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ECONOMIC DOWNTURN AND EFFICIENT MARKET HYPOTHESIS: LESSONS SO FAR FOR GHANA^{*}

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ABSTRACT

Like all good theories, market efficiency has major limitations, even though it continues to be the source of important and enduring insights. This is a conceptual framework on global financial crisis and Efficient Market Hypothesis (EMH). Despite the theory's undoubted limitations, the claim that it is responsible for the current worldwide crisis seems wildly exaggerated. This paper discusses many of those claims. It was identified that many of these claims were without merit and what developing economies need to consider and worry about is how they can strategize well to insulate themselves from the effects of global financial crisis whenever they arise and even capitalize on it to reap maximum benefits from the situation. Since African stock markets are seen to be providing investors in the developed economies the benefits of portfolio diversification, Ghana should be thinking of what they can benefit from the crisis which we refer to as an opportunity in this paper. Leaders in emerging economies should not sit aloof and believe that the adverse impact is certainly going to affect their economy but they should rather focus on minimizing the effects and taking advantage of the distortions in the developed economies.

Keywords: Economic Downturn; Efficient Market Hypothesis; Stock Market; Ghana.

INTRODUCTION

The August 2011 and the 2007–2008 financial crisis (often called the Credit Crunch or the Global Financial Crisis) is considered by many economists to be the worst financial crisis since 1930s Great depression especially the latter. The effect of the crisis was the collapse of large financial institutions, the bailout of banks by national governments, and downturns in stock markets around the world. The housing sector also suffered, resulting in numerous evictions and prolonged vacancies. Major businesses failed and there was a significant decline in economic activity, leading to a severe global economic recession. The cause of this crisis was triggered by liquidity shortfall in the banking system. Economies worldwide slowed during this period, as credit tightened and international trade declined. Governments and central banks responded with unprecedented fiscal stimulus, monetary

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policy expansion and institutional bailouts. The financial crisis came to an end around 2009 even though there have been some aftershocks.

Most political leaders in Africa often capitalize on global financial crisis to explain their own inappropriateness and mismanagement of their economy to the world crisis. By assuming that their economic difficulty is as a result of global crisis they sit aloof hoping that the developed economies would resolve it. This perception is really affecting the African continent. It must be noted here that any time financial crisis is being resolved leaders of the developed economies see to it that the solution would not made their countries worst off. African leaders are not involved and hence we should not expect any better outcome for us. Yes the world is a global village and the economies are interrelated, but critically speaking the African economies correlates inversely with that of the developed world. African leaders and economies must understand the world financial crisis and fashion out strategy that would propel Africa to the frontiers of developed economies. We should note that crisis is an opportunity too (Ceniga, 2013).

Experts have assigned varying degree of causes of the financial crisis. Among the reasons is the fact that the crisis was not a natural disaster, but the result of high risk, complex financial products; undisclosed conflicts of interest; and the failure of regulators, the credit rating agencies, and the market itself to rein in the excesses of stock exchange markets. If this is true then what is the stand and future of the EMH. There are two main strains in economic thought on economic efficiency, which respectively emphasize the distortions created by governments and the distortions created by markets. Distortions created by government are reduced by decrease in government involvement and distortions created by markets are reduced by increase in government involvement. This explains why the financial meltdown of 2007 was a distortion by the market and hence the increase in government involvement in markets all over Europe, Asia, America. The efficient market hypothesis stipulates that competitive financial markets ruthlessly exploit all available information in fixing security prices.

For some two generation ago, the EMH was widely accepted by academic financial economists; for example, see Malkiel & Fama (1970). It was generally believed that securities markets were extremely efficient in reflecting information about individual stocks and about the stock market as a whole. This means that when information arises, the news spreads very quickly and is incorporated into the prices of securities without delay. If this is true then why do we have financial bubbles?

The EMH is associated with the idea of a “random walk,” which is a term loosely used in the finance literature to characterize a price series where all subsequent price changes represent random departures from previous prices. The logic of the random walk idea is that if the flow of information is unimpeded and information is immediately reflected in stock prices, then tomorrow’s price change will reflect only tomorrow’s news and will be independent of the price changes today. But news is by definition unpredictable, and, thus, resulting price changes must be unpredictable and random. As a result, prices fully reflect all known information, and even uninformed investors buying a diversified portfolio at the tableau of prices given by the market will obtain a rate of return as generous as that achieved by the experts (Malkiel, 2003).

This paper examines the attacks on the EMH and the belief that stock prices are partially predictable. While we make no attempt to present a complete survey of the purported regularities or anomalies in the stock market, we will examine the relationship between predictability and efficiency.

EMH like all good theories has major limitations, even though it continues to be the source of important and enduring insights. Despite the theory’s undoubted limitations, the claim that it is responsible for the current worldwide crisis seems wildly exaggerated. If the

EMH is responsible for asset bubbles, then how will one explain bubbles of 1637 (Dutch tulip), 1720 (South Sea Company Bubbles), 1840's (Railway Mania), 1926 (Florida Land Bubbles), and event surrounding market collapse of 1929 as reviewed in works of Cooper (2008). All these bubbles happened before the advent of the EMH and modern financial economic theory. As the above list suggests, unusually large price run-ups followed by unusually large drops have occurred throughout the recorded history of organized markets. It's only the idea of market efficiency that is relatively new to the scene and not bubbles.

Malkiel (2003) argues that a financial crisis occurred because the financial industry was dominated by people who viewed current prices as correct and hence felt it was unnecessary to verify true asset values seems wildly at odds with what we see in practice. That is the theory that current prices of stocks reflect their true value in reality is at variance with practice.

Almost all investment money is actively managed, despite all the evidence of academic and industry studies showing that active managers fail to beat the market in an average year. Much of the enormous losses by banks and investment banks in 2007-2008 originated in their trading desks and proprietary portfolios, whose strategies and very existence were premised on making money from market mispricing. Investors who poured money into the property market, stock market, and other asset markets in the years while the "bubbles" were forming seemed to do so in the belief that prices would continue to rise, with the implication that they believed current prices were incorrect. It seems inconsistent to argue simultaneously that asset price "bubbles" occur and that investors passively believe current asset prices are correct. Yet this is precisely what many EMH critics have claimed.

It believed that 2007-2008 financial crisis will have been averted if more homeowners, speculators, investors, and banks had indeed viewed current asset prices as correct. The related argument that when asset prices are rising rapidly their level is not subject to scrutiny by investors also seems wildly at variance with the facts. For this reason it is not surprising that blame for the crisis is leveled at EMH. Many investors and employees have incurred considerable losses, regulators have lost face, and scapegoats are sorely needed. The EMH is a natural candidate. It sounds academic. It is not welcomed by most money managers because it states what they are not honest enough to admit to their clients that they operate in a fiercely competitive world, populated by a large number of capable and ambitious people, just like themselves, and thus superior investment returns are generally (though not exclusively) attributable more to luck than insight. To justify their fees, active money managers have to argue they are "above average" and consistently beat the market, but the EMH and the body of empirical studies supporting it suggests otherwise. To us there is less drama, but more insight, to be gained by examining what the crisis tells us about the efficient markets theory. What is more interesting that we must find out is whether the rapid and substantial fall in prices that occurred across countries and asset classes invalidate the notion of market efficiency?

EFFICIENT MARKET HYPOTHESIS (EMH) AND FINANCIAL CRISIS

An important assumption about EMH is that competition is very keen among stakeholders of the capital market. The effect of this notion is that competition enforces a correspondence between revenues and costs. In other words for one to beat the market and make more profit, the nature of competition will require a commensurate increase in cost. This means that your net will still be the same and so there is no need for that activity when the market is efficient. The issue about EMH is to view changes in asset prices as a function of the flow of information to the marketplace.

In competitive equilibrium, the gains from exploiting public information should correspond to the cost of exploiting it. It is known fact that public information is costless to

obtain, and hence the gains from its use should be competed away to zero. From this comes the prediction that one cannot expect to earn above-normal returns from using publicly available information because it already reflected in prices.

MISCONCEPTION ABOUT EMH AND FINANCIAL CRISIS

There are several misconceptions about EMH. Below are some explanations about the misconception.

The EMH Assumes That Return Distributions Do Not Change Over Time

One principal limitation of market efficiency is that it is completely silent about the shapes of the distributions of securities' returns but assumes that distribution does not change (Soros, 2009). This does not imply that past return distributions like the means, variances, skewness, and correlation matrices will instinctively repeat themselves in the future but rather given a certain amount and kind of publicly available information, security prices are "efficient" in the statistical sense in that they have minimum variance forecasts of future prices. If markets are not efficient they expose the investor to future price variability. On the other hand if the market is efficient no future price reaction to that information is necessary and the investors will not be exposed to future price variability. At the core of these assumptions has been the theory of efficient and rational markets.

The Market Should Have Predicted the Crisis

The theory about EMH does say that the market should be able to predict the future and hence any possible financial crisis. If we say it is possible to predict financial crisis then we are rather saying the market is inefficient because current market price would not reflect the information embodied in the prediction. It is possible to predict that large market changes will occur but the difficult is when that will happen. In other words we can predict stock price changes but not when the changes will occur. That is one cannot predict that start and the end of a financial crisis.

No One Should Act On Information

If investors do not act on information the market would cease to be efficient. The misunderstanding arises from confusing efficiency as a statement about the equilibrium resulting from investors' actions with the actions themselves. Investors act on information in a fiercely competitive market, and the average investor is not expected to make abnormal returns. The implication here is that on the average investors would not make abnormal returns by acting on information, which doesn't mean that investors should not act on information. Very few investors would gain on the average when they act on information.

This is the essence of the claim that market participants were seduced into believing that since market prices already reflected all available information and hence nothing to gain from producing or searching for information. For this critics of EMH believe that it made people not to act on information allowing security prices to digress significantly from their market values. This is not true.

The Stock Market Should Have Prompted Us of Financial Crisis

Bubbles are always identified after the fact and it will be very difficult for the market to know in financial crisis. One way of determining whether the market knew about a possible financial is to find out whether investors tried to liquidate their investment. That is investors converting their investment into cash. This change should be huge and sudden. In short EMH will not know about a possible financial crisis. Immediately this is identified by the market the bubble will burst because there will be huge selling of stocks pushing price to

free fall. By this test, we are skeptical about the possibility of identifying financial crisis except in hindsight.

Financial Regulators Mistakenly Relied On the EMH

One principal action of regulators or regulation is to remove the impediments which might produce inefficient and illiquid markets. For this reason some analysts and policy implementers believe that financial meltdown is as a result excessively lax in supervision by appropriate bodies. In short it believed that more and proper regulation is the key to avert future financial meltdown. In contrast to EMH, regulators are to ensure an adequate flow of reliable information to the public and nothing more. Regulators are not telling investors what to do with their investment but rather to provide a uniform playing field for investors.

Financial Difficulties of Financial Institutions Indicate the Market Is Inefficient

It is believed that if the market is efficient companies and institutions should collapse. EMH does not mean investors cannot make big gains on their investment. If it possible to make big gain so is it possible to make big losses. In a competitive capital market, if you take massive risky positions you are bound to lose big no matter how large and venerable the investor is. Market efficiency does not mean there will be no spectacular failures of large banks or investment banks. Market efficiency does not depend on the size of the investor or institution.

LESSONS FROM EMH AND THE FINANCIAL CRISIS

It must be noted that EMH is a theory and not a fact and that it is an abstraction from reality. For now there is no theory which can totally determine our thoughts or our actions. We would be disappointed if we take EMH literally. They are ways of implementing the basic ideas in a theory, using more detailed and more specific assumptions that adapt the theory for particular purposes. They cannot and should not be taken literally. For instance, the Capital Asset Pricing Model takes the basic concept of correct pricing and adds a number of assumptions about return distributions to come up with a more specific and implementable pricing model. It is therefore less robust than the basic idea of correct pricing. People who take models literally are in for a very big disappointment. No theory can explain everything.

It must also be noted here that theoretically, EMH has many obvious limitations. The most important of these limitations stem from the fact that EMH makes no statements whatsoever about the “supply side” of the information market. That is about how much information is available, whether it comes from accounting reports or statements by managers or government statistical releases, what its reliability is, how continuous it is, the frequency of extreme events, and so forth. The theory addresses only the demand side of the market. The EMH says only that, given the supply of information, investors will trade on it until in equilibrium there are no further gains from trading. Consequently, the EMH is silent about the shapes of return distributions and how they evolve over time. An almost exclusive focus on the demand side is perhaps the single biggest weakness of modern financial economics, generally.

In addition to these limitations of EMH that stem from ignoring the supply side of the information, there are number of others worth noting:

- In reality, investor has different information and beliefs but is modeled in the EMH as an objective commodity that has the same meaning for all investors
- Information processing is assumed in the EMH to be costless, and hence information is incorporated into prices immediately and exactly. Cost of information could be costless but the cost of processing information cannot be costless and it is an important element in cost of information. While it seems reasonable to assume that

the cost to investors of acquiring public information is negligible, information processing (or interpretation) costs are an entirely different matter

- Market efficiency does not clearly explain the role of transaction cost. The EMH assumes the markets themselves are costless to operate. Generally speaking, stock markets are paradigm examples of low-cost, high-volume markets, but they are not entirely without costs. The issue is that if there are pricing errors that are not eliminated because they are smaller than the transactions costs of exploiting them, is the market judged to be efficient or inefficient
- Similarly, the EMH implicitly assumes continuous trading, and hence ignores liquidity effects. There is evidence that illiquidity is a “priced” factor, which is, higher returns compensate for lower liquidity. Few would take the fact that markets are closed on weekends or overnight as a serious violation of market efficiency
- The EMH also is silent on the issue of investor taxes. In reality, many investors pay taxes on dividends and capital gains, with some offsets for capital losses. The effects of investor taxation on security prices and expected returns are potentially large, but not well understood.

We could conclude from the above that the EMH adopts a simplified view of markets and that should not be translated to mean that EMH is cause of financial meltdown.

CONCLUSION: LESSONS FOR DEVELOPING NATIONS

One of the important lessons for Ghana from the global financial crisis is that the world is more complex than many thought, and certainly is more complex than most pricing models used in practice. Did the simplicity of the models employed by researchers, from 1970 Fama’s formulation of EMH through to specific pricing models, lure people into thinking that the EMH meant the same things as the models? That is not true. One can’t blame a theory for people misusing it. It is a means of ensuring efficient allocation of scarce resources.

It must be noted here that efficiency of the market correlate positively with the performance of the market. Research has proved that due to the low correlation that developing economies have with developed economies, African stock markets are seen to be providing investors the benefits of portfolio diversification (Harvey, 1995). If this finding is anything to go by one should capitalize on any bubble burst in the developed securities markets to market the securities markets of the emerging markets. This is not to say developing countries should be working for global crisis to occur but they should make good use when they occur to bridge the gap between the developed and developing. It should also be noted here that total collapse of global financial market will also be a big problem for developing countries like Ghana. A prolong crisis will also have negative effect on developing countries as well. Global financial crisis are to be interpreted as an indication of the need for investors to equally pay attention to investments in developing countries if they want to reduce their risk.

Proper functioning of the financial market is crucial to economic growth and development. This is because if the securities markets are efficient, scarce resources in Africa, in particular Ghana would be allocated to where they are needed most.

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