



# THE EFFECTS OF FINANCIAL RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF MONEY EXCHANGE DEALERS

<sup>1</sup>Akhlaqi. Liaqat Ali, <sup>2</sup> Haidary. Abdul Hakim

<sup>1</sup> University lecturer, Department of Accounting and Management, Economics faculty of Taj Institute of Higher Education, Mazar I Sharif, Afghanistan

<sup>2</sup> University lecturer, Department of Business Administration, Economics faculty of Taj Institute of Higher Education, Mazar I Sharif, Afghanistan

**Abstract:** Financial and credit institutions, often known as non-bank financial institutions, are institutions that act as financial market intermediaries. In many ways, their services are comparable to those offered by banks. So, in Balkh province, research on the relationship between financial risks and the financial performance of these institutions and exchange dealers is particularly significant. In order to determine the consequences of these financial risks, they were separated into two groups and assessed using two hypotheses in this study. The impacts of each variable were estimated using a multivariate regression model. The independent variables in this model are systematic risk and credit risk, with the dependent variable of return on assets serving as a proxy for the financial institution's performance.

The statistical population of this study includes exchange dealers and financial institutions in Mazar-e Sharif's Kefayat market, with 110 samples picked using a random sampling approach. The results demonstrate that all of the study variables that were tested at the 0.05 percent level of significance. The findings also show that there is meaningful and significant relationship between foreign exchange risk, market risk, interest rate risk, and purchasing power risk on the MXDs' financial performance. For each indication of systematic risk variable, the beta coefficients are -0.168, -0.178, -0.102, -0.231, respectively. The components of the research's second hypothesis demonstrate a substantial association between credit risk and default risk trend on financial performance, as well as the power of correlation with ROA, which are -0.068 and -0.378, respectively.

**Key words:** Money exchange dealers, financial risk management, financial performance, systematic risk, credit risk.

## 1- INTRODUCTION AND BACKGROUND

Foreign exchange markets are often the most active and important asset markets in developing and transition economies, yet few research papers on the subject have systematically documented their structures or main characteristics. (Canales-Kriljenko, 2004, p. 4). In the 1990s, the United Nations Cultural, Scientific, and Educational Organization set a goal for its members to provide "education for all." The goal was to give everyone access to basic education. Although many governments passed the law, insufficient resources prevented them from achieving their goals. Also, some countries, even if they could provide this access to citizens, due to limited resources, suffered a lot in the quality of education (Chandani, Neeraja, and Sreedevi 2007). In this context, privatization was seen as a potential tool in some areas to provide education for all (Caddell and Ashley 2006).

Money exchange dealers (MXDs) play a critical role in the economic development and business transaction facilitation of the businesses in Mazar e Sharif. Kefayat market is one of the important centers for the MXD in Mazar e Sharif, therefore we have decided to conduct our research study in this specific geographical location. As the MXDs play a vital role in the facilitation of business transactions, the associated risk of currency exchange should also be taken into consideration which is the subject matter of this study.

The work exchange means trading of all kinds of money. As our target location is Balkh province which is located in border to Uzbekistan, and many of the goods are imported from this location and many of the remittances are done via Hawala through money exchange providers and the local currency is converted to USD or other currencies. Therefore existence of money service providers/ money exchange dealers is a crucial factor to the flow of business. Even many major transactions inside Mazar e Sharif are done in foreign currency which makes the role of MXDs vital.

“Risk is called the chance that an investment's actual return will be different than expected. Risk includes the possibility of losing some or all of the original investment. Different versions of risk are usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment. A high standard deviation indicates a high degree of risk.” (Lyridis, 2015, p. 2)

“The process of determining the likelihood that a specified negative event will occur. Investors and business managers use risk assessments to determine things like whether to undertake a particular venture, what rate of return they require to make a particular investment and how to mitigate an activity's potential losses”. (Lyridis, 2015, p. 5)

In an economically unstable country like Afghanistan in which the exchange rate is always floating it is extremely hard to mitigate the currency exchange risk, but by applying tools and techniques we can manage to reduce the risk to some extent or to mitigate some of the risks.

The main factors of money exchange risks are:

- ✓ Direct Foreign Investment (DFI)
- ✓ Monetary policy of the central bank
- ✓ Capital inflow and outflow
- ✓ Exchange Rate Stability
- ✓ Saving
- ✓ Employment
- ✓ Trading Activities/ frequency of traders
- ✓ COVID-19 Pandemic
- ✓ Political Situation
- ✓ Cash injection to the market (mainly USD)
- ✓ Trading Activities in the other currencies
- ✓ Political instabilities
- ✓ Inflation Rate (Horcher, 2005, p. 12)

Money Exchange Dealers play a critical role in the flow of business and cash circulations, therefore it is always demanded to have a thorough analysis of the risk factors for the sector in order to propose practical and logical approaches to mitigate or at least reduce the risks, yet working in the monetary industry contains huge inherent risk which is hard to avoid, but by applying some rational practices; we can reduce or in some areas mitigate the risk.

### **1-1- Problem Statement**

Many of money services providers including exchange dealers in Mazar e Sharif are running their businesses in traditional mode without proper knowledge of business, accounting, and risk management while this industry bears huge inherit risk. Taking this point into consideration it is necessary to have a vast overview of the inherit risk in the industry in order to measure the risk and suggest the procedures to mitigate some of them and reduce those which are inevitable. The fragile money exchange business in a floating and unstable economy with a high inflation rate bears tremendous risk factors which should be taken into account.

The risk factors should be highly monitored and dealt with as they hugely affect the operations and performance of money exchange dealers. Working in the monetary industry itself is a risky business which requires curative attention. The risk in this industry can damage the entire business, assets, and revenue of the business owners in a blink of an eye. One of the ways to deal gently with the risk associated in the industry is to have regular monitoring on the industry activities and market information. A single mistake in the business to ignore any risk can lead the business into bankruptcy and can even affect the entire business located in the same geographic location.

Not only this, the associated risk can even highly effect on the customers of the market and also any potential investors and entrepreneurs who want to invest in the industry. Due to high-risk rate and also lack of proper systems and procedures it would not be so easy for anyone to enter the market, but those who have prior background in the industry. While raising any risk issue, it will create an alert to the central bank (DAB) and they will also try to regulate it for precautionary procedures so that no other exchange dealer faces the same difficulty/ risk.

### **1-2- Significance of the Study**

As MXDs play a critical role in the flow of business and facilitation of foreign transactions, it is rational to analyze the risk factors of the industry. In this research I am intended to figure out the risk factors and suggest the approaches in order to mitigate or decrease the risks. This part of the economy is important for Mazar e Sharif as it a majority of imports from the middle east to Afghanistan is transited/ imported via Hairatan port which belongs to Balkh provinces and the remittances take place from Mazar e Sharif.

This research can be used by the money exchange dealers to measure their risk, analyze the risk and use the suggested solutions to mitigate the risks, and if mitigation is not possible, reduce the risks. It can also be used by policymakers like the central bank (DAB) to modify the regulations in order to enhance the performance of money exchange dealers and also reduce the risks.

This research paper can be used by the money exchange dealers to clearly point out the risk factors of their business and use the suggestions to reduce some of the risks and also mitigate some of the other risks which are possible. DAB can use this research to modify its regulations in order to reduce the risk and enhance performance of the money exchange dealers to create a safer business environment for the industry.

This piece of work will also work as a set of comprehensive information regarding money exchange dealers' activities and the risk associated with the business so it can be used by investors, potential businesses who want to enter this industry, and academic researchers as a reference.

### **1-3- Research Topic and Questions**

"THE EFFECTS OF FINANCIAL RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF MONEY EXCHANGE DEALERS in Money Exchange Dealers of Kefayat Market in Balkh Province" is this research topic. There are several elements that influence an investor's financial success, and these factors may change from one region to the next and nation to country. This research subject will focus solely on the factors impacting the financial performance of money exchange dealers in Afghanistan's Balkh region, with the goal of identifying and prioritizing these aspects.

**1-3-1. Main Question:**

Does the financial risk management affect financial performance of money exchange dealers in Kefayat market of Balkh province?

**1-3-2. Sub-questions:**

- 1- How systematic risks' indicators effects on financial performance of MXDs?
- 2- How credit risk effects on financial performance of MXDs?

**2- LITERATURE REVIEW**

According to Da Afghanistan Bank (DAB) law: Money Service Providers (MSP) means any service conducted in relation to money including safekeeping, money transmission (Remittance), check cashing, or currency exchange, and also Money Service provider means any individual or entity who is engaged into the business of providing money services. Meanwhile, MSPs are required to be licensed by DAB financial Supervision Department (Siddique, 2016).

Beside Financial Institutions like banks, money exchange dealers play a critical role in the ease of transactions by exchanging the foreign currency into local currency and vice versa. The industry has been center of concentration to many researchers who have researched different angles of the industry. As Afghanistan relies more on imports specially through northern ports from Central Asia, Kefayat Market exchange dealers play a vital role in this regard. In this chapter we will review the previous literatures on exchange dealers, finance, and risk management.

Money exchange dealers play a crucial role in the economic development of Afghanistan and ease of commerce either it is local business transactions or international business transactions. With the help of money exchange dealers, business remit their payments throughout the country and abroad, yet no certain research has been conducted on the financial risk management of the industry inside the country. In this research we will review the literature of the topics related to the subject matter.

Some researchers like (Baig, 2020) have researched on the exchange dealers and money service providers and their impact on the business growth. On the research conducted by him, he has found that 80.3 per cent of the respondents are agree that MXD play a critical role on the business growth in Mazar e Sharif (Baig, 2020, p. 71).

**Foreign Exchange Market is of two types retail and wholesale market:**

1. **Retail Market:** The retail market is a secondary price maker. Here travelers, tourists and people who are in need of foreign exchange for permitted small transactions, exchange one currency for another.
2. **Wholesale Market:** The wholesale market is also called interbank market. The size of transactions in this market is very large. Dealers are highly professionals and are primary price makers. The main participants are Commercial banks, Business corporations and Central banks. Multinational banks are mainly responsible for determining exchange rate.

**Other participants of the market are as follow:**

- a) **Brokers:** Brokers have more information and better knowledge of market. They provide information to banks about the prices at which there are buyers and sellers of a pair of currencies. They act as middlemen between the price makers.
- b) **Price Takers:** Price takers are those who buy foreign exchange which they require and sell what they earn at the price determined by primary price makers (Daru, 2016).

There are approximately one thousand non-bank financial service providers offering money exchange services all around the UK which is four times more than the number of the same business registered in Spain, France, Netherlands, and Germany cumulatively. In UK money service providers are officially called Money Service Business (MSB). The reason that there is numerous amount of MSB in the UK is due to the existence of authorized payment institutions registered in the country who are allowed to operate at any geographic location inside the country and in the European Economic Area (EEA).

There is financial crime risk associated with the sector because MSBs' access to banking services has been denied therefore the MSBs utilize alternative approaches which do not have sufficient anti money laundering supervision (Kraft, 2018).

Taking the rapid economic growth of India into consideration, the foreign exchange market in the country is growing parallel to the economic growth and very rapid. According (Daru, 2016) the annual turnover of the industry is more than USD 400 bn. without the interbank transactions. This market is included of sellers, buyers, the market middlemen, and the Indian monetary authorities. The market is controlled by Indian monetary authority, regulated by The Foreign Exchange Management Act (FEMA 1999), and managed by the financial institutions active in the industry. Due to high demand for the market, it is running nonstop, all 365 days of the year and all over the country. The market serves to a range of different dealers from big investors who exchange millions of USD to local individuals who transact USD100.

Exchange rate itself can impose risk to the economy as reflected in UNCTAD report "Despite the generally positive prospects, several challenges and risks face the world economy that may have implications for FDI flows in 2007 and 2008. Global current-account imbalances have grown dramatically in some developed countries. This could cause exchange-rate shifts, which may affect FDI negatively" (UNCTAD, 2007, p. 30).

## 2.1 The Exchange Market

The Exchange Market (also referred to as Foreign Exchange Market, Forex, FX, and Currency Market) is a decentralized market for trading currencies all over the world. The market determines exchange rates for different currencies. It includes all aspects of buying, selling and exchanging currencies at current or determined prices. In terms of trading volume, it is by far the largest market in the world, followed by the Credit market.

The main actors in the market are multinational banks and financial institutions around the world function as anchors of trading between a wide range of multiple types of buyers and sellers around the clock. Since currencies are always traded in pairs, the foreign exchange market does not set a currency's absolute value but rather determines its relative value by setting the market price of one currency if paid for with another. Ex: US\$1 is worth X CAD, AFN, CHY, JPY, etc. The foreign exchange market works through financial institutions and operates on several levels. Behind the scenes, banks turn to a smaller number of financial firms known as "dealers", who are involved in large quantities of foreign exchange trading. Most foreign exchange dealers are banks, so this behind-the-scenes market is sometimes called the "interbank market" (although a few insurance companies and other kinds of financial firms are involved). Trades between foreign exchange dealers can be very large, involving hundreds of millions of dollars. Because of the sovereignty issue when involving two currencies, Forex has little (if any) supervisory entity regulating its actions.

Non-bank foreign exchange companies offer currency exchange and international payments to private individuals and companies. These are also known as "foreign exchange brokers" but are distinct in that they do not offer speculative trading but rather currency exchange with payments (i.e., there is usually a physical delivery of currency to a bank account). It is estimated that in the UK, 14% of currency transfers/payments are made via Foreign Exchange Companies. These companies' selling point is usually that they will offer better exchange rates or cheaper payments than the customer's bank. These companies differ from Money Transfer/Remittance Companies in that they generally offer higher-value services (Kollmorgen, 2012).

The foreign exchange market assists international trade and investments by enabling currency conversion. For example, it permits a business in the United States to import goods from European Union member states, especially Eurozone members, and pay Euros, even though its income is in United States dollars. It also supports direct speculation and evaluation relative to the value of currencies and the carry trade speculation, based on the differential interest rate between two currencies. (UNCTAD, report 2007).

A foreign exchange market refers to buying foreign currencies with domestic currencies and selling foreign currencies for domestic currencies. Thus it is a market in which the claims to foreign moneys are bought and sold for domestic currency. Exporters sell foreign currencies for domestic currencies and importers buy foreign currencies with domestic currencies. Foreign Exchange transactions result in inflow & outflow of foreign exchange.

### 2.1.1 Functions of foreign exchange market

Foreign exchange is also referred to as forex market. Participants are importers, exporters, tourists and investors, traders and speculators, commercial banks, brokers and central banks. Foreign bill of exchange, telegraphic transfer, bank draft, letter of credit etc. are the important foreign exchange instruments used in foreign exchange market to carry out its functions (Daru, 2016).

### 2.1.2 The History of Foreign Exchange Market

The first time it was the ancient times that the demand raised for exchanging different currencies due to raise of multilateral trades. Individuals who were helping others to exchange their money into different currencies (and charge their transaction charges/ fees) were mainly living in the holy land at the times of Talmudic writings (Thomas, 2011).

During the 15th century, the Medici family were required to open banks at foreign locations in order to exchange currencies to act on behalf of textile merchants. To facilitate trade, the bank created the *nostro* (the Italian word for “ours”) account book which contained two columned entries showing amounts of foreign and local currencies; information pertaining to the keeping of an account with a foreign bank. During the 17th (or 18th) century, Amsterdam maintained an active Forex market. In 1704, foreign exchange took place between agents acting in the interests of the Kingdom of England and the Netherlands (Vasari, 2012).

### 2.1.3 Hawala (Money Transfer)

The term of money exchange has different names in different countries for example, it is called hawala in Afghanistan, Hundi in India, Fei-Ch'ien in China, Padala in Philipines, Hui Kuan in Hong Kong, and Phei Kwan in Thailand (El-Qorchi, 2002, p. 3).

## 2.2 Risk and Financial Risk

First of all, it is import to know a little about the risk itself and then we have to dive into the literature of financial risk management and what have been done so far in this regard. Some authors like (Steiner, 2002), ((Horcher, 2005), (Van Deventer, Donald R.; Imai, Kenji; Mesler, Mark;, 2013), (O'Brien, 2014), and (Lyridis, 2015), have researched in this regard.

“Although Foreign Exchange translation exposure affects the book value of a parent’s equity, Foreign Exchange translation exposure does not necessarily reflect Foreign Exchange business exposure. Often, there will be some overlap between Foreign Exchange translation exposure and Foreign Exchange business exposure, but sometimes a business can have Foreign Exchange translation exposure without having any Foreign Exchange business exposure, and vice versa. Academic advice on Foreign Exchange translation exposure is that companies should ignore it, because it is only about accounting book values and not real variables, like cash flow and business value. If a company uses financial instruments to hedge the Foreign Exchange translation exposure on its balance sheet that does not overlap with Foreign Exchange business exposure, a “real” Foreign Exchange exposure is created where one did not exist before” (O'Brien, 2014, p. 52).

Risk provides the basis for opportunity. The terms risk and exposure have subtle differences in their meaning. Risk refers to the probability of loss, while exposure is the possibility of loss, although they are often used interchangeably. Risk arises as a result of exposure” (Horcher, 2005, p. 2). Financial risk arises due to tremendous factors such as sales, purchases, acquisition, new projects, etc. It can even raise as a result of natural transactions due to market uncertainty, competition, management decisions, government new regulations, international regulations, foreign country policies, or to some industries even the weather situation. The increase in risk exposure can cause sales and purchase price fluctuation which leads to reduction in the business/ company profitability.

“The risk that future FX rate uncertainty poses to a company is determined by both how volatile the FX rate is and the company’s FX exposure, which is the sensitivity of its operating and financial results to the FX rate changes. In 2001, for example, the unexpected depreciation of the euro severely affected the revenues and earnings of a number of U.S. companies, including DuPont, Merck, Minnesota, Mining and Manufacturing (MMM), Johnson & Johnson, and Proctor & Gamble. In

general, the FX exposure we will cover is more complex than the FX transaction exposure of single foreign currency revenue or disbursement, which is covered elsewhere” (O’Brien, 2014, p. 3).

### 2.3 Financial Risk Management

The field of risk management has undergone an enormous change in the past 40 years and the pace of change is accelerating, thanks in part to the lessons learned during the credit crisis that began in late 2006 (Van Deventer et. al, 2013, p. 3). Financial risk management is referred to as the practice of securing the economic value in a business through the utilization of tools to manage risk exposure to: credit risk, market risk, shape risk, volatility risk, liquidity risk, foreign exchange risk inflation risk, business risk, legal risk, reputational risk, sector risk, and so far. Same as general risk management, financial risk management also requires identifying the risk sources, measuring the risk, and plans to address it (Christoffersen, 2011).

Financial risk management can be qualitative and quantitative. As a specialization of risk management, financial risk management focuses on when and how to hedge using financial instruments to manage costly exposures to risk (Malz, 2011). In the banking sector worldwide, the Basel Accords are generally adopted by internationally active banks for tracking, reporting and exposing operational, credit and market risks (Van Deventer et. al, 2013).

When applied to financial risk management, this implies that firm managers should not hedge risks that investors can hedge for themselves at the same cost. This concept was captured by the so-called "hedging irrelevance proposition" (Crishnamurti et al., 2010). In a perfect market, the firm cannot create value by hedging a risk when the price of bearing that risk within the firm is the same as the price of bearing it outside of the business. In practice, financial markets are not likely to be perfect markets (Hampton, 1982). This suggests that firm managers likely have many opportunities to create value for shareholders using financial risk management, wherein they have to determine which risks are cheaper for the business to manage than the shareholders. Market risks that result in unique risks for the business are commonly the best candidates for financial risk management (Kasper; Meisner; Nielsen; 2010).

Oliver Kraft, 2018 has researched on money services businesses and the risk associated within. He suggested some recommendations in this regards to reduce the risks for money exchangers, such as: Information sharing and coordination between law enforcement and supervisors, Information sharing and coordination among supervisors, Coordination within law enforcement, Public-private information sharing and communication, Private-to-private information sharing, Transparency Requirements for MSBs, Periodic reports on transaction volume, Adapt transparency requirements for agents depending on number of principals, and Re-assess risks related to cash handling.

The concepts of financial risk management have changed dramatically in the international realm. Multinational Corporations are faced with many different obstacles in overcoming these challenges. There has been some research on the risks firms must consider when operating in many countries, such as the three kinds of foreign exchange exposure for various future time horizons like transactions exposure<sup>1</sup>, accounting exposure (Aggarwal, 1979), and economic exposure<sup>2</sup>.

As money service businesses are vulnerable, there is a risk of financial crimes always available in the industry. “The types of services offered by MSBs may serve several purposes for criminal or terrorist groups seeking to launder ill-gotten gains or to conceal the origin or destination of funds. In particular, currency exchange has been found to be a means to reduce the physical volume of cash by converting, for example, large amounts of low-denomination bank notes into a foreign currency with high-denomination notes (‘refining’), which are easier to smuggle.<sup>4</sup> Money transmission services are of use for individuals or groups looking to transfer criminal proceeds across jurisdictions to undermine detection or confiscation efforts where the proceeds were generated, to purchase illegal goods, or to fund criminal or terrorist activities. Third-party cheque cashing may break the paper trail in instances where criminal proceeds are transferred by cheque” (Kraft, 2018).

<sup>1</sup> <http://www.emeraldinsight.com/Insight/viewContentItem.do?jsessionid=EFA8D4FB63329F2C94>

<sup>2</sup> <http://www.ijournals.com/doi/abs/10.3905/jpm.1997.409611>

By hedging, we mean covering of a foreign exchange risk arising out of the changes in exchange rates. Under this function the foreign exchange market tries to protect the interest of the persons dealing in the market from any unforeseen changes in exchange rate. The exchange rates under free market can go up and down; this can either bring gains or losses to concerned parties. Hedging guards, the interest of both exporters as well as importers, against any changes in exchange rate. Hedging can be done either by means of a spot exchange market or a forward exchange market involving a forward contract (Daru, 2016, p. 81).

## 2.4 Systematic Risk

Some other investment risks, such as industry risk, are based on systematic risk. If an investor has put too much focus on cybersecurity companies, for example, he or she might diversify by buying stocks in other industries such as healthcare and infrastructure. Interest rate fluctuations, inflation, recessions, and crisis, among other big events, are all part of systematic risk. Shifts in these domains can have a large impact on the market and cannot be addressed by altering holdings within a public equity portfolio. To help mitigate systematic risk, investors should diversify their portfolios by include fixed income, cash, and real estate, all of which would respond differently in the case of a large systemic change. An increase in interest rates, for example, may enhance the value of some new-issue bonds while decreasing the value of some firm equities if investors believe executive teams are cutting back on expenditure. In the event that interest rates rise, ensuring that a portfolio has a sufficient amount of income-producing assets will help to cushion the value loss in some shares (Viral V. Acharya, Lasse H. Pedersen, Thomas Philippon, Matthew Richardson, 2017).

### 2.4.1 Foreign Exchange Risk

Foreign exchange risk refers to the fluctuations in a company's revenue and costs, as well as its overall cash flow, caused by unanticipated changes in exchange rates. In other words, it captures unanticipated changes in fiscal values (enterprise assets, resources, revenue, costs, cash flows, and future firm value) due to exchange rate fluctuations. Differences in the economic development of countries that use different currencies, the development level of financial markets, a country's political stability, the expectations of people who participate in financial markets, and accidental factors are all factors that contribute to exchange rate risk (Habibnia, 2013).

Transformational risk, transactional risk, and economic risk are the three categories of foreign exchange risk identified by Dufey and Srinivasulu (1983) for organizations operating on an international scale. The risk posed by the conversion of foreign currencies to each other is known as transformational risk or accounting risk. It was also highlighted as a potential accounting hazard. Economic risk is a measure of the impact of changes in foreign currency rates on the economic worth of a company (Dufey, G., & Srinivasulu, S.L., 1983).

However, many empirical investigations suggest that markets with a time delay converge to the relative buying power equilibrium. Many academic research show that exchange rates vary significantly from the equilibrium in the short run. International capital flows in the form of portfolio investments have been viewed as the primary source of buying power differences in recent years. Fund providers participate in foreign capital market assets as portfolio investments, taking on all political and economic risk in order to earn high interest and dividend income (Aliber, 1976).

Most businesses in a worldwide economy are exposed to foreign currency. The uncertainty connected with changes in the value of foreign currencies is known as exchange rate risk. As a result, this sort of risk only affects the securities of companies that deal in foreign exchange or have foreign exchange exposures, such as exporters, multinational corporations, or companies that employ imported raw materials or products.

### 2.4.2 Market Risk

The herd mentality of investors, or their desire to follow the market's direction, is what causes market risk. As a result, market risk refers to the tendency for security prices to move in lockstep. Even the share prices of well-performing companies fall when the market is down. Almost two-thirds of total systematic risk is accounted for by market risk. As a result, systematic risk is also referred to as market risk. The most common source of risk in securities is market price fluctuations.



### 2.4.3 Interest Rates Risk

Changes in market interest rates cause interest rate risk. Because bond prices are inversely tied to the market interest rate, this largely affects fixed income securities in the stock market. In fact, there are two types of interest rate risks: price risk and reinvestment risk. Both of these dangers operate in the opposite direction. Price risk is linked to variations in the price of a securities as a result of interest rate changes. Reinvesting interest/dividend income carries the risk of reinvestment risk. Reinvestment risk is positive if price risk is negative (i.e., price falls) (i.e., increase in earnings on reinvested money). Changes in interest rates are the most significant source of risk for fixed income securities like bonds and debentures.

### 2.4.4 Purchasing Power Risk (or Inflation Risk)

Inflation creates a risk of losing purchasing power. Inflation is defined as a steady and continuous rise in the general price level. Inflation reduces money's purchasing power, which means that the same amount of money can buy fewer products and services as prices rise. As a result, if an investor's income does not increase in response to rising inflation, the investor's income is actually lower in real terms. Because the income from fixed income assets is fixed in nominal terms, they are vulnerable to a high level of purchasing power risk. It is commonly stated that equity shares are good inflation hedges and hence have a decreased risk of losing buying power.

## 2.5 Credit Risk

When a borrower in a debt contract defaults or delays in repaying the obligation in full or in part, credit risk arises. "The likelihood that a legally enforceable contract may become worthless (or at least considerably decreased in value) because the counterparty fails and goes out of business," Anderson (2013, 292) defines credit risk. It is the "risk that the promised cash flows from loans and securities held by financial institutions may not be paid in full," as Saunders and Cornett (2011, 186) put it. Credit risk arises as a result of debt issuers and counterparties in derivatives agreements defaulting (Hull, 2012). Several credit risk ideas, models, and theories have been created since the 1960s, each presenting a new issue. Bankruptcy prediction (Altman 1968, Atiya 2001), distance-to-default (Merton 1974), derivative pricing (Duffie and Huang 1996, Jarrow and Turnbull 1995), default intensity (Lando 1998, Duffie and Lando 2001), credit default swaps (Parlour and Winton 2013, Longstaff et al. 2011), contingent claim (Jarrow, Lando, and Turnbull 1997, Duffie and Singleton 1999), counterparty risk (Jarrow and Yu 2001) (Stephen Zamos & Kwame Ohene Djan & Ilan Alon, 2016).

The banking industry plays a critical part in every country's economic development (Batten, J., & Vo, X. V, 2019). Investors frequently exploit planned projects to boost consumer confidence, resulting in a country's economic growth (Luo, Y., Tanna, S., & De Vita, G, 2016). However, when these banking institutions lend credit to investors, the borrower is frequently not expected to repay the loan (s). This can put a strain on financial profitability, potentially leading to the bank's demise. As a result, credit risk is the primary focus of risk management in the majority of banks and financial institutions around the world following the financial crisis (Ezike, J. E., & Oke, M. O, 2013).

## 2.6 Theoretical Foundation and Background

### 2.6.1 Systematic risk foundations

The relationship between financial and accounting variables and market-based risk measures has been the subject of considerable empirical research. Some financial (accounting) variables are substantially connected with a market-based measure of risk (beta) and can be used to anticipate future risk, according to research findings. However, little study has been done on the theoretical link between financial factors and market-determined risk. The link between portfolio analysis and corporate finance has been studied by Hamada (Hamada, 1998). He has demonstrated that a firm's common stock's systematic risk should be positively connected with the firm's leverage. Below, we'll go over Hamada's analytical strategy in further detail. The method utilized to build a link between systemic risk and leverage in this research is based on Hamada's prior work. In a subsequent work, he took a different strategy to reach the same result.

Diversification strategy, or investing in a portfolio of assets, is one technique for investors to decrease or eliminate risk while maintaining projected returns. Diversification refers to the addition of securities to a portfolio in order to lower overall risk. If the two-stock portfolio of the is superior than the one-stock portfolio, the three-stock portfolio should be superior to the two-stock portfolio, and so on. The portfolio diversification principle asserts that risk may be reduced (but not eliminated) by implementing an investment strategy that involves investing in a portfolio of securities. This is one technique for investors to decrease or limit risk without lowering projected profits to increase safety (Scott, 2009). There are two types of risk in investments namely: (1) Systematic risk, and (2) unsystematic risk. Summation of systematic risk and unsystematic risk is the risk of the total shares of the company. Unsystematic risk is the risk that can be eliminated through diversification in the portfolio, the source comes from internal factors (micro), and this risk affects one (small group) company, such as an increase in sales of the company were higher than expected (Harianto, F., and Sudomo, S, 1998).

### 2.6.2 Evolution of Credit Risk Modelling

Credit risk is a significant sort of risk in finance, and it is typically considered the earliest type of risk in financial markets, going back to 1800 BCE in ancient Egypt (Caouette, John B., Edward I. Altman, and Paul Narayanan, 2008). Altman's Zscore (Benzschawel, 2012), based on multivariate discriminant analysis of five accounting ratios, was the first modern-day quantitative model of credit risk.

Black and Scholes (1972, 1973) and Merton (1972, 1973) were the first to propose structural credit risk models (1973, 1974). Based on capital structure theory (Black, 1973), structural models believe that a default happens when a company's assets are smaller than its debt. Black and Scholes (1973), for example, utilize an options pricing model to price debt and equity, proving that call options on equity have some impact on debt value. The difficulty with Black-Scholes model is that a firm's asset values cannot be directly seen. Merton (1974) builds on their work by demonstrating that the asset value can be determined under certain assumptions, which can then be used to compute the likelihood of default, which he refers to as the "distance to default." Merton's model is the most important model in credit risk modeling today, at least in terms of structural models (Merton, 1974).

Reduced-form models, unlike structural models, may predict the chance of default without making any assumptions about the source of credit risk premium (Benzschawel, 2012). Reduced-form models are based on risk-neutral pricing theory, which states that the present value of future cash flows discounted at the risk-free rate matches the market value of a risky investment (e.g. US Treasury rate). The risk-neutral pricing theory has been used to credit risk modeling by Jarrow and Turnbull (1995) and Duffie and Singleton (1999), among others. In credit risk modeling, the reduced-form method has also been a popular paradigm (Weigel, Diana D., and Gordon Gemmill, 2006).

Default risk, spread risk, and downgrade risk are the three components of credit risk (Bielecki, Tomasz R, and Marek Rutkowski, 2004). A default risk is the probability that the issuer or counterparty will not fulfill the terms of a financial contract's obligation. Loss or underperformance of an issue or issues due to a rise in the credit spread is referred to as credit spread risk. The credit spread illustrates how financial markets react to an issue's projected credit quality deterioration. The danger of credit ratings degradation is known as downgrade risk. When a rating agency assigns a lower grade than the preceding grade, an issuer is at danger of being downgraded. The three categories of credit risk are inextricably linked (Aggarwal, 1979).

When a firm seeks debt funding, such as through a bond, a prospectus is made accessible to investors so that they may learn enough about the company before purchasing the bonds. Investors often do a credit investigation of the issuer prior to making an investment, which includes name recognition and credit ratings (Anson, Mark J. P., Frank J. Fabozzi, and Moorad Choudhry, 2000). Credit ratings are formal opinions expressed by a rating agency or agencies concerning the default risk associated with a particular debt issue. Name recognition is about the issuer's reputation, whereas credit ratings are formal opinions expressed by a rating agency or agencies concerning the default risk associated with a particular debt issue.

## 2.7 Financial Performance

The profitability of a business organization would depend on the resources it owns and the obligations it has to meets. Companies carry out various activities to make profits, and to generate wealth for further growth. Profit helps to make finance. Finance is considered as the most important for these activities. The actions of managers have financial consequences for the business firm. Therefore, it is imperative that they know the importance of finance (profit) functions and their linkage with their

own activities (I.M. Pandey, 1999). Hence financial position or condition of the firm should be assessed and future position of the companies should predict to make the business activities in order to make profit, it would be necessary to keep the financial position favorably. Hence the present study is initiated to predict the financial position of the firms and to find out the linkage between financial position and profitability. Financial statements provide information about the financial positions of an enterprise that is useful to a wide range of users in making economic decisions.

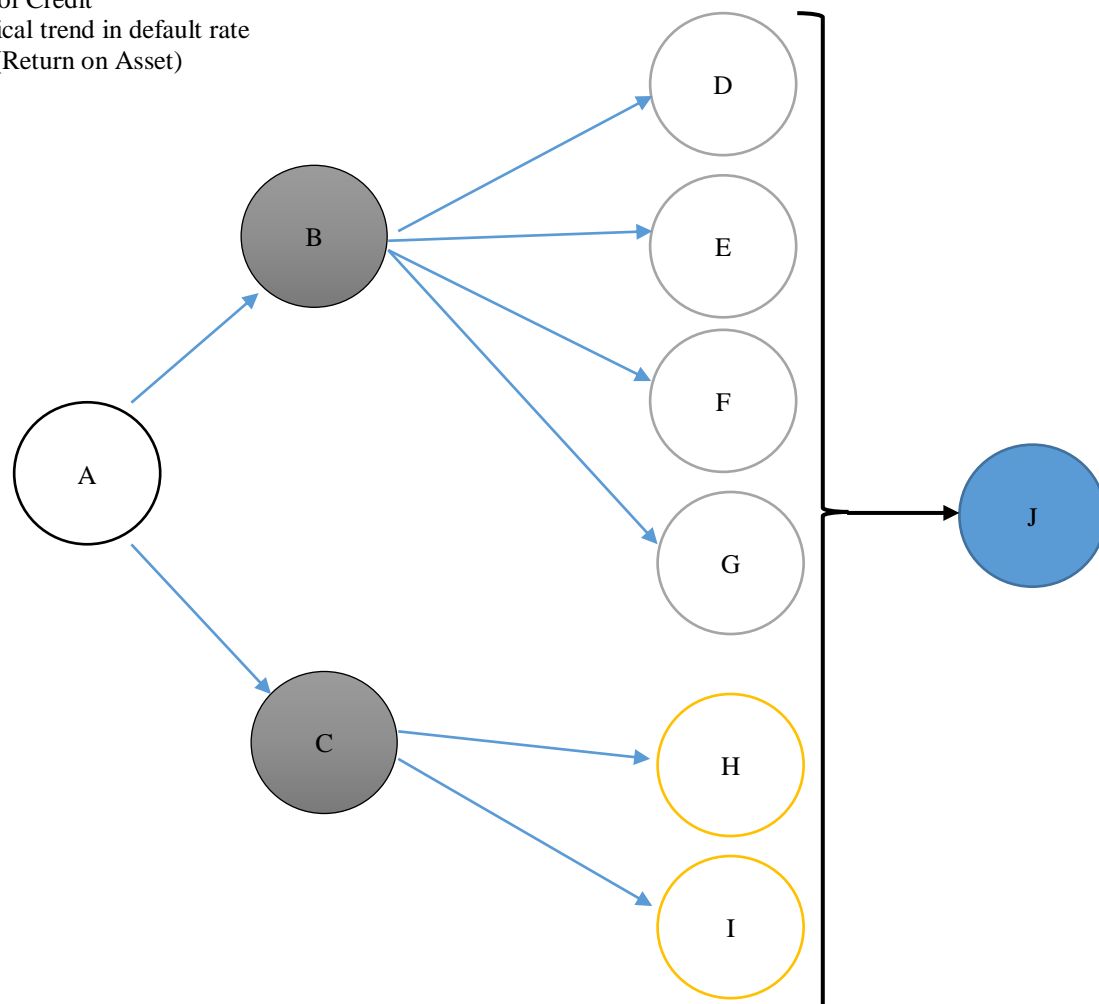
Profitability demonstrates a company's ability to profit from a large sum of money invested in total assets. One method is to employ the return on equity metric, which is the ratio of net profit after taxes to stockholder's equity. This metric depicts the amount of net income generated by business owners on capital invested. Profitability demonstrates a company's ability to profit from a large sum of money invested in total assets. One method is to employ the return on equity metric, which is the ratio of net profit after taxes to stockholder's equity. This metric depicts the amount of net income generated by business owners on capital invested (Syamsuddin, 2007).

Tandelilin (1997) uses net profit margin metrics to show that systematic risk has a beneficial influence on profitability. Instead, the variable profitability of the systematic risk was found to have a negative impact when measured using gross profit margin. Chun and Ramasamy (1989) showed a negative influence on the profitability of the systematic risk variables when they measured net income after taxes before extra-ordinary items divided by shareholders' money (Tandelilin, 1997).

**Research Model**

Where:

- A: Financial management factors in MXDs
- B: Systematic Risk
- C: Credit Risk
- D: Foreign Exchange Risk
- E: Market Risk
- F: Interest Rates Risk
- G: Purchasing Power Risk
- H: Size of Credit
- I: historical trend in default rate
- J: RoA (Return on Asset)



**Figure 1: Research Model**

## RESEARCH METHODOLOGY

In terms of purpose, the research methodology is applied research, and the nature of the research is correlation approach. This research is a post-assessment study (using historical data) that has been updated based on information from corporate financial statements. The essential data in the theoretical foundations phase of the research are retrieved from books, specialist journals, papers, and some related researches (library technique), and a questionnaire was constructed and utilized in gathering quantitative data to collect research data from the field.

It is a definitive investigation, according to the research design, with the goal of providing final and conclusive answers to research questions and testing the hypothesis. Deductive paradigm will be used for information excavation and research modeling, while inductive paradigm will be employed for hypothesis testing in the context of Balkh province. As shown in the below, the research will be conducted in three phases of data processing.

1st phase: data collection (Desk study and field survey)

2- Excel and SPSS data entry

3- Data analysis and reporting (qualitative and quantitative approaches)

### 3.1 Research Population

The statistical population of this study consists of authorized money exchange dealers in Kefayat Market of Mazar-e-Sharif city and includes the following characteristics:

1. They have registered with Da Afghanistan Bank (central bank).
2. Having a proper documentation about financial and accounting information
3. Only those companies whose fiscal year corresponds to the fiscal year of the Government of the Islamic Republic of Afghanistan have been assessed for the sake of uniformity.

### 3.2 Research Site

The site of this study is Kefayat Market of Mazar-e Sharif city which is located in the north zone of Afghanistan.

### 3.3 Data Collection Method

In desk study research (library research), the data gathering tools listed below will be employed.

- 1- Printed books and electronic books
- 2- Magazines and journals dedicated to economics
- 3- Business websites and blogs
- 4- Any paper documents and articles that have been published in newspapers or that have been broadcast on television

Analytical data gathered through a field survey activity created by the researcher based on a review of the research literature and the use of financial statements by businesses.

### 3.4 Sampling Procedure

To select the statistical sample for this study, the researchers used a random sampling method. Green (1991) proposes two minimum sample size guidelines: the first is dependent on whether you want to test the overall fit of your regression model (i.e. the  $R^2$ ), and the second is based on whether you want to test the individual predictors inside the model (i.e. test b-values of the model).

If the researcher wishes to test the model as a whole, a sample size of  $50 + 8k$  is recommended, where  $k$  is the number of predictors. With three predictors, a sample size of  $50 + 8 * (3) = 74$  is required.

If you wish to test individual predictors, he recommends a sample size of  $104 + k$ , therefore in the case of 16 predictors, a sample size of  $104 + 6 = 110$  is required (Brooks, Gordon P.; Barcikowski, Robert S., 1994).

And in this research, there are six independent variables in this study, which means 94 to 110 observations could be chosen for this research. The greatest sample size used by the researcher which is 104 people from the research population. So, from the Kefayat financial market in Balkh province, 104 authorized money exchange traders were chosen.

### 3.5 Data analysis

In this work, a multiple regression model was utilized as a statistical model. The hypotheses were tested using combined data (combined effects). The appropriate regression model was estimated to test statistical assumptions, then the ANOVA test was used to assess the model's significance, and coefficient Beta was used to examine the correlation of each element on ROA.

#### 3.5.1 Research Variables

##### Dependent Variables

The variables of Return on Assets (ROA) were used as dependent variables in this study, and each of them was calculated as follows:

The rate of return on assets (ROA) is equal to the ratio of business i's net profit to total assets in year t. It's a figure that compares a company's profits before interest and taxes (PBIT) to its total net assets. The ratio is used to determine how well a corporation utilizes its assets to produce earnings prior to satisfying contractual obligations. The greater the company's earnings in proportion to its assets, the more effectively the company is said to be using its assets.

$$\text{ROA} = \text{Net Earnings after Taxes (NEAT)} / \text{Book Value of Assets (BVA)}$$

##### Independent Variables

In this study, six components; Foreign exchange risk (FER), Market Risk (MR), Interest rate risk (IRR), purchasing power risk (PPR), credit size (CS), and trend of default ratio (TDR) are the independent variable of the research which measured by Likert scale by exchange dealers at Kefayat market of Balkh province.

Table 1: Research independent variables

No	Dependent variable name	Abbreviation
1	Foreign exchange risk	FER
2	Market Risk	MR
3	Interest rate risk	IRR
4	purchasing power risk	PPR
5	credit size	CS
6	trend of default ratio	TDR

#### 3.5.2 Techniques of Data Analysis

A functional connection between the dependent variable and the independent variables has been given in the form of a regression model in order to fulfill the study's goal and test the hypotheses. Multiple linear regressions were employed in this research. A regression approach is selected to find and assess effects that are difficult to detect and evaluate using pure cross-sectional or pure time series data.

### 3.5.3 Model Specification

A multiple linear regression model was created to investigate the impact of financial risk management on profitability. The model accounted for the impact of six predictor factors on asset return (ROA). The following operational equations were employed for empirical reasons to evaluate a firm's performance in regard to its financial risk management considerations:

$$ROA = \beta_0 + \beta_1 FER + \beta_2 MR + \beta_3 IRR + \beta_4 PPR + \beta_4 CR + \beta_4 TDR + \epsilon_{it}$$

Reliability Statistics	
Cronbach's Alpha	N of Items
.731	10

From this model, the research hypotheses are tested by considering the effect of control variables and the significance of the independent variable coefficient ( $\beta$ ) by considering t-value. Of course, the sign of this coefficient must also be in line with the expected sign for the hypothesis to be accepted.

## DATA ANALYSIS AND FINDINGS

This chapter examines and analyzes the data collected during the research. The techniques that will be used in this chapter will be derived from the research principles and methods outlined in Chapter three. After analyzing the descriptive data, using the regression model described and constructed in the previous chapter, we will examine the effect of each of the independent variables on the dependent variable and thus the regression function will be formed.

### 4.1 Validity and Reliability of the Questionnaire

Validity and reliability of the questionnaire is one of the most important parts of information analysis that cannot be acceptable without precisely determining the validity and reliability of the research. Therefore, the researcher first determined these two variables in below parts.

#### 4.1.1 Validity of the Questionnaire

In fact, validity is applicability of the questionnaire under the same conditions in different regions and the same results will be obtained from different regions. One of the methods of validation of the research data collection tools is the use of experts and expertise in that fields. And in this research, the validity of the questionnaire already has been confirmed and approved by the supervisor.

#### 4.1.2 Reliability of the Questionnaire

Reliability of the questionnaire test and examine by Cronbach Alpha which shows the entire correlation among the questions. The alpha value indicates the strength of the entire correlations of the questions. The amount of alpha is variable between zero and one. The amount alpha between zero and 0.5 is not reliable and the amount between 0.5 and 0.7 has a medium reliability but the alpha amount above 0.7 shows high reliability of the questionnaire. In this research and after analyzing the reliability test for the research questionnaire, the Cronbach's alpha is equal to 0.531 indicating the appropriate reliability of the research questionnaire.

**Table 2: Reliability of the questionnaire**

Case Processing Summary			
		N	%
Cases	Valid	110	100.0
	Excluded <sup>a</sup>	0	.0
	Total	110	100.0
a. List wise deletion based on all variables in the procedure.			

## 4.2 Descriptive Data Analysis

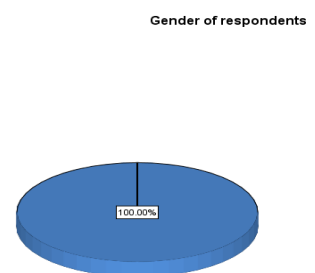
According to Kothari, by analysis we mean the computation of certain indices or measures along with searching for patterns of relationship that exist among the data groups. Analysis, particularly in case of survey or experimental data, involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences. Analysis may, therefore, be categorized as descriptive analysis and inferential analysis (Inferential analysis is often known as statistical analysis). “Descriptive analysis is largely the study of distributions of one variable (Kothari, 1985). Descriptive analysis may include of central tendency, dispersion and distribution scales. The following part includes descriptive analysis of questionnaire which is collected through the survey.

### 4.2.1 Gender of Respondents

One of the questions of the research questionnaire is gender of respondent which shows how many men and women participated in this research. As the table below shows, total of the respondents are men which is 100% of the respondents. This shows that no woman working in Kefayat financial market and this makes this market a male business environment.

**Table 3: Gender of respondents**

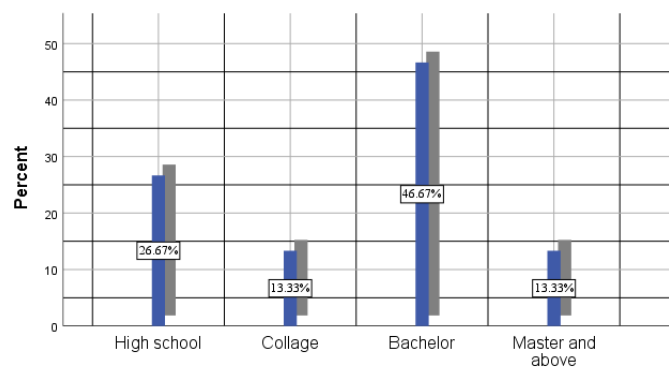
		Gender of respondent			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	110	100.0	100.0	100.0
	Female	0	0.0	0.0	100.0
	Total	110	100.0	100.0	



### 4.2.2 Education Level of Respondents

As the table show, 46% of the respondents are Bachelor which is the highest rate of respondents and the minimum rate of the respondents belongs to collage and master degree respondents.

**Figure 2: Education level of respondents**



### 4.2.3 Computing Return on Asset of the MXDs

As the dependent variable of the research is financial performance of the MXDs in Kefayat financial market of Balkh province, return on asset (ROA) determined as dependent variable of the research. based on data received through the questionnaires the ROA for each money exchange dealers calculated as the following table to use in the regression model equation.

**Table 4: Descriptive analysis of calculating ROA for 110 company (research sample)**

No	ROA	No	ROA	No	ROA
	ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)		ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)		ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)
1	0.15	38	0.18	75	0.15
2	0.04	39	0.18	76	0.14
3	0.04	40	0.05	77	0.24
4	0.12	41	0.16	78	0.12
5	0.18	42	0.20	79	0.18
6	0.18	43	0.30	80	0.28
7	0.05	44	0.28	81	0.15
8	0.16	45	0.15	82	0.26
9	0.20	46	0.52	83	0.20
10	0.32	47	0.30	84	0.32
11	0.23	48	0.28	85	0.28
12	0.17	49	0.15	86	0.25
13	0.44	50	0.68	87	0.61
14	0.24	51	0.27	88	0.17
15	0.16	52	0.18	89	0.28
16	0.16	53	0.16	90	0.36
17	0.29	54	0.28	91	0.18
18	0.15	55	0.08	92	0.28
19	0.10	56	0.14	93	0.14
20	0.26	57	0.20	94	0.10
21	0.18	58	0.15	95	0.15
22	0.12	59	0.10	96	0.13
23	0.26	60	0.24	97	0.21
24	0.37	61	0.39	98	0.29
25	0.18	62	0.17	99	0.17
26	0.10	63	0.10	100	0.10
27	0.10	64	0.30	101	0.28
28	0.33	65	0.28	102	0.36
29	0.09	66	0.15	103	0.09
30	0.22	67	0.61	104	0.12
31	0.17	68	0.30	105	0.34
32	0.10	69	0.28	106	0.19
33	0.10	70	0.15	107	0.17
34	0.21	71	0.34	108	0.10
35	0.19	72	0.16	109	0.24
36	0.23	73	0.33	110	0.18
37	0.25	74	0.27		

### 4.3 Inferential Data Analysis

To compute the effect of each independent factors on financial performance of the company, a multiple linear regression model has formed and data entered to SPSS software program. The result of the analysis shows as below.



## 4.3.1 Variables Entered in SPSS Regression Model

Table 5: Output 1 SPSS regression model

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	Foreign Exchange risk,  Market risk  Interest rate risk,  Purchasing power risk,  Credit risk,  Trend of default ratio		Enter
a. Dependent Variable: ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)			
b. Tolerance = .000 limit reached.			

The variables input in the regression model are shown in the table above, which is the first output table of the regression model. Six components were added as independent variables, and ROA (return on asset) was introduced as a dependent variable, as illustrated.

## 4.3.2 Regression Model Summary

The correlation between the independent and dependent variables is defined in the second table of SPSS output analysis (ROA). In our case, the R value is 0.78, indicating a strong connection and demonstrating that our model accurately predicts ROA.

In this study, R square equals 0.56, which is the square of R. It shows how much of the variation in ROA can be "explained" by the six predictors. Because regression optimizes R square for our sample, R square for the total population will be somewhat lower, a phenomenon known as shrinkage. The adjusted r-square calculates our model's population R square and so provides a more accurate indicator of its predictive potential.

Table 6: Output 2 SPSS regression model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 <sup>a</sup>	.562	.424	12.143
a. Predictors: (Constant), Foreign Exchange risk, Market risk, Interest rate risk, Purchasing power risk, Credit risk, Trend of default ratio				

### 4.3.3 ANOVA Test Analysis

ANOVA is the name of the following table. This table demonstrates if the regression model can accurately (and significantly) predict changes in the dependent variable. And, as seen in the table's last column (sig), the column displays the statistical significance of the regression model, which must be less than 0.05 to be considered significant. In our study, the significance level is 0.031, which is less than 0.5, showing that the regression model is useful.

**Table 7: Output 3 SPSS regression model**

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.041	3	.014	.665	.031 <sup>b</sup>
	Residual	.537	26	.021		
	Total	.579	29			
a. Dependent Variable: ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)						
b. Predictors: (Constant), Foreign Exchange risk, Market risk, Interest rate risk, Purchasing power risk, Credit risk, Trend of default ratio						

### 4.3.4 Coefficients Table of Regression Analysis

The last table which indicates the coefficient of each independent variable on dependent variable is coefficients table which is shown in below. The b coefficients tell us how many units ROA increases for a single unit increase in each predictor.

As a result, a one-point rise in foreign currency risk correlates to a -0.16-point increase in the money exchange dealer's financial performance (ROA). We can calculate ROA based on solely the scores on our predictors. We may compare the respective strengths of our predictors using beta coefficients. The p-values for our predictors are stored in the column "Sig." We may state that a b coefficient is statistically significant if its p-value is less than 0.05 as long as the Sig value is less than 0.05.

**Table 8: Output 4 SPSS regression model**

Coefficients <sup>a</sup>						
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.236	.040		5.944	.000
	Foreign Exchange risk,	-.041	.001	-.168	-1.690	.032
	Market risk	-.071	0.18	-.178	-3.744	0.00
	Interest rate risk	-.049	.001	-.102	-1.457	.035
	Purchasing power risk	-.063	.021	-.231	-2.354	.017
	Credit risk	-.061	.001	-.068	-1.690	.022
	Trend of default risk	-.072	0.16	-.378	-5.744	0.00
a. Dependent Variable: ROA = Net Earnings after Taxes (NEAT) / Book Value of Assets (BVA)						

#### 4.4 Final model of regression equation

The final model of the regression equation is formed as below through the SPSS data analysis output. In this model, the coefficient is showing the power of correlating with each of the independent variables and the X shows the value of each independent variables. ROA is a proxy for showing the financial performance of the dependent variable.

$$\text{ROA} = 0.236 + (-168) * X_1 + (-0.178) * X_2 + (-102) * X_3 + (-0.231) * X_4 + (-0.068) * X_5 + (-0.378) * X_6$$

Where:

Beta Constant= 0.236

X1= value of foreign exchange Risk (EFI)

X2= value of market Risk (MR)

X3= Interest rate Risk (IRR)

X4= Purchasing power Risk (PPR)

X5= Credit Risk (CR)

X6= Trend of Default Ratio (TDR)

#### SUMMARIZING AND RECOMMENDATIONS

The researcher's opinions and recommendations based on the research findings are discussed in Chapter 5 of this study. This chapter gives a summary of the study, including the research methodology, the research conceptual model, and the data analysis process, before summarizing the findings and concluding the research suggestions.

#### 5.1 Research Summary

Banks play a critical role in the financial system by supplying financial resources to economic sectors such as agriculture, industry, and services, and the expansion of these sectors is directly linked to the banking system's dynamics.

One of the most essential characteristics of the banking system is that the speed and variety of exchanges promote the expansion of economic sectors, and thus the economy and national production. Financial and credit institutions act as financial intermediates in the financial markets, acting as non-bank financial entities. Their services are similar to those offered by banks in many ways. The types of services, degrees of freedom, and extent of activity of these institutions vary by country and are subject to the country's specific conditions and legislation. These institutions gather resources by attracting various types of approved bank deposits and other financial instruments, and then use those resources to provide credit.

A financial institution is a company that uses financial assets or liabilities like stocks, bonds, and loans instead of actual assets like buildings, tools, and raw materials as its major asset. Financial institutions, in general, serve two purposes: first, they provide a means of payment between individuals and the economy, and second, they permit the transfer of cash from the lender (with a surplus) to the borrower (with a savings deficit). Their financial mediation is the second task. By developing markets for two types of securities, "lender and borrower," financial institutions help bridge the gap between the lender and the borrower. Financial intermediaries can increase the flow of savings and loans in an economy in this way. As a result, they enable a rise in aggregate demand. Furthermore, they benefit from providing services to borrowers and earning more interest than they pay depositors.

Kefayat Market is a financial market in Mazar-e-Sharif, Afghanistan, that is one of the most active in Balkh province and the northern portion of the country. Many money exchange traders (MXDs), lenders, and borrowers use this market for financial transfers. The financial management risks of money exchange dealers are explored in this research while they are investing or

lending to borrowers on financial performance of MXDs. The research's dependent variables are divided into two categories: systematic risks and credit risks, with the role of each being quantified using the regression model built for the research's dependent variable.

The overall purpose of this study is to examine a meaningful relationship between the systematic risk and credit risk as dependent variables and return on asset (ROA) as observed variable.

In terms of the purpose, this study includes applied research, and the form of the study employs descriptive and correlational research methods. Quantitative information was gathered for this study. Questionnaires were used to collect quantitative and qualitative data. Experts and research consultants confirmed the validity of the research questionnaire, and Cronbach's alpha was utilized to determine the research's reliability. The questionnaire's dependability was found to be 0.731, which indicates that it is reliable.

Statistical population of this study is all money exchange dealers (MXDs) which is operating in Kefayat market of Balkh province and the sample of this research is 110 MXDs in target area. After receiving the filled questionnaire by the MXDs, ROA and financial management risk indicators are calculated and proceeded through SPSS application. Multiple regression equation has formed and then developed for independent and dependent variables (ROA) to obtain the general function of financial risk management on financial performance of MXDs.

## 5.2 Summary of Findings

This section will summarize the study's findings, which are reported in the study's fourth chapter. The research's conclusions begin with descriptive data that depicts the gender, educational level, and calculation of ROA for each of MXDs. The research hypotheses are validated using the regression model established for the study after defining the descriptive data.

The overall adjusted coefficient of regression model shows that 42% of the dependent variable changes are explained by the independent variables entered in this model and the Sig of ANOVA test analysis show 0.031 which is less than 0.05 and elaborate that this model of regression is meaningful for both dependent and independent variables.

The indicators of the study's first hypothesis show a significant relationship between systematic risk and profitability, as well as the correlation of this variable on profitability, and all four indicators are less than 0.05, indicating that the test is meaningful and there is a significant relationship between foreign exchange risk, market risk, interest rate risk, and purchasing power risk on the MXDs' financial performance. For each indication of systematic risk variable, the beta coefficients are -0.168, -0.178, -0.102, -0.231, respectively.

The components of the research's second hypothesis demonstrate a substantial association between credit risk and default risk trend on financial performance, as well as the power of correlation with ROA, which are -0.068 and -0.378, respectively.

## 5.3 Recommendations

Each study contains unique suggestions based on its results for the research's scope to address problems and optimize the condition on which the research is conducted. Through financial risk management, this study also offers a number of recommendations for increasing the profitability of MXDs in Mazar-e Sharif's Kefayat market.

1. According to the statistics, the most significant impact of the financial risk management aspect is connected to the borrower's default rate trend, which is -0.378. To maximize the profitability of MXDs, it is advised that the borrowers' backgrounds be checked before loan approval and money transfer.
2. The purchasing power risk of the money, which affects investors and money lenders, has the greatest effect following the borrower's default rate trend. When inflation rises without adjustments in interest rates or investment profit margins, money lenders and investors lose support and desire to invest. As a result, this aspect had an impact on the MXDs' financial performance. As a result, MXDs that properly manage purchasing power risk can reduce the risk of loss during investment, money lending, and money transfer.

3. Market risk is the third element impacting the MXDs' financial performance. Because of the market environment, the profitability of MXDs is decreasing as the market price of services and interest rate falls.
4. The fourth indicator of risk that affect the financial performance of the MXDs is foreign exchange risk which effect the profitability with beta coefficient of 0.168 while the foreign currencies fall down. It suggests to use the alternative investment like gold and bond to the recognized and reliable companies in international financial market to prevent risk of foreign exchange risk.
5. Interest rate risk is another risk which is affect the financial performance of the MXDs in Kefayat market of Mazar -e Sharif city. As this risk is happened to macro environment of the financial atmosphere in the market, it would be difficult to prevent but the interest rate can be monitored and evaluate in shorten period of time to prevent big loss.
6. The last indicator which affects the financial performance of MXDs is credit risk which shows the liquidity of the MXD to lend the money to the borrowers. and it is advised that MXDs maintain a suitable level of liquidity in the market enough to avoid losing the capacity to paying the loans to the borrowers and transfer money in order to mitigate credit risk.

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