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Legal-Based Financial Structure and Long-Run Growth: Evidence from Nigeria*

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Abstract

This paper examines 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. Time series general method of movement (GMM) regression was used to estimate the necessary models. 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. The paper recommends for the restructuring of the legal system in enforcing contracts.

JEL classification: O11, F43

Keywords: Financial Structure, Legal System, Economic Growth

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1 Introduction

The taxonomy established by Gerschenken (1962), which divided financial systems into two categories: bank-based and market-based, has generated controversy among scholars. The argument has polarised along the following lines; the standard parameters or measurement for classifying a country's financial system either as bank-based or market-based; which of these classifications exert more influence on economic growth; and the determinants of a country's financial structure. Scholars have also broadened the classification of the structure of the financial system to include the financial service theory and legal-based theory (Levine, 2002; Beck and Levine, 2002 and La Porta et al; 1997).

The link between financial structure and long-run growth has been examined on the basis of competing theories of financial structure. These are: the bank-based view, the market-based view, the financial services view and the legal based view. Empirically, several studies have concentrated on comparing Germany and Japan as bank-based systems with United States of America and United Kingdom as market-based system. Scholars have however argued that any comparison using the four countries will yield limited results since these four countries have similar level of economic growth. This makes necessary the study of financial structure at individual country levels.

To provide information on the importance of financial structure in promoting economic growth, scholars have broadened the debate to include a wider array of national experiences. In Nigeria, empirical works along this line are concentrated on bank-based financial structure and market-based financial structure (Salami and Ujunwa, 2009). Considering the role of the legal system in contract enforcement and the smooth functioning of the financial system, it is imperative to empirically examine the impact of the Nigerian legal codes in promoting economic growth.

This paper sets to achieve the above goal by examining the impact of legal-base financial structure, while controlling for government expenditure as a

ratio of GDP and gross capital formation as a ratio of GDP, on economic growth. The rest of the paper is structure into: review of related literature, brief review of Nigerian legal codes, data and methodology, the research results, conclusion and recommendations.

2 Literature Review

Financial structure has to do with the institutions, financial technology, and rules of the game that specify how financial activity is organized at a point in time (Stulz, 2001). Financial structure provides (1) a payment system, (2) a mechanism for pooling funds, (3) a way of transmitting resources across space and time, (4) a way to manage uncertainty and control risk, (5) price information to allow the economy to implement a decentralized allocation, and (6) a way to deal with the asymmetric information problems that arise when one party to a financial transaction has an information that the other party does not have (Merton, 1995).

According to Stulz (2001), financial structure is to the financial system what foundation is to the house. Many different houses can be built on the same foundation. However, a foundation makes it impossible to build some type of houses. Thus, the function of a financial system can be performed by different institutions or according to different rules. The difference in the characteristics of a country's financial system and level of economic growth has led to the classification of the financial system into 'bank-based and market based' financial structure (Gerschenken, 1962).

The link between financial structure and long-run growth can be examined on the basis of competing theories of financial structure. These are: the bank-based view, the market-based view, the financial services view and the legal based view (Gerschenken, 1962; Levine, 2002; Beck and Levine, 2002 and La Porta et al; 1997). The bank-based theory lays much emphasis on the positive role of banks in development and growth, and also, stresses the shortcomings of market-based

financial systems. It argues that banks can finance development more effectively than markets in developing economies, and, in the case of state-owned banks, market failures can be overcome and allocation of savings can be undertaken strategically (Gerschenkron, 1962). Those banks that are unhampered by regulatory restrictions, can exploit economies of scale and scope in information gathering and processing (for more details on these aspects of bank-based systems, see Levine, 2002, and Beck and Levine, 2002).

However, the market-based theory highlights the advantages of well-functioning markets, and stresses the problems of bank-based financial systems. The theory posits that big, liquid and well-functioning markets foster growth and profit incentives, which enhances corporate governance and facilitates risk management (Levine, 2002, and Beck and Levine, 2002). The inherent inefficiencies of powerful banks were also stressed. The opponents of bank-based view argue that powerful banks "can stymie innovation by extracting informational rents and protecting firms with close bank-firm ties from competition … may collude with firm managers against other creditors and impede efficient corporate governance" (Levine, 2002). Market-based financial systems reduce the inherent inefficiencies associated with banks and are, thus, better in enhancing economic development and growth.

The financial services view (Merton and Bodie, 1995; Levine, 1997), is actually consistent with both the bank-based and the market-based views. Although it embraces both, but minimizes their importance in the sense that the distinction between bank-based and market-based financial systems matters less than was previously thought; it is financial services themselves that are by far more important, than the form of their delivery. In the financial services view, the issue is not the source of finance. It is rather the creation of an environment where financial services are soundly and efficiently provided. The emphasis is on the creation of better functioning banks and markets rather than on the type of financial structure.

The legal-based view of financial structure –espoused by LaPorta, Lopez-de-Silanes, Shleifer, and Vishny (1997, 1998, 1999a,1999b) – extends the financial services view and unconditionally rejects the bank-based versus market-based debate. The legal-based view argues that finance is a set of contracts. These contracts are defined – and made more or less effective – by legal rights and enforcement mechanisms. From this perspective, a well functioning legal system facilitates the operation of both markets and intermediaries. It is the overall level and quality of financial services – as determined by the legal system – that improves the efficient allocation of resources and economic growth. According to the legal-based view, the century long debate concerning bank-based versus market-based financial systems is analytically vacuous.

There are extensive empirical and theoretical evidence that differences in legal system of creditors rights, the efficiency with which legal system enforces those rights and legal codes explain differences in financial structure (LaPorta, Lopez-de-Silanes, Shleifer and Vishny, 1997, 1998; Rajan and Zingales, 1998). Most studies have divided the legal origin of countries predominantly into English, French, German and Scandinavian legal origins and that countries typically obtain their legal system through occupation and colonization (LaPorta, Lopez-de-Silanes, Shleifer and Vishny, 1997, 1998; Rajan and Zingales, 1998). Nigeria legal system is pattered according to English law, which is linked to the influence of colonization. Thus, we hypothesize that *there is a positive and significant relationship between the legal-based view and economic growth.*

3 Legal codes in Nigeria

In a study of this nature, it is imperative to discuss the major provisions of the Nigerian legal codes as it relates to contract enforcement and corporate reorganization because of the peculiar nature of the study. Also, since the dummy variables will be extracted from the provisions of laws that regulate companies in

Nigeria, such brief review is of utmost, at least be show beyond doubt, how the dummies where selected.

These dummy variables presented in appendix 1 and justified in data presentation and methodology, are used to ascertain the determinants of the structure of the Nigerian financial structure and the impact of the legal based-view on economic growth. Data on Autostay (which measures whether Nigerian law imposes an automatic stay on the asset of a firm upon filling a reorganization petition) shows that Nigerian legal codes do not impose automatic stay on a company's assets upon filling reorganization petition.

On Manages, the legal codes provide that any company that decides to reorganize must adhere strictly with the dictates of the law in Nigeria. It is important to measure the extent of opposition to the reconstruction from members and creditors. Before reorganization becomes effective, it has to be approved by the shareholders of company and the Federal High Court. An application is made to the high court which then orders that separate meetings of the company be convened. At such ordered court meeting, the scheme of reorganization must be approved by majority representing not less than seventy-five per cent in the value of the shares of members present and voting either in person or by proxy. It is expected of every shareholder to have considered the valuation of the merging entity which entails market capitalisation, projected earnings and net assets (see, Investment and Securities Act, 1999; S. 53(1) of Companies and Allied Matters Act, 1990). In Nigeria, the management of a company can only by replaced by person selected by the court in cases of voluntary or compulsory liquidation of a company (see S.53(1) of Companies and Allied Matters Act, 1990).

Secured creditors have charged against over some specific or specific assets of the company. It attaches to assets identified at the time charge is created or in case of property yet to be acquired, when the property is acquired. Section 474 of the Companies and Allied Matters Act, 1990 provides that the assets of companies are to be applied in the following order; (1) fixed charge holders from the value of the

assets to which the charges are attached. They rank as unsecured creditors for any shortfall; (2) liquidation expenses; (3) preferential claims like rate, telephone bill and wages and salaries of not above two thousand naira per worker for a maximum of four months; (4) floating charge holders; (5) unsecured creditors; (6) amount due to members, e.g dividend; and (7) repayment of capital according to class priority. Rule of law assesses of the law and order tradition of Nigerian. It looks the effectiveness of in terms of enforcement. This dummy ranges from strong law and order tradition to very weak order tradition. In Nigeria, one of the legal problems is the enforcement of laws. The weakness of the country's legal system has made it possible for the citizens to circumvent these laws. Also, the level of corruption among law enforcement agencies like the Nigerian Police, Nigerian Army, and Nigerian Custom among others is not helping issues. The delay of the law courts in deciding cases have made litigation one of the safest ways of circumventing the laws. This is expected to impact negatively on business contracts in Nigeria.

4 Data and Methodology

Annualised data for a 17-year period 1992-2008 were collated from Central Bank of Nigeria statistical bulletins and annual reports and accounts of banks in Nigeria. Time series general method of movement (GMM) was used to estimate the impact of the structure of Nigerian financial system on economic growth. This study will adopt the time serial linear multiple regression, which is specified thus;

$$Y_i = B_0 + B_1 X_{1i} + B_2 X_{2i} + U_i \quad (1)$$

where, the subscript i runs over observation, I = 1, …,n, Y_i is the dependent variable, X_{1i}, X_{2i} are the independent variables, $Y_i = B_0 + B_1 X_1 + B_2 X_2$ are the

population regression lines, B_0 is the intercept of the regression line, B_1, B_2 are the slope of the population regression line, and U_i is the error term (Stock and Watson, 2007).

We modify the multiple linear regression (1) into a standard growth regression as follows:

$$\text{Growth}_i = aX_i + \beta FD_i + yFS_i + \mu_i \quad (2)$$

where *Growth* is the annual growth rate of real per capita GDP, X is a set of potential growth determinants, *FD* is other indicators of economic growth (these indicators were the controlled variables in the study) , *FS* is a measure of financial structure and u is the error term.

Since the legal-based view is that part of overall financial development defined by the legal system is linked with economic growth. This approach suggests using instrumental variables to extract that component of overall financial development, F, defined by the legal rights of outside investors and the efficiency of contract enforcement. It makes the same predictions as the financial-services view, except within the context of a regression framework that uses the legal codes and enforcement efficiency as instruments. Thus, we have;

$$\text{Growth} = aX_i + \beta FD_i + yLBFS_i + \mu_i \quad (3)$$

where, *LBFS* is Legal Based Financial System. The study used the following legal codes to examine the impact of the legal system on economic growth.

I. *Creditor Rights.* The ability of banks to persuade firms to pay their loans differs across national legal systems. Legal systems differ in terms of the rights of banks to repossess collateral or liquidate firms in the case of default. Legal systems differ in terms of the rights of banks to remove managers in corporate reorganizations. Finally, legal systems differ in terms of the priority given to

secured creditors relative to other claimants in corporate bankruptcy. More specifically, this study used four measures of the legal rights of banks.

AUTOSTAY equals one if Nigerian country's laws impose an automatic stay on the assets of the firm upon filing a reorganization petition. *AUTOSTAY* equals 0 if this restriction does not appear in the legal code. The restriction would prevent banks from gaining possession of collateral or liquidating a firm to meet a loan obligation and thus promote market-based financial system.

MANAGES equal one if the firm continues to manage its property pending the resolution of the reorganization process and equals zero if otherwise. In some countries, management stays in place until a final decision is made about the resolution of claims. In other countries, management is replaced by a team selected by the courts or the creditors. If management stays pending resolution, this reduces pressure on management to pay bank loans and promote market-based financial system.

SECURED equals one if secured creditors are ranked first in the distribution of the proceeds that result from the disposition of the assets of a bankrupt firm. *SECURED* equals zero if non-secured creditors, such as the government or workers, get paid before secured creditors. In cases where *SECUREDl* equals zero, this certainly reduces the attractiveness of lending secured credit.

CREDITOR is a conglomerate index of these three individual creditor rights indicators that is designed to be positively associated with creditor rights. Specifically,

CREDITOR = the average of SECURED + AUTOSTAY + MANAGES (4)

and takes on values between 1 (best) and - 2 (worst). We expect a country with higher values of *CREDITOR* to have better-developed banks, all else being equal.

2. *Enforcement.* The laws governing secured creditors will affect secured creditors only to the extent that the laws are enforced. Consequently, measures of the efficiency of the legal system in enforcing contracts are included from in line with the works of LaPorta, Lopez-de-Silanes, Shleifer and Vishny (1998). *RULELAW* is an assessment of the law-and-order tradition of the country that ranges from 10, strong law-and-order tradition, to 1, weak law-and-order tradition. This measure was constructed by International Country Risk Guide (ICRG) and is an average over the period of this study. Given the contractual nature of banking, higher values of the *RULELAW* is likely to positively influence banking development.

CONRISK is an assessment of the risk that a government will—and therefore can—modify a contract after it has been signed. *CONRISK* ranges from 10, low risk of contract modification, to 1, high risk of contract modification. Specifically, "modification" means either repudiation, postponement, or reducing the government's financial obligation. This measure was constructed by Laporta, Lopez-de-Silanes and Shleifer and Vishny (1997) and is an average over the period under study. Legal systems that effectively enforce contracts will tend to support banking bank-based financial system..

ENFORCE = the average *of RULELAW* and *CONRISK* (5)

The empirical analyses focused on this aggregate index of the efficiency of the legal system in enforcing contracts, *ENFORCE,* and the aggregate index of creditor rights, *CREDITOR.*

5 Results

This study adopted the measure constructed by International Country Risk Guide (ICRG) in determining the impact of Nigerian legal-based financial structure on economic growth (See table 1 in appendix).

5.1 Summary of Result

Growth	-10.615 +11.752 VTR
R	0.376
R^2	0.141
Adjusted R^2	-0.057
F	0.230
D Watson	1.244
T	1.174

Source: SPSS Statistics 17.0

Dummy variables were used to determine the legal-based financial structure. This indicator was arrived at by taking the average of Autostay (whether a Nigerian country's laws impose automatic stay on the assets of a firm upon filling a reorganisation petition), Manages (whether the firm continues to manage its property pending the the resolution of reorganisation process), Secured (whether creditors are ranked first in the distribution of the proceeds that results from the disposition of the assets of a bankrupt firm), Rulelaw (an assessment of the law- and oder tradition of the country), and Conrisk (an assessment of the risk that a government will and therefore can modify a contract after it has been signed). This hypothesis was aimed at finding the impact of the legal-based financial structure in promoting economic growth in Nigeria. The regression co-efficient for legal-based financial structure was found to be negative and insignificant in promoting economic growth (See appendix 2 for details of the result). Hence, we reject alternate hypothesis. This result is consistent with the conventional wisdom that only developed legal system promotes economic growth. The result showed that the Nigerian legal system is still at its rudimentary stage, as such cannot impact positively on economic growth.

6 Conclusion and Recommendations

The relationship between finance and growth has generated serious controversy among scholars. The polarization of the financial system into bank-based, market-based, financial service-based and legal-based financial structure has raised an important policy issue on which of these structures impacts more on economic growth. While extensive research works have been undertaken on the first three, research challenges remain to empirically examine the impact of the legal-based financial structure on economic growth. The legal-based view argues that the legal system shapes the quality of financial services. In other words, the legal-based view stresses that the component of financial development explained by the legal system critically influences long-run growth.

The result of this study shows that legal codes do not impact positively on economic growth. This findings is consistent with theories that legal codes in developing countries are either poorly developed, or where they exist, they are not implemented, which impacts negatively on contract execution and enforcement. This is true of Nigeria since the government has the power to vary contracts; coupled the long period of time it takes for the judiciary to decide cases in Nigeria. Based on the result from this study, policy trust should focus on creating a sound legal environment, rather than on debating the merits of bank-based or market-based systems. Distinguishing Nigerian financial system as bank-based or market-based does not help in explaining long-run economic performance. However, it is the country's overall level of financial development that helps in explaining economic growth. Thus, policy makers should focus on strengthening the legal rights of outside investors and the overall efficiency of contract enforcement. There is not very strong evidence, however, for using policy tools to tip the playing field in favor of banks or markets. Instead, policy makers should resist the desire to construct a particular financial structure, but focus on the fundamentals of property rights and the enforcement of those rights.

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Appendix 1 **(Data Presentation)**

Table 1: Legal Determinants of Financial Structure

Years	Autostay	Manages	Secured	Rule of Law	Conrisk
1992	0	0	1	2	1
1993	0	0	1	2	1
1994	0	0	1	4	1
1995	0	0	1	4	1
1996	0	0	1	4	1
1997	0	0	1	4	1
1998	0	0	1	4	1
1999	0	0	1	5	1
2000	0	0	1	5	1
2001	0	0	1	5	1
2002	0	0	1	5	1
2003	0	0	1	5	1
2004	0	0	1	5	1
2005	0	0	1	5	1
2006	0	0	1	5	1
2007	0	0	1	6	1
2008	0	0	1	6	1

Sources: Company and Allied Matters Act (CAMA) 1990
Public Procurement Act 2007 and 2009

Appendix 2 (SPSS Result)

There is no positive and significant relationship between legal-based financial structure and economic growth in Nigeria.

Descriptive Statistics

	Mean	Std. Deviation	N
EG	2.6371	5.01008	17
LB	1.2941	.22492	17
GRform	1.2257	.84196	17
GOVexp	1.9794	1.17390	17

Correlations

		EG	LB	GRform	GOVexp
Pearson Correlation	EG	1.000	.346	.224	.207
	LB	.346	1.000	.767	.819
	GRform	.224	.767	1.000	.910
	GOVexp	.207	.819	.910	1.000
Sig. (1-tailed)	EG	.	.087	.194	.213
	LB	.087	.	.000	.000
	GRform	.194	.000	.	.000
	GOVexp	.213	.000	.000	.
N	EG	17	17	17	17
	LB	17	17	17	17
	GRform	17	17	17	17
	GOVexp	17	17	17	17

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376[a]	.141	-.057	5.15123

a. Predictors: (Constant), GOVexp, LB, GRform

b. Dependent Variable: EG

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.141	.712	3	13	.562	1.244

b. Dependent Variable: EG

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	56.659	3	18.886	.712	.562[a]
	Residual	344.957	13	26.535		
	Total	401.615	16			

a. Predictors: (Constant), GOVexp, LB, GRform

b. Dependent Variable: EG

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-10.615	10.188		-1.042	.316
	LB	-11.752	10.014	-.528	-1.174	.262
	GRform	.827	3.710	.139	.223	.827
	GOVexp	-1.500	2.973	-.352	-.505	.622

a. Dependent Variable: EG

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	LB	.346	-.310	-.302	.327	3.059
	GRform	.224	.062	.057	.170	5.884
	GOVexp	.207	-.139	-.130	.136	7.345

a. Dependent Variable: EG

Collinearity Diagnostics[a]

Model	Dimension			Variance Proportions			
		Eigen-value	Condition Index	(Constant)	LB	GRform	GOVexp
1	1	3.737	1.000	.00	.00	.00	.00
	2	.233	4.001	.02	.01	.07	.02
	3	.025	12.345	.01	.00	.92	.75
	4	.006	25.968	.96	.99	.00	.23

a. Dependent Variable: EG

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1.9644	5.2351	2.6371	1.88180	17
Residual	-5.88056	14.24904	.00000	4.64325	17
Std. Predicted Value	-2.445	1.381	.000	1.000	17
Std. Residual	-1.142	2.766	.000	.901	17

a. Dependent Variable: EG