Bank profitability determinants in Africa: A review of literature

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Abstract

The study presents a review of existing research on bank profitability determinants in Africa. Using the literature review methodology, it was found that bank profitability determinants differ across countries in all regions of Africa. Some suggested areas for future research are to explore the impact of circular economy, fintech activities, the pandemic, and economic uncertainty on the profitability of African banks. The implication of the review findings is that bank profitability determinants will remain a contested research agenda in the banking literature.

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1. Background

The objective of this paper is to provide a concise overview of the advances in the African bank profitability determinants literature, to understand the state of research in the field and offer directions for future research. During the review, the study focused mostly on the post-2010 literature, and illuminate the issues that are particularly significant in the literature.

Bank profitability is crucial for the continuity of banking business. Bank profitability is of interest to external parties such as regulators, shareholders, tax authorities, accounting standard setters, financial economists, banking academics, the public and investor analysts. There is so much attention on bank profitability for many reasons. The most important reason is because, when banks declare a profit, some of the profit is allocated as (i) provisions for loan loss (ii) regulatory reserves, (iii) dividend to shareholders, (iv) tax payments, (v) bonuses to employees, (vi) corporate social responsibility expenses, and (vii) some profit is reinvested into the banking business. These allocation expectations, which are either statutory or discretionary, justify the attention given to the profitability of banks from internal and external parties. Take the case of a bank regulator, for example. Bank regulators want banks to be profitable at all times. Regulators would be worried if all or most regulated banks report significant losses in the same year because it can tarnish the reputation of the regulator. Bank regulators can grant regulatory forbearance to banks that have financial difficulties in the short term, to avoid transmitting distress in the inter-bank market. Of course, there may be concern that bank managers could take advantage of their important status in the financial system to report false profit or inflated profit in order to meet their profit projections and to entice investors, and this is a highly debated issue in the earnings management literature (see, for example, Cao (2022), Ozili (2022), and Ertan (2022)).

Bank profitability is also very important for the proper functioning of firms in the real sector of the economy. Profitable banks can perform their financial intermediation function effectively by allocating credit to economic agents who undertake production and investment activities that contribute to higher economic output. Given the importance of bank profitability for economic growth, economists and researchers are interested in bank profitability determinants. Many studies provide extensive insight into the determinants of bank profitability in developed countries, but such insights are limited for developing countries particularly African countries. In Africa, banks are important because most African countries have a bank-based financial system. Yet, there is little research on African bank profitability determinants, compared to the similar research conducted in other regions. Knowledge about bank profitability determinants in African countries is limited in the literature.

Majority of the profitability studies have focused on bank profitability determinants while only few studies focus on the antecedents and effect of bank profitability. Some studies explore bank profitability during booms and recessions (Dietrich and Wanzenried, 2011; Albertazzi and Gambacorta, 2009); how profit persistence contribute to bank stability (Ali and Puah, 2019; Le, 2020; Ozili 2021a); the role of earning management in profit persistence (Ozili, 2018; Ozili and Outa, 2017); how regulation affects bank profitability (Ozili, 2015; Latridis and Persakis, 2012); impact of competition on bank profit (Yuanita, 2019); how corporate governance affects bank profit (Peni and Vähämaa, 2012; Aebi, Sabato and Schmid, 2012); as well as bank profitability impacts across other regions (Pasiouras and Kosmidou, 2007; Ozili and Uadiale, 2017, etc.). Despite the extensive research on bank profitability determinants, there are few studies from emerging countries, particularly African countries. This review study summarizes the mainstream bank profitability literature, and thereafter, focus the discussion on African bank profitability determinants.

The review adds to existing research that investigate the determinants of bank performance. It also adds to the research that explore the nexus between bank profit and financial regulation designed to make the banking system safer (Lee and Chih, 2013; Xu, Hu and Das, 2019). The review study also adds to the earnings management literature by considering the potential for managers to understate or overstate bank profit in order to meet their opportunistic financial reporting objectives, and whether such behavior reduces the transparency of reported profits of banks (see, Cohen et al 2014; Ozili and Thankom, 2018; Ozili, 2019).

The remaining sections of the study are organized in the following way. The methodology used to conduct the review is reported in section 2. The review of studies that investigate the determinants of bank profitability in African countries is reported in section 3. Some suggestions for further research are presented in section 4. The concluding remarks are presented in section 5.

2. Review Method

The review was conducted using published articles. The search for content was limited to abstract search and a search on the body of articles and using Google as the primary search engine. The search result yielded 28 articles. Therefore, the study used the 28 studies to conduct the review. The inclusion criteria are that the articles included in the review are post-2010 articles, and the articles are published in a journal. Regarding the exclusion criteria, studies that were published prior to 2010 were excluded. Also, thesis and dissertation papers were excluded from this review.

Table 1. Reviewed Articles

S/N	Region	Number of articles
1	Sub-Saharan African countries	4
2	West Africa	8
3	Middle East and North Africa (MENA)	6
4	Southern Africa	5
5	East Africa	5

These are 28 articles in total. The remaining 6 articles that were reviewed can be found in sections 1 and 5

3. Bank Profitability determinants in African region

3.1. The African banking sector: challenges and opportunities

In the last decade, many African countries witnessed sustained economic growth due to sustained financial sector development. Despite this, the banking system in many African countries remain either developing or under-developed. African banking systems are still highly concentrated as five banks own over 60 percent of the entire banking assets in the industry in many African countries. Bank intermediation is also inefficient in the region as shown by the high interest rate, small bank size, low intermediation and significant entry and exit barriers. Access to credit is also a significant issue in the region as African countries are among the countries with the lowest access to credit indicators in the world and it constrains banks' ability to generate enough profit. Notwithstanding these challenges, African banks are also benefiting immensely from a stable macroeconomic environment which assists in the development of the banking sector and in the persistence of bank profitability in the region. Some African countries are undergoing reforms and structural changes that would position the banking sector for higher profitability and growth.

3.2. Sub-Saharan African countries

Focusing on Sub-Saharan African countries, Francis (2013) examined the determinants of bank profit in Sub-Saharan Africa during the 1999 to 2006 period. The author analysed 216 commercial banks from 42 African countries, and measured profitability using net interest margin, return on assets and return on equity. The explanatory variables were total asset growth, equity capital ratio, deposit size, efficiency ratio, change in GDP and the rate of inflation. They found that internal and external factors are significant factors affecting bank profitability. Ozili (2017) investigates bank profitability determinants in Africa. The author used several measures of profitability and found that the volume of total assets, minimum risk capital and provision for loan loss are factors affecting bank profit, with risk capital having a stronger effect than the other determinants for listed banks. Another research by Sarpong-Kumankoma et al (2018) focused on banks from four countries in Sub-Saharan Africa from 2006 to 2012. They showed that cost efficiency is a crucial factor influencing the persistence of bank profit, while bank concentration did not have any impact on bank profit. Tarus and Manyala (2018) also investigate some factors affecting the interest rate spread of banks in Sub-Saharan African countries during the 2003 to 2012 period. They focused on 20 sub-Saharan African countries and found that high inflation and strong governance institutions decrease the interest rate spread of banks. They also found that bank concentration leads to increase in the interest rate spread of SSA banks.

Overall, the important profitability determinants for African banks in the Sub-Saharan African countries are capital regulation, inflation, operating cost and bank concentration.

3.3. West Africa

Studies from West Africa have interesting findings. In Ghana, Boadi et al (2017) investigate whether bank profitability is affected by SMEs funding in Ghana. The authors use the panel regression method estimation technique, and they found that SMEs funding and GDP growth are significant factors affecting bank profit in Ghana. They also found that the real value of SMEs loan is depleted by high inflation, thereby eroding the interest income on the loans to SMEs. In a related study, Alhassan et al (2016) analyse twenty-six banks in Ghana during 2003 to 2011 and found that technical efficiency positively affects the profit of banks. They further observe that there is low persistence of profit which might be caused by having a competitive banking industry.

Mireku et al (2018) investigate whether commercial bank presence improves profitability in Ghana during the 2007 to 2013 period. They showed that increase in bank branches lead to higher bank profit, while credit risk and management quality did not improve profitability. However, they observe that bank profit is also enhanced by internal and external factors. Adelopo et al (2018) investigate banks in the ECOWAS regional group, to identify the factors affecting bank profit before, during and after the great recession. They use fixed effect estimations. The variables used are internal and external variables affecting bank profit, and they found that the internal factors had a significant influence on bank profit in the three periods, and the significance vary across the periods.

Ozili (2015) focused on the factors that determine bank profit after the adoption of Basel capital regulation in Nigeria. The study used three profitability metrics: ROE, NIM and ROA. The analysis was estimated using fixed effect regression. The findings show that regulation had an insignificant impact on the profit of Nigerian banks. It was also found that nonperforming loans impacted the interest margin of banks, and the size of a bank and cost-to-income ratio had a considerable influence on ROA. Ozili (2015) conclude that the significance of bank profitability determinants depends on the profitability metric employed. Chidozie and Ayadi (2017) in their study focused on external factors influencing bank profit in Nigeria. They found that crude oil price negatively affects the profit of banks in Nigeria. Zaccheaus and Ajuwon (2019) investigate whether bank profit is affected by volatile oil price. They investigate twelve large commercial banks between 2006 to 2015. They found a significant effect of volatile oil price shocks on the profit of banks in Nigeria, indicating that the transmission mechanism through which oil price impacts the profit of banks is a direct mechanism. In another related study, Ozili and Uadiale (2017) examined whether ownership concentration influences the profit of banks in Nigeria. In the study, ownership was measured as the proportion of direct equity held by a majority shareholder. They conducted some empirical analysis and found that ownership concentration increases the interest margin of banks.

Overall, the important bank profitability determinants in West African countries are market power, inflation, monetary policy, real interest rate, exchange rate, capital regulation, cost efficiency, and rising nonperforming loans.

3.4. Middle East and North Africa (MENA) studies

For instance, in the case of Tunisia, Ben Naceur and Goaied (2008) investigate the factors that affect bank profit for the 1980 to 2000 period. Two performance indicators were used: ROA and NIM. They found that bank capital, overheads, and better stock market development positively affect the profit of banks. Abdullah and Tan (2017) investigate the factors affecting the profit of commercial banks in eleven Middle East and North African (MENA) countries during the 2004 to 2014 period. It was found that credit risk reduced the profit of banks in non-oil exporting countries. Elkhayat and ElBannan (2018) assessed whether privatizing public banks affect their profit and focused on the MENA region. Thirty-six countries were analysed, and they found that privatization had an insignificant impact on bank profit, but the region witness a reduction in credit risk due to the privatization. They conclude that the privatization certainly improved cost efficiency and reduced credit risk for privatized banks.

Ammar and Boughrara (2019) were interested in whether revenue diversification improve the profit of banks. They examined two hundred and seventy-five banks in 14 fourteen MENA countries from 1990 to 2011. They use GMM regression estimation and found a strong positive association between revenue diversification and bank profit. They also observe that non-interest activities did not improve the profit of banks, rather it leads banks to insolvency.

One notable observation from the MENA profitability literature is the impact of political transition on the profit of banks. War and conflict in the region make banks unstable for many reasons, and empirical evidence supports this hypothesis. Ghosh (2016) investigates bank profitability during the Arab spring period covering 2000-2012 to determine its impact on the profit of banks in MENA region. The author found that the Arab spring lowered the profit of banks and increased the risk of banks. Bitar (2016) took into account the Arab spring transition period when investigating the impact of Basel capital regulation on the risk and profit of banks in MENA region. The author found that compliance with the Basel capital requirements helped to protect MENA banks against certain risks and improved their profit.

Overall, the dominant factors affecting bank in the region are bank size, bank ownership type, cost efficiency and bank risk.

3.5. Southern Africa

In the southern Africa region, some studies such as Du Toit and Cuba (2018) investigate the relationship between the cost efficiency and profit of South African banks before, during and after the great recession. They focused on banks that were listed on the Johannesburg Stock Exchange from 2004 to 2012. They observe a significant link between bank profit and changing business cycles. Seemule et al (2017) investigate the determinants influencing the profit of banks in Botswana and found that bank liquidity and GDP are significant factors influencing the profit of banks. Garcia and Trindade (2019) examined the determinants of the profit of seventeen banks in Angola and found that ownership has a strong positive impact on the profit of Angola banks. Kumbirai and Webb (2010) analyse the case of South Africa during 2005 to 2009. They found that banks performed better before the crisis but witnessed significant poor performance during 2008 and 2009 at the peak of the crisis. Abel and Le Roux (2016) examine bank profitability determinants in Zimbabwe from 2009 to 2014 during the period when Zimbabwe adopted a multi-currency system. They employ a fixed effect model and show that profitability is significantly driven by bank risk.

Overall, the important factors affecting bank profit in Southern African region are bank ownership type, financial crisis, and bank risk and bank liquidity.

3.6. East Africa

Bank profitability studies in East Africa is limited. Only few studies exist on the factors influencing bank profit in this region. Mdoe et al (2018) found that Kenyan banks have high profit persistence. Amin, Sanusi, Kusairi and Abdallah (2019) analysed the association between the risk and profit of banks in Tanzania. They found a negative association between risk and profit, implying that supervisors in Tanzania would need to consider the trade-off between risk and return. Kodongo et al (2015) investigate the effect of leverage on the profit of listed firms in Kenya, and they found that leverage significantly and negatively affect firm profitability but does not affect firm value.

Kapur and Gualu (2012) examine the effect of ownership structure on the profit of eight Ethiopian commercial banks from 2001 to 2008. They found that private banks performed better than public banks. Private banks had higher profit, fewer loan default, and stronger capital ratio than public banks. Lelissa (2014) examined the factors influencing the profit of banks in Ethiopia and found that internal factors largely determine changes in the profit of banks. It was also found that bank capital, liquidity status, bank size and real GDP growth rates did not significantly influence profitability.

Overall, these studies show that the important bank profitability determinants in East African region are leverage, and bank risk.

4. Directions for further research

4.1. Fintech revolution and bank profitability

There is few research on the impact of fintech activities on the determinants of bank profitability. 'Fintech' combines financial services with digital technology and innovation. Fintech activity may negatively impact banks' profit because fintech lenders are less regulated or are regulated within a sandbox, which puts them in an advantageous competitive position over banks (Ozili, 2021b). Future studies can explore how fintech activities affect the profit margins of banks.

4.2. Economic uncertainty and bank profitability

There is few research on the effect of economic uncertainty on the profit of banks. Banking activity is sensitive to uncertainty particularly economic policy uncertainty that is caused by unexpected changes in monetary policy, fiscal policy, and regulatory policy. Such uncertainty affects bank profitability through reduced bank lending and loan repricing (Danisman et al, 2020). Future studies can explore how economic policy uncertainty affects bank's return on asset, return on equity, and net interest margin.

4.3. Effect of pandemic on bank profitability

There is few research on the impact of pandemic on the profit of banks. A pandemic, such as the Covid-19 pandemic, disrupts banks' revenue streams for an indeterminate period, increases the fixed costs of banks, leads to poor credit quality in banks, and leads to deteriorating balance sheets. These combined effects will affect the profit of banks. Generally, the impact of pandemics on bank profit may differ due to different risk management practices across banks, and differences in regulatory and supervisory quality. Further research is needed to explore the impact of pandemics on the profit of banks.

4.4. Bank profitability in the circular economy

No studies have examined how the circular economy would affect bank profit. The circular economy emphasizes efficiency in waste reduction (Ozili and Opene, 2021). In the circular economy, banks will have opportunities to diversify their revenue stream by lending to the recycling sector, and this may increase the profit of banks. But no research has investigated the prospects of higher bank profit in the circular economy. Future studies can explore the profitability prospects of banks in a circular economy.

4.5. Other areas

Future researchers in this topic can undertake a more comprehensive analysis of the specific economic, political, and regulatory conditions in each of the African regions, and provide an overview of the regional characteristics and their potential impact on bank profitability. Case studies could also be used to provide real-world examples for the impact on bank profit in the regions. Future research can also examine how significant economic and political events in these regions, such as financial crises, changes in leadership, and political instability, may impact bank profitability. In addition, future studies can explore the impact of macroeconomic factors, such as GDP growth, inflation, exchange rates, interest rates, and monetary policies, on bank profitability. Furthermore, it would be interesting to investigate the impact of risk management and the regulatory environment on profit of banks in each region.

5. Conclusion

In this article, I reviewed the literature on the factors influencing the profit of banks in African countries. The findings from the review revealed that the factors influencing the profit of banks differ across African countries. The study offered some suggestions for future research such as the need to explore the impact of circular economy, fintech activities and pandemic on bank profitability. A profitable banking environment will undoubtedly promote greater financial development and expand lending to the real sector to increase the level of economic activities. Nevertheless, there are policy debates on what constitutes the uniform determinants of bank profitability. The academic literature also shows that bank profitability determinants differ according to bank specific, external, and time-varying factors. In the future, there will be continuous search for the factors influencing bank profit. Therefore, this study concludes that the factors influencing bank profit will remain a contested research agenda in the banking literature

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