

12-2011

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Recommended Citation

Ekpu, V. (2011). Rational for financial system regulation and supervision: a global perspective. CBN Bullion, 35(4), 18-24.

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RATIONALE FOR FINANCIAL SYSTEM REGULATION AND SUPERVISION: A GLOBAL PERSPECTIVE



Victor Ekpu

INTRODUCTION

The financial system of any economy consists of financial intermediaries (banks, and non-banks), financial markets (e.g. money and capital markets), financial instruments (savings, loans and securities) and the users of financial services (households, firms, governments, investors, traders, and other market participants). The financial system plays a key role in the economy by facilitating financial intermediation, which involves the mobilization and allocation of resources for productive investment. A stable financial system is also important for the efficient functioning of the payments system, thereby accelerating the process of financial deepening between the financial and real sectors of the economy.

Sometimes, however, when the financial system fails or malfunctions, it could pose severe problems for the whole economy.

Some economists, on the one hand, argue that stricter financial regulation and supervision can prevent the occurrence of market failures (e.g. Diamond and Dybvig, 1983; Stiglitz, 1994) and promote economic development (e.g. White, 2005) while others advocate the notion of self-regulation of markets, i.e. allowing the invisible forces of demand and supply to regulate markets (e.g. Stigler, 1970). Many believe that the occurrence of the recent financial crisis was premised on the latter view of 'light hand' regulation of markets, a view claimed to have been supported by the ex-Fed Chairman, Alan Greenspan which led to the lowering of interest rates in U.S below sustainable levels. Those in favour of regulation and supervision present a "public-interest" argument while those against regulation present a "private interest" view. The Public-Interest view argues that the presence of asymmetric information in financial markets, which lead to market failures, justifies the role of government as the ultimate insurer of the financial system. Market failures disrupt capital formation through the financial intermediation role of banks and other financial institutions as mentioned earlier. Contagion theory teaches that the failure of a banking intermediary can spill over to other neighbouring banks thereby threatening the entire financial system (e.g. Diamond and Dybvig, 1983).

The failure of a bank can lead to a loss of capital far in excess of shareholders' investment. It inflicts

a significant social and economic cost on society. These costs include: (i) the fiscal costs of compensating depositors/investors (e.g. deposit insurance protection fund), (ii) the costs of recapitalizing failed banks and (iii) output losses that occur due to overall disruption to the economy. The close up of factories and businesses, and the attendant job losses resulted to collapse of international trade, etc are examples of the spill over effects of a typical financial crisis. There is a view that the frequency and severity of financial crises are increasing; so there is no case for leaving market forces to operate freely. Public tolerance of financial loss is also diminishing.

On the other hand, the private interest view of regulation admits the presence of market failures but contends that the government lacks the incentives and capabilities to ameliorate these market failures. Proponents of this view have viewed regulation as a product, like many other products, which are affected by supply and demand forces (Barth, Caprio and Levine, 2006). Moreover, orthodox economic theory teaches that market forces produce the optimal allocation of resources so that the workings of the market can be deemed efficient. The private interest view has been described as the case of "regulatory capture" or "political capture" (as the case may be) and in this case represents a situation where banking policies are primarily shaped by the private interests of the regulator, private bankers or politicians, rather than by the public interest.

**The views expressed in this paper are those of the author and do not represent the official position of the Central Bank of Nigeria or its Board of Directors.*

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² Regulation sets out the general rules under which officially authorised financial institutions and markets must operate.

³ Supervision entails the monitoring and enforcement of compliance with the provisions of regulation.

For example, the view believes that government regulates banks to facilitate the financing of government expenditures, to channel credit to politically attractive projects at the expense of economically efficient ones. Proponents of this view argue that even when all regulatory apparatuses are present, supervisory powers are limited and often politicised. Thus they support the view of greater reliance on 'market discipline', 'information disclosure', a 'light hand' by the regulatory authorities, and a greater oversight on the regulatory process itself (Shleifer, 2005 cited in Barth et al, 2006). But recent crisis episodes prove this view to be inadequate. The depth and magnitude of the recent global crisis proved that the regulatory approach was lax and ineffective in anticipating shocks.

In essence, the shortcomings of regulation and supervision, notwithstanding, one can argue that because of the special role that financial institutions play in the economy and the economic and social costs to society of their eventual failure, it is obvious that leaving the forces of demand and supply to bear rule will have adverse implications on the economy and the living standards of the nation's citizens. It is on this note that I expound on the various reasons for financial system regulation in section 2. The paper ends in section 3 with some conclusions and policy implications.

2. SO WHY REGULATE THE FINANCIAL SYSTEM?

A vast amount of economic and commercial activities are now being regulated and/or supervised which shows the inability of competition and the

price mechanism to produce socially desirable outcomes. For example, food and drugs must be healthy and safe for consumers; the transport and aviation industries are now subject to stringent safety standards; there are now price controls on many products and services in order to prevent large firms from making huge monopoly profits. So it is obvious that the provision of financial products must follow the same strict regulation. But an argument can be raised here, which is that financial institutions are special and hence demand special regulatory attention. While it is permissible for firms in some of these industries (e.g clothes, food and travel) to go bust if they mismanage their affairs, it might not be socially or even politically acceptable for banks and other financial institutions (e.g insurance firms, pension funds, and investment firms) to become insolvent. There are thus several reasons for regulating the financial services sector:

2.1. The Importance of Financial Intermediation

Financial institutions, especially banks are essential to the efficient functioning of the economy. As mentioned earlier, they play distinct role in the financial intermediation process. Banks issue deposits, originate loans, and provide payment services. By facilitating transactions, mobilising savings and allocating capital across time and space, the financial system contributes to economic performance. Financial institutions provide payment services and a variety of financial products and services that enable the corporate sector and households to cope with economic uncertainties by hedging, pooling, sharing and pricing risks. A stable, efficient

financial sector thus reduces the cost and risk of investment and of producing and trading in goods and services (Herring and Santomero, 1999). In view of these contributions to economic performance, maintaining a healthy financial sector through effective regulation and supervision should be of paramount interest to the central bank and other relevant stakeholders.

2.2. Protecting Consumers and Depositors

A second fundamental rationale for financial regulation is the protection of consumers against the excessive pricing or opportunistic behaviour by providers of financial services or participants in financial markets. According to Mathews and Thompson (2008), consumers lack market power and are prone to exploitation from the monopolistic behaviour of banks. Banks are somewhat able to exploit the information they have about their clients to exercise some monopolistic pricing of financial products. However, the more competitive financial markets are the lesser this degree of exploitation. For example, the strong competition in the banking market can lead to a decline in interest margins. However, the point is that consumers of financial services- especially the unsophisticated ones are unable to evaluate the quality of financial information or services that they contract. Under such circumstances, consumers are vulnerable to adverse selection, the likelihood that a customer will choose an incompetent or dishonest firm for investment or agent for execution of a transaction. They are also vulnerable to moral hazard, the possibility that firms or agents will

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Regulation sets out the general rules under which officially authorised financial institutions and markets must operate. Supervision entails the monitoring and enforcement of compliance with the provisions of regulation.

place their own interests or those of another customer above those of the customer or even engage in fraud. In short, unsophisticated customers are prone to 'incompetence', 'negligence' and 'fraud' (Herring and Santomero, 1999). The strict enforcement of conduct of business rules with appropriate sanctions for misbehaviour can help deter financial institutions from exploiting asymmetric information against unsophisticated customers.

Apart from protecting consumers from the opportunistic behaviour of financial institutions, depositors that are uninformed and unable to monitor banks also require protection. There is a notion that uninsured depositors are likely to run rather than monitor (Ibid). Historically, for example, most bank failures in the US were caused by bank panics. In fact, it was in response to the banking crisis of the Great Depression that the U.S established the Federal Deposit Insurance Corporation (FDIC) in 1933 to assist in providing deposit insurance against loss of owners of small deposits.

Many countries over the years have established similar systems of explicit deposit insurance. The argument that uninsured depositors are likely to cause a bank run is also theoretically motivated. The most influential work in the area of preventing bank runs is the analysis by Diamond and Dybvig, (1983). The model presupposes that, in the case of an undesirable equilibrium, a bank run can precipitate the failure of other supposedly solvent banks because the failure of one bank causes depositors to panic and rush to the bank to withdraw their deposits because they expect other banks to fail. In order to solve this problem, the model proposes the suspension of deposit convertibility (deposit freeze) and

the provision by authorities of a deposit insurance scheme to act as a disincentive to participate in a bankrun.

2.3. Enhancing Efficiency of the Financial System

Apart from protecting consumers from monopolistic pricing, financial regulation also aims at harnessing market forces to enhance the efficiency of the allocation within the financial sector and between the financial sector and the rest of the economy. In the U.S, competition policy and anti-trust enforcement are the key tools for enhancing the efficiency of the financial system. The main emphasis here is to minimise the monopolistic tendencies of banks and the barriers to entry into the financial services industry. One of the characteristics of an efficient banking system is one, which provides quality service to customers at competitive prices. An efficient financial system is also characterised by a reliable payment system, high liquidity and low transaction costs. The purpose of regulation is thus to promote efficiency and competition in the financial system. Efficiency and competition are closely intertwined. An efficient financial system is able to utilise or allocate its investors' resources prudently if it will continue to attract their patronage. Without such competition, individual banks might want to gain higher prices for their products/services or collude with other banks (Spong, 2000). Some firms may want to take undue advantage of the relative ignorance of customers to boost profits.

The purpose of regulation is thus to use appropriate conduct of business rules, disclosure standards and conflicts of interest rules to guard against unwholesome practices and correct perverse

incentives among firms. The efficient operation of the financial markets depend critically on confidence that financial markets and institutions operate according to the rules and procedures that are fair, transparent and place customers' interest first. An efficient financial system will stimulate competition, which also encourages innovation amongst financial institutions and leads to the development of new and better financial services for customers.

2.1. Keeping up with the Pace of Financial Innovation

At the root of financial instability is the drive towards financial innovation by financial institutions and investors. As financial markets develop and expand globally and as new products and instruments evolve daily in line with changes in technology and the globalization of financial services, there have been significant concerns over the ability of regulators and supervisors to keep up with the complexity of products and markets. Banks seek to exploit profitable opportunities by innovating new market instruments and products that would generate substantial returns, yet are highly risky. Regulation and supervision have had to adjust accordingly. The analysis of risk, in particular, and the amount of capital and liquidity necessary to match this new understanding of risk, has developed significantly. For example, the recent global financial crisis which was preceded by the adoption of new business models based on wholesale (non-stable) funding, derivatives trading and securitization of assets have elicited appropriate response by regulators and supervisors. The Basel Committee on Banking Supervision (BCBS) has recently made changes to the Basel II framework, which was deemed to

⁵ See Mathews and Thompson (2008:189-190) for examples.

be procyclical, and micro-prudential focused. The new regulatory framework is now termed the Basel III. Basel III strengthens bank capital requirements and introduces new regulatory requirements on bank liquidity and bank leverage.

In a world of increasing financial innovation, it is challenging for regulation and supervision to effectively prevent the fragility associated with a liberalized (market) system. Financial liberalization often leads to optimism and euphoria. Under such environment, risks are downplayed and incorrectly assessed. Limits on credit expansion or concentration may not be easily enforceable. Its misfortunes, notwithstanding, financial innovation matters for economic growth and allocation of capital. Because of this, it is somewhat difficult and costly to regulate financial innovation (Engelen et al, 2009). If financial innovation cannot be stopped, it can be made less attractive through various measures such as: (i) Product testing – i.e investigating the suitability of financial instruments or products and how they will be used. (ii) Disclosure rules - improving transparency and information exchange in the market. These measures will perhaps assist regulators, investors and other market participants in assessing the risk profile of institutions and their exposures.

2.2. Guarding Against Systemic Risk and Contagion

The systemic risk rationale for prudential regulation and supervision of banks begins from the understanding that banks are

highly leveraged institutions (with an equity-to-asset ratio that is lower than other financial and non-financial firms) and hold portfolios of illiquid assets that are difficult to value. Banks transform short term and liquid demand and savings deposits into the longer term, risky, and illiquid claims on borrowers. Shocks occur in a financial system where there is a breakdown in this maturity transformation upon which banks depend for their profitability. Such shocks that originate from financial institutions' inability to redeem at short notice the deposits that fund longer term illiquid loans can give rise to instability in the financial system. A systemic risk is thus created where the risk of a sudden, unanticipated event in the financial system disrupts the efficient allocation of resources and thus frustrates economic activity. According to a publication by the IMF, FSB and BIS (2009), systemic risk can be defined as the risk of disruption to the provision of financial services (such as credit, payment and insurance services) that arises through the impairment of all or parts of the financial system, and has the potential to create a material adverse effect on the real economy. Macro-prudential policies are aimed at limiting the risk of such disruptions to the provision of financial services to the real economy.

The Bank for International Settlements (BIS) has classified systemic risk into two dimensions: (i) the 'cross-sectional' dimension (or micro-systemic dimension) of systemic risk and (ii) the 'time' dimension (or the macro-systemic dimension). The cross sectional dimension refers to the disruptions that arise from the effect of the

failure or weakness of an individual financial institution on other financial institutions, which potentially disrupts the flow of financial services to the economy at large. According to Nier (2011), this kind of disruption can occur through four channels of contagion: (i) direct exposures and contagion losses at other financial institutions (ii) reliance of other financial institutions on the continued provision of financial services – such as credit and payment services – by the distressed institution (iii) fire-sales of assets by the distressed institution that cause mark-to-market losses at other institutions, and (iv) informational contagion that sparks off a loss of confidence in other institutions. Addressing the cross sectional dimension of systemic risk calls for the calibration of prudential tools with respect to the systemic significance of individual institutions viz-a-viz their contribution to overall risk. For instance, those institutions that pose a greater amount of systemic risk would be subject to tighter standards (Clement, 2010).

The time dimension of systemic risk, on the other hand, refers to disruptions of financial services that arise from the aggregate weakness of the financial sector and its effect on the real economy. This kind of disruption arises when risk is distributed within the financial system at once. It occurs because financial institutions are faced with common exposures or correlated risks, e.g. correlated credit risk, common exposure to market risks – including changes to stock market prices, exchange rates, etc - as well as common exposure to the dry up of liquidity in funding

⁴ This practice is common today in developed financial centres and much less in developing countries where the classic form of commercial banking still prevails. In Nigeria, however, banks have since 2001 adopted the universal banking framework, which allows banking institutions to own other non-bank intermediaries like insurance companies, pension funds, and investment banking subsidiaries. This arrangement created huge transfer and interconnection of risks across these subsidiaries, especially in the capital market segment, which partly accounted for the 2009-banking crisis in Nigeria.

⁵ See Bank for International Settlements (2010) for more on Basel II enhancements (the new Basel III).

⁶ According to the FSA's Turner Report (2009) for the UK banks, product regulation is not required because well-managed firms will not develop products which are excessively risky, and because well informed customers will only choose products which serve their needs.

⁷ Kodres and Narain (2009) suggest that models and valuation techniques used by banks should be disclosed to allow investors better judge the risks of what they are contracting.

markets. Since there are correlations or interconnections across institutions, crystallisation of these risks puts pressure on all or a large proportion of providers of financial services to the economy (Nier, 2011). The time dimension of systemic risk later became known as the 'procyclicality' of the financial system. Addressing procyclicality calls for the prudential framework that induces the build-up of cushions in good times so that they could be drawn down in bad times (i.e. countercyclical capital buffers), thereby acting as stabilisers (Clement, 2010).

2.1. Mitigating Externalities from Financial System Failure

When financial institutions fail and markets dry up, they cannot perform their essential functions of channelling funds to those offering the most productive investment opportunities. Some firms may lose access to credit. Investment spending may suffer in both quality and quantity. If the damage affects the payments system, the shock may also dampen consumption directly. The fear of such outcomes is what motivates policy makers to act. Moreover, there is a significant divergence between the private marginal costs and the social marginal costs of financial system failure. While the private marginal costs of failure (e.g. destroyed shareholder value, lost jobs and damaged reputations) are borne by the shareholders and the employees of the company, the potential external (social marginal) costs far outstrip these private costs in magnitude. In this light therefore, it can be argued that the failure of an institution can lead to a loss of capital far in excess of shareholders' investment. It inflicts a significant social and economic

cost on society. These costs include: (i) the fiscal costs of compensating depositors/investors (e.g. deposit insurance protection fund), (ii) the costs of recapitalizing failed banks and (iii) output losses that occur due to overall disruption to the economy. For example, the close up of factories and businesses, job losses created, collapse in external trade, etc are all spill over effects of a typical financial crisis. In fact, the fiscal costs of banking crises and other costs associated with crisis management over the years, according to a recent crises database hover between 13.3% and 51.1% of GDP, with output losses averaging about 20% of GDP during the first 4 years of crisis (Laeven and Valencia, 2008). Thus unregulated private actions can pose substantial costs to the real economy in many respects.

2.1. Financial Institutions' Access to the Public Safety Net

Commercial banks have access to the central bank's discount window when they face temporary liquidity constraints or the lender of last resort (LOLR) facilities when they are unable to access funds from the interbank market (as the case may be). Nowadays, investment banks and insurance firms (in the U.S for example) have access to the public safety net. Thus, it is imperative for central banks to monitor and supervise how these institutions deploy such funds. As stated earlier, in order to eliminate bank runs and insulate the financial system from adverse shocks, most national governments have instituted deposit insurance schemes. Although, the public safety net has been successful at protecting depositors and preventing bank panics, it also has serious

drawbacks. Because with a safety net, depositors know that they will not suffer losses if a bank fails, they do not have incentives to monitor the bank when they suspect that the bank is taking on too much risk. Consequently, banks with a government safety net have an incentive to take on greater risks, with taxpayers paying the bill if the bank subsequently goes bankrupt. Another similar problem with the public safety net is the 'too important to fail' and the 'too many to fail' syndromes. Because the failure of a very large bank makes it more likely that a major financial disruption will occur, bank regulators are naturally reluctant to allow a systemically important bank to fail and cause losses to its depositors. One problem with this policy is that it increases moral hazard incentives for big banks. Because an individually systemic institution can count on public sector support when it fails, it distorts incentives for private risk management and further reduces the force of market discipline (too-important-to fail). In addition, financial sector exposures to institutions that are labelled 'too important to fail' are likely to grow substantially large as financial institutions care less about their exposure to an entity that is expected to be supported. Similarly, if banks have an expectation that in the event of an aggregate weakness of the financial system (macro-systemic risk), they can gain public sector support, it further distorts incentives and lead institutions to increase their exposure to the aggregate shock – 'too many to fail' (Archarya and Yorulmazer, 2007).

2. SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

This paper has considered the rationale for financial system

¹⁰ Procyclicality is the tendency for some regulatory and business practices to magnify the business cycle (Kodres and Narain, 2009).

¹¹ For instance, managers and shareholders of a failed institution do not have adequate incentives to take into account the contagion losses to other institutions and the real economy.

¹² The 'domino-effect' is the phenomenon used to describe the spreading of risks among interconnected entities in the financial system and the subsequent externalities to the society (e.g. Brunnermeier, et.al, 2009).

regulation and supervision. The 'public interest' argument represents the most powerful argument in favour of regulation and supervision. Rather than assuming a hands-off position on the oversight of financial institutions and market activities, the central bank should increase its role in guiding financial behaviour along lines that contribute to stability. The systemic risk rationale and the fiscal costs of crises justify the role of government intervention.

Regulation and supervision are also necessary to protect investors and depositors from the opportunistic behaviour of banks and ensure a stable, efficient and

reliable financial sector. However, there have been significant concerns that regulation and supervision can only reduce (but not eliminate) the probability of future crises occurrence because financial innovation always arises as a response to regulation. The risks inherent in the financial system are numerous and current regulatory models (namely the Basel II framework) have failed to mitigate such risks, especially those posed by excessive leverage, illiquidity, low loss absorbing capital and securitization of assets which were all factors that led to the build-up of the recent crisis. New approaches to regulation have

now been developed by The Basel Committee on Banking Supervision following the lessons learnt from the crisis. These reform measures will, among other things, curtail both micro-systemic and macro-systemic risks that have threatened global financial stability. The proposed regulatory regime will require banks to hold more capital in times of excessive credit growth to cushion against losses in down times. It will also involve more stringent liquidity risk management standards and supervisory monitoring as well as enhanced disclosure on remuneration practices and off-balance sheet exposures.

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¹⁹ Even uninsured depositors (whose deposits are far in excess of the government's deposit insurance limit) are less likely to monitor the bank and enforce market discipline because they believe the government will intervene in the event of failure, further strengthening the 'too important to fail' syndrome.

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