The State of Long-Term Expectations in the Financial Sector¹

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Abstract

Chapter 12 of the General Theory is one of the best essays to explain the current predicament in the mechanics of the financial markets. As the global economic turmoil that began in August 2007 continues to send shock waves across the world, the Keynesian message on the state of long-term expectation is more relevant than ever. The goal of this paper is to look at the message of Chapter 12 in the General Theory from the author's personal perspective as an analyst in the financial services sector in Switzerland and observe how relevant it is to understanding the functioning of the financial markets.

This is not going to be an attempt to pinpoint the causes of shortsightedness on the part of individual corporations in the financial world, but, in fact, to identify how we can address the externalities arising from volatility driven by group psychology and institutional shortcomings through the scope of the General Theory. Throughout this paper, we shall look at the 6 critiques made by Keynes in Chapter 12 in reference to the weak points of the social convention, which guide the investment decisions in the financial markets. We shall analyze individual critiques proposed by Keynes below and attempt to interpret them with instances from the financial practices of today.

1. There is an assumption in the markets that the existing state of affairs will continue even though we know that it will not.

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2. There is an assertion in the current models that current prices include all the possible

information and constrained by markets knowledge of the existing state of affairs.

3. There is a decline in the real knowledge of the investors because people who own the

equity are not involved in the day-to-day management or special knowledge of the

circumstances.

4. Animal spirits guide group psychology and ignorance cause wild fluctuations in the

financial markets.

5. Experts do not know any better than the average investor in the financial markets.

6. Economic recovery depends on the revival of both confidence and state of credit. The

confidence of the lending institutions towards those who seeks to borrow from them.

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Critique 1. There is an assumption in the markets that the existing state of affairs will continue even though we know that it will not.

The current financial models share the following points in common as their data model predictions are based on the aggregated data from the past.

- Existing course of events will continue indefinitely.
- Current prices include all the possible information and constrained by market's knowledge of the existing state of affairs.
- Confidence defined by collective action and expectations become self-fulfilling prophecies.

The conventional economic theory assigns a lot weight on the role of reason and rationality in economic decision. It also emphasizes that the markets are fundamentally rational, self-correcting, and efficient and consider potential fluctuations in its model. The financial world has become more complex since 1970s, with the introduction of financial instruments that were previously unknown in finance. Options, derivatives, and credit default swaps have emerged as a result of the quest to quantify and accurately price risk and establish the bond economy on solid foundations. The basic goal of the risk models are used by the financial services industry was to predict the financial events in the future.

The common point between these models is based on the assumption that history simply repeats itself, that is, the existing periodical frequency of the state of affairs will be continue to happen in the same regularity. One of the most widely-used examples of this attempt is the Black-Scholes model, which was developed by the economists Fischer Black and Myron Scholes along with Robert C. Merton in 1973 and became widely-used in Wall Street ever since. The formula used by the Black-Scholes calculates the value of an asset using a limited number of market indicators, such as interest rate, portfolio value, strike price, volatility and original stock cost. The result of these factors creates a risk indicator, which is used, in the end, to price the financial assets. Black-Scholes model showed that, under plausible conditions, it was possible to

duplicate the payoff from an option by a combination of trades in the original stock and riskless bonds. The "right" option price could be calculated by looking at the interest rate on bonds and the variability of the stock price. If the market price differed from the Black-Scholes price, traders could make money with little or no risk, by combining trades in two markets"

Black-Scholes formula is based upon a number of simplifying assumptions:

- 1. The underlying asset being analyzed pays no dividends or interest during its lifetime.
- 2. The option is a European option, that is, it cannot be exercised prior to maturity.
- 3. The risk-free rate of interest is fixed during the life of the option.
- 4. The financial markets are perfectly efficient with zero transaction costs, no bid-ask spread and no taxes.
- 5. The price of the underlying asset is log-normally distributed, with a constant mean and standard deviation.
- 6. It is possible to short-sell the underlying asset and utilize the proceeds obtained without restriction.
- 7. The price of the underlying asset moves in a continuous fashion. (Pilbeam, 2010)

The greatest shortcoming of this model is its assumption that the current economic indicators incorporate all the available and existing information and that the present state is an accurate indicator that is yet to happen in the future. While we know for a fact that the future will be different from the present, Black-Scholes risk model that was developed to be a mere indicator are applied imprudently on financial assets. As a result of the tremendous increase in the computing power and mathematical calculations, the model has morphed into becoming the most widely used tool in financial transactions.

Second problem is the concept of perfect replication in financial trading. This refers to the assumption that history repeats itself in order to apply the model on a timescale. Application of the elementary paradigm of 'perfect replication' in derivatives trading for the credit risk of structured product requires the use of historical data, which is not always available given the relatively short time given that which the derivatives have existed in the market place for a short

time (cf. Colander & Lux et al, 2008, p. 5). Risk management and mathematical portfolio models have facilitated the tremendous increase of trading volume and financial instruments traded in the markets. Nonetheless, non-availability of data has not stopped the utilization of Black-Scholes model in finance. In this case, users of Black-Scholes have simply replaced the missing historical data with model simulations constructed by hypothetical assumptions on risk and default probability based on the available data. Historical data required for input in Black-Scholes has been substituted with fabricated 'as-if' reality of past data under the assumption that history repeats itself in the future in the same frequency as it had in the past.

Even if the historical data is, in fact, available in the Black-Scholes and other risk model, the generated outcome of the model bases its findings for future prices on the fluctuations from the past under the assumption that future volatility in option prices is essentially a derivative of past price fluctuations. Keynes noted this contradiction and stressed that:

"We assume that the existing state of opinion as expressed in prices and the character of existing output is based on a correct summing up of future prospects, so that we can accept it as such unless and until something new and relevant comes into the picture. Knowing that our individual judgment is worthless, we endeavor to fall back on the judgment of the rest of the world, which is perhaps better informed. That is, we endeavor to conform to the behavior of the majority or the average. The psychology of a society of individuals, each of whom is endeavoring to copy the others lead to what we may strictly term a conventional judgment" (CW 14: 114)

Keynes re-iterates that it is "reasonable ... to be guided to a considerable degree by the facts about which we feel somewhat confident", and people tend to continue to project that the existing situation will continue in the future, unless there is a plausible reason to expect the

contrary. This is where Keynes differentiates between the "most probable forecast one can make" vis-à-vis "the confidence on which the forecast is made" in his *Treatise on Probability*.

The current models based on mainstream economic orthodoxy simulates that history is repeated within same intervals. Methodologically speaking, Black-Scholes model conforms to the neo-classical axiom which asserts that the bigger the sample is; the better the data will be, such that abundance of historical data improves quality and exactitude of the outcome and corresponding forecast. Even if all the data is regressively baked into this model, generated future prices cannot be relied upon because the future is inherently unknown. Any price generated from this model is bound to diverge from real-world prices according to the assumptions of Black-Scholes model, which simplifies the real world conditions by replicating the past for the future in order to adapt the reality into the predetermined model variables. This was best exemplified by the inability of Black-Scholes model to seize extreme movements in the stock market crashes, as recent as the crash and demise of Long Term Capital Management (LTCM) in 1998 with Bear Stearns and Lehman Brothers in 2008 (Aslan, 2013).

Critique 2. There is an assertion in the current models that current prices include all the possible information and constrained by markets knowledge of the existing state of affairs.

Mainstream orthodoxy argues that the existing prices include all the possible information based on the assumption that all investors in the market possess the same knowledge about the state of affairs. Hence, the global use of such tools compounds and strengthens the collective behavior across the investors as they become increasingly popular and they are taken as a reference point for investment decisions. This is also the result of mathematization of a psychological phenomenon, namely the state of confidence, which has been gradually baked into

the financial models where the issue of uncertainty is downplayed. The fact that the calculations on the risk models are rough estimations and we simply do not know the probability of events in the future is often overlooked.

The financial market models based on the neoclassical theory is flawed because of its naïve assumption that the market prices are fundamentally right and include all the relevant information baked into their variables. Its basic assumption was that depression and crises cannot occur, and even if they do so, the system would automatically correct itself. While this assumption has allowed for ease of economic modeling and pricing since uncertainty (as well as potential bubbles) are ignored, it has resulted in the downplaying unmanaged risks.

Neoclassical models explicitly rule out defaults, implying all IOUs are risk-free, thereby eliminating the need for the monitoring services provided by financial institutions (Wray, 2011). Additionally, it also assumes that the prices include everything there is to know about the current affairs. This assumption disregards the possibility of financial volatility perfect information, under ideal circumstances, eliminates the default risk as rational agents possessing perfect information are assumed not enter into contractual agreements, which could yield to default. Misunderstanding of risk occurs when assumptions to model reality break off from the real world when mathematical rigidity takes hold in order to be able to establish a model to analyze multifaceted dealings between agents. This poses a quandary for investors as well as the policy makers as these models not only provide them wrong information, but also compel to think in a certain way, where the best course of action is 'do-nothing' since the markets are assumed to be self-correcting.

In today's stock portfolios, investors use tools such as Black-Scholes to diversify risk. Let us assume that we purchase a portfolio of mortgage-backed securities, with varying degrees of covariance at different degrees of risk. Downside of the lack of diversification is that if mortgage-backed securities decrease, all securities in the portfolio also decrease. To cover for a potential default, investor could choose to buy an insurance policy, a credit default swap (CDS), or diversify its portfolio by buying stocks from another sector or asset class. In this technique, investor spreads the risk to different risk categories so that he would not be exposed to a big loss if there were a decline in one category. The risk could still be contained to one basket; therefore, the risk covariance could be reduced. There is no limit to cap the bottom, and hence buying stocks from different categories could not diversify the risk and the investors rush to the most liquid asset, cash, when there is a financial crisis as in 2008. In reality, the current models in use have been colossally ineffective in dealing with the effects of the ongoing financial crisis, because of the fact that a depression is impossibility. Ben Bernanke, the head of US Federal Reserve, has most notably admitted this point:

"Most of the time, including during recessions, serious financial instability is not an issue. The standard models were designed for these non-crisis periods, and they have proven quite useful in that context. Notably they were part of the intellectual framework that helped deliver low inflation and macroeconomic stability in most industrial countries during the two decades that began in the mid-1980s" (Bernanke, 2010, p. 17).

The Bear Stearns case is the most recent example to showcase this predicament. During the 2008 global finance crisis, the colossal downfall of Bear Stearns precipitated many financial titans' demise, such as Fannie Mae, Freddie Mac, AIG and Lehman Brothers. Surprisingly, the credit rating of a now-defunct Bear Stearns who has been sold to JP Morgan at a fraction was

upgraded to AA-/A-1+ with a stable outlook on March 24th, 2008 right before it was sold (Thomson Financial News, 2008). Similarly, Lehman Brothers were awarded AA within days of failing in a similar fashion with AIG which was graded also AA before being bailed out by the government. Leading mortgage providers Fannie Mae and Freddie Mac, which collectively had 85% of the US mortgages on their books, had AAA ratings before the US federal government rescued these institutions.

The logic behind these ratings is embedded within the forecasting models used by the rating agencies for risk assessment. One of the most popular methods was called Value at Risk (VaR), which measures the risk of loss on a portfolio of financial assets. For any given portfolio, time horizon and probability, VaR is defined as the threshold value such that mark-to-market loss on a portfolio over the given time horizon exceeds this value in the given probability level (Jorion, 2006). However, one peculiar feature of VaR in its assessment was its assumption of normal markets and no abnormal level of trading. Despite that, it could potentially be a useful tool to measure day-to-day volatility ceteris paribus it is proven to be hardly a reliable tool to predict future volatility. Based on this risk model used by the VaR model, Bear Stearns, which had an AA- rating on its day of collapse, could only default every 4000 years. This sophisticated model and many other highly complex risk assessment models prophesized extremely low default probabilities for the other financial institutions like Lehman and AIG based on the vast quantity of data that factored into their modeling, whose quality and integrity was also questionable. How can one be ensured that data used for the calibration of models is sufficiently homogenous and belong to the same patch of history in order to give information about today and tomorrow rather than giving the information based on data from 5 years ago when the world was quiet? Most importantly, how was this 1 in 4000 year default rate reached?

In this model, financial institutions could take a look at how many AA rated banks defaulted in one year, and they create an investment basket in the risk model. This basket includes all the currencies and companies in a given portfolio. As a result, we have several thousand companies with various currencies, and out of this population, it is likely to have a few companies in default, a small proportion compared to the entire population in the portfolio. Therefore, the portfolio has an eventual credit rating at AA because of its relative calculated risk in its overall portfolio. This rating has meant that Bear Stearns bondholders should set aside only enough capital because the rating predicted that the risk of Bear Stearns default was once every 4000 years and communicated to the market that capital should be realigned for Bear Stearns with the observed frequency of default of AA company. This was essentially a signaling device to the market, regulators and bondholders that Bear Stearns was AA and should not have been demanded to possess substantial capital requirements, and therefore, should not have been asked higher interest rates on its loans from the marketplace (Rebonato, 2007). In this regard, VaR model has the same shortcoming as the Black -Scholes risk pricing model. That is the assumption that the existing state of affairs will continue and that the current prices, based on previous data, are accurate indicators.

Critique 3. There is a decline in the real knowledge of the investors because people who own the equity are not involved in the day-to-day management or special knowledge of the circumstances.

In today's financial world, there is a clear separation of ownership and management, which provides a disincentive to the management for the long-term profits and future viability of the company, whereas the focus is fixated on the short-term profits by the generation of fees of their services, which fuel the exorbitant salaries and bonuses. The separation between

management and ownership is ever more pronounced as the ownership, to a large extent, are detached from the daily business. One should not, however, think that this is because the ownership is willingly oblivious to the day-to-day management. The complicating factor why the investors are disconnected is a result of two main factors. First is the sheer amount of minutiae details in the markets, where no single investor can absorb the circumstances on the ground in order to translate the results to financial investments. Second is the elimination of shareowners control in the Board of Directors. The equity owners are large in number, yet often small in influence; therefore their influence is largely limited in terms of having an influence of the management.

Ownership of an enterprise comprises of the shareholders and by statutes controlling corporate governance, the management of the company should, at the end of the day, be responsible to the shareholders for their action. At present, however, there is a growing disconnection between the shareholders and management driven by the lack of knowledge on the side of investors about the daily management of their investments as they are unable to keep track of events and minutiae details. The large number of small shareholders that are negligible in influence further exacerbates this situation. This situation causes an immense apathy in the general public, whose tax money is used to bailout defunct 'too-big-to-fail' corporations that not only fail to penalize the failed CEOs but continue to pay exorbitant sums to them despite their obvious and abject failure of their management. While the management continues to collect their bonus and golden parachutes at the misery of thousands of now unemployed workers, shareholders are disenfranchised to curb the abuse of management power. The most recent, and so far the only, example to limit this abuse was the referendum on the "Minder-Initiative" in Switzerland. Despite heavy objection from the industrial lobby and federal government, the

proposal was accepted with overwhelming support, which proposes to increase and limit management oversight as a way of preventing abusive salaries.

While the perceived abuse of power by management is rightly vilified in public opinion, the fundamental problem is first, a result of the incentive structure in corporate governance. The management is rewarded for the short-terms gains by taking risks, which affect the long-term viability of the company and pose systemic risk to the economy as a whole (i.e. AIG case). The bonuses and salaries are defined by using short-term targets, namely by using monthly, quarterly and yearly profits. In return, the management is compelled to ignore other factors. Second, the investors rarely have influence on the management decisions. The Board of Directors defines the salary and bonus of the CEO and management cadres. Since the management is often not composed of owners (i.e. Equity partners), they are not exposed to a loss of their own capital if the corporation is in financial trouble. Therefore, they do not act as prudential as they should be in assuming risks since their own money is not at stake and they would get paid with hefty compensation regardless of the outcome of their decisions. Third, it has become exceedingly hard for investors to follow every aspect of corporate decision, especially in the large firms. Their knowledge is often bounded by a specific area, and they are unable to attain minutiae of daily management that requires a prerequisite special knowledge of circumstances. A US investor could own stocks of a Turkish conglomerate, which might have purchased a factory in Romania for goods to be exported to Russia. The investor could be unable to absorb the interconnectedness and result of these decisions, without attaining specialist knowledge to the future of the company.

2008 financial crises triggered by the securitization of subprime mortgages is a notable example. Unsuspecting investors continued to pay for worthless securities whose illusionary

value was based on fraudulent accounting by sellers and poor disclosure by the credit rating agencies. The investors bought these securities because they were not involved in the management decisions that lead to the financial engineering of these products and they have continued to buy them without suspicion (enter group psychology) because everyone in the market did. The financial institutions approved this inappropriate practice, even though they were quite aware of the lack of quality of these financial products; however, they were enticed by the high returns and people's willingness to purchase these investments. The mortgages made out to people without proper means of income were securitized. These securities were sold to investors who believed that there were prudential checks to ensure the quality of their investments.

Critique 4. Animal spirits guide group psychology and ignorance cause wild fluctuations in the financial markets.

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill done (Keynes, 1936, p. 159).

Keynes argued that the mass psychology of the markets had the most influence on the professional investors. These investors are exposed to the mass hysteria driven by the group psychology of 'animal spirits'. In such cases, ignorance rules cause wild fluctuations where the investors rush to assets that are most liquid. However, in times of crisis, 'one forgets that there is no such thing as liquidity of investment for the community as a whole'. When speculation, fuelled by 'animal spirits' becomes the main activity in an economy, Keynes argued that it is inevitable that that economic problem would ensue.

Actions of collective behavior and role of expectations in the stock market show that the investments on the stock exchange are driven by expectations, not by the actual value. The collectivization and global acceptance of indicators, which are churned out of these models perpetuates the group behavior and has a tremendous impact on the expectations in the stock market. In the General Theory, Keynes coined the term 'animal spirits' to describe emotions, which influences human behavior. These emotions play a role in the financial markets. The conventional economic theory envisions the economy as utility-maximizing, rational agents who methodically evaluate their decisions without any emotional hindrance or bias. They operate similar to computers, with full rationality. Adam Smith, for instance, has ignored the role of irrationality and role of emotions in economic decisions, and argued that people are exclusively driven by their rational self-interest.

Keynesian multiplier is a vital force that brings exaggerated booms and busts in a capitalist economy (Akerlof & Shiller, 2010). A decrease in the confidence could reduce individual spending, affecting the spending and purchasing power of the others. For instance, the current economic predicament of countries, such as Greece, Spain and Italy, are driven by the imposed austerity measures by the government. The lack of government spending coupled by confidence deficiency in the economy, in times of crisis when the private sector is unable or unwilling to spend, cascades into a decline in economic activity, thereby adversely affecting purchasing power, individual spending and overall GDP.

It is crucial to address to the role of new media and spread of information instantaneously due to the advent of Internet since 1990s. Since early 1990s, the rise of information technologies and new media has given a new twist to the nature of financial speculation, which has facilitated the dissemination of speculative motives and information. While the financial information has

been limited to a few venues until late 1980s (i.e. Wall Street Journal, Forbes, etc.), creation of 24-hour financial news cycles lead by CNBC and Bloomberg TV, and the emergence of Internet has created a boost to the real-time distribution of financial information. On the downside, however, the new media have facilitated the spread of speculative news, which often are taken by the audience at its face value and motivate them to buy/sell without truly understanding why there are buying and selling since these transactions are done by mass hysteria. The level of punditry often amazes the author, where financial news shows often follow a corporatist and biased view of actual events happening instead of providing a useful insight to the events. The news is cluttered to inject an artificial optimism to investors to ensure that the market index constantly increases and maintain calmness at all costs.

One of the most notable examples of punditry was shown by Jim Cramer in his popular show "Mad Money" on CNBC, where he argued that it would be 'foolish' not to buy Bear Stearns stock a week before it collapsed and that Bear Stearns was perfectly healthy (March 11th, 2008 broadcast). While obtaining perfect information by the investors is not possible, they are blatantly misled to act against their own self-interest by such media outlets. Financial news on cable TV are not entirely reliable not only because they compound the effects of group psychology, but also willful ignorance of their broadcast is based on the assumption that the markets always act rationally undermine the plausibility of their journalism standards³.

Warren Buffet has also warned off the investors against following daily news and trends for the risk. He has argued that investors are often misinformed and wrongly lead to bull and

http://forums.alternet.org/story/131334/busted%3A_cnbc_sleaze_jim_cramer_blabs_on_how_he_shorted_stock s_and_manipulated_markets

bear positions based on group psychology⁴. "As regards to transparency" argues Quiggin (2012), "no market in history has been subject to such intense scrutiny and coverage as NASDAQ. Investment banks, stockbrokers, and the financial press assessed stocks and the companies that issued them. The dubious projections on which they relied were set out in the prospectuses that warned (in a pro forma fashion) they might not be fulfilled " (Quiggin, 2012).

Keynes complained about the negative effects of speculation as it attracts people with "insufficient knowledge" so that those with "superior knowledge could gain (Keynes MSS 1910, UA/6/3: 104). Regardless of their ignorance, the influx of people with insufficient knowledge compound the effect of animal spirits as their convictions about the future yields of an investment could become a self-fulfilling prophecy given the number of people. This is analogous to Keynes' beauty contest analogy. Keynes addressed to the behavioral perspective of investment and noted: "you win not by picking the soundest investment, but by picking the investment that others, who are playing the same game, will soon bid up higher". Thereby, it does not truly matter whom the investor thinks that who will win, but what truly matters is whom the average opinion thinks that is going to win.

This is the reason why the conventional economic theory fails to address irrational exuberance and pessimism, which can carry the market to stratospheric heights or abysmal depths because according to the perfect rationality economic agents could drive away from rational decisions and be enslaved to group psychology that result in manias and crashes. However, given that markets are human structures and humans show emotional behavior, risks as a result of 'animal spirits can never be mitigated by the 'rational agents'. Contrary to the conventional economic theory, one must factor in that humans are not entirely in charge of their

⁴ http://www.forbes.com/sites/rogerdooley/2013/05/07/buffett-confirmation-bias/

choices. This is especially true in the context of financial markets, where people invest their money, not always on the basis of the fundamentals, but on the perception of the market on how an investment will perform over the course of time. Their decisions are both consciously and unconsciously affected by the rumors they receive in the media. These rumors in return shape their own unique perspectives on how the events will unfold in the marketplace. Keynes did not buy into this concept of efficient markets and coined "animal spirits". If everyone else is selling, then one is well-advised to sell as soon as possible. Similar to a bank-panic, the value of a financial asset is subject to self-fulfilling prophecy.

Critique 5. Experts do not know any better than the average investor in the financial markets.

Current risk models are based on the assumption that future events are calculable. Future risk can be estimated with reasonable certainty, under the assumption that the vent patterns in the past will be repeated. "People who argue that speculation is generally destabilizing seldom realize that this is largely equivalent to saying that speculators lose money" Friedman asserts, "since speculation is largely equivalent to saying that speculators on average sell when the [commodity] is low in price and but when it is" (Friedman, 1953). Friedman's objection to the assertion that speculation is destabilizing derives from the neoclassical theory. The theory not only sees speculation as a destructive activity, which could break havoc in the markets, but, in fact, actively encourage it. This mechanism, on one hand, eliminate the irrational people who are unable to act 'rationally' and buy commodities when they are expensive and sell when they are cheap while on the other hand, paves the way for the prudent and rational investors who are able to buy cheap and sell at a higher price. Through this Darwinian cleansing and Smith's "Invisible

Hand", markets are only made up of rational investors, whose investment skills and fitness have been filtered, and hence more stable and agile.

Here, we have Keynes' famous analogy of investing in the stock market to a beauty pageant, "it is not", Keynes then argued, "case of choosing those which, to the best of one's judgment, are genuinely the prettiest, nor even those which average opinion genuinely think the prettiest. We have reached the third degree where we devote our intelligence to anticipating what average opinion expects the average opinion to be. And there are some...who practice the fourth, fifth, and higher degrees (Keynes, 1936, p. 154). In today's financial markets, the situation is exponentially more difficult, especially given the emergence of high frequency trading with power of supercomputers, where the number of transactions done through the NYSE and NASDAQ alone exceed trillions of trades per second. On one hand, human intervention is often minimized in the buy/sell mechanisms given that no human could achieve the transactional speed of electronic trading whose speed is measured at a millionth of a second. Once there is a crash as a result of a crisis, either through a bankruptcy (i.e. Lehman Brothers), or terror attack (i.e. September 11th, 2001), panic sets into the market which triggers panic selling across the board through high frequency trading, and hence result in the complete collapse of the market. On the other hand, the opacity and complexity of financial products traded in the stock exchange and over-the-counter markets are immensely higher than to those that were handled before 1990s. Various kinds of CDOs of dubious quality, which belong to debtors without proper credit history checks, are bundled together and marketed to unsuspicious investors with the fraudulent ratings given by credit rating agencies. While examining the fraud in the credit rating agencies fall beyond the scope of this paper, suffice it so mention that the credit rating agencies generate their revenues, not on the quality of their ratings, but on the fees they charge, which is based on the portfolio volume. Hence, they often sandbag their rating in order to appease the financial institutions. The most recent notable example was AAA rating of AIG weeks before its effective bankruptcy and nationalization.

As things currently stand, the 'so-called' experts in financial markets are largely irrelevant to the functioning of the financial system. In a marketplace where trading is largely automated, any downswing has the potential to bring down the entire system and cascade into a larger issue for the global economy. To the author's professional observation, random movements in the market often perplex traders, who are supposedly the most informed bunch of financial players, and have to act on gut feeling alone instead of making a rational and assessed decision on how they react in an up or downswing. The fundamental qualities of a firm, such as its production capabilities or future revenue potential play a minimal role. Instead, the speculative qualities are projected, where assets, which can be easily flipped and sold at a premium, are immensely appreciated by the investors. Thus, the market psychology is computerized, and once a speculative wave hits, the prices suddenly fluctuate as a result of (often unfounded) rumors instead of the actual supply and demand of the real economy.

Here, we must address the difference between gambling and speculation in the financial markets, two concepts that Keynes has clearly distinguished. In defining speculation, the reference point for Keynes in this regard was the possession of knowledge: "the essential characteristic of speculation is, it seems to me, the possession of superior knowledge" (Keynes MSS 1910, UA/6/3: 93).

Keynes observed that the speculators success could be attributed to their superior knowledge than the market average, whereas the gamblers do not have the knowledge and they

simply bet on down/upward trends without having any substantial knowledge about the underlying market trends. Keynes notes that:

"[t]he essential characteristic of speculation is, it seems to me, the possession of superior knowledge. We do not mean by the risk of an investment its actual future yield – we mean the degree of probability of the yield we expect. The probability depends upon the degree of knowledge. In a sense, therefore it is subjective. What would be gambling for one man would be sound speculation for another" (ibid)

Keynes differentiates between long- and short-term expectations in regards to assessing future yields. Speculators try to benefit from market fluctuations with a 'short-term view' with buying and selling based on impulse and rumors. Professional investors, on the other hand, trade with 'long-term horizon' as they buy stocks with the expectation that future yields will be 'higher than the generality think' and they are affected by the short-term gain/loss in the markets.

We must also consider the fact that the experts are also exposed to same emotional and psychological impact as the average investor. Rational people do emotional and irrational decisions because they are under the influence of the same biases, non-conscious behavior. This is the reason why businesses in the financial sector must establish close monitoring systems to ensure that irrational risks taken by seemingly rational expert individuals are mitigated. The latest rogue trading scandals in 2008 at Société Générale and in 2011 at UBS are the latest examples. The author thinks that the risk management sector largely carries the blame for the recent financial meltdown and banking crises. However, it would be erroneous to assign the blame only to individuals in the financial sector, but, in fact, we should admit that their failure is driven by their erroneous assumptions based on the conventional neoclassical theory.

Critique 6. Economic recovery depends on the revival of both confidence and state of credit, especially the confidence of the lending institutions towards those who seeks to borrow from them.

The economic recovery can only happen when the confidence is secured, and credit flow is established in the markets. In the context of the financial sector, confidence refers to a trust, belief and expectation of an optimistic future. While the existence of confidence set stability in the markets, it has the adverse effect to empowering people to take excessive risk, which eventually cause a market crash. This is what Minsky identified as "stability is destabilizing". On the other hand, lack of confidence causes a paralysis in the credit markets because lenders are unsure of the future outlook of the market, thereby prefer to hold on their capital instead of lending it out to borrowers who might not repay the loan. The (re-) establishment of confidence can only be achieved if the long-term expectations in the market by investors are secured. When we look at the current predicament of the EU economic crisis, we can vividly see this dilemma. Despite the massive liquidity pump into the markets, the economies are sluggish. 6 EU countries (Portugal, Spain, Italy, Slovenia, Hungary and Czech Republic) are in a prolonged recession (no growth for at least a year) while 2 member countries; Greece and Cyprus, are experiencing extreme recession as their respective annual change in GDP has been -6.4% and -2.4%. The recession in the periphery countries also cascade into sluggish economic growth in the core EU countries, where they risk entering into recession as their economies shrank in Q1 2013. Germany and the UK only grew by 0.7% and 0.3% while France did not posit any growth at all.

Although ECB has tried to calm the markets during the sovereign debt crisis, the investors continue to be bearish in their outlook because they believe EU in general, and Eurozone in particular are in a Kondratiev downswing, and they are trapped in a vicious cycle,

which EU institutions are unable or unwilling to break. Decline in investment causes an increase in the unemployment rates, which in return, results in the gradual erosion of purchasing power, thereby resulting in a loss of aggregate demand. Despite the wide imposition of austerity measures throughout Europe, at the moment, the investors cannot see the bottom of the barrel break out this cycle. A plausible way to remedy this problem is to apply a Classical-Keynesian solution. Here comes the role of institutions to the fore, where they form 'reasonable judgments, endowed with more partial knowledge than individual agents operating in a market economy in order to counteract market conventions through active policies aiming at promoting general interest' (Carabelli & Cedrini, 2012, p. 31). In the case of EU, this should focus on the reducing unemployment so as to secure the flow of aggregate demand and investment back to the economy and thereby, de-freezing the credit lines from the banks. The (EU) governments have the explicit responsibility to socialize investment and manage aggregate demand while monetary authorities control money and credit conditions (ibid). The economy should be designed on the basis of principles, where the policy-making is done with social priorities and on a long-term perspective. Prioritizing social needs will not only ensure that system-wide alienation (such as current apathy toward the EU among EU nationals and widespread social unrest) is avoided, but also ensure the long-term viability of economic development.

The fundamental problem surrounding the financial markets in Europe in particular and the world in general is the lack of confidence in the austerity measures that they would have any meaningful recovery to the economies in the short and long run. When we look at the existing structural problems in Europe, we see that how the predicaments of Southern Europe also cascade into Northern Europe, thereby becoming a continental problem in times of crisis. Carl B. Weinberg, chief economist of High Frequency Economics, argued "the EU has made Europe a

much more cohesive economy, which is good when things are going up. When things are going down the multiplier is very strong. An outgoing tide lowers all ships" (Ewing, 2013). For instance, unemployment rates in Portugal, Spain and Greece are 17.5%, 26.7% and 27.2% respectively. Dropping purchasing power driven by mass unemployment in Southern European markets cascade into lack of demand to Northern European products, which worsens the economy as a whole, yet the only tool that the authorities deploy to revive the economy. European Central Bank recently cut the benchmark rate to a record low of 0.5% from 0.75%; however, this quantitative easing failed to give the expected stimulus to jump-start the economy. Moreover, the repetitive quantitative easing measures in the EU, as in the US, fail to address the credit crunch problem especially in those countries that are hurt the most. The government follow a supply-side approach and expect that the economies would be stimulated by only creating additional liquidity in the markets. In reality, we only see the contrary. Monetary stimulus fails to trickle down to the corporate and individual borrowers in Italy, Spain and Greece. This is a result of lack of confidence, which offset the potential effect that quantitative easing might have in the economy.

Long-term expectations do not solely depend upon the most probable forecast we can make
—they also depend on the confidence with which we can make this forecast. The state of
confidence is a matter to which practical men always pay the closest and most anxious attention.

The conclusions in these matters should depend mainly upon the actual observation of markets
and business psychology. In conclusion, we can summarize Keynes' points as below.

- Future is inherently unknown, and we simply do not know that will happen in the future. Despite our best efforts and mathematical calculations, there is a fundamental uncertainty, which cannot be baked into the financial forecasting and stochastic models.
- Long-term expectations are not only driven by the future forecast but are also guided by the confidence to such models.

- These conclusions are driven by the psychology of the markets and movements in the market.
- The conventional method of calculation can be calculated with continuity and stability as long as the markets rely on the maintenance of the convention -- that is the existing state of affairs will continue until we have reasons to expect a change.

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