The financial sector of emerging markets based on digital technology evolution in the banking sector - The Ghanaian experience

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Abstract
Evaluating the financial sector of emerging markets based on digital technology evolution is crucial, as the market tends to exhibit greater fragility than in the developed markets. As a result, this study is conducted to provide a deeper understanding of the old and new realities of the financial sector of emerging markets and conducts both qualitative and quantitative analyses of technology impacts on financial sector of emerging markets. Further, the study has developed models to help emerging markets leverage digital technology to achieve sustainable financial sector growth. In addition, the SmartPLS modeling was applied to show the linkages between the characteristics of the financial sector in emerging markets and digital technologies.

Introduction

The rapid emergence of digital technology has transformed the financial sector in most emerging markets, particularly banking operations. Digital technology has not only changed the way banks operate in developing countries, but it has also become the most important factor that banks need to invest in to improve their performance, develop more products and enhance customer experience. Regardless of the economy in which a bank is located, it is expected to embrace and invest in new digital technologies so that it can provide cost-effective and efficient services to its customers. In recent years, bank customers have become more financially literate, and the introduction of digital banking products such as e-money and challenger banks have led to strong competition between traditional institutions, while the banking sector has also seen constant innovation that attracts more customers (OECD, 2020). In addition, the promotion of digital credit, digital financial literacy, digital financial resilience, and financial well-being has also become a common feature of the financial sector of emerging economies (Sun et al., 2023, Murendo et al., 2017, Grozdanovska et al. 2017, McKnight et al. 2020, Brueggen et al. 2017; and Kabadayi et al. 2019).

Understanding the financial sector of an emerging economy like Ghana is very important for this study. According to Arizala et al. (2021), there is no universally accepted definition of an emerging market. However, the IMF's World Economic Outlook classifies 39 economies as “advanced” based on factors such as high per capita income, greater integration into the global financial system, and exports of diversified goods and services. In this respect, all other economies can be classified as developing and emerging countries. On the other hand, the Corporate Finance Institute defines emerging markets as economies that are experiencing significant economic growth and exhibit some, but not all, of the characteristics of a developed economy. That is, economies that are in transition from the “developing” phase" to the “developed” phase". Emerging markets tend to have high market volatility, high growth and investment potential, a high economic growth rate, and a low median income per capita. On the other hand, David (2018) explained that an emerging market is a term used to describe a country’s social or economic activities characterized by rapid growth and industrialization. This definition clearly shows that income is not the only distinguishing feature of an emerging market. However, emerging markets also lack the ability to produce higher value-added goods and sustained strong growth can also be classified as an emerging market.

Literature Review

The OECE (2021) pointed out that digital acceleration has been amplified by advances in global connectivity and that this needs to be supported to realise its potential. In the case of the emerging African market, more than 72% of the population regularly use cell phones to hold a total of about 300 million mobile money accounts, representing rapid growth in the market's financial sector and the highest number globally. In just one year, from 2019 to 2020, the number of e-commerce users in Asia has increased by 37 million to 71 million. The OECD (2021) predicts that Asia will account for almost half of all new mobile subscribers worldwide and more than half of all cashless transactions. However, caution is needed as the next wave of digital transformation driven by technology will continue to shape future emerging markets. It is also important to keep in mind both the further potential of digital transformation and the risk that this digital transformation could exacerbate existing inequalities in emerging markets.

The financial sector of any emerging economy plays a critical role in helping the economy overcome inequalities, as cautioned by the OECD. Even if the financial sector in emerging markets is considered a recent phenomenon, payment and financial systems have evolved over several years. Even though the current digital transformations have remarkably changed the way the financial sector of emerging markets operates and transact, its core objectives and activities have not change with regards to promoting value exchange, financial intermediation, financial risk transfer, and liquidity in today's economy (Freixas et al. 2008, and Bernanke 2013). The financial intermediation role assists the financial sector of emerging markets to facilitate the movement of funds between savers and borrowers by taking funds from savers through deposits and lending to borrowers, governments, businesses, and households. That is facilitates transfer of assets, risk assessments and mitigation, ensures accounting accuracy, and resource pooling (Allen et al. 1996).

Also, Ravikumar et al. (2022) noted that the most promising mechanism that has gained impetus globally to guarantee all-inclusive financial access and foster collective financial inclusion is digital financing. However, this study posits that the benefits of digital technology in the financial sector of emerging economies could be realized if digital technology is utilized to promote financial services such as digital payments, savings, credit, and insurance while building and increasing the resilience of the people in developing economies, as also contained in Hussain et al. (2019) in a different perspective.

Methodology

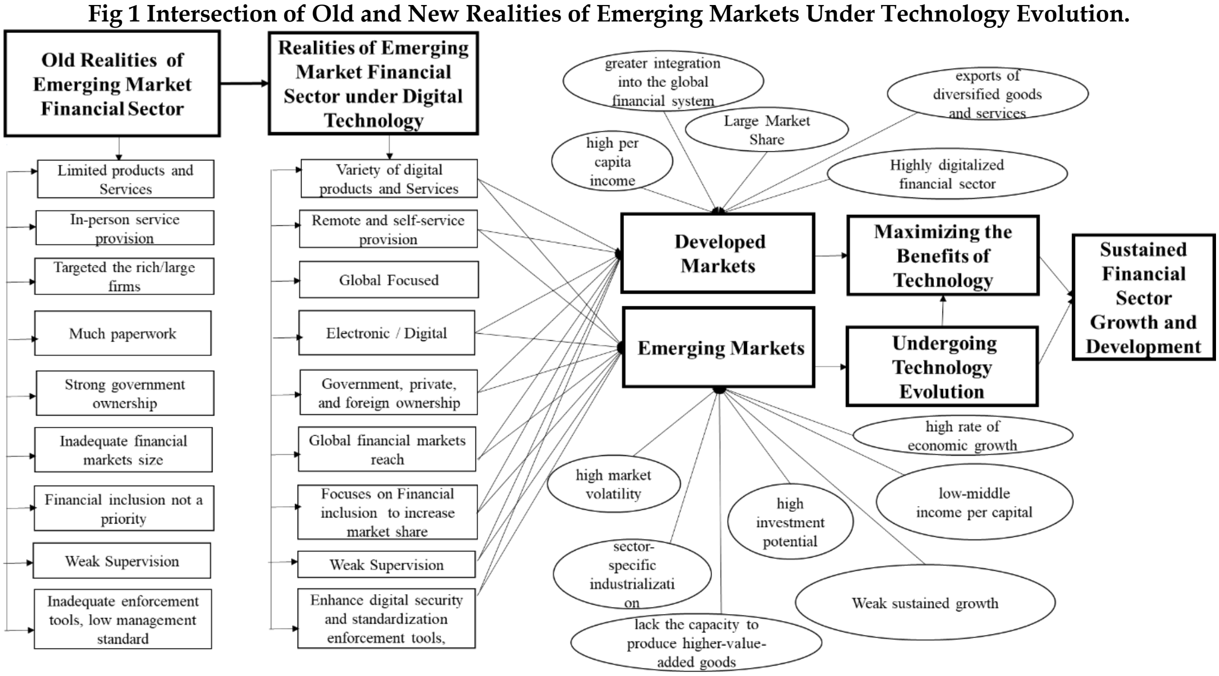
Most studies analyze the technological development that has dominated the financial sector of emerging markets with a quantitative approach through surveys. The authors, including Zhu et al. (2023), found through a survey that digital technology can significantly improve the profitability of banks. In addition, this study uses a qualitative analysis tool to overcome the shortcomings of using a purely quantitative method (Appiahene et al. 2019)

Findings/Results

The results of the study show that government policies, private foreign investors, security and enforcement instruments correlate with the promotion of technology (variable 5). In addition, global reachor market correlates with digital financial products (variable 9), transaction medium (variable 2) and security and enforcement tools (3). Private foreign investment (variable 2) is also closely related to government policy (variable 1), financial self-service and integration (variable 11) and global reach and market (variable 10). In addition, technology (variable 5) correlates with digital financial products (variable 9) and transaction medium (variable 6) and is strongly related to all variables, including sustainable market growth (variable 12) and contrast (variable 3). Most importantly, government policy (variable 1) correlates with all variables.

The results of the study in Figure 1 show the old and new realities of the financial sector of emerging markets and the other factors that need to be considered to achieve sustainable growth and development of the financial sector in emerging markets. Figure 1 of the study below shows the relationship between the old and new realities of the emerging market financial sector and the impact of technological development on the emerging market financial sector. The study from figure 1 shows that emerging markets are characterized by high market volatility, high investment potential, sector-specific industrialization, lack of capacity to produce high-value added products, weak sustainability growth and Low-middle income per capital. On the other hand, developed markets are characterised by high per capital income, greater integration into global financial system, large market share, export of diversified goods and services, and high digitalized financial sector.

Fig 1 Intersection of Old and New Realities of Emerging Markets Under Technology Evolution.



Discussions and conclusions

Emerging markets differ in many important ways, such as demographic factors, geographic location, and cultural factors. However, one important common feature that is considered a desirable factor for economic development is the financial sector. This study found that the financial sector of emerging markets is characterized by old and new realities, as shown in Figure 1 above. These realities have been confirmed in many studies, such as Mohideen et al. (2018), OECE (2022), the World Bank (2016), López et al. (2012), Xavier (2022) and Ravikumar et al. Furthermore, this study found that digital technology dominates the financial sector in emerging markets. For sustainable growth and development of the financial sector, emerging markets need to take full advantage of all the opportunities that digital technologies offer to the financial sector.

Limitations and direction for future research

Data used for analysis in this study is limited to a specific period, which may not be a true representation of the situation of the financial sector in emerging markets in the future.

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