THE EFFECTS OF SOCIAL CAPITAL ON ECONOMIC GROWTH IN NIGERIA

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Abstract
Recent discourse on the problem of economic growth in Nigeria is also link to the lack of social capital among the governmental and individual as well. The aim of this paper is to assess the impact of the existing components of social capital on the economic performance in Nigeria. Using a multiple linear regression analysis this paper examines the relationship between the component of government social capital i.e. (enforceability of contract, the rule of law, civil liberty and economic liberty) and economic growth (proxied by gross domestic product (GDP)) in Nigeria. The results obtained indicate that the components of government social capital (enforceability of contract, rule of law, civil liberty and economic liberty) are negatively related to economic growth. Measures, such as the fight against corruption, good government and the involvement of the people in the design and implementation of government policy, trust, honesty among the government officials in carrying out their activities and between the government and private organizations are suggested as possible ways of improving social capital.

Introduction

In recent times a number of studies have identified the importance of social capital to economic growth. For instance, countries like United States, Burkina Faso, India and Cote d'Ivore have had success story of how social capital have helped improve their economic performance (see Grootaert 1998 and Knack .1999).

In Nigeria, the prolonged military and authoritarian rule, debt overhang, bad governance, increase in the level of corruption and lack of social capital are known to have negative effects on economic growth. Because of the lack of social capital, the nation has witnessed a declining rate in its GDP from $64201.79 in 1980 to S41 083.37 in the year 2005

The aim of this paper is therefore, to assess the impact of the existing components of social capital on the economic growth using multiple regression analysis.

The rest of the paper is organized as follows. Section two provides a review of literature of economic growth and social capital, section three provides empirical evidence of the measures and impact of social capital. Section four provides the data sources and methodology, while the discussion and recommendations are contained in the last section.

2. REVIEW OF LITERATURE: ECONOMIC GROWTH AND SOCIAL CAPITAL

2.1 Economic Growth: Definition and Measurement

According to Simon Kuznets (1953) cited in Jhingan (1975) economic growth is a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands. Jhingan (1975) refers to it as a quantitative and sustained increased in a country's per capita output or income accompanied by expansion in its labour force, consumption, capital and volume of trade and welfare. According to Vaish (1973) economic growth may be defined as the increase in real national product or output overtime. First and foremost, economic growth should mean that an ever increasing quantity of goods and services that is available to meet the economy's needs overtime. To be meaningful economic growth should be accompanied by an improvement in the economic welfare of the people of a country. This is possible only if the rate of growth of output exceeds the rate of growth of population in the economy.

Related to the definition of economic growth is the measurement of economic growth. According to Todaro et al (1977) the most frequently used measures are, per capita real income, per capita real consumption, which indicate the growth in consumer economic welfare overtime, real GNP per unit. These concepts emphasize changes in economy's productivity overtime.

Economy's growth overtime may either be due to improvement in the qualitative performance (productivity) of given inputs or it may be due to the combination of both these factors. For example, while the economy's total force increases overtime its productivity may also increase. The performance of economy's capital stock may improve while it grows over time.

Atoloye (1997) pick from the view of the neoclassical, he stated that the progress in these indicators (e.g. GDP and per capita income) are also determined by a stable macroeconomic environment and with the right combination of factors of production most especially labour and capital. Thus, the standard neo-classical model begins from the premise of a fixed technological co-efficient and elasticity of labour and capital that can be altered depending on the combination of the two factors. The state of evolution of technology alters the value of the constant co-efficient at any point in time. The capital component is made up of this stock of human and physical capital. The more the output given the right combination of the basic factors of production, the possibility of extending supply beyond the frontiers of the economic. The production function in the neo-classical growth model which is typical of the Cobb Douglas production function is therefore given as:

$$Y = A^{U} K^{\alpha} L^{1-\alpha}$$

Where:

Y = Gross Domestic Production

K = the stock of human and physical capital

L = unskilled labour used in production

$1-\alpha$= the parameters that represent technology

A = constant reflecting the initial static endowment of capacity

u = the rate of evolution of technology.

As a parameter for economic growth higher technological capabilities will permit greater amount of outputs from any given level of inputs.

Therefore, the integration of social capital into this growth model would further enhance technological capabilities, given the importance of social capital to economic development.

2.2 Social Capital: Definitions and Types

a. Definitions

There are many definitions and interpretations of the concept of social capital, there is a growing consensus that "social capital stands for the ability of actors to secure benefits by virtue of membership in social network or other social structures", Portes (1998) cited in Grootaert (1999) said that.: if we take a broad view of what comprised these "other social structure" then social is a relevant concept at the micro and macro levels". At the macro level social capital includes institutions such as government, the rule of law, civil and political liberties. There is overwhelming evidence that at macro level social capital has a measurable impact on national economic performance. At the micro level, social capital refers to the network and norms that govern interactions among - individuals, households and communities. Such networks are often (but not necessarily) given structure through the creation of local associations or local institutions (See Knack 1999).

The most narrow concept of social capital was viewed as a set of "horizontal association" between peoples that consists social networks ("network of civic engagement") and associated norms that have an effect on the productivity of the community. Two empirical presumptions underlie this concept. Network and norms are empirically associated, and these have important economic consequence. While originally this concept of social capital was limited to association having positive effects on development, recently it has been relaxed to include groups - that may have undesirable outcome as well, such as association with rent seeking behaviour (for example, (the Mafia in Southern Italy). The key feature of social capital in this definition is that it facilitates co-ordination and co-operation for the mutual benefit of the members of the association (Putnam 1973 cited in Collier 1998).

Coleman (1988), cited in Satu (1999), also argued that social capital could include "vertical" associations as well, characterized by hierarchical relationships and unequal power distribution among members.

However, the broader concept of social capital was put forth by Coleman (1988) cited in Satu (1999) who defines social capital as "a variety of different entities, with two elements in common. They all consist of same aspect of social structure and they facilitate certain action of actors whether personal or co-operation actors, within the structure". This broadens the concept to include vertical as well as horizontal associations as provided by Collier (1998) and Satu (1999).

b. Types of Social Capital

Generally, there are two types of social capital "government social capital and civil social capital". Collier (1998) distinguished "government social capital" from "civil social capital "by referring to government social capital as governmental institutions that influence peoples' ability to cooperate for mutual benefit. These institutions include the enforceability of contracts, the rule or law, civil liberty and the extent of economic liberty that are permitted by the state. While civil social capital encompasses common values, norms, informal networks and associational memberships affecting the ability of individuals to work together to achieve common goals.

3. Measurements and Impact of Social Capital: An Empirical Evidence

The available indicators of governmental social capital are commonly measured only at the level of nations. For example, values for the "rule of law" are assigned to nations and not to constituent parts of nation. Such as province, villages, or households. In fact, this is a question of data availability as one could conceivably attempt to measure differences in the way local government enforce national laws regarding (for example) the enforceability of contracts, as well as differences in local laws.

Measuring civil social capital is more problematic while the judicial system in most nations is likely to enforce contracts more or less equally well across all regions, cooperative norms, interpersonal trust and the social ties that generate them are more likely to vary by locality. Because they will vary more than government social capital, they are more likely to play a role in explaining regional differences in economic performance within countries. Cooperative norms, trust and social ties are most readily measured through conducting representative surveys of individuals. Important issues arise in aggregating survey-based measure to assign values to nations. For example, a country populated by individuals with ethnic intra-family or intra-ethnic trust or ties is not "high trust societies". (See Fukuyama and others (1995) cited in Knack (1999).

Conceptually, the type of trust that should be unambiguously beneficial to a nation's economic performance is trust between strangers, or more precisely between two randomly matched residents of a country. Particularly in large and mobile societies where personal knowledge and reputation effects are limited, a sizeable proportion of potentially mutually beneficial transactions will involve parties with no prior personal ties. In societies where strangers can trust each other to act in the collective interest, people only can leave their bicycles unattended and unlocked on the street, they can contract with a wide range of parties without extended written agreements, and run a business without devoting substantial time to monitoring employees, partners and suppliers.

According to Grief (1994) cited in Knack (1999) he said that within family trust, intra-ethnic trust or other forms of "particularized trust" or specific trust" may well be corrosive to "generalized trust" (trust in strangers). Strong intra-ethnic trust is an ethnically-heterogeneous society may restrict the scope for transacting and lead to, segmented markets, reducing gains from specialization, and perhaps from the economies of scale.

4.0 METHODOLOGY AND DATA SOURCE

4.1 Model Specification

In determining the influence of the social capital on economic growth in Nigeria, an econometric analysis based on non-linear production function of Cobb Douglas is built around the components of government social capital: The models are thus used in estimate the impact of these components on economic growth in Nigeria.

The components that were taking into consideration are: (enforceability of contract, rule *of* law, civil liberty and economic liberty). To quantify these components dummy variables were used. Dummy 1 and dummy 0 for years when the components were perceived as having positive and negative impact respectively.

For the use of dummy's two period were put into consideration, that is the period of military rule and the period of democratic rule. Therefore dummy 1 is assigned for the period of democratic regime, while dummy 0 is assigned for the period of military rule.

The model is an independent and addictive that relates economic growth with components of government social capital. The essence of this model is to determine the relative weight of each components of the government social capital improve economic growth in Nigeria using Gross Domestic Product (GDP) as proxied.

In specifying the model emphasis is placed on whether social capital (government social capital) has a significant impact on economic growth in Nigeria.

Having stated this, the model is therefore formulated using Cobb-Douglas production function. The production function in the neo-classical growth model is therefore given as:

$Q=f(k, L)$ .... (i)

Where

Q = output (amount)

K = capital input

L= Labour input

However, the above equation (1) was further expanded and transformed by Cobb-Douglas. Accordingly Cobb-Douglas production function can be written as:

$Q = Ak^{\alpha}L^{\beta}U$ .... (2)

If we disembodied capital from the above Cobb-Douglas production function, we have

$Q = Ak_1^{\alpha 1} K_2^{\alpha 2} L^{\beta}U$ .... (3)

Where:

Q = Output

A = Technical efficiency (or efficiency of production)

K_1= social capital

K_2 = capital inputs

L= labour inputs

U = disturbance term

$\alpha 1$, $\alpha 2$ & β = elasticity of output with respect to capital and labour.

However, by disaggregating equation (3)

The equation then becomes

$Q= AK_{11}{}^{\alpha 11} K_{12}{}^{\alpha 12}K_{13}{}^{\alpha 13} K_{14}{}^{\alpha 14} K_2{}^{\alpha 2} L^{\beta}U$ .... (4)

The Cobb-Douglas production function exhibits a non-linear relationship and the appropriate transformation for the estimation is to work with the logarithms of the variables.

$\text{Log } Q = \text{Log}A + {}_{\alpha 11} K_{11} + {}_{\alpha 12} K_{12} + {}_{\alpha 13} K_{13} + {}_{\alpha 14} K_{14} + {}_{\alpha 2}$
$\text{Log}K2 + \beta\text{Log}L + U$ .... (5)

Where:

Log Q = Log of output proxied by the nation's GDP

Log A = Log of technical efficiency (or efficiency of production)

K_{11} = Enforceability of contract

K_{12} = Rule of law
K_{13} = Civil liberty
K_{14} = Economic liberty
$LogK_2$ = Log of capital inputs
Log L = Log of labour inputs

α_{11}..... α_{14}=	Estimation parameter associated with the influence of the components of government social capital resting on economic growth in Nigeria.
$\alpha_2 + \beta$=	Estimation parameters associated with the influence of capital and labour on economic growth in Nigeria.
U =	Disturbance term

However, K_2 which is the capital input can be seen as the cost or expenditure committed by the public on variables that assist social capital. for this study, cost of physical structure which include housing, road and electricity on the part of the government will be employed to represent physical capital. This was done on the basis that the physical structures mention above play two important roles (1) as contributors to economic growth and (2) as interactive variables with social capital attainment.

Labour on the other hand, can be measured through both industrial and agricultural output. however, given the fact that many other avenues are opened for measuring labour input, capacity utilization is taken as input measurement for labour. This is because where there is economic progress in our economy, one will expect expansion in the production of goods and services and this can be attained under a situation of perfect social environment. Thus, the increase in productivity as a result of improved in social economic environment as may be epitomized by social capital components is measured using capacity utilization.

On a-priori the expected pattern of the structural behaviour of the independent variables (k_{11}, k_{12}, k_{13}, k_{14}) on the dependent variable (GDP) is:
$K_{11>0}$, $K_{12>0}$, $K_{13>0}$.$K_{14>0}$, $K_{2>0}$, $L_{>0}$

Indicating that the more the quality of the components of government social capital, capital inputs and labour inputs, the better the economic performance of Nigeria.

4.2 Estimation Techniques

In assessing the problems confronting the social capital in Nigeria, the components of government social capital such as enforceability of contracts, the rule of law, civil liberty and the economic liberty were taken into consideration.

To determine the severity of these components, scores is assigned to each component. Dummy 1 will be used for years when the components perceived as having positive impact and Dummy 0 for the years when the components perceived as having negative impact on the Nigerian economy.

4.4 Data Source

A data for the period 1980 - 2003 on the impact of social capital on economic growth (proxies by the nation's gross domestic product (GDP)) and the components of the governmental social capital were used. This governmental social capital comprises of enforceability of contracts, the rule of law and the extent of civil and economic liberties.

To quantify these components dummy variables were used. Dummy I and dummy 0 for years when the components were perceived as having positive and negative impact respectively.

The data were obtained from the African Development Bank selected statistics on African countries for the year 2005 (ADB 2005).

5. EMPIRICAL RESULTS AND DISCUSSION

5.1 Empirical Results

The results of the regression analysis conducted at 5% level of significance are presented in Table 1 below.

Table I: Regression results of government social capital and economic growth in Nigeria

Variable	Coefficient and t-value
Intercept	8.61
(t)	(3.81)
Kap	1.51
(t)	(6.89
Lab	-1.26
(t)	(-1.21)
K11	-1.29
(t)	(-3.26)
K12	-2.15
(t)	(-0.02)
K13	-1.14
(t)	(-1.76
K14	-4.56
(t)	(-0.61)
R^2	0.88
F	16.1

The t-values are in parenthesis

A look at the model shows that the model is of good fit because it has an R^2 of 0.88. This shows that 88% variation in the dependent variable (GDP) is explained by the explanatory variables (the components of social capital) while the error term take care of the remaining 22% which are variables in the study that can not be included in the model because of certain qualitative features. At

5% level of significance the F-statistics shows that the model is useful in determining if any relationship exist between economic growth and social capital in Nigeria, as the computed F-statistic which is 16.1 is greater than the tabulated F-statistic (7.21 degree of freedom) valued at 2.49.

In terms of the individual independent variables the t-test shows that at 5% level of significance only capital inputs fulfils our a-priori expectation. While labour inputs, enforce ability of contract, rule of law, civil liberty and economic liberty are negatively related to economic growth in Nigeria which are contrary to our a-priori expectation.

5.2 Discussion of the Results

Our expectation in this study is that with the components of government social capital fully put in place in Nigeria, the Nigerian economy would improve. But to our surprise the results gave a contrary view. These results indicate that government social capital is far from improving the level of economic activities in Nigeria.

That the sign of capital inputs is positive as expected, is an indication that capital inputs have direct relationship with economic growth and social capital in Nigeria. This situation can be linked to the increase in investment in the economy, expenditure on low cost housing, maintenance of road network, improvement and development in the performance of the capital market which prompt the privatization policy in Nigeria, and the call for democratic principle which increase the participation of politics by the people in the country most especially women.

Also the sign of labour inputs which is expected to have positive impact on economic growth in Nigeria provided contrary results. Thus, indicating that the quality of labour force put in place is not good enough to improve economic growth in Nigeria, a situation that can be linked to high level of unemployment, recruitment problems by recruiting on the basis of whom you know, leaving the competent out because he knows nobody, this really affect the kind of labour force we have in this country.

However, the components of government social capital (enforceability of contract, the rule of law, civil liberty and economic liberty) that were expected to have positive impact on economic growth in Nigeria, however, provided a contrary result, thus, indicating that these variables have not improved the economic growth in Nigeria.

With respect to enforceability of contract, negative impact on economic growth can be linked to the failure of Nigeria government in enforcement of contract, and high level of corruption. These can be due to non-chalet attitudes on the part of government in awarding contracts to incompetent and fraudulent contractors.

That the rule of law gave a contrary result to our a-priori expectation can also be linked to the prolonged military and authoritarian rules in Nigeria, where the country constitution is abandon for Decree, it has also come to our notice that even during the last democratic dispensation there was no respect for the rule of law, in a situation where the court will rule and the Government will turn down the ruling , here the rule of law is suffer..

For civil liberty to have gave a negative result can also be linked to a bad governance, human right violation and a prolonged military rule in the country. Also the inability of the government to deregulate the market, also the privatization policy embarked upon by the Government which have not yielded any possible impact on the people and economy as well and implementation of certain policy which have adverse effect on the economy can also be linked to the lack of economic liberty in Nigerian economy.

5.3 Conclusion and Recommendations

An empirical study of the influence of social capital on economic growth in Nigeria was carried out using multiple linear regression analysis.

The findings in this study shows that social capital (government social capital) when based (In its components are negatively related to economic growth in Nigeria. Given these results, it is thus important for the Nigerian government to address the issue of the components of government social capital given its relevance to economic development.

In addressing this issue, the government should be accountable to its people, so that government must be responsive to citizens at large rather than to narrow interest. Government should also facilitate agreement where political preferences are polarized and should also be able to associate with greater innovation in policy making to face new challenges.

Holding government accountable is arguably the most important means by which social capital can influence performance. Greater trust and more civic-minded attitude can improve governmental performance by affecting the level; and character of political participation, reducing rent seeking and enhancing public interest behaviour. Government should be transformed in the awarding of contracts by awarding the contracts to the honest and competent contractors and lay down the rule and regulation of its activities by making sure that corrupts contractors did not go unpunished.

Government should be able to involve the people in their policy making, most especially in the areas of deregulation of the market and also try to streamline its ownership of some enterprises, which had been causing problem to the Nigerian economy. It should be able to address issues with labour union (concerning the welfare of its citizens) before embarking on implementation of any policies. The issue of good governance that has eluded the nation and corruption that has ruined the nation's economy should also be addressed. When good governance is allowed to thrive the components of government social capital would be enhanced and these would improve economic growth in Nigeria.

Above all, is the generalized trust among the government officials, private organizations and individuals in carrying out their activities. With the above recommendations fully put in place, there will be an improvement in the Nigerian economy.

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