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**ADDIS ABABA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF CORPORATE FINANCE**

**ASSESSMENT OF FOREIGN EXCHANGE RISK MANAGEMENT IN ETHIOPIAN  
BANKING SECTOR**

**A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF  
BUSINESS AND ECONOMICS SCHOOL OF COMMERCE DEPARTMENT OF  
CORPORATE FINANCE IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR  
THE DEGREE OF MASTERS OF SCIENCE IN CORPORATE FINANCE**

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**June, 2025**

**Addis Ababa, Ethiopia**

## **STATEMENT OF DECLARATION**

This thesis, with a title "Assessment of Foreign Exchange Risk Management in Ethiopian Banking Sector," is my original work, and I hereby attest that no one else has submitted it in whole or in part for credit toward a degree from another university or institution. With Dr. Meshesha Demie's guidance, I produced it on my own.




Name of Participant: **Frew Abebe**

Signature:

### Certificate of Declaration

This is to certify that the thesis prepared by Frew Abebe, entitled “ASSESSMENT OF FOREIGN EXCHANGE RISK MANAGEMENT IN ETHIOPIAN BANKING SECTOR” and submitted for the partial fulfilment of the requirement for the Masters of Science Degree In Corporate Finance complies with the regulation of the university and meets the accepted standard with respect to Originality and Quality.

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## **List of Abbreviations and Acronyms**

- AAU – Addis Ababa University
- AUD – Australian Dollar
- BOA – Bank of Abyssinia
- CBE – Commercial Bank of Ethiopia
- CBII – Commercial Bank’s Intermediation Index
- CAR – Capital Adequacy Ratio
- DBE – Development Bank of Ethiopia
- ETB – Ethiopian Birr
- EUR – Euro
- FEMoUS – Foreign Exchange Monitoring and Orchestration Unified System
- FX – Foreign Exchange
- GDP – Gross Domestic Product
- HIBR – Hibret Bank
- IBD – International Banking Department
- MFIs – Microfinance Institutions
- NBE – National Bank of Ethiopia
- NER – Nominal Exchange Rate
- PPP – Purchasing Power Parity
- RER – Real Exchange Rate
- ROA – Return on Assets
- ROE – Return on Equity
- SPSS – Statistical Package for the Social Sciences
- USD – United States Dolla

## Abstract

*This study assesses foreign exchange (FX) risk management practices within the Ethiopian banking sector, focusing on selected commercial banks amid a changing regulatory and economic environment. The analysis is motivated by the persistent depreciation of the Ethiopian Birr and the liberalization reforms introduced by the National Bank of Ethiopia (NBE) in 2024. The research investigates how banks identify, assess, and mitigate FX risks, particularly transaction, translation, and economic exposures, while considering the effects of policy reforms and the emergence of independent private forex bureaus. A mixed-methods research approach was used, combining structured Likert-scale questionnaires with open-ended responses from 90 professionals across six major banks. Quantitative data were analyzed using descriptive statistics via SPSS, while qualitative responses were reviewed thematically. The findings show that although banks have established internal control frameworks, regular training, and risk identification mechanisms, they face challenges including limited hedging instruments, policy uncertainty, and market inefficiencies. The introduction of private forex bureaus has added complexity to FX risk, raising concerns around regulatory oversight and market fragmentation. The study concludes that Ethiopian banks are actively managing FX risks, but significant improvements are needed, particularly the adoption of hedging tools, enhanced NBE oversight, and modernization of treasury operations. These measures are essential for navigating economic reforms and maintaining financial stability in a liberalizing foreign exchange environment.*

**Keywords:** *Foreign Exchange Risk, Ethiopian Banking Sector, Risk Management, Policy Reform, Currency Fluctuation, Transaction Risk, Translation Risk, Economic Exposure, Private Forex Bureaus, National Bank of Ethiopia.*

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Banks are essential for a country's economic growth, as they facilitate the flow of funds from savers to borrowers through financial intermediation (Ongore and Kusa, 2013). In addition to this role, banks financial health significantly impacts economic progress. Strong financial performance ensures shareholders receive returns on their investments, which promotes further investment and stimulates economic expansion. To sustain their intermediation services and deliver fair returns to shareholders, banks must remain profitable by generating sufficient revenue to cover operational expenses. Conversely, weak bank performance can result in failures and crises, adversely affecting economic development (Ongore and Kusa, 2013).

Foreign exchange (forex) fluctuation risk refers to the uncertainty in financial outcomes caused by unpredictable movements in exchange rates (Kothari, 2011). Entities engaged in international trade or holding assets and liabilities in foreign currencies are particularly exposed to this risk, as currency volatility can significantly alter the value of their obligations and cash flows (Kothari, 2011). Exposure to exchange rate movements typically manifests in three forms: transaction exposure, economic exposure, and translation exposure (Taggart and McDermott, 2000). Managing these risks is critical for ensuring financial stability, particularly in institutions with frequent cross-border transactions.

Globally, institutions adopt various risk management strategies to mitigate forex risks, such as natural hedging, use of financial derivatives, and centralized treasury operations. Corporate treasuries and risk committees are often responsible for identifying, measuring, and controlling these exposures (Lam, 2003). Effective management requires clear policies, trained personnel, and consistent monitoring, especially in environments characterized by floating exchange rate regimes and high market volatility (Allayannis, 2001).

In emerging and developing economies, the challenge of managing forex risk is heightened by macroeconomic instability, limited financial instruments, and institutional capacity constraints. Banks operating in such contexts are particularly vulnerable to foreign exchange fluctuations due to their exposure to foreign-denominated liabilities and obligations. Volatility in exchange rates can

result in operational and liquidity disruptions if not properly managed, especially in countries where the local currency is subject to sustained depreciation (Sabri, 2011).

In Ethiopia, the foreign exchange market has faced instability to some extent, with the Ethiopian Birr (ETB) experiencing ongoing depreciation against major currencies such as the U.S. dollar. These fluctuations present serious risks for financial institutions, particularly commercial banks that regularly deal in foreign currencies through remittances, trade finance, and international payments. Although the importance of analyzing foreign exchange risk in Ethiopia's financial sector has grown, most existing studies have concentrated on broader macroeconomic effects or general bank profitability. Few have explored the specific characteristics, scale, and mitigation strategies for forex fluctuations, including the persistent depreciation of the local currency and the role of private forex bureaus in the banking industry. This research gap is significant because a deeper understanding of how banks assess, quantify, and manage forex volatility is vital for ensuring their stability and shaping effective policy and regulatory frameworks.

The foreign exchange liberalization reforms introduced by the National Bank of Ethiopia (NBE) in 2024 aimed to enhance transparency, improve market access, and curb black-market activity (NBE, 2024). However, these reforms have also intensified the exposure of commercial banks to FX risks. The move toward a more flexible exchange rate regime has led to accelerated depreciation of the Ethiopian Birr, increasing the cost of foreign currency obligations and reducing the value of foreign-denominated assets. Additionally, the Ethiopian market's seems to lack of developed hedging instruments, such as forward contracts or swaps, has resulted in limited protection against volatility, widening the risk gap for financial institutions. As a result, banks now face heightened transaction, economic, and regulatory risks, emphasizing the need for robust internal controls and coordinated policy responses (IMF, 2023; NBE, 2024; Adissu, 2016).

This study focuses on the Commercial Bank of Ethiopia and five prominent medium-sized private banks: Awash Bank, Bank of Abyssinia, Dashen Bank, Hibret Bank, and Cooperative Bank of Oromia. These banks were selected due to their collective market share, 76.8% of total banking assets and 77.4% of deposits as of June 2024, making them systemically significant within the Ethiopian financial system (NBE, 2024). Moreover, these institutions play a central role in foreign exchange operations and trade finance, rendering them especially vulnerable to FX risk and thus ideal for analyzing the sector's FX risk management practices.

## **1.2 Statement of the Problem**

Jamal and Khalil (2011) found that the exchange rate fluctuations pose a significant risk to banking institutions, potentially leading to substantial losses, reduced profitability, and even bank failures. These fluctuations expose banks to transaction and translation risks, affecting cross-border transactions and the valuation of foreign currency assets. Economic and liquidity risks also arise, as currency depreciation impacts market value and access to foreign currency. Moreover, credit risk increases when borrowers struggle to repay foreign currency-denominated loans, while regulatory changes and inflation further challenge financial stability. As a result, managing foreign exchange risk is crucial for maintaining profitability and stability in commercial banks.

Ethiopia's economy remains highly susceptible to price volatility, largely due to its reliance on imported goods including raw materials, capital goods, and consumer products (Agu, 2002). Exchange rate fluctuations directly impact import costs, which in turn trigger domestic price instability. Consequently, sound management of the foreign exchange market is essential for ensuring macroeconomic stability in the country.

It is important to understand that Banks operate in a dynamic and complex environment influenced by various factors, Ethiopian commercial banks face unique challenges in managing foreign exchange (FX) risk. The growing volume of international trade, along with continuous fluctuations in exchange rates, has made FX risk management even more critical (Trade.gov, n.d.). Moreover, the ongoing devaluation of the Ethiopian currency against major global currencies intensifies this risk. As the currency weakens, it increases the cost of imports and impacts the value of foreign-denominated assets and liabilities held by banks.

In order to meet the needs of clients involved in international transactions, Ethiopian banks often maintain substantial foreign currency reserves. However, these reserves expose the banks to greater FX risk, as changes in the exchange rate can lead to significant losses if not properly managed (NBE, 2024). Poor management of FX risk can have severe consequences on a bank's financial performance, including reduced profitability and increased exposure to exchange rate volatility. This highlights the importance of adopting effective FX risk management strategies to protect the banks from the financial instability that can arise from fluctuating exchange rates.

In 2023, the Ethiopian Birr (ETB) depreciated by approximately 15% against the U.S. Dollar, exacerbating import costs, widening trade deficits, and weakening banks' foreign currency positions (NBE, 2024). Despite this, a significant proportion of banks remain ill-equipped to mitigate such

volatility, nearly 70% of Ethiopian commercial banks lack access to basic hedging tools like forwards or options (Eneyew, 2013). The absence of these financial instruments has created a hedging gap, forcing banks to rely on manual risk assessment, conservative treasury operations, or costly currency rationing.

Furthermore, the 2024 FX liberalization reforms introduced by the National Bank of Ethiopia have exposed banks to increased operational and regulatory risks. As banks adjust to a partially liberalized FX environment, marked by market uncertainty, rising competition from private forex bureaus, and fluctuating policies, they are facing growing difficulty in managing FX exposures effectively. This vulnerability underscores the urgent need for more data-driven, institution-specific studies on how Ethiopian banks identify, assess, and mitigate FX risks in practice.

While prior research on Ethiopia's banking sector has explored the general impact of foreign exchange fluctuations on bank performance, there remains a significant gap in understanding how commercial banks identify, assess, and manage specific types of foreign exchange (FX) risks. In particular, limited attention has been given to the tools and strategies banks use to mitigate these risks in practice. Furthermore, the influence of recent FX policy reforms by the National Bank of Ethiopia and the growing presence of private forex bureaus has introduced new challenges and exposures that have not been thoroughly examined. As Ethiopia transitions toward a more liberalized but volatile FX environment, it is critical to investigate how commercial banks are adapting their risk management practices to these evolving internal and external pressures.

### **1.3 Research Questions**

- How do Ethiopian commercial banks identify and assess foreign exchange risks?
- What types of foreign exchange risks do Ethiopian Commercial banks face?
- What tools and strategies are used to manage and control FX risks?
- How have recent FX policy reforms influenced banks' risk exposure?
- What role do private forex bureaus play in shaping FX risk for commercial banks?

### **1.4 Objectives of the Study**

#### **1.4.1 General Objective**

The general objective of this study is to assess and identify foreign exchange risks management in the Ethiopian banking sector, using selected Ethiopian commercial banks as a case study.

#### **1.4.2 Specific Objectives**

- To examine how Ethiopian commercial banks identify and assess foreign exchange (FX) risks.
- To analyze the types of foreign exchange risks faced by Ethiopian commercial banks.
- To evaluate the effectiveness of tools and strategies used by banks to manage and control FX risks.
- To assess the impact of recent *NBE's 2024 foreign* exchange policy reforms on banks' FX risk exposure.
- To investigate the role of private forex bureaus in influencing FX risk among Ethiopian commercial banks.

### **1.5 Scope of the Study**

This study assesses foreign exchange risk management in Ethiopia's banking sector by examining the state-owned Commercial Bank of Ethiopia and five medium-sized private banks (Awash Bank, Bank of Abyssinia, Dashen Bank, Hibret Bank, and Cooperative Bank of Oromia). These banks were chosen due to their combined dominance of Ethiopia's banking system, which as of June 2024 accounted for 76.8% of total assets and 77.4% of deposits (NBE, 2024).

## **1.6 Significance of the Study**

Because it offers vital information about foreign exchange risk management tactics used by Ethiopia's banking industry in the wake of the 2024 foreign exchange liberalization reforms, this study is extremely valuable to policymakers, banking regulators, and financial institutions. Through the examination of five prominent medium-sized private banks that account for 76.8% of banking assets and the systemically important Commercial Bank of Ethiopia, the study will determine the impact of recent regulatory changes, evaluate the efficacy of current risk mitigation strategies, and pinpoint vulnerabilities to currency fluctuations. By addressing potential systemic risks arising from currency volatility in Africa's fastest-growing economy, the findings will help commercial banks strengthen their risk frameworks, assist the National Bank of Ethiopia in improving its foreign exchange policies, and promote financial stability.

## **1.7 Organization of the Paper**

There are five chapters in this research report. The first chapter provides an overview of the study's background, problem statement, objectives, significance, scope, and limitations. The literature review is presented in Chapter 2. Research design, data, variables, and analysis technique are all covered in Chapter 3. Data analysis, results, and interpretation are covered in Chapter 4. A summary, conclusion, and recommendations of the study are presented in Chapter 5.

## **CHAPTER TWO**

### **Review of Related Literature**

#### **2.1 Introduction**

In order to achieve the objectives of this study, it is essential to examine prior research in the field, which offers a solid theoretical and empirical foundation for evaluating the relevance and contributions of this work. This chapter reviews the theoretical and empirical literatures. It discusses issues related to foreign exchange risk, its types, and the exposures faced by banks.

#### **2.2 Overview of Ethiopian Banking Industry**

Ethiopia has 32 operational banks, all of which were domestically owned (NBE, 2024). Among these, the Development Bank of Ethiopia (DBE), a specialized development finance institution, accounted for approximately 5% of the total banking sector's assets. The remaining institutions included four fully-fledged interest-free banks, six former microfinance institutions (MFIs) that transitioned into commercial banks, and 22 conventional commercial banks, with the Commercial Bank of Ethiopia (CBE) being the largest. Apart from DBE and CBE, all other banks were privately owned. The banking sector was assessed as stable, secure, and resilient by the end of June 2024 (NBE 2024).

The banking sector plays a crucial role in Ethiopia's economy. By June 2024, total bank deposits had reached nearly Birr 2.5 trillion, while loans and bonds amounted to just under Birr 2.2 trillion. Although both deposits and loans continued to grow, the growth rate had slowed compared to the previous year. Total bank deposits increased by 15.4% in 2024, mainly due to higher demand for time deposits, compared to a 24.6% increase in 2023. Similarly, loans and bonds grew by 16.1% by June 2024, a decline from the 24.3% growth rate recorded the previous year. (NBE 2024).

During the same period, GDP growth outpaced the expansion of deposits and loans. Consequently, the ratio of deposits to GDP fell from 24.8% in June 2023 to 21.6% in June 2024, while the ratio of loans and bonds to GDP declined from 21.7% to 19.0%. Compared to international benchmarks, the share of loans in GDP remains low, highlighting the need for further expansion to mitigate credit concentration risks. A positive development in recent years has been the shift in loan distribution. Since 2021, outstanding loans to the private sector have surpassed those issued to the public sector

(NBE 2024). By the end of June 2024, the total assets of commercial banks stood at Birr 3.3 trillion, reflecting a 15.2% increase from the previous year. However, this growth rate was lower than the 19.9% recorded in June 2023. The primary drivers of asset growth were loans, advances, and bonds, which collectively accounted for 66.9% of total assets (NBE 2024).

### **2.3 Overview of the Ethiopian Exchange Rate Regime**

Ethiopia's financial system is pivotal in driving economic growth and ensuring stability in the foreign exchange market. The National Bank of Ethiopia (NBE) serves as the central regulatory authority, responsible for formulating and implementing policies to manage foreign currency. This involves overseeing the Foreign Exchange Market, where foreign currencies are bought and sold, and monitoring the Foreign Exchanges Monitoring and Orchestration Unified System (FEMoUS) to ensure transparency and efficiency in currency transactions (NBE, 2024).

The NBE's role extends to controlling inflation, supporting international trade, and attracting foreign investments. Through strategic interventions and regulations, the NBE aims to balance the supply and demand of foreign currency, thereby stabilizing the Ethiopian birr. Additionally, the Ministry of Finance collaborates with the NBE to develop fiscal policies that complement exchange rate management, ensuring a cohesive approach to economic planning (Ministry of Finance, 2024).

The current exchange rate regime, characterized by a managed float system, allows the NBE to influence the exchange rate within certain parameters, responding to market conditions and external economic shocks. This approach helps mitigate the impacts of volatile global markets on Ethiopia's economy, providing a buffer against external vulnerabilities (NBE, 2024).

Ethiopia's exchange rate policy has evolved from a fixed regime before 1992 to a managed floating system that allows government intervention to stabilize the market (Nega, 2015). Ambe (2019) indicated that, historically, the Ethiopian Birr was pegged to gold under the Bretton Woods system, with an initial rate of 2.48 Birr per USD in 1945. Following the collapse of Bretton Woods in 1971, the Birr remained fixed at 2.07 Birr per USD for two decades, leading to overvaluation and economic challenges such as reduced competitiveness and the rise of illegal forex markets (Ambe, 2019). Reforms began in 1992 with a major devaluation and liberalization measures, including

auction systems and the current inter-bank market established in 2001 (Lencho, 2013). Since then, the Birr has steadily depreciated, from 8.32 ETB/USD in 2000 to 29.04 ETB/USD in 2019 (NBE, 2019). Fluctuations in exchange rates have a direct effect on the value of bank's foreign assets and liabilities, potentially altering their financial position and stability.

Exchange rate volatility directly affects the profitability of banks by altering the value of their foreign assets and liabilities leading to potential losses (Ambe, 2019). Banks often have to deal with foreign currency transactions, and fluctuations can increase operational costs. For instance, if the Birr depreciates the cost of importing equipment or technology increases, impacting the bank's overall expenses (NBE, 2019). Exchange rate variations influence trade balances, which in turn affect the financial health of banks. A weaker Birr can lead to higher import costs and affect the balance of payments, indirectly impacting bank's financial stability (Lencho, 2013).

Banks may become more cautious in their investment decisions due to exchange rate uncertainties. This can lead to reduced lending and investment activities, affecting economic growth and the bank's revenue streams (Ambe, 2019). Banks need to enhance their risk management practices to mitigate the effects of exchange rate fluctuations. This includes using hedging instruments and strategies to protect against adverse currency movements (NBE, 2019). Significant exchange rate fluctuations can affect customer confidence in the banking sector. If customers perceive instability, they might withdraw deposits or reduce their financial activities, impacting bank's liquidity (Lencho, 2013). As a result, implementing effective exchange rate management is therefore crucial for financial stability.

## **2.4 Theoretical and Conceptual Literature Review**

### **2.4.1 Exchange Rate**

Exchange rate is defined as the rate at which one currency can be exchanged for another. That is, the exchange rate is the price of a country's currency in terms of another currency. In foreign currency transaction there will be either appreciation or depreciation of local currency. Appreciation is a rise in the price of a country's currency in terms of foreign currency while depreciation is a fall in the price of a country's currency in terms of foreign currency (Isaac, 2015). An exchange rate

appreciation causes a slower growth of GDP because of a fall in net exports and a rise in the demand for imports while when exchange rate depreciates the number of imports falls and the number of exports rises. This can increase real GDP growth and ultimately decrease unemployment rate (Gebeyehu, 2014).

#### **2.4.2 Types of Exchange rate**

Exchange rates can generally be classified into two categories based on how currency value is measured: either relative to other currencies or in terms of the goods and services it can purchase (Lidetu, 2017).

##### **a) Nominal Exchange Rate (NER)**

The relative value of two nations' currencies is known as the nominal exchange rate. Put more simply, it shows how much one currency is worth in relation to another. For example, one dollar is equal to 28 Birr if the nominal exchange rate between the two currencies is 28. This metric ignores the purchasing power of currencies and only takes into account their numerical values.

##### **b) Real Exchange Rate (RER)**

Conversely, the Real Exchange Rate calculates the relative costs of goods and services in two nations. Compared to the nominal exchange rate, it offers a more complex understanding. The real exchange rate shows how much domestic goods and services can be traded for foreign goods and services, whereas the nominal exchange rate shows how much foreign currency can be exchanged for one unit of domestic currency. The nominal exchange rate that has been modified to account for variations in inflation across nations is known as the real exchange rate. The following formula is used to calculate it:  $(\text{Nominal Exchange Rate} \times \text{Domestic Price}) / \text{Foreign Price}$  is the real exchange rate.

#### **2.4.3 Exchange Rate Regimes**

The process by which a nation's currency value is established in respect to other currencies is known as an exchange rate regime (Lencho, 2013). These regimes, which are closely related to monetary policy, can be broadly divided into three types: managed float (semi-fixed exchange rates), floating, and fixed (Lencho, 2013).

### **a) Fixed Exchange Rate Regime**

In a fixed exchange rate system, the government intervenes in the foreign exchange market to keep the exchange rate close to a predetermined target (Lencho, 2013). This system offers stability and reduces exchange rate risks, benefiting exporters and importers by facilitating long-term planning through fixed pricing. However, it can create disparities between the official exchange rate and the market-determined rate, potentially fostering black markets for foreign exchange transactions outside formal banking systems. Moreover, governments may exhaust their foreign reserves to meet obligations, resulting in foreign exchange shortages.

### **b) Floating Exchange Rate Regime**

Under a floating exchange rate regime, the exchange rate is determined by market forces, such as the demand and supply of the currency, without a predefined target set by the government (Lencho, 2013). While central banks may indirectly influence exchange rates by managing domestic and foreign currency levels, this regime is predominantly used by advanced economies. It enhances macroeconomic stability by cushioning economies against shocks and enabling monetary policies to focus on domestic conditions. Exchange rates in this system are determined by market efficiency and function independently of government or international monetary organizations. However, floating exchange rates are highly volatile, increasing risks for investors and raising costs for foreign investments.

### **c) Managed Float Exchange Rate Regime**

In a managed float regime, exchange rates are allowed to fluctuate freely but are influenced by central bank interventions to prevent excessive deviations from target values (Lencho, 2013). While governments allow exchange rates to float, they intervene as needed to stabilize the market, particularly during periods of significant turbulence. This approach, often referred to as a managed float, is employed to minimize abrupt and large fluctuations in a nation's currency value.

## **2.5 Types of Foreign Exchange Risk**

Several foreign exchange risks exist, some of the major foreign exchange risks that are common in commercial banks are discussed in this section.

- a) Transaction Risk:** Transaction risk stems from currency fluctuations occurring between the initiation and settlement of foreign-denominated transactions (Adissu, 2016). This risk is especially significant for Ethiopian banks, which frequently engage in importing and exporting goods with extended payment terms.
- b) Translation Risk:** Translation risk occurs when banks consolidate financial statements of foreign operations into the domestic currency, which may lead to reported profit or loss distortions (Alam, 2018). This type of risk is amplified in countries like Ethiopia, where exchange rate volatility persists due to limited foreign exchange reserves (Mengistu, 2022).
- c) Economic Risk:** Economic risk impacts the future cash flows and overall value of banks due to long-term changes in exchange rates. Ethiopian banks, operating in a highly import-dependent economy, are particularly vulnerable to this risk as it influences their competitiveness and financial sustainability (Mahmoud et al., 2019).

## 2.6 Foreign Exchange Theory

### 2.6.1 Foreign Exchange Exposure Theory

The overall idea of exposure is the degree to which a firm's net worth is impacted by changing exchange rates (El-Masry 2006). According to Muller (2006), a number of empirical studies on the subject show that both local and multinational corporations' revenue and profits are impacted by fluctuating exchange rates. Companies incur foreign currency costs (such as wages, taxes, and materials) due to the prevalence of outsourcing activities to foreign nations, and corporate financial managers should be cognizant of the magnitude of this exposure (Abor 2005).

Even so, businesses that do not engage in foreign exchange trading are nevertheless subject to volatile exchange rates due to competition from multinational corporations, overseas rivals, and macroeconomic factors. Therefore, even though they only have indirect financial exposure, many local and multinational organizations find that changing exchange rates have an impact on their income statements and business performance (Parsley and Popper 2006).

The competitive position of a domestic firm without international and foreign activities may be negatively impacted by changes in prices, the cost of final goods, the cost of raw materials, labor

costs, or the costs of input or output and other substitute goods as a result of fluctuating exchange rates. However, the impact of exchange rates varies depending on the type of product and the competitive environment in which the entity operates (Moles and Bradley, 2001). Therefore, the foreign exchange exposure theory explains how changes in exchange rates have a significant impact on the firm's value by influencing sales and net asset values.

### **2.6.2 Currency Base Theory**

This theory was developed by Aliber (1971) and the currency base theory is based on imperfect foreign exchange and capital market. He postulates that internationalization of firm can best be explained in terms of the relative strength of different currencies, such as firms from a strong-country and firms from a weak country. In a weak-currency country, the income stream is fraught with greater exchange risk and as a result, the income of a strong-currency firm country firm is capitalized at a higher rate, implying that such a firm is to acquire a large segment of income generation in the weak currency country corporate sector.

### **2.6.3 The Purchasing Power Parity Theory**

One theory for determining exchange rates is purchasing power parity, or PPP. In its most popular form, it states that changes in the relative price levels of the two nations determine how much the exchange rate between two currencies changes over time. Dornbusch (1985) The Swedish economist Gustav Cassel's writings from 1918 served as the foundation for the purchasing power parity (PPP) theory. According to the theory, depending on each nation's currency, the value of similar goods is comparable across nations. He asserts that the exchange rates between nations' currencies will be in balance when their purchasing power is comparable. According to Reid and Joshua's (2004) theory, the country's currency should be equal to the ratio of commodity price levels.

The underlying presumptions of this theory are that the commodities being traded are homogeneous, there are no transaction costs, and there are no trade barriers. A homogenous commodity should have the same price across borders if the trading currency is exchanged at the spot exchange rate. To ascertain the precise price of a uniform good across nations, the theory recommended using price indices. Given that different nations use different goods to determine

their price level, the primary challenge of this belief is measuring Purchasing Power Parity derived from price indexes (Reid, 2005). Menon and Viswanathan (2005) demonstrated the absolute and relative PPP classifications.

### **a) Absolute PPP**

According to Kanamori (2006), the theory of Absolute Purchasing Power Parity (PPP) contends that the ratio of two nations' national price levels alone determines the equilibrium exchange rate between them. It makes the assumption that there are no trade restrictions and that the market is completely competitive, enabling the law of one price to operate perfectly. But in practice, this ideal state is hampered by things like import quotas, tariffs, and transportation costs. As a result, there are still price disparities between nations for identical goods. Assuming that the domestic and international markets operate as one integrated market, absolute PPP is commonly regarded as a prerequisite for goods market equilibrium. because it ignores international payment balances and money market dynamics.

### **b) Relative PPP**

As discussed by Mishkin (2012), this version of Purchasing Power Parity (PPP) recognizes that market imperfections exist, meaning that identical goods may have different prices even when measured in a common currency. Despite this, the theory maintains that, provided transportation costs and trade barriers remain unchanged, the rate of change in the price levels of goods baskets across countries should be relatively similar. According to the theory, the percentage change in the actual spot exchange rate between two countries is determined solely by the difference in their inflation rates. This can be expressed as: Percentage change in spot rate = Inflation rate of the foreign (counter) currency – Inflation rate of the domestic (base) currency.

## **2.6.4 Interest Rate Parity Theory**

As noted by Keynes (1923), even during the gold standard era, monetary authorities observed that exchange rates were influenced by shifts in monetary policy. An increase in domestic interest rates typically led to an appreciation of the local currency, while a decrease resulted in depreciation, indicating that asset prices have a significant effect on exchange rate movements. The concept now

referred to as interest rate parity (IRP) was introduced by Keynes to illustrate the relationship between interest rates, inflation, and exchange rates. This framework forms the basis of what is known as the asset approach to exchange rate determination.

The IRP theory assumes that international investors respond to differences in returns on similar financial assets across countries, thereby driving changes in the spot exchange rate. In this context, IRP also suggests that financial account transactions influence the exchange rate in the foreign exchange (Forex) market. The theory is divided into two types: Covered Interest Rate Parity (CIRP) and Uncovered Interest Rate Parity (UCIRP). CIRP links spot and forward exchange rates with interest rates in two economies, assuming no arbitrage opportunities. In contrast, UCIRP connects the spot rate with the expected future exchange rate, considering nominal interest rates across countries without forward contracts. For Ethiopian banks operating under FX liberalization, ignoring IRP principles can expose them to speculative losses when forward rates and spot rates diverge. Since Ethiopia lacks a well-functioning forward market, banks may be unable to lock in future rates, making them more vulnerable to interest-rate-induced currency depreciation and portfolio misalignments (Madura, 2012; Mengistu, 2022).

### **2.6.5 The International Fisher Effect**

As explained by Mishkin (2012), this model was developed by Irving Fisher in his book *The Theory of Interest Rate* and introduces the idea that the nominal interest rate ( $R$ ) consists of a real interest rate plus a premium ( $I$ ) for expected inflation. This implies that if investors worldwide seek the same real return, differences in interest rates between countries are primarily due to differences in expected inflation. According to Ubindi (2006), interest rate variations across countries arise because inflation expectations differ, while investors still require the same real return. The theory also suggests, as noted by Madura (2012), that currencies with higher nominal interest rates tend to depreciate because those high rates reflect higher expected inflation.

The Fisher Effect explains why inflation may not impact the real interest rate over the long term. For real interest rates to remain unaffected by inflation, nominal interest rates must adjust to changes in inflation. For example, if inflation rises by 2%, nominal interest rates should also increase by 2%, keeping the real interest rate stable since the two changes offset each other.

Additionally, nominal interest rates include the default risk of investments, as discussed by Staikouras and Wood (2004).

The theory assumes that borrowing in one country and investing in another should not yield positive returns in the long run because exchange rates adjust to counterbalance interest rate differences (Ubindi, 2006). However, the theory has limitations since other factors besides inflation also influence exchange rates, meaning exchange rates may not always align perfectly with inflation differentials. This theory is important for this study as it helps explain the purchasing power of currencies, capturing inflation differences across countries, and ensuring that at equilibrium exchange rates, the cost of a basket of goods and services in one country's currency equals that in another country.

## **2.7 Gross Domestic Product**

Bank profitability may be impacted by the state of the nation's economy. Therefore, the performance of the bank may be impacted by the impact of the exchange rate on the overall economy. The relationship between the economy and exchange rate was evaluated by various studies. Charles (2006) demonstrated, for instance, that the exchange rate is one of the most crucial tools for economic adjustment as well as one of the most challenging and contentious instruments for economic policy. According to the study, domestic industry is only protected by exchange rate depreciation when the cost of production at home rises significantly less quickly than the rate of depreciation, while the price of imported equivalents rises by the entire amount of the depreciation.

By altering the relative prices of goods, exchange rate fluctuations have a significant impact on a nation's imports and exports. According to Adesola and Taiwo (2013), who cited Agu (2002), the goal of the best exchange rate policies should be to cool the real exchange rate (RER) in order to preserve the equilibrium of the economy both internally and externally. Here, "internal balance" refers to the degree of economic activity that permits both full employment of resources and adequate control of inflation. Conversely, external balance is characterized by payment equilibrium and a sustainable current account deficit that is financed using a long-term basis of anticipated capital flow. Instability in the external and internal balance is likely to result from any variation in the real exchange rate. An economy's internal and external balances are maintained by the exchange

rate, which is generally seen as a tool for economic adjustment and has a significant impact on the import and export industry.

## **2.8 Determinants of Bank Financial Performance**

The financial performance of banks is influenced by several key factors, including exchange rates, inflation, bank size, and interest rates. The exchange rate, which determines the price at which foreign currency can be acquired, fluctuates over time due to various factors, making it unpredictable for businesses engaged in international transactions (Hoyle et al., 2011). Countries adopt different exchange rate policies, categorized into three main systems: floating, fixed, and managed floating exchange rate systems, where government intervention varies to stabilize currency fluctuations (Hoyle et al., 2011). Exchange rate fluctuations impact organizations, particularly those involved in international transactions, while locally focused banks experience minimal effects (Nyandema, 2016).

A high exchange rate can discourage foreign investors, reducing banking activities such as savings and borrowing, which in turn lowers returns. Inflation, defined as the percentage change in price levels over time, affects the economy by reducing the purchasing power of money (Mankiw, 2003). It leads to increased prices of commodities, making transactions less favorable and impacting businesses and consumers alike (Biller, 2007). Although inflation can sometimes benefit organizations that invest before inflationary periods, it is largely unpredictable and negatively affects economic stability, making it necessary for banks to develop mechanisms to manage its impact.

The size of a bank is also a crucial determinant of financial performance, as larger banks benefit from economies of scale, leading to increased efficiency and profitability (Wild, 2010). Large banks tend to attract more customers, engage in higher transaction volumes, and are perceived as more stable, which enhances their financial performance (Ahmed, 2015). Additionally, in times of financial risk, large banks can absorb shocks better than smaller banks, which are more vulnerable to insolvency (Teece, 2009). Interest rates, which represent the cost of borrowing, are another significant factor affecting bank performance. They are closely linked to inflation and exchange rates, as central banks manipulate interest rates to regulate economic conditions (Bergen, 2010). Higher interest rates attract foreign capital, strengthening the local currency, whereas lower interest

rates encourage borrowing but may weaken the currency. Interest rates also impact banking revenue since they directly influence the spread between lending and deposit rates, which constitutes a major income source for banks. In this research, the interest rate spread, defined as the difference between the lending rate and the deposit interest rate, is used as a key measure of banking performance.

## **2.9 Independent Forex Bureaus in Ethiopia**

By granting licenses to independent forex bureaus, the National Bank of Ethiopia (NBE) has started a major reform in the nation's foreign exchange market. The objectives of this action are to increase accessibility, liberalize the foreign exchange market, and foster transparency in currency exchange activities (NBE, 2024). Five non-bank organizations received operational licenses from the NBE in October 2024: Robust Independent Foreign Exchange Bureau, Global Independent Foreign Exchange Bureau, Ethio Independent Foreign Exchange Bureau, Yoga Forex Bureau, and Dugda Fidelity Investment PLC. These bureaus are only permitted to buy and sell major convertible currency cash notes, and they can only do so on the spot market. They are not allowed to open letters of credit for trade transactions or engage in other forex market segments (NBE, 2024).

The NBE has set strict regulatory standards for these bureaus in order to guarantee compliance and preserve market integrity. In addition to providing a security deposit double that amount, held in a blocked, interest-bearing account, applicants must meet a minimum capital requirement of 15 million Birr. Foreign nationals and corporations are specifically excluded from eligibility, which is limited to Ethiopian nationals, non-resident Ethiopians, and foreign citizens of Ethiopian origin (Addis Fortune, 2024). Additionally, the NBE closely monitors and oversees these bureaus' operations to make sure that the duties and responsibilities specified in Foreign Exchange Directive No. FXD/01/2024 is being followed (NBE, 2024).

## **2.10 Review of Empirical Literature**

Ngerebo (2012) studied how changes in the foreign exchange rate affected the way Nigerian banks provided financial services between 1970 and 2004. The study mainly relied on data from the Central Bank of Nigeria. Using information from these 34 years, the researcher found that fluctuations in exchange rates had a strong impact on how well banks could perform their

intermediation role, basically, how well they could connect savers and borrowers. The study used a quantitative approach, analyzing time-series data to see how changes in exchange rates (the independent variable) influenced the Commercial Bank Intermediation Index (CBII), which measures banks' performance in this area (the dependent variable). A simple linear regression was used to test whether there was a meaningful and positive link between exchange rate changes and CBII. The idea was that if the result (coefficient) turned out to be both positive and statistically significant, then the hypothesis that there's no relationship would be rejected.

Majok (2015) conducted a study to examine how changes in exchange rates affect the financial performance of commercial banks in Kenya. The study used a descriptive research design and relied on secondary data from the Central Bank of Kenya and the banks' consolidated financial statements. The findings revealed that fluctuations in foreign exchange rates were positively linked to the financial performance of the banks, as measured by the return on assets (ROA) ratio.

Sabri (2011) studied how commercial banks in Pakistan manage foreign exchange risk. The research used both quantitative and qualitative methods to evaluate the effectiveness of risk management in ten banks over an eight-year period. Specifically, the study applied panel data regression and a non-parametric technique called Lowes smoothing to assess how factors like credit risk, foreign exchange risk, liquidity, interest rate sensitivity, and forex exposure affect the banks' Capital Adequacy Ratio (CAR), which is used as a measure of efficiency. In addition to the data analysis, the study included a survey of risk managers to provide real-world insights that supported the findings. The results showed that financial risk indicators strongly influence how effectively banks manage risk. The survey also revealed that many banks follow Basel guidelines in their risk practices. While some banks had no exposure to foreign exchange risk, most had net foreign currency exposure roughly equal to their net assets. To manage these risks, banks used several strategies, including diversifying their foreign currency holdings, matching foreign currency assets with liabilities, and using currency derivatives.

Kim (2011) looked into how corporate firms and commercial banks in Korea manage foreign currency risks, both through what's shown on their balance sheets and what's kept off the books. The study had two main parts: the first focused on what influences firms to hold foreign currency net asset positions or use derivatives for hedging, and the second examined what drives banks'

exposure to foreign currency risk and how that relates to bank failures. The results showed that mismatches in currency positions, maturity timing, and debt rollovers were major risks, mainly because banks often used currency carries lending strategies. However, banks that kept their foreign currency positions and maturities better aligned were less likely to face financial trouble.

Eneyew (2013) carried out a study titled “*Financial Risks and Profitability of Commercial Banks in Ethiopia*” to examine how different types of financial risks affect bank profitability. Using a mixed-methods approach, the study analyzed data from eight Ethiopian commercial banks covering the years 2000 to 2011. It combined an analysis of financial records and macroeconomic indicators with in-depth interviews to understand the link between risk and profitability. The results showed that credit risk and liquidity risk had a strong negative impact on profitability. However, interest rate risk and foreign exchange risk did not show any significant effect. Based on these findings, the study recommended that Ethiopian banks prioritize strong credit risk management and maintain a balanced liquidity level to improve their return on assets.

Casey, He, and Fayman (2014) explored how foreign currency fluctuations affect the profitability of banks, focusing on 22 large U.S. commercial banks over a 40-year period. Their study showed that these banks are indeed exposed to foreign exchange risk, and their financial performance tends to move in line with changes in the value of the U.S. dollar compared to a group of other major currencies. The findings highlighted that when local currencies weaken against stronger foreign currencies like the Euro and British Pound, it can significantly impact the profits of banks, especially those involved in international business or serving clients who operate in multiple currencies.

Kiganda (2014) examined how macroeconomic factors affect the profitability of commercial banks in Kenya, using Equity Bank Limited as a case study. The study was based on the theory of production and used a correlation research design, analyzing annual data from 2008 to 2012. By applying a transformed version of the Cobb-Douglas production function and using ordinary least squares (OLS) regression, the study looked at how factors like real GDP, inflation, and exchange rates influenced bank profitability. The findings showed that these macroeconomic variables had no significant impact on the bank’s profitability at the 5% significance level.

Taiwo and Adesola (2013) studied how exchange rate changes affected the performance of Nigerian banks between 1970 and 2005. They used two indicators to measure bank performance: the capital deposit ratio and the loan loss to total advances ratio. Their regression analysis showed a positive link between exchange rate fluctuations and loan losses, suggesting that unstable exchange rates could lead to an increase in bad loans. However, the results also showed that exchange rate changes had no significant effect on the capital deposit ratio.

Osuagwu (2014) explored how exchange rate movements affect bank profitability in Nigeria, focusing specifically on non-interest margins and return on equity (ROE). The study found that exchange rates did not significantly affect return on assets (ROA), but they did have a strong impact on both ROE and non-interest margins. The reason for the weak effect on ROA was that many of the banks' assets were either fixed or off the balance sheet, making them less sensitive to exchange rate changes.

Yadollahzadeh, Ahmadi, and Soltan (2013) concentrated on determining the elements influencing Iranian commercial bank's performance. Using panel data regression techniques, the study looked at nine commercial banks from 2006 to 2010. The explanatory variables included things like bank size, gearing ratio, nonperforming loans, asset management, operating efficiency, and capital adequacy ratio, while the dependent variables were return on equity (ROE) and return on assets (ROA). The findings showed that the bank's performance was positively impacted by its size.

Similarly, Weersainghe and Ravinda (2013) studied how both bank-specific factors, like bank size, liquidity risk, operating costs, capital adequacy, and credit risk, and broader economic factors such as GDP growth and interest rates affect the profitability of commercial banks in Sri Lanka. They used quarterly data from 2001 to 2011 and applied multiple panel regression analysis. Their findings showed that larger banks tend to be more profitable, likely because they benefit from economies of scale. They also found that banks with higher capital ratios were more profitable. The study measured profitability using Return on Assets (ROA) and Return on Equity (ROE).

Kanwal and Nadeem (2013) studied how macroeconomic factors affect the profitability of listed commercial banks in Pakistan. They found that GDP had a small positive effect on Return on Assets

(ROA) but a small negative effect on Return on Equity (ROE). Inflation, however, showed a clear negative relationship with both ROA and ROE. The study did not look into how exchange rate changes affect profitability and concluded that overall, macroeconomic factors had little influence on banks' earnings. On the other hand, Hooshyari and Moghanloo (2015) examined the impact of inflation on Iranian banks, including both state-owned and private banks, and found a strong connection between inflation and bank profitability. This suggests that inflation plays a significant role in affecting the financial performance of banks in Iran.

Mengistu (2022) examined FX risk exposure in Ethiopian private banks and found that *economic exposure and policy volatility* were the most critical factors affecting profitability. His study emphasized that the lack of structured hedging tools significantly undermines banks' resilience against exchange rate shocks.

Adissu (2016) conducted a study on FX risk management practices among Ethiopian commercial banks and highlighted operational inefficiencies, outdated systems, and limited training as barriers to effective FX risk response. The study also noted banks' heavy reliance on central bank directives due to the absence of market-driven hedging mechanisms.

Asmamaw (2021) explored the impact of FX fluctuations on financial performance in Ethiopia's banking sector. The study used panel data from ten commercial banks and found that exchange rate volatility had a statistically significant negative effect on Return on Assets (ROA) and Return on Equity (ROE), especially during periods of currency devaluation.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the methodology, providing a detailed explanation of the research framework and the selection process for the study population. It also covers the research instruments used, data collection methods, and the procedures for data analysis.

#### **3.2 Research Approach**

This study employed a mixed research approach to assess foreign exchange (FX) risks management in Ethiopia's banking sector, focusing on the Commercial Banks of Ethiopia. A mixed-methods approach was chosen to combine the strengths of both quantitative and qualitative data. The structured Likert-scale survey enabled collection of standardized responses for statistical analysis, while open-ended questions captured richer, context-specific insights into operational challenges and policy responses that cannot be quantified. This combination improves the depth, context, and explanatory power of the findings, particularly in areas like FX risk where both numerical performance data and institutional experience are critical (Creswell, 2014). The goal of employing both quantitative and qualitative methods is to get around the drawbacks of relying solely on one. As argued by Creswell (2014), the study seeks to create a comprehensive understanding of FX risk management practices in Ethiopian banks by fusing the depth and context of qualitative insights with the objectivity and generalizability of quantitative analysis.

### **3.3 Research Design**

Research design refers to the structured framework for the collection and analysis of data in a manner that ensures relevance to the research objectives while optimizing time and resources (Kothari, 2004). A well-constructed research design facilitates the smooth execution of research activities, enabling the generation of meaningful insights with maximum efficiency and minimal cost.

This study adopted a descriptive research design, which, according to Saunders (2012), is particularly effective for understanding ongoing phenomena and exploring complex issues in real-world contexts. This design was appropriate for assessing foreign exchange (FX) risks and management practice across selected Ethiopian banks, as it allowed for the systematic collection and interpretation of data related to FX risk exposures.

Using structured questionnaires, a survey research strategy was used in accordance with the descriptive approach to gather both quantitative and qualitative data from respondents employed in international banking departments. These statistical tools improved the study's explanatory power and made it possible to pinpoint the underlying trends and factors that influence the banking industry's FX risk behavior.

### **3.4 Population Size and Sampling Techniques**

As of June 30, 2024, there were 32 domestic banks operating in Ethiopia (NBE-Financial-Stability-Report-2024). The Development Bank of Ethiopia (DBE), owned nearly 5% of the assets in the banking sector. The other institutions consist of four fully-fledged interest-free banks, six former microfinance institutions (MFIs) that converted to commercial banks, and 22 traditional commercial banks, including the largest bank in the country, the Commercial Bank of Ethiopia (CBE). Except for the DBE and CBE, all are private banks (NBE-Financial-Stability-Report-2024).

Six private banks, Commercial Bank of Ethiopia (CBE), Awash Bank, Bank of Abyssinia, Dashen Bank, Hibret Bank, and Cooperative Bank of Oromia, were selected for this study using purposive sampling. These organizations collectively hold approximately 76.8% of Ethiopia's banking sector assets due to their significant roles in trade financing and foreign exchange transactions (NBE, 2024), and they are particularly relevant for assessing the risks associated with foreign exchange fluctuations.

The study will focus on the International Banking Department's staff because they are directly involved in managing and processing foreign currency-related tasks. The target group consisted of fifteen technical and operational employees. With 15 responders per bank, the selection of 15 staff members per bank was based on both practical and methodological considerations. In most Ethiopian banks, FX-related tasks are handled by a relatively small number of professionals within international banking and treasury departments and targeting 15 employees per bank ensured access to individuals with direct involvement in foreign exchange operations while maintaining manageable data collection efforts. This number also provided balanced representation across the six selected banks, enhancing the validity and comparability of the findings without compromising depth or quality. This arrangement yields a sample size of 90 participants from all six banks. The study employed Yamane's (1967) simplified formula to determine an appropriate sample size from a known population.

The equation is written as:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- $n$  = required sample size
- $N$  = total population size
- $e$  = margin of error (set at 0.05 for 95% confidence level)

**Population Parameters:**

- Total staff per bank: 15
- Total population ( $N$ ): 6 banks  $\times$  15 staff = 90

**Calculation:**

$$n = \frac{90}{1 + 90(0.05)^2}$$

$$n \approx 73.46$$

**Result:** The computation guaranteed that the sample was statistically representative of the population and produced the minimum sample size of 74 respondents needed to obtain statistically

significant results with a 5% margin of error. Nevertheless, the study was able to gather responses from roughly 81 participants, which is more than the minimum amount that is advised.

### **3.5 Data Sources and Types**

This study integrates primary and secondary data to fully assess the foreign exchange risks and management practices in Ethiopia's banking sector. Secondary data has been obtained from the National Bank of Ethiopia's (NBE) annual reports, financial stability reports, and audited financial statements of the selected banks. Participants were carefully selected from banking departments that regularly deal with foreign exchange (FX) operations and risk management.

### **3.6 Data Collection Instrument**

This study used a questionnaire as its main data collection tool to make it easier to gather pertinent information. Because of its effectiveness, affordability, and capacity to collect vast amounts of data from a large sample in a comparatively short amount of time, the questionnaire method was selected. When evaluating banking professionals' attitudes, behaviors, and perceptions of foreign exchange risk, this method works especially well. More thorough and nuanced results were possible because both quantitative and qualitative data could be gathered using both open-ended and closed-ended questions. The questionnaire's first section will collect demographic data about the respondents, and its second section will include closed-ended questions intended to elicit their opinions and experiences with regard to foreign exchange risk management procedures. A 5-point Likert-scale, with 1 denoting strongly disagree and 5 denoting strongly agree, was used to score the responses. To enable respondents to offer more information or bring up topics not addressed in the structured items, an open-ended question will also be included.

### **3.7 Data Analysis and Presentation**

In accordance with the research questions and particular objectives, the gathered data was carefully edited, coded, sorted, examined, and interpreted. The Statistical Package for the Social Sciences (SPSS Version 20) was used for the analysis, enabling the data to be organized, summarized, and interpreted in a meaningful and structured manner. According to Zikmund, Babin, Carr, and Griffin's (2010) recommendations, the type of data collected whether quantitative, qualitative, or both, guided the selection of analysis tools.

Descriptive statistical methods such as frequencies, percentages, means, and standard deviations were used to summarize the quantitative data, which included Likert-scale responses regarding exposure to and management of foreign exchange (FX) risk. For the qualitative data, content analysis was used to look at responses to open-ended questionnaires. Finding recurring terms, themes, and patterns were necessary to supplement and improve the quantitative findings. These were then measured and examined. Marketal (2009) asserts that content analysis is a helpful technique for transforming qualitative data into structured, comprehensible insights, enhancing the study's validity, reliability, and scope.

### 3.8 Reliability and Validity of the Study

Reliability refers to the consistency and stability of research results (Bryman and Bell, 2007). This concept is crucial in measurement, and the methodology of this study has been thoroughly detailed. Cronbach's alpha serves as a reliability coefficient, often employed to assess the internal consistency of psychometric test scores within a sample. A Cronbach's alpha value above 0.70 is generally considered acceptable. In this research, Cronbach's alpha was utilized to evaluate the reliability of the designed questionnaires. However, it is only one of several criteria for assessing measurement instruments or scales. Since the study incorporates multiple items for each variable, an internal consistency analysis was conducted using Cronbach's alpha reliability tests in SPSS. The findings indicate that the items demonstrate strong internal consistency.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.865	36

*Table 3.1. The reliability coefficient Cronbach's alpha*

With a Cronbach's alpha coefficient of 0.865, the questionnaire items have acceptable internal consistency. Values above 0.70 are typically regarded as satisfactory (Hair et al., 2019). This indicates that the survey questions used to evaluate different facets of foreign exchange risk management were reliable and statistically consistent across respondents.

### **3.10 Ethical Consideration**

This study kept to strict ethical guidelines by obtaining each participant's informed consent, ensuring voluntary participation, and maintaining confidentiality by anonymizing responses. Participants were fully informed of the study's objectives and their rights, and approval was given by relevant institutional and participating banks. Only the combined findings were published, and sensitive banking data was protected throughout the data collection and storage process. Throughout the study, the research design maintained integrity, transparency, and professional accountability by avoiding intrusive questions, adhering to organizational policies, and allowing participants to withdraw at any time without facing repercussions. All data sources will be appropriately cited and acknowledged in order to preserve transparency and avoid plagiarism.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

The analysis and interpretation of the data gathered to evaluate the risks of foreign exchange risks in the Ethiopian banking industry are presented in this chapter. This Section Presents the methods used to process both quantitative and qualitative data, such as descriptive statistics, and thematic content analysis, are first described in the data analysis section. The findings section provides the analysis's results, answering the research questions of the study and Objective.

#### 4.2 Respondents Profile

##### 4.2.1 Distribution of Survey Respondents among Selected Banks

The frequency and percentage of participants from each bank are highlighted in the table below, which displays the distribution of survey respondents across the chosen banks. This breakdown sheds light on how respondents were represented in the study.

*Table 4.1: Frequency Distribution of Respondents by Bank*

Responded banks	Frequency	Percent	Cumulative Percent
Commercial Bank of Ethiopia	13	16.0	16.0
Awash Bank	13	16.0	32.1
Bank of Abyssinia	15	18.5	50.6
Dashen Bank	13	16.0	66.7
Hibret Bank	13	16.0	82.7
Cooperative Bank of Oromia	14	17.3	100.0

Source (Survey Result, 2025)

A total of 81 valid responses were gathered from six carefully chosen commercial banks in Ethiopia, according to the descriptive statistics output table for the participating banks. With 15 responses (18.5%), the Commercial Bank of Ethiopia had the most responses. With 14 replies (17.3%), Hibret Bank came next. Thirteen responses, or 16.0% each, were provided by Awash Bank, Bank of Abyssinia, Cooperative Bank of Oromia, and Dashen Bank. Fair representation from both public and private financial institutions was ensured by the generally balanced distribution of responses across all chosen banks.

**4.2.2 Years of Experience of Respondents in the Banking Sector**

The frequency distribution of survey participants by years of experience is shown in the table below. The information provides a summary of the participants' professional backgrounds and levels of expertise by classifying them into various experience groups.

*Table 4.2: Frequency Distribution of Respondents by Years of Experience*

		<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
	3–5 years	16	19.8	19.8
	6–10 years	65	80.2	100.0
	Total	81	100.0	

Source (Survey Result, 2025)

The majority of participants, 65 out of 81 (80.2%), reported having between 6 and 10 years of experience in the banking industry, according to the descriptive statistics output table for respondents' work experience. Only 16 respondents (19.8%) reported having three to five years of experience. This implies that the majority of responders have a great deal of work experience, which gives their opinions on foreign exchange risk management procedures greater credibility and details..

### 4.2.3 Educational Background of Survey Respondents

The below table presents the distribution of survey respondents by educational qualification categorizing participants based on their academic background. It provides a clear breakdown of the varying levels of formal education among respondents in the study.

*Table 4.3: Frequency Distribution of Respondents by Educational Qualification*

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Bachelor’s Degree	22	27.2	27.2
Master’s Degree	59	72.8	100.0
Total	81	100.0	

Source (Survey Result, 2025)

Based on the descriptive statistics output table The majority of respondents, 59 out of 81 (72.8%), have a Master's degree, according to the descriptive statistics output table for respondents' educational background. 22 (27.2%) of the remaining respondents have a bachelor's degree. This shows that the respondents have a high level of education, which improves the accuracy of their answers and implies that they have a solid academic background in understanding and employing foreign exchange risk management techniques..

### 4.2.4 Questionnaire Completion Rate among Distributed Surveys

The number and percentage of surveys that are fully, partially, or not returned are displayed in the table below, which shows the completion status of the distributed questionnaires.

*Table 4.4: Completion Status of Distributed Questionnaires.*

	<b>No of Questioner</b>	<b>Percentage</b>
Completed	81	90%
Not Completed	9	10%
Total	90	100%

Source (Survey Result, 2025)

81 of the 90 questionnaires that were distributed were filled out and returned, indicating a high response rate of 90%, according to the descriptive statistics output table for questionnaire

completion. Just 9 (10%) of the questionnaires were left unfinished. This high completion rate improves the data's representativeness and dependability for evaluating the risks associated with foreign exchange fluctuations in Ethiopia's banking industry.

### 4.3 Descriptive Analysis

This section presents a descriptive analysis of respondents' perceptions of risk management strategies, foreign exchange (FX) transaction procedures, and the consequences of Ethiopia's FX policy reforms. The results are arranged into frequency distributions and descriptive statistics (mean and standard deviation) to assess the level of agreement among banking professionals on significant FX-related issues.

#### 4.3.1 Risk Identification and Assessment.

The following table shows respondents' views on key practices related to the identification and assessment of foreign exchange (FX) risks within their banks. It combines frequency data (Agree, Strongly Agree), mean scores, and standard deviations for each statement, based on responses from 81 participants.

*Table 4.5: Respondents Perceptions on Risk Identification and Assessment*

Statements	Response	Frequency	Mean	Std. Deviation
Our bank systematically identifies all forms of FX risk.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		
There is a dedicated team responsible for monitoring FX risk.	Agree	21	4.74	0.441
	Strongly Agree	60		
	<b>Total</b>	<b>81</b>		
We use structured tools or technologies to assess FX risk exposure.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		
FX risk is evaluated during major financial decision-making.	Agree	26	4.68	0.470

	Strongly Agree	55		
	Total	81		
Departments involved in FX operations report risk exposures regularly.	Agree	24	4.70	0.459
	Strongly Agree	57		
	<b>Total</b>	<b>81</b>		
Risk identification processes are standardized across branches.	Agree	20	4.75	0.434
	Strongly Agree	61		
	<b>Total</b>	<b>81</b>		
Our bank conducts risk assessments whenever there are policy or market changes.	Agree	22	4.73	0.448
	Strongly Agree	59		
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the combined descriptive and frequency statistics, The responses show broad agreement that banks have efficient procedures in place for identifying and evaluating foreign exchange risk, as indicated by the descriptive and frequency statistics taken together. The high mean scores for each statement, which ranged from 4.68 to 4.77, showed that there was a tendency toward strong agreement. For example, 60 out of 81 respondents strongly agreed that a dedicated team monitors foreign exchange risk, and 62 out of 81 respondents strongly agreed that their bank systematically identifies all forms of FX risk. The use of structured tools for FX risk assessment was also confirmed by 62 respondents.

Additionally, between 55 and 61 participants strongly agreed on other important practices, including regular exposure reporting by departments, standardized identification procedures, conducting assessments during market or policy changes, and evaluating FX risk during major decisions. Low standard deviations and consistent high agreement indicate that these risk management techniques are not only widely used but also consistently recognized and approved by the banks that were surveyed.

#### 4.3.2 Types of FX Risks Faced

The following table shows respondents' views on the different types and sources of foreign exchange (FX) risk exposure affecting their banks. It presents a combination of frequency data, mean scores, and standard deviations for each statement based on 81 valid responses. These factors reflect how banking professionals perceive operational, regulatory, and market-related FX risks in their daily activities.

*Table 4.6: Respondents Perceptions on Types of FX Risks Faced*

<b>Statements</b>	<b>Response</b>	<b>Frequency</b>	<b>Mean</b>	<b>Std. Deviation</b>
Our bank frequently deals with FX risks that come up during transactions	Agree	18	4.78	0.418
	Strongly Agree	63		
	<b>Total</b>	<b>81</b>		
Regulatory risk is considered to be a major concern of FX risk in our bank	Agree	21	4.74	0.441
	Strongly Agree	60		
	<b>Total</b>	<b>81</b>		
Addressing economic exposure to FX risk allows banks to safeguard profitability	Agree	11	4.86	0.345
	Strongly Agree	70		
	<b>Total</b>	<b>81</b>		
Changes in global interest rates affect our currency exposures	Agree	25	4.69	0.465
	Strongly Agree	56		
	<b>Total</b>	<b>81</b>		
Fluctuations in the Ethiopian Birr significantly impact our operations	Agree	17	4.79	0.410
	Strongly Agree	64		
	<b>Total</b>	<b>81</b>		
Cross-border payments increase our FX risk exposure	Agree	15	4.81	0.391
	Strongly Agree	66		
	<b>Total</b>	<b>81</b>		
Market uncertainty has increased the frequency of FX-related losses	Agree	18	4.78	0.418
	Strongly	63		

	Agree			
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the descriptive statistics output table, The majority of respondents firmly agreed, according to the output table of descriptive statistics, that a number of internal and external factors considerably increase their banks' exposure to foreign exchange risk. With 70 out of 81 respondents strongly agreeing (mean = 4.86, SD = 0.345) with the statement about protecting profitability through managing economic exposure, the highest level of agreement was observed. In a similar vein, high mean scores above 4.7 were reported for the impact of currency fluctuations (64), cross-border payments (66), and frequent FX-related losses because of market uncertainty (63).

More than two-thirds of participants strongly agreed with the influence of global interest rate changes and regulatory risks, which are other noteworthy concerns. The low standard deviations and consistent responses show that respondents share a common understanding of the sources of FX risk exposure and that it is widely acknowledged across banks.

#### 4.3.3 Risk Management and Control Strategies.

The following table shows the responses of participants regarding the FX risk mitigation practices implemented by their banks. It combines statistical data including mean and standard deviation with frequency distributions for each key strategy, such as the use of hedging instruments, risk avoidance, diversification, risk transfer, internal controls, and training.

*Table 4.7: Respondents Perceptions on Risk Management and Control Strategies.*

Statement	Response	Frequency	Mean	Std. Dev.
Our bank uses hedging techniques (e.g., forwards, swaps) to manage FX risk.	Strongly Disagree	28	2.00	0.837
	Disagree	25		
	Neutral	28		
	<b>Total</b>	<b>81</b>		
Our bank avoids certain FX exposures as a risk reduction strategy.	Agree	9	4.89	0.316
	Strongly Agree	72		
	<b>Total</b>	<b>81</b>		
Risk diversification across currencies is actively	Agree	16	4.80	0.401

employed.				
	Strongly Agree	65		
	<b>Total</b>	<b>81</b>		
The bank transfers FX risk to third parties when needed.	Agree	12	4.85	0.357
	Strongly Agree	69		
	<b>Total</b>	<b>81</b>		
Our Bank follows strict internal control when it comes to FX risk control.	Agree	17	4.79	0.410
	Strongly Agree	64		
	<b>Total</b>	<b>81</b>		
Regular training is given on FX risk mitigation tools.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the results, respondents overwhelmingly agreed that banks actively avoid risky FX exposures (mean = 4.89), diversify across currencies (mean = 4.80), and transfer risk to third parties when necessary (mean = 4.85). Similarly, strong agreement was observed on maintaining strict internal controls (mean = 4.79) and providing regular training (mean = 4.77).

However, a notable exception is the use of formal hedging tools like forwards and swaps, which had a very low mean of 2.00. In fact, 53 out of 81 respondents either disagreed or strongly disagreed with the use of such instruments, likely reflecting limitations in Ethiopia's derivative markets.

These results suggest that while Ethiopian banks are proactive in indirect FX risk mitigation, the application of direct tools like hedging techniques remains underutilized.

#### 4.3.4 Impact of FX Policy Reforms

The following table presents responses from participants regarding how recent foreign exchange (FX) policy reforms and regulatory changes, particularly those issued by the National Bank of Ethiopia (NBE), have affected their banks' risk exposure, transaction strategies, internal controls, and staff awareness.

Table 4.8: Respondents Perceptions on Impact of FX Policy Reforms

Statement	Response	Frequency	Mean	Std. Dev.
Recent FX policy changes have increased our risk exposure.	Agree	23	4.72	0.454
	Strongly Agree	58		
	<b>Total</b>	<b>81</b>		
New NBE regulations have altered our FX transaction strategies.	Agree	16	4.80	0.401
	Strongly Agree	65		
	<b>Total</b>	<b>81</b>		
Policy reforms forced changes in our risk management and FX controls.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		
Staff are well-informed about recent FX regulatory changes.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		
Policy uncertainty increases our FX operational risks.	Agree	21	4.74	0.441
	Strongly Agree	60		
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the results, most respondents strongly agreed that new NBE regulations have altered FX transaction strategies (mean = 4.80), and that policy reforms have led to changes in risk management practices (mean = 4.77). Additionally, a large majority strongly agreed that staffs are well-informed about recent regulatory changes and that policy uncertainty increases operational FX risk, both with high mean scores of 4.77 and 4.74 respectively.

71.6% of respondents strongly agreed that recent FX policy changes have increased overall risk exposure. These findings indicate that regulatory changes are driving significant shifts in how

Ethiopian banks handle FX operations and risk, while also emphasizing the need for consistent staff awareness and adaptability to policy shifts.

#### 4.3.5 Influence of Private Forex Bureaus

The following table presents participant responses on the perceived impact of private foreign exchange (FX) bureaus in Ethiopia. It explores whether their entry has introduced new forms of FX risk, increased transactional competition, contributed to speculation, and the perceived importance of tighter regulations for ensuring market stability and fairness.

*Table 4.9: Respondents Perceptions on Influence of Private Forex Bureaus*

Statement	Response	Frequency	Mean	Std. Dev.
The entry of private forex bureaus has introduced new FX risk in the market.	Agree	19	4.77	0.426
	Strongly Agree	62		
	<b>Total</b>	<b>81</b>		
Competition from private bureaus has increased FX transaction risks.	Agree	17	4.79	0.410
	Strongly Agree	64		
	<b>Total</b>	<b>81</b>		
The existence of private FX bureaus has contributed to more speculative behavior in the FX market.	Agree	13	4.84	0.369
	Strongly Agree	68		
	<b>Total</b>	<b>81</b>		
Tighter regulation of private FX bureaus would stabilize the market and ensure fairness.	Agree	25	4.69	0.465
	Strongly Agree	56		
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the descriptive statistics output table The responses indicate a strong consensus that private FX bureaus have heightened market risks. A vast majority of respondents strongly agreed that their entry has contributed to new FX risks (mean = 4.77) and increased FX transaction risks (mean = 4.79). Notably, 84% strongly agreed that these bureaus contribute to speculative behavior (mean = 4.84), the highest agreement among all statements.

Furthermore, over two-thirds (69.1%) strongly agreed that stricter regulation of these bureaus would promote fairness and market stability (mean = 4.69). These findings reflect a broad perception among banking professionals that, while private FX bureaus play a role in the market, they also present systemic risks that require more rigorous oversight.

#### 4.3.6 FX Risk Management Effectiveness

This section presents descriptive statistics analyzing the participant perceptions of their banks' internal capabilities and practices related to foreign exchange (FX) risk management. This includes assessments of policy adequacy, staff training, operational consistency, internal auditing, and responsiveness to market fluctuations.

*Table 4.10: Respondents Perceptions on FX Risk Management Effectiveness*

Statements	Response	Frequency	Mean	Std. Dev.
Our bank effectively manages foreign exchange risks across all operations.	Agree	24	4.70	0.459
	Strongly Agree	57		
	<b>Total</b>	<b>81</b>		
The current FX risk policies in place are adequate and up-to-date.	Agree	14	4.83	0.380
	Strongly Agree	67		
	<b>Total</b>	<b>81</b>		
FX risk control mechanisms are consistently applied.	Agree	20	4.75	0.434
	Strongly Agree	61		
	<b>Total</b>	<b>81</b>		
Employees handling FX transactions are being well-trained in risk management.	Agree	15	4.81	0.391
	Strongly Agree	66		
	<b>Total</b>	<b>81</b>		
Our bank regularly reviews and updates its FX risk mitigation strategies.	Agree	23	4.72	0.454
	Strongly Agree	58		
	<b>Total</b>	<b>81</b>		
Internal audits regularly assess the bank's FX risk	Agree	14	4.83	0.380

management performance.				
	Strongly Agree	67		
	<b>Total</b>	<b>81</b>		
Our bank responds quickly to changes in FX market conditions.	Agree	18	4.78	0.418
	Strongly Agree	63		
	<b>Total</b>	<b>81</b>		

Source (Survey Result, 2025)

Based on the descriptive statistics output table the results show that banks in Ethiopia are perceived to have strong internal mechanisms for managing FX risk. A high percentage of respondents strongly agreed that current FX risk policies are adequate and up-to-date (82.7%, mean = 4.83), and that internal audits regularly assess FX risk management performance (82.7%, mean = 4.83).

Additionally, 81.5% strongly agreed that employees handling FX are well-trained (mean = 4.81), and a majority indicated that their banks respond promptly to market changes (mean = 4.78). The lowest, but still high, mean score was 4.70 for overall FX risk management across operations, with 70.4% expressing strong agreement. These findings suggest robust internal FX risk management practices across commercial banks, with a strong emphasis on policy, training, auditing, and timely response.

#### 4.4 Analysis of Qualitative Data

The open-ended qualitative responses collected from banking professionals were examined in this study using thematic analysis, a qualitative method for identifying, analyzing, and summarizing patterns (themes) in data. Thematic analysis was chosen due to its versatility and ability to provide broad insights into participant viewpoints and recommendations regarding foreign exchange risk management. Following a careful examination of the responses, key themes were found, including staff training, regulatory alignment, operational improvements, monitoring systems, internal controls, hedging strategies, and accurate documentation. This strategy allowed the researcher to systematically examine recurring ideas and align them with the study's objectives and conceptual framework.

#### **4.4.1. Emphasis on Hedging and Derivative Use**

A common point raised by many participants was the need to start using hedging tools like forward contracts and basic FX derivatives. Several respondents emphasized this by saying things like “we need to introduce FX hedging tools” or “start using currency forward agreements.” This concern was also reflected in the survey results, 53 out of 81 respondents either disagreed or strongly disagreed that their bank currently uses any hedging instruments (Mean = 2.00). This shows a strong concern across both the qualitative and quantitative data. Similar patterns were seen in earlier studies by Kim (2011) and Sabri (2011), which found that banks in Korea and Pakistan used financial derivatives to protect themselves from FX risk. Based on the theoretical discussions in Chapter Two, especially on foreign exchange exposure under managed float regimes, this recurring suggestion from participants signals that Ethiopian banks may be ready to adopt modern risk management tools, even though such instruments are still not well-developed locally.

#### **4.4.2. Enhanced Monitoring and Forecasting Systems**

Participants strongly emphasized the need to improve real-time monitoring systems and currency forecasting models. Many felt that banks should adopt more predictive, data-driven tools to better manage foreign currency movements. Comments like “improve forecasting methods for foreign currency needs” and “build a real-time FX exposure tracker” clearly reflect this demand. This concern is backed by the quantitative data, where there was a high level of agreement (Mean > 4.70) on the risks tied to market uncertainty and currency fluctuations, highlighting gaps in technology and data systems. These findings also align with earlier studies by Majok (2015) and Ngerebo (2012), who stressed that timely market information is key to maintaining bank profitability during exchange rate changes.

#### **4.4.3. Strengthening Internal Controls and Governance**

There was a strong emphasis on internal risk controls and supervision. The respondents suggested actions like "establishing daily FX transaction thresholds," "implementing dual authorization for large FX transactions," and "creating a dedicated FX risk register." The desire to institutionalize risk governance and make sure that foreign exchange exposures are methodically monitored and controlled is evident in these recommendations. These contributions corroborate earlier research by Eneyew (2013), who pointed out that effective internal controls are essential for reducing foreign

exchange-related risks in Ethiopian banks. Additionally, the suggestions are consistent with procedures described by Casey et al. (2014) in American banks, where control systems were essential for controlling exposure to foreign-denominated assets.

#### **4.4.4. Regulatory Alignment and Policy Responsiveness**

Many participants stressed the importance of aligning FX risk reports with the expectations of both the board and regulators, and keeping up with regulatory changes that affect FX operations. This directly supports the study's third objective, which looks at how Ethiopia's foreign exchange policy changes are impacting banks. It also matches the survey results in Section 4.3.4, where about 80% of respondents strongly agreed that recent policy reforms have increased their risk exposure and forced changes in how FX transactions are handled (Mean = 4.77–4.80). These concerns suggest that ongoing reforms by the National Bank of Ethiopia have made banks more aware of the need to improve compliance and make their internal processes more adaptable.

#### **4.4.5. Operational System Upgrades**

Respondents frequently emphasized the shortcomings of legacy systems, calling for enhancements to "system alerts for rate changes" and "FX transaction systems." The demand for FX operations to be automated and digitalized is a proactive stance that is consistent with the empirical data indicating that technology can serve as a hedge against market volatility.

#### **4.4.6. Documentation Accuracy and Procedural Rigor**

A number of respondents underlined the significance of documentation, suggesting actions like "ensure FX documents are complete and correct" and "improve documentation for FX transactions." Sabri (2011) and Eneyew (2013) also brought attention to this issue, pointing out that operational risk and regulatory violations are frequently caused by inconsistent documentation. These revelations emphasize even more how crucial it is to match compliance and control goals with internal documentation standards.

#### **4.4.7. Capacity Building and Awareness Programs**

The necessity of improved client education and staff training emerged as another major theme. Both internal and external stakeholders need to be better prepared to navigate FX risk environments, according to statements like "improve staff training on FX risk management" and "provide clients

with FX risk awareness." This is consistent with the findings of Weersainghe and Ravinda (2013) and Yadollahzadeh et al. (2013), This theme echoes the high standard deviation in the training question (Section 4.3.3), suggesting variation in how well staff perceive FX training effectiveness. who highlighted the importance of human capital in raising bank profitability and risk resilience. Wider education and training are crucial for systemic preparedness in Ethiopia, where FX expertise is frequently concentrated within a small number of teams.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter concludes the research by summarizing key findings, drawing meaningful conclusions, and offering practical recommendations based on the earlier analysis. The study set out to evaluate how selected commercial banks in Ethiopia manage foreign exchange (FX) risks and how these strategies affect their stability and performance. It specifically looked at how banks identify and handle different types of FX risk, how effective their risk management tools are, how recent policy changes from the National Bank of Ethiopia have impacted operations, and how private forex bureaus are influencing the market.

The summary brings together insights from both the survey data and the qualitative responses, giving a well-rounded view of current practices, challenges, and areas that need improvement in FX risk management. Conclusions are closely tied to the study's original research questions and objectives, while the recommendations are designed to help policymakers, banks, and regulators strengthen FX risk management in an increasingly dynamic market environment.

#### 5.2 Summary of Findings

The study explored how selected commercial banks in Ethiopia identify, manage, and respond to foreign exchange (FX) risks in the context of ongoing market liberalization and regulatory changes. One of the key findings is that most banks have put in place structured systems for identifying and assessing FX risks. Respondents confirmed that their banks use dedicated teams, organized tools, and regular review processes that are aligned with policy updates and major financial decisions. This finding supports Sabri (2011), who highlighted the importance of building strong risk monitoring systems, especially in developing countries where hedging tools are still limited.

When it comes to risk exposure, the study found that Ethiopian banks mainly deal with transaction risk, regulatory risk, and economic exposure. These risks are driven by fluctuations in the Ethiopian Birr and changes in global interest rates. Bank staff showed strong awareness of these challenges, which supports previous research showing that exchange rate volatility has a direct impact on bank profitability and stability (Ambe, 2019; Lencho, 2013). Economic exposure stood out the most, as it affects long-term cash flows and competitiveness, especially relevant in import-heavy economies like Ethiopia, as noted by Mahmoud et al. (2019).

In terms of how banks manage these risks, the study found that they mostly rely on strategies like risk avoidance, currency diversification, and internal governance. However, formal hedging tools like forwards and swaps are rarely used, mainly because Ethiopia's financial markets are still developing. This situation is similar to what Kim (2011) and Eneyew (2013) observed in Korea and Ethiopia, where limited market development held back the use of advanced risk management tools. Even so, strong internal controls and regular staff training are widely practiced and well-supported across the banking sector.

Another important finding from the study is the strong impact of recent FX policy reforms introduced by the National Bank of Ethiopia. Many respondents felt that these changes have increased their banks' exposure to risk, forced them to adjust operations, and reshaped their FX transaction strategies. This aligns with existing research, which shows that policy uncertainty can lead to greater FX-related losses and make long-term planning more difficult (Ngerebo, 2012; Osuagwu, 2014). On a positive note, bank staff across the board reported being well-informed about these changes, suggesting that internal communication systems are working effectively.

In addition, the growing presence of private forex bureaus has added a new layer of market risk. Many participants noted that these bureaus have increased competition, encouraged speculative behavior, and made FX transactions more risky. These concerns back up the National Bank of Ethiopia's (2024) decision to regulate these new players strictly, highlighting the need for transparency and proper oversight to keep the market stable.

In summary, the study offers solid evidence to support the theoretical and conceptual frameworks explored in the literature. It highlights the strengths Ethiopian banks have in terms of FX risk awareness and governance but also exposes major weaknesses in financial infrastructure and policy alignment that hold back effective risk management in practice.

### **5.3 Conclusion**

This study concludes that while Ethiopian commercial banks have made good progress in building internal systems and policies to manage foreign exchange (FX) risks, several key gaps still limit the full effectiveness of these efforts. The findings show that most banks have solid institutional structures in place, such as dedicated FX teams, standardized risk identification processes, and consistent internal controls. These strengths reflect Sabri's (2011) view that strong governance, staff

training, and monitoring systems are essential for effective risk management in developing markets with limited financial tools.

However, despite these internal capabilities, the study also found that formal hedging tools like forward contracts and swaps are rarely used. As noted by Kim (2011) and Eneyew (2013), this is largely due to Ethiopia's underdeveloped derivatives market and regulatory limitations that restrict banks' ability to manage direct currency exposure. Instead, banks tend to rely on more passive strategies like risk avoidance, diversification, and compliance, useful, but not always enough in today's complex and volatile FX environment.

The study also found that recent FX policy reforms by the National Bank of Ethiopia have significantly changed the risk landscape. These changes have increased exposure to currency risk and forced banks to adjust their transaction strategies and internal workflows. This is consistent with the findings of Ngerebo (2012) and Osuagwu (2014), who observed that sudden policy shifts in developing economies often increase operational risks when markets aren't yet mature.

Another concern highlighted in the study is the rising influence of private forex bureaus. While these entities add competition, many respondents expressed concern that they also fuel speculation and market instability. The findings support the NBE's (2024) decision to impose tighter oversight, emphasizing the need for stronger regulation to ensure fairness and transparency in the FX market.

## **5.4 Recommendations**

Based on the study's findings, several important recommendations are proposed to improve foreign exchange (FX) risk management among Ethiopian commercial banks:

First, there is an urgent need to introduce and develop formal hedging tools like forwards, swaps, and options in Ethiopia's financial market. Survey results showed that over 65% of respondents disagreed that their banks currently use such instruments (Mean = 2.00), and many highlighted this gap in their comments. The National Bank of Ethiopia (NBE) should lead efforts to establish basic derivative markets, starting with regulated forward contracts. At the same time, banks should invest in training their staff on how to use these hedging tools effectively. Relying mostly on risk avoidance and diversification is no longer enough to handle today's complex FX exposures. As Allayannis (2001) and Sabri (2011) emphasize, effective FX risk management depends on access to well-developed financial derivatives. NBE and banks need to work together to build the legal, regulatory, and technical frameworks needed to support these instruments.

Second, banks should improve their real-time FX exposure monitoring and forecasting capabilities. While there was strong agreement on the need for structured FX assessment tools (Mean = 4.77), many still rely on manual processes. Introducing real-time monitoring systems and internal dashboards can help banks get better visibility of their exposures across different branches. Although internal controls and periodic risk reviews are generally in place, there's a clear gap in proactive forecasting. Upgrading digital systems and using predictive analytics would support timelier decision-making, as Lam (2003) highlights, which is critical in volatile currency markets.

Third, regulators should take care to implement FX policy reforms with more coordination, consultation, and transitional support. The study found that recent policy changes increased risk exposure and disrupted banks' internal strategies. To avoid causing shocks that destabilize the system, regulators should follow a more gradual and consultative approach to reforms, as recommended by Ngerebo (2012).

Fourth, the growth of private forex bureaus calls for stronger regulation and clear operational rules. While these bureaus can improve access to foreign currency and increase competition, they also pose risks if left unchecked. As outlined in the NBE (2024) directive and echoed by respondents, strict capital requirements, transparency measures, and transaction monitoring are essential to prevent speculation and protect market stability.

Finally, banks should consistently invest in staff training focused on modern FX risk management. Even though many employees have strong educational backgrounds (72.8% hold master's degrees), training on practical tools like financial instruments, scenario planning, and regulatory compliance seems uneven. Banks should develop targeted FX training programs, and the NBE could collaborate with international partners to build capacity across the sector.

## **5.5 Areas for Future Study's**

While this study offers a thorough look at foreign exchange (FX) risk management in selected Ethiopian commercial banks, there are several areas that future research could explore further.

First, future studies could examine the direct quantitative relationship between FX risk exposure and financial performance indicators like return on assets (ROA), return on equity (ROE), and non-performing loan ratios regarding the FX regime Change. While this study focused on management

practices and perceptions, measuring these direct financial impacts would provide stronger evidence of how effective different risk strategies really are. This approach has been supported by studies such as Majok (2015) and Casey et al. (2014), who linked FX volatility to bank profitability.

Second, it would be useful to conduct comparative research across different types of banks, small versus large, interest-free banks, newly converted microfinance institutions. This could reveal whether risk management maturity and resource availability differ significantly by institution type, echoing findings from Yadollahzadeh et al. (2013) on how organizational structure influences performance.

Third, future research should explore how technology and digital tools are changing FX risk forecasting and management. As the FX market evolves, studies focusing on fintech solutions, like AI-powered currency prediction models, could provide valuable insights into modernizing Ethiopia's risk management practices.

Fourth, longitudinal studies tracking the FX environment over several years after the National Bank of Ethiopia's 2024 reforms would be helpful. Since this study took place shortly after the reforms, longer-term research could better assess their lasting impact on currency stability, speculative behavior, and overall bank performance.

Finally, understanding customer behavior and perceptions related to FX fluctuations is another important area. Examining how businesses engaged in international trade respond to exchange rate changes and policy shifts can help banks and private forex bureaus design better client-focused services and strategies.

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Appendix-I: Questionnaire

**Addis Ababa University**

**College of business and economics**

**Department of corporate finance specialization on investment management.**

**ASSESSMENT OF FOREIGN EXCHANGE RISK IN ETHIOPIAN BANKING SECTOR**

A partial fulfillment of the requirement of the Master of Science degree in corporate finance-specialization on investment management.

*Prepared by: Frew Abebe*

Dear Respondent,

I sincerely appreciate your time and expertise in completing this questionnaire, which supports my thesis research titled “*Assessment of Foreign Exchange Risk in Ethiopian Banking Sector.*” Your honest and prompt responses are invaluable to fulfilling the academic requirements for my degree.

This survey will take approximately 15–20 minutes to complete. All data will remain strictly confidential and will be used solely for academic purposes. Please provide your candid insights to ensure the success of this important study.

Thank you for your generous contribution.

*Frew Abebe*

**Demographic Information**

1. Bank Name: \_\_\_\_\_
2. Years of Experience in the Banking Sector:
  - Less than 3 years
  - 3–5 years
  - 6–10 years
  - More than 10 years

**3. Educational Background:**

- Diploma
- Bachelor’s Degree
- Master’s Degree
- PhD
- Other: \_\_\_\_\_

Please indicate your level of agreement with the following statements

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

**Section 1: Risk Identification and Assessment.**

1. Our bank systematically identifies all forms of FX risk.	1	2	3	4	5
2. There is a dedicated team responsible for monitoring FX risk.					
3. We use structured tools or Technologies to assess FX risk exposure.					
4. FX risk is evaluated during major financial decision-making.					
5. Departments involved in FX operations report risk exposures regularly.					
6. Risk identification processes are standardized across branches.					
7. Our bank conduct risk assessments whenever there are policy or market changes					

**Section 2: Types of FX Risks Faced**

6. Our bank frequently deals with FX risks that come up during transactions.	1	2	3	4	5
7. Regulatory risk is considered to be major concern of FX Risk in our Bank.					
8. Addressing economic exposure to FX risk allows banks to safeguard profitability.					
9. Changes in global interest rates affect our currency exposures.					
10. Fluctuation in the Ethiopian Birr significantly impacts our operations.					
11. Cross-border payments increase our FX risk exposure					

12. Market uncertainty has increased the frequency of FX-related losses.					
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**Section 3: Risk Management and Control Strategies.**

11. Our bank uses hedging techniques (e.g., forwards, swaps) to manage FX risk.	1	2	3	4	5
12. Our bank avoids certain FX exposures as a risk reduction strategy.					
13. Risk diversification across currencies is actively employed.					
14. The bank transfers FX risk to third parties when needed.					
15. Our Bank follows strict internal controlled when it comes to FX risk Control.					
16. Regular training is given on FX risk mitigation tools					

**Section 4: Impact of FX Policy Reforms**

16. Recent FX policy changes have increased our risk exposure.	1	2	3	4	5
17. New NBE regulations have altered our FX transaction strategies.					
18. Policy reforms have forced changes in our risk management practices and internal FX controls.					
19. Staffs are well-informed about recent FX regulatory changes.					
20. Policy uncertainty increases our FX operational risks.					

**Section 5: Influence of Private Forex Bureaus**

16. The entry of private forex bureaus has introduced new FX risk in the market.	1	2	3	4	5
17. Competition from private bureaus has increase FX transaction risks.					
18. The existence of private FX bureaus has contributed to more speculative behavior in the FX market.					
19. Tighter regulation of private FX bureaus would stabilize the market and ensure fairness.					

**Section 6: FX Risk Management Effectiveness**

16. Our bank effectively manages foreign exchange risks across all operations.	1	2	3	4	5
17. The current FX risk policies in place are adequate and up-to-date.					
18. FX risk control mechanisms are consistently applied.					
19. Employees handling FX transactions are being well-trained in risk management.					
20. Our bank regularly reviews and updates its FX risk mitigation strategies.					
21. Internal audits regularly assess the bank's FX risk management performance					
22. Our bank responds quickly to changes in FX market conditions					

**Open Ended Question**

- What tools or techniques do you recommend for improving FX risk management, including hedging methods and forecasting systems?

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- What challenges do you face in monitoring and controlling FX exposures, and how can internal controls be strengthened?

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- How have recent foreign exchange policy changes affected your department's daily operations and compliance efforts?

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- What system or technological upgrades would help enhance the efficiency and accuracy of FX transaction processing?

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- What kind of training or awareness programs do you think are necessary for both staff and clients to better manage FX risks?

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