007, later to unfold to becoming a world financial crisis. Alarming features of this crisis was the collapse of big investment banks such as Lehman Brothers, Merrill Lynch and Bear Stearns who had to receive bail out plans from the US government in a bid to quickly calm the crises. Discussion of moral hazards was introduced and carrying negative connotations to bailing out the banks (The Economist, 2008). Banks were accused of rashly giving out loans to would be home owners, creating conditions for easy credit on demand. This pattern of easy credit is a consumption lead approach to development and market stimulation. Characteristics of this was recognised when greater demands for housing in the USA lead to sharp raising in property prices along with high rates of interest . Acharya and Richardson (2009) explained behaviours being displayed by the lenders did to transfer the credit risks onto person receiving the loan. The example given was holding an AAA trench, with AAA referring to the classification of the loan while the trench makes notes of risks and liabilities carried with the loan.

The crises also developed within the housing market which was not a surprise as most of the firms involved were mortgage lenders in the UK Bradford & Bingley and property investment firms in the US, turning into what is now know as the housing bubble burst (Sowell, 2010). The American Government sponsored enterprise of Freddie Mac and Frannie Mae had to be bailed out in a bid to secure nearly \$12 trillion of property mortgage

(BBCNews, 2008). This was in response to house prices falling house prices and loans were being defaulted on or not being paid. Bailing out Freddie Mac and Frannie Mae played an important role in resorting confidence back into the American housing market. The two large mortgage firms are described as behemoths owning around \$5.3 trillion properties within the American market. This is 25 times as big as Northern Rocks responsibilities and twice the size of the UK economy (BBCNews, 2011). Ivashin and Scharfstein (2008) reported large drop in the numbers of new loans borrowed by 47% during the peak period of the financial recession.

Critics blame the severe downturn leading on to the financial crisis on intense speculator behaviours which resulted in inflationary price increases which often lead to question of market efficiency. The efficiencies in this content related heavily on asset pricing in the stock and housing market as explained above. This essay aims to assess how and to what extent events of the financial crisis beginning in 2007 reflect asset-pricing inefficiencies in stock markets and housing markets.

Expressing efficiency

Efficiency of the financial market is concerned with the rate and degree in which market information is assimilated into asset prices (Koch, 2007). There are many sources providing market information such newspaper articles that publish daily stock market information and yearly financial review publish by companies themselves. Financial economist regard efficiency as being able to make the best possible investment decision on information provided (Malkiel, 2003). There is a need for information deemed relevant to be cheap

and within easy access to parties enquiring for it, these are the condition for information efficiency. Readily available information creates conditions whereby resources can be allocated to get the best possible use out of them allowing allocation efficiency.

Based on the conditions of informational efficiency it is possible to gauge if markets operate efficiently. More also if the results states otherwise, it help in providing clues as to what feature of the market are not operating efficiently. Mama (2010) explained, in a study of capital allocation in early 2008 amid the 2007 US housing market, financial crises, Germany exhibited negative correlated stock returns across domestically trade firms. Mama (2010) going into more details explaining it was possible to have an increase in the movement of stock returns. Under this condition explained by Mama it can be concluded that Germany failed to meet allocation efficiency.

The aim of the informed decision made is to increase returns in investment by allowing the investors to recognise undervalued stocks. Intensions to achieve higher rates of returns are likely to be covered with a higher rate of risk attached to the investment (Acharya and Richardson, 2009). The problem following this approach is assuming stock markets behaviour is predictable, leading to speculative actions on set of assets and stocks.

'Random walk' (Malkiel) suggests, another means to choosing the best possible outcome of share and stock prices, which operates under the assumption the flow of information is continuous and would therefore affect the prices stocks. Therefore, each day's price is independent of the previous day, in line with news and information. The random walk condition was best

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suited to describing pricing determinants within during the crises as seen from the need to boost confidence in the market, bring in positive news a method attempted by Portugal in November 2010 (Wise, 2010).

Watson and Head (2007) identified the condition necessary for getting a perfect and efficient market. These conditions are base assumptions for creating conditions whereby trades stocks can be traded effectively with minimum limitations.

Promotion of free mobility of stocks when buying and selling, which means barriers such as transaction cost and taxes are removed from market trading procedures.

All market stakeholders have the same expectations regarding asset prices interest rates and other influencing economic factors.

There is free mobility to all who wish to enter and leave the market at will. Information must be free of financial costs to attain and also free to all stakeholders within the market.

There is expected to be numerous sellers and buyers, under conditions where no individual interest is able to dominate the market.

Conditions leading to the financial crises of 2007 exhibited none if any of these features under the current market function. A Feature that stands out as definitely unresolved is the free mobility of stock which is often hindered by liquidity issues. Another characteristic is the conditions for free market information available with no cost and free to all. Besides the several different sources of information available t the public, participants incur large volumes of financial and time cost in an attempt to have perfect knowledge

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of market behaviour. Furthermore, the privately acquired information is not freely dispersed into the public for free usage.

It is possible for investors to operate under an imperfect market environment. There is a greater need for markets to be efficient instead of being perfect because it creates condition where investors stand to make profits by choosing to invest on stocks at the prices they are give. Under and efficient capital market there is there is expected to be operationally efficient. The condition for operational efficiency dictates transaction cost in the market incurred by investors when moving resources for the purpose of market operations must be kept as low as possible (Dimson and Mussavian, 1998).

Within some trade regions of the world this condition was met. The division of most of the world's trading economies into trading blocs (UNIONS) ensured some features of minimal operational cost incurred when trading. For example countries within the EU and those using the EURO were able to trade under a no barrier policy. For those with the EU it was possible to move resources about without being affected by significant levels of cost through taxes or limits on expenditure, for example UK residents wanting to buy property in Portugal. Furthermore, a France resident wanting to buy property in Portugal is likely to even get lower operational cost as there is no cost incurred when exchanging currency as both countries trade in the same currency.

Price Efficiency recommends a fair pricing method for the role of stocks and shares. This requires the pricing of " capital market to fully and fairly reflect information concerning the past and all events that the market expects to

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occur in the future" (Watson and head, 2007). Wickens (2006) defined conditions whereby there are two types of asset pricing. Relative asset pricing involves comparing the price of one asset to another, derivatives and bonds are examples of this. Absolute asset pricing operates by relating the price of a stock to fundamentals. Aspects of arbitrage opportunities are expected to be removed, when they appear in the market. This is because within a financial market the existence of arbitrage would lead to increase in competition which wipes out the conditions through increase in price. The competition is by opportunities for investors to gain returns from nothing. This was a dominant feature in the conditions leading the 2007 recession, whereby investor were able to exploit differential prices of comparatively similar stock. There was intense level of price speculation based around the property market boom, which imposed strains on the economy globally, With the US homes sales fell across 40 states in 2006 (Whitney, 2007). This was after a 14. 3% fall in house prices. Whitney (2007) expressed it was similar condition were present during the 1920s at the beginning of the last global recession.

Conditions for allocation efficiency within the market requires strong characteristics of pricing efficiency within the market, it is through that resources can be allocated for the purpose of best use. It is understood that the fair price of an investment needs to be known by investors. Therefore they are able to better understand cost conditions surrounding the decisions made when selecting their investment portfolio. High level of emphasis is placed on information available and the conditions for reaching fair and fully secured prices. From this it is possible to explain market efficiency is heavily

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dependent on accuracy between speed and quality of information and the rates at which prices adjust.

Forms of Efficiency

It is possible to find out how share prices are affected by availability of relevant information within the capital market using empirical tests. In many cases this approach (correlating with pricing efficiency) is used when there is information deficit, due to insufficient data to carry out tests relating to allocation efficiency and operational efficiency. Many of the tests carried out focus on the presence of conditions suitable for investors to make abnormal returns on their investment, and to what extent that condition is feasible across the market.

Weak form efficiency

Weak form efficiency within the capital market occurs when current share prices reflect all historical information (Koch, 2007). This means that the behaviours of current investment opportunities follow the same historical movement and price trends. Under this situation, conditions for making abnormal return on investments are forgone when using technical analysis method. Similar results weak form efficiency is also expressed under empirical means and testing. It is expected that share prices will behave in a random pattern due to information being used arriving at random times and under random circumstances.

Semi-strong form efficiency

This expresses conditions where all share prices reflect all historical information and all publically available information (Watson and Head, 2007). Furthermore it is expected that share prices are more responsive to reacting quickly and accurately to securing price as soon as new information becomes available. Under semi-strong efficiency conditions for attaining supernormal returns on investments are still not possible through the use of publically as supported by empirical forms of market efficiency study.

Strong form efficiency

Markets with strong form efficiency are characterised with share prices reflecting all information, available within public and private domain. This condition describes a situation whereby information is freely mobile and price is very responsive to the arrival of new information. Those with full informational efficiency can make the best possibly decision on allocating their resources to produce the best returns. The condition of efficient information mobility means when situations of achieving supernormal returns arise all participants with the market are aware of it therefore removing the conditions of achieving supernormal profit. It is generally assumed under conditions of strong mobility and information there will not be opportunities for investor to achieve supernormal profit due to high levels efficiency. Investors who achieve supernormal profits through inside information are often prosecuted for inappropriate behaviours. This behaviour is generally a few in occurrence compared to overall practices within the market (Wickens, 2006).

Empirical evidence on real financial markets suggests there are some levels of market efficiency (Koch, 2007); it is possible to argue on the range of these efficient characteristics. In case studies of the financial Market crisis in 2007 most studies find no evidence of superior returns for technical or fundamental analysis (Mama, 2010). However, anomalies do exist and pose challenges for price efficiency. For example, trading at some times of the year can lead to negative or positive returns on investment. This is known as the calendar arising from changes within the market often the result of anomalies. Situations like this lead to question regarding the possibility of predicting future share prices. It is already well know that it is not possible to predict market trends based on past data proven through vast researches and empirical study.

There is emphasis placed on analytical tools used for proving efficiency. The use of graphs and charts expressing correlation is regarded as technical analysis. Using this method it is possible to imply there is a relationship between past and future prices which allows condition for investors to make supernormal profits. Other analysis technique is fundamental analysis which proceeds with using public information for the purpose of calculating values of current market. It is important to note, because both form of analysis are interested in finding supernormal returns on investment, they facilitate to increasing the speed in which share prices assimilate new market information therefore, unintentionally creating conditions whereby supernormal returns is prevented from be achieved (Watson and Head, 2007). It is expressed that these analysis create new information during the

investigation period which is then added to the overall information available within the market.

Conclusion.

When relating discussion points expressed in this essay with inefficient market behaviours leading to the 2007 financial crises, aspects that stands out most to causing price inefficiency area information inefficiency with a semi-strong form efficiency which resulted in allocation inefficiency.

Information inefficiency was present within the stock market in terms of asset pricing and also within the property market in terms of risk associated with loans being given out to households. There are characteristic explained within The Economist (2008) and Ivashin and Scharfstein (2008) which leads to believe that future projections of market behaviour were not being made. This along with the increase in demand for mortgage (provision of public information) coincides, to demonstrating that large portions of the financemarket (excluding those investing in private information) was displaying features more suited to semi-strong efficiency. This assumption correlates with large numbers of household applying for mortgage loans not having relevant information which is able project plans of the rates of returns expected for individual household. Information deficit for households are often generated from costs incurred when trying to access or compile large volume of information. There is also a risk that the investment of resources for the purpose of attaining market information might not produce favourable returns on investment, a characteristic which is shared by both households and corporate investor.

Information inefficiency would mean prices are not secure and fairly. Speculators often take advantage of this situation whereby it is possible to identify differentiated prices from having inside information or private information. Financial market behaviours become more unpredictable (Acharya and Richardson, 2009) risk of affecting decision making are often ignored due to the possibility of making supernormal profits. The financial market will show trends more closely matching allocation inefficiency as decisions are not being made based on the fair prices. The investments carry high risks along with high level of opportunity cost. Opportunity cost demonstrates loss in profits that could be made, under conditions where assuming market prices are secured and the investors were well informed. This conclusion was reached using fundamental analysis assumption along with efficiency condition outlined as aspect of perfectly competitive finance market.

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