

# **A Review of Literature on the Impact of Financial Structure on Economic Growth**

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**ABSTRACT:** This paper reviews empirical issues involved in financial structure and whether it matters for economic growth from Although Bagehot [1873] and Schumpeter [1911] who introduced the idea, the financial sector started to be considered important for economic growth more recently than capital and labor or technology. The study concluded that whether it is bank based or market based, legal or financial services based, there is no conclusive evidence on which type is better. The type of structure which works in one country may not work in another. The peculiarities of different economies determine the type of structure that works for them.

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## **I. INTRODUCTION**

The debate on the financial structure of economies has a long history in finance and economics. Nonetheless, there is hardly consensus at both theoretical and empirical level whether bank based or market based financial structure enhances economic growth or not. Competing theoretical and empirical models has posited the superiority of one type of financial system over the other or they simply relegate financial structure as irrelevant. On the one hand while some have argued that the bank-based system is superior to the market-based one. On the other hand others have argued the opposite. Still, some still maintain that it is neither the banks nor the markets; instead, it is the provision of overall financial services that is crucial in promoting growth. However, the complementarities between banks and markets in the provision of financial services can as well enhance economic growth. The theoretical debate on financial structure culminates into four distinct views: the bank-based, the market-based, the financial services and the law and finance. A large body of empirical literature has attempted to evaluate this debate.

Studies have shown that the UK and the US economies are market-based systems while Japan and Germany have been classified as bank-based systems. These studies have rigorously compare and contrast the country-specific financial structure, that is, an assortment of financial markets, instruments and intermediaries in operation, and conclude that financial structure is important for economic growth. However, highlighting the shortcomings of these structures it is argued that these four industrialized countries have resembling real per capita income levels and they historically share similar growth rates. Consequently, it is hard to attribute their analogous growth rates to alternative forms of either the bank-based or the market based financial system.

These studies are immensely important because they offer broad insights on the issue. They are not without concerns however. Again some authors have conceded that the result of economic performance being impervious to financial structure does not necessarily imply that institutional structure is of no consequence to growth (Demirguc-Kunt and Levine, 2001). Instead, it may simply indicate that either there is not one optimal institutional structure, which fits everywhere and at all times, or the indicators used in the literature may not satisfactorily capture the roles of banks and markets. While, Luintel and Khan (2004) show lack of correspondence between panel and country-specific estimates, hence, the generalizations based on panel results, i.e., the very 'broad conclusions', may proffer incorrect inferences for several countries, industries or firms of the panel.

This seminar paper complements the existing empirical literature by examining literature in this area of finance. Subsequently, the rest of the paper is organized as follows. In the next section existing empirical evidence are examined and in section three, the conclusion.

## **II. REVIEW OF LITERATURE**

Ujunwa and Otaru (2011) examined specifically the impact of legal-based financial structure on long-run economic growth in Nigeria, using time serial data for 17 year period: 1992 – 2008. The time series general method of movement (GMM) regression was used to estimate the necessary models and the growth rate of gross domestic product per capita was adopted as the dependent variable, while the independent variables were the country's legal codes. The study also controlled for government expenditure as a ratio of GDP and gross capital

formation as ratio of GDP. The regression result shows that the components of legal-based financial structure are negative and non-significant in promoting economic growth in Nigeria thus they recommends for the restructuring of the legal system in enforcing contracts.

Rousseau and Wachtel (2007) was of the opinion that although the finance-growth relationship is now firmly entrenched in the empirical literature, they showed that it is not as strong in more recent data as it was in the original studies with data for the period from 1960 to 1989. Therefore they considered two related explanations. First, excessive financial deepening or too rapid growth of credit may have led to both inflation and weakened banking systems which in turn gave rise to growth inhibiting financial crises. Second, excessive financial deepening may be a result of widespread financial liberalizations in the late 1980s and early 1990s in countries that lacked the legal or regulatory infrastructure to exploit financial development successfully. They found that the increased incidence of financial crises since the 1990s is primarily responsible for the recent weakening of the finance-growth link, but find no direct evidence that liberalizations played an important supporting role.

Fadare (2011) using data from 1985 to 2009 studies the determinants of nonperforming loans and the possibility of developing a composite indicator of financial crisis for Nigeria. On the strength of the specified linear least squares model, the paper found that a reduction in real GDP growth, equity index, financial deepening, liquidity ratio, interest rate spread, GDP per capita, parallel market premium, market risk premium, and credit to the private sector results in increased non-performing loans while increases in foreign exchange reserves, growth of credit to the general economy and the general price level lead directly to increases in non-performing loans. Employing a stepwise regression approach and specifying a logistic model, he also found that unlike the many determinants of non-performing loans, changes in liquidity ratio was the only significant predictor variable influencing changes in the probability of financial crisis in Nigeria. The results suggests that the probability of financial crisis increases in tandem with increases in liquidity ratios as banks invest that proportion of their deposit liabilities not covered by liquidity ratio monetary policy in very risky and sometimes speculative loans so as to cover the high cost of funds and operations while generating enough returns on shareholders capital.

Demirguc-Kunt and Huizinga (2000) was of the view that countries differ in the extent to which their financial systems are bank-based or market-based. Hence they presented evidence on the impact of financial development and structure on bank performance using bank-level data for a large number of developed and developing countries. For countries that have underdeveloped financial systems, they showed that a move towards a more developed financial system reduces bank profitability and margins. Controlling for both bank and market development, they opined that financial structure per se does not have an independent effect on bank performance.

Oluitan (2009) examined the significance of bank credit in stimulating output within the real sector and the factors that prompt financial intermediation within the economy. The study is a contribution to the existing literature on finance and growth applied to the Nigerian economy. Available statistics from this study showed that the economy has been thriving predominantly on proceeds from oil exports over the last three decades. Evidence from this work shows that real output causes financial development, but not vice versa. It was also observed that export of oil and non-oil export are not significant in driving financial development; but growth in the financial sector is highly dependent on foreign capital inflows.

Ezirim and Muoghalu (2002), empirically investigated the impact of the legal and regulatory environments on financial intermediation in an emerging sub-saharan economy, with evidence drawn from the Nigerian Commercial banks. The method employed included the construction, estimation and analysis of econometric models. Using annual time-series data (1970–2000), the models attempted to investigate the relationships between the nominated financial intermediation indices (financial interrelation ratio, FIR and the commercial banking ratio, CBR), and the indicators of the legal environment, geographic, price, and product regulation. The results show that the legal and regulatory environments exert a very significant effect on financial intermediation operations of commercial banks in Nigeria. Particularly, the legal environmental index and the index of geographic regulation, individually, affect financial intermediation significantly as expected. Their results suggest that programs aimed at reducing banking density in the country; enhancing the legal structures and system; and the promulgation of amiable laws and regulations that would encourage intermediation activities.

Taiwo and Akinlo (2011) using descriptive statistics and Vector Autoregressive Model investigated the impact of financial sector reforms on the performance of the Nigerian economy. Accordingly they justified their work by opining that given the need to provide empirical evidence on the effectiveness of financial reform in promoting saving, investment and growth. Their study found that the means of performance indicators - saving rate, investment ratio and growth of real GDP, were very low relative to pre-reform period and their correlation with financial indicators were mostly low or negative under reform. Evidence from the VAR analysis also showed that shocks to financial indicators either had negative or insignificant positive effect on the saving rate

investment and growth during reform. Complementing financial reforms with structural reforms, therefore, is necessary to promote growth in Nigeria.

Nzotta and Okereke (2009) empirically examined financial deepening and economic development in Nigeria between 1986 and 2007. The central focus of the study was that a high level of financial deepening is a necessary condition for accelerating growth in an economy because of the central role of the financial system in mobilizing savings and allocating same for the development process. The study made use of secondary data, sourced for a period of 22 years and specified nine explanatory variables for the study based on theoretical underpinnings. They sought to establish a relationship between these variables and financial deepening index. The two stages least squares analytical framework was used in the analysis and a trend analysis was also done in the study. They found among other things that financial deepening index is low in Nigeria over the years. They also found that the nine explanatory variables, as a whole were useful and had a statistical relationship with financial deepening. However, four of the variables; lending rates, financial savings ratio, cheques/GDP ratio and the deposit money banks/GDP ratio had a significant relationship with financial deepening. They therefore concluded that the financial system has not sustained an effective financial intermediation, especially credit allocation and a high level of monetization of the economy, thus the regulatory framework should be restructured to ensure good risk management, corporate governance and stemming systemic crisis in the system.

Balogun (2007) reviews the perspective of banking sector reforms since 1970 to date. It notes four eras of banking sector reforms in Nigeria, viz.: Pre-SAP (1970-85), the Post-SAP (1986-93), the Reforms Lethargy (1993- 1998), Pre-Soludo (1999-2004) and Post-Soludo (2005-2006). Using both descriptive statistics and econometric methods, three sets of hypothesis were tested: firstly that each phase of reforms culminated in improved incentives; secondly that policy reforms which results in increased capitalization, exchange rate devaluation; interest rate restructuring and abolition of credit rationing may have had positive effects on real sector credit and thirdly that implicit incentives which accompany the reforms had salutary macroeconomic effects. The empirical results confirm that eras of pursuits of market reforms were characterized by improved incentives. However, these did not translate to increased credit purvey to the real sector. Also while growth was stifled in eras of control, the reforms era was associated with rise in inflationary pressures. Among the pitfalls of reforms identified by the study are faulty premise and wrong sequencing of reforms and a host of conflicts emanating from adopted theoretical models for reforms and above all, frequent reversals and/or non-sustainability of reforms. In concluding, the study notes the need to bolster reforms through the deliberate adoption of policies that would ensure convergence of domestic and international rates of return on financial markets investments.

Kularatne (2001) examined the impact of financial deepening on long run economic growth in South Africa over the period 1954-92. Two models were developed using the Johansen VECM structure. While the first model investigated whether the financial system has a direct or indirect effect on per capita output via the investment rate, the second model attempted to investigate the possibility of feedback effects between the financial and real sectors. He found that both dimensions of the financial system through financial intermediation and securities affect economic growth in both models. Furthermore, both models reveal that the financial system has an indirect effect on GDP via the investment rate. Feedback effects are also found to exist between the real and financial sectors. One interpretation of the evidence is that credit rationing is prevalent in South Africa with firms extensively relying on internal finance to meet their financing requirements.

Demirgüç-Kunt and Levine (1999) provided additional empirical evidence on earlier works of Goldsmith's three questions of financial structure and development as well as updated Goldsmith's documentation of the evolution of financial structure during the process of economic growth. The study used cross-country dataset to assess Goldsmith's two questions: the relationship between economic growth and both the level of overall financial development and the structure of financial systems. They found among other things that national financial systems tend to become more developed overall and more market-oriented as they become richer. They also found that overall financial development tends to accelerate economic growth, facilitate new firm formation, ease firm access to external financing, and boost firm growth. Moreover, their evidence strongly suggests that Legal systems that effectively protect the rights of outside investors and that enforce contracts efficiently improve the operation of financial markets and intermediaries with positive ramifications on long-run growth. Again they found that financial structure is not an analytically very useful way to distinguish among national financial systems. Countries do not grow faster, new firms are not created more easily, firms' access to external finance is not easier, and firms do not grow faster in either market or bank based financial systems.

Beck, Demirgüç-Kunt, Levine and Maksimovic (2000) explored the relationship between financial structure – the degree to which a financial system is market- or bank-based – and economic development. Using Cross-country regressions, industry panel estimations, and firm-level analyses they provided remarkably consistent conclusions. That financial structure is not an analytically useful way to distinguish among financial systems and assert that countries do not grow faster, financially dependent industries do not expand at higher rates, new firms are not created more easily, firms' access to external finance is not easier, and firms do not

grow faster in either market- or bank-based financial systems. They found that economies grow faster, industries depending heavily on external finance expand at faster rates, new firms form more easily, firms' access to external financing is easier, and firms grow more rapidly in economies with a higher levels of overall financial sector development. They further found that countries with legal systems that more effectively protect the rights of outside investors enjoy greater financial development and economic growth. Thus, it is overall financial development and not financial structure per se that is critical for economic progress.

Mitchener and Wheelock (2011) examined the impacts of banking market structure and regulation on economic growth using new data on banking market concentration and manufacturing industry-level growth rates for U.S. states during 1899-1929a period when the manufacturing sector according to them was expanding rapidly and restrictive branching laws segmented the U.S. banking system geographically. Unlike most studies of developing and developed countries today, They found that banking market concentration generally had a *positive* impact on manufacturing sector growth in the early twentieth century United States, with a somewhat stronger impact on industries with lower rates of incorporation and less reliance on bond markets (and, hence, relatively more reliance on banks). Because regulations affecting bank entry varied considerably across states and the industrial organization of the U.S. banking system differs markedly from those of other countries, they considered the impact of other aspects of banking market structure and policy on growth. Even after controlling for differences in the prevalence of branch banking, deposit insurance and other aspects of policy and market structure and found that market concentration boosted industrial growth.

Barajas, Chami and Yousefi (2011) explored the extent subpar growth has resulted from subpar performance of the financial sector in MENA and concluded that the role of state banks should be carefully assessed and, if necessary, scaled down as worldwide analysis has shown that a dominant state bank presence is associated with lack of financial deepening and, when combined with institutional weakness, with lower economic growth. Finally, they suggested that government actions to kick-start financial market development, by placing government debt domestically on open and voluntary markets and encouraging development of a secondary market would also be welcome.

Irfan, Sulaiman, Hussain and Jalil (2009) explored the long run association between economic growth and financial structure in Pakistan and used the data from the period of 1975 to 2008, and applied Johansen cointegration technique to find out the long run association among the selected variables. Weighted sum of structure activity and structure size of the financial sector is used as a proxy of financial structure. The study found that the proxy of financial structure is positively correlated with economic growth. The result pointed out that the channel of transmission mechanism of financial development to growth is efficient to the financial sector not the volume of investment.

Luo and Zhou (2008) based on the theory of financial deepening analyzed the impact of financial deepening on the regional economic growth using the panel data of China's 27 provinces from 1995 to 2007. Results showed that there is a positive impact of financial deepening on economic growth and this was mainly reflected in the later period. Factors such as the capital securities affected economic growth in the opposite direction insignificantly, which means that in the past few years, the development of China's stock market had limited the effects to the economic growth.

Guzman (2000) was of the opinion that recent events have drawn attention to the banking industry, one of the most important and vital sectors needed for an efficient market economy therefore it was important to understand how the various aspects of the banking system in general and the underlying structure of the banking sector in particular affect economic growth and development. It was against this background that he reviewed that economic impact of bank structure based on existing literature. He concludes that it will be important to develop models that not only are better able to mimic the actual relationships between banks, borrowers, and depositors but that also allow the impact of government policy on the banking system and economy to be explicitly analyzed.

FitzGerald (2006) made four major contributions which were, first the potential contribution of financial development to economic growth is considerable, but cannot be taken for granted depends on the construction of the appropriate institutional structure. Second, conventional measures of financial 'depth' (in terms of private assets) and financial 'development' (defined as moving from banks towards capital markets) are not associated with higher rates of economic growth. Thirdly, financial liberalisation leads to more efficient and liquid financial intermediation, but does not appear to raise the rates of domestic savings or investment in the aggregate and finally; the efficiency gains from the standard model of financial liberalisation in terms of investment allocation and corporate governance can be outweighed by news of instability from short-term foreign capital flows.

### III. CONCLUSION

This paper reviews empirical issues involved in financial structure and whether it matters for economic growth. Although Bagehot [1873] and Schumpeter [1911] had already introduced the idea, the financial sector started to be considered important for economic growth more recently than capital and labor or technology. Goldsmith [1969] and McKinnon [1973] were the first to argue that the manipulation of the financial sector to achieve development goals was undesirable and that flows of saving and investment should be decentralized in an open capital market operating with market-determined interest rates.

Since the early 1990s, a growing body of empirical literature, starting with King and Levine [1993a, b], has showed that financial development leads to growth. Among the different components of the financial system, the banking system has been analyzed most widely finding that a larger share of bank deposits, bank assets or bank credit to the private sector promote economic growth, after controlling for endogeneity. Equity markets have also received attention since they constitute an alternative channel of financing, particularly for large enterprises. A review of literature reviews that the impact of certain sectors, such as the bond market on economic growth, is scarce probably due to the data limitations.

An interesting and long-standing question in researches reveal that financial structure are mostly oriented toward the banking sector or the capital markets— performs better. The divergent opinions as to which financial structure is preferred are based on a number of arguments. On the one hand, banks constitute the best means to mobilize capital, identify good projects, monitor managers and manage risk. It is also argued that the incentives for individual investors to acquire information, since they form long-run relations with firms and information is making the market based argument more prominent. Again, deeper capital markets enhance risk management and corporate. In addition, they can avoid excessive power concentration in banks' hands, which could allow them to extract informational rents and protect firms with close bank ties from competition.

In conclusion therefore, whether it is bank based or market based, legal or financial services based, there is no conclusive evidence on which type is better. The type of structure which works in one country may not work in another. The peculiarities of different economies determine the type of structure that works for them.

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