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Effect of Risk Exposures to Credit and Asset on the Insurance Industry: a Critique

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Abstract

The title of the study is "Effect of Risk Exposures to Credit and Asset on the Insurance Industry: A Critique." The study's objectives are to critically examine the effect of credit and asset risk exposures on the insurance industry and to proffer recommendations that will tremendously reduce the effect of the risk exposures on the industry. To achieve these objectives, the methodology of using an opposite theoretical framework couched in the modern theory of financial intermediation was adopted. This was done against the backdrop of the review of relevant empirical and theoretical literature. The study found that the effect of the exposures to credit and asset risks on the insurance industry was problematic because of losses on stocks, bond market and reduced demand for insurance products. It also found that the exposures had the prospects of strengthening risk management and enforcing transparency, market and discipline in the industry. These findings imply that for the industry the exposures to the risks are both a setback and an encouragement to shape up. They also implied that risk governance framework needs to be put in place to mitigate exposures and prevent industrial collapse. In conclusion, the study noted that the effect of the exposures to credit and asset risks on the industry was both negative and positive, highlighting certain problems and prospects of the industry. The study proffered pragmatic recommendations. It urged the managers of the insurance companies to endeavour to buy shares or stocks of companies that are not only stable financially, but are also well-managed and ethical. Furthermore, it urged the regulatory authorities like the NAICOM in Nigeria or Solvency II in EU to ensure the strengthening of risk management practices and/or risk governance practices in the industry.

Keywords: *Risk Exposures, Credit, Asset, Insurance industry*

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Background to the Study

Although the insurance industry is a lucrative human contraption designed to mitigate risks or risk exposures of people and their organizations, it is a risky business which is subject to its own peculiar risks or risks exposures (Easey, 2013: 35). Risks can take many forms. They may be in the shape of physical hazard to our equipment. Furthermore, they may be in the shape of technological failure we have precipitated or unexpected technological success for a competition with a new product (innovation). Risks can arise from the impact of political or social change..

There have been many different interpretation of the word "risk". Be that as it may, in talking about risk, we are making reference to the future and the key feature of our effectiveness as businessmen is our ability to contend with risk. Risks are not only commonplace in business. In other areas such as health, public works and finance, risks abound. In the financial world, risk is the probability that an investment's actual return will be different than expected (Wikipedia, 2015; 3). This includes the possibility of losing some or all the original investment. Some regard a calculation of the standard deviation of the historical returns or average returns of a specific investment as providing some historical measure of risk (Bickelhaupt, 2008: 89).

Interesting enough, in the same financial world, insurance is helping to mitigate the financial risks described above. In the society at large, insurance is helping to reduce or eliminate risks for individuals and business organizations through transfer of risks to the professional risks bearer (Oni, 2012: 27). Thus, insurance device reduces the aggregate amount of risk in the society by substituting certain costs for uncertain losses. The costs are assessed on the basis of predictions made through the use of his law of large numbers.

As a result of the following, economists have defined insurance as an economic device for reducing or eliminating risks through the process of combining a sufficient number of homogeneous exposure into a group in order to make the losses predictable for a group as a whole (Low, 2009: 56).

Statement of Problem

Credit and asset risk pose great challenges to the insurance industry. The industry comprises of companies that strive to maximize their profits. Thus, they seek and earn premium; and frequently make investments for the purpose of earning income. In a similar vein, Mehr and Comack (2013: 18) stressed that insurance companies make money in two ways: through underwriting, the process by which insurers select the risk to insure and decide how much in premiums to charge for accepting those risks and by investing the premiums they collect from insured parties.

These ways of making money are fraught with risks, especially when the premium collected are invested in shares, stocks and other instruments that are subject to the volatility of the dynamic market environment. These financial assets (like the shares) can dip in value as it has been happening at the Nigerian Stock Exchange lately, causing the investing insurance companies to lose money. In addition, some of the insured or clients do not pay their premiums as and when due for reasons of financial incapacity. These exposures to credit and

asset risks are dangerous and can cripple the financial system, if care is not taken. This study is designed to examine critically the effect of credit and asset risk exposures on the insurance industry and proffer solutions that will forestall the collapse of the entire industry.

Objectives of the Study

The objectives, which serve as the purpose of this study are: to examine critically the effect of credit and risk exposures in the insurance industry; to undertake a review of the empirical and theoretical literature on risk exposures; and to proffer recommendations that will tremendously reduce the effect of the risk exposures to credit and asset risks in the insurance industry.

Significance of the Study

Insurance companies that make up the insurance industry are very important in stabilizing the economy. They help private and even government organizations to eliminate or reduce risks, which can hinder their growth and survival. Studying such institutions is, therefore, a welcome development as it would enable their development. Importantly, any study like this one that will investigate their capacity to handle the risks they face, namely, credit and asset risks, is going to strengthen them.

The study also has significance from the theoretical and empirical perspectives. It will deepen the theory of risk management in the financial sector of the economy by virtue of its peculiar findings. The suggestions the study will proffer will help make insurance companies stay afloat by managing its credit/asset risks properly. This study will be invaluable to management experts, economists, financial experts, insurance theorist/practitioners and decision theorists, among others.

Literature Review

Empirical Review

In the last decade, some studies have attempted to highlight the various types of risks the insurance industry is exposed to. The studies stemmed from the fact that insurance companies were increasingly exposed to diverse risks which were affecting their bottom line. In extreme condition, unmitigated risk had led to bankruptcy, a case in point being the 2001 bankruptcy of Australia's second largest general insurance company, HIH (Magee, Johnson and Park 2014: 56)

The Center for the Study of Financial Innovation (2013) conducted a study whose aim was to determine the most critical economic, financial and operational risks facing insurance companies worldwide and in the USA. The study found that the three most critical risks facing insurance companies worldwide were regulation, investment performance and macroeconomic environment. In the USA, the three most critical risks facing insurance companies were natural catastrophes, regulation and quality of management.

Magee, Johnson and Park (2014) used the fixed-effects approach to analyze the relationship between risk governance and risk performance measures for a global sample of 107 insurance companies from 2004 to 2012. They found that in general, in 2008, firms with a higher risk governance index had lower tail risk and lower expected default frequency.

In her study of a Nigerian insurance company, Niger Insurance Plc, Mfon (2012) examined the impact of credit and asset risks on it. The study found that the company's exposure to credit and asset risks was caused by premium pay defaults and market changes/poor management of acquired equities.

Theoretical Framework

The theoretical plane on which this study lies is the modern theory of financial intermediation developed by Merton and Bodie (1994: 45). The theory encompasses the traditional theory and the changes in the financial environment. It emphasizes six core functions of insurance which are to include: provision of means for clearing and settling payments to facilitate exchange of goods and services; provision of mechanism for polling resources; resources allocation; risk management; provision of price information to help in coordinating decentralized decision making in various sectors of the economy and provision of means to tackle the problem of moral hazard, physical hazard and information asymmetry.

Theoretical Review

The modern study of risk and its effects can be traced to Markowitz's seminal work on portfolio selection (Lileo, 2013). Markowitz made the observation that one should care about risk as well as returns, and placed the study of risk at the center stage in the new field of Financial Economics.

According to Bickelhaupt (2008), the theory of management of risk and its effects has developed tremendously over the past two decades. From the theory, two dimensions have arisen, namely, risk measurement and the practice of risk management. Their obvious differences notwithstanding, they indicate instruments that firms use to mitigate the effects of possible adverse events (Liedtke, 2010).

Financial risk is not a monolithic entity. In fact the classic view of risk categorizes it into several broad types: market credit, operational, liquidity, legal and regulatory (Eassey, 2014). They show that risk exposures to humans and organizations are many. The insurance industry is not free from risk exposures. Brunley (2014) asserted that insurance companies were exposed to three main types of risk which were payout risk, legal risk and market risk. Furthermore, he insisted that the risks could affect the liquidity assets, fiscal regimes and working capital of insurance companies.

Concepts of Risk and Insurance

Risk is ubiquitous in the world and is generally considered a burden (Darity, 2008). In the theoretical literature of Finance, Insurance and Risk Management, there is a general lack of agreement about the actual definition of risk. According to Darity (2008), the following are some of the most commonly used definitions: risk is hazard or the chance of a loss; risk is the possibility of a loss; risk is an uncertainty; risk is the possibility of an outcome different from the expected; and risk is the divergence of actual from the expected result

The definitions above do not all mean the same thing. That compounded the issue of properly defining the term. Unugbro (1998) and Baranoff and Flick (2013) have attempted a definition which numerous Risk Management academics and practitioners consider interesting.

According to them, risk is the possibility of an adverse deviation from a desired outcome that is expected. Unugbro (1989) further stated that since an adverse deviation from the desired outcome may be viewed as a loss, we could also define risk as the possibility of a loss.

It must be stressed at this point that in the insurance industry, the term "exposure" is used to describe the enterprise, property, person, or activity facing a potential loss. So, a house built on the River Niger extensive plain in Delta State is called an "exposure unit" for the potentiality of loss due to intense flood. Risk exposure is really the amount of risk a business or an investor has taken on in a particular investment or a portfolio; or alternatively it is the extent a business could be affected by certain factors that have a negative impact on earnings (Financial Times, 2013).

According to Liedtke (2010), insurance is a transaction that transfers a specified risk to another party for a fee, called a "premium". In return, the insurer provides the insured with a promise of indemnification (insurance component for damages) should the specified event occur. The specified events vary widely and comprise the different lines of insurance industry: marine, property, vehicle, liability, life and health, but the basic structure is the same. The amount of indemnification may be event-dependent (small of large fire) or fixed (life). In life insurance, the events specified are either death or longevity. The industry has grown to one of the worlds largest and in the 21st century comprises a ubiquitous and central component of life in developed nations with written premiums surpassing $3.4 trillion (Darity, 2008).

Risk Exposures to Credit and Asset

The insurance industry is not immune to risks. Like all the other industries in the world, it is exposed to varied forms of risks, from the routine to the catastrophic and from the well known to the unknown. Concurring, Magee, Johnson and Park (2014) and Brurnley (2014) posited that the insurance industry was exposed to unique risks. Magee et al pointed out that the industry was exposed to underwriting, business conduct, reputational and operating risks. Brurnle (2014) highlighted the following as the main risks faced by the industry: payout risk, also known as claim risk; market risk, which relates to market dynamics; and legal risks, precipitated by government policies.

Under the subtitle, "Enterprise Risks," Baranoff and Markson (2014) identified three key enterprise risks insurance companies were exposed to. They are asset risk, credit/product risk and operational risk. In their books, "Risk and Insurance" and "Risk management", Hellwig (2009) and Mfon (2012) respectively contended that credit and asset risks are substantially different. To them, credit risk is an investor's risk of loss arising from a borrower who does not make payments as promised. Such an event is called default. Another term for credit risk is default risk. They also referred to asset risk as the risk related to market changes or poor investment performance of a financial asset (e.g shares, options, futures, currency). It is also known as investment risk. .

Brurnley (2014) has posited that as regards credit risks, investor loses include lost principal and increased collection costs. He also stated that these losses arise in a number of circumstances such as: a business or government bond issuer does not make a payment on a coupon or principal payment when due; and an insolvent insurance company does not pay a policy obligation;

Significant resources and sophisticated programs are used to analyze and manage risk (Bluhn, Funa and Bale, 2002). Some companies run a credit risk department whose job is to assess the financial health of their customers and extend credit (or not) accordingly. They may use in-house program to advice on avoiding, reducing and transferring risk. They also use third-party-provided intelligence.

There are two forms of credit risks that are worthy of mention in this review: Sovereign risk and counterparty risk. The former is the risk of government becoming unwilling or unable to meet its loan liabilities or reneging on loan it guarantees (Wikipedia, 2015). Counterparty risk is that risk that occurs when an organization does not pay out on a bond, credit derivative, credit insurance contract or other trade or transaction when it is supposed to (Dickson, 2012).

From the foregoing, it is obvious that risk exposures to credit and asset have noteworthy effect on the insurance industry. In the next two sections of the paper, the effect is examined.

Problems and Prospects

Problems

A critical examination of the effect of the credit and asset risk exposures on the insurance industry is done from two perspectives. The first is the perspective of being problematic and the second is the perspective of having prospects.

In general, the insurance industry suffers badly sometimes from tremendous credit and asset risk exposures. Insurers are among the largest institutional investors on the capital market and thus negative development regarding asset value is almost unavoidable. On the liability side, insurers can be affected through insurance in the credit market, by directors and officers (D&O) as well as errors and omissions insurance, or by a reinsurers' default. Furthermore, in a situation of economic downturn, insurers will suffer a decline in demand for insurance products (Gal Research Organization Forum, 2009: 65)

On the international scene, a combination of widespread financial crisis and specific credit and asset risk exposures between 2007 and 2009 had effect on three notable companies in the industry. There were the government bailout of the AIG, the write-downs at Swiss Re (due to reinsurance problems in credit portfolios), and the insolvency of Yamato Life Insurance (due to severe risk management failures in asset management). According to Harrington and Moses (2009: 34), three events have different characteristics and illustrate that insurers' balance sheets were affected by different aspects of the crisis. These cases thus show that an adverse scenario can include a combination of negative developments on both the asset side and the liability side.

But the different nature of these three events also reveals that they had only a limited systematic impact at the global industry level. Only some insurers were directly affected from investments in structured credit products, but most felt an indirect impact from the losses in many investments during the recent capital market plunge. That these effects on asset management can produce a threatening economic situation is illustrated by the Japanese life insurer Yamato Life Insurance. This company experienced losses in the subprime area, and losses due to a high investment in stocks (lLiedtke, 2010: 34).

One advantage of the Nigerian insurance industry in this context is that traditionally its asset allocation is conservative and it invests a relatively low portion of assets in stocks (Oni, 2007:54). Therefore, it was not too adversely affected by the 2008-2010 stock market set back. It appears that insurers had learned to be very cautious unlike the bankers.

The liability side of the insurance industry can also be affected by the credit and asset risk exposures, but less severely, with effects largely dependent on the insurer's line of business. If insurers are engaged in credit markets, they could suffer a negative impact due to the increase in credit risk, which was what happened at Swiss Re with a depreciation of US$ 1.1 billion in November 2007. The loss resulted from two credit-default swaps (CDS) designed to provide protection for a client against a fall in the value of a mortgage backed securities portfolio (Campbell, 2007: 32).

Overall, insurers are exposed to credit and asset risks. Such exposures affect assets negatively (because of losses on stocks and bond market) and their liabilities negatively (because of increasing insurance credit market, reinsurance, directors and off ricers claims and reduced demand for insurance product). These negative effects imply that risk management and supervision are not strong as they should be. The effect of credit and asset risk exposures on the insurance industry is not only unsavory or negative. There is a flip side to it all. The next section makes this clear.

Prospects

The pervasive contention that the effect of credit and asset risk exposures on the insurance industry is only problematic is erroneous. This is because the effect of credit and asset risk exposures brings to the fore certain prospects for the insurance industry. The prospects are in the areas of strengthening risk management and supervision, needing easy to use and understandable risk management, sticking to the principles instead of rules, and needing transparency and market discipline. These prospects are discussed below;

Identifying, measuring, and valuing risk is at the core of the insurer business model and should not be delegated to a third party. Insurers and regulators should thus beware of substituting their own due diligence by a global rating, as rating agencies' methodologies are not really transparent (Cummins, 1988: 76). In contrast to European Union (EU) Solvency I, ratings are essential in the Swiss solvency test (SST) and under Solvency II, for example, for deriving the credit risk of the insurer's bond portfolio and for determining the default risk of reinsurance exposure, and regulators need to review these rules (Cal Research Organization Forum, 2009).

In light of the challenging market environment, strong enterprise risk management is a crucial element in maintaining financial strength and ensuring a safe insurance industry. Risk management must be proactive, independent, and have sufficient power and authority. Independence is important because of possible conflicts of interest, including those between the underwriting sector, the sales department, and risk managers. It will also employ agency theory to hold risk managers accountable for the behavior of insurers on behalf of potential crisis victims. Risk management must play a leading role in each insurance company, which could be accomplished by transferring the concept of “responsible actuary” to that of an “appointed risk manager.

The interaction between risk models, the risk management process, and managerial decisions can be improved. The best risk models are useless if the results are not understood by the people who make decisions. A serious problem in this context is the communication gap between risk managers and decision-makers on the executive board (Dickson, 2012). Risk managers and actuaries develop and implement risk models and it is likely that most of them are aware of the underlying assumptions and limitations of the model when interpreting its results. However, the executive board may not have the same degree of competence in this particular area or the time to develop it. Thus, they require easy to use and understandable statistics.

However, due to the inherent problems of models regardless of how well presented, their results should not be the sole basis for management decisions. Model results are best employed as supporting, either for or against, different strategies. How the statistic output of a risk model is communicated to top management is crucial. Here, we believe that the communication skills of risk managers and actuaries can be improved, for example, by using more intuitive forms of communication, such as graphs and diagrams, instead of long lists of numbers and complicated tables and equations.

Communication is another area that might benefit from the concept of an "appointed risk manager" with independence, a clear function, and reporting requirements to the executive board. In this respect, the credit and asset risk exposures make a strong argument for improving the education of model users and decision-makers.

These days, regulations from NAICOM in the case of Nigeria and Solvency II in the case of European Union (EU) focus on an enterprise risk management approach in order to obtain equity capital standards (Fromm and Windels, 2009). The steps toward more principle-based regulation spelt by them are a move in the right direction for reducing the effects of the credit and asset risk exposures. The idea behind principle-based regulation is that the regulator provides only a set of principles to follow, but does not prescribe exactly how to implement the principles.

Generally speaking, a principle-based approach is more flexible and better able to capture an individual risk profile, for example, by using insurer-specific model parameters instead of ones predetermined by the regulator (Harrington and Moses, 2009). A principle-based approach may also trigger innovation, such as when insurers need to develop their own risk models. Furthermore, the principle-based approach provides the insurer with the opportunity to integrate regulatory requirements into its risk management process.. Another advantage of using principles instead of strict rules is that doing so has the potential to reduce the danger of similar behaviour and, in turn, systemic risk within the market.

Good and effective regulations call for market transparency and disclosure requirements aimed at promoting market discipline. It is believed that market discipline, that is, the influence of customers, brokers, rating agencies, and investors on firm behaviour could be a big step toward creating a strong and solvent insurance industry. Impediments to market discipline have been an important flaw where there is excessive credit and asset risk exposure (Loffler, 2014). Transparency and disclosure requirements are closely connected to

monitoring. The monitoring instance is the public (i.e., all market participants) in this case and the expectation is that more monitoring will limit executive discretion and decrease the opportunity for excess risk taking (Harrington and Moses, 2009). Often, the issue of credit and asset risk exposures reveals the necessity of taking a closer look at transparency in financial services markets (Low, 2009) .

Conclusion

The study examined critically the effect of exposures to credit and asset risks on the insurance industry. Credit and asset risk exposures are two challenges of the insurance industry. Circumstances that throw them up are internal and external economic factors. Their effect on the industry is both negative and positive, indicating that it highlights certain problems and prospects of the industry.

Recommendations

Based on the findings of the study, recommendations are made that

1. To proffer solutions to the problems associated with the exposures.
2. To curb the negative effect of the exposures, the companies in the industry should take adequate measures that prevent the exposures or mitigate them.
3. The managers of the companies should ensure that credit and asset risks do not arise annually by steering clear of circumstances that precipitate or encourage them.
4. They should also endeavor to buy shares or stocks of companies that are not only stable financially, but are also well-managed and ethical.
5. Individuals and corporate organizations who obtain insurance policies of the insurance companies must be made to strictly abide by the terms of premium payments through invocation of penalties.
6. Furthermore, the regulatory authorities like the NAICOM in Nigeria or Solvency II in EU must ensure the strengthening of risk management practices and/or risk governance practices in the industry.

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