



Association Between Development Banking And Technical Innovation In Nigeria: An Empirical Analysis

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Abstract

Innovations do not occur with spontaneity but involves activities that have cost implications and hence the need for proper funding. The relationship between development banking and innovations, particularly, technical innovations, is still an empirical question. This study empirically explored the relationship between development banking and innovation in Nigeria during the period, 1996-2023. Pearson correlation and covariance tests were applied to the annual time series data obtained from World Development Indicators. In this study, technical innovation is proxy with scientific and technical journal articles, while number of development banks is the proxy for development banking. Empirically, the study found the existence of a strong, positive, and significant relationship between development banking and technical innovation in Nigeria. This implies that, a higher number of development banks is associated with higher volume of technical innovation in Nigeria. It can therefore be concluded that development banking and innovation have are directly related in Nigeria. The study recommends that government should look in the direction of development banks, in order to promote technical innovations in Nigeria and also development banks should also embrace the positive role of technical innovations in their operations.

Keywords: Correlation, Covariance, Development Banking, Innovation, Finance, Scientific, Technical.

Introduction

In the contemporary economic landscape, technical innovation has emerged as a pivotal driver of national competitiveness, productivity growth, and sustainable development. Particularly in developing economies, fostering innovation is essential for addressing structural imbalances, enhancing industrial capacity, and achieving inclusive economic transformation (World Bank, 2020). Nigeria, as Africa's largest economy, has recognized the strategic imperative of building a knowledge-based and innovation-driven economy, as reflected in policy frameworks such as the National Digital Economy Policy and Strategy (NDEPS) 2020–2030 (Federal Ministry of Communications and Digital Economy [FMCDE], 2020). Despite these policy initiatives, the country continues to grapple with weak innovation infrastructure, limited research and development (R&D) funding, and low levels of technology adoption across sectors (Oyebanji, et al., 2022).

In recent years, Nigeria has witnessed a surge in technological transformation, particularly in the digital financial services space. Financial technology (fintech) firms and digital platforms are disrupting traditional business models, improving service delivery, and expanding access to financial services (Otonne et al., 2023). However, despite this progress, there remains a significant gap in innovation financing, particularly for early-stage technologies and small and medium-sized enterprises (SMEs). Development banks, by offering concessional loans and risk-tolerant capital, can potentially bridge this gap and stimulate innovation at scale. While studies have explored innovation and access to finance independently (Salihu, 2020; Osisanwo, 2022), few have empirically examined the linkage between development banking and technical innovation in Nigeria. Understanding this relationship is crucial in aligning development financing strategies

with the country's innovation and industrialization goals.

Development banking institutions are considered critical vehicles for financing long-term investments that market-oriented financial institutions often neglect due to risk aversion and short-termism. Globally, development banks have played instrumental roles in supporting industrialization, technological advancement, and entrepreneurial ecosystems by providing patient capital and facilitating strategic investments in research, innovation, and infrastructure (Mazzucato & Penna, 2016; Griffith-Jones & Ocampo, 2018). In the Nigerian context, institutions such as the Bank of Industry (BOI) and the Nigerian Export-Import Bank (NEXIM) have been established to bridge financing gaps in key sectors, including technology-driven enterprises and manufacturing. However, the extent to which these banks have effectively catalyzed technical innovation remains a subject of empirical inquiry.

Development banking has emerged as a cornerstone of long-term economic development strategies in emerging economies, particularly in Nigeria, where financial markets remain underdeveloped and private investment in innovation is relatively low. Development banks such as the Bank of Industry (BOI) and the Nigerian Export-Import Bank (NEXIM) provide tailored financial support to sectors that are often neglected by commercial banks, including agriculture, infrastructure, and manufacturing (Adegbite & Machethe, 2020). These sectors are critical for promoting technical innovation, which is essential for enhancing productivity, competitiveness, and inclusive growth.

The relationship between development banking and innovation in Nigeria is complex and underexplored. While some scholars suggest that development finance institutions (DFIs) have the potential to incentivize innovation through targeted funding and

technical support (Adeniran & Ajakaiye, 2021), others argue that bureaucratic inefficiencies, political interference, and limited institutional capacity undermine the innovation impact of DFIs (Ibrahim & Alabi, 2019). Furthermore, Nigeria's innovation ecosystem is characterized by fragmented coordination among stakeholders, regulatory bottlenecks, and inadequate intellectual property protections (Adeleye & Esan, 2023), all of which may hinder the transmission mechanisms through which development banking influences innovation outcomes. Theoretically, Schumpeterian and endogenous growth models underscore the role of finance in enabling innovation by reducing constraints to investment in human capital and technological capabilities (Aghion et al., 2015).

Despite policy initiatives and substantial public investments in development banking, Nigeria continues to lag behind in innovation outputs, as reflected in its low ranking on the Global Innovation Index (WIPO, 2023). There is insufficient empirical evidence on the extent to which development banking contributes to the generation, adoption, and diffusion of technical innovations in Nigeria's economic landscape. Moreover, challenges such as poor infrastructure, bureaucratic lending processes, limited technical support, and low absorptive capacity among firms hinder the effective utilization of development bank funding for innovative projects (Adeyemo & Obafemi, 2024). The lack of coherent data and systematic evaluation also restricts stakeholders from understanding how effectively development banks support innovation-driven enterprises.

Empirical analyses of the development finance innovation nexus are particularly pertinent in light of Nigeria's quest to diversify its economy away from oil dependence and accelerate industrial development (Osarosee and Laoye, 2025; Famakin et al., 2024; Nwodo et al., 2024;

Ogunkoya et al., 2024; Ndaghu et al., 2023; Obayi et al., 2023; Oyedele, 2022; Okpalaoka et al., 2022; Nwosu et al., 2022; Ejemeyovwi et al., 2021). Within this framework, development banks are positioned as agents of structural change, capable of altering innovation trajectories in sectors deemed strategically important for national development. This study therefore seeks to empirically examine the association between development banking and technical innovation in Nigeria, contributing to the literature by offering evidence-based insights into the role of DFIs in fostering an innovation-led development agenda.

Literature Review

Conceptual Review

Development Banking

Development banks are specialized financial institutions established to provide long-term capital and financial services in sectors that are underfunded by commercial banking systems. Their mandate often extends beyond profit maximization to include social and developmental goals such as industrialization, technological upgrading, infrastructure development, and inclusive economic growth (Griffith-Jones & Ocampo, 2018). As state-owned or publicly-backed institutions, development banks serve as counter-cyclical tools in economic policy, especially during financial downturns, when risk-averse private investors retreat from lending (Crespi et al., 2021). The conceptual foundation of development banking is rooted in structuralist and Schumpeterian economics, which posit that financial markets are inherently imperfect, particularly in developing economies where institutional voids and capital shortages are prevalent (Mazzucato & Penna, 2016). Development banks are thus positioned to correct market failures by offering concessional loans, guarantees, and equity participation in ventures that are essential for national development but unattractive to

private financiers due to perceived risks or long gestation periods (Luna-Martínez & Vicente, 2015).

A key conceptual attribute of development banks is their ability to play both financial and strategic roles. Financially, they provide long-term financing for projects in agriculture, industry, infrastructure, and technology, often with interest rates and repayment terms that are more favorable than those of commercial banks. Strategically, development banks are policy instruments for the state, used to direct capital flows toward sectors identified as priorities for structural transformation and economic diversification (De Luna-Martínez et al., 2023). Development banks are also differentiated by their developmental mandate, which includes goals that go beyond financial returns. These include employment creation, technological spillovers, and capacity building for small and medium enterprises (SMEs). For example, the Bank of Industry (BOI) in Nigeria has adopted various intervention programs targeting the digital economy, creative industries, and green energy technologies, aimed at stimulating innovation and entrepreneurship (BOI, 2022). However, conceptual critiques of development banks often focus on issues of governance, political interference, and inefficiency. Poorly governed development banks may succumb to clientelism, favoring politically connected borrowers and accumulating non-performing loans that undermine their sustainability (Ibrahim & Alabi, 2019). Moreover, without clear performance metrics and strong oversight, development banks risk becoming passive institutions that neither catalyze innovation nor deliver on their developmental mandates (Chandrasekhar, 2020). In recent years, there has been a resurgence of interest in development banking, especially in the context of financing sustainable development goals (SDGs) and post-COVID-19 economic recovery. The global reappraisal of state-led

financing mechanisms highlights the relevance of development banks as facilitators of structural transformation, particularly in low- and middle-income countries where access to affordable finance remains limited (UNCTAD, 2021).

In Nigeria, the conceptual significance of development banks lies in their potential to fill financing gaps in strategic sectors such as manufacturing, agro-processing, and technology-based enterprises. Despite the establishment of various DFIs, including the Development Bank of Nigeria (DBN) and the Nigerian Export-Import Bank (NEXIM), questions persist regarding their effectiveness in driving innovation and industrial competitiveness (Adeleye & Esan, 2023). Hence, a thorough understanding of the conceptual framework surrounding development banks is essential for assessing their developmental impact and for designing reforms that enhance their operational efficiency and developmental outcomes.

Technical Innovation

Technical innovation is broadly defined as the application of new or significantly improved technologies, products, or processes to enhance productivity, competitiveness, and socio-economic outcomes (OECD, 2018). It encompasses both tangible advancements such as machinery, digital tools, and software and intangible elements, including new knowledge, processes, and organizational practices (Archibugi & Filippetti, 2018). In the context of developing economies like Nigeria, technical innovation is critical not only for driving industrial development but also for addressing persistent development challenges such as unemployment, low productivity, and import dependency (Adeleye & Esan, 2023). The conceptualization of technical innovation is rooted in Schumpeterian theory, which emphasizes innovation as a fundamental engine of economic change and growth.

Contemporary frameworks often distinguish between incremental and radical innovations. Incremental innovations involve gradual improvements to existing technologies, while radical innovations introduce entirely new paradigms that transform production and consumption patterns (Dosi & Nelson, 2016). In Nigeria, the bulk of innovation tends to be incremental, driven by necessity entrepreneurship and informal sector adaptations rather than structured R&D (Egbetokun et al., 2017). This reflects broader systemic weaknesses, including underinvestment in R&D, weak linkages between research institutions and industry, and an underdeveloped intellectual property rights (IPR) regime (Oyebanji et al., 2022). Technical innovation is also influenced by the broader national innovation system (NIS) a conceptual framework that captures the institutional and policy environment within which innovation occurs. Effective NIS includes universities, research centers, government agencies, financial institutions, and private firms, all interacting to produce, diffuse, and apply new knowledge (Lundvall, 2016). In Nigeria, however, the innovation ecosystem is fragmented, with weak coordination among actors and limited state capacity to incentivize and regulate innovation activity (Adegbite & Akinwale, 2020). Digital technologies have further expanded the conceptual boundaries of technical innovation. Innovations in information and communication technologies (ICTs), artificial intelligence (AI), and renewable energy systems are increasingly central to economic transformation. The digital economy presents significant opportunities for Nigeria to leapfrog traditional development trajectories, provided that foundational constraints such as broadband access, digital literacy, and regulatory frameworks are effectively addressed (World Bank, 2021).

Importantly, technical innovation is not solely a function of technological input, but also of institutional support and financing mechanisms, such as development banks and public R&D investments. Empirical studies have shown that innovation thrives where financial constraints are minimized and where firms have access to long-term, risk-tolerant capital (Crespi & Zuniga, 2016; Lee, 2020). This highlights the interdependence between innovation and development financing, particularly in contexts where market-based finance is limited or inefficient. In sum, technical innovation is a multidimensional and dynamic concept that intersects with economic policy, institutional development, and financial systems. For Nigeria, the imperative is to strengthen its innovation systems, improve policy coherence, and leverage both public and private financing mechanisms to translate innovation potential into tangible economic outcomes.

Theoretical Review

Schumpeterian Innovation Theory

The theoretical foundation of this study is anchored in Schumpeterian Innovation Theory, originally advanced by Joseph Schumpeter in 1911, in his seminal work *Capitalism, Socialism and Democracy* (1942). Schumpeter conceptualized innovation as the central engine of economic development and postulated that economic progress is driven not by the mere accumulation of capital, but through the “creative destruction” that innovation engenders. In his view, entrepreneurs are the agents of innovation, introducing new combinations of resources such as new products, production methods, markets, or organizational forms that disrupt the equilibrium and generate dynamic economic transformation. The major assumption of Schumpeterian theory is that innovation is both an endogenous and discontinuous process, inherently linked to entrepreneurial activity and institutional

support. It emphasizes that access to finance is a necessary though not sufficient condition for innovation to occur (Schumpeter, 1942). The theory also assumes that innovation emerges in a systemic manner, shaped by structural conditions such as access to capital, institutional frameworks, and policy environments (Aghion et al., 2015). This theoretical position has evolved into a broader Schumpeterian framework that highlights the importance of national innovation systems, public financing mechanisms, and knowledge spillovers in stimulating technical change (Mazzucato & Penna, 2016).

The relevance of Schumpeterian theory to this study is multidimensional. First, it offers a conceptual lens through which the relationship between development banking and technical innovation can be understood. In developing countries like Nigeria, the private sector is often constrained by limited access to affordable long-term capital, inadequate infrastructure, and high innovation risks. These constraints create a financing gap that development banks are institutionally designed to bridge. From a Schumpeterian perspective, development banks can serve as innovation enablers, particularly by financing projects that involve high uncertainty and long gestation periods but hold transformative economic potential (Crespi et al., 2021). Second, Schumpeterian theory highlights the role of state-led financing in correcting market failures associated with innovation, such as underinvestment in R&D, information asymmetry, and externalities. This theoretical orientation aligns with recent empirical research emphasizing the catalytic role of development finance institutions (DFIs) in fostering innovation ecosystems, especially in emerging economies (Luna-Martínez et al., 2023; Griffith-Jones & Ocampo, 2018). Development banks, by offering concessional financing, technical assistance, and risk mitigation instruments, effectively reduce innovation barriers and enhance the

absorptive capacity of firms to adopt and generate new technologies.

Furthermore, the theory underlines the interdependence between financial structures and innovation outcomes, suggesting that the structure of financial institutions and their strategic orientation can significantly influence the innovation trajectory of a country (Lee, 2020). In the Nigerian context, where innovation is often necessity-driven and informally organized, the presence of well-functioning development banks such as the Bank of Industry (BOI) or the Development Bank of Nigeria (DBN) can enhance innovation capabilities by channeling resources to underfunded but high-potential sectors such as manufacturing, ICT, and green energy. In essence, Schumpeterian theory provides a robust explanatory framework for analyzing how institutionalized financial mechanisms, particularly development banking, interact with structural innovation constraints in developing economies. It also supports the core hypothesis of this study: that development banking is positively associated with the advancement of technical innovation in Nigeria, particularly when it is targeted, strategic, and aligned with national innovation objectives.

Financial Intermediation Theory

The Financial Intermediation Theory was initially formalized by Gurley and Shaw (1960) and later expanded by Diamond and Dybvig (1983). It posits that financial institutions act as intermediaries that facilitate the flow of funds from surplus units (savers) to deficit units (borrowers), thereby stimulating investment and economic activity. The theory assumes that intermediaries reduce transaction costs and information asymmetries, thereby increasing the efficiency of resource allocation in the economy. By pooling resources and managing risk, financial intermediaries (e.g., development banks) promote productive investments, particularly

in high-risk but high-return sectors like technology and innovation (Diamond & Dybvig, 1983).

The relevance of this theory to your study lies in the role that development banks play as specialized financial intermediaries. In Nigeria, development banks are expected to bridge financing gaps for sectors that commercial banks might consider too risky particularly technological innovation and startup ventures. Thus, the theory helps explain how effective intermediation by development banks can promote innovation and support national development goals. Recent literature supports this application. For instance, Eze and Uchenna (2023) showed that efficient financial intermediation by development finance institutions led to increased funding of tech-focused SMEs in Nigeria. Likewise, Ibrahim and Lawal (2021) found that development banking significantly contributed to R&D funding in sectors like agriculture and ICT, areas often underserved by private capital.

In conclusion, both Schumpeter's Theory of Innovation and the Financial Intermediation Theory offer rich explanatory frameworks for analyzing the relationship between development banking and technical innovation in Nigeria. While Schumpeter's theory highlights the centrality of innovation in economic development, the intermediation theory underscores how development banks act as catalysts by providing access to capital, thereby enabling innovation to thrive. Integrating these theories provides a holistic lens through which the mechanisms and effectiveness of innovation financing can be empirically examined.

Empirical Review

Osarosee and Laoye (2025) investigated how technopreneurship influences FinTech start-up growth in Nigeria. Using surveys and inferential statistics, it was found that technical innovation and entrepreneurial

acumen significantly enhanced market reach. The study concluded that technopreneurship drives financial inclusion and economic growth. However, the study failed to assess how development banks could finance FinTech innovations.

Famakin et al. (2024) investigated the effect of innovation on the growth of quantity surveying firms in Nigeria. Using a correlational research design, data were collected from 180 firms and analyzed with regression models. Results showed that innovative practices improved productivity and client satisfaction. The conclusion emphasized the strategic value of innovation. However, no analysis of how development banks could support innovation adoption in professional services.

Nwodo et al. (2024) studied the effect of technological capability on the competitive advantage of industrial firms in South-East Nigeria. Surveying 385 staff and using linear regression, they found a strong link between R&D investment and market dominance. It was concluded that innovation capability is key to industrial growth. However, they ignored the enabling role of development banks can fund R&D for competitive advantage.

Ogunkoya et al. (2024) aimed to evaluate how technological innovation affects firm performance in Nigeria Consolidated Breweries. A purposive sampling of 102 respondents was used with descriptive statistical tools. The study reported that technological learning significantly improved operational efficiency. They concluded that innovation enhances organizational competitiveness. However, the research did not analysis on how development banking fosters innovation in the manufacturing sector. Ndaghu et al. (2023) examined the role of technological innovation in boosting agricultural productivity during Nigeria's transition from oil dependency. Using ARDL models, the study revealed that innovation

had a long-run positive impact on agricultural output. The study concluded that innovation is crucial for rural development. However, they omitted how development banks in agriculture-related innovation.

Obayi et al. (2023) assessed how innovations in technology affect vocational and technical education in Nigeria. Using qualitative content analysis, they discovered that digital integration improved student employability and skill development. The authors concluded that innovation reforms are essential for a future-ready workforce. However, the study ignored how development banks could support educational innovation initiatives.

Oyedele (2022) studied the impact of financial innovation on insurance company performance in Nigeria. A sample of 150 senior executives was surveyed, and data were analyzed using structural equation modeling. The findings showed that innovation improved service delivery and customer satisfaction. It concluded that innovation drives performance in the financial sector. The role of development banks in supporting financial innovations in insurance was not discussed.

Okpalaoka et al. (2022) examined the impact of technological innovation capabilities on the performance of manufacturing SMEs in Lagos State. Using a survey research method, data were analyzed through regression analysis. They found that research and development (R&D) capabilities had a significant effect on profitability and market expansion. The study concluded that innovation capabilities are crucial for SME sustainability. However, no link was established between development banking and the provision of innovation resources.

Nwosu et al. (2022) explored the relationship between banking innovation and sustainable development in Nigeria across the pre- and post-COVID periods. Using econometric analysis on CBN data, the study found that mobile and digital banking had a positive

influence on human development indices. The conclusion emphasized that banking innovation is a vital tool for inclusive development. Yet, the study overlooked development banking despite their critical role in innovation funding.

Ejemeyovwi et al. (2021) explored how ICT adoption and innovation influence financial development across Sub-Saharan Africa, including Nigeria. Using panel data econometrics, they observed that innovation had a significant positive effect on financial system growth. The study concluded that innovation policies are essential for digital transformation. However, the study was not specific to Nigeria and omitted the development banking context.

Methodology

The study of the association between development banking and innovation was carried based on ex-post facto research design, hence the use of secondary data in the analysis. The covariance analysis approach was employed in the study with specific techniques of Pearson correlation and covariance. The study, because of the normality of the variables of the study employed two normality-compliant methods of ordinary and ordinary uncentered Pearson correlation and covariance.

The data used are quantitative in nature and annual infrequency and are obtained from the World Bank's World Development Indicators. Innovation was proxied with the Number of scientific and technical journal articles while development banking was measured as the Number of development banks. Data on innovation were obtained from World Development Indicators while Central Bank of Nigeria's Statistical Bulletin was the source of data on development banking.

The covariance analysis was used to obtain different measures of association (covariances and correlations) and associated test statistics for the series in a group. The study computed

the measures of association are ordinary Pearson product moment, ordinary uncentered Pearson product moment, ordinary Pearson

co-variance test, and ordinary uncentered Pearson co-variance test.

Results and Discussion

Descriptive Statistics

Summary Statistics

Table 1 presents the descriptive statistics for the study.

Table 1: Descriptive Statistics

	INNO	DEVB
Mean	3045.716	5.142857
Maximum	7899.950	6.000000
Minimum	884.8300	4.000000
Std. Dev.	2052.578	0.803432
Skewness	0.941242	-0.258250
Kurtosis	2.921451	1.648482
Jarque-Bera	4.141570	2.442269
Probability	0.126087	0.294895
Observations	28	28

Source: Authors' computation using Eviews 10

Common sample descriptive statistics was computed using observations for which there are no missing values in any of the series in the group and the summary as presented in Table 1 reveals that the average scientific and technical journal articles and number of development banks in Nigeria was about 3046 and 5 respectively in the study period. The

minimum and maximum scientific and technical journal articles were roughly 885 and 7900 respectively while that of number of development banks were 4 and 6 respectively. Going by the Jarque-Bera statistics, both variables (innovation and development banking) are normally distributed.

Trend Analysis

Figure 1 presents the trend of the variables of the study.

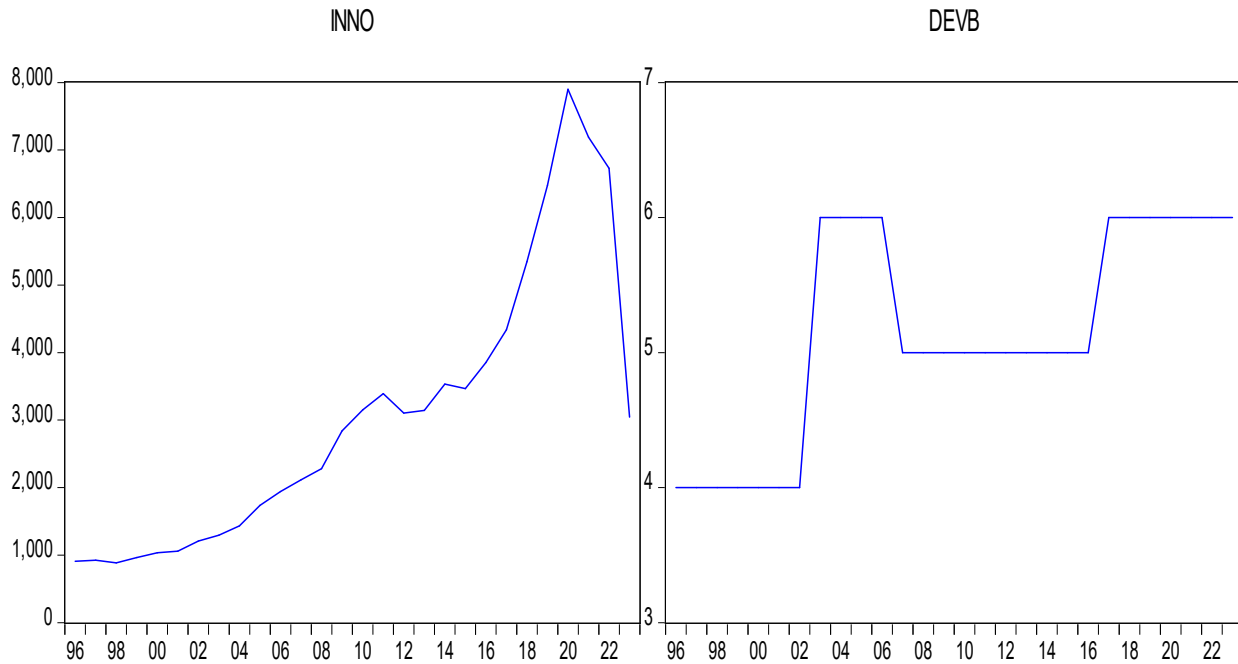


Fig. 1: Trend Analysis of number of scientific and research journals and numbers of development banks in Nigeria from 1996-2023

Source: Authors' design using Eviews 10

The trend analysis of the variables of the study as presented in Figure 1 shows an upward trend in the number of scientific and technical journals in Nigeria from 1996 to

2020 until after it started nose-diving. However, a zig-zag trend was noticed in the number of development banks in Nigeria in the study period.

Empirical Analysis

Correlation Analysis

Table 2 summarizes the Pearson correlation analysis based on the normality methods of

ordinary and ordinary uncentered methods/approaches.

Table 2: Pearson Correlation Analysis of Development Banking and Innovation in Nigeria

[I]. Ordinary Pearson Moment Correlation			[II]. Ordinary Uncentered Pearson Moment Correlation		
Coefficient	INNO	DEVB	Coefficient	INNO	DEVB
INNO	1.000000		INNO	1.000000	
	-----			-----	
DEVB	0.634592*	1.000000	DEVB	0.877388*	1.000000
	[0.0003]	-----		[0.0000]	-----

Note: Values in [] are probabilities; * denotes statistically significant at 1% since p-value is less than 0.01

Source: Authors' computation using Eviews 10

In the ordinary Pearson correlation analysis of development banking and innovation in Nigeria in Table 2(Panel I), it can be seen that the development banking is positively correlated (0.634592) and statistically significant ($p < 0.01$) in its relationship with innovation. Likewise, the ordinary uncentered Pearson ordinary correlation analysis in Table

2 (Panel II), development banking has positive (0.877388) and significant ($p < 0.01$) correlation with innovation in Nigeria.

Covariance Analysis

Table 3 summarizes the Pearson co-variance analysis based on the normality methods of ordinary and ordinary uncentered approaches.

Table 3: Pearson Covariance Analysis of Development Banking and Innovation in Nigeria
Covariance Analysis of development banking and innovation in Nigeria

Pearson Covariance Ordinary			Pearson Covariance Ordinary uncentered		
	INNO	DEVB	Probability	INNO	DEVB
INNO	4062608.		INNO	13338992	
	-----			-----	
DEVB	1009.134	0.622449	DEVB	16672.81	27.07143
	[0.0003]	-----		[0.0000]	-----

Note: Note: Values in [] are probabilities; * denotes statistically significant at 1% since p-value is less than 0.01

Source: Authors' computation using Eviews 10

In the ordinary Pearson co-variance analysis of development banking and innovation in Nigeria as reported in Table 3(Panel I), development banking has a positive co-variance (1009.134) with innovation and is also statistically significant ($P < 0.01$). In the same vein, Pearson ordinary uncentered co-variance analyses in Panel II of Table 3 indicate there is a positive covariance (16672.81) between development banking and innovation and this is statistically significant different from zero at 1% level of significance.

Discussion of Findings

In the study of the association between developmental banking and innovation in Nigeria based on covariance analyses, the study established the existence of a positive relationship between development banking and innovation in Nigeria. Specifically, the Pearson ordinary correlation test reveals a weak ($r < 50\%$) association between development banking and innovation but a very strong correlation between the two was

established in the Pearson ordinary uncentered correlation analysis. Since in both cases, the relationship was found to be statistically significant and positive, then it can be said that there is direct link between development banking and innovation in Nigeria. **By this finding, the null hypothesis of no significant relationship between development banking and innovation in Nigeria, is rejected in this study.** The alternative hypothesis that there is significant relationship between development banking and innovation in Nigeria, is upheld.

Conclusion and Recommendations

This study empirically explored the relationship between development banking and innovation in Nigeria during the period, 1996-2023 using Pearson correlation and covariance tests. The study established the existence of a positive relationship between development banking and innovation in Nigeria. Specifically, the Pearson correlation analysis (ordinary and ordinary uncentered) reveal a strong association between development banking and innovation. Since in

both cases, the relationship was found to be statistically significant and positive, then it can be said that there is positive relationship between development banking and innovation in Nigeria. Thus, to improve, innovation,

particularly as it relates to the publication of scientific research journal articles, development banking is key.

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