POLICY BRIEF

PB/03/24

May 2024

THE CENTRE FOR RESEARCH ON FINANCIAL MARKETS AND POLICY®

Bank performance and real sector productivity in East Africa

Executive Summary

We sought to establish the linkages between bank performance and real sector productivity using data for five East African countries (Ethiopia, Kenya, Rwanda, Tanzania, and Uganda) for the period 2014—2022. Employing several econometric procedures using banks' return on assets and return on equity as indicators of bank performance and sectoral value added as proxies for real sector productivity, our results show a robust negative nexus between banking sector performance and real sector productivity. Second, we find that noninterest charges is the major channel of transmission of adverse effects from the banking sector to real sectors such as manufacturing, while the interest channel tends to transmit positive effects especially to the services. Given these findings, policy options include the creation of state-owned banks or specialized finance agencies with a mandate to provide banking services (especially credit) to vulnerable but important economic sectors with high social returns such as agriculture and small, micro, and medium enterprises; and limiting the use of, or tightening the enforcement of policies that limit the use of, noninterest income to reduce systemic risk and to boost real sector productivity for countries in the East African region with relatively low levels of banking sector concentration.

Authored by: Odongo Kodongo Wits Business School, Johannesburg, South Africa).

The Centre for Research on Financial Markets and Policy®

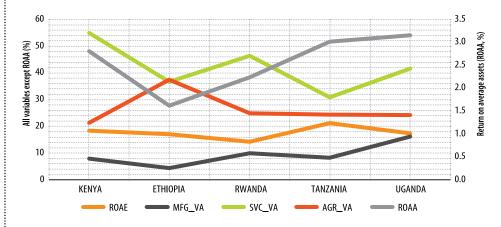
The Centre was established by the Kenya Bankers Association in 2012 to offer an array of research, commentary, and dialogue regarding critical policy matters that impact on financial markets in Kenya. The Centre sponsors original research, provides thoughtful commentary, and hosts dialogues and conferences involving scholars and practitioners on key financial market issues. Through these activities, the Centre acts as a platform for intellectual engagement and dialogue between financial market experts, the banking sector and the policy makers in Kenya. It therefore contributes to an informed discussion that influences critical financial market debates and policies.

Disclaimer: The views presented in this *Policy Brief* are those of the authors and should not be attributed to, or reported as reflecting the position of the KBA, its Governing Council, members or the institutions the authors are affiliated to. The entire content of this publication is protected by copyright laws. Reproduction in part or whole requires express written consent from the publisher.

1. Context

anks' intermediation role broadly constitutes a dichotomy of activities: first, banks facilitate mobilization and accumulation of resources (savings) by minimizing transaction costs and diversifying risks; and secondly, they efficiently allocate the accumulated resources to **enterprises to facilitate their productive activities.** If done efficiently, banks' borrowing rate (reward to savers) should be at the level that minimizes the opportunity cost of saving for economic agents appropriating a surplus of funds, and the lending rate should be at a level that minimizes the cost of capital for economic agents appropriating a deficit. Thus, by efficiently conducting their resource accumulation and allocation roles, banks should earn no more than the "normal" profit and facilitate the maximization of output of productive enterprises. In a well-functioning economy, therefore, it is expected that banks' economic profits (e.g., net profit margin) and accounting profits (e.g., return on assets) would be closely related to real sector productivity.

Figure 1: East Africa – Banking sector and the real economy, 2022



Source: Authors illustration

The East African region's banking sector's assets have recently witnessed a large growth. However, the pace of growth in real GDP per capita does not appear commensurate with the rapid change in the size of the banking sector. Importantly, despite the banking sector's fairly large size relative to the countries' economies, the data reveal an apparent disconnect between its performance and the productivity of the region's real sectors. These observations raise several fundamental questions. (1) What is the nexus between banking sector performance and real sectors' productivity? (2) What inform(s) the basic relationship between banking sector performance and productivity of real sectors? (3) Through which channels do banking sector performance affect real sector productivity? Using a battery of econometric procedures including estimating a fixed effects and controlling for endogeneity, we attempt answers to these questions for the East African region, where, as observed, the nature of the nexus is unclear, and no empirical investigation has been done in the literature.

Methods and results

We measure bank performance using return on average assets, return on average eguity, return on eguity, and cost-to-income (or efficiency) ratio, all constructed from reporting banks' income before tax. The data for banks are obtained from Bank Focus. The productivity of real sectors (manufacturing, services and agriculture) is measured using sectoral value added per capita. We control a number of potential macroeconomic factors that can affect the underlying relationship between the financial and real sectors. The productivity data and data on all the control variables (other than the human development index, obtained from the Mo Ibrahim Foundation database), are sourced from World Bank's World Development Indicators. We run our empirical tests on a panel of five countries (Ethiopia, Kenya, Rwanda, Tanzania, and Uganda) sampled on the basis of data availability.

We document several interesting results. First, bank profitability is negatively related to productivity growth in the manufacturing and services sectors but has no discernible relationship with productivity growth in the agriculture, fisheries and forestry sector. The latter finding can be explained by the neglect of the agriculture sector by commercial banks, which regard the sector as riskier than other sectors due to its exposure to seasonal forces. In more specific terms, our results show that a unit increase in banks' return on assets lowers productivity growth by about 5 percentage points in the manufacturing and services sectors. A similar change in the return on equity lowers productivity growth by about 1 percentage point in both sectors

Interestingly, we find that an increment of 1 unit in banks' cost efficiency (costto-income ratio) raises productivity growth in the manufacturing sector by 0.7 percentage points. This finding appears consistent with arguments that "better functioning banks improve resource allocation and accelerate total factor productivity growth." That is, our finding here appears to indicate that efficiency gains in the banking sector would be beneficial if the cost savings could be passed through to real sectors, for instance, in the form of lower noninterest charges. Speaking of which, our results also show that noninterest charges are the more effective channel through which the negative effects of bank profitability are transmitted to real sector productivity. Depending on the profitability measure, noninterest channel accounts for between 1 and 15% in the manufacturing sector, and between 2% and 29% in the agriculture sector, of the negative effects of bank profitability on sectoral productivity growth.

Policy proposals

We make several policy recommendations. First, the negative relationship between bank performance and real sector productivity speaks to a possible predatory behavior of banks. To address this, countries in the East African region may want to consider the creation of state-owned banks or specialized finance agencies with a mandate to provide banking services (especially credit) to vulnerable but important sectors with high social returns such as agriculture and small, micro, and medium enterprises. This proposal may be criticized on the grounds that stateowned banks are often less efficient than private banks in developing countries, and due to concerns that state banks may not operate profitably. However, some previous studies do not record evidence of a systematic difference in the efficiency of private and public banks while others find that the lower performance of stateowned banks and associated fiscal costs are outweighed by the benefits of stateowned banks' financing of sectors with higher social returns and lower private sector investments. A modified version of this policy proposal is the option for the public sector to work alongside private banks to offer subsidized credit to firms in sectors with high social returns. Under this arrangement, the state buys out a specified proportion of the market interest rate (say 4%), allowing the bank to offer credit to firms in specified sectors at below-market interest rates.

Second, we find that noninterest income is the most important channel through which banks' performance affect real sector productivity. Although usually motivated by the need to diversify income, existing research shows that noninterest income increases bank fragility and does not provide diversification benefits. These effects depend, in some cases, on the degree of bank concentration in the economy. Thus, although real sector productivity appears to be adversely affected via the noninterest income channel, the policy options must be nuanced: countries in the East African region, such as Kenya, with relatively low bank concentration may propose policies to limit the use of noninterest income to reduce the systemic risk and to boost real sector productivity. If some level of restriction is already imposed in such countries, regulatory agencies may have to tighten their enforcement. However, for countries such as Uganda, with relatively high levels of bank concentration, although noninterest income inhibits real sector productivity, there are benefits in terms of low volatility in bank profitability; such countries do not have to impose restrictions on banks' noninterest charges.

Kenya Bankers Association

13th Floor, International House, Mama Ngina Street P.O. Box 73100-00200 NAIROBI

Telephone: 254 20 2221704/2217757/2224014/5

Cell: 0733 812770/0711 562910

Fax: 254 20 2221792 Email: research@kba.co.ke Website: www.kba.co.ke



One Industry. Transforming Kenya.



