PERFORMANCE ASSESSMENT OF INTEREST FREE BANKING WINDOWS OF PRIVATE COMMERCIAL BANKS

BY: Dagmawit Tsegaye

GSE/7535/14

A THESIS SUBMITTED TO ADDISABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMIC IN PARTIAL FULFILLMENT FOR THE REQUIREMENT OF MASTERS OF SCEINCE (MSC)

ADVISOR: Alem Hagos (PHD)

A.A, ETHIOPIA

Statement of Declaration

I, Dagmawit Tsegaye, hereby declare that this thesis entitled "Determinants of Financial Performance of Interest-Free Banking Windows of Private Commercial Banks in Ethiopia" is my original work, prepared in partial fulfilment of the requirements for the Master's Degree at Addis Ababa University.

I confirm that:

- This research was conducted wholly or mainly during my candidature for a Master's degree at Addis Ababa University.
- It has not been submitted, either in part or in full, for any academic degree or qualification at any other university or institution.
- All sources of information used in this thesis are properly acknowledged, and all quotations are clearly cited.
- Except where otherwise stated, the work presented in this thesis is entirely my own.

Name: Dagmawit Tsegaye

Signature:  Date: June 2, 2025

Approval Sheet

We, the undersigned members of the Examining Board, hereby certify that this thesis entitled "Determinants of Financial Performance of Interest-Free Banking Windows of Private Commercial Banks in Ethiopia" has been reviewed and approved in accordance with the requirements of Addis Ababa University for the award of the Master's Degree.

Approved by Board of Examiners

Name & Title	Signature	Date
Chairperson		24/06/2025
Advisor	Alem Hagos (PhD)	24/06/2025
External Examiner	Tigist Belachew (PhD)	26/06/2025
Internal Examiner	Abebaw (PhD)	24/06/2025

ACKNOWLEDGMENTS

First and foremost, I express my deepest gratitude to the Almighty God for granting me the health, strength, and perseverance to successfully complete this academic journey.

I am sincerely thankful to my advisor**, Dr. Alem Hagos,** for his invaluable guidance, thoughtful feedback, and consistent support throughout the course of this research. His mentorship played a crucial role in shaping the quality and direction of this study.

My heartfelt appreciation also goes to the National Bank of Ethiopia (NBE) for providing access to essential data, regulatory insights, and support that were vital for the completion of this research on the performance of Interest-Free Banking windows in private commercial banks.

Lastly, I extend my appreciation to my family, friends, and all individuals who offered their encouragement, assistance, and moral support. Your contributions, whether direct or indirect, are genuinely appreciated.

Table of Contents

LIST OF TABLE

LIST OF FIGURES

ABBREVIATIONS

AAOIFI- Accounting and Auditing Organization for Islamic Financial Institutions

IFB- Interest Free Banking

NBE- National Bank of Ethiopia

OIB- Oromia International Bank

PLS- Profit & Loss Sharing

ABSTRACT

This research evaluated the performance of private commercial banks' IFB windows in Ethiopia that are actively involved in IFB services. The research aimed at examining the operating models, offerings, financial performance, and Sharia compliance of IFB windows, relative to events during the early stages of application to the period 2020 to 2024. The main objective was to examine the financial performance of IFB windows, using Return on Assets (ROA) as the key measure, and the profitability determinants. Only five of the 32 private commercial banks were included in the analysis due to the presence of regular and independent financial data of IFB operations. Panel data was utilized and a Random Effects regression model was employed to analyze the effect of key variables such as Deposit Mobilization, Management Efficiency, Operating Efficiency, Bank Size, and Capital Adequacy on IFB profitability. Findings show wide differences in performance across the listed banks. The Cooperative Bank of Oromia led in profitability, mobilization of deposits, and asset size but was marred by operational inefficiency. Dashen Bank showed good cost control and stable growth of deposits and low capital adequacy. Oromia Bank showed balanced performance while Wegagen Bank lagged behind in most of the indicators despite comparatively efficient operations. Hibret Bank, though in smaller magnitude, demonstrated a good trend of profit and cost management. Deposit Mobilization, Management Efficiency, Bank Size, and Capital Adequacy were revealed to have a statistically significant and positive relationship with ROA by regression analysis. Operational Efficiency and macroeconomic factors such as exchange rate, GDP, and inflation, however, had no statistically significant relation with profitability. The study contributes to the dearth of empirical studies on IFB performance in Ethiopia and offers policy inputs for policymakers, bank managers, and regulators. It also underscores the need for bank-level strategic reforms to render IFB operations profitable and sustainable in the country.

CHAPTER ONE

1. INTRODUCTION

1.1. Introduction

The study aims to assess the performance of private commercial banks' interest-free banking window services. The first chapter provides the background of the study, states the problem being investigated, outlines the research questions and objectives, highlights the significance of the study, defines the scope, and explain any limitations.

1.2. Background of the Study

Interest free banking also known as Islamic banking is the practice of conducting banking activities in accordance with Islamic principles or sharia. The sharing of income and loss and the prohibition of interest collection and payment by lenders and investors are the two essential principles of Islamic banking (Evan Traver, 2023). Investing in businesses that cause harm is prohibited by the Islamic principles or sharia. For example, investing in alcohol, tobacco and gambling (Mohammed, 2012).

Islamic banking first emerged in Pakistan and Egypt in 1950 and 1963 respectively and currently expanded all over the world as an alternative to the conventional banking services (Suadiq Mohammed & Nissar Ahmed, 2021). This success is linked to free capital flow and Muslims responsiveness to the negative effects of interest centered transaction in their religious faith (Azam Anwar, Saqib Ghais & Syed Irfan, 2021). Interest free banking is one of the most rapidly expanding sectors and also one of the newest economic trends in the world. In Ethiopia there is a huge demand for interest free banking services, not only for the Ethiopian Muslim community but also for the Ethiopian government to conduct business with countries with a Muslim majority. Islamic banking is widely practiced and seen to be one of the market with quickest growth, yet it is not without obstacles and challenges.

The national bank of Ethiopia revised the Ethiopian banking business proclamation SSB/11/2022 in 2008 to include the provision of interest free banking in order to meet the demand for these

services from the Ethiopian Muslim community. This paved the way for the establishment of Islamic banking in Ethiopia.

The proclamation however, was amended by another declaration SSB/51/2011 that prohibited the establishment of fully fledged Islamic financial institutions while granting existing commercial banks the freedom to offer an interest free banking service with a dedicated window. Following the release of the working directive, NBE has begun to authorize several commercial banks to offer IFB to its clients. On September 16, 2013, OIB became the first private commercial bank to issue the NBE license. Currently, the majority of private commercial banks award IFB license and provide the service in a dedicated window model. However, this paper tries to assess the performance of interest free banking windows of the licensed private commercial banks.

1.2.1. Background of Private Commercial Banks IFB windows

Currently, Ethiopia has a total of 32 banks operating within its borders. These include one government bank, one development bank, one mortgage bank, four full-fledged banks, and 25 private commercial banks. The first bank to be granted a license for interest-free banking (IFB) was Oromia International Bank on September 16, 2013.

The table below displays the banks that have been granted a license to offer IFB services through a dedicated window. However, it is important to note that this list does not include all the banks that have been granted the license. Other banks, such as Amhara Bank, Siinqee Bank, Tsehay Bank, Tsedey Bank, Gedda Bank, Sidama Bank, Siket Bank, and Omo Bank, have also obtained the license. However, they are not included in the list because they began their operations in the years 2022 and 2023. Addis International Bank, Birhan Bank, Zemen Bank and Ahadu Bank do not provide IFB services in their banking operations.

Additionally, Enat Bank, Bunna Bank, Abay Bank, Awash Bank, Abyssinia Bank, Lion International Bank, Nib International Bank and Global Bank are excluded from the study because they didn’t provide a separate financial statement for their IFB window service as it’s the requirement from the sharia.

The banks that are selected for the study are Oromia international bank, Hibret bank, Wegagen bank, Cooperative bank of Oromia and Dashen bank these banks grant the license to provide the IFB window services in the year 2013, 2014, 2020, 2015 and 2018 respectively.

Oromia International Bank is the pioneer in offering interest-free banking window services in Ethiopia. The bank provides these services across various categories, including deposits, financing, and other services. In the deposit category, the bank offers Wadi'ah saving accounts, which include Wadi'ah saving account, Amana (Demand) account, Lebbaik-Wadi'ah saving account, and Mudarabah investment account. Additionally, the bank provides a Wadi'ah special saving account, which encompasses Sinqe women's Wadi'ah saving account, Handhura children's Wadi'ah saving account, Wadi'ah retirement account, and Hayyu Wadi'ah education solution account. Under the financing category, Oromia International Bank offers Murabaha financing, interest-free export financing, Ijarah financing, Salam financing, and Istisna (manufacture-sale) financing services.The bank's other services category includes bank guarantee services, money transfer services, partnership-based financing, and trade finance services.

Hibret Bank obtained a license from the National Bank of Ethiopia (NBE) in 2014 to offer interest-free banking (IFB) services through its dedicated window. The IFB services provided by Hibret Bank's IFB windows consist of various accounts and financing options. In terms of accounts, they offer Wadiah saving accounts, Mudarabah investment saving accounts, and Mudarabah fixed-term deposits. The financing category offered by Hibret Bank's IFB window includes trade-based financing, which encompasses Murabahah, Salam, and Istisna. It also includes Ijarah (rent-based financing), investment-based financing such as Mudarabah and Musharakah, Qard (loan financing) which comprises Qard pre-shipment and Qard employment agency. Diaspora financing is another category that covers diaspora personal financing, diaspora automobile financing, diaspora house financing, and diaspora direct investment. Additionally, there is a category called tailored services & guarantee, which includes Murabahah NGO staff financing, Kafalah (IFB bank guarantees), and Hawala/Hiwala & Wakalah.

In 2015, the Cooperative Bank of Ethiopia joined the IFB window operations. The bank classifies its IFB services into three categories: customer accounts, financing, and investment.The customer account category includes various types of accounts such as Wadiah saving account, Labbaik saving account, Wadiah demand deposit, Mudarabah unrestricted account, Mudarabah restricted account, and Wadiah special accounts. Under the financing category, the bank offers Mudarabah financing, Ijarah financing, Salam, and Istisna.The investment category encompasses Mudarabah investment, Musharakah investment, Diminishing Musharakah, Kafala, Mudarabah import letter of credit, Musharakah letter of credit, Wakalah

export letter of credit, Wakalah cash against document (CAD), Wakalah advance payment, and Wakalah consignment basis payment (for export).

Dashen Bank introduced its IFB Window Service in 2018. The service encompasses various offerings such as Wadi'ah deposits, Qard current accounts, Mudarabah savings accounts, and Mudarabah investment accounts. Additionally, there is a category called "other special deposits" which includes Hadji Wadi'ah deposits, youth Wadi'ah deposits, and An-Nissa Wadi'ah deposits (women's savings accounts) catering to specific customer groups. Furthermore, Dashen Bank provides local and international (foreign) Kafalah services, which consist of advance payment Kafalah, contract performance Kafalah, retention Kafalah, supply Kafalah, order Kafalah, lease payment Kafalah, credit service Kafalah, credit sales Kafalah, and custom bond Kafalah.

Wegagen Bank's IFB window service started operating in 2020. They offer IFB services with three categories named saving, financing and kafala (guarantee). The saving category comprises Wadiya Amana account, Muday Wadiya Amana, Equb Wadia Amana, Zakat Wadia Amana & school Wadia Amana. Muraba financing, Qard financing and Qard Benevolent financial categorized in the financing category and the last category includes Bid Bond guarantee, advance payment guarantee & export & import trade.

1.3. Statement of the Problem

According to Alharbi, 2015 Islamic banking is a financial institution which provide banking service to savers & investors based of the sharia principles, provides banking services within the framework of legitimate contracts and create balance between economic & social return. The Islamic banking industry is one of the most growing industry at a fast pace and expand in all Muslim and non-Muslim countries as an alternative to the conventional banking service. The main reason for the existences of Islamic banking is to provide sharia compliant banking services to the Muslim society which considered as the most underserved society. (Navid, 2018)

In Africa, Ethiopia is one of the nations that has recently included Islamic finance into its financial system. There is a huge demand for the sharia compliant banking service in Ethiopia. (Mohammed and Ahmed, 2021) The interest free banking service in Ethiopia started in 2011.

According to Teferi (2015), one of the most significant financial sectors that facilitates financial intermediation in the economy and, eventually, promotes economic development is the banking

sector. Banks are fighting to obtain a resource (deposit) in today's cutthroat market and then advance the same to profit from it.

With its unique operational philosophy, beliefs, and practices, IFB has emerged as a promising avenue for the business community. Utilizing its entire range of services, which include financing, foreign trade services, deposit, and other non-cash facilities, requires awareness and understanding.

According to Tsion (2017), financial service providers in Ethiopia have a great potential to take advantage of the niche in the IFB industry by supplying services. Even if there is unrealized potential for IFB services to flourish, there are a number of obstacles that prevent them from competing with the current traditional banking system. Generally, IFB's distinctive characteristics and guiding rules are the source of its challenges. Consequently, interest-free banks function within two distinct constraints.

According to Teferi (2015,the introduction of IFB not only creates an inclusive financial system for the Muslim community, but it also has the ability to positively impact and advance the nation's economic development by mobilizing resources and creating jobs. Nevertheless, none of the aforementioned research attempted to evaluate the banks that provide interest-free banking in terms of their performance.

The research on Ethiopian IFB services discussed in the previous paragraphs highlights the need for additional investigation into the IFB sector. Thus, this study aims to assess the performance of interest-free banking services by compiling data regarding the IFB services provided by Ethiopia's private commercial banks from the early operations stages to the most recent years.

1.4. Research Questions

1) What is the performance status of IFB windows of private commercial banks?

2) Are IFB procedures carried out in accordance with sharia requirements of IFB tenets?

3) What are the opportunities of providing IFB services for conventional banks?

4) What are the challenges of IFB windows?

5) How is the growth trend of IFB windows?

1.5. Objectives of the Study

1.5.1. General Objectives of the Study

The general objective of this study is to assess the performance of private commercial banks IFB windows.

1.5.2. Specific objective of the study

- To assess the performance status of the IFB windows of the private commercial banks.
- To examine whether the IFB windows operate in accordance with sharia requirements.
- To assess the growth trend of IFB windows of private commercial banks.

1.6. Significance of the Study

The research has significantly contributed to both theoretical and practical knowledge regarding the concepts and implementation of interest-free banking. The study is expected to expand the existing body of information on interest-free banking, specifically in the Ethiopian context, and serve as a foundation for further research in this field. The findings of this research was particularly be valuable as they empower private commercial banks to develop effective strategies that can improve the performance of interest-free banking.

1.7. Scope of the Study

Geographical Scope

The study was assess the performance of private commercial banks of Ethiopia interest free banking windows by undertaking the selected banks branches that particularly locate in Addis Ababa.

Conceptual Scope

The study was assess the performance of the interest-free banking windows of private commercial banks. It was utilize variables that are commonly considered essential for measuring the performance of a bank, such as return on assets (ROA), deposit, capital adequacy, market share, total asset, operating income, operation expense and other variables considered crucial for measuring bank performance.

Time

The focus of the study was solely being on the IFB windows of private commercial banks by covering a period of five years starting from 2020 up to 2024.

LIMITATION OF THE STUDY

The primary limitation of this study is that it only attempted to reach and survey bankers, not customers. The participants may not be fully representative of the entire banking population. However, these factors are unlikely to have significantly impact the quality and findings of the research.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Concepts and Definition of IFB

The term Islamic banking/interest free banking means performing banking operations in accordance with the Islamic law or Islamic principles. (Ahmed 1994)

According to Bello and Abubeker (2014), Islamic banking is a banking operation that operates according to the Islamic teaching or sharia. The service provided was be free from interest .Charkraborty,salam and rabbany(2015) define Islamic banking as a financial activity governed by Sharia law. It adheres to the fiqh muamalat (Islamic laws on transactions), which are part of the Shariah. The guidelines and practices of fiqh muamalat were derived from the Qur'an, the Sunnah, and other secondary sources of Islamic law, including the ijma', qiyas, and ijtihad (personal argumentation). The Holy Quran states that trade and business comprise the following three principles: (i) taking calculated risks (ghorm); (ii) putting up effort and work (kasb); and (iii) being accountable (damam). Islamic law forbids investing in industries that are deemed illegal (haram), including those that produce media (such as gossip columns or pornography), sell alcohol or pork, or engage in gambling, among others. The goods that Islamic banks offer are specifically designed to adhere to the aforementioned tenets of Islamic law. Such banks' primary focus areas include trade, leasing, hire-purchase, etc. According to Maali, Casson, and Napier (2006), the term "Islamic Banking System" refers to banks that assert to adhere to Shari'a (Islamic law) in their business dealings. Shari'a mandates that these dealings take the form of lawful (Halal) transactions and forbids dealings involving interest (Riba).Interest is the main driver of operations for conventional banks. As a result Muslims are forced to create their own financial organizations in accordance with Islamic law because traditional banks were founded on capitalist ideas and conduct business by charging interest, which is improper (forbidden) in Islamic law.

Islamic banking first emerged in the 20th century and expanded in the last 20 years. This success is linked to free capital flow and Muslims responsiveness to the negative effects of interest centered transaction in their religious faith. One of the most rapidly expanding sectors in the world and one of the newest economic trends is interest-free banking. As new products entered

the Egyptian banking industry in 1963, this kind of financial service began to change over time. Since its recent expansion, the banking sector has extended into non-Muslim nations as well as Muslim ones. The economic expansion of Muslim nations, particularly those that have profited from the rise in oil prices, is largely responsible for this surge. The laws that govern business transactions in Islamic banking are known as fiqh al-muamalat sharia, which are also forbidden in the Quran, along with alcohol, gambling, and pork. Islamic banks use equity participation systems, which are parallel to project sharing, to make money without charging the customary interest rate. If a bank lends money to a business, the business was repay the bank with a portion of its profits through equity participation. The bank is also not compensated if the company defaults or is not profitable.

2.2. Principles of Islamic Banking

The principles of baking are derived from the Quran, the central religious text of Islam. The Islamic principles & teachings of Islam are the basis for Interest free banking operations (Evan Traver, 2023).

The mobilization of financial resources and their distribution among diverse investment projects is the rationale behind financial systems whether they are conventional or Islamic, in order to attain profit maximization. Profitability is neither the only nor the decisive factor of the theory for Islamic finance. Sharia rules, which governs Islamic finance, is characterized by an integrated and comprehensive framework that direct an economic, social and political life (Derbel H 2011). Therefore, the principles of an Islamic financial system reflect the interest of sharia on the consequences of the financial structure of other aspects of life. Derbel H. (2011) report that the object of such a system lies in the aspiration to ensure that different Islamic financial products are compatible with legal and moral values of Islam.

The following are the main principles of Islamic banking;

1- Prohibition of RIba (Interest) - Riba is an Arabic term which means to increase. The term refers to any financial benefit or excess that one of the contractors perceives that has no legitimately parallel under Muslim law (Derbel H, 2011). Both receiving & paying interest are totally forbidden in Islam (www.Islamic.relief.org).

   Akther & Lumpur, 2015 categorize interest in to two; a) Riba-Al-Fadl it is defined as the excess or over paid loan in kind. It arises when the creditor pays additional payment to

the debtor in the exchange of commodities of the same kind. B) Riba-Al-Nasi'ah which refers to interest on loans.

2- Profit & Loss Sharing- Since interest is prohibited in Islam, the providers of funds and the entrepreneur in an Islamic banking settings share the business risk and profits based on mutual agreement. Profit-Loss Sharing (PLS) suggests an equitable sharing of risks and profits between the parties involved in a financial transaction. Under PLS, "the lender and the borrower assume the investment's risk based on a pre-agreed formula". PLS acquires several forms depending upon the type of contract e.g. Mudaraba (Silent partnership) and Musharaka (Equity partnership). In both of these forms, the financier makes the funds available, not as a lender, but rather as an investor. (Ahmed, 2012)

3- Prohibition of Gharar (Uncertainty) - The word gharar means uncertainty, hazards, or risk. It is a general concept in the modern Islamic finance world. Gharar refers to the level of misunderstanding that might arise between the parties and the level of uncertainty by which the goods or the payment can be delivered. It is totally forbidden in Islam because the Islamic finance rules & principles prohibit transactions that are highly uncertain or that may cause any injustice against any of the parties. (www.investopedia .com)

4- Prohibition of Maisir (Gambling) - the word Maisir refers to speculation or gambling. The Holy Quran expressly forbids gambling, which employs the term Maisir for games of chance, which refers the creation of wealth without exertion and the term is now applied generally to all gambling activities. Gambling in all its forms is forbidden in Islamic jurisprudence. Islamic law also forbids any banking activities which contain any element of gambling.

5- Sharia Approved Activities-Islamic banking is a sharia-compliant banking system. A financial product must be ethically sound in order to be allowed under sharia law. Sharia is a general human standard that is preached and followed. It means that a financial institution that practices Islam cannot use its resources to support the manufacturing or distribution of particular things that Islam forbids. This includes financial investments in unethical or immoral sectors, such as those producing or distributing alcohol, pornographic, gambling, environmentally harmful goods, or any other sector without a

moral foundation that is acceptable to humans. For Islamic banks, only approved transactions or operations are allowed.

2.3. Conventional Banking vs. Interest Free Banking

The following are the key differences between interest-free (Islamic) banking and conventional banking:

1. Money's Role:

- Conventional Banking: Money is treated as a product itself, not just a medium of exchange.
- Islamic Banking: Money is seen solely as a medium of exchange, not a commodity.

2. Basis for Profit/Return:

- Conventional Banking: Profit and return are based on time value of money and interest.
- Islamic Banking: Profit and return are based on sharing of profits and losses from actual economic activity.

3. Disbursement of Funds:

- Conventional banking: Funds can be disbursed without any underlying exchange of goods/services.
- Islamic banking: Funds can only be disbursed after agreeing on an exchange of goods/services.

4. Impact on Money Supply:

- Conventional banking: Increasing money supply without corresponding real assets can lead to inflation.
- Islamic banking: Money supply expansion is tied to real economic activity, preventing inflationary pressures.

5. Risk-Sharing:

- Conventional banking: Interest is charged even if the project incurs losses, no concept of loss-sharing.
- Islamic banking: Profits and losses are shared between the bank and the entrepreneur.

6. Focus on Real Economy:

- Conventional banking: Lending can be based on capital availability without focus on real economic projects.
- Islamic banking: Lending is tied to financing of specific real economic activities and capital goods.

www.aims.education

2.4. Interest Free Banking Models

The interest free banking service has been implemented through different structures & approaches throughout the world. There are three major models; full-fledged models, subsidiary and window models. (Abdulkadir Wahab, 2019)

2.4.1. Full-Fledged IFB Model

The full-fledged model which operates according to the sharia compliant with an independent management system, specifically raised capital, specifically designed products and uses different risk management accounting & auditing procedures. This type of bank is more dominant in Muslim majority countries.

2.4.2. Subsidiary IFB Model

The subsidiary model is a division or unit under the conventional parent bank which offer Islamic banking products. The segregated capital and management team differential the model from the window model.

2.4.3. Window IFB Model

In window IFB model the conventional banks create a dedicated division or unit that provide a sharia-compliant banking products for customers that prefer sharia compliant services other than the conventional one. NBE define interest free banking window as a unit within a conventional bank which exclusively offering interest free banking services. The interest free banking window widely practiced in countries with Muslim minorities. In some countries, a mixed of these

models are allowed to operate in parallel. The window IFB model and the full-fledged IFB model are the models that are practiced in Ethiopia.

2.5. Modes of Interest Free Banking

According to Haron, 1996 cited on Elgadi Classified the Islamic modes of finance into the following three categories;

I. Modes founded on Profit & Loss Sharing (PLS) includes Mudarabah and Musharaka
II. Modes founded on Fixed Charges non-PLC includes Murabaha, Salam and Ijarah
III. Free of charge mode; Qard is the only free of charge mode of Islamic finance

2.5.1. Mudarabah (Silent partnership)

Mudarabah is one of the PLS modes of Islamic finance, which refers to an Islamic financial contract between two parties in which one party provides the capital and the other provides labor. The profit incurred by the business was be shared between the parties in a predetermined ratio but if any loss occurred the investor or the capital provider was borne solely (www.amis.com). Mudarabah categorized into two types;

i. Unrestricted Mudarabah- an Islamic financial contract in which the capital provider or the bank permits the other party or the one who provide the labor to manage the mudarabah capital without any specific restrictions.
ii. Restricted Mudarabah- an Islamic financial contract in which the capital provider imposes specific restrictions on the mudaraba terms. The capital provider or the bank may specify conditions restricting the party which provide the labor or effort about the determination of location, period of location, period of investment, type of projects etc.

2.5.2. Musharaka (Equity Partnership)

The other PLS based mode of Islamic finance is Musharaka. Musharaka refers to an Islamic business contract between partners who agree to share profits & losses of the business based on a predetermined ratio. In Musharakah profit was be shared according to the predetermined ratio while losses was be shared strictly in the proportion of investment of partners.

2.5.3. Murabaha (Cost Plus Mark-up)

Murabaha is a non-PLS mode of Islamic finance. It is a contract of sale between a customer and bank in which a bank purchases the goods needed by a customer and sells the goods to the customer on a cost plus markup basis. The profit (mark-up), expenses and the time of payment

including the schedule are specified in an initial contract. The bank own the goods before it sells it to the customer. Murabahah requires an offer and acceptance, which must include; certainty of price, place of delivery and date when the price was be paid. This type of contract mostly used in the procurement of equipment.

2.5.4. Salam (Forward Trade Contract)

This is a sale contract whereby Islamic bank agrees to supply some specific commodities to the buyer (its client) at a future date that is specified in exchange of an advanced full spot payment to the bank. That is, the client pays the full amount and delivery of the commodity to the client is done in specific future date by the Islamic bank.

2.5.5. Ijarah (Leasing)

Ijarah is a long-term rental agreement, which is similar to leasing in conventional banks but subject to certain conditions that comply with Islamic Shariah. Within this mode of finance, the Islamic bank (the lessor) should purchase the assets (property, car, equipment etc.) before conducting the Ijarah contract. After acquiring the assets, the bank rents the assets for the client (the lessee) who pays the rent at regular intervals. The Islamic bank holds the accountability of monitoring the asset's usage. If it requires any maintenance – but not due to wear and tear- the Islamic bank calls for or employs a suitable maintenance unit for the purpose of maintenance. The bank is also accountable for the risks related to the asset. Meanwhile, the lessee was be accountable for safeguarding the asset (Abdul Rahman, 2007 and Amba and Almukharreq, 2013) ciited on Elgadi.

2.5.6. Istisna (Contract of Manufacture)

According to Ibrahim et al., (2009) define Istisna as an Islamic financial contract for the sale of certain commodity to be manufactured within a certain completion period of time and delivered upon completion by the manufacturer to the customer. Istisna involves two contracts; the first one represents the customer agreement to buy the asset from the Islamic bank upon completion. The second contract is between the bank and the service provider for manufacturing the same product with another contractor. In this contract the bank sets another specific predetermined price in a way that enables it to generate a reasonable profit, bearing in mind that the bank holds the responsibility for the construction to match the contracted standards and specification.

Qard Al-Hasan

Qard al-hasan an Islamic financial contract between an Islamic banks and borrowers states that the borrower only has to pay back the amount borrowed, loan without interest. Qard is an attempt to reduce poverty and creation of economic growth and welfare among society Loans such as this are used as an attempt to alleviate poverty and create economic growth.

2.6. Sharia Requirement for Conventional Banks

When conventional institutions enter an Islamic banking sector, there are requirements they must abide by and put into practice. The accounting and auditing organization for Islamic financial institutions establishes the necessary requirements. This is a Bahrain-based organization that sets international standards for the Islamic finance industry. The necessary conditions consist of;

1-Complete segregation of Funds

The funds associated with Islamic products must be completely segregated by the financial institutions that we refer to as conventional. It is not advisable to mix the funds of sharia-observant investors with those of conventional investors who are not as diligent and eager to achieve legal revenue. To demonstrate this total segregation of cash, there should be separate accounts, books, and computer programs.

2- Sharia Supervisory Board

Conventional bank need to have a sharia supervisory board when they enter into Islamic banking market. The board should be made up of reliable scholars who are well qualified to make fatawa (religious ruling) on financial transactions.

3- Managerial Commitment

The managers which undertake the activities must understand the concept and need to be fully committed and dedicated to the fatawa (religious ruling). Unless the entire management is committed and convinced, the business activities and the enterprise was not be foul free or was not escape irregularities and deviation.

4- Safeguarding Muslim Investor's Funds

It is an established principle in Islamic law that the mudarib does not guarantee the mudaraba capital for the capital provider. Hence, investment accounts in Islamic financial institutions are not guaranteed by the mudarib. However, this does not prevent the laying down of a stipulation requiring that the parent conventional financial institution (the original company) guarantee

Muslim investors' funds against trespass, negligence, and fraud. Major financial institutions may sometimes shirk their responsibility in this connection by claiming that their Islamic windows, branches, or sections are privately incorporated, among other reasons and excuses. This is wholly unacceptable. Precautions should be taken to guard against this, and a similar policy should be expressly stated in the Articles of Association or the prospectus of the financial institution.

5- Compliance with AAOIFI Standards

The Accounting and Auditing Organization for Islamic Financial Institutions is an institution that issued & published accounting and auditing standards to be followed and implement by every Islamic financial institutions. The standards are considered as a fundamental framework that underpins Islamic banking activities by keeping them away from individual, personal reasoning. The collective personal reasoning (ijtihad) of the AAOIFI is highly important in this vital aspect of Islamic economic life. Therefore, these standards deserve strict adherence **(www.islamic-banking .com, Sheik Nizam).**

EMPIRICAL REVIEW

There are significant number of empirical studies have been conducted regarding interest free banking (IFB) globally. Most of these studies shows that the principles of interest-free banking are largely consistent across different countries. However, the findings cannot be generalized because of variations in political, economic, social, cultural, technological, religious, legal, and other factors among countries. In this section, the researcher reviews various studies that are related to interest-free banking.

A study conducted by Dünya Gökalp and Joseph Yacoub D (2007) titled Islamic banking: windows opportunity, examines the potential opportunities and challenges of Islamic banking windows, especially in developing nations. Islamic banking windows are described as distinct divisions within conventional banks that provide financial services and products that adhere to Sharia law. The study explores the potential of windows to provide financial inclusion to unbanked communities and looks at how windows have developed in nations like Malaysia, Qatar, and the United Arab Emirates. The report also covers the benefits and drawbacks of windows, including regulatory challenges and concerns about Sharia compliance.

According to Irfan, Majeed, and Zaman (2014), Sole (2007) and Bello & Abubakar (2014), interest-free banking is an emerging sector not only in Muslim-majority countries but also in

non-Muslim nations. Many countries are now adopting a "dual banking" system where interest-free banks operate alongside conventional banks. This model has seen success in countries such as the United States, the United Kingdom, and various European nations. Furthermore, Irfan, Majeed, and Zaman (2014) conducted a study on "The Performance and Efficiency of Islamic Banking in South Asian Countries," which revealed that Islamic banking demonstrates greater efficiency in financial performance compared to conventional banking. The researchers noted that because Islamic banks adhere to principles that eliminate uncertainty and exploitation, their growth and performance generally surpass those of the conventional banking system.

Another article titled "Determinants of interest free financial products in Ethiopian banking industry" by Debebe Alemu Kebede explores the factors influencing the adoption of interest-free financial products in the Ethiopian banking industry, with a specific focus on commercial banks. The study aims to identify the determinants of the use and adoption of interest-free financial products and services and to analyze the factors affecting their adoption. The study suggest that economic factors such as unemployment and saving habits have an impact on the adoption of interest-free financial products and services by banks. Other factors influencing adoption include the obsoleting of technological environment, inflexibility of government policies, educational background of customers, and diverse cultures of societies. The study also reveals that interest-free financial products and services are not properly utilized by customers due to low awareness, perceived relative advantage, perceived compatibility and complexity, and perceived trust in the existing banking system. Based on the results, the study recommends that banks should adopt interest-free financial products and services while considering external factors. It suggests that banks should engage in aggressive promotion to increase customer awareness, and the government should formulate.

Sefiani (2014), in his study titled "Policy Analysis on Ethiopia Interest Free Banking (IFB) Directive," identified several challenges to the practice of interest-free banking in Ethiopia. These include the lack of an appropriate legal framework, a shortage of skilled IFB experts, and insufficient awareness of available products. Sefiani recommended that the National Bank of Ethiopia (NBE) revise directive no. SBB/51/2011 to address legal issues impacting interest-free banks, such as participation in non-banking activities, value-added tax on goods, and double taxation.

In 2015, Akmel conducted a study on the "challenges and prospects of Islamic banking for resource mobilization in Ethiopian commercial banks." The study findings suggest that the introduction of Islamic banking services in Ethiopia can enhance the economy by providing additional resources for banks, creating investment opportunities, reaching unbanked customers, and generating employment opportunities. This can be achieved through effective mobilization and allocation of capital within the country.

Teferi (2015) conducted a study titled "Contribution of Islamic Finance to Economic Development and its Prospects in Ethiopia." The finding of the study indicates that Islamic Finance plays a crucial role in mobilizing idle monetary resources, generating employment opportunities, supporting GDP growth, and aiding in crisis stabilization and inflation control. . Additionally, the adoption of Islamic finance has the ability to greatly influence and improve the nation's overall economic development in addition to fostering an inclusive financial system. However, this potential can only be realized through adequate awareness about the governing principles of Islamic finance, adherence to prohibitions, familiarity with operating philosophies, capacity building in terms of expertise, sharing of experiences, and the establishment of a supportive regulatory environment. It is important to note that the study focused solely on the contribution and prospects of IFB and its impact on the Ethiopian economy.

Furthermore, a study conducted in 2019 by Nobel on "Factors Affecting the Implementation of Interest-Free Banking Services in Ethiopia: The Mediating Role of Customer Involvement" examines the main variables affecting the adoption of IFB services. The findings of the study shows that a number of variables, including awareness, perceived risk, compatibility, awareness, complexity, religious beliefs and customer involvement have a big impact on the implementation of IFB services in Ethiopia.

Most of the researches conducted regarding the interest free banking windows of private commercial banks were conducted during the early operation years of the banks. This paper aims to assess the performance of private commercial banks' interest-free banking windows, covering the period from their early operational stages to their most recent stages.

Conceptual Framework

Based on the extensive literature review presented in this chapter, this study proposes a conceptual framework as illustrated in Figure below. (Figure 1)

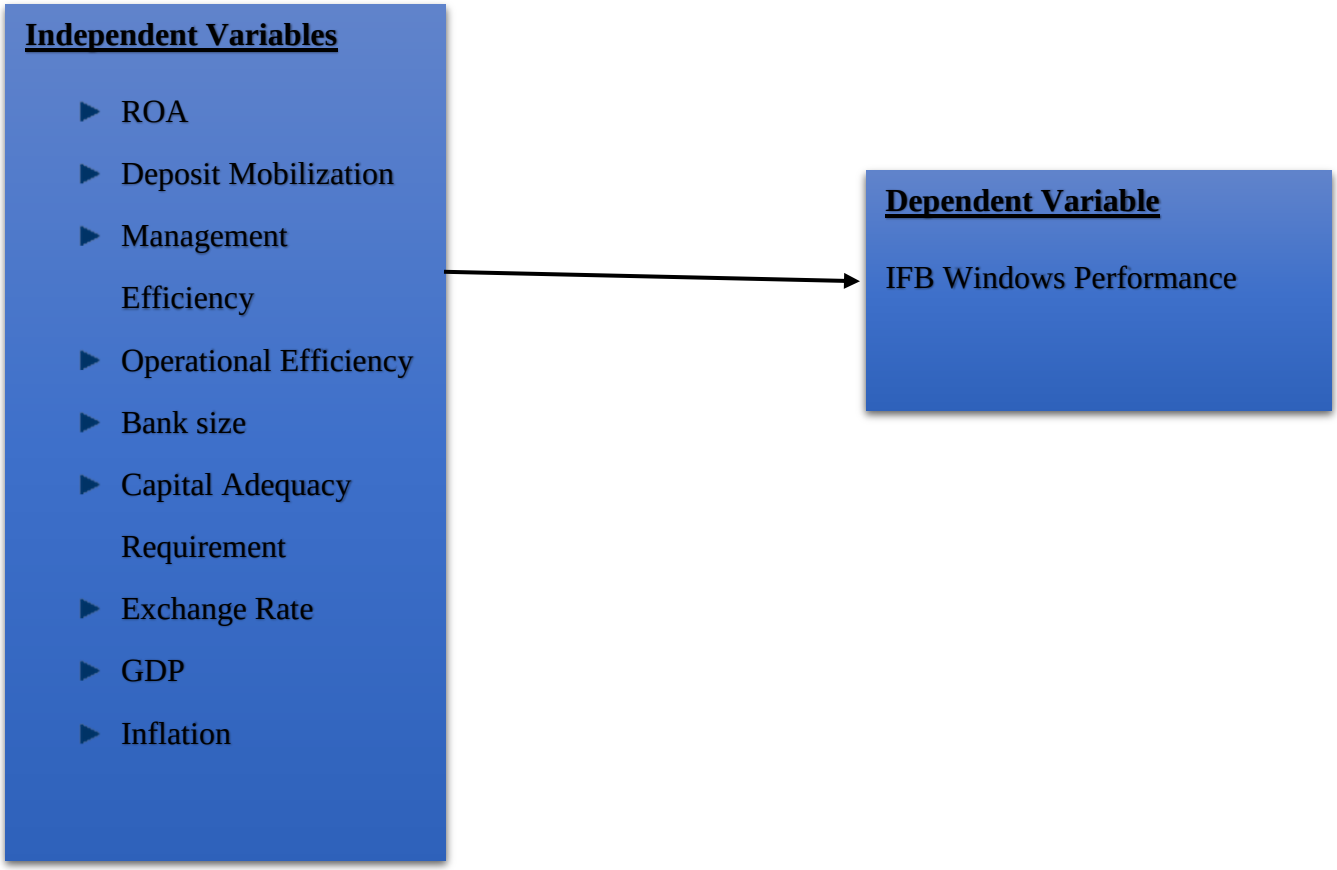


FIGURE 1: CONCEPTUAL FRAMEWORK

CHAPTER THREE

3. RESEARCH METHODOLOGY AND DESIGN

3.1. Introduction

In this chapter, the research methodology employed in undertaking the study Performance Assessment of Interest-Free Banking Windows of Private Commercial Banks is presented. It gives the research approach, design, sources of data, sampling methods, and the analytical techniques employed. The aim of the study was to evaluate the financial and operational performance of interest-free banking windows of private commercial banks in Ethiopia. To ensure the reliability and comparability of the findings, a systematic methodology based on secondary data and quantitative analysis was employed. Secondary data analysis was conducted employing panel regression techniques with the help of Stata Version 15.

3.2. Research methodology

A quantitative research method was employed to quantify the performance of IFB windows. This was appropriate for quantitative analysis and making objective conclusions using statistical models. Quantitative research enabled econometric methods to be used to test how various financial variables interact with the performance outcomes of IFB windows. It also enabled statistically sound conclusions to be drawn that could be generalized to similar circumstances in the banking sector.

3.3. Research Design

The study applied an explanatory research design in exploring the cause-and-effect relationships among the selected variables. The design was most suitable in determining the impact of some of the financial and operational measures on the performance of IFB windows. Explanatory

research warranted the use of panel regression models, which are suitable in analyzing data spanning multiple points in time and institutions. This allowed for proper conclusions to be derived based on temporal and institutional variations between private commercial banks.

3.4. Research Method

Data Type & Collection Method

The research relied solely on secondary data obtained from the audited financial statements and annual reports of private commercial banks with interest-free windows. The research period was five years, i.e., 2020 to 2024. The reports included significant financial parameters such as Return on Assets (ROA), deposits, capital adequacy, bank size, operating income, operating expenses, market share, and number of branches. Secondary data were complemented by data extracted from the National Bank of Ethiopia (NBE), for example, regulatory guidance and cross-industry performance analysis. Policy briefs, academic literature, and bank websites were consulted to complement the secondary data as well as provide background information.

3.4.1. Population & Sampling Technique

Target Population

The target population for this research were private commercial banks in Ethiopia with interest-free windows. Specifically, the participating banks in this study include Cooperative Bank of Oromia, Dashen Bank, Oromia Bank, Wegagen Bank, and Hibret Bank. These banks are selected due to their active engagement in IFB services and regular provision of relevant financial information for the past five years. These institutions all have windows with interest-free banking and are an active stakeholder in the IFB sector of the nation.

Sampling Design

The study applied a non-probability purposive sampling technique. This was used in order to include banks that are currently offering IFB window services and with sound financial disclosure conduct. Five banks were selected considering availability as well as richness of secondary data from 2020 to 2024. The purposive approach ensured inclusion of institutions that most closely mirror the research objectives. This allowed for the creation of a balanced panel dataset suitable for estimation using robust econometric techniques.

Study Variables

The dependent variable for the study was IFB window performance, which was determined by Return on Assets (ROA). The independent variables were Deposit Mobilization, Capital Adequacy, Total Assets, Operating Income, Operating Expenses, Market Share, Bank Size, Number of Branches, and Managerial Efficiency. These were selected after prior literature and their proven applicability in banking performance measurement

Method of Data Analysis

The data were analyzed using descriptive and inferential statistical procedures via Stata Version 15. Descriptive statistics such as mean, standard deviation, and range were used to summarize the characteristics of the variables for a given bank and time. These summaries provided a general overview of the trends in performance and suggested potential outliers or inconsistencies in data within the data set.

In order to conduct inferential analysis, panel regression models were employed to understand the influence of independent variables on the performance of the IFB window. Prior to performing regression analysis, correlation analysis was employed to verify multicollinearity among independent variables. The choice between fixed effects and random effects models was determined through the Hausman test, which showed the most desired specification for panel data. The selected regression model allowed bank-level and time-level effects to be held constant, hence enhancing the effectiveness of the findings. Model fit was also tested using R-squared and F-statistics, while predictor significance was tested using p-values. Analysis finally provided insight on what factors most significantly affect the financial performance of IFB windows in Ethiopian private commercial banks.

3.5. Expected Result & Output of the Study

The study aims to assess the performance of private commercial banks' IFB window services in Ethiopia. It was providing insights about the IFB windows growth, product offerings, and compliance with Sharia principles in addition to their operational and financial performance**.** The study tries to provide a comprehensive understanding of the current state of the IFB window operations in private commercial banks and offer insights to help improve the performance, sustainability and expansion of this segment of the banking sector in Ethiopia.

CHAPTER FOUR

4. RESULT AND DISCUSSION

4.1. Introduction

This chapter presents data analysis, interpretation, and discussion of performance of Interest-Free Banking (IFB) windows in selected private commercial banks operating in Ethiopia. Five out of 32 private banks were only included in the study. Four full interest-free bank branches were excluded since they were recently established after 2022, ten were new banks and had not yet extended the IFB window services, and eight did not publish standalone financial statements for

their IFB operation. Thus, the research takes into account the five banks that had regular reporting of IFB information from 2020 to 2024.

The data were acquired from audited reports of the National Bank of Ethiopia (NBE) that issued financial statements. The study aims to quantify the level of IFB window performance, experiment on the levels of their Sharia compliance, and examine their growth patterns. To achieve all these objectives, correlation and panel regression tests were employed using such critical variables as ROA, deposit mobilization, efficiency of management, and efficiency of operations, bank size, capital adequacy, exchange rate, GDP, and inflation. These tests provided insight into the determinants of IFB windows' performance in Ethiopian private banking.

4.2. Descriptive and Trend Analysis

In this chapter, the descriptive and trend analysis of the key variables that were used to assess the performance of Interest-Free Banking (IFB) windows in selected private commercial banks in Ethiopia are presented. The variables used here include Return on Assets (ROA), deposit mobilization, management efficiency, operational efficiency, bank size, capital adequacy, exchange rate, GDP, and inflation. Descriptive statistics such as mean, standard deviation, minimum, and maximum values were calculated to summarize data characteristics and variability from 2020 to 2024.

In addition to summary statistics, the trend of each key variable over the period of the study was investigated to identify patterns of growth and changes in IFB operation performance. The analysis exhibited a general increasing trend in bank size and deposit mobilization, indicative of growing customer acceptance and expansion of IFB services. ROA and managerial efficiency improved progressively over the time, showing enhanced profitability and strengthening operational control. However, fluctuations were noted for certain variables such as capital adequacy and operational efficiency, possibly on account of economic adversity or bank-specific strategy changes. Macroeconomic factors like inflation and exchange rate also showed year-to-year volatility, influencing the trend of banking sector performance.

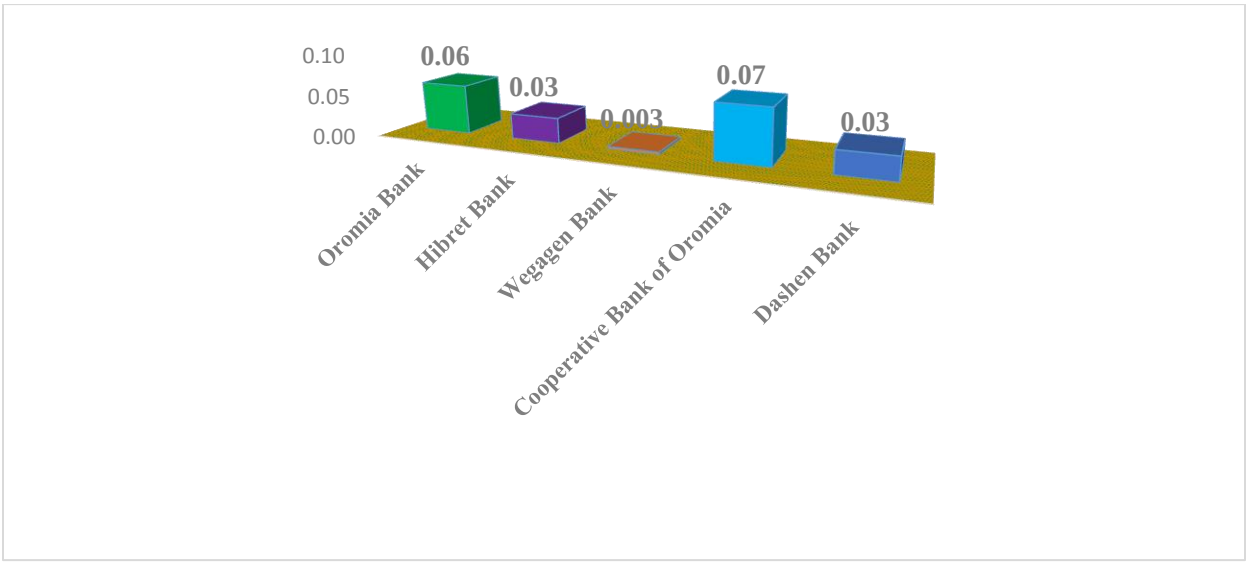
Overall, the trend and descriptive analysis provides an overview understanding of the data and highlights the key trends in IFB window performance of the five selected private banks, setting the stage for the correlation and regression analyses that was follow.

4.2.1. Return on Assets (ROA)

Return on Assets (ROA) measures the productivity of a bank in utilizing its assets to generate profit. ROA is one of the frequently applied profitability measures in both Islamic banking and conventional banking systems (Zeitun, 2012). According to Bashir (2003), ROA is a measure of profit earned per unit of asset and reflects efficient management of financial resources. Rivard and Thomas (2006) claim that ROA is the most accurate bank profitability measure since it is not affected by financial leverage and better captures a bank's earning power in comparison to its overall assets.

ROA has been used in this study as the dependent variable and is calculated as net income after tax divided by total assets. Of the five private commercial banks selected that offer IFB window services, 0.07 was the maximum ROA of Cooperative Bank of Oromia, followed by Oromia Bank at 0.06. A moderate ROA was 0.03 for both Hibret Bank and Dashen Bank, while Wegagen Bank had the minimum value of 0.003. These results present trends in the asset use efficiency, where Oromia and Cooperative Banks have better performance. Overall, the trend reveals a sustained improvement in profitability in certain banks, though gaps are present among institutions.

Figure 4.1: Average Return on Assets (ROA) (2020-2024)



Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.2. Profit Trend

Profit trend analysis displays the growth and performance of IFB windows over the last five years (2020–2024) in selected private commercial banks. Profitability is a significant indicator of successful operations and long-term sustainability.

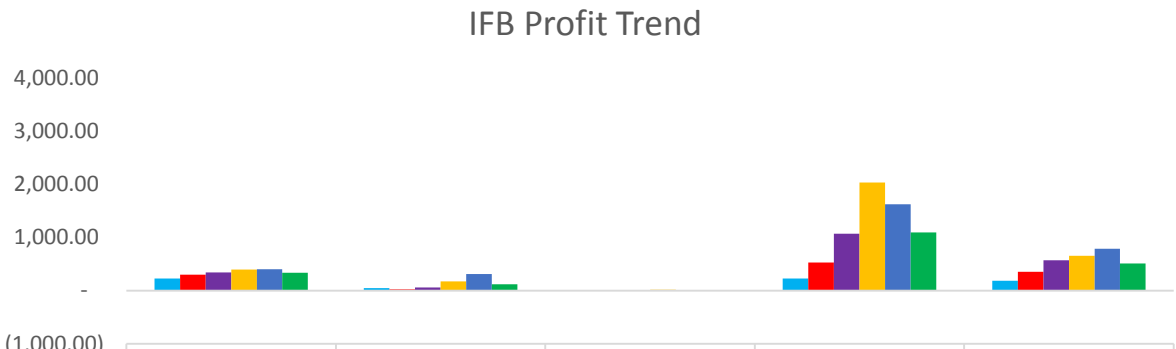
Of the banks to be reviewed, Cooperative Bank of Oromia performed overall better than the rest, with profit rising substantially from 224.82 million in 2020 to its highest level of 2,031.94 million in 2023 before dipping slightly to 1,620.31 million in 2024. This reflects sustained and strong growth, averaging a profit of 1,094.61 million—the highest across the five banks.

Dashen Bank also grew positively, as the profits were increased from 183.97 million in 2020 to 784.12 million in 2024, with an average of 508.78 million. Similarly, Oromia Bank also grew steadily, as it increased to 401.00 million in 2024 from 225.64 million in 2020 with an average profit of 333.21 million.

Hibret Bank demonstrated exceptional growth, particularly after 2022, from 22.52 million in 2021 to 307.88 million in 2024, an average of 120.46 million. Wegagen Bank, on the other hand, demonstrated erratic and overall poor performance, with the peak of 12.69 million in 2023 falling to 1.57 million in 2024, resulting in the lowest average of 5.69 million.

Collectively, the pattern indicates that all IFB windows experienced growth over the period of the study, except for major exceptions like Cooperative Bank of Oromia, among others, while institutions like Wegagen have struggled to remain profitable.

Figure 4.2: Profit trend analysis IFB windows (2020–2024, In Millions)



	Oromia Bank	Hibret Bank	Wegagen Bank	Cooperative Bank of Oromia	Dashen Bank
2020	225.64	44.01	6.35	224.82	183.97
2021	301.00	22.52	3.23	529.43	350.00
2022	342.00	54.65	4.61	1,066.55	569.94
2023	396.40	173.26	12.69	2,031.94	655.86
2024	401.00	307.88	1.57	1,620.31	784.12
Average	333.21	120.46	5.69	1,094.61	508.78

Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.3. Average Operating Expenses, Operating Income, and Profit (2020–2024)

The section below depicts the average operating expenses, operating income, and profit of the IFB windows of the selected private banks for the five-year period from 2020 to 2024.

Among the banks studied, Cooperative Bank of Oromia recorded the highest average operating income of 1,121.68 million, closely followed by Dashen Bank at 1,248.47 million. This high income level is aligned with their highest average profits at 1,094.61 million for Cooperative Bank and 508.78 million for Dashen Bank. The operating expenses for these two banks stood at 94.53 million and 774.04 million, respectively, reflecting differences in cost structures and the level of operations.

Hibret Bank has registered an average operating income of 549.20 million and operating expenses of 180.80 million, garnering an average profit of 333.21 million, which shows a fairly stable cost-to-income ratio. Wegagen Bank registered the lowest performance with an average operating income of 184.35 million and operating expenses of 71.46 million, achieving a paltry average profit of 120.46 million.

In general, the evidence puts forward that banks with greater operating incomes tend to register superior profitability regardless of the levels of expenses, stressing the significance of efficiency in income generation in the performance of IFB windows.

Figure 4.3: Average Operating Expenses, Operating Income, and Profit (2020–2024)

	Oromia Bank	Hibret Bank	Wegagen Bank	Cooperative Bank of Oromia	Dashen Bank
Average Operating expense	180.80	71.46	10.27	94.53	774.04
Average operating income	549.20	184.35	15.38	1,121.68	1,248.47
Average Profit	333.21	120.46	5.69	1094.61	508.78

Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.4. Deposit Mobilization Trend

Deposit mobilization is among the most significant contributors to IFB window expansion and viability, a pointer to their ability to mobilize funds from customers in the long term. IFB deposits traditionally include a combination of various Sharia-compliant products, e.g., Mudarabah (profit-sharing investment accounts), Wadiah (safekeeping accounts with guaranteed principal), and Qard Hasan (interest-free social loans), each meeting various customer needs and affecting the bank's liquidity position and risk profile.

2020-2024, Cooperative Bank of Oromia led the mobilization of deposits with an average deposit of 14,538.23 million, which has shown great growth from 6,409.00 million in 2020 to

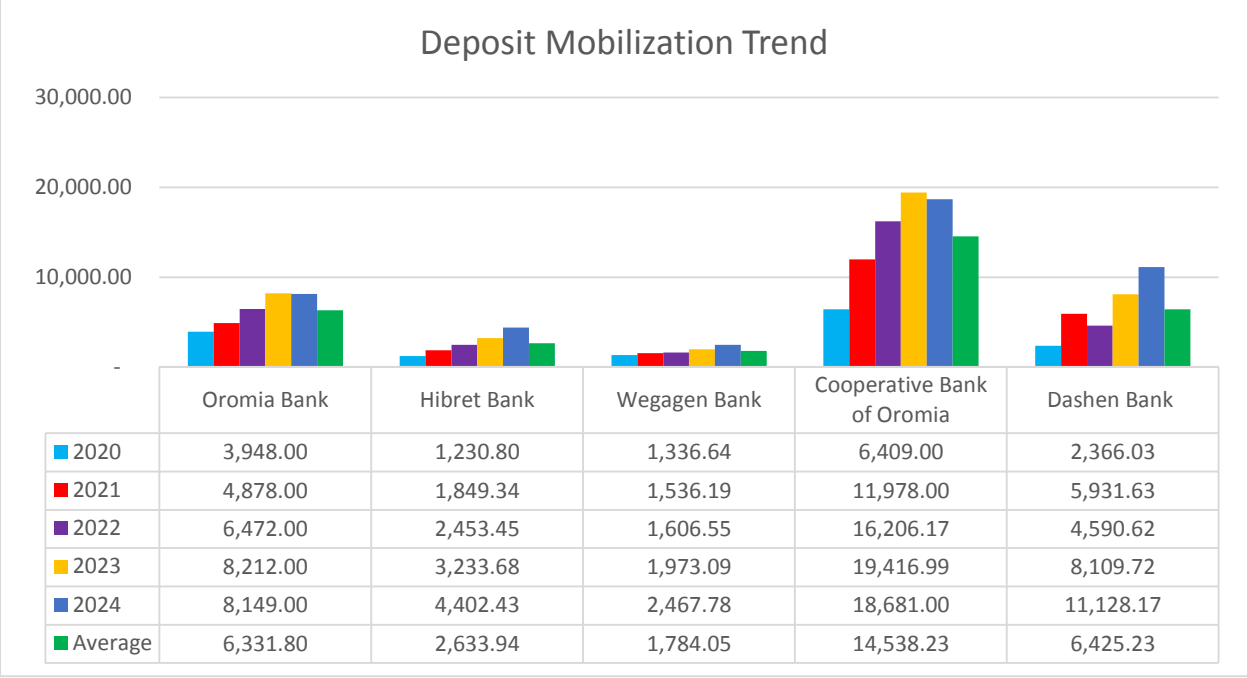
18,681.00 million in 2024. This shows the bank's strong capacity to mobilize and maintain deposits, which is important to finance its Islamic banking operations.

Oromia Bank subsequently presented with steady growth, having an average of 6,331.80 million in deposits, from 3,948.00 million in 2020 to 8,149.00 million in 2024. Similarly, Dashen Bank also presented with remarkable growth in deposits, averaging 6,425.23 million and increasing from 2,366.03 million in 2020 to 11,128.17 million in 2024.

Hibret Bank showed consistent improvement, with deposits being 1,230.80 million in 2020 to 4,402.43 million in 2024 on average of 2,633.94 million. Wegagen Bank showed the minimum mobilization of deposits, with an average of 1,784.05 million and rising modestly from 1,336.64 million in 2020 to 2,467.78 million in 2024.

Generally, the trends in deposits indicate that Cooperative Bank of Oromia and Dashen Bank have mobilized the most deposits, consistent with their better financial performance and expansion of their IFB windows.

Figure 4.4: Deposit Mobilization Trend



	Oromia Bank	Hibret Bank	Wegagen Bank	Cooperative Bank of Oromia	Dashen Bank
2020	3,948.00	1,230.80	1,336.64	6,409.00	2,366.03
2021	4,878.00	1,849.34	1,536.19	11,978.00	5,931.63
2022	6,472.00	2,453.45	1,606.55	16,206.17	4,590.62
2023	8,212.00	3,233.68	1,973.09	19,416.99	8,109.72
2024	8,149.00	4,402.43	2,467.78	18,681.00	11,128.17
Average	6,331.80	2,633.94	1,784.05	14,538.23	6,425.23

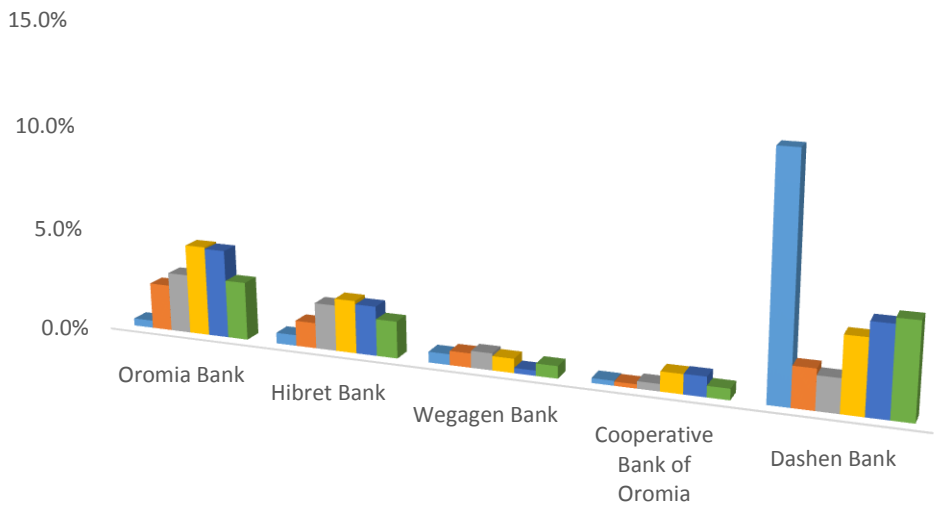
Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.5. Management Efficiency

Efficiency in management is a reflection of the ability and performance of the management of a bank in handling resources, optimising productivity, and eventually profitability. Optimal management activities encompass effective organisational control, tidiness, and proficient personnel performances. Though there are qualitative measures of management systems, efficiency is oftentimes measured quantitatively through monetary ratios such as operating expenses to operating income and operating expenses to total assets. These ratios enable one to assess the level to which management can handle the costs versus revenues and assets.

During the year 2020-2024, Dashen Bank possessed the maximum average management efficiency ratio of 4.5%, meaning a comparatively higher percentage of operating expenses to income or assets compared to others. Oromia Bank was second with the average 2.8%, having rising tendencies throughout the years. Hibret Bank also maintained the same average of 1.8%, whereas Wegagen Bank and Cooperative Bank of Oromia contained the lowest averages of 0.6% and 0.5%, respectively. The lower ratios in the case of these banks reflect better control over costs and perhaps better control over management efficiency during the study period. These ratios are a critical indication of management capability to reduce operations costs against the revenues and size of the bank's assets, necessary to sustain profitability of IFB windows.

Figure 4.5: Management Efficiency Trend (%)



	Oromia Bank	Hibret Bank	Wegagen Bank	Cooperative Bank of Oromia	Dashen Bank
2020	0.4%	0.5%	0.5%	0.2%	11.3%
2021	2.3%	1.2%	0.7%	0.2%	1.9%
2022	2.9%	2.2%	0.8%	0.4%	1.6%
2023	4.3%	2.6%	0.7%	0.9%	3.5%
2024	4.3%	2.4%	0.3%	1.0%	4.2%
Average	2.8%	1.8%	0.6%	0.5%	4.5%

Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

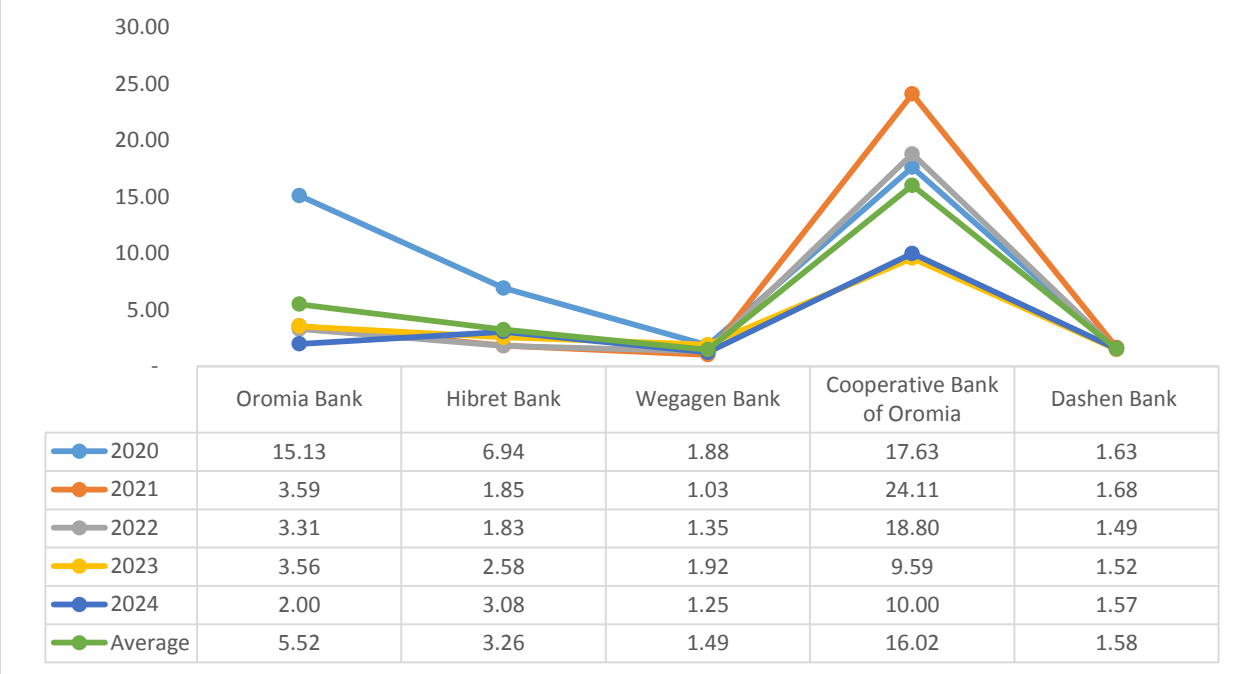
4.2.6. Operational Efficiency

Operational efficiency is a measure of the efficiency with which a bank runs its resources to generate revenue while maintaining costs at a lowest level, finally benefitting shareholders. It actually measures the capability of the bank to provide banking products and services at the lowest cost. The most widely employed measure of operational efficiency in Islamic banking is measuring total operating expenditure against total operating income. By this measurement, one can identify whether a bank is efficiently managing its cost against the revenue it produces.

Between 2020 and 2024, Dashen Bank and Wegagen Bank recorded the highest operating efficiency with low average cost-to-income ratios of 1.58 and 1.49, respectively. Hibret Bank was relatively efficient with an average ratio of 3.26. Oromia Bank's average ratio of 5.52 rose over the years but was relatively lower. The largest average ratio of 16.02 was recorded by Cooperative Bank of Oromia, indicating that it had comparatively higher costs than income

during the period. These findings show that the Wegagen and Dashen Banks were better at managing operating expenses, which could be surmised to have led to better financial performance in their Islamic banking windows.

Figure 4.6: Operational Efficiency Trend



	Oromia Bank	Hibret Bank	Wegagen Bank	Cooperative Bank of Oromia	Dashen Bank
2020	15.13	6.94	1.88	17.63	1.63
2021	3.59	1.85	1.03	24.11	1.68
2022	3.31	1.83	1.35	18.80	1.49
2023	3.56	2.58	1.92	9.59	1.52
2024	2.00	3.08	1.25	10.00	1.57
Average	5.52	3.26	1.49	16.02	1.58

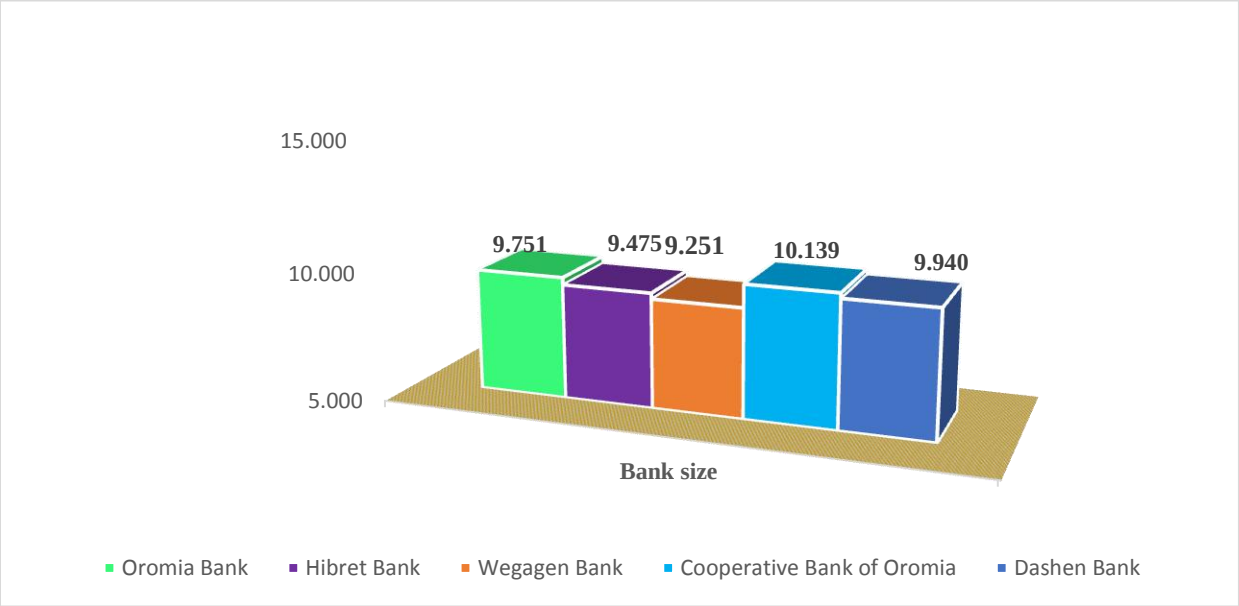
Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.7. Bank Size

Size is quantified by the total assets, which indicate the scale at which the bank operates and its ability to generate profits through economies of scale. For size comparisons in a similar manner, the natural logarithm of the total assets is used.

Between 2020 and 2024, the greatest average size belonged to Cooperative Bank of Oromia at 10.14, followed by Dashen Bank at 9.94. Oromia Bank and Hibret Bank also recorded middle-average sizes of 9.75 and 9.47, respectively, and Wegagen Bank the smallest average size of 9.25. The averages indicate various capacities of banks, which can be a determinant of the banks' financial performance.

Figure 4.7: Bank Size

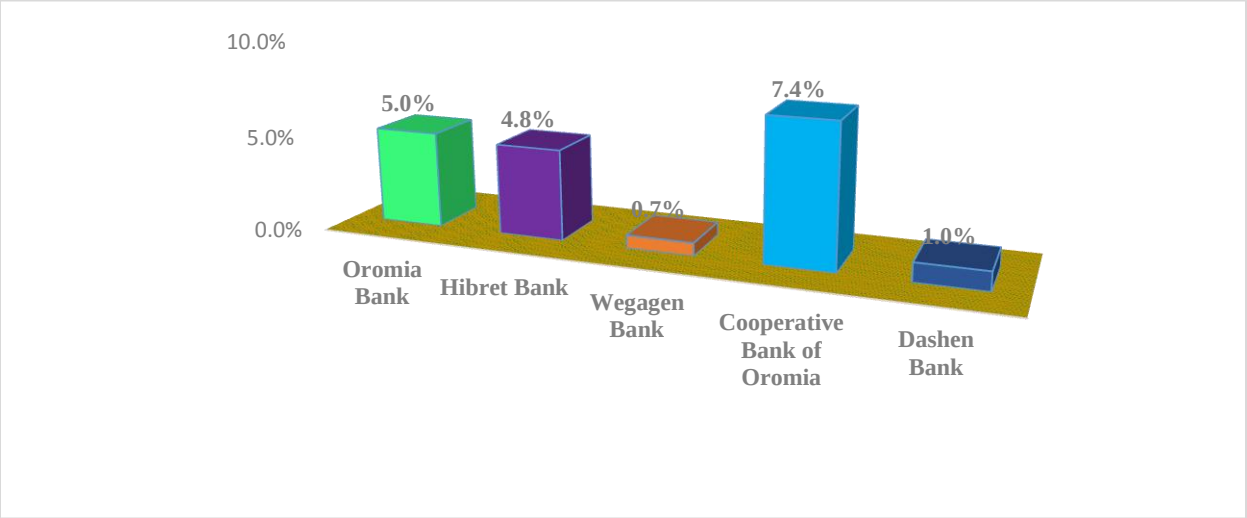


Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.2.8. Capital Adequacy Requirement (CAR)

Capital Adequacy Requirement (CAR) is a ratio of a bank's equity capital to its risk-weighted assets to protect depositors from loss. It is also calculated as a percentage of total equity to total assets. According to the National Bank of Ethiopia Directive No. SBB/78/2021, all licensed banks must maintain a minimum CAR of 8%. Of the banks reviewed, Cooperative Bank of Oromia came closest to this requirement with an average CAR of approximately 7.4% between 2020 and 2024. Oromia Bank and Hibret Bank had moderate average CARs of approximately 5.0% and 4.8%, respectively. On the other hand, Wegagen Bank and Dashen Bank had very low averages of approximately 0.7% and 1.0%, respectively, indicating a struggle to meet regulatory capital requirements and financial stability risk.

Figure 4.8: Capital Adequacy Requirement (CAR)



Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

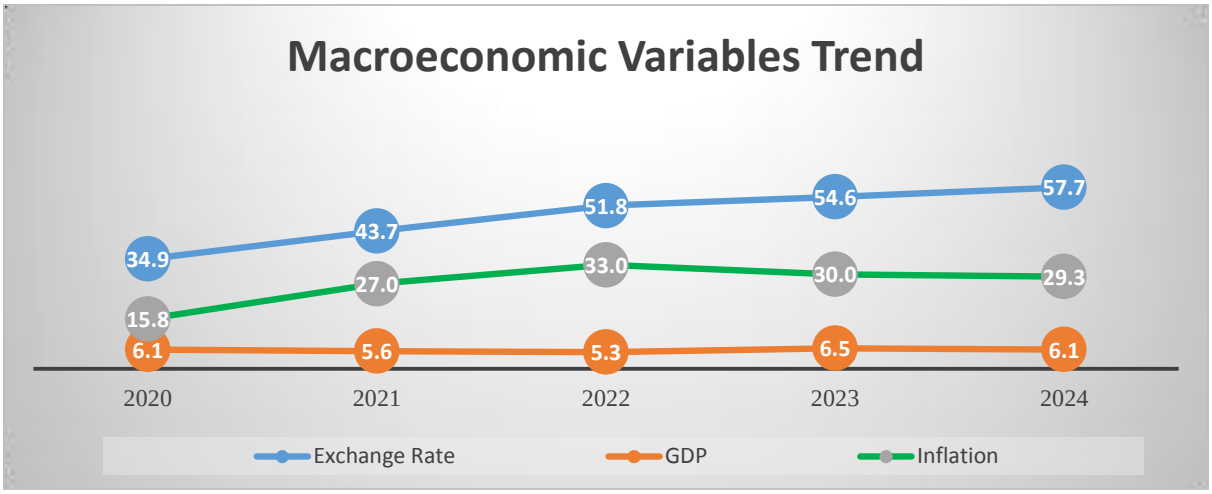
4.2.9. Trend of Macroeconomic Indicators (2020–2024)

The macroeconomic environment from 2020 to 2024 was characterized by broad fluctuations in the key indicators of exchange rate, GDP growth, and inflation. The exchange rate showed steady depreciation of the local currency relative to the US dollar, going up from 34.9 in 2020 to 57.7 in 2024, with an average of 48.5 over the five-year span.

The GDP growth was comparatively flat, at an average of 5.9%, with minimal fluctuations of a low of 5.3% in 2022 and a high of 6.5% in 2023. Inflation, however, was quite volatile and elevated, averaging 27.0% throughout the period. It peaked at 33.0% in 2022 and remained elevated at 29.3% in 2024, suggesting that inflationary pressures were persistent in the economy.

All of these macroeconomic trends have profound implications for the banking sector, impacting operating expenses, loan demand, and financial stability in general.

Figure 4.9: Trend Analysis of Exchange Rate, GDP Growth, and Inflation in Ethiopia (2020–2024)



Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

Performance appraisal of interest-free banking (IFB) windows of selected private commercial banks from 2020 to 2024 showed outstanding differences in key financial indicators. The Cooperative Bank of Oromia performed better than the rest in return on assets (ROA), levels of profits, deposit mobilization, and size overall, showing solidity in terms of financial strength and growth. It recorded the highest average deposit mobilization (14.5 billion ETB) and profitability (average profit of 1.09 billion ETB), although its operating efficiency was poor in terms of a high cost-to-income ratio (16.02). Dashen Bank was second, posting strong profitability, sound cost control, and steadily increasing deposit base, although its capital adequacy was low. Oromia Bank showed balanced growth in profitability, deposit mobilization, and management efficiency.

Conversely, Wegagen Bank lagged in almost all dimensions, with poor profitability, modest deposit expansion, and modest asset base, despite showing relatively strong operational efficiency. Hibret Bank, although small in size and revenues, showed increasing profit trends and relatively stable cost-efficiency ratios. Overall, the analysis identified that despite the fact that IFB windows at banks have exhibited positive growth and profitability patterns, significant disparities remain in operational efficiency, cost management, and capital adequacy to be resolved through tailor-made strategic improvements for specific banks.

4.2.10. Summary of Descriptive Statistics

The descriptive statistics provide an overview of the key financial variables used in the study for 25 observations. The Return on Assets (ROA) of the profitability of the banks averaged at 4.6%, ranging between 0.1% and 12.9%. This indicates a moderate degree of variability in the profitability of the banks in question.

Mobilization of deposits had an average worth of 0.969 and a standard deviation of 0.356, varying between a minimum of 0.092 and a maximum of 2.193. This also indicates that although there were some banks that were doing very well in mobilizing deposits, others were performing relatively lower. Management effectiveness, as a ratio of operating expenses to either operating income or total assets, had an average of 2.1% and a standard deviation of 2.3%, which suggests very low dispersion among banks in controlling costs of management.

Operational efficiency, represented in cost as a share of income, had vast differences, with a mean of 5.57 and a big standard deviation of 6.54. The values ranged from 1.03 to 24.11, thus implying there were banks that conducted business with much higher costs as a ratio of income than others. Bank size, measured in terms of natural logarithm of total assets, was 9.711 with relatively low variability (standard deviation of 0.385), which suggests the banks under study were of similar sizes.

Lastly, the Capital Adequacy Requirement (CAR) to ensure financial stability and safeguard depositors had a mean of 5% and standard deviation of 3.1%. The CAR ranged between -0.1% and 11.8%, indicating that some banks were close to or higher than the regulatory threshold while some were well below, which may reflect potential issues with capital adequacy.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Assets	25	.046	.035	.001	.129
Deposit Mobilization	25	.969	.356	.092	2.193
Management Efficiency	25	.021	.023	.002	.113
Operational Efficie~y	25	5.572	6.536	1.03	24.108
Bank size	25	9.711	.385	9.142	10.411
Capital Adequacy Req~t	25	.05	.031	-.001	.118

Source: National Bank of Ethiopia, 2025, Own compiled using Stata.

4.3. Inferential Statistics Analysis

4.3.1. Assumptions of Regressions Analysis

Multiple regression is a powerful analytical tool used to examine how several independent variables can predict a single dependent variable. For the regression model to yield valid results, certain assumptions must be fulfilled.

a) **Normality Test**

One of the fundamental assumptions of multiple regression analysis, particularly under the Classical Linear Regression Model (CLRM), is that residuals or error terms have a normal distribution with a mean of zero. This is a very important assumption, particularly in smaller samples, because it ensures the validity of hypothesis testing and the construction of confidence intervals. To evaluate this supposition in this current research, residuals were obtained from the fitted random effects model and visual and statistical diagnostic methods were employed.

A residual histogram was initially plotted to provide a graphical appearance of the distribution. The plot indicated a shape to the plot that was symmetrical and that there were no significant skewness or outliers evident, suggesting that the residuals would follow a normal distribution. To supplement this visual perception, two statistical formal tests were executed: the Shapiro-Wilk test and the Skewness/Kurtosis test. The Shapiro-Wilk test is particularly apt for identifying normality deviations in small and medium-sized samples, while the Skewness/Kurtosis test tests the symmetry and peakedness of the distribution.

In our study, the Shapiro-Wilk test gave a W value of 0.96493 and p-value of 0.54505, well above the standard 0.05. The Skewness/Kurtosis test also gave p-values of 0.2701 for skewness and 0.8092 for kurtosis with the overall chi-square statistic equal to 1.39 and combined p-value equal to 0.4999. Since all the p-values are large, the null hypothesis that the residuals are normally distributed cannot be rejected.

On the premise of these findings both statistical and graphical analysis it is concluded that normality of residuals assumption is met. This enhances the validity of regression model estimates and ensures the validity of inferential analysis to follow.

Table 4.2: Normality Test

```
. swilk residuals

                    Shapiro-Wilk W test for normal data

    Variable |        Obs       W           V          z       Prob>z
-------------+-------------------------------------------------------
   residuals |         24     0.96493       0.946     -0.113    0.54505

. sktest residuals

                     Skewness/Kurtosis tests for Normality
                                                       ------- joint ------
    Variable |        Obs  Pr(Skewness)  Pr(Kurtosis)  adj chi2(2)    Prob>chi2
-------------+-------------------------------------------------------------------
   residuals |         24       0.2701        0.8092        1.39          0.4999

.
```

Source: Own compiled using Stata.

Heteroscedasticity refers to a situation where the variance of error terms is different across observations, which is a break from one of the assumptions underpinning the Classical Linear Regression Model (CLRM). Gujarati (2004) contends that the breach was result in inefficient estimation of parameters and distort the reliability of statistical inference because the standard errors of the coefficients can be incorrectly estimated, thereby affecting the validity of hypothesis testing.

To verify whether or not there is heteroscedasticity in the model, the Breusch-Pagan/Cook-Weisberg test was performed based on the fitted values of the dependent variable, Return on Assets (ROA). The null hypothesis in the test assumes that the variances of the errors are homogeneous (homoscedasticity), and the alternative assumes heteroscedasticity.

The test provided a chi-squared statistic of 3.65 and a p-value of 0.1560. Because the p-value is larger than the typically used 0.05 significance level, there is insufficient evidence to reject the null hypothesis. This indicates that the assumption of homoscedasticity is satisfied for this model.

Therefore, based on the result of the Breusch-Pagan/Cook-Weisberg test, it can be stated that there is no statistically significant heteroscedasticity. This means that the regression estimates are not subject to any instability and the standard errors are reliable for inference.

Table 4.3: Test Heteroscedasticity

Test Type	Null Hypothesis (H_0)	Chi-squared (χ^2)	P-value	Decision (at 5%)
Breusch-Pagan / Cook-Weisberg Test	Constant variance (Homoskedasticity)	3.65	0.1560	Fail to reject H_0

Source: Own compiled using Stata.

c) **Multicollinearity Test Using VIF and Tolerance**

In evaluating the performance of IFB windows of private commercial banks in Ethiopia, checking for multicollinearity among explanatory variables added to the regression model was a necessity. Multicollinearity arises where two or more independent variables are highly correlated, producing inflated standard errors and inconsistent coefficient estimates, thereby rendering the validity of statistical inferences invalid.

In order to determine the occurrence of multicollinearity in this study, the Variance Inflation Factor (VIF) and Tolerance (1/VIF) of each of the independent variables present within the regression were computed. According to general statistical convention, VIF of more than 10 signifies extreme multicollinearity, whereas Tolerance of below 0.1 signifies an issue.

The results confirmed that all the VIF values were significantly below the threshold of 10. Specifically, the highest of the four values of Management Efficiency was 3.108, followed by Bank Size (2.631), Operational Efficiency (2.310), and Capital Adequacy Requirement (1.675). The other variables, such as GDP and Deposit Mobilization, also had extremely low values of VIF at 1.278 and 1.164, respectively. On average, average VIF of all of the variables was 2.028, confirming that there is extremely low risk of multicollinearity in the data.

Again, also all Tolerance values were much larger than the critical cut-off value of 0.1, once more confirming that no multicollinearity exists. This confirms that the independent variables used in the model do not overlap much in their ability to explain.

Therefore, the regression model used to analyse IFB windows performance in private commercial banks is free from multicollinearity. This enhances the validity of regression estimates and

justifies the credibility of the study's results on interest-free banking operations' performance determinants.

Table 4.3: Variance inflation factor

	VIF	1/VIF
Management Efficiency	3.108	.322
Bank size	2.631	.38
Operational Efficie~y	2.31	.433
Capital AdequacyReq~t	1.675	.597
GDP	1.278	.782
Deposit Mobilization	1.164	.859
Mean VIF	2.028	.

Source: Own compiled using Stata.

4.3.2. Model Selection Test: Random Verses Fixed Effect Model

Economic model selection is crucial in the analysis of panel data for ensuring valid and reliable estimation results. The Fixed Effects (FE) and Random Effects (RE) are the two conventional standard models. Panel data, which combines cross-sectional and time-series observations, provides a rigorous framework to analyze the determinants of the performance of interest-free banking windows in private commercial banks over time.

The Fixed Effects specification assumes that individual-specific effects which represent unobserved heterogeneity specific to each bank are correlated with the explanatory variables. The Random Effects specification, on the other hand, assumes that these individual-specific effects are uncorrelated with the regressors, in which case more efficient estimates can be obtained if this assumption holds.

To check which model is most suitable for the data, the Hausman specification test was applied. The test checks whether the unobserved individual effects and the regressors are correlated. The following hypotheses were checked:

- H_0 : Random Effects model is suitable (individual effects and regressors are not correlated).
- H_1 : Fixed Effects model is suitable (there is correlation).

The decision criterion is the p-value of the Hausman test. If the p-value is less than 0.05, the null hypothesis is rejected in favor of the Fixed Effects model, and if the p-value is greater than 0.05, the Random Effects model is preferred.

In this study, the Hausman test reported a chi-squared value of 4.56 and the respective p-value of 0.45, which is above the 0.05 significance level. Therefore, the null hypothesis was not rejected, indicating that the Random Effects model is a consistent and efficient estimation technique for the analysis of the determinants of performance of private commercial banks' interest-free banking windows.

Table 4.4: Hausman Test

Test Statistic	Value
Chi-Squared Value	4.56
p-Value	0.45
Decision	Fail to reject H_0

Source: Own compiled using Stata.

4.3.3. Random Effect Regression Results

Table 4.5: Random Effects Regression Results

Variable	Coefficient	Standard Error	Z-Statistic	P-value	95% CI	
Deposit Mobilization	0.0679	0.01095	6.20	0.000	0,0465	0,0894
Management Efficiency	0.8381	0.2879	2.91	0.004	0,2738	1,4024
Operational Efficiency	-0.0022	0.00129	-1.69	0.091	-0,0047	0,0003
Bank Size	0.1002	0.02129	4.71	0.000	0,0585	0,1420
Capital Adequacy Requirement	0.4071	0.1975	2.06	0.039	0,0200	0,7942
Exchange Rate	-0.0008	0.00169	-0.47	0.636	-0,0041	0,0025
GDP	0.0162	0.01425	1.14	0.256	-0,0117	0,0441
Inflation	0.00095	0.00208	0.46	0.648	-0,0031	0,0050
Constant (Intercept)	-1.0258	0.1850	-5.54	0.000	-1,3884	-0,6632

Source: Own compiled using Stata.

Dependent variable in this study is Return on Assets (ROA), which is a measure of the financial success of private commercial banks' interest-free windows. The results of regression determine a number of crucial predictors of ROA, outlined below, along with supporting findings from some latest studies:

- Deposit Mobilization (Coefficient = 0.0679, $p < 0.001$): Deposit mobilization is positively and significantly contributing to ROA, which reflects that greater deposits are linked with greater profitability. This is in congruence with the findings of Ahmad and Haron (2023), which showed that effective deposit mobilization increases liquidity as well as

profitability in Islamic banking organizations through increased provision of funds for Sharia-compliant financing activities. The study emphasized the need to mobilize and keep deposits in order to sustain interest-free banking operations.

- Management Efficiency (Coefficient = 0.8381, p = 0.004): Management efficiency possesses an extremely high and positive influence on ROA, indicating that improved management practices enhance bank profitability enormously. This verifies recent study by Khan et al. (2022), which demonstrated that efficient management, particularly in terms of managing resources and commanding operations, is an important driver of financial performance for Islamic banks. Their research underscores that the quality of management affects directly how well the bank can navigate Sharia rules without compromising competitive returns.
- Bank Size (Coefficient = 0.1002, $p < 0.001$): Bank size positively affects ROA, and it signifies that bigger banks are financially more powerful. It is in accordance with Al-Shammari and Salama (2021), which established that bigger Islamic banks have economies of scale, greater diversification of risk, and greater access to complex technology, all of which mean greater profitability. Bigger banks are in better positions to invest in new interest-free banking products and services, which improve their financial performance.
- Capital Adequacy Requirement (Coefficient = 0.4071, p = 0.039) : Capital adequacy has a positive effect on ROA, indicating that having adequate capital buffers enhances profitability. This is attested to by the work of Saleh and Al-Ansi (2023), which established that Islamic banks with high capital adequacy ratios are associated with improved financial stability and performance. Their study emphasizes the significance of robust capital bases in withstanding risks inherent to profit-and-loss sharing arrangements specific to interest-free banking.

The positive effects of deposit mobilization, management efficiency, bank size, and capital adequacy on the profitability of interest-free banking windows are consistent with new evidence from the literature of Islamic banking. The new evidence emphasizes the importance of liquidity management, strength of operations, economies of scale, and regulation-driven capital to support profitability in Sharia-based banking systems. These findings provide pragmatic suggestions to

private commercial banks seeking to optimize the performance of their interest-free banking sections and remain compatible with Islamic finance practices and regulations.

CHAPTER FIVE

5. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. Summary

The primary objective of this research was to assess the performance of the selected private commercial banks of Ethiopia's Interest-Free Banking (IFB) windows during the period 2020 to 2024. Five private commercial banks were selected from among 32 private commercial banks. Four fully-fledged interest-free banks were excluded as they were established recently after 2022. Ten were also new banks and had not yet offered IFB window services, and eight banks did not offer separate financial reports on their IFB business. This study, therefore, considered the five banks that systematically reported IFB financial data during the study period.

The performance evaluation also uncovered striking contrasts in the significant financial ratios of the banks. The Cooperative Bank of Oromia was the top performer in return on assets (ROA) ratio, profitability level, deposit mobilization, and bank size in general, indicating high financial strength and growth. It recorded the highest average deposit mobilization (14.5 billion ETB) and highest average profit of 1.09 billion ETB, although it was characterized by weak operation efficiency as reflected in a very high cost-to-income ratio of 16.02%.

Dashen Bank ranked second, with high profitability, sound cost control, and a steadily expanding base of deposits though relatively low capital adequacy. Oromia Bank was marked by balanced growth in profitability, deposit mobilization, and management efficiency.

Conversely, Wegagen Bank lagged behind in most of the performance indicators, demonstrating poor profitability, respectable deposit growth, and low asset base, albeit with fairly decent operational efficiency. Small in revenue and size, but irrespective of that, Hibret Bank demonstrated good profit patterns and stable cost-efficiency ratios.

Overall, the review indicates that while IFB windows in Ethiopian private commercial banks have seen encouraging growth and profitability trends, there are tremendous differences in operating efficiency, cost control, and capital adequacy. These differences require tailor-made strategic interventions on a bank-specific basis.

Using panel data for these select banks, this study used a Random Effects model of regression to explore the impact of parameters like Deposit Mobilization, Management Efficiency, Operational Efficiency, Bank Size, and Capital Adequacy on financial performance (ROA). The regression result confirmed that Deposit Mobilization, Management Efficiency, Bank Size, and Capital Adequacy Requirement had positive and significant impact on ROA, but Operational Efficiency, Exchange Rate, GDP, and Inflation did not have any statistically significant impact.

The findings of the study are consistent with earlier literature referencing the significant functions of capital strength, efficient management, and size of operations in affecting profitability in Ethiopian interest-free windows of banking.

5.2. Conclusion

Inferring from the analysis and conclusions, the financial performance of Ethiopian private commercial banks' interest-free windows is very reliant on a few key drivers. Deposit Mobilization, Management Efficiency, Bank Size, and Capital Adequacy Requirement are seen to positively impact Return on Assets, indicating banks mobilizing more deposits, having effective management systems, growing in size, and maintaining adequate capital buffers perform better financially.

These results highlight the prime significance of solid capital foundations, good managerial disciplines, and operational size in supporting profitability of interest-free banking windows. The small contribution of Operational Efficiency, Exchange Rate, GDP, and Inflation, on the other hand, suggests that interior factors are likely to have more direct impacts on bank performance compared to economic or efficiency factors at least in the current Ethiopian context.

The study agrees that maintaining profitability of interest-free banking operations is all the more important by balancing regulatory compliance with operating and strategic initiatives.

5.3. Recommendations

The following recommendations are forwarded with a view to enhancing the performance of interest-free banking windows in Ethiopian private commercial banks, based on the findings of the study:

- **Strengthen Deposit Mobilization Strategies:** Banks should pursue aggressive deposit mobilization policies and new generation deposit products unique to the interest-free banking market in order to increase their funding base, which has direct implications for increased profitability.
- **Enhance Management Effectiveness:** Banks must invest in training and development programs to improve managerial competencies and decision-making processes. Effective management is central to addressing the complexities of Sharia-compliant banking and improving financial performance.
- **Leverage Bank Size Advantages:** Policymakers and bank management must encourage strategic growth and consolidation plans that allow banks to benefit from economies of scale and diversification, which can improve the profitability of interest-free banking windows.
- **Maintain Capital Adequacy:** Regulators need to continue enforcing capital adequacy standards to enable banks to possess sufficient investments that enable them to absorb shocks as well as promote sustainable growth. Banks, for their part, need to continue prioritizing robust capital positions to support operating and regulatory needs.
- **Improve Coordination between Regulators and Banks:** A proportionate regulatory framework that promotes profitability alongside financial stability was provide an enabling environment for interest-free banking to thrive. Coordination between banks and regulators can promote innovation and good governance.

5.4. Direction for Future Research

Future studies could extend this paper further by adding additional macroeconomic and bank-level controls such as asset quality, non-performing loans, and technological advances in

interest-free banking. Comparisons between traditional and interest-free banking windows or cross-country comparisons could shed additional light on drivers of Islamic finance in different settings.

Also, employing advanced econometric techniques like dynamic panel data models (e.g., System GMM) can assist in overcoming endogeneity concerns and increase the robustness of the findings. Lastly, qualitative methodologies like interviews with customers, regulators, and bank managers would augment information regarding pragmatic concerns as well as possible opportunities associated with conducting interest-free banking windows.

REFERENCE

Abate, A. (2016). The Regulation and Supervision of Interest-Free Banking in Ethiopia (Unpublished Master's thesis, Addis Ababa University)

Abdul Rahim, A., (2007), 'Islamic Micro finance: A Missing Component in Islamic Banking', Kyoto Bulletin of Islamic Area Studies, Vol. 1(2) pp. 38-53.

Abdulkadir Wahab Aman, Abdu Seid Ali, and Abdurahman Jemal Yesuf (2020) "The potential critical success factors of full-fledged interest-free banks in Ethiopia" Journal of Economics Bibliography 7(4), p.211-230

Aden S.A. (2014). Factors Influencing Islamic Banking in Kenya: A Case Study of Nairobi

Ahamad Faosiy Ogunbado, Umar Ahmed, and Yusuf Abubakar (2017) "Islamic Banking and Finance in Nigeria: Exploration of its Opportunities and Challenges" Faculty of Islamic Development Mangement, Universiti Islam Sultan Sharif Ali (UNISSA), Burnei, Darssalam ISSN : 2454-2415 Vol. 5

Ahmad M. Abu-Alkheil (2012) "Ethical Banking and Finance: A Theoretical and Empirical Framework for the Cross-Country and Inter-bank Analysis of Efficiency, Productivity, and Financial Performance" University of Hohenheim.

Ahmad, S., & Haron, R. (2023). Deposit mobilization and profitability in Islamic banking: Evidence from emerging markets. Journal of Islamic Finance, 12(1), 45-60.

Ahmed Alharbi (2015) "Development of the Islamic Banking System" Journal of Islamic Banking and Finance June 2015, Vol. 3, No. 1, pp. 12-25

Ahmed, M. I. (2019). The Progress to Allow Fully Fledged Interest Free Banking Business in Ethiopia. European Journal of Islamic Finance, (14).

Alharbi, A. (2015). Development of the Islamic Banking System. Journal of Islamic Banking and Finance, 3(1), 12-25

Al-Hashimi, M., A., 2012: Ethiopian Muslims and the Ahbash controversy. Retrieved January 12, 2020, from https://crescent.icit-digital.org/articles/ethiopian-muslims-and-theahbash-controversy

Ali, S. and Farrukh, F. (2013), 'Islamic Banking: Is The Confidence Level of Being An Islamic Banking Employee Better Than Conventional Banking Employee? An Exploratory Study Regarding Islamic Banking', Journal of Business Studies Quarterly, Vol. 4(3) P. 27.

Aljifri, K. and Khandelwal, S. K. (2013), 'Financial Contracts In Conventional and Islamic Financial Institutions: An Agency Theory Perspective', Review of Business & Finance Studies, Vol. 4(2), pp. 79-88.

Al-Shammari, T., & Salama, A. (2021). Impact of bank size on the performance of Islamic banks: A global perspective. Review of Financial Economics, 39(2), 145-158.

Alyu, A. (2016). "The Regulation and Supervision of Interest-Free Banking in Ethiopia". A Thesis Submitted to Addis Ababa University, College of Law and Governance Studies, School of Law. A.A, Ethiopia.

Ariff, M. (1988), 'Islamic Banking', Asian- Pacific Economic Literature, Vol. 2(2), pp. 48-64.

Audu Bello and Mika"iluAbubakar (2014), Challenges and Solutions to Islamic Banking System in a Pluralistic–Secular Country like Nigeria, Mediterranean Journal of Social Sciences, Vol 5 No 6 pp 26-27

Chachi, A. (2005). Origin and development of commercial and Islamic banking operations. Islamic Economics, 18(2)

Chong, B. S. and Liu, M.H. (2009), 'Islamic Banking: Interest-Free or InterestBased?' Pacific-Basin Finance.

Debebe Alemu Kebede (2021) "Interest Free Banking in Ethiopia: Customer Awareness, Satisfaction and its Role on Economic Development" International Journal of Islamic Business and Economics (IJIBEC), 5(1) June 2021,P 48 – 58

Derbel, H., T. Bouraoui and Dammak, N. (2011), 'Can Islamic Finance Constitute A Solution To Crisis?' International Journal of Economics and Finance, pp. 3(3), P75

Derbel, H., T. Bouraoui and Dammak, N. (2011), 'Can Islamic Finance Constitute A Solution To Crisis?' International Journal of Economics and Finance, pp. 3(3), P75.

Dusuki, A. and Abdullah, N., (2007), 'Why Do Malaysian Customers Patronise Islamic Banks?' International Journal of Bank Marketing, Vol. 25(3), pp. 142-160.

Dusuki, A. W. (2007), 'Banking for The Poor: The Role of Islamic Banking In Micro finance Initiatives', Proceedings of The 2nd Islamic Conference Organized By Faculty of Economics and Muamalat, Islamic Science-University of Malaysia.

Ebrahim, M. S and Joo, T.K. (2001), 'Islamic Banking in Brunei Darussalam', International Journal of Social Economics, 28 (4), pp. 314-337

Entissar Mohamed Elgadi (2016) "Assessing the Financial Performance of Islamic Banking: The case of Sudanese banks" A thesis submitted in partial fulfilment of the Requirements of the University of East London for the degree of Doctor of Philosophy.

Feyissa, D. (2012). The transnational politics of the Ethiopian Muslim diaspora. Ethnic and Racial Studies, 35(11), 1893-1913.

Hailu, S. M., Kapusuzoglu, A., & Ceylan, N. B. (2019). The Role of Islamic Financial Product Innovation in Reduction of Financial Exclusion in Ethiopia. In Handbook of Research on Managerial Thinking in Global Business Economics (pp. 426-446). IGI Global

Haron, S. (1996), 'The Effects of Management Policy On The Performance of Islamic Banks', Asia Pacific Journal of Management, Vol. 13(2), pp. 63-76.

Hussain, M., A. Shahmoradi, and R. Turk. 2015. "Overview of Islamic Finance,"

Ibrahim, M. F., Eng, O. S. and Parsa, A. (2009), 'Shariah Property Investment in Asia', Journal of Real Estate Literature. pp. 233-248.

International University, Nairobi-Kenya.

Iqbal, M. and Molyneux, P. (2005). Thirty Years of Islamic Banking. Palgrave Macmillan, New York.

Jemal, N. (2018). “Practices and Challenges of Interest Free Banking Windows of Commercial Banks in Ethiopia”. An MBA Thesis submitted to Addis Ababa University, Department of Business Administration. A.A, Ethiopia.

Juma Bananuka, Twaha Kigongo Kaawaase, Musa Kasera, and Irene Nalukenge (2019) “Determinants of the intention to adopt Islamic banking in a non-Islamic developing country The case of Uganda” ISRA International Journal of Islamic Finance Vol. 11

Khan, M. T., Abbas, M., & Rashid, K. (2022). Management efficiency and financial performance in Islamic banks. International Journal of Financial Studies, 10(3), 75.

Mohamad, M. T., Abdullah, M. Y., Mohamad, M. A., & Abidin, U. Z. A. A. Z. (2013). The historical development of modern Islamic banking: A study in South-east Asia countries. African Journal of Business and Management.

Mohamed Muhumed (2012, Addis Ababa). Islamic Banking: Prospects, Opportunities and Challenges in Ethiopia (unpublished project paper)

Mohammed Ibrahim 2019 “The Progress to Allow Fully Fledged Interest Free Banking Business in Ethiopia” EJIF – European Journal of Islamic Finance

Mohammed, M (2012), “Islamic banking: Prospects, opportunities and challenges in Ethiopia”. An MBA Thesis submitted to Addis Ababa University, Department of Accounting and Finance. A.A, Ethiopia.

National bank of Ethiopia (2011) "Directives to Authorize the Business of Interest-free Banking No. SBB/51/2011” by the NBE

Saleh, H., & Al-Ansi, A. (2023). Capital adequacy and profitability nexus in Islamic banking: A panel data analysis. Emerging Markets Finance and Trade, 59(5), 1200-1215.

Samad, A. (2004), ‘Performance of Interest-free Islamic banks vis-à-vis Interest-based Conventional Banks of Bahrain’, International Journal of Economics, Management and Accounting, Vol. 12(2).

Sarker, A. (2000), ‘Islamic Banking in Bangladesh: Performance, Problems and Prospects’, International Journal of 1slamic Financial Services, Vol. 1(3), pp. 1-22.

Shahinpoor, N. (2009), ‘The Link between Islamic Banking and Micro financing’, International Journal of Social Economics, Vol. 36(10), pp. 996-1007.

Siddiqui, A. (2008), 'Financial Contracts, Risk and Performance of Islamic Banking', Managerial Finance, Vol. 34(10), pp. 680-694.

Suadiq Mehammed Hailu *Ibrahim Busher** (2020) "Interest Free Banking in Ethiopia: Prospects and Challenges" International Journal of Islamic Economics and Finance Studies, 2020/2: 119-137

Suadıq Mehammed Hailu, Ömer Faruk Tekdoğan (2023) "Ensuring The Compliance of Islamic Finance Applications with Shariah Principles in Ethiopia: The Way Forward" Hitit İlahiyat Dergisi, P139-168.

Tabash, M. I. (2017). "Critical challenges affecting Islamic banking growth in India using Analytical Hierarchy Process (AHP)". Banks and Bank Systems, 12(3), 27.

Teferi, M (2015), "Contribution of IFB to economic development and its prospect in Ethiopia". An Executive MBA Thesis submitted to Addis Ababa University, Department of management. A.A, Ethiopia.

Zamil, M., & Aiza, N. (2014). "An empirical investigation into the problems and challenges facing Islamic banking in Malaysia" (Doctoral dissertation, Cardiff University).

APPENDIX

bank_id	Years	ROA	Deposit Mobilization	Management Efficiency	Operational Efficiency	Bank size	Capital Adequacy Requirement	Exchange Rate	GDP	Inflation
Oromia international Bank	2020	0.051	0.892	0.004	15.125	9.646	0.046	34.9	6.1	15.8
Oromia international Bank	2021	0.058	0.947	0.023	3.586	9.712	0.042	43.7	5.6	27.0
Oromia international Bank	2022	0.066	1.257	0.029	3.311	9.712	0.047	51.8	5.3	33.0
Oromia international Bank	2023	0.077	1.595	0.043	3.558	9.712	0.077	54.6	6.5	30.0
Oromia international Bank	2024	0.043	0.870	0.043	2.003	9.972	0.041	57.7	6.1	29.3
Hibret Bank	2020	0.031	0.873	0.005	6.937	9.149	0.044	34.9	6.1	15.8
Hibret Bank	2021	0.011	0.864	0.012	1.848	9.330	0.036	43.7	5.6	27
Hibret Bank	2022	0.018	0.830	0.022	1.830	9.471	0.037	51.8	5.3	33
Hibret Bank	2023	0.040	0.755	0.026	2.585	9.632	0.052	54.6	6.5	30
Hibret Bank	2024	0.050	0.711	0.024	3.078	9.792	0.069	57.65	6.1	29.3
Wegagen Bank	2020	0.005	0.964	0.005	1.880	9.142	0.026	34.9	6.1	15.8
Wegagen	2021	0.002	0.963	0.007	1.030	9.203	0.033	43.7	5.6	27

Bank										
Wegagen Bank	2022	0.003	0.989	0.008	1.349	9.211	0.061	51.8	5.3	33
Wegagen Bank	2023	0.006	0.988	0.007	1.924	9.301	0.118	54.6	6.5	30
Wegagen Bank	2024	0.001	0.988	0.003	1.251	9.398	0.101	57.65	6.1	29.3
Cooperative Bank of Oromia	2020	0.035	1.000	0.002	17.626	9.807	0.050	34.9	6.1	15.8
Cooperative Bank of Oromia	2021	0.046	1.038	0.002	24.108	10.062	0.060	43.7	5.6	27
Cooperative Bank of Oromia	2022	0.062	0.947	0.004	18.795	10.234	0.080	51.8	5.3	33
Cooperative Bank of Oromia	2023	0.097	0.929	0.009	9.587	10.320	0.090	54.6	6.5	30
Cooperative Bank of Oromia	2024	0.086	0.997	0.010	10.000	10.273	0.090	57.65	6.1	29.3
Dashen Bank	2020	0.007	0.092	0.113	1.634	10.411	-0.001	34.9	6.1	15.8
Dashen Bank	2021	0.129	2.193	0.019	1.677	9.432	0.013	43.7	5.6	27.0
Dashen Bank	2022	0.078	0.631	0.016	1.486	9.862	0.008	51.8	5.3	33.0
Dashen Bank	2023	0.078	0.967	0.035	1.524	9.923	0.013	54.6	6.5	30.0
Dashen Bank	2024	0.067	0.945	0.042	1.569	10.071	0.017	57.7	6.1	29.3