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DISCUSSION ON POLICY REFORMS FOR SYSTEMATIC RISK, FINANCIAL STABILITY AND SHADOW BANKING

A TRIANGULAR THEORETICAL REVIEW

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Abstract

The prime objective of this paper is to provide a theoretical review on systematic risk, role of shadow banking and governance in financial stability, linkage of banking concentration, non interest income and systematic risk factor. Overall study is to be carried for a brief review on these factors. Some improvement is required regarding the regulations over the financial sectors and remodeling of systematic risk. A brief discussion has been done over these issues. Discussion over capital adequacy related standards and also some new prominence on liquidity standards can broaden the view of this theoretical debate

Key words: Systematic risk, Shadow banking, financial stability, banking governance, capital adequacy, remodeling, financial sector

INTRODUCTION

The outcomes of global financial crisis in last decade have made it significant to define better and appropriate regulations and set of laws for supervision and appropriate regulations for financial institutions. Among the several characteristic of these set of standards, measuring and remodeling of inherent or systematic risk and definition of methodical reforms at global level have got significant importance. In this regard the key focus is on various institutions like European Systematic Risk Board (ESRB) and in USA, Financial Stability Oversight Council (FSOVC) etc.

In this paper our key objective is to review various policy reforms, which are significantly designed and implemented in order to create symmetry in terms of responses towards the outcomes of systematic risk specifically just after the time phase of worldwide financial crisis. In recent years, disintegration and operational failure of various financial institutions like banks has created adverse and obverse superficiality challenges for Governments at different regions. Such trends are increasing the obligations and concentration in manipulative way for several financial institutions in risk management practices (RMP) towards the cost linked up with the financial insecurity and instability. For the better management of financial cycle of these institutions there is emerging need of cost effective approaches at macro level. Appropriate remodeling of systematic risk and relevant restructuring is very much complicated assignment which cannot be disregarded.

Our mature discussion will be towards those financial institutions which have remarkable persuade over the constancy of financial system. No doubt our discussion begins with the non-diversifiable risk; such institutions put their leverage upon the whole financial system through their relative size in the industry. We have presented a detail discussion on contemporary measures of inherent Risk, several hurdles in implementing these procedures across various markets and regions. Critical discussion also includes the framework of prudent, efficient and cost effective framework of financial cycle with its efficacy. These factors can be considered as nourish for the uncertainty and chance of loss, intrinsically linked up with significant financial institutions.

We will also make understandable debate regarding how the key requirements regarding the adequacy of capital have been changes over a period of time. Among the several challenges the regulations of such requirements is among the core issues to be observed. Besides this we also put our focus on the banking sector regulation by considering the Basel I, Basel II and Basel III framework. Based on this framework overall paper is structured as follows. Section 02 defines the core concept of Risk from non-diversification so called the systematic Risk, its present significant measures, specifically risk factor in gigantic banking institutions which are the major role player in overall financial stability or volatility in the performance of overall financial system. In next session we have provided theoretical framework on shadow banking and financial stability and linkage of banking concentration, non interest income and systematic risk factor.

MEASURING NON-DIVERSIFIABLE RISK / SYSTEMATIC RISK/ INHERENT RISK

Ten (2001) has defined the concept of systematic risk as "The risk that an event will trigger a loss of economic value or confidence in, and attendant increases in uncertainly [sic] about, a substantial portion of the financial system that is serious enough to quite probably have significant adverse effects on the real economy. Systemic risk events can be sudden and unexpected, or the likelihood of their occurrence can build up through time in the absence of appropriate policy responses. The adverse real economic effects from systemic problems are generally seen as arising from disruptions to the payment system, to credit flows, and from the destruction of asset values".

While measuring the value of beta coefficient which is the relative measure of systematic risk in any of the portfolio, 03 significant issues are very much crucial to be addressed. The first one is linked up with the identification of key drivers which are primarily associated with it. Contemporary studies have presented individual measures by focusing on how in return the downturn in financial institutions stock value. Researchers have also presented the theoretical foundation in this regard. In a downturn market trend when there is fall down in the value of capital, which will move them towards the ultimate disaster unless potential investors from the market play their significant role. In most of the cases, Priorities of the govt. is based upon the notion of cost minimization for the taxpayer which is a connected with size, financial leverage and future predictable losses of equity investment (Acharya & Richardson, 2009).

Besides with the above stated component the estimation of loss value in equity during the time phase of financial crisis is very much complex to measure but through some statistical and econometrical techniques and procedures. Various models have been developed for this purpose(Acharya, Engle, & Richardson, 2012) has provided a solution through a historical estimator and (Brownlees & Engle, 2012) have proposed a bivariate tool by using the asymmetric Generalized Autoregressive Conditional Hetroskedasticity GARCH process. These models have demonstrated significant outcomes within the region of USA, but it seems to be in modified form if implementation is required in some other market. In the study of (Acharya et al., 2012) they have provided documentary evidence by considering the US economy for most affected banking firms during the period of crisis (2007-2008). Their significant findings is now been extended to European and Asian countries. Determination of various signals of systematic risk in other regions after USA, while controlling the effect of structural difference in economy, formation of financial market and related regulations is one of confront for researchers. Researchers like (Griffin, Kelly, & Nardari, 2010) have stated the fact that price of stock in promising financial markets may in return imitates less particular information.

Remarkable efforts and ongoing exertion has been under way in order to identify and measure the contribution of institutions towards the risk measurement practices specifically from Systematic risk perspective. In this matter Contribution approach of is a good deal to recognize key attributes of Systematic Risk (Tarashev, Borio, & Tsatsaronis, 2010). Key assumption behind this idea is to define the institutional marginal involvement in the general level of systematic risk. Among the several, key factors are the relative size of the institution, its likelihood to be default in the coming time period and experience towards the various other factors associated with the risk(Tarashev et al., 2010). A symmetric research framework has been developed by (Drehmann & Tarashev, 2013) comparatively to the work of (Tarashev et al., 2010). For this matter they have considered the banking networks for generalized contribution approach known as GCA.

Shadow Banking and Financial Stability

The role of shadow banking in financial stability has been addressed in numerous studies. Its role in worldwide financial crisis of 2007, has been never ignored (Pozsar, Adrian, Ashcraft, & Boesky, 2010; Tucker, 2010). Among the several other observations it is very much significant to understand that financial mediators in overall shadow banking system are subject to run. As opposed to the findings of (Klapper & Vittas, 2004) there is conflict of outcomes in assets composition of Money Market Funds MMFs due to lack of transparency. Investors in the European Money markets are unable to differentiate in Money Market Funds based on the quality of their assets. Several channels and intermediaries have been formulated likewise in terms of reciprocity or interconnection (Rochet & Tirole, 1996) uncertainty at macro level (Aiyagari, 1988; Chari & Jagannathan, 1988)and liquidity spirals (Brunnermeier & Pedersen, 2009).

In their study (Borio & Zhu, 2012) have stated the fact that it is probably feasible to form those key indicators which can be very much beneficial for recognition of future banking risk crisis. These key indicators are primarily linked up with excessive private sector firms. The Scenario in both US and European economies is entirely different to each other in terms of financial crisis determinants. In US economy these financial crisis has a major derivative in financial distress due to huge correlation assets (Acharya & Richardson, 2009), while in European Economy this is due to shortage of liquidity in banks (Diamond & Rajan, 2005).

Investigation on key determinants of systematic risk is going but it is quite necessitate for ensuring that these measures are concentrated in terms of variety of channels which eventually reasoned for visitation in financial institutions.

Governance and Financial Stability

To mitigate the effect of systemic risk in financial markets, worldwide crisis of 2007 has encouraged various researchers and key policy makers to define a framework which is quite significant in this regard. For this purpose the banking governance is very much important. Several attempts have been made for restructuring and reformulation of banking operations key columns; competition, risk resolution, auditing and some valuation policy. Unfortunately less attention has been made towards the linkage of banking governance and systematic risk. Ellis, Haldane, and Moshirian (2014) have provided four fundamental solutions to fortify the banking governance which includes; enhancement of regulation for capital, reformation of compensation structure for managers, realignment of company law (extension of control rights from shareholders to other stakeholders) and final one is focus on creation and implementation of declaration regimes for credible prospect.

Financial market analysts have also put their focus on non-interest income and funding in the form of non-deposit. This trend caused a change in statement of financial position of business firm and similar analysis has been done by who have examined 1334 banking firms in 101 states by focusing on financial crisis of 2007 also. Subjective outcomes in this matter have stated the fact that contemporary financial crisis are associated with large investment units in banking sector like Citibank (Arnold, Borio, Ellis, & Moshirian, 2012) which is primarily based on financial theories that probability of being failure augmented as banking firms expand their operational activities into other business units(Boyd, Chang, & Smith, 1998).

LINKAGES OF BANKING CONCENTRATION, NON-INTEREST INCOME AND SYSTEMATIC RISK FACTOR

Key area of research has also put significant spotlight on the approach of competition in banking firms by considering the size of the firm, nature of operational activities being performed and governance mechanism but need of time is to analyze more upon how these factors will persuade the systematic level of risk (Arnold et al., 2012). Meanwhile it is also discussed that more concentration on banking operations will definitely permit these firms to deal with high interest earnings, lead to the higher risk profile for borrowers and accordingly to insolvency position(Boyd & De Nicolo, 2005). Comparatively the research work have pointed out that banking firms who have more concentration proffer more stability. Investigation has also been done in the study of (Engle, 2012) by focusing on interstate concentration of banks and performed business activities. They have found an inverse outcome of concentration and noninterest income for banking firms but this was just before the financial crisis of 2007. Activities which are connected with non interest income enhanced the risk adjusted financial outcomes up to 2007. However after global financial crisis such income seems to be disastrous in providing heterogeneous rewards just because of more exposition for systematic risk.

Just few time back from financial crisis of 2007, (DeYoung & Roland, 2001; Stiroh, 2004) have analyzed the dormant costs linked up with the diversification of key products. They stated the fact that earning volatility in US is positively related to non-interest income activities. Besides this it is also accentuated that diversification of products don’t lead to the risk reduction because of the volatility in non interest income, its fixed cost and earning fluctuations(DeYoung & Roland, 2001). Dealing with the concept of diversification of the banking products and risks outside US, (Lepetit, Nys, Rous, & Tarazi, 2008) have conducted their work on European banking firms from 1996 to 2002. Their key findings have demonstrated that extension of earnings in the form of non interest activities have a direct impact on risk enhancement, mainly because of commission and fee activities instead of trading bustles.

Likewise the other regions banking risk and non interest income activities have also been investigating in Asian countries like Indonesia (Hidayat, Kakinaka, & Miyamoto, 2012). By considering product diversification and bank risk over the time period of 2002 to 2008, they have stated that bank risk with respect to diversification is highly depending on the assets size. In particular, the degree of production diversification and risk has negative linkage with small banking firms and positive for those who have large size.

Nontraditional activities of banks and efficiency estimation through these actions have also been addressed in previous decade. Based upon the economic conditions, infrastructure, geographical regimes and other country specific factors (Lozano-Vivas & Pasiouras, 2010) have done this job. The inference of bank level efficiency has been done through a sample size of 752 commercial banks in 87 countries worldwide. Both cost and profit estimation by using traditional function which considers loans, and earnings assets as outputs.

CONCLUSION

Current paper has provided a theoretical review in a comprehensive way on systematic risk and its measurement, shadow banking and their role in financial stability, governance and financial stability, linkage of banking concentration, non interest income and systematic risk factors. From a brief theoretical point of view we have addressed these factors in order to enlighten their potential outcomes for some future decisions. In order to control the effect of systemic risk on financial institutions there is a great of proper regulations and policy reforms.

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