

Financial Development and Economic Growth Nexus in Emerging Economies: The Role of National Security, Environmental Sustainability and Green Bonds

Charles O. Manasseh^{1*}, Chine Sp Logan², Anthony Orji^{3*}, Oghenefejiro M. Ejime⁴, Obiageli G. Akamobi⁵, Kenekwukwu K. Ede⁶, Nkechi C. Nkwonta⁷ & Odidi C. Onuselogu⁸

¹Department of Banking & Finance, University of Nigeria, Enugu, Nsukka
Email: charssille@gmail.com (Corresponding Author)

²Department of Public Policy, Liberty University, Lynchburg, VA 24502, US
Email: cslogan11@gmail.com

³Department of Economics, University of Nigeria, Nsukka
Email: anthony.orji@unn.edu.ng (Corresponding Author)

⁴University of Salford Business School, Manchester, United Kingdom
Email: o.m.ejime2@salford.ac.uk

⁵Department of Economics, Chukwuemeka Odumegwu Ojukwu University, Anambra State
Email: go.akamobi@coou.edu.ng

⁶Department of Economics, Godfrey Okoye University Enugu
Email: edekenechukwuk@gmail.com

⁷Department of Business Administration, University of Nigeria, Enugu, Nsukka
Email: nkechi.nkwonta@unn.edu.ng

⁸Department of Banking & Finance, University of Nigeria, Enugu, Nsukka
Email: odidi.onuselogu@unn.edu.ng

Abstract

This study investigates financial development and economic growth and moderated for the role of national security, environmental sustainability and green bonds in the emerging economies using annual time series data which covered the period of 2000 to 2022, panel differenced and system generalized method of moment (GMM) as the baseline model as well as fully modified ordinary least squares (FMOLS) and dynamic ordinary least squares (DOLS) as the models for robustness checks. Financial development was stratified into financial development – financial institution access index and financial institution depths index and financial markets – measured with financial markets access index and financial markets depths index. Also, national security were measured with military expenditure, global peace index and global terrorism index, environmental sustainability was measured with indicators such as ecological footprint, biodiversity index and renewable energy share, while the green bonds were measured with environmental protection expenditure and carbon footprint of bank loans as we controlled for climate change and foreign remittances. Findings from the GMM results revealed that while financial development and green bonds shows positive and significant effects on the economic growth in the emerging economies, the national security had negative effects, while the environmental sustainability had significant negative and positive effects on the economic growth of the emerging economies and similar findings were made from the results of the robustness checks (FMOLS) and (DOLS). Also, from the results of the interactive effects financial development with national security, environmental sustainability green bonds, we found that the variables had significant effects on the economic growth. In addition, findings from the marginal effects (ME) and threshold effects (TH) results revealed that while financial

development improves economic growth, additional effects of national security, environmental sustainability and green bonds may have adverse effects on the economic growth in the emerging economies at a certain threshold. Based on these findings, this study recommends that financial development, national security and environmental sustainability should be improved by the authorities to forestall economic growth in the emerging economies.

Keywords: Economic Growth, Financial Development, National Security, Environmental Sustainability, Green Bonds

1. Introduction

Every nation prioritizes achieving economic growth, which is why governments pursue it through a variety of policies and goals (Schumpeter, 1911). Greater economic growth boosts business profitability, which permits increased investment in R&D, lowers poverty, improves infrastructure, and enhances people's quality of life (Biplob and Halder 2018). Economic growth can result in technological advancement, better lives and property, and willingness among businesses to take chances and innovate. It is critically important to the emerging economies in terms of poverty reduction, infrastructural development, investment and innovation, improvement of the standard of living and government revenue, increased global competitiveness, reduction of over-dependence on Aids, and increasing social stability by contributing to the drastic reduction of unemployment, inequality, and social unrest, thereby creating a more cohesive and prosperous society (Barro 2001). However, this cannot be properly achieved without taking into consideration some factors such as financial development, national security, environmental sustainability and green bonds. To this end, scholars are very curious to ascertain whether financial development promotes economic growth and development, with the majority of research suggesting that the development of an economy's financial sector is a prerequisite for economic expansion (Mckinnon 1973, Calderon & Liu 2002, Shaw 1973, Robinson 1952, Khalid & Marasco 2019). Nonetheless, economic growth may also occur as a result of the financial sector's expansion due to funding, the creation of new institutions, tools, and markets, and the maintenance of large investments (Guru and Yadav 2019). Besides, while exploring economic growth, authorities should not limit their considerations to financial development, rather, highlighting national security, environmental sustainability, and green bonds can also boost economic growth and development of emerging economies if properly harnessed.

Left for itself, economic growth cannot be fully achieved without the effects of financial development, because financial development plays crucial roles in improving economic growth in terms of capital formation, efficient resource allocations, risk diversifications, improvement of trade and commerce, entrepreneurship and innovation, and financial inclusion (Schumpeter 1911, Hurlin & Venet 2008). According to Bijlsma et al. (2018), financial development facilitates the best possible deployment of money and provides improved knowledge about potentially successful projects. This implies that strong, efficient and stable financial systems are required for achieving economic growth in the emerging economies. Thus, the reinforcement of financial systems like financial institutions and financial markets should be placed on a closer look for the achievement of economic growth in emerging economies. Many