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Empirical Determination of the Causal Link between Private Sector Credit and Manufacturing Output in Nigeria

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Abstract:

The Nigerian economy has been skewed towards a mono-economy with much reliance on the oil sector. However, with the fall in global oil price, there is now a shift of interest to a more promising sector capable of liberating the economy. This study is centered on determining the direction of causality between private sector credit and manufacturing output in Nigeria. The study utilized quarterly time series data from 1981 to 2015. The study adopted Toda and Yamamoto approach to granger causality in determining the existence of long run association between private sector access to credit and manufacturing output. The result of the Toda Yamamoto Granger causality test showed that there exists a bi-directional causality between private sector access to credit and manufacturing output in Nigeria. The study however recommends that in order to boost the manufacturing productivity in Nigeria, credit should be made available to the private sector at lower cost and effort should be made by government to establish a monitoring framework that will guide the activities of the manufacturing sector to ensure effective utilization of the available credit.

Keywords: manufacturing; output; private; sector; credit.

JEL Classification: E51; H81; O14.

Introduction

Over the years, oil and agriculture have been the major sources of Nigerian revenue with greater percentage coming from the oil sector. This increased revenue from oil resulted to the neglect of other sectors such as the manufacturing sector, information communication sector, and even the agricultural sector that was known to be the next after oil. However, the manufacturing sector plays a catalytic role in a modern economy which has many dynamic benefits crucial for economic transformation. It is because of this vital role expected of the manufacturing sector in an economy that prompted Orji, Ogbuabor, Okeke and Anthony-Orji (2018) and Alao (2010) to argue that manufacturing sector is a veritable sector for economic growth. They argued that manufacturing sector creates investment capital at a faster rate than any other sector of the economy while promoting wider and more effective linkages among different sectors. The sector increases productivity in relation to import replacement and export expansion, creating foreign exchange earning capacity, raising employment and per capita income, which causes unique consumption patterns (Orji *et al.* 2015). This sector is less prone to price volatility in the world market and that could be one of the reasons behind nations' emphases on its tremendous contribution in an economy.

In modern period, Nigeria has been making effort to push-up the productivity growth of manufacturing sector by carrying out various reforms in the industries and financial institutions (Osakwe, Ibenta, and Ezeabasili 2019). One among the industrial policies is the Nigeria Industrial Revolution Plan (NIRP) with its formal launch scheduled for early 2014. The NIRP aims to expand the country's industrial capacity by pursuing systematic development in agro-allied industries; metals and solid minerals processing; oil and gas industries; light manufacturing; construction and services (Central Bank of Nigeria, 2013). However, despite Nigeria's immense economic reforms which were all aimed at improving industrial production and capacity utilization of manufacturing sector output, there are still growing concern on the decline of the output of the sector in recent times (Akpokerere and Ighosewe, 2015).

Access to credit is the trust which allows one party to provide resources to another party where the second party does not reimburse the first party immediately, there by generating debt, but instead arranges either to repay or return those resources (or other materials of equal value) at a later date. Access to credit is synonymous to access to finance (Nwosu and Orji 2017; William, Ajaro and Ogumniyi 2007). Finance is vitally important for firm expansion and entrepreneurship. An efficient financial system directs household and firm savings to producers who can most efficiently produce various goods, and therefore facilitates entrepreneurship, firm growth, economies of scale, and ultimately economic growth.

Firms in Nigeria are concerned about their access to finance and the cost of finance - after electricity outages, it was their second and third rated problems. Managers in Nigeria were more likely to say that access to finance is a serious problem than managers in most of the comparator countries (Nwosu and Orji 2016, World Bank 2011). Dikko (2005) as cited in Adegbie and Adeniji (2012) argued that the financial system as wide, complex and regulated as it appears is saddled with enormous tasks and the success of economic, social and political system of the nation hinges on how these are managed. The financial institutions by providing the much needed capital for output and growth fill an important gap in the development process. That is, the financial system is paramount importance in facilitating economic development under a liberalized and reformed environment. He opined that efficiency of the financial intermediation process can be accessed through determination of the level of efficiency in allocation, cost efficiency and price efficiency. The boldest socio-economic contribution of banks is the emergence of the small and medium industries equity investment scheme (SMIES) can be viewed as economic contribution since the banks expect returns overtime only if the project operates profitably. Access to bank credit is on the ground of viability of the project coupled with the past record of the industry or firm.

Credit is seen as a viable resource that affects productivity. All else equal, the expansion and growth of manufacturing industries are anchored on the level of credit accessed and how such credit is utilized. It is pertinent to note however that credit that impact most in the economy are those accessed by private sectors. It is argued that private sector has the feature of efficiency in management and as such channel the credit to the most productive sector. The broad objectives of credit policies in Nigeria over the years have been anchored on the enhancements of availability, reduction of cost and private sector access to credit as well as the stimulation of growth in the productive sectors of the economy (Orji, Anthony-Orji, Mba 2015). In a review of credit allocation to private sector, Onodugo, Anowor, Ukweni and Ibiam (2014) argued that credit allocation as at 1980 was based on preferred and less preferred sectors. While the preferred sectors comprised productive sectors such as agriculture, manufacturing and services *etc*., the less preferred sectors comprised the general commerce.

However, manufacturing productivity has remained low for years despite the conscious effort of the government to boost the contribution of this sector to the gross domestic product. Also, even with the current recession in Nigeria, manufacturing sector productivity has further dropped drastically. This is not the number of workers that are laid-off due to high cost of production. Thus, it has become an empirical concern to consider the relationship between credit to private sector and manufacturing output.

Against this background, the aim of this paper is to empirically determine the direction of causality between private access to credit and manufacturing output in Nigeria. This is very vital because it will aid in development of policies that will enhance the productivity of the manufacturing sector so as to reduce the increasing rate of unemployment and upturn manufacturing share to gross domestic product.

1. Review of related literature

1.1. Theoretical literature

A model of the neoclassical credit market postulates that the terms of credits clear the market. If collateral and other restrictions remain constant, the interest rate is the only price mechanism. With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. It is thus believed that the higher the failure