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Banks versus markets: Do they compete, complement or Co-evolve in the Nigerian financial system? An ARDL approach

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ABSTRACT

A long-standing debate about the financial structure of an economy has concerned the superiority of banks or capital markets as well as at what stage of economic development either plays a dominant role in an economy. More recently, there has been a paradigm shift in the debate, from superiority to the interplay between banks and markets in a financial system – whether they compete or complement each other. This paper explores the association between banks and stock markets, whether they are foes or friends in the Nigerian financial system. Using autoregressive distributed lag model Bounds testing technique on annual data obtained from the Central Bank of Nigeria Bulletin, we find a long-run link between bank models and market models– a complementary rather than a competing association, which suggests a co-evolving development in the Nigerian financial structure. We therefore recommend that efforts should be geared toward action-based approaches in the development of both the Nigerian banking system and capital markets for a rapid development in the financial system, which drives economic growth.

1. Introduction

Two questions have received much debate among financial economists. These questions concern- the type of relationship that exists between finance and growth, otherwise called the finance-growth nexus, and how the financial structure affects growth, otherwise known as the financial structure-growth nexus.

On the finance-growth debate, which focuses on the importance of financial systems in the economic growth in an economy, Bagehot (1873) and Schumpeter (1912) argue that economic development follows the decision of financial intermediaries. Robinson (1952), on the other hand, argues that economic growth drives intermediaries instead. Robinson insists that factors other than finance could explain the process of economic development. These two types of relationships between the financial sector and economic growth and development are described by Patrick (1966) as supply-leading and demand-following relationships. Whereas the former posits that economic growth induces the supplying of financial services, the latter holds that it is the financial services that motivate growth. Lucas (1988) believes that finance is not relevant in economic growth and describes the debate as being overestimated. Authors like Mashayekhi et al., (2007) believe that developing economies like Nigeria are influenced by supply-leading relationships.

The second debate focuses on financial system models and economic growth. The two intermediation models are bank-based and

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market-based. La Porta et al., 1997, Levine (1999) and Ujunwa and Salami (2011) widened the classification by adding legal-based financial structure. The debate has centered on which of the models plays adominant role in economic growth and at what stage of the economic development (see, for example, Levine and Zervos, 1998; Beck, 2010; Demirgüç- kunt et al., 2011; Gambacorta et al., 2014). Levine and Zervos (1998), Beck (2010) and Gambacorta et al. (2014) find that banks and markets are significantly important in economic growth,while Beck and Levine (2002), Levine (2002), and Demirgüç-Kunt et al. (2011) conclude that the relationship between the financial structure and growth is dependent on the level of economic and financial development in the country in question. The third strand of debaters holds that what matters is the type of model (banks or markets) and not necessarily the services they provide. Beck (2010), for instance, states that the financial services provided by both contribute to economic growth jointly rather than severally. Chakraborty and Ray (2006) add that the key to economic growth is efficient financial and legal institutions given that one cannot clearly draw a line on which of the models is better.

Similarly, Beck and Levine (2002) argue that what is important is not the superiority of the financial structure model, but the capability of the model (banks or markets) to reduce thecosts of financing savings and borrowings for economic activities, while Čihák et al., 2012 assert that better-developed financial systems facilitate economic growth in the long-run. Along the same line of argument, authors like Allen and Gale (2000); Song and Thakor (2010a,b) and Osoro and Osano (2014) conclude that, after all, no economy operates a ‘pure’ model and that the strength in one aspect of the financial system (say, banks) should reflect on the other.

This interaction between banks and markets in financial systems has not received sufficient empirical evidence in the literature. There areeven fewercountry-based empirical studies on the subject. To the authors’ knowledge, the only prior study on this subject matter in the African context is Ashoreand Osoro and Osano (2014) for Kenya, and there are none inthe case of Nigeria. The overall objective of this paper, therefore, is to examine whether banks and capital markets compete or complement each other in the context of the Nigerian financial system and to investigate whether the emergence of one is at the expense of the other and also how the development of one affects the other.

The study uses autoregressive distributed lag (ARDL) technique in the analysis. The choice of Nigeria is justified because it is the largest economy in Africa, a strategic position in African regional economic integration. The result of this study is significant as evidence-based for policymaking in financial system development, which impacts positively on economic growth. It also contributes to the extant literature in financial structure interactions, especially in developing economies. The rest of this work is arranged as follows: section two reviews related literature, while section three presents data and method of empirical analysis. The penultimate section discusses the result, and section five concludes the study.

2. Literature review

Literature documents both the specific roles and the “frictions” of intermediaries and markets in a financial system vis-à-vis their contributions to financial development that aids economic growth. For instance, Singh (2012, p. 231) enunciates ways that developed financial markets can be helpful to economic policymakers in emerging market economies, including the following:

(1) Deeper financial markets can more readily absorb flows. Financial markets in emerging market economies are dominated by the banking system; hence, liquidity tends to accumulate in the banking system. With more developed capital markets, the liquidity inflows tend to be more spread out across the financial system.
(2) A deep financial system can more effectively utilize the liquidity in a non-wasteful and non-distortionary manner.
(3) Developed financial markets give the central bank a broader range of tools to manage monetary policy.
(4) The greater variety of saving and borrowing instruments makes it easier for the central bank to change interest rates to manage monetary policy, unlike when, for example, savings are predominantly in the form of deposits with banks.

Song and Thakor (2010a) provide a theoretical basis for interactive relations between banks and capital markets. The authors identified three-dimensional interactions between intermediaries and markets, namely, competitive, complementary and co-evolving interactions. They argue that banks are seen as competitors in markets and vice-versa only when they are viewed on a stand-alone or dominance basis. This means that when they are viewed from and interactive standpoint, they complement and co-evolve rather than compete. For instance, the authors present two scenarios that are significant for connectivity between banks and markets– securitization and bank capital. The process of securitization removes the frictions (‘certification’ and ‘financing) that hamper borrowers’ ease in financing or cause a denial of financing for them as a result of wrong judgments from either bank (certification friction) or markets (financing friction). In the case of a bank capital scenario, bank financing frictions are reduced through markets, and capital requirements for riskier loans are boosted as that the previous would-have-been-denied loans could be granted, thereby reducing the certification friction and serving the previously unserved customers. These feedback effects on the interactions between banks and markets are what the authors described as a vicious cycle that confirms a co-evolution between these sectors. Song and Thakor (2010b) assert that what is necessary is a strong banking institution and well-functioning markets for a complementary existence. In sum, Song and Thakor (2010a,b) show that banks and markets depend on each other via securitisation and risk-sensitive bank requirements channels.

Drawing from Song and Thakor’s (2010a) theoretical framework, Osoro and Osano (2014) empirically tested the interaction of banks and capital markets in the Kenyan financial system. They found a complementary and co-evolving relationship between the bank and the capital market in the Kenyan financial structure, as though it is a bank-based economy.

Earlier, Beck (2010) failed to find empirical support for either bank-based or market-based economies in the cross-country analysis of data from 40 developed and developing economies. He concludes that his results are consistent with the financial services