The Scientific Temper (2025) Vol. 16 (1): 3936-3949

E-ISSN: 2231-6396, ISSN: 0976-8653

Doi: 10.58414/SCIENTIFICTEMPER.2025.16.1.41

https://scientifictemper.com/

RESEARCH ARTICLE

Linking globalization to commercial banks' performance in Ethiopia

Bayelign Abebe, Ayalew Ali*

Abstract

Globalization promotes profitable global progress, creates jobs, makes enterprises more competitive, and lowers consumer prices. However, little attention was given to the relationship between globalization and banks' accounting-based performance, and the issue has not yet been studied in Ethiopia. Thus, the purpose of this study is to empirically examine the effect of globalization on the banks' accounting-based performance in Ethiopia from 2012 to 2019. This study used a descriptive survey research design to investigate the effect of globalization on the banks' accounting-based performance in Ethiopia using the ordinary list squire estimation technique. The study used ROA and ROE as the dependent variables, economic, social, political, and financial globalization as the major independent variables, and asset size, liquidity, real GDP, and inflation as control variables. The result showed that economic globalization, social globalization, political globalization, asset size, liquidity, and real GDP have a significant positive effect on the banks' accounting-based performance as measured both by ROA and ROE in Ethiopia. However, financial globalization and inflation have a significant but adverse impact on banks' accounting-based performance as evaluated both by ROA and ROE. Policymakers should develop policies and plans to make Ethiopia a member of organizations like the European Free Trade Association (EFTA) and the Africa, Caribbean, and Pacific European Union (ACPEU). Additionally, policymakers should strengthen and improve the financial systems, trade in goods and services, the diversity of trade partners, personal relationships, information flows, close cultural ties, and international travel, and banks should get ready to expand their operations into new markets.

Keywords: Globalization, Commercial banks, Inflation, GDP, Liquidity, Ethiopia

Introduction

Globalization is a collection of systems that promote cooperation and interaction among governments, cultures, and economies by allowing people, goods, and ideas to spread throughout the globe (Baloch, Ozturk, Bekun, & Khan, 2021). As a result of globalization, nationalistic notions are replaced by a bigger vision of an interconnected world; where money, goods, and services are freely carried across national boundaries (Al-Khouri, 2010), as the basic goal of globalization is to combine all nations into a single economic entity with no boarders or governments. Moreover, the economic, social, cultural, and political settings have all been significantly impacted by globalization (Panayotou, 2000). Globalization handles some of the most pressing concerns facing the world even though it unites economies all over the world through the transmission of information, goods, and services, as well as foreign direct investment, technology, and trade (Grossman & Krueger, 1991) and (Collier & Dollar, 2002). Therefore, globalization is a complex issue that calls for research (Awan, Azam, Saeed, & Bakhtyar, 2020).

Free trade, which supports global economic development, creates jobs, increases company competitiveness, and lowers consumer prices, is a key component of globalization. Collins (2015) and Paul (2003) Tariffs, value-added taxes, subsidies, and other trade barriers are all meant to be eliminated through free trade. In addition, prices are anticipated to drop as a result of global competition because governments want to manipulate their currencies to get a price advantage. By luring in foreign capital and technology, free trade enables economically struggling nations to thrive (Cherif and Dreger, 2018). Free trade also creates the framework for the growth of democracy and respect for human rights by distributing prosperity. Globalization eliminates all barriers to trade

College of Business and Economics, Mizan Tepi University, Ethiopia.

***Corresponding Author:** Ayalew Ali, College of Business and Economics, Mizan Tepi University, Ethiopia, E-Mail: ayalewali27@gmail.com

How to cite this article: Abebe, B., Ali, A. (2025). Linking globalization to commercial banks' performance in Ethiopia. The Scientific Temper, **16**(1):3936-3949.

Doi: 10.58414/SCIENTIFICTEMPER.2025.16.1.41

Source of support: Nil

Conflict of interest: None.

Received: 28/12/2024 **Accepted:** 12/02/2025 **Published:** 20/03/2025

(Bragin *et al*., 2018). The loss of jobs that are being transferred to less developed host countries is the most important problem facing industrialized countries. Additionally, a fear culture has emerged among many middle-class workers as a result of their poor performance in the global game. Some analysts claim that because terrible working conditions are widespread among inmates and young workers, globalization is contributing to the growth of contagious diseases, human trafficking, and worker exploitation (Gallo, Konrad, & Thinyane, 2020).

Like other transition economies of its kind, Ethiopia's financial sector has experienced various structural changes since 1991 in order to strengthen the development of its financial sector. For instance, economic legalization reform has allowed private banks with 100% Ethiopian ownership to operate in the market, which has led to the service's expansion across the entire nation. Despite reforms to the sector's development, Ethiopia has been slow to liberalize the entry of foreign banks. The government is worried that the admission of foreign banks may further skew loan allocation toward large-scale industrial, real estate, and service firms and young domestic private banks, which is cited as a barrier to financial sector liberalization (Danbobi Note Dido, 2020). Foreign ownership is evident in Ethiopia's bank modernization, which dates back to the early 1990s. Before bank ownership was nationalized at the beginning of 1974, foreign involvement in banks persisted. From that point forward, ownership is only permitted by state-owned entities, at least until the transitional administration assumes power and implements a reform that permits private ownership. However, the door has been blocked to foreign participation for the previous 48 years, which runs against the idea of globalization. However, the Ethiopian government has just introduced a new order that would enable foreign banks' admission starting in 2022.

Additionally, the majority of past studies on how globalization affects banks' profitability were conducted in advanced and established nations, taking economic, social, and political globalization into account. Ruba Al-Jarallah, (2022) found economic, social, and political globalization has a negative effect on banks' performance in Gulf Cooperation Council countries. Moreover, Logasvathi M. and Mugeshmani S., (2021) found economic and political globalization has a negative effect on banks' performance, but social globalization has an insignificant effect on banks' performance in Malaysia. Whereas previous studies ignored the financial globalization that the current study sought to address. As a result, the study adds to the body of knowledge in finance because it is the first of its type to explore the connection between globalization and accounting-based performance in Ethiopia and so offers proof for emerging market economies generally. The study also offers advice on how domestic banks can get ready for computation. The study's goal was to ascertain how globalization has affected Ethiopian banks' accounting-based performance.

The structure of the remainder of the paper is as follows: the second chapter deals with a literature review. Chapter three discussed the method employed for the study. The result discussed in the fourth chapter and section five concludes and recommends the discussions.

Literature review

Eclectic Theory

The eclectic theory was created by Dunning, (1977) and showed a very productive mindset about multinational enterprises (MNEs). It has sparked several studies and practical work in the fields of finance, economics, and global business. Ownership, Location, and Internalization, or "OLI," are the three advantages of a good position that may be the driving force behind a firm's or bank's decision to go global. According to the book Ownership Advantages, which seeks to explain why some businesses migrate abroad but not others, While location advantage aims to solve the issue of the MNE's targeted location, finally, global advantages affect how a company conducts business abroad, for example by keeping track of costs. The eclectic hypothesis is closely related to this study's efforts to determine how globalization has affected the accounting-based performance of Ethiopian banks. According to this view, there are three crucial things to consider before internationalization or globalization occurs. According to the argument, expanding banks has a number of benefits for a nation. In conclusion, eclectic theory demonstrates the benefits of globalization for banks if it adheres to and has three key benefits, namely the ownership benefits, location benefits, and international benefits. Thus, in line with the goal of this study, this theory is very helpful in comprehending the benefits of globalization, which have a direct impact on local banks.

Empirical literature review and hypothesis development

Economic globalization and banks accounting based performance

Actual flows and restrictions are the two sub-indices that makeup economic globalization. Actual flows are determined using GDP trade percentages, investments in foreign equities and commodities, portfolio investments, and payments of income to overseas nationals. Hidden import barriers, the mean tariff rate, current revenue percentages of taxes on international commerce, and capital account limits are used to compute restrictions. According to various financial literature, economic globalization is said to have a substantial impact on banks' financial performance. Sufian and Habibullah's, (2011) is the first study in the literature to offer empirical support for how economic globalization affects bank performance. They calculate the effectiveness of the Chinese banking industry using a

frontier-based data envelopment approach. Their findings suggest that greater economic integration has a beneficial impact on the effectiveness of Chinese banks.

In a different study, Zhang and Daly, (2014) set out to present empirical data on several factors that affect the performance of the Chinese banking industry. Their findings show that greater economic globalization tends to be profitable for Chinese banks. Moreover, Sufian and Kamarudin, (2016) develop an empirical model that takes into account the origins of multinational banks as well as measures of globalization for both home and host countries to examine the effects of globalization dimensions on the performance of the South African banking sector. Their research shows a strong correlation between bank profitability and host nation trade flows and increasing economic globalization. The most recent research, conducted by Nguyen & Nguyen, (2018), reveals that economic globalization significantly and favorably affects Vietnamese banks' performance. The study therefore stated the following as its hypothesis:

- *H1*

Economic globalization has had a significant effect on banks' accounting-based performance in Ethiopia.

Social globalization and banks accounting performance

Social globalization indicates sharing the of different cultures, ideas and knowledge through social media, the internet, and cross-border transactions between countries around the world. Empirical studies introduce three different dimensions of social globalization, namely, personal contacts, information flows and cultural proximity. Berger *et al*., (2000) point out that financial institutions from countries with constructive market and or regulatory conditions may possess distinct advantages over their peers, enabling them to operate efficiently in foreign nations. In the same way, Sufian and Habibullah, (2012) examine the link between globalization and the performance of Chinese banking sector and found that social globalization exerts a positive impact on the Chinese banking sector profitability. Zhang and Daly (2014) set out to give empirical data on several factors that affect the performance of the Chinese banking industry and found that social globalization affects the profitability of Chinese banks. Furthermore, Sufian and Kamarudin, (2016) found an opposite relationship between social globalization and bank profitability in South Africa. The study so stated the following as its hypothesis:

- H2

Social globalization has a significant effect on banks' accounting-based performance in Ethiopia.

Political globalization and banks accounting based performance

Political globalization takes into account both the size and complexity of a country's political system to gauge its development. The national policies of the country that establish a political connection between it and its partner nation are also covered. Political globalization also refers to the extension and strengthening of international political ties. Political concerns about state sovereignty and the future of the nation-state are brought up by the political aspects of globalization. Karadagli (2012) examined the impact of political globalization on the performance of enterprises in China, Brazil, Indonesia, Turkey, Russia, Mexico, and India from 1998 to 2009 and found positive results. Peltonen *et al*. (2008) and Georgiou (2009) found political globalization has been shown to have favorable benefits on profitability as assessed by the net return of equity in European countries. Additionally, Pangarkar and Wu, (2012) looked at how much globalization had an impact on the productivity of Chinese industrial enterprises between 2001 and 1996 and revealed that political globalization had a beneficial impact on firm productivity. Consequently, the study developed the hypothesis as:

- *H3*

Political globalization has had a significant effect on banks' accounting-based performance in Ethiopia.

Financial globalization and banks accounting performance

Banks benefit from increased financial globalization and an increase in efficiency. As a result, bank profitability can be used as a useful indicator of its effectiveness. In addition to deepening our awareness of the numerous dimensions of globalization, a precise investigation of how financial globalization affects bank profitability has significant ramifications in that it can help regulators and legislators create regulations that would increase industry productivity.

In the context of a rising economy, a thorough examination of the relationship between bank profitability and financial globalization is even more crucial given the potential benefits of greater financial integration with the rest of the world. Using a nonparametric frontier methodology, Zaim (1995) examines the effects of financial liberalization policies on Turkish banking efficiency for both the pre- and post-financial reform periods. His findings show that Turkish banks increase their technical and financial efficiency after financial liberalization measures are put in place. After studying the impact of financial market deregulation between 1981 and 1990 on Turkish banks' total factor productivity, Isik and Hassan, (2003) discovered that the performance of Turkish banks had greatly improved as a result of the liberalization initiatives. Denizer *et al*. (2007), who compare Turkish banking efficiency in pre- and post-financial liberalization eras spanning the years 1970 to 1994, come to the contrary conclusion that there has been a significant decline in Turkish banks' efficiency as a result of the liberalization process. The study so stated the following as its hypothesis:

- *H4*

Financial globalization has had a significant effect on banks' accounting-based performance in Ethiopia.

Asset size and banks accounting based performance

In this study, asset size is employed as a control variable to gauge company accounting-based performance, which is related to economies of scale as seen in the conventional neoclassical perspective of banks. The size of a company has numerous effects on its financial performance. Compared to smaller organizations, larger firms benefit from economies of scale, which results in efficiency. Since smaller companies are likely to have less power, they will likely have trouble competing with larger companies in highly competitive markets (Hailegebreal, 2016). The empirical findings, as they relate to the size and performance of banks, have been mixed. Mazviona *et al*. (2017), Kazeem (2015), and Mwangi and M (2015) found a negative relationship between size and performance. On the other hand, Alomari and Azzam (2017); Dey *et al*. (2015); Bawa and Chattha (2013) and Charumathi (2012) found a positive relationship between size and profitability. Thus the study formulates the hypothesis as:

- *H5*

Asset size affects the accounting-based performance of banks in Ethiopia.

Liquidity and bank's accounting performance

The study's second control variable, liquidity, measures the firm's capacity to meet short-term obligations with its liquid assets. Companies with more liquid assets have a lower failure rate because they can generate cash flow even in dire circumstances. Therefore, it is anticipated that financial institutions like banks will function better than those with less liquid assets. The existence of a correlation between financial institution profitability and liquidity was established by Daniel and Tilahun, (2013). Similar to this, Chinoda, (2014) came to the conclusion that commercial banks need to have enough liquidity to meet depositor and loan holder requests and that a low level of liquidity is a pre-requisite for a bank's failure. Additionally, concerns about generating funds and failure to meet existing and unforeseen variations in the sources of financing are caused by liquidity problems Tariq *et al*., (2014). However, Pasiouras and Kosmidou, (2007) proposed that there is a conflict between profitability and liquidity. The following is how the study expresses the hypothesis:

- *H6*

Liquidity affects the accounting-based performance of banks in Ethiopia.

Real GDP and bank's accounting performance

The other control variable in this study, real GDP, shows how well a nation's economy is doing. According to Fadzlan & Royfaizal, (2008), GDP is the most widely used macroeconomic statistic to gauge total economic activity inside an economy. The stock market is typically significantly impacted by a major change in GDP, whether it is up or down. It is simple to comprehend why a poor economy typically results in lower company profits, which in turn results in lower stock values. Investors are concerned about low GDP growth, which economists use as one indicator of whether an economy is in a recession. Real GDP has been found to positively impact financial institutions' profitability, according to empirical data from studies by Doreen, (2013) and Isayas, (2022). The following is how the study expresses the hypothesis:

- *H7*

Real GDP affects the accounting-based performance of banks in Ethiopia.

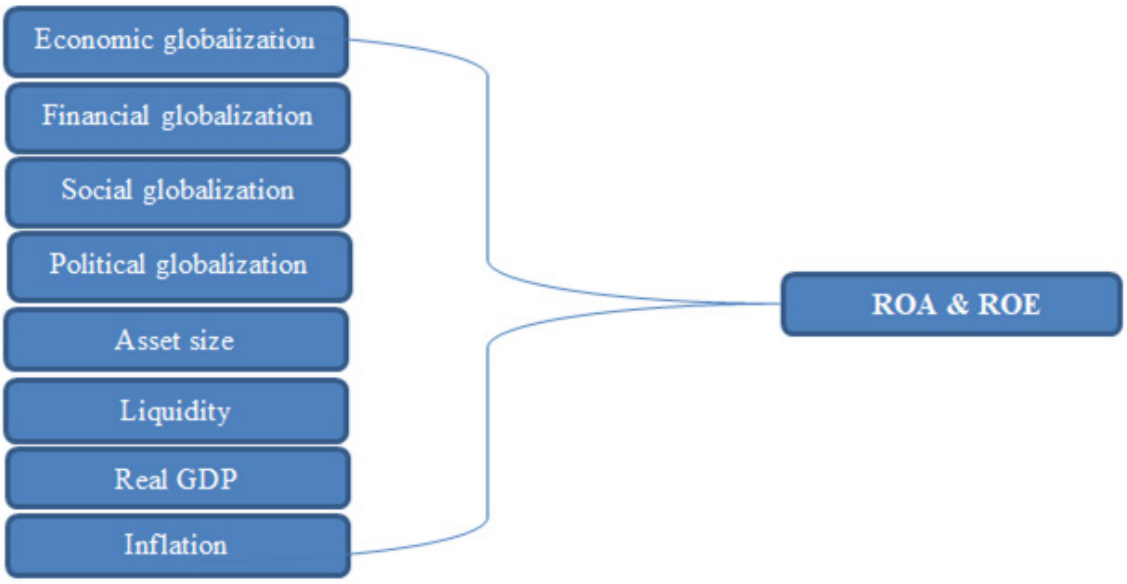
Inflation and bank's accounting performance

The final control variable is inflation, which is characterized by a persistent rise in the level of prices in general. Small price increases or erratic price increases are not seen as inflation. It is a steady and noticeable price increase. Not all costs and prices increase simultaneously and proportionately during an inflationary period. A price index, which is an average of consumer or producer prices, is used to measure the general level of prices Bansal *et al*., (2018). High incomes and high loan interest rates are typically correlated with high inflation rates. According to Bashir (2003), projected inflation benefits bank profitability, but unexpected inflation has the opposite effect. The study formulates the following hypothesis: There is a positive relationship between anticipated inflation and the performance of the bank because it gives banks the chance to adjust interest rates accordingly, resulting in revenues that increase faster than costs, implying higher profits, and the reverse with unanticipated inflation. Thus the hypothesis concerning inflation is:

- *H8*

Inflation affects the accounting-based performance of banks in Ethiopia.

The conceptual framework demonstrates how specific variables are connected in the study and assists in identifying the variables that are employed in the research process. Figure 1 presents the conceptual framework for the dependent and independent variables used in this investigation. The relationship between the study's dependent and independent variables is depicted in Figure 1 below. The dependent variable used to determine how profitable commercial banks are in relation to their total assets is called return on asset (ROA). The dependent variable used to determine how well commercial banks are able to generate a return on their equity investments is called return on equity (ROE). Globalization (economic globalization,



Sources: Own design, 2025
Figure 1: Conceptual framework

social globalization, political and financial globalization) is a collection of systems that foster cooperation and interaction among governments, cultures, and economies by allowing people, goods, and ideas to spread throughout the world and are used as the major independent variables in this study. In this study, asset size (AS) is utilized as a control variable to determine a bank's accounting-based performance, which is related to economies of scale as seen in the standard neoclassical view. The study's second control variable, liquidity (LIQ), measures the firm's capacity to meet short-term obligations with its liquid assets. The other control variable in this study is real GDP (RGDP), which is one of the main factors of an economy's health. The final control variable is inflation (INF), which is characterized by a persistent rise in the general level of prices.

Research method

The study's main goal was to look at how globalization affected Ethiopian commercial banks' accounting-based performance. To achieve the stated objectives, this study used a quantitative technique and an explanatory research design. Due to the availability of data, the study used purposive sampling to cover 14 commercial banks out of 26 commercial banks in Ethiopia from 2012 to 2019. The audited annual financial reports of the banks under examination were among the secondary data sources considered in the study. The study also obtained secondary data from the Dreher *et al*. (2008) revised 2021 KOF Index of Globalization for variables relating to economic, social, political, and financial globalization. The International Monetary Fund's World Development Indicator databases were also used to retrieve data on the macroeconomic indicators (real GDP and inflation). Both cross-sectional and time-series data were used, which were made up of evenly distributed panel types.

Methods of data analysis

In order to analyze the data and achieve predefined objectives, the study used both descriptive statistics and econometric techniques. The former includes fundamental descriptive techniques like mean, maximum, minimum, and standard deviation tools that assist us in determining the overall trends of the data and provide a clearer understanding of the problem at hand. Both the generalized method of moments (GMM) and ordinary least square (OLS) models are the panel data estimators however, the study used Standard OLS because the GMM is an iterative procedure, meaning that they start from a guess as to the value of *beta*. In contrast, OLS does not guess, as its formula immediately solves for the value of *beta* that minimizes the sum of squared residuals and explains super-consistency in the presence of non-stationary Vinod (2008).

Variable measurement and model specifications

The study has two dependent, four major independent, and four control variables all are detailed below.

Dependent variables

This study used the return on assets (ROA) and return on equity (ROE) as metrics of banks' accounting-based performance. ROA measures overall profitability and shows how well a company uses its total assets to generate income, as well as the profit margin (Brealey *et al*., 2006). Net profit after tax is divided by total assets to determine ROA and

shows the returns produced from the assets of the banks and it is perhaps the most significant when assessing the effectiveness and financial performance of banks. The formula for the return on assets is given as follows:

$$ROA = \frac{Net\ profit\ after\ tax}{Total\ assets}$$

Return on equity shows the bank's ability to generate profits by using its own capital owned by the bank. This ratio is important for the authorities to know the effectiveness and efficiency of the bank's management. The higher the ROE, the more efficient the management of own capital is conducted by the management. The formula for the return on equity is given as follows:

$$ROE = \frac{Net\ profit\ after\ tax}{Total\ equity}$$

Independent variables

The explanatory variables chosen for this study were selected based on how they theoretically related to the dependent variables. Economic, social, political, and financial globalization are the explanatory variables that influence the accounting-based performance of banks in Ethiopia. Furthermore, the control variables that impact the accounting-based performance of Ethiopian banks are asset size, liquidity, real GDP, and inflation. The proxies of globalization are discussed below:

Economic globalization is characterized as the long-distance flows of goods, capital, and services, as well as information and perceptions that accompany market exchanges.

Social globalization refers to the sharing of ideas and information between and through different countries through social media, the internet, and cross-border transactions.

Political globalization is described by the diffusion of government policies and measured by aggregating and weighting data on the number of embassies and high commissioners in a country, the number of the country's membership in international organizations, its participation in the UN peacekeeping missions, and the number of international treaties signed by the said country.

Financial Globalization is composed of combining data on foreign direct investment, portfolio investment, international debt, international reserves and international income payments which are obtained from the IMF database and are expressed as a percentage of GDP. Table 1 below provides a summary of the study variables used in this study's analysis.

The following econometric models were developed for this study in order to determine how globalization affects Ethiopian banks' accounting-based performance:

$$ROA = f\left(EG, SG, PG, FG, AS, LIQ, RGDP, INF\right) \text{ ----------1}$$

$$ROAi,t = \alpha + \beta 1EGt + \beta 2SGt + \beta 3PGt + \beta 4FGt + \beta 5ASi,t +$$

$$\beta 6LIQi,t + V7RGDPt + V8INFt + \sum i,t \text{ ----------2}$$

ROAi, t represents the return on assets of banks i at time t, EG represents economic globalization, SG represents social globalization, PG represents political globalization, FG represents financial globalization, AS represents asset size, LIQ represents liquidity, RGDP represents real GDP, and INF represents inflation.

$$ROE = f\left(EG, SG, PG, FG, AS, LIQ, RGDP, INF\right) \text{ ----------3}$$

$$ROEi,t = \alpha + \beta 1EGt + \beta 2SGt + \beta 3PGt + \beta 4FGt + \beta 5ASi,t$$

$$+ \beta 6LIQi,t + \beta 7RGDPt + \beta 8INFt + \sum i,t \text{ ----------4}$$

Table 1: Summary of variables and their expected relationship

Variables	*Symbol*	*Measurement*	*Expected effect*
Dependent variables			
Return on asset	ROA	Net profit after tax / total asset	
Return on equity	ROE	Net profit after tax / total equity	
Independent variables			
Economic globalization	EG	The economic globalization index of the home country	+
Social globalization	SG	Social globalization index of the home country	+
Political globalization	PG	Political globalization index of the home country	+
Financial globalization	FG	Financial globalization index of the home country	-
Control variables			
Asset size	AS	The natural logarithm of the accounting value of the total assets of the bank in year *t*	+
Liquidity	LIQ	Current asset to the current liability of the bank in year *t*	
Real GDP	RGDP	The rate of GDP	+
Inflation	INF	The rate of inflation	-

Where: ROEi, t represents the return on equity of banks i at time t, EG represents economic globalization, SG represents social globalization, PG represents political globalization, FG represents financial globalization, AS represents asset size, LIQ represents liquidity, RGDP represents real GDP, and INF represents inflation.

Result and discussions

Descriptive statistics

As shown in Table 2, the average value of banks' accounting-based performance measured by return on assets (ROA) was 0.0488 (4.88%), with a minimum and maximum value of 0.00935 and 0.37, respectively. This suggests that banks make 0.0488 cents on average from a birr invested in their assets, with a standard deviation of.0628631 (6.28631%) and returns ranging from 0.00935 cents to 0.37 throughout the study period. Banks' average accounting-based performance, as determined by the return on equity (ROE), was 0.1904 with a standard deviation of 0.1049601 (10.49601%). The minimum and maximum values of return on asset were 0.00123 to 0.749, respectively. This suggests that banks in Ethiopia create 0.1904 cents from a birr invested in their assets, and returns ranging from 0.00123 cents to 0.749 throughout the study period.

Furthermore, economic globalization had an average value of 28.62, a minimum and maximum value of 26 and 31, and a standard deviation of 1.583274. The average value of social globalization is 28, while the minimum and maximum values are 26 and 30, respectively, with a standard deviation of 1.123059. Political globalization had a mean score of 76; with minimum and maximum values of 75 and 77, and a standard deviation of 0.8699177. Financial globalization had an average value of 29.125, a minimum and maximum of 28 and 31, respectively, and a standard deviation of 0.7841332. Asset size has a mean value of 5.3035, a range of 1.122 to 11.853 for the minimum and maximum, and a standard deviation of 2.119316. Liquidity had an average value of 0.51082 with a minimum and maximum value of 0.034 and 11.853, respectively, and a standard deviation of 0.460831. Real GDP had an average value of 0.09252, a minimum and maximum of 0.0681 and 0.1058, and a standard deviation of 0.0119461. The average inflation rate was 0.118101, with the minimum and maximum values being 0.066281

Table 2: Descriptive statistics of variables

Variables	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
ROA	112	.0488	.0628631	.00935	.37
ROE	112	.1904	.1049601	.00123	.749
EG	112	28.62	1.583274	26	31
SG	112	28	1.123059	26	30
PG	112	76	.8699177	75	77
FG	112	29.125	.7841332	28	31
AS	112	5.3035	2.119316	1.122	11.853
LIQ	112	.51082	.460831	.034	1.871
RGDP	112	.09252	.0119461	.0681	.1058
INF	112	.118101	.0544808	.066281	.236004

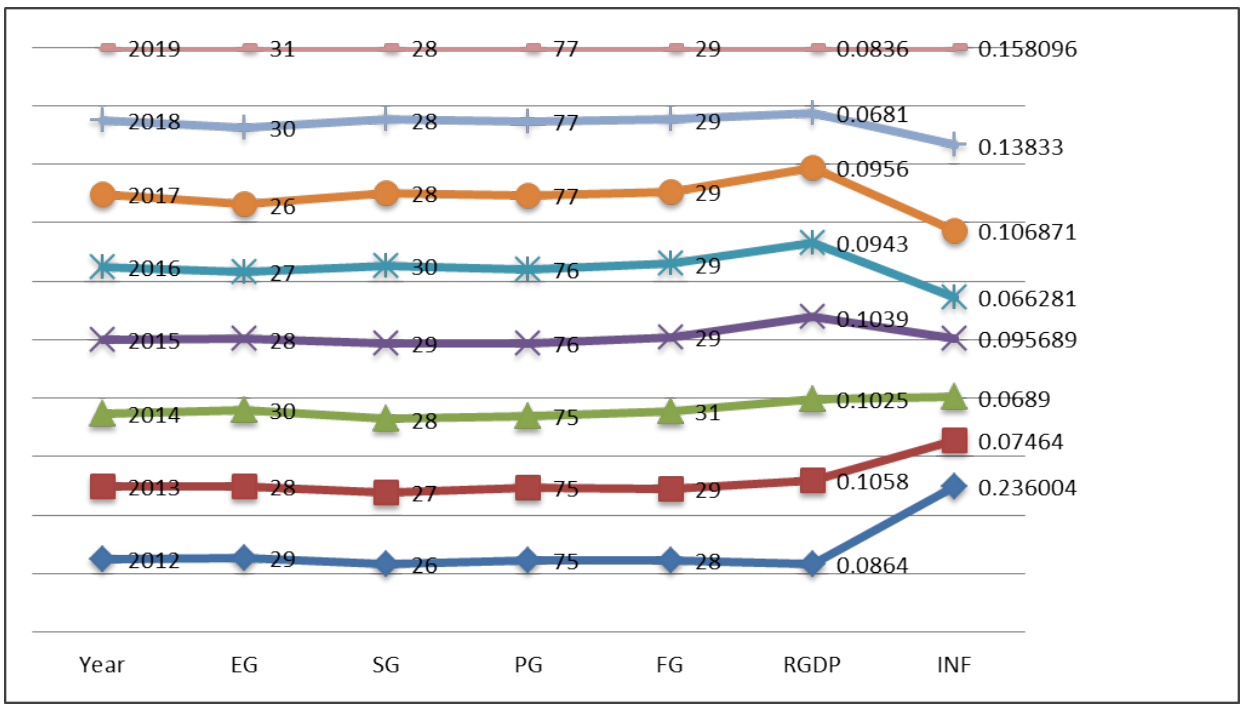


Figure 2: Trend analyses

and 0.236004, respectively, and a standard deviation of 0.0544808.

Trend analyses of globalization and macro-economic indicators

Figure 2 below indicates the trend analysis of 8 years of real GDP, inflation, economic, social, political and financial globalization index of Ethiopia from 2012 to 2019. Economic globalization (EG) decreased in 2013 compared to 2012, increased in 2014, and decreased from 2015 to 2017 as seen by the trend line. EG did, nevertheless, advance and accelerate in 2018 and 2019. The trend analysis also shows social globalization (SG) rose from 2013 to 2016 compared to 2012, and from 2017 to 2019 achieved a similar outcome. Political globalization (PG) received the same score from 2012 to 2014, 2015 and 2016, and 2017 to 2019 accordingly. Additionally, financial globalization (FG) grew in 2013 and 2014 compared to 2012, and the trend continued from 2015 to 2019. The real GDP (RGDP) grew from 2013 to 2017, compared to 2012, 2018 and 2019. Lastly, the line graph showed that inflation (INF) peaked in 2012, declined in 2013, surged from 2013 to 2014, reduced from 2015 to 2016, and grew from 2017 to 2019.

Correlation result

The data presented in Table 3 demonstrates a favorable correlation between banks' accounting-based performance as evaluated by ROA and EG, social globalization (SG), PG, FG, AS, liquidity (LIQ), and RGDP. However, there is a negative correlation between banks' accounting-based performance, as assessed by ROA, and INF. Additionally, the correlation analysis reveals that AS, LIQ, RGDP, PG, FG, SG, and EG have all been positively correlated with banks' accounting-based performance as measured by ROE. However, there is a negative correlation between banks' accounting-based performance, as assessed by ROE, and INF.

Fixed effect model (FEM) and Random effect (REM)

Fixed effect model (FEM) and random effect model are the two main classes of panel estimator techniques that can be used in financial research (REM; Brooks, 2008). The Hausman test was used to determine whether either of the two (FEM or REM) models provided consistent estimates for this investigation, and the following hypothesis was created:

Ho

A random effect model is appropriate.

H1

A random effect model is not appropriate.

Table 4 below found a *p-value* of 0.04 for model 1 and 0.4471 for model 2 which indicates the null hypothesis was rejected for model 1 but not for model 2. Model 1 shows the appropriate model choices on the relationship between return on asset (ROA) and economic, social, political and financial globalization and asset size, liquidity, real GDP and inflation. On the other hand, model 2 shows the appropriate model choices on the relationship between return on equity (ROE) and economic, social, political and financial globalization and asset size, liquidity, real GDP and inflation. Accordingly, the connection between the dependent and independent variables was estimated using the FEM and REM, respectively.

Regression results and discussion

The model results of the investigation into the relationship between globalization and Ethiopian banks' accounting-based performance are shown in Table 5. The relationship between firm-specific (asset size and liquidity) and macroeconomic (real GDP and inflation) variables is also shown, along with the accounting-based performance of banks as evaluated by ROA and ROE, respectively.

As can be shown in Table 5, economic globalization significantly and favorably affects Ethiopian banks'

Table 3: Correlation analysis

	ROA	*ROE*	*EG*	*SG*	*PG*	*FG*	*AS*	*LIQ*	*RGDP*	*INF*
ROA	1.000									
ROE	0.182	1.0000								
EG	0.021	0.0579	1.0000							
SG	0.014	0.018	-0.283	1.0000						
PG	0.03	0.0234	0.0000	0.3873	1.0000					
FG	-0.03	-0.012	0.2413	0.2864	-0.1849	1.0000				
AS	0.07	0.0121	0.1453	0.0216	0.8030	-0.0982	1.0000			
LIQ	0.07	0.0270	0.1881	0.0816	0.7779	-0.0839	0.7388	1.0000		
RGDP	0.03	0.051	-0.465	0.1307	-0.5753	0.3511	-0.572	-0.521	1.0000	
INF	-0.03	-0.056	0.371	-0.656	0.0632	-0.6386	0.1889	0.1468	-0.585	1.0000

Table 4: Fixed and random effect model

Model 1	*Fe*	*re*	*Difference*	*S.E.*
EG	.0004105	.0003818	.0000287	.0007461
SG	.0036415	.0030401	.0006014	.003407
PG	-.0001207	.0014942	-.0016149	.0087681
FG	-.000849	-.0004985	-.0003505	.0025139
AS	-.0015102	-.0021195	.0006093	.0035422
LIQ	-.0130736	-.0134041	.0003305	.0043307
RGDP	-.5107097	-.521226	.0105162	.1225442
INF	.0386303	.0359318	.0026985	.0322495
Prob>chi^2= 0.04				
Model 2	*Fe*	*re*	*Difference*	*S.E.*
EG	.0035101	.0022325	.0012776	.001952
SG	.0344424	.0082402	.0262021	.0095051
PG	-.0825607	-.012258	-.0703027	.0261314
FG	-.0147399	.0005616	-.0153015	.0036743
AS	.0305796	.0039511	.0266285	.0109019
LIQ	.0231173	.0092064	.0139109	.0100229
RGDP	.6166662	.1562386	.4604276	.2624665
INF	.3105769	.1933619	.117215	.0807344
Prob>chi^2= 0.4471				

accounting-based performance as measured by ROA and ROE, with coefficients of 0.0004105 and 0.0022325 at the 5% significance level, respectively. This indicates that for every 1% increase in economic globalization, the accounting-based performance of banks, as measured by ROA and ROE, rises by 0.04105 and 0.22325%, respectively. Economic globalization and accounting-based performance have a favorable link since the expansion of communication networks has significantly lowered the cost of cross-border transactions, thereby fostering international trade and economic integration between nations. This study's findings concur with those of Mayer Schoenberger and Hurley (2000) and Fadzlan (2016). The results of Ruba Al-Jarallah (2022), in contrast, show that the banking industry in Gulf Cooperation Council (Bahrain, Kuwait, Qatar, Oman, United Arab Emirates and Saudi Arabia) is not benefiting from economic globalization because of the banking sector's heightened exposure to external global shocks.

A favorable correlation between social globalization and bank accounting-based performance is also seen in Table 5, with coefficients of 0.0036415 and 0.0082402 at 10% for models 1 and 2, respectively. This implies that when social globalization grew by 1%, the bank's accounting-based performance increased as measured by ROA and ROE with values of 0.36415 and 0.82402%, respectively. The result of this study is in line with those of Sufian and Habibullah (2012), who found that social globalization, has a beneficial effect on the profitability of the Chinese banking industry. In contrast to the findings, Kim, Lim, and Sohn (2020) and Ruba Al-(2022) Jarallah discovered that global risk aversion shocks had more negative effects on financial markets and real economic activity.

Political globalization significantly and favorably affects Ethiopian banks' ROA and ROE, with coefficients of 0.0001207 and 0.012258, respectively, at the 10% level of significance. This indicates that taking other explanatory variables to be held equal, a 1% rise in political globalization results in ROA and ROE values for banks' of 0.01207 and 1.2258%, respectively. The findings of Fadzlan (2016) and Dreher (2007), which suggest that greater political globalization tends to benefit banks and point out that greater political integration significantly influences reforms in political processes and subsequently leads to higher economic growth are consistent with the finding that political globalization has a positive impact on banks' accounting-based performance. Conversely, the results of Nguyen & Nguyen (2018) and Ruba Al-Jarallah (2022) are in conflict with the findings of this study.

Financial globalization has a significant and positive effect on the banks' accounting-based performance in Ethiopia with a coefficient of -0.000849 and -0.0005616 measured by ROA and ROE, respectively at a significance level of 10 and 5%. This suggests that banks in Ethiopia lose 0.0849 and 0.05616% as financial globalization increases by 1%. The inverse relationship demonstrates how financial globalization may result in severe banking crises, large financial imbalances, and increased financial volatility and fragility. The results of this study agree with those of Ece *et al*. (2022), Denizer *et al*. (2007) and Yakubu, and Bunyaminu, (2019). The findings of this study, however, are at odds with those of Hassan (2003), who came to the conclusion that financial globalization helped the domestic financial system develop and led to a significant rise in foreign subsidiaries, which gave financial intermediaries access to a wider range of opportunities, including more affordable and external financing sources.

Asset size has a significant and positive effect on the banks' accounting-based performance with the coefficients of 0.0015102 and .0039511 at a 5% significance level measured both by ROA and ROE respectively. This indicates that taking other explanatory variables constant a 1% increase in banks asset size leads banks' accounting-based performance by 0.0015102 and 0.0039511, respectively. The positive relationship between bank asset size and banks' accounting-based performance is because big banks are likely to have more market sway and, as a result, charge cheaper input costs and larger banks may gain from improved skills that would allow them to provide new goods and services and subsequently increase their volume and market share. The result of this study is consistent with Sufian and Habibullah (2009), (Roman & Sargu, 2015), Khanal

(2019), Assfaw (2019), Sopan and Dutta (2018), Teshome (2017), Zaghdoudi and Hakimi (2017), Singh and Sharma (2016), Deléchat *et al*. (2012), and P. Vodová (2013). The study, however, went against Kokobe and Birhanu's (2015) assertion that the size of the bank had a detrimental effect on the profitability of commercial banks, supporting the notion that holding big asset sizes was too difficult to handle and that negative economies of scale emerged.

The model's findings demonstrated that liquidity, which assesses the capacity to meet short-term liabilities with short-term assets, has a favorable and statistically significant impact on the accounting-based performance of Ethiopian banks as evaluated both by ROA and ROE. The outcome demonstrates that improved accounting-based performance is correlated with increasing liquidity. The outcome is consistent with expectations and supports the findings of Suheyli (2015) and Abate and Yuvaraj (2013), who argued that profitability increases with the amount of resources committed to a liquidity position. This is in contrast to Berhe and Kaur (2017), who found that profitability, is negatively correlated with liquidity. Additionally, the findings of this study is at odds with those of Shobor and Batra (2016), Chinoda (2014), and Kawshala (2017), who contend that because productive assets became idle, liquidity had a detrimental influence on the profitability of commercial banks.

In Ethiopia, banks' accounting-based performance, as determined by ROA and ROE, was found to have a positive and statistically significant impact on real GDP. This finding is consistent with theory and empirical data suggesting that there may be a pro-cyclical relationship between real GDP and bank accounting-based performance. This would suggest that the effect on banks' accounting-based performance, as measured by ROA and ROE, is positive when real GDP is positive, and the effect is negative when real GDP is negative, as would be the case in this study. This study's key finding is that Ethiopia's economy has grown favorably in recent years, which may have had a good effect on the country's banks' operations. Research by Athinasoglou and Staikouras (2006) and Demirguc-Kunt, Huizinga (2006) and Yonas (2022) lend credence to this conclusion.

Finally, the regression result found that inflation has a negative and considerable impact on the accounting-based performance of Ethiopian banks, as determined by ROA and ROE. The inverse relationship between bank accounting performance and profitability demonstrates that Ethiopia's inflation was not anticipated, and as a result, banks did not change their lending interest rates, which resulted in losses and raised costs. The outcome is in line with Misker (2015), Melaku (2015) and Yonas (2022) although it contradicted the findings of Chinoda (2014) and Tesfaye (2012).

Table 5: Regression result using fixed effect model (FEM) for model 1 and random effect model (REM) for model 2

Model 1	*Coef.*	*Std. Err.*	*t*	*P>|t|*	*[95% Conf. Interval]*
EG	.0004105	.0050279	0.08	0.035**	-.0095783 .0103994
SG	.0036415	.0104294	0.35	0.072*	-.0170783 .0243613
PG	.0001207	.0229793	-0.01	0.099*	-.0457731 .0455317
FG	-.000849	.0120424	-0.07	0.094*	-.0247734 .0230753
AS	.0015102	.0079007	-0.19	0.049**	-.0172063 .0141859
LIQ	.0130736	.0206395	-0.63	0.028**	-.0540775 .0279302
RGDP	.5107097	.7694538	-0.66	0.040**	-2.039364 1.017945
INF	-.038630	.2132965	0.18	0.057*	-.3851203 .462381
Cons	.0264586	1.649203	0.02	0.987	-3.249972 3.302889
Model 2	*Coef.*	*Std. Err.*	*z*	*P>|z|*	*[95% Conf. Interval]*
EG	.0022325	.010334	0.22	0.029**	-.0180217 .0224867
SG	.0082402	.0187816	0.44	0.066*	-.028571 .0450515
PG	.012258	.0383173	-0.32	0.074*	-.0873585 .0628425
FG	-.0005616	.0240261	0.02	0.011**	-.0465287 .047652
AS	.0039511	.0116374	0.34	0.034**	-.0188578 .02676
LIQ	.0092064	.0404332	0.23	0.020**	-.0700414 .0884541
RGDP	.1562386	1.575027	0.10	0.0021***	-2.930757 3.243234
INF	-.1933619	.4380054	0.44	0.039**	-.6651128 1.051837
Cons	.7480822	2.816951	0.27	0.791	-4.773039 6.269204

Note***, ** and * shows significance at 1, 5 and 10% significance levels respectively.

Classical linear regression model assumptions (CLRMA)

Errors have zero value

The conventional linear regression model makes the assumption that the mean of the error components is zero. It implies that the expected value of the error term's distribution must be zero. The calculated coefficients will be affected by an error component with a mean that is different from zero. This assumption can be broken if the regression equation contains a constant term (Brooks, 2008). The assumption was not violated because the study's model includes a constant term.

Multi-collinearly test

Multi-collinearity is one of the problems in multiple regression analysis. It is usually regarded as a problem arising out of the violation of the assumption that explanatory variations are linearly independent Gujarati (2004). However, the mire satisfaction of this assumption does not prevent the possibility of an approximate linear dependence among the explanatory variables. As shown in Table 6 there is no tolerance value lower than 1 and the value of VIF is less than 10 given that, multicollinearity is not a concern for this study.

Heteroscedasticity test

The variance of the errors must be constant under the homoscedasticity condition. Gujarati (2004) asserts that for all observations, the variance of UI is the same regardless of the value of X. Heteroscedasticity is a term used to describe a breach of the homoscedasticity assumption, which occurs when the errors do not have a constant variance. The Breusch–Pagan test was employed in this study to examine the possibility of heteroscedasticity across a variety of explanatory variables. Errors are considered heteroscedastic if their variance is not constant (Brooks 2008). The *p-value* for the Breusch–Pagan test in Table 7 is 0.67 and 0.240 for models 1 and 2, respectively. Thus, there is no difficulty with heteroscedasticity in the study because the *p-value* is higher than 5%.

Table 6: Multi-collernerity test

Variables	*VIF*	*1/VIF*
PG	9.69	0.103215
INF	5.84	0.171190
AS	4.64	0.215342
SG	4.17	0.239613
RGDP	3.62	0.276025
FG	3.58	0.279230
LIQ	3.33	0.299944
EG	2.74	0.364451
Mean VIF	**4.701**	

Table 7: Breusch-Pagan/Cook-Weisberg test for heteroscedasticity

Model 1	*Model 2*
chi2(1) = 7.34	chi2(1) = 5.09
Prob > chi2 = 0. 67	Prob > chi2 = 0. 240

Table 8: Shapiro-Wilk W test for normal data

Variables	*Obs*	*W*	*V*	*z*	*Prob>z*
Model 1	112	0.57412	38.665	8.158	0.1623
Model 2	112	0.77332	20.580	6.751	0.3021

Table 9: Auto-correlation test

	Durbin-Watson test	
Model 1	Statistic (9, 112) =	1.859488
Model 2	Statistic (9, 112)	1.77342

Normality test

According to Brooks (2008), the normalcy assumption must be met in order to execute a hypothesis test about a model parameter. The mean of the residuals is assumed to be zero under the normalcy assumption. For normal data, the study applied the Shapiro-Wilk test. According to this test, the null hypothesis that the data are normally distributed is rejected if the *p-value* is less than 5%. The *p-value* for the Shapiro-Wilk test in Table 8 is 0.1623 and 0.3021 for models 1 and 2, respectively. Thus, normality is not a problem for this study because the *p-value* is greater than 5%.

Autocorrelation test

This assumption states that the errors are linearly independent of one another (uncorrelated). According to Brooks (2008), the Durbin-Watson (DW) model has two critical values: an upper critical value (du) and a lower critical value (dl), as well as a leveled inconclusive intermediate area. It is the area where the no autocorrelation null hypothesis cannot be either rejected or not rejected. As a result, the regression result shows that 1.859488 and 1.77342 are closer to 2 according to the Durbin-Watson Statistics (DW stat), and there is no evidence for the existence of autocorrelation as indicated in Table 9.

Conclusion and policy implications

Researchers' and academics' attention has been sparked by the hot research topic which is the impact of globalization on corporate performance. Despite the existence of empirical literature, the industrialized nations have continued to look into these inquiries since the outcomes have remained ambiguous. Therefore, the goal of this study is to look into how globalization has impacted Ethiopian banks' accounting-based performance between 2012 and 2019. The study gathered information from 14 commercial banks. The study used ROA and ROE as dependent variables and

AS and LIQ as control variables, on which the data was gathered from the websites of sampled commercial banks. Additionally, the study employed globalization (economic, social, political, and financial globalization) as the primary explanatory variable on which the data was gathered from countries using the KOF index. The study's other control variables included RGDP and INF, whose data were taken from databases of the International Monetary Fund. The data was examined using the ordinary list squire (OLS) approach in light of the 112 observations that were made.

The study found economic, social, and political globalization is positively and significantly correlated with Ethiopian banks' accounting-based performance, as determined by both ROA and ROE. However, the impact of financial globalization on Ethiopian banks' accounting-based performance as assessed by ROA and ROE is significant but negative. In addition, the study found that RGDP, liquidity, and AS all had a positive and significant impact on Ethiopian banks' accounting-based performance as measured by ROA and ROE. Finally, the study found that Ethiopian banks' accounting-based performance, as measured by ROA and ROE, is negatively and significantly impacted by INF. Therefore the study concluded that banks' accounting-based performance is affected by the bank-specific, macro-economic and globalization indicators.

Policy implications

The following important policy and operational directions are provided in light of the study's findings. The authorities should focus on economic globalization by enhancing and strengthening the financial systems, enhancing trade in goods and services, and enhancing trade partner diversity in order to improve the accounting-based performance of Ethiopian banks. The Ethiopian government should promote political globalization by ratifying agreements with free trade zones like those with the European Free Trade Association (EFTA) and the Africa, Caribbean, and Pacific European Union (ACP EU), which benefit the banking industry and increase tax revenue for the government from banks. In a similar vein, as the macroeconomic conditions in the region are less favorable than those in other regions of the world, therefore, attention should be paid to financial globalization through shutting down capital accounts. Additionally, efforts should be made to strengthen interpersonal relationships, information exchange, cultural proximity, and international travel. Moreover, domestic banks should get ready to expand their operations into new markets and foreign banks venture abroad in order to diversify their operations and revenue sources as well as to maintain their influential exporting clients because the door has opened for foreign bank participants.

Banks should keep more liquid assets because liquidity enables banks to meet their depositors' demand for cash withdrawals at any moment they withdraw in order to become more financially stable. Banks in Ethiopia also hold larger asset sizes to benefit from economies of scale. Additionally, in cooperation with the government, the National Bank of Ethiopia (NBE), which regulates banks, should modify interest rates to limit the unexpected inflation rate. Finally, the study made the suggestion that Ethiopia's real GDP growth rate be increased because countries with positive GDP growth rates attract more foreign investors, which boosts the bank's accounting-based performance. The empirical study of how globalization has affected the banking industry is still in its infancy. Therefore, this restriction opens up a lot of possibilities for further study. Future studies should also take into account other financial institutions that are impacted by globalization factors, such as insurance businesses and microfinance institutions. Future studies may also take into account the application of frontier efficiency techniques by taking Ethiopia's social globalization into account.

Acknowledgments

We thank the editor and anonymous reviewers for providing us with remarkable comments and expressive recommendations.

Conflict of interest

The authors declare that they have no conflict of interest.

References

Abate, G., & Yuvaraj, S. (2013). A study on performance of insurance companies in Ethiopia. *International Journal of Marketing, Financial Services and Management Research*, *2*(7), 138–150.

Abdu Mohammed Assfaw (2019). Firm-Specific and Macroeconomic Determinants of Banks Liquidity: Empirical Investigation from Ethiopian Private Commercial Banks. *Journal of Accounting, Finance and Auditing Studies,* 5/2 (2019) 123-145. 10.32602/jafas.2019.24

Al-Khouri, M. A. (2010). *The challenge of identity in a changing world: The case of GCC countries*. Paper presented at the Conference Proceedings, The 21st Century Gulf: The Challenge of Identity.

Alomari, M. W., & Azzam, I. A. (2017). Effect of the micro and macro factors on the performance of the listed Jordanian insurance companies. *International Journal of Business and Social Science*, *8*(2), 66–73.

Angela Roman and Alina Camelia Sargu (2015). The impact of bank-specific factors on the commercial banks liquidity: empirical evidence from CEE countries. *Procedia Economics and Finance* 20 (11), 571 – 579. www.sciencedirect.com

Applied Economics, 38 (10), 1091-1110.

Awan, A. M., Azam, M., Saeed, I. U., & Bakhtyar, B. (2020). Does globalization and financial sector development affect environmental quality? A panel data investigation for the Middle East and North African countries. *Environmental Science and Pollution Research, 27*(36), 45405-45418. Available at: https://doi.org/10.1007/s11356-020-10445-4.

Baloch, M. A., Ozturk, I., Bekun, F. V., & Khan, D. (2021). Modeling the dynamic linkage between financial development, energy innovation, and environmental quality: Does globalization matter? *Business Strategy and the Environment, 30*(1), 176-184.

Available at: https://doi.org/10.1002/bse.2615.

Bansal, R., Singh, A., Kumar, S. and Gupta, R. (2018). Evaluating factors of profitability for Indian banking sector: a panel regression. *Asian Journal of Accounting Research*, 3 (2), 236-254. https://doi.org/10.1108/AJAR-08-2018-0026

Bawa, S. K., & Chattha, S. (2013). Financial performance of life insurers in the Indian insurance industry. *Pacific Business Review International*, *6*(5), 44–51.

Berger, A.N., DeYoung, R., Genay, H. and Udell, G.F. (2000). Globalization of financial institutions: evidence from cross border banking performance, *Brookings Wharton Papers on Financial Services*, 3, (1), 23-158.

Berhe, T. A., & Kaur, J. (2017). Determinants of insurance companies' profitability Analysis of insurance sector in Ethiopia. *International Journal of Research in Finance and Marketing, (7*(4), 124–137.

Bragin, L. A., Ivanov, G. G., Panasenko, S. V., Efimovskaya, L. A., Karashchuk, O. S., Krasilnikova, E. A., & Tyunik, O. R. (2018). Globalization of trade based on innovations.

Brealey, R.A., Myers, S.C., and Allen, F. (2006). Corporate Finance, Eighth Edition, McGraw-Hill, Inc., New York.

Brooks, C. (2008). *Introductory econometrics for finance, 2nd*. Press.

Chancharat, N. (2008). An empirical analysis of financially distressed Australian companies: The application of survival analysis. A thesis was submitted to the University of Wollongong. http://ro.uow.edu.au/theses/401/

Collier, P., & Dollar, D. (2002). *Globalization, growth, and poverty: Building an inclusive world economy*: World Bank Publications.

Danbobi Note Dido (2020). Banking Sector Reform in Ethiopia. *International Journal of Business and Social Research*.10(5), 55-65. https://doi.org/10.18533/ijbsr.v10i5.1332

Delechat, C., Arbelaez, C. H., Muthoora, M. P. S., & Vtyurina, S. (2012). The determinants of banks' liquidity buffers in central America. International Monetary Fund working paper

Demirguç-Kunt, Asli and Huizinga, Harry (1999). Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence. *The World Bank Economic Review, 13(2), 379-408*. https://ssrn.com/abstract=614949

Denizer, C. A., Dinc, A., Tarimcilar, M. (2007). Financial liberalization and banking efficiency: evidence from Turkey. *Journal of Productivity Analysis,* 27(3), 177–195, 10.1007/s11123-007-0035-9.

Dey, N. B., Adhikari, K., & Bardhan, R. (2015). Factors determining the financial performance of life insurance companies of India: An empirical study. *EPRA International Journal of Economic and Business Review*, *3*(8), 42–48.

Dreher, A. (2007). Does globalization affect growth? Empirical evidence from a new index.

Dreher, A. and Gaston, N. (2008). Has globalization increased inequality, *Review of International Economics*, 16 (3), 516-536.

Dunning, J. H. (1977). Trade, location of economic activity and the MNE: a search for an eclectic approach. *The International Allocation of Economic Activity*, 395-418. https://doi.org/10.1007/978-1-349-03196-2_38

Ece C. Akdogan, Ekin Ayşe qzşuca (2019). Profitability effects of financial globalization in an emerging market banking industry: Economic paper, *37 (1), 303-325*

Fadzlan Sufian Fakarudin Kamarudin, (2016). The impact of globalization on the performance of Banks in South Africa. *Review of International Business and Strategy*, 26 (4), 517 – 542 http://dx.doi.org/10.1108/RIBS-02-2016-0003

Fadzlan Sufian (2008). Determinants of Bank Profitability in a Developing Economy: Empirical Evidence from the Philipinnes. *Asian Academy of Management Journal of Accounting and Finance* 4 (2), 91 -112. https://EconPapers.repec.org/RePEc:usm:journl:aamjaf00402

Gallo, M., Konrad, R. A., & Thinyane, H. (2020). An epidemiological perspective on labor trafficking. *Journal of Human Trafficking*, 10(1), 1-22. https://doi.org/10.1080/23322705.2020.1815474.

Grossman, G. M., & Krueger, A. B. (1991). Environmental impacts of a North American free trade agreement.

Gujarati, D. N. 2004. *Basic econometrics. United States Military Academy, West Point. Published by McGraw Millrwin, a business unit of the McGraw Hill Companies*. Inc: avenue of Americas, Nework, Ny, 10020 122.

Hailegebreal, D. (2016). Macroeconomic and firm-specific determinants of profitability of insurance industry in Ethiopia. *Global Journal of Management and Business Research, 16*(7), 26–36.

Hasan, I., Marton, K. (2003). Development and efficiency of the banking sector in a transitional economy: Hungarian experience. *Journal of Banking & Finance,* 27 (12), 2249–2271. 10.1016/s0378-4266(02)00328-x.

Hassan, M.K., and Bashir, A.H.M., (2003). *Determinants of Islamic Banking Profitability*. Paper Presented at the 10th ERF Annual Conference.

Hrishikesh D. Vinod. Hands-on Intermediate Econometrics Using R: Templates for Extending Dozens of Practical Examples. World Scientific, Hackensack, NJ, 2008. URL http://www.worldscibooks.com/economics/ 6895.html. ISBN 10-981-281-885-5.

Isik, I., Hassan, M. K. (2003). Financial deregulation and total factor productivity change: An empirical study of Turkish commercial banks. *Journal of Banking & Finance,* 27(8), 1455–1485, 10.1016/s0378-4266(02)00288-1.

J. Sopan and Abhijit Dutta (2018). Determinants of Liquidity Risk in Indian Banks: A Panel Data Analysis. *Asian Journal of Research in Banking and Finance,* 8(6), 47-59.

Karadagli. Ece C. (2012). The Effects of Globalization on Firm Performance in Emerging Markets: Evidence from Emerging-7 Countries. *Journal of Asian Economic and Financial Review* 2(7), 858-865.

Kawshala, H. and Panditharathna, K. (2017). The Factors Effecting on Bank Profitability. *International Journal of Scientific and Research Publications*, 7 (2), 212-216

Kokobe Seyoum and Birhanu Deriba (2015). Determinants of Financial Performance of Commercial Banks in Ethiopia. *Journal of Business Management and Economics* 3(11), 33-40. 10.15520/JBME.2015.VOL3.ISS11.158.PP33-40

Logasvathi M. and Mugeshmani S. (2021). The impact of Globalization towards Bank Performance in Malaysia. *Research in World Economy,* 12(1), 331-339. http://rwe.sciedupress.com

Mayer–Schoenberger, V. and Hurley, D. (2000). Globalization of communication, in Nye, J.S. and Donahue, J.D. (Eds). *Governance in a Globalizing World*, Brookings Institution Press, Washington, DC, pp. 135-154.

Mazviona, B. W., Dube, M., & Sakahuhwa, T. (2017). An analysis of factors affecting the performance of insurance companies in Zimbabwe. *Journal of Finance and Investment Analysis*,

6(1), 1–21.

Mehari, D., & Aemiro, T. (2013). Firm specific factors that determine insurance companies' performance in Ethiopia. *European Scientific Journal, 9*(10), 245-255. https://doi.org/10.19044/esj.2013.v9n10p%p

Melaku Aweke (2016), Determinants of bank profitability in Ethiopia: A case study of Private Commercial Banks. *Journal of Finance and Accounting Research*, 7 (7), 28-43

Misker Bizuayehu (2015). Impact of Credit Risk on Financial Performance of Banks in Ethiopia, MSC Thesis, Addis Ababa University, Addis Ababa-Ethiopia, Retrieved from http://etd.aau.edu.et.

Mwangi, M., & M, J. W. (2015). The determinants of financial performance in general insurance companies in Kenya. *European scientific journal*, *11*(1), 288–297.

Nguyen, H. T., & Nguyen, D. T. (2018). Globalisation and bank performance in Vietnam. *Malaysian Journal of Economic Studies*, 55(1), 49-70. https://doi.org/10.22452/MJES.vol55no1.3

Nguyen, H. T., & Nguyen, D. T. (2018). Globalisation and bank performance in Vietnam. *Malaysian Journal of Economic Studies*, 55(1), 49-70. https://doi.org/10.22452/MJES.vol55no1.3

Panayiotis P. Athanasoglou & Matthaios D. Delis & Christos K. Staikouras, 2006. Determinants of Bank Profitability in the South Eastern European Region, Working Papers 47, Bank of Greece.

Panayotou, T. (2000). Globalization and environment. CID Working Paper Series.

Pangarkar, Nitin. Wu, Jie. (2012). Industry Globalization and the Performance of Emerging Market Firms: Evidence from China. *Journal of International Business Review* 21 (2012) 196–209.

Pasiouras, F., & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance*, *21*(2), 222–237. https://doi.org/10.1016/j.ribaf.2006.03.007

Peltonen, Tuomas A. Skala, Martin. Rivera, Alvaro Santos. Pula, Gabor. (2008). Imports and Profitability in the Euro Area Manufacturing Sector: the Role of Emerging Market Economies. Working Paper Series. No 918.

Reshid, Suheyli (2015). Determinants of Insurance Companies Profitability in Ethiopia. AAU institutional repository. http://etd.aau.edu.et/handle/123456789/5182

Ruba Al-Jarallah (2022). Impact of globalization on banks performance and standard of living in GCC countries: Macro evidence based on GMM approach. *International journal of Business, Economics and management,* 9(3), 70-83. 10.18488/62.v9i3.2995

Samiksha Khanal,(2019). Determinants of Liquidity in Commercial Banks of Nepal. *International Journal of Economics and Management Studies*, 6, (8), 11-16, https://doi.org/10.14445/23939125/IJEMS-V6I8P103

Shobor Gudeta and G.S.Batra (2016) the impact of credit risk management on the financial performance of Ethiopian commercial banks. *IOSR Journal of Economics and Finance,* 7 (6), 106-116

Singh, A., & Sharma, A. K. (2016). An empirical analysis of macroeconomic and bank-specific factors affecting the liquidity of Indian banks. *Future Business Journal*, 2(1), 40–53. https://doi.org/10.1016/j.fbj.2016.01.001

Sufian, F. (2009). Determinants of bank profitability in a developing economy: empirical evidence from the China banking sector, *Journal of Asia Pacific Business*, 10 (4), 281-307.

Sufian, F., Habibullah, M.S. (2011). Navigating the impact of globalization on bank efficiency in China, *China & World Economy*, 19 (5), 85–101, 10.1111/j.1749-124x.2011.01260.x.

Sufian, F., Kamarudin, F. (2016).The impact of globalization on the performance of Banks in South Africa. *Review of International Business and Strategy.* 26 (4), 517–542, 10.1108/ribs-02-2016-0003.

Tariq, W., Muhammad, U., Haseeb, Z., Inam, A. & Imran A. (2014). Determinants of Commercial Banks Profitability: Empirical Evidence from Pakistan. *International Journal of Accounting and Financial Reporting*, 4 (2), 1- 22

Tesfaye Boru (2014). Determinants of Ethiopian Commercial Banks Performance. *European Journal of Business and Management,* 6(14), 52-62. www.iiste.org

Teshome, W. (2017). Factors Affecting Liquidity of commercial banks in Ethiopia (Master's thesis, Addis Ababa University).

Tough Chinoda (2014). Determinants of Commercial Banks Profitability in Zimbabwe. *IOSR Journal of Economics and Finance,* 5(6), 69-80

Tough Chinoda (2014). The Determinants of Commercial Banks Profitability in Zimbabwe. *IOSR Journal of Economics and Finance,* 5(6)69-80. 10.9790/5933-05626980

University Press, Princeton, NJ.

Vodova, P. (2011). Liquidity of Czech commercial banks and its determinants. *International Journal of Mathematical Models and Methods in Applied Sciences*, 5(6), 1060–1067.

Vodová, P. (2013). Determinants of commercial bank liquidity in Hungary. Finansowy Kwartalnik Internetowy e-Finanse, 9(4), 64–71

Yakubu, I.N. and Bunyaminu, A. (2022). Bank profitability in Sub-Saharan Africa: does economic globalization matter?. *Journal of Economic and Administrative Sciences*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JEAS-08-2021-0158

Yonas Nigussie Isayas (2022) Determinants of banks' profitability: Empirical evidence from banks in Ethiopia, Cogent Economics & Finance, 10:1, 2031433, DOI: 10.1080/23322039.2022.2031433

Zaghdoudi, K., & Hakimi, A. (2017). The determinants of liquidity risk: Evidence from Tunisian banks. *Journal of Applied Finance and Banking*, 7(2), 71-81

Zaim, O. (1995). The effect of financial liberalization on the efficiency of Turkish commercial banks, *Applied Financial Economics*, 5, (4), 257–264, 10.1080/758536876.

Zhang, X., Daly, K. (2014). The Impact of Bank-Specific and Macroeconomic Factors on China's Bank Performance. *Chinese Economy,* 47 (5), 5–28, 10.2753/CES1097-1475470501.