T.C.
SAKARYA UNIVERSITY
INSITUTION OF SOCIAL SCIENCES
DEPARTMENT OF ISLAMIC ECONOMICS AND FINANCE

THE IMPACT OF FINANCIAL INCLUSION ON POVERTY ALLEVIATION THROUGH ISLAMIC BANKS

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MASTER DEGREE THESIS

Thesis Supervisor: Assist. Prof. Hakan ASLAN

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“This thesis was defended face to face on 19/06/2023 and was unanimously accepted by the jury members whose names are listed below.”

JURY MEMBER	APPROVAL
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Assist. Prof. Murat YAŞ	Successful

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Ayan Mohamoud OMER
19/06/2023

THE PREFACE

Alhamdulillah. I thank almighty Allah, who with his willing has given me the ability to complete my master’s research. I wish to convey my gratitude and appreciation to each of those individuals who have sustained support in completing this project after so many months of hard work. Without them, it would not have been possible for me to frame this study.

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19/06/2023

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ABBREVIATIONS

AAOIFI : Accounting and Auditing Organization for Islamic Financial Institutions.
ATM : Automated Teller Machines
CGAP : Center for Global Development
CPI : Consumer Price Index
CR : Credit risk
DGMM : Difference Generalized Method of Moments
FAS : Financial Access Survey
FII : Financial inclusion index
GDI : Gender Development Index
GDP : Gross Domestic Product
GDPG : Gross Domestic Product growth
GMM : Growth Mixture Modeling
GNI : Gross National Product
HCI : Poverty gap index
HDI : Human Development Index
HDRO : Human Development Report Office
HPI : Human Poverty Index
IDB : Islamic Development Bank
IFSB : Islamic Financial Services Board
IMF : International Monetary Fund
INEFF : Inefficiency
INFL : Inflation
MDGs : Millennium Development Goals
MPI : Multidimensional Poverty Index
MENA : Middle East and North Africa.
NGO : Non-governmental organizations
OECD : Organization for Economic Co-operation and Development
OIC : Organization of the Islamic Conference
OLS : Ordinary Least Squares
Pbuh : Peace be upon him

PIGR : Poverty income gap ratio
PLS : Profit and loss sharing
PPP : Purchasing power parity
PVAR : Panel vector autoregression
RINST : Real interest rate
ROAA : Return on average assets
RQ : Regulation quality
SDG : Sustainable Development Goals
SGMM : System Generalized Method of Moments
SME : Small and Medium Enterprise
SSA : Sub-Saharan Africa
UAE : United Arab Emirates
UN : United Nations
UNDP : United Nations Development Programme
USD : United States dollar
VAR : Vector autoregression model
VIF : Variance inflation factor
WB : World Bank
WDI : World Development indicators
WDR : World development report
WGI : World Governance Indicator

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ABSTRACT

Title of Thesis: The Impact of Financial Inclusion on Poverty Alleviation Through Islamic Banks

Author of Thesis: Ayan Mohamoud OMER

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Poverty is one of the worldwide syndromes that affect a significant portion of the global population. Financial inclusion has been acknowledged as a crucial element in poverty reduction by giving disadvantaged people inexpensive access to important financial services such as money transfers, payments, investments, loans, and healthcare. This study aims to offer an empirical analysis of the effect of Islamic banking on poverty alleviation in thirty-one Organization for Islamic Cooperation (OIC) member states. The analysis utilizes unbalanced annual panel data from 1990 to 2020. System Generalized Method of Moments (SGMM) is utilizing an estimator method, this research determines the empirical Human Development Index (HDI) correlation with financial inclusion, according to the amount measurement of the Automated Teller Machines (ATMs) and per square kilometer. Empirical evidence demonstrates that financial inclusion via Islamic banks is positively correlated with poverty alleviation (HDI).

The research suggests that Islamic banks should enhance their current strategy and tools to attract more individuals and extend the range of their financial items and services aimed toward helping the underprivileged and helping them alleviate poverty. Policymakers must prioritize addressing the primary hurdles to financial inclusion in Islamic banking. Also, governments and regulators should be responsible for fostering an atmosphere that supports Islamic banks to conduct and administer effectively to help alleviate poverty. This research adds empirical analysis to the existing literature in diverse ways, for example, through its unique findings since it is the first to be undertaken in the OIC member countries.

Keywords: SGMM, Financial Inclusion, Poverty Alleviation, Islamic Banks, OIC Countries

ÖZET

Başlık: İslami Bankalar Aracılığıyla Finansal Kapsayıcılığın Yoksulluğun Azaltılmasına Etkisi

Yazar: Ayan Mohamoud OMER

Danışman: Dr. Öğr. Üyesi Hakan ASLAN

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Yoksulluk, dünya nüfusunun büyük bir bölümünü etkileyen dünya çapındaki sendromlardan biridir. Finansal kapsayıcılık, temel finansal hizmetlere karşılanabilir bir maliyetle yeterli erişim sağlayarak yoksulluğun azaltılmasında önemli bir faktör olarak tanımlanmıştır. Bu araştırmanın amacı, İslam İş birliği Teşkilatı (İİT) üyesi 31 ülkede İslami bankacılığın yoksulluğun azaltılması üzerindeki etkisinin ampirik bir analizini sağlamaktır. Analiz, 1990'dan 2020'ye kadar olan ikincil kaynaklardan alınan panel verileri kullanılarak yapılmıştır. Sistem Genelleştirilmiş Momentler Yöntemi (SGMM) tahmincisi yöntemini kullanan bu araştırma, İnsani Gelişme Endeksi (İGE) ile finansal kapsayıcılık arasındaki ampirik ilişkiyi kilometre kareye düşen ATM ve banka şubesi sayısı ile ölçerek analiz etmeye çalışmıştır. Ampirik sonuçlar, İslami bankaların ATM ve banka şubelerinin sayısının, 0.1 güven düzeyinde yoksulluğun azaltılması ile pozitif korelasyon içinde olduğunu göstermektedir.

Araştırma, İslami bankaların daha fazla kişiyi çekmek için mevcut stratejilerini ve araçlarını geliştirmelerini, yoksullara ulaşmak ve yoksulluğu azaltmalarına yardımcı olmak için finansal ürün ve hizmetlerinin kapsamını genişletmeleri gerektiğini öne sürmektedir. Politika yapıcıların, İslami bankacılığın finansal kapsayıcılığının önündeki başlıca engelleri ele almaya öncelik vermesi gerekiyor. Ayrıca, hükümetler ve düzenleyiciler, İslami bankaların yoksulluğu hafifletmeye yardımcı olabilmeleri için etkin bir şekilde faaliyet göstermeleri ve performans göstermeleri için elverişli bir ortam yaratmalıdır. Bu çalışma, İİT üyesi ülkelerde yapılan ilk çalışma olduğundan, özgün bulgularıyla mevcut literatüre ampirik olarak katkıda bulunmaktadır.

Anahtar Kelimeler: SGMM, Finansal İçerme, Yoksulluğun Azaltılması, İslami Bankalar, İKT Ülkeleri

INTRODUCTION

In recent years, researchers and policymakers in developed as well as developing nations have paid a tremendous deal of consideration to financial inclusion issues. Financial exclusion is the absence of access to formal banking institutions and the inability to obtain even the most fundamental services of finance (Carbó et al., 2005; Lamb, 2016). Multiple causes can lead to exclusion, including those related to approach, conditions, pricing, marketing, and the individual's own decisions. Many nations and financial institutions, including the World Bank (WB) and the International Monetary Fund (IMF), have a rising ambition for achieving financial inclusion internationally, which would alleviate the global underprivileged population's absence of utilization of financial services. Numerous studies, such as (Akhtar & Pearce, 2010; Barajas et al., 2015; Demirgüç-Kunt & Klapper, 2012), are sponsored and published by the World Bank and the International Monetary Fund to attain financial inclusion and extend the global financing industry. Multiple studies show that many nations are seriously dedicated to attaining financial inclusion. Some of these nations' studies are as follows: Turkey (Aysan et al., 2013); China (Funggovv & Weill, 2014); India (Kolloju, 2014); Canada (Lamb, 2016); Nigeria (Adewusi, 2011); Latin America (Dabla-Norris et al., 2015). In fact, the fact that these nations are willing to make such a commitment demonstrates that achieving financial inclusion is rapidly rising in importance throughout the world.

Although Islamic banking is seeing fast growth and development worldwide, it continues, specifically in countries with a significant Muslim population, to experience financial exclusion. (Ali, 2015) notes that in many Muslim nations, especially those countries throughout the Middle East and Northern Africa, rural areas in Sub-Saharan Africa and Central Asia are the most destitute and lack access to banking services. Financial inclusion is lower for Organization of Islamic Cooperation (OIC)-affiliated countries, as shown by a number of indices, and a significant percentage of the unbanked population lists religious beliefs as their reason for not using standard financial services. Considering the above, it is clear that nations with an active Islamic banking industry have a stronger possibility of contributing to the goal of achieving true financial inclusion for their citizens (Barajas et al., 2015).

There is mounting evidence that ensuring that people, especially the financially disadvantaged, have a range of options for quality services and products at affordable rates (Grant et al., 2019) that can help decreasing poverty and inequality and improve their well-being and living standards (Odeleye & Olusoji, 2016). Even if increased financial inclusion may not be sufficient to eliminate a Lack of resources, injustice, and unemployment, it may undoubtedly play a role in this. Risks associated with poverty can be mitigated through financial inclusion in areas such as healthcare, education, and business investments, as well as the handling of sudden financial emergencies such as job loss or crop failure (Demirguc-Kunt et al., 2018). In simple terms, increased access to accessible financial services has an additive impact that stimulates growth in the economy and the country's development. This is because more people are able to participate in the economy and earn money, which in turn increases their disposable income and the amount they can save (Migap et al., 2015; Swamy, 2010). Redistribution mechanisms, for example, Zakat, Waqf, Sadaqat, and Qard-al-Hassan, as well as profit-loss allocation financial tools like Mudarabah and Musharaka, contribute to a solution for the problem of financial inclusion via Islamic banking and finance.

Subject of the Study

This study tries to empirically assess the impact of financial inclusion on poverty reduction through Islamic banks. The research focus on thirty-one out of 57 countries OIC member countries where statistics on Islamic banking operations were accessible.

The Islamic banking industry, which dominates the financial landscape in the vast majority of OIC nations, may be crucial to the development of finance (Gheeraert, 2014).

Aim of the Study

This research's main objective is to empirically assess the impact of Islamic bank financial inclusion on poverty reduction in thirty-one OIC member countries in an effort to provide recommendations for policies to enhance financial inclusion in these countries and glean lessons from this research. This study specifically aims to:

1. To observe the correlation between the current poverty alleviation rate and the past year's poverty alleviation rate.

2. To evaluate the impacts of the Islamic financial inclusion index (Automated Teller Machines per 1000 km2) on poverty alleviation.

3. To evaluate the influence of the Islamic financial inclusion index (branches of commercial banks per 1000 km2) on poverty alleviation.

Research Question

The following research questions have been formulated to guide this research and achieve the objectives tallied in it:

1. Is there any correlation between the poverty alleviation rate of the current year and the past year's poverty alleviation rate?

2. How does the Islamic financial inclusion index (Automated Teller Machines per 1000 km2) impact poverty alleviation?

3. How does the Islamic financial inclusion index (commercial bank branches per 1000 km2) affect poverty alleviation?

Importance of the Study

Despite the efforts and strategies employed to reduce poverty, it remains one of the most persistent problems in the world. (Alkire et al., 2017) note that the issue of poverty involves not only a lack of income but also a lack of access to other essential services. Several studies indicate that financial inclusion has the potential to alleviate poverty in developing nations as well as urban and rural disadvantaged populations (Burgess & Pande, 2005; Williams et al., 2017; Honohan & Beck, 2007). Despite previous research on the relationship between financial inclusion and poverty, such as (Beck et al., 2007; Giné & Townsend, 2004), or the influence of Islamic banking and finance on financial inclusion, as described by (Ali, 2015; Ben Naceur et al., 2017; Demirguc-Kunt et al., 2014; El-Zoghbi & Tarazi, 2013; Z. Iqbal, 2014) limited and insufficient studies have examined how the financial inclusion of Islamic banking may alleviate poverty, especially in OIC nations. Given the preceding, this gap in the literature must be filled.

This study aims to close the literature gap by determining the impact of financial inclusion through Islamic banking on poverty reduction among OIC members. Moreover, it provides policymakers, researchers, and academics at both the international and national levels with essential insights for designing and implementing programs that would

increase access to Islamic financial goods and services, thereby reducing the prevalence of poverty in OIC countries.

Method of the Study

This study explores the link between financial inclusion and poverty reduction in member nations of the Organization of Islamic Cooperation (OIC), whose rate of deliberate financial exclusion is disproportionately higher than in other nations. The data set was compiled from secondary sources, such as data collected from BankScope for bank-specific characteristics. Whereas financial inclusion index (FII) data is collected based on data from the International Monetary Fund (IMF) and the Financial Access Survey (FAS), the data on the human development index (HDI) is accumulated from the United Nations Development Programme (UNDP)'s Human Development Report, the World Development Indicators (WDI) of the World Bank, and the IMF for country-specific macroeconomic variables, and the World Bank's World Governance Indicator for the regulatory quality variable.

The OIC consists of 57 countries; however, statistics were obtained from 31 of the 57 OIC member nations where statistics on Islamic banking operations were accessible. The system-generalized method of moments (SGMM) regression methodology was used for the estimation. We employed the two-stage GMM recommended by (Arellano & Bover, 1995; Blundell & Bond, 1998). Because, in contrast to other models such as Ordinary Least Squares (OLS), the SGMM controls the bias and inconsistency that could have led to the non-observation of a time-invariant country effect. Secondly, SGMM models are more consistent and efficient estimation. In dynamic panel data like this study, the cause-and-effect relationship related to underlying phenomena often changes throughout time. To capture this, dynamic panel data estimation approaches employ the lags of the dependent variables as explanatory factors. Lagged values of dependent variables are thus employed as tools to manage this endogenous connection. These instruments are typically referred to as "internal instruments" because they are incorporated into the existing econometric model (Roodman, 2009).

Limitations of the Study

In the course of conducting research, researchers frequently encounter constraints or limitations that have an impact on the overall investigation; therefore, any study needs to

acknowledge certain limitations. These limitations result from the identification of several difficulties, obstacles, and perhaps alternatives that were not feasible at the time the research was conducted, and this study is no exception in this regard, as will be explained below.

The study's sample size is rather small—31 of the 57 OIC member nations having data on Islamic banking activities were included—so the results may not be generalizable to the whole member states in the OIC. As a result, the findings of this study may vary greatly from those of other member countries of the OIC.

The Human Development Index (HDI) is a measure of a country's degree of social and economic development that has been collected by the United Nations since 1990. One limitation relates to the dependent variables adopted herein. There is limited data available on poverty measures; for instance, headcount, poverty gap, or other significant poverty types indicators necessitate the use of a welfare proxy (HDI) to assess the level to which poverty has been relieved in the sample nations following the paper by ((Akinlo & Dada, 2021; Asare & Hongli, 2020; Dwumfour et al., 2017; Gohou & Soumaré, 2012; Grant et al., 2019; Kelikume, 2021; Khan et al., 2022; Koyuncu & Ünal, 2020; B. Sharma & Gani, 2004; Musakwa et al., 2021; Uttama, 2015; Vitenu & Alhassan, 2019; Workneh, 2020), which uses the HDI index as a proxy for poverty reduction in different areas.

Also, this research is limited to the effects of financial inclusion on poverty alleviation. We considered Automatic Teller Machines and bank branches as financial inclusion index variables due to the accessibility of data for financial inclusion index variables in this study. So not all the proxies for financial inclusion were considered. Furthermore, the correlation between access to financial services and lower levels of poverty has been the subject of limited study. And almost none regarding the reduction of poverty and Islamic financial inclusion in the OIC. Because of this, it's possible that less relevant literature was gathered for the research.

Various proxies for financial inclusion, such as the number of commercial bank borrowers per 1,000 individuals and the number of commercial bank depositors per 1,000 adults, should be addressed in future studies to determine the effect of FI on various measures of poverty, such as daily income. Also, this research has the potential to be

expanded to include more nations that are not included in the OIC, particularly those with active Islamic banking systems.

Study Structure

This thesis has three parts, illustrating the conceptual framework of financial inclusion and poverty and their link in general ways, poverty reduction and financial inclusion regarding the Islamic finance and banking sector, and the empirical analysis of financial inclusion's effect on poverty reduction through Islamic banks. In the conclusion session, a summary of recommendations for promoting Islamic financial inclusion in the OIC will be provided.

The first chapter mainly introduces the key concepts of the study by identifying the definitions, history, and measurements of financial inclusion and poverty, as well as indicating the importance of financial inclusion and poverty reduction. The final section of the chapter highlights the link between the independent variable of financial inclusion and the dependent variable of poverty alleviation, as interpreted by the theoretical literature. The second chapter focuses more on Islamic perspectives or point view, through highlighting the fundamentals, growth history, key principles, and tools of the finance sector and Islamic banking. As this chapter draws to a close, it will emphasize financial inclusion and poverty reduction via Islamic finance and banking based on theoretical literature.

The empirical analysis of the study is provided in the third chapter. Consequently, there are two major sections in this chapter: the beginning section indicates previous empirical studies about the impact of financial inclusion on poverty reduction in general, as well as poverty reduction and Islamic financial inclusion. Also, it underlines the study gap in the field and determines the research problem. The research data collection sources, variable definition, research strategy, and empirical technique used are included in section two. It also provides empirical results, and finally, the study presents its findings as well as recommendations for further research.

CHAPTER 1: CONCEPTUAL FRAMEWORK

1.1. Financial Inclusion

Institutions like banks, insurance companies, and stock exchanges all contribute to the financial system by facilitating the transfer of money. There are fundamentally different financial structures at the company, national, and international levels. (Schumpeter, 1912) emphasized the significance of financial institutions in the allocation of resources and established the five major functions that financial intermediaries serve: resource mobilization, project evaluation, risk management, manager monitoring, and transaction facilitation. In addition, (Diamond & Dybvig, 1983) suggested that the banking sector's major purpose is to provide liquidity, which encourages investors to invest in productive assets. This enhances the productivity of capital accumulation and economic expansion.

The authors (McKinnon, 1973; Shaw, 1973) embraced a neo-liberal stance on the role that currency plays in the process of economic growth. These writers assert that developing nations' financial savings, the indisputable expansion of the economy, and the financial system's capacity in relation to the non-financial industry were all diminished. As a consequence of financially restrictive policies examples, include nominal interest rate limitations, regulated credit allocation, and reserve ratio requirements. In this context, financial repression is defined by artificially low deposit and lending rates that result in excessive loan demand and non-price credit limitation (McKinnon, 1973; Shaw, 1973). The McKinnon-Shaw model suggests liberalizing the financial sector to stimulate economic growth and development. They suggest that financial liberalization might increase economic growth with proper financial discipline by raising financial institutions' efficacy (Acheampong, 2007). This suggests that extensive and robust financial liberalization is the cause of financial inclusion, which may help alleviate poverty.

Income inequality and financial growth have an inverted U-shaped relationship (Greenwood & Jovanovic, 1990) meaning that when financial growth occurs, inequality rises but decreases over time. According to this theory, income inequality rises because low-income individuals cannot access financial intermediaries, despite these institutions providing higher savings returns and decreased risk. It is anticipated, however, that as

time passes, an increasing proportion of low-income individuals will be able to pay for employing these intermediaries, which will help reduce the first increase in inequality.

Due to the opportunities that financial services provide, poor families and economically disadvantaged areas may benefit from them. According to (Olugbenga & Olankunle, 1998), as key participants in the financial platform, financial institutions are key to the success of the economy of every country, and substantial efforts are necessary to guarantee that everyone has access to financial services. Financial inclusion strategies make this a deliberate effort. Financial inclusion applies intervention strategies with the objective of removing the obstacles that prevent the poor and disadvantaged from benefiting from market forces. It also provides augmentation and supplemental measures for poverty reduction, promotes equitable expansion, and achieves the Millennium Development Goals (Chibba, 2009). It aims to convince individuals who aren't banked to become one so they can use banking services, including savings, payments, and transfers, along with credit and insurance.

In order to enhance financial markets, financial inclusion has garnered worldwide attention and is widely recognized as a major influence on emerging markets and developing nations. It is believed because of those positive consequences for economic expansion, poverty alleviation, equitable distribution of income, resource efficiency, etc. A massive untapped market that financial inclusion aims to bring into the banking system makes it a promising commercial prospect.

The term "financial inclusion" has a large scope. When analyzing the term "financial inclusion," It's important to consider that a variety of organizations and researchers have utilized varying terminology. In accordance with (Sarma, 2008, 2012) financial inclusion is an approach for making official financial services available, usable, and utilized by all individuals. To paraphrase of (Kochhar et al., 2009), financial inclusion is more than ensuring that individuals have easy access to the financial platform; according to (Sarma, 2008); it also necessitates that individuals get access to reasonably priced, appropriate, and fair financial services. Because FI cannot be gained by providing credit to customers, it must instead rely on the informal sector, which includes money lenders and small banks. However, accessibility will only be transparent, equitable, and low-cost if it is offered by recognized financial institutions. Financial inclusion, according to definitions by (Ramji,

2009; United Nations, 2006), is the provision of suitable financial services to poor people. The phrase "financial inclusion" is used by the International Monetary Fund (IMF) to indicate organized and deliberate efforts to expand access to financial services, especially for those with lower incomes and more disadvantages. Every conceivable type of banking service, from simple deposit and withdrawal accounts to sophisticated retirement planning and insurance products, is available to customers. In addition, resulting from financial inclusion, the industry is exposed to more competitive offerings. When consumers have access to numerous financial service providers. Around 2 billion individuals throughout the world do not have access to official financial products and services. Eighty-eight percent of these people live in Asia, including the Middle East, Africa, and Latin America. (Chaia et al., 2009; Demirguc-Kunt et al., 2014; World Bank, 2014).

1.1.1. Financial Exclusion

The term "financial inclusion" was first used by (Leyshon & Thrift, 1993), who performed a study on the restricted ability to access banking financial services caused by bank branch closures. Similarly, to the literature about financial inclusion in the nineties, there was also a rise in the literature about the barriers encountered by groups of individuals in societies in accessing additional banking services and current payment mechanisms, in addition to credit cards and insurance, a lack of savings. In research by (Kempson & Whyley, 1999); more and more often, the phrase "financial exclusion" has been used to describe those who do not have access to mainstream financial services. Following this, a variety of commentators, including academics such as (Anderloni, 2003; Carbo et al., 2004; Devlin, 2005; Gloukoviezoff, 2004; Sinclair, 2001), and policymakers such as the (HMTreasury, 2004) Provide their ideas and add their own interpretation of the meaning of the financial exclusion. Financial exclusion indicates the circumstances in which a society's members have difficulty acquiring the financial products and services required for a healthy, productive life. Financial exclusion is a form of social exclusion that can affect those who lack access to quality services in the areas of work, schooling, housing, and health care.

As stated by (Sinclair, 2001), exclusion from the financial system has real and growing consequences that are often paid by the poorest and most needy. A well-developed,

accessible financial structure minimizes transaction costs and information and influences rates of savings, investment choices, developments in technology, and sustainable growth rates (Beck et al., 2009). This may be contested by the financial inclusion project's intended audience of numerous clients who benefit from the opacity of information and legal flexibility.

The factors that keep some people or groups from participating in the financial system are what we mean by "financial exclusion." To be financially excluded means to lack enough access to mainstream financial services (Sinclair, 2001). As stated by (Carbó et al., 2005), When some groups of people are denied access to the financial system, this is referred to as financial exclusion. Most of these definitions see financial exclusion as only an indicator of a larger systemic issue of social exclusion that disproportionately affects specific populations, such as the poor, low-income, and disadvantaged.

(Kempson et al., 2004) requirements for identification, terms and conditions of bank accounts, financial institution fees, physical accessibility of financial institution bank branches, mental and cultural consequences, and ease of use of banking services were identified as six likely causes of financial exclusion from banking financial products and services. According to (Ozili, 2018; Sarma, 2008) financial exclusion could originate from a lack of access, market circumstances, pricing, marketing, or even self-exclusion due to a lack of information or misconceptions, religious beliefs that are incompatible with the broad use of financial technology may also lead to social exclusion from the financial sector (Ozili, 2018). Since some individuals will always opt out of using conventional banking systems, universal financial inclusion can never be achieved. Poverty traps and inequality are linked to financial exclusion, or a lack of access to credit, as shown by several models in development economics (Aghion & Bolton, 1997; Banerjee & Newman, 1993)

According to (Yunus, 2011), the poor people do not cause their own plight because of a lack of personal initiative or skill, but rather because of flaws in the system that have been constructed and shortcomings in the institutions and policies that have been crafted. He uses banks as an example, saying, "They refuse to offer financial services to roughly two-thirds of the world's population." For decades, the argument that the poor lack creditworthiness was widely believed to be the reason why this was impossible. As a

result, we need to reinvent our way of thinking, our models, and our policies in order to reach a new paradigm.

(Taket et al., 2009) demonstrate that several authors link social exclusion with financial exclusion. Being socially excluded means being exposed to a complete and complex kind of exclusion in economic, social, cultural, and political services, which has a detrimental influence on an individual's, family's, or community's standard of living. As a consequence, financial exclusion was seen as a tactic that restricted capacity for full social participation (Evans & Broome, 2005; Gómez, 2015; Wilson, 2012). According to (Alamá & Tortosa-Ausina, 2012; Evans & Broome, 2005; Gómez Urquijo, 2015; Leyshon et al., 2008; Wilson, 2012), exclusion from financial services, whether on an individual or family basis, leads to household and community economic instability.

According to (Kempson & Whyley, 1999) in (Sarma, 2012), Financial exclusion may be broken down into five categories: access exclusion, price exclusion, condition exclusion, market exclusion and self-exclusion. The term financial exclusion describes the process of limiting access based on a person's perceived level of risk, whereas price exclusion describes situations in which certain individuals are priced out of accessing financial products entirely. Condition exclusion describes situations in which the conditions and terms of financial goods make them unsuitable for the requirements of certain individuals; on the other hand, marketing exclusion happens when particular categories of people are kept out of the market by strategic sales and advertising strategies, while self-exclusion occurs when a prospective client chooses not to apply for a financial product out of fear of being rejected. Reasons for this might include the individual's past experience with rejection, knowing of a second person's rejection, or the general public perception that locals aren't welcome here. Researchers are in agreement that many people throughout the world lack access to basic banking services, but they disagree on why this occurs.

1.1.2. Measurements of Financial Inclusion

Financial inclusion needs to be quantified using a multidimensional measurement that captures all dimensions of the concept in a single figure. Additionally, useful to compare the extent of financial inclusion between regions and countries. Also, it is suitable to illustrate the evolution of a nation's financial inclusion policies over time. Using the following criteria, a proper measure of financial inclusion must be constructed according

to these standards: to be include as many facets of financial inclusion as possible, to be convenient and simple to use for calculations, and can be used to compare between nations.

Numerous empirical studies have been conducted to develop a financial inclusion index that examines the diversity of a nation's financial sector in terms of bank penetration (accounts at a bank, deposits, and loans), accessibility (no. of bank divisions, ATMs, and bank agents) (Piñeyro, 2013; Yorulmaz, 2013), and usage of bank financial services (proportional extent of credit and deposits) (Yorulmaz, 2013). Client protection (as assessed by a number of conflicts originating from legal advice) and social mobility were formerly utilized as two extra dimensions or elements in a single index. In addition, financial literacy (as a proportion of the population's literacy rate) and social development (such as the prevalence of poverty) (Piñeyro, 2013).

This research considers two out of the six components that make up the financial inclusion index, which are as follows: Banking penetration, dimension one (D1), is defined by demographic bank branch penetration, an example being the ratio of accounts held by each financial institution per one thousand people (d1). Dimension two (D2) demographic and geographic factors that influence access to financial services. For example, ATMs\100,000 (d2), bank divisions \ 1,00,000 people (d3), ATMs \ 1,000 square kilometers (d4), and the rate at which commercial banks are opening new branches per 1 000 km2 (d5). Consequently, all three aspects of financial inclusion are included in these measures.

(Amidžic et al., 2014) put up a financial inclusion indicator that takes into account factors such as the number of people who have access to financial services, the percentage of the population that does, and how much it costs to use these services. On the other side, when constructing the indicator, (Sarma, 2008) employs a unique methodology. He began by calculating a dimension index for each component of financial inclusion. A normalized inverse of Euclidean distance was used to aggregate these indices; in this approach, distance is measured relative to an ideal reference point and then scaled to account for the total number of dimensions in the aggregate index. This method has the benefit of being straightforward to compute and not requiring weights to be assigned to each dimension. Due to these reasons, this study used the FII by (Sarma, 2008)

1.1.3. The Importance of Financial Inclusion

Financial inclusion (FI) is progressively becoming an important policy instrument for lots of nations, whether developing or developed. Inclusion in the financial system is widely recognized as a prerequisite for national development. People are enabled to engage better in the social and economic activities of their communities as a consequence of the empowering effect of inclusive growth. Financial access attracts global market participants to the target country, resulting in an expansion of both employment and business opportunities.

As The term "financial inclusion" is gaining importance among policymakers. They prioritize financial inclusion while formulating national financial policies in order to establish more inclusive financial systems (Goel & Sharma, 2017). According to the World Bank, financial inclusion is what drives seven of the seventeen sustainable development objectives. In addition, in some regions, like Sub-Saharan Africa (SSA) countries, lack of access to banking services or financial exclusion is a significant player in poverty causes, unemployment, and insufficient growth and development levels (World Bank, 2015)

According to (Aguera, 2015), By increasing employment, decreasing susceptibility to crises, and increasing human capital investment, financial inclusion is one of the most important elements in lowering poverty and increasing economic growth. In addition, (Abdulmumin et al., 2019) stated that economic expansion is a result of financial inclusion, which decreases poverty and raises equality. As stated by (Sarma, 2012) Some of the many benefits of widespread access to financial services are as follows: It makes it simpler to gain access to suitable financial services, which can greatly enhance daily financial management, and it could potentially slow the rise of predatory, informal credit providers like money lenders by increasing the efficiency with which productive resources are allocated.

From a policy viewpoint, a more inclusive financial system has the ability to rise the success and effectiveness of other policies, particularly in developing nations. According to (UN, 2006), having access to an efficient financial system may provide individuals, particularly the poor, with more economic and social empowerment. It enables

individuals to participate in the economies of their nations, assist in their growth, and protect themselves against economic crises.

1.2. Poverty and Poverty Alleviation

One of the global syndromes that affects a sizable fraction of the world's population is poverty. It has been included as a goal of the United Nations' sustainable development agenda and continues to garner the interest of governments, civil society agencies, donor agencies, and international organizations. Scholars have sought to define the concept of poverty in line with social norms, beliefs, and practices, but no agreement exists over its definition. According to the (World Bank, 2014) hunger, lack of shelter, disease, lack of education, unemployment, and worry about one's future are all things that are included in the definition of poverty. The absence of capability, rather than a lack of resources, is another way poverty has been characterized. The capability of the poor to use their resources is more significant than the quantity of resources they possess (HICK, 2012). The distinction between income poverty and capacity poverty may be traced back to this point of view. While "income poverty" refers to a person's inability to earn enough income to cover their basic requirements, "capability poverty" takes into consideration that person's lack of resources to participate in services that would enhance their quality of life (R. HICK, 2012).

Poverty is the inability to afford life's basic necessities. Poverty, low wages, shoddy housing, inadequate medical treatment, low rates of community education leading to a dearth of human resources, and high unemployment all contribute to a miserable level of living. Estimating a country's standard of living may be done using a variety of metrics, including its gross national product (GNP) per capita, per capita income, relative national growth, national income distribution, poverty rate, and social welfare level. According to (Arsyad, 1999), poverty is a multifaceted issue that encompasses several aspects of acquiring fundamental human necessities. Assets, sociopolitical organizations, knowledge, and skills are the basic dimensions of poverty. Inadequate access to social services, financial resources, and knowledge are secondary dimensions of poverty. Multiple aspects of poverty are characterized by malnutrition, filthy water in the house, and a lack of access to healthcare and education. Not only that, but each dimension of poverty is linked to others, simultaneously in direct and indirect ways. This suggests that

developments and setbacks in one dimension may have an effect on developments and setbacks in other dimensions.

According to neoliberal theory, poverty results from personal flaws or decisions. If market forces are permitted to operate to their fullest extent and economic growth is pushed to its limit, poverty will vanish on its own. In contrast, efforts to alleviate poverty should have a limited duration (thus the name "residual") and be focused solely on individual households, local groups, and faith communities. The government now stands in the role of a "night watchman," ready to step in, if necessary, when agencies are unable to do their jobs. The social democratic theory holds that poverty is a systemic issue rather than an individual one. Thus, poverty results from social injustice and inequality, which in turn result from the denial of various social resources to some groups.

As indicated by the (World Bank, 2000), poverty is defined as a "significant lack of wellbeing", where well-being is determined by factors such as a person's income, nutrition, health, education, assets, housing, and access to fundamental freedoms like freedom of expression. Poverty also entails a lack of possibilities, a lack of strength, and a high susceptibility to damage. In order to alleviate poverty and improve living conditions for the poor in this context, it is necessary to institute policies and programs that cater to their needs from a variety of angles. for example, the significance of economic growth in generating new opportunities. However, growth is inadequate since the poor and vulnerable may not be able to reap its benefits due to an absence of basic necessities (such as health, education, and employment opportunities). To allow the poor to reap the advantages of growth, they must be given the ability to grab the opportunities that arise.

High poverty rates are strongly correlated with poor human development standards. According to (UNDP, 2010), a country's high poverty rate is mostly attributable to its poor educational, health, and economic performance. For this reason, the government is allocating local resources toward a number of interventions aimed at boosting HDI in these three areas. If these three factors can be improved, the HDI will rise, and this will be a strong indicator of economic development. In other words, HDI values correlate positively with economic development results.

The 2015 Millennium Development Goals Report indicates that 836 million people live on less than $1.25 per day. Regardless of the fact that one billion people have been pulled out of severe poverty since 1990, still it has been estimated that fifty percent of the world's working population is exposed to dangerous conditions at work. Despite global efforts to combat poverty, the rapid spread of poverty continues to restrict long-term economic development. Financial inclusion has progressively become a major policy aim in low- and middle-income nations as a method of reducing poverty and improving living standards.

The World Bank's primary goal has always been the elimination of widespread poverty. The World Bank projected in 2012 that 896 million people, or 12.7% of the world's population, lived on less than $1.90 a day. When analyzing the distribution of poverty throughout the world, it shows that the vast majority of the world's impoverished live in nations with low-incomes. Numerous individuals still lack access to basic services like nourishment, medical care, education, dependable electricity, and clean water. The poverty headcount ratio, however, demonstrates a greater disparity in poverty levels across countries with varying incomes. The World Bank Group and the United Nations have both set their sights on achieving the Sustainable Development Goal (SDG) of ending extreme poverty throughout the world by 2030. The only reliable means of monitoring progress toward these global targets are national data systems, household surveys, and measures of poverty.

There are two types of services that the poor are unable to pay for: financial Products and Services (financial exclusion) (Allen et al., 2016; Fosu, 2017), and basic social services (socio-exclusion) (Alkire et al., 2017). Efforts to decrease poverty are essential for social and economic advancement. Even though the majority of developing nations have made substantial progress in recent years in reducing poverty, several countries still have very high poverty rates.

1.2.1. Types of Poverty

1.2.1.1. Absolute Poverty and Relative Poverty

Although there have been historical arguments concerning the meanings of two concepts, relative and absolute definitions of poverty may be linked essentially to their different

viewpoints of disparities (Shanahan & Tuma, 1994). Typically, distinct strategies and recommendations are proposed in response to absolute and relative poverty issues (Brady, 2003). However, scholars studying poverty have reached the conclusion that relative concepts are suitable for developed nations, while absolute concepts are generally relevant to developing nations.

Absolute Poverty

Absolute poverty is seen as a scientific and objective term that may be traced back to the concepts of sustenance and origin. In a narrower sense, it refers to a state under which a people or a subset of a people can only achieve their fundamental requirements, such as clothing, housing, and food, so as to sustain a subsistence level of living.

The term "subsistence" is believed to give an objective definition of absolute poverty. As the term "subsistence" refers to the bare minimum necessary to preserve life, going below this standard signifies absolute poverty as one lacks the means to survive. When we talk about an absolute standard, we're referring to a benchmark that is set with respect to the real needs of the underprivileged rather than the spending habits of the affluent (Shakeel, 2020)

Absolute poverty is the absence of access to the resources necessary for one's physical survival and frequently entails a value judgment of basic human needs. Starvation, malnutrition, sickness, a lack of clothing, a lack of housing, and a virtually complete absence of medical treatment are all symptoms of absolute poverty. When determining whether a person is living in absolute poverty, the majority of indicators concentrate on whether or not individuals have accessibility to the minimal standards for nutrition, hygiene, and shelter (Shakeel, 2020)

With their "Level of Living Index" (Drewnowski & Scott, 1968) Basic Physical Requirements' are defined and implemented as follows: food, assessed by parameters like calorie and protein intake; housing, rated by criteria including housing quality and density; and health, which may be evaluated using indicators like the infant mortality rate and the standard of nearby medical care. Theories of absolute poverty introduce the concept of 'basic cultural needs', which extends beyond the common concept of subsistence poverty. By doing so, we broaden our conception of what it means to satisfy basic human needs beyond mere subsistence. Education, safety, and leisure are examples

of basic cultural needs. However, the difficulty of explaining absolute poverty increases when "basic cultural needs" are included. Since these 'needs' change from place to place and over time, it is pointless to attempt to establish absolute fixed standards.

Estimating the number of people who are poor by using the percentage of the population that is below the poverty line is one method. In reality, rich nations have a greater absolute poverty rate than poor countries. This is what (Ravallion, 1998), referenced in (Damanhuri, 2010) implies when he argues that a particular poor person in developed country A is not poor in developing country B. Therefore, many individuals who are thought to be poor in Country A may not be in Country B.

Relative Poverty

The degree of one's relative poverty is more a function of one's own views than of any objective factors. A person may feel uncomfortable even though he has adequate food, clothing, a roof over his head, and entertainment because he cannot afford to live like the other people in his society. Consequently, relative poverty is primarily a status discontentment phenomenon, or relative deprivation, which refers to the deprivation that emerges when contrasting our standard of living to that of a comparison group containing a greater income. (Shakeel, 2020)

Poverty in a wealthy but unequal society is referred to as relative poverty. Those at the very bottom may be able to meet their most fundamental needs, but they are unable to achieve many other social standards, resulting in their exclusion from society's average quality of life. This kind of poverty simply shows lower income levels compared to others with higher incomes, regardless of the reality that they can be living beyond the minimal level of sustenance. (Shakeel, 2020)

Relative poverty is determined by comparing the level of life of the top 5-10% of the population with that of the bottom 5-10%. This comparison is founded on an examination of the distribution of incomes among vulnerable population groups. Relative poverty illustrates the relative position of different segments of the population within the income hierarchy. In a world that is constantly changing, relative definitions of destitution will always fluctuate. Products and services such as hot and cold flowing water, refrigerators and washing machines, medical and dental care, full-time education, and automobiles are a few examples of what has become or is on the path to becoming a necessity in Western

society. (Shakeel, 2020) A universally rational and acceptable way of doing things isn't something we should take for granted. Judgments of what constitutes a decent level of life within a given culture might differ depending on criteria including ethnicity, group, age, faith, region, and numerous others. For instance, the middle class may have quite different standards than the lower working class. Townsend has suggested establishing a list of commonly recognized social norms and practices. (Shakeel, 2020)

The idea of relative poverty also complicates comparisons of the impoverished within a single country through time and across nations. If we only evaluate poverty in relative terms, for instance, we cannot compare the poor in modern-day European nation A to those in nineteenth-century European country A or those living in Third-World nations in Africa, Asia, and South America. With regard to relative poverty, conditions and expectations change throughout time and locations. Therefore, there is no possibility of comparison. Peter Townsend has proposed an approach to the comparison issue. He states that there should be "national-relative and world-relative" measures of poverty. The norms of a particular society determine relative destitution, which determines national relative standards. World relational poverty would have relied on more artificial criteria, necessitating a return to absolute poverty standards despite their numerous deficiencies. This would allow us to assess the level of destitution in various societies (Shakeel, 2020).

1.2.1.2. Primary Poverty and Secondary Poverty

Primary Poverty

Primary poverty is defined as the inability to generate sufficient income (or expenditures) to afford a comfortable standard of living. According to (Rowntree, 1941), the fundamental poverty line was the minimum quantity required to maintain physical effectiveness. Rowntree, in his book "Poverty and Progress," estimates the cost of a minimum diet consisting of essential foodstuffs and the petroleum required to produce them.

To determine fundamental poverty, one must modify monetary income for price fluctuations. Price variations of commodities purchased by the poor may not be captured by general consumer price indexes. In an effort to quantify primary poverty, the following six veils may be removed: First, there is money income, which indicates nothing about

changes in the purchasing price of products and services. Second, Real income, which is adjusted for variations in the general price level, is also available. Thirdly, the real income is adjusted to account for the region- and commodity-specific purchases of the impoverished and the paucity of essential goods. Fourth, there are direct measurements of tangible inputs used to satisfy fundamental requirements, such as calories consumed, yards of cloth purchased, cubic feet of housing space occupied, hospital beds provided, school environment, and letters sent. There are also impact measurements of health, morality, literacy, and morbidity that capture "capabilities." Sixth, domestic units are frequently used as the primary unit of investigation in studies examining the relationship between income and consumption. (Rowntree, 1941)

Secondary Poverty

By Rowntree's definition, "secondary poverty" occurs when a person's actual income is sufficient to purchase the minimal needs basket, but they desire not to do that for different reasons, including "alcohol, gambling, and ineffective housekeeping” (Rowntree, 1941). According to (Rowntree, 1941), one is considered to be in secondary poverty if they lack the resources necessary to maintain their physical health, whereas fundamental poverty refers to a lack of resources necessary to live one's life in accordance with reasonable standards of decency. Since poverty limits both the opportunities accessible to the poor and their access to information, attributing secondary poverty to a fault in moral character or innate intelligence is questionable. Indeed, the suffocating nature of poverty makes it impossible to explain secondary poverty to a lack of moral character or to affluent nations, where the poor pay more due to the activities of so-called "easy credit businesses," but in developing nations, people buy at nearby establishments because they may pay from the shops there. The fact that we cannot differentiate between the ability to consume and the sufficiency of the resource base for consuming offers an operational difficulty that is more critical from our current perspective. In practical terms, there is no substantive distinction among primary and secondary poverty. To put it simply, fundamental poverty relates to a scarcity of resources, but secondary poverty refers to inefficient utilization of available resources or a flaw in the conversion process (Rowntree, 1941). Rowntree used the term "poverty" to describe both primary and secondary poverty.

1.2.1.3. Natural Poverty and Artificial or (Social) Poverty

Natural poverty results from events beyond human control, such as floods, earthquakes, and droughts, whereas artificial poverty is the result of human behavior. According to Professor Baxi, decisions made by individuals are typically the root cause of natural causes of poverty. Droughts and floods, for instance, are no longer considered just natural disasters but rather the result of poor policymaking. Forests have a vital role in ecological sustainability and in preventing flooding. And now, due to deforestation, the strength of wind and floods has increased. And causes damage to the economy. (Shakeel, 2020)

Social planning and the advancements of contemporary science and technology may lessen so-called "natural poverty." It's possible we won't be able to eradicate natural poverty entirely, but it has been decreasing since the late 20th century, and if the current pace of technological and scientific advancements continues, the first part of the 21st century is anticipated to see a significant decline. (Shakeel, 2020)

Poverty that arises as a direct result of a changing policy or decision made by the public is referred to as "artificial" or "social" poverty. Government officials make these decisions, so despite how magnificently and dramatically they may do so, it would be incorrect to assume that only politicians possess this power. Some judges, economists, bureaucrats, public opinion makers, journalists, activists, and members of the intelligentsia all have considerable authority and make judgments that lead to poverty

.(Shakeel, 2020)

1.2.2. Measurements of Poverty

The purpose of the poverty index is to assess and contrast the severity of severe disadvantage that people in a community experience. Furthermore, in order to assess the effectiveness of policies and programs and determine who is poor, we need poverty indicators. A few of the most common statistical evaluations are shown here (OECD, 2001).

1.2.2.1. Poverty Gap Approach

This is the second most used method, after the headcount technique, and it shows the typical poverty gap as a percentage of the national poverty line. Using the income gap or

poverty ratio may help with certain measurement challenges, but other problems exist. The income whole percentage represents the gap between what individuals living in poverty really earn and what the poverty line is (OECD, 2001).

$$\boldsymbol{PIGR\ (y,) = \sum (z - yi)\ qi = 1qz}$$

Poverty income gap ratio (PIGR), Z= poverty line, qi- number of poor, where $yi -$ is a well-being indicator (income or consumption).

Since the Poverty Gap Approach does not take poverty disparity into account, it is unable to detect substantial poverty differences within the poor unit. (Sen, 1976) disagrees with the Poverty Gap Approach index as it excludes income distribution among the impoverished (OECD, 2001).

1.2.2.2. Multidimensional Poverty Index

The UNDP Multidimensional Poverty Index (MPI) was first used in 2010. The Human Development Report is a publication of the United Nations Development Programme's Human Development Report Office (UNDP, 2010). Similar to the Human Development Index (HDI), the Multidimensional Poverty Index (MPI) attempts to quantify the extent to which disparities exist in such key areas as literacy, life expectancy, and child mortality. (Klugman, 2011).

1.2.2.3. The Watts Index

(Watts, 1967) stated that "a measure of poverty should be connected to the individual's or family's 'permanent' degree of command over commodities and services," proposing a poverty meter as a major constraint on families' freedom of choice." (Watts, 1967). When incomes are taken into account, the assertion that "poverty grows more pronounced at a rising rate with consecutive decrements" is true (Watts, 1967). Watts recommended that the logarithmic function be used.

$$\boldsymbol{PW = ln \sum (zyi) qi = 1}$$

PW = poverty watts.

ln= the natural logarithm denotes by ln(x), I.e., z= means poverty line. qi number of poor, Yi (say, income or consumption).

One of his major flaws is that he is very susceptible to variation. The index is computed using logarithmic functions, and it is based on the premise that if all people in a country have access to the same resources—like money—poverty will be alleviated. Yet if the state doles out the same amount of money to every person, it will fail to take into consideration the richer citizens. (Zheng, 1993) Despite data showing that the Watts measure adheres to the core tenets of poverty research, it has not been used in this field. However, it has been employed in various other studies like (Chakravarty & Silber, 2008)

1.2.2.4. Headcount Approach

The most often used index is the poverty headcount technique, in which the percentage of the people with incomes below the poverty line is calculated as follows:

$$PH\ (y, z) = qn$$

If q = number of poor, z = poverty line, n = total population, and y = measure of happiness. However, there are several problems with using headcount as a metric. In the first place, it doesn't take into consideration the level of poverty depth and doesn't show when the poor become worse since the headcount remains constant at all times. Another way of putting this is that the headcount does not take into account the level of poverty in a nation. Since the headcount ratio is based on households rather than individuals, Poor people's income distribution is not taken into consideration. It may have certain drawbacks, but it's still the most commonly used approach. (OECD, 2001).

1.2.2.5. The Foster-Greer-Thorbecke Approach

Innumerable studies use the well-recognized decomposable poverty indicator proposed by (Foster et al., 1984):

$$PFGT\ (y,) = \ln \sum (z - yiz)\ \alpha qi = 1$$

This method may be reformulated as the average of converted the headcount approach and commonplace gaps of the poor $q\backslash n$: $\sum\ (z - yiz)\ \alpha/qqi = 1$. It is impacted by the percentage of the individuals that lives in poverty as α → 0, the index approaches PH, whereas, for α = 1, it coincides with the poverty gap ratio PHPIGR.

1.2.2.6. The Sen Measure

An axiomatic approach, proposed by (Sen, 1976) and grounded on limitations of population enumeration and poverty methods, might be useful in overcoming such obstacles. For Sen, the way to evaluate large concentrations of the poor is as follows:

$PS\ (y,) = PH = [\mathbf{PIGR} + (1 - \mathbf{PIGR})\ \mathbf{IGP}]$

Where IGP is a Gini index for the poor. When compared to other measures, Sen's poverty index satisfies the requirements of focus, symmetry, population replication invariance, an expanding poverty line, weak monotonicity, and weak transfer. However, it violates the principle of subgroup decomposability.

1.2.2.7. Human Development Index (HDI)

The HDI is an aggregate statistic used to rank and compare countries according to their level of human development (UNDP, 2018). When it comes to measuring a country's economic development, the Human Development Index is widely regarded as one of the most reliable metrics. The Human Development Index enables a more precise evaluation of a country's achievements. It classifies nations into developed, developing, and underdeveloped categories based on their average performance across a wide range of socioeconomic indicators. Human development is to ensure that people can live longer and healthier lives (life expectancy), have enhanced the education, and have a higher standard of living (median household income) (UNDP, 2018). In addition, it employs the geometric mean of standard indexes for each of its three dimensions. The key idea behind the HDI is that the ultimate indicator of a country's success should be its people and their abilities rather than its economic progress. However, the HDI's strategy has been heavily criticized. Similarly, averaging the three components of the indices shows a perfect alternation between them and implies trade-offs between the three components (Ravallion, 1998).

1.2.3. Poverty in OİC Countries

As a consequence of initiatives to decrease poverty, the total number of individuals who live on less than $1 (US) per day has declined from 1.2 billion to less than 1 billion since 1990. In the previous three decades, poverty rates in the developing world have dropped

from 28% to 20%, and recent data indicates this pattern will persist. The MDG target of 14% by 2015 is most likely to be met in Asia, which has seen the highest development. Approximately 400 million of the world's estimated 1 billion people living in severe poverty are in Muslim nations. This accounts for 31 of the 56 OIC member countries. 40 percent of the population in these countries lives in absolute poverty. That is to say, the poverty rate in these 56 OIC nations is double the global average. In light of this, the Makkah Declaration's call to action to solve the critical challenge facing Ummah was given at the ideal time (World Bank, 2019)

Indonesia, Pakistan, Nigeria, Bangladesh, and Sudan are five large countries with an overall population of 690 million; 250 million of these people are poor. In these countries, around 36% of individuals live below the poverty line. More than half of the 143 million residents of 15 states are poor; these 74 million individuals confront significant obstacles and are losing the battle against poverty. Urgent assistance must be supplied to these countries. 55 million people, out of 113 million, live in poverty in nine states. Even though these states have very high poverty rates (over 50%), they have made great progress in reducing poverty. With a combined population of 30 million, Uzbekistan and Albania have just 8 million people living in poverty. This poverty percentage of 27% is quite manageable and low. It is safe to say that the majority of the population in these 14 countries lives comfortably above the poverty line. However, the human development indices in a number of these affluent countries are rather low and need immediate policymakers' attention.(World Bank, 2019)

(World Bank, 2019) Various nations comprise the Organization of Islamic Cooperation. The GDP per capita of OIC nations varies considerably, ranging from $1,048 to $126,598. Seventeen OIC nations are classified as low-income. However, their combined GDP accounts for just 2.7% of the OIC's total GDP. According to data gathered between 2007 and 2017, approximately 241 million individuals in the OIC Region earn less than $1.90 per day. (World Bank, 2019), The nine lowest-income OIC nations have a combined poverty rate of almost 40%.

1.2.3.1. High-Income OIC Member Countries

With a GNI per capita of more than $12,236 (in constant US dollars), a country is considered to have a high income. Bahrain, Brunei Darussalam, Kuwait, Oman, Qatar,

Saudi Arabia, and the United Arab Emirates are the OIC Member Countries with the highest per capita income. No one survives on less than $1.90 USD a day in these high-income nations (World Bank, 2019).

1.2.3.2. Upper-Middle Income OIC Member Countries

The middle-upper class is characterized by a GNI per capita of more than $3,956 but less than $12,235 (in current US dollars). Albania, Lebanon, Algeria, Iran, Azerbaijan, Maldives, Gabon, Guyana, Iraq, Jordan, Kazakhstan, Libya, Malaysia, Suriname, Turkey, and Turkmenistan are examples of OIC Member States with an upper-middle income level. The distribution of middle-income OIC countries' GDP per capita (PPP; current international dollars) is not homogeneous. In contrast to the relatively low rates of poverty in the OIC's middle-income states, the rates of poverty in the Maldives, Gabon, and Iraq are significantly higher than the regional average. (World Bank, 2019)

1.2.3.3. Lower-Middle Income OIC Member Countries

The lower-middle class had a gross national income per capita (GNI) of $1,006 to $3,955 US dollars. lower middle-income OIC countries are Bangladesh, Cameroon, Cote d'Ivoire, Djibouti, Egypt, Indonesia, Kyrgyzstan, Mauritania, Morocco, Nigeria, Pakistan, Palestine, Sudan, Tunisia, Uzbekistan, Comoros, and Senegal. Eleven of the participating countries have GDPs per person of less than $6,000, making them the lowest in the group. Add to this list Cameroon, Kyrgyzstan, Bangladesh, Mauritania, Cote d'Ivoire, Palestine, Sudan, Pakistan, Nigeria, Comoros, and Senegal. Comparatively, the GDP per capita of nations like Uzbekistan, Morocco, Egypt, Tunisia, and Indonesia is above $6,000(World Bank, 2019).

The percentage of the population living in poverty varies widely between high- and low-income countries. Of the world's countries, only six (Pakistan, Tunisia, Kyrgyzstan, Egypt, Morocco, and Palestine) have a ratio below 5%; eight (Cote d'Ivoire, Cameroon, Comoros, Djibouti, Sudan, Bangladesh, Mauritania, and Indonesia) have a ratio between 5% and 30%; and Nigeria has a ratio of 53.5% (World Bank, 2019).

1.2.3.4. Low-Income OIC Member Countries

Low income is countries that their GNI per capita equal $1,005 or less. Niger, Afghanistan, Tajikistan, Burkina Faso, Mali, Gambia, Guinea, Guinea-Bissau, Chad, Mozambique, Benin, Sierra Leone, Syria, Uganda, Togo, Somalia, and Yemen are among the OIC Member States with the low income per capita.

In general, low-income nations have extremely high poverty headcount ratios. Except for Yemen, Gambia, and Tajikistan, all countries at this income level had poverty headcount ratios at US$1.90 a day greater than 35%. (World Bank, 2019)

1.3. Relationship Between Financial Inclusion and Poverty

As a powerful weapon against global unemployment, inequality, and poverty, financial inclusion has been widely praised. In addition to improving wealth and enhancing the lives of the general populace, the project will also improve the environment. The word "financial inclusion" gained recognition in the early years of the 21st century because it connected poverty with inaccessibility to financial services. The decline in poverty is attributable to numerous things, including higher incomes, easier access to low-interest loans, cheaper methods of transferring funds, etc. Despite the fact that financial inclusion cannot directly enhance the poor's net assets, it may open the door to new income opportunities that need only small outlays of investment. Without these services, it may be difficult for low-income individuals to realize their full economic potential. (Odell, 2010).

It is crucial to distinguish between having access to and actively utilizing financial services. It's possible that some people have access but choose not to use it for moral, cultural, or ideological reasons. This phenomenon, known as voluntary financial exclusion, can be attributed to a variety of factors, including a lack of interest in or reliance on financial services or on family members who already have access to these services. It has been found that allowing more individuals to participate in the financial system improves their economic standing and quality of life, while also reducing income disparity (Beck et al., 2007).

(Brune et al., 2011) insist that saving improves a household's ability to weather economic storms, control spending, amass assets, and improve health and education. By facilitating

access to financial services, we can help the poor escape the cycle of poverty and foster the growth of efficient and inexpensive payment systems (Dixit & Ghosh, 2013). According to (Sanjaya, 2014) microcredit schemes that provide access to financial services raise the living standards of the disadvantaged.

By making banking services, such as deposit accounts, savings and loan services, and investment and financial management, more accessible to the previously unbanked, financial inclusion has shifted the conversation about the relationship between finance and economic growth to focus on finance's role in alleviating poverty and inequality and promoting personal empowerment (Klapper et al., 2016). It encourages consumers to have easy, low-cost access to a variety of financial services (such as remittances, payments, savings, loans, and insurance) (Demirguc-Kunt et al., 2018). Furthermore, financial inclusion may contribute to the expansion of the financial industry by enhancing the speed, security, low cost, and efficiency of all transactions (Fouejieu et al., 2020).

There is a direct and indirect relationship between FI and poverty in the context of financial growth. Access to credit, insurance, savings, and other financial services that create revenue for addressing day-to-day transactional requirements for economic development, consumption, and investment are all direct contributions of FI to poverty reduction. (King & Levine, 1993; Rajan & Zingales, 1998). In the same manner, (Demirguc-Kunt & Levine, 2008) asserted that more effective FI may enhance the number of chances for beneficiaries to become self-employed, which would boost their income, standard of living, level of autonomy, and say in household and communal matters. According to (Jalilian & Kirkpatrick, 2002), The poor are able to increase their productive assets thanks to FI because it increases their ability to invest in things like technology, education, and health. These types of investments increase the poor's chances of reaching economic independence ((World Bank, 2000). (McKinnon, 1973; Schumpeter, 1934) provides an example of an indirect channel when they discuss the role of the financial industry in fostering economic expansion.

By providing employment and increasing government expenditures on social programs like healthcare, education, and security, finance-induced economic growth indirectly benefits the underprivileged (Abosedra et al., 2016; Perotti, 1993). Credit cards, automated teller machines, and financial banking all make it simpler to make purchases,

but an over-dependence on them may result in debt as well as financial challenges, which can lead to shortages (Lyons & Hunt, 2003). It would be beneficial to change attention from improving financial services for the poor to improving financial services for everyone, as studies have shown that expanding access to financial resources can temporarily exacerbate economic disparities between those who benefit and those who do not. (Demirguc-Kunt & Levine, 2008), which is consistent with the World Bank's goal of achieving UFA as a tool for reducing poverty by 2020.

Several direct and indirect solutions have been developed to combat poverty. Increasing financial services accessibility is considered one of the indirect strategies that has proved successful. The key to eliminating poverty is the availability of banking services. Having quick and simple access to available funds may support economically disadvantaged people in establishing their own enterprises or advancing their education, therefore enabling them to escape poverty. Also, during a financial crisis, the availability of banking services may save the time needed to arrange crucial medical appointments and cut down on unnecessary costs. Financial variety may be a viable option for the poor population to minimize expenditures.

Challenges to Fighting Poverty and Expanding Financial Opportunity The interaction between the poor and society is the central focus of Simmel's book "The Poor", from which this idea of poverty is developed. According to (Simmel & Jacobson, 1965), eradicating poverty is "the obligation that each actual human member of society performs." Therefore, the poor as a sociological category do not consist of individuals with identifiable shortfalls and privations, but rather of those who do or should get assistance in line with established norms and values (Simmel & Jacobson, 1965). The United Nations (UN) forecasts that by 2030, severe poverty will be eradicated from every country on earth as a result of the SDGs. The government is also attempting to improve the capacity of domestic financial institutions so that more individuals may access banking, insurance, and other financial services.

In conclusion, this chapter tries to explain the study's conceptual framework by focusing on the ideas of financial inclusion and exclusion, the measurement that may be used for financial inclusion, and the significance of financial inclusion in general. Furthermore, this chapter aims to give the definitions of poverty and its varieties, as well as the

measurements of poverty that have been utilized in previous research. And it classifies OIC countries by poverty level so that we can talk about it. In the final section of this chapter, we attempt to make some conclusions concerning the relationship between financial inclusion and poverty, as understood by the theoretical literature. The next volume of this research delves deeper into the Islamic viewpoint on financial inclusion and poverty, exploring the origins, tenets, tools, and impact of Islamic banks financial inclusion on eradicating poverty.

CHAPTER 2: ISLAMIC FINANCE AND FINANCIAL INCLUSION

2.1. Fundamentals of Islamic Finance

Islam's fundamental sources are the Quran and the Sunnah, which give laws and guidelines for all sides of a person's life. The Islamic economic system is part of the Islamic order, which includes Islamic belief (Aqidah), the Islamic legal code (Shariah), and Islamic morality (Akhlaq). Ibadat (prayer) and Mu'amalat (social interaction) are two aspects of Muslim life that are governed by the Shariah. Islamic economics refers to the economic components of mu'amalat that must be in compliance with Sharia rules. Accordingly, Islamic economics adopts a distinct perspective, including all economic segments, from the micro to the macroeconomic level, in accordance with its values and principles. Justice is one of Islam's top aims, along with enlightening knowledge and fostering human well-being via various individuals, institutions, and organizations. (Chapra, 2001)

Islamic financial institutions are one of the primary features and operational components of Islamic economics that make it possible to put the tenets of Islam's economic system into practice. Although Islamic banking has developed rapidly, its expansion has mostly happened within a restricted geographic region. Since the great majority of Muslims may acquire financing via conventional financial products, the Islamic finance industry represents a niche market.

Despite its name, Islamic finance is not a religious product. Nonetheless, there is a growing variety of customized financial solutions intended to fill a void for certain people. Conventional, or non-Islamic, finance entails interest and risk, which are forbidden under shariah law. The developments in Islamic finance have enabled Muslims to save as well as invest their own funds in ways that are consistent with ethical principles and their religious faith. In recent decades, Islamic banking has emerged as an important component of the global financial system. Due to its expanding client base, asset size, instrument variety, and worldwide reach. In addition, institutions ranging from local institutions to international financial institutions have acknowledged the significance of finance in Islam and the world financial system.

These are the main subfields within contemporary Islamic banking and finance: First, Islamic banking includes deposit institutions like Bahrain Islamic Bank that operate in compliance with Shariah principles. HSBC Amanah is only one example of a conventional bank that offers Shariah-compliant products and also invests via an Islamic window or separate organization. Second, takaful, also known as Islamic insurance, is a Shariah-compliant insurance firm, and it is forbidden under Shariah for the insurer to tell the insured, T.L. the insured. Third, the Islamic capital market includes both equity investments and fixed-income instruments, which must adhere to a unique set of regulations and rules compared to contractual norms and monetary exchanges in the conventional financial system. In addition to interest rates and uncertainty, problems such as gambling, investing in illegal activities, and capital guarantees for equity-based products should be avoided. Bonds, mutual funds, stocks, and other investment funds and products that are Shariah-compliant are all covered. Fourth, Islamic non-banking financial institutions: This subsector has a significant number of non-banking financial enterprises that adhere to Islamic financial principles. Among them are Islamic financial companies, Islamic factoring and leasing, Islamic microfinance, Islamic housing cooperatives (waqf), companies specializing in pilgrimage management, charity, or zakat administration, and private equity and working capital, etc.

In Islamic finance, sharia-compliant banks were the first to appear, then new institutional models and instruments like tankful and sukuk companies. With the start of the new century, the sector has gained new momentum. Awareness of this new ethical form of finance was increased via coordinated efforts across international and local communities. This effort aims to raise awareness about Islamic finance among influential members of the financial sector. Consequently, standardization activities included both the mechanism for establishing global international standard-setting organizations and the regulatory and legal framework established by local authorities.

2.1.1. The History and Growth of Islamic Finance and Banking

During the Medieval Era, Middle Eastern traders handled their financial transactions according to the Shari'ah, which followed the same fairness principles in trade and prohibited usury as their European contemporaries. They formed interest-free systems built on profit-loss sharing. During and after the period known as Islamic civilization,

which spanned between the closure of the 6th century and the start of the 11th century, these instruments served as successful means of funding trade and other businesses. Western or conventional financial institutions gained prominence as Western countries adopted a greater role in the global economy. When the Middle East and Asia grew in importance as trading areas for European firms like the Dutch East India Company, Banks in Europe established their bank offices in those areas. They implemented a new interest-based financial system. Cooperative societies and credit unions persisted, but on a much smaller scale and mostly in far more constrained locations.

Nevertheless, as a consequence of Muslims' desire to avoid interest, A newfound enthusiasm for updating the traditional Islamic banking system has emerged. Although it wasn't until the 1980s that the vast majority of Muslim scholars opposed the development of commercial banking as a result of the industrial revolution because of its dependence on the interest rate mechanism, when commercial banking formed in the aftermath of the industrial revolution, most Muslim scholars had serious reservations about its ability to serve as a financial intermediary in Muslim societies. A substantial percentage of the Muslim community avoided traditional banks. However, the demands of merchants, manufacturers, and other business owners were essential to the quick monetization of economies. To address this issue, Islamic banks and economists have been looking at alternative methods of financial intermediation. In the first part of the nineteenth century, significant theoretical progress was accomplished. Much of the Muslim world was under the control of colonial powers at the time. After World War II's conclusion, newly independent Muslim nations started undertaking small-scale experiments with interest-free finance, which would eventually expand in size and importance. Even during colonial times, certain Muslim countries had credit organizations and cooperatives (running without interest), and by the early 1960s, these societies and cooperatives had begun to resemble banking institutions.

Mit Ghamar, Egypt, conducted a remarkable experiment in implementing Islamic principles governing financial transactions from 1963 to 1967. The Mit Ghamar initiative, which drew inspiration from German savings banks, primarily used savings accounts to gather and invest small donations from the rural sector. On their accounts, clients did not receive any interest. However, as a bonus, they were qualified for modest amounts of short-term, interest-free financing for useful means. They might take their deposits out at

any moment. Additionally, investment accounts with profit-sharing were made available. According to a profit-sharing agreement with investors, the money was invested. In 1971, Egypt's Nasser Social Bank became the earliest instance of a financial organization using the term "bank" in its title that did not charge its customer’s interest. A Muslim nation's government expressed interest in establishing the first free-interest bank. The Nasser Social Bank's main goals were social ones; for example, offering low-interest loans to the needy and those in need, student scholarships, and profit-sharing microcredits for small-scale enterprises. But for Muslim businesspeople with additional cash, the government's involvement in interest-free banking sends vital messages. A group of these businesspeople in Dubai, United Arab Emirates (UAE), came up with the idea to form the Dubai Islamic Bank in 1975 the first truly standalone Islamic financial institution. However, government assistance was crucial, with the governments of the UAE and Kuwait giving 20% and 10% of the capital, respectively. The Islamic Development Bank (IDB) was founded in 1975 and is often regarded as the single most important event in the development of Islamic banking. A conference of Islamic finance ministers in Jeddah, Saudi Arabia, issued a declaration of purpose in December 1973, which led to the establishment of the Islamic Development Bank (IDB). Twenty-three different OIC member states sent representatives to sign the declaration. In August of 1974, at Jeddah's hosting of the second conference of finance ministers, the Articles of Agreement establishing the Islamic Development Bank were ratified. In July 1975, the IDB's Board of Governors had its inaugural meeting in Riyadh, Saudi Arabia, and on October 20 of the same year, the organization officially opened for business. The period between 1975 and 1990 saw the greatest growth in the Islamic banking industry.

During that period, it matured into a competitive system for mediating financial transactions. Credibility and esteem were attained through a combination of theoretical development and experimental evidence. Several Shariah-compliant financial products were developed, and Islamic banks have successfully used them. During this time, a considerable number of private sector enterprises in a wide range of economic and social contexts established Islamic financial institutions. In addition, the Islamic Republic of Iran, the Islamic Republic of Pakistan, and the Islamic Republic of Sudan have all declared their plans to replace interest with an Islamic banking system. To attain this goal, these countries simultaneously took many practical actions. Not only that, but a number

of the world's largest banks started to provide Islamic financial products, which was a significant development. Like Amanah Bank, which was established in the Philippines in 1973, Islamic banking came to Europe for the first time in 1978 in Luxembourg, and the 1980s saw numerous additional Islamic banking and finance initiatives. In 1982, Faisal launched the Faisal Finance House in Geneva, Switzerland. Countries including the UK, Germany, France, the Netherlands, and Italy are working to accommodate their Muslim minorities and take advantage of opportunities in the Islamic financial sector, which is growing quickly.

This was a public acknowledgment of the success and worldwide acceptance of the new Islamic model. Both the World Bank and the International Monetary Fund (IMF) have published articles recognizing financial Islamic products as a legitimate type of intermediation. In the 1990s, as the banking industry developed, but at a slower rate, non-bank financial institutions gained prominence. And numerous Islamic non-bank financial institutions have developed. Insurance corporations and mutual funds were also represented. The Islamic investment fund business has grown rapidly, in stark contrast to the underdeveloped Islamic insurance market. The 1990s also saw the beginning of efforts to establish a wide range of ancillary institutions to back up the Islamic financial sector. There was a time when Islamic banks had to follow the same regulations as their conventional counterparts. They were disadvantaged since this arrangement failed to meet their requirements. Efforts have been made to develop a framework of institutions to support the Islamic financial industry. Banking systems worldwide adhere to conventional principles. Global banking systems conform to conventional ideas. Because of IB's unique qualities, establishing standards agencies have been obliged to create industry-specific standards. In 1990, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) was established to set Shari'ah accounting and auditing standards, and in 2002, the Islamic Financial Services Board (IFSB) was established to regulate and oversee the industry. These groups have collaborated closely with the Basel Committee and other traditional standard-setting committees to produce a broad variety of technical standards and advisory notes.

2.1.2. Islamic Banking

Islamic banking is the backbone of Islamic finance. It is a term used to define any type of financial banking that operates in accordance with Islamic law's principles and Islamic economics' rules. Islamic banking is a new, moral financial system that currently serves around 25% of the global population. With its continuing expansion, the Islamic banking system demonstrates its ability to act as a reliable worldwide financial intermediary. Islamic banking has become a potent instrument in the fight against a potential world economic catastrophe since its development in the twenty-first century. According to (Ariff, 1988), the most significant contrast between Islamic and traditional banks is that the former charge their clients' interest while the latter do not. For this reason, Islamic banks provide services such as zero-interest loans, profit-and-loss sharing, and inexpensive consumer loans. Islamic profit-loss sharing is based on confidence and collaboration between the consumer and the intermediary in financial matters (Yudistira, 2004). Islamic banking derives from the Islamic economic system, yet it is not restricted to Muslims since Islam promotes the prosperity of all people (Memon, 2007). The fundamental aim of Islamic banks is to act as a resource for potential entrepreneurs by offering a range of banking services and financial possibilities (Abdullah et al., 2016). Islamic financial institutions provide several shariah-compliant financial services, including Musharakah, Mudarabah, Wadi'ah, Tawarruq, and Ijārah.

2.1.3. Islamic Banking and Finance Principles

Two sorts of ahkam (rulings) are distinguished in the Islamic Fiqh framework. The first type, ibadat (worship), regulates how a person interacts with God. The fundamental tenet of ibadat is that nothing is permitted unless it has received direct or indirect approval from Allah. Therefore, an action must be ordered before it can be considered worship. The second category of ahkam, also called muamalat (mutual transactions), governs human interaction. In this context, the rule of ibaha (permissibility) states that everything is permissible until God directly forbids it. The term "doctrine of universal permissibility" is used to characterize this outlook. There aren't many black-and-white prohibitions. These restrictions are enacted to level the playing field, safeguard the rights of less powerful parties, encourage social harmony, and guarantee the mutual benefit of all parties involved and the greater society. As part of the Principle of Universal

Permissibility, Islam allows for the inclusion of whatever terms and conditions that the parties to a contract deem necessary, so long as they do not contradict Shariah law. According to a famous authentic hadith, "With the exception of a condition that enables what is unlawful or forbids what is legal, all the requirements agreed upon by Muslims must be met". (Sunan Abu Dawood, 1981). " The Golden Rule of Free Will" is just what it sounds like. As can be seen, this method allows a great degree of flexibility when creating agreements. Within the next paragraphs, we will go through several limitations that must be taken into account while drafting financial agreements:

2.1.3.1. Prohibition of Riba

The term riba comes from the Arabic root rib, which means "to increase." Throughout Muslim history, the idea of riba has been believed to be identical to interest on a loan. As a result of the restriction on riba, in order to make up for time spent waiting, charging interest on debt is forbidden by Shariah law. There is no difference between a loan with fixed interest and one with variable interest, or one with interest paid in advance, at maturity, as a gift, or in exchange for services. It is also irrelevant whether the borrowed funds were utilized for personal or business purposes.

2.1.3.2. Prohibition of Gharar

Multiple trustworthy sources attest to a hadith attributed to the Prophet Muhammad (peace be upon him) that forbids engaging in the gharar trade. It is gharar to put oneself or one's property at risk without realizing it. gharar is only used in situations of uncertainty or doubt, such as not knowing if something will occur or not. However, jurists acknowledge two sorts of gharar: gharar fahish (major) and gharar yasir (minor). It's very forbidden to use the 1st type, whereas the 2nd type is authorized if it is likely to occur without severely damaging one party. The nature of the commodities makes it difficult in many cases to offer accurate information, not because the seller is trying to conceal anything.

2.1.3.3. Prohibition of Maysir

In Islam, gambling and other games of chance are generally forbidden. There is a substantial distinction between totally random games of chance and the other areas of life

and business that also include a degree of chance and risk-taking. However, risk-taking is not always forbidden. The pooling of risk between investors and company owners is one of the fundamental elements of Islamic banking, as we shall see. Given that all insurance plans involve an element of "chance," some Islamic scholars have made the connection that the industry is equivalent to gambling, which is forbidden in Islam.

2.1.4. Differences Between Islamic Banking and Conventional Banking

Though Islamic banks offer a similar function to conventional banks, they carry it out quite differently. The distinguishing characteristics that set Islamic banking apart from its competitors are as follows: As mentioned by (Iqbal & Molyneux, 2016)

Firstly, Risk-sharing is the greatest distinguishing characteristic of Islamic banking, as is its focus on mutual risk-bearing among the investor (bank) and the customer (entrepreneur). For conventional banking, on the contrary, the investor's interest rate is guaranteed. It is impossible to anticipate in advance the outcome of a project without taking a risk due to the unpredictability of the surrounding environment; under conventional banking, the entrepreneur takes all this risk. The investor obtains a fixed rate of return, no matter if the undertaking generates a profit or not. Such unethical distribution is prohibited in Islam. Profits from an agreement between an investor and an entrepreneur are split equally under Islamic banking. According to the terms of their individual contracts, both parties receive a portion of the profits. If the business fails, the capitalist loses money and the entrepreneur loses labor. (Iqbal & Molyneux, 2016)

Secondly, by giving output priority over creditworthiness in the conventional banking system, timely repayment of loans and interest is the only thing that matters. Therefore, the major consideration is a borrower's ability to repay the loan. With PLS banking, the bank is only repaid if the project is profitable and successful. Therefore, an Islamic bank will place more emphasis on the entrepreneur's business and managerial skills as well as the project's viability. This trait significantly affects the stability of the system and how loans are distributed. (Iqbal & Molyneux, 2016)

Thirdly, the moral aspect Conventional banking is a secular enterprise. However, under the Islamic system, all economic participants are required to comply with Islamic ethical principles. Islamic financial organizations are not an exception either. Therefore, they

cannot grant support for any initiative that violates Islamic moral principles. For instance, they won't put money into a company that manufactures or sells alcohol, partakes in gambling, or throws pool parties because they believe that these activities are either against their religious beliefs or detrimental to society as a whole. Islamic banks may be comparable to the Western "ethical funds" that are becoming more and more well-known in this regard. (Iqbal & Molyneux, 2016)

Fourthly, a larger selection of products; the diversity of Islamic banking's product offerings is among its numerous advantages. Islamic banks may employ a broad range of novel profit-sharing financing mechanisms, in addition to a few fixed-return modes that may fulfill the same purposes as interest in traditional banking. (Iqbal & Molyneux, 2016)

Fifthly, a stronger connection between the real and financial economies; Islamic banking provides a considerable advantage over interest-based finance and other kinds of fixed returns that lead to debt. In Islamic finance, debt cannot be established without commodities or services as collateral, and the resultant debt instruments cannot be exchanged for anything other than commodities or services. Since the monetary flows of Islamic financial modes are inextricably tied to the flow of goods and services, there is far less probability of a sudden and huge movement of such funds than there is with the flow of interest-based short-term funds. Consequently, it is projected that speculative instability would diminish substantially. Return rates in the financial sector are increasingly driven by financial variables. (Iqbal & Molyneux, 2016)

2.1.5. Islamic Financial Instruments

Today, financial transactions are regarded as Islamic if they adhere to the tenets of Islam and do not go against the teachings of Muhammad (pbuh). Islamic banking and finance's traditional tools obtained their conformity with Islamic legal principles during his lifetime since they were either accepted by the Prophet himself or were in use throughout his lifetime, and he either gave them his permission or did not forbid or alter them (Ökte, 2010). Musharakah and Mudarabah, two well-known Islamic financial instruments, have been permitted for usage. Numerous innovative financial products have been established by Islamic banks across the world using the concepts of risk and profit sharing. Constantly, many new financial products that accord with the tenets of Islamic finance and give suitable returns for Muslim investors are developed. According to (NIDA‟UL

ISLAM, 1995) in (Iqbal & Molyneux, 2016; Ökte, 2010), the following are some of the most important Islamic banking tools:

First, Murabaha (Cost Plus Financing) Murabaha is an Islamic banking process in which the Islamic bank buys the item with cash and gains a profit by reselling it to their clients through deferred payment. In a Murabaha-based sales contract, the seller freely discloses his costs and profits. In many fields, the murabaha finance structure is preferred over traditional loan arrangements. For instance, consumers use Murabaha to acquire home goods, automobiles, and real estate. Typically, companies would utilize this sort of financing to buy new pieces of equipment, machinery, or raw materials. Short-term transactions, such as the issuance of letters of credit for importers, are other popular uses of Murabaha. (Iqbal & Molyneux, 2016; Ökte, 2010)

Second, Mudarabah which is a kind of Islamic finance in which the first party and the financier enter into a legally binding contract, is the capital owner (known as Rabb al-mal) in this case, the Islamic bank that provides the capital and investment manager, and the second partner (known as Mudarib), who provides the labor, skill, and management. The bank has the authority to apply any limits it deems necessary to guarantee that its money is used properly, even if it will not be engaged in the firm's activities. Investment accounts are managed using the Mudaraba structure. Third, Musharaka (Partnership) Musharakah is a corporate partnership in that profits and losses are shared equitably. Partnerships of this kind often only last for the duration of one specific project. So, it's very much like a joint venture in the West in that respect. Musharakah is often used to acquire real estate, finance significant purchases, fund business ventures, and make investments. (Iqbal & Molyneux, 2016; Ökte, 2010)

Fourth, Ijarah (Leasing) Ijarah is structured after conventional leasing arrangements, with monthly payments in place of a single lump-sum payment. A contract for ijarah involves leasing or renting goods or services. Al-ijara is very similar to a leasing contract, vehicles, houses, plants, and even machines may all be financed via Ijarah. Fifth, Salam refers to a kind of sales agreement when the buyer pledges to compensate the seller in full at the moment of contract signing in return for the seller's pledge to deliver the goods or services at a later date. It serves as a kind of financing for people in the agricultural and retail sectors. Microfinance institutions and other financial institutions utilize it to help out local

businesses. It is typically utilized for agriculture, working capital, commercial and industrial, export, operations, and capital cost financing. (Iqbal & Molyneux, 2016; Ökte, 2010)

Sixth, Al-Istisna contract, one party instructs the other to manufacture and supply a product or service; the contract defines the kind of good or service to be produced or given, as well as its delivery date, price, and payment terms. Istisna 'a contracts may be utilized in infrastructure projects such as road construction, school construction, hospital construction, building construction, power generation, and other facilities, as well as a variety of other contracts such as airplane, car, and ship manufacture. For the people behind these initiatives, finding alternate means of funding would have been challenging. (Iqbal & Molyneux, 2016; Ökte, 2010)

2.2. Islamic Financial Inclusion

In conformity with shariah law, Islamic finance encompasses a vast array of organizations and practices that offer clients high-value services. This includes banking, microfinance, capital markets, takaful, as well as the latest financial innovations, such as cryptocurrency, crowdfunding, etc. (Tahiri Jouti, 2018). In fact, Islamic finance is constantly developing in order to compete with traditional finance by targeting consumers of various religions (Abdullah et al., 2012). In itself, this is a triumph for this newly formed industry. The extent to which Islamic banking might support a diverse financial system has given rise to questions, particularly in Muslim-majority nations where people are excluded from financial services for religious reasons (SESRIC, 2018).

(Al-Jarhi, 2014; Al-jarhi, 2018) provides a Shariah-compliant financial product-based Islamic finance theory. These interest-free products adhere to Islamic principles and are an effective means of reaching financially excluded individuals. from the mainstream economy via no fault of their own. Islamic banking has the ability to serve those who are now shut out of the financial sector, enabling the average individual to participate in a wide range of operations because the system provides alternative finance that is compatible with a significant number of financially excluded individuals, thereby generating wealth that impacts the economy positively. Without a doubt, Islamic finance may contribute to financial inclusion by fostering growth in the economy and addressing issues of poverty through its inclusive offering.

Profit-loss sharing financial instruments like Mudarabah and Musharaka, as well as redistribution mechanisms like Zakat and Sadaqat, enable Islamic finance to tackle the issue of financial inclusion, through Waqf and Qard-al-Hassan. In Islamic finance, investment initiatives are evaluated based on their morality and profitability. Because of this, taking risks and splitting them up are encouraged without the requirement for coverage. In brief, financial inclusion is supported. In addition, Islamic finance redistribution mechanisms promote financial inclusion by requiring grant recipients to have accounts with official institutions for redistribution to take place.

In its redistribution approach, Islam embraces any means that provide a fair division of wealth. In fact, it is a qur'anic principle formulated in the following: "Whatever Allah restored to His Messenger from the villagers belongs to Allah, the Messenger, the relatives, the orphans, the needy, and the traveler, in so that it not just be distributed among the wealthiest among you." (Qur'an, 59:7).

The term "redistribution" is used to describe the phase that follows "distribution," during which the less able own rightful share is repaid by contributions both voluntary and involuntary. These expenditures are basically a return and payback of the rights of other people to a person's wealth and income. It's an affirmation and recognition that Allah made these resources and that everyone should have unrestricted utilization them. All the skills that enable accessibility to resources are a gift from Allah. This could suggest that individuals who are less skilled or incapable of utilizing these resources are companions of those who are (Mohieldin et al., 2011). One of Islam's tenets of economics is the need to include everyone by dividing up the risk. It's founded on the idea that taking full responsibility—including, maybe, for the consequences of one's actions—can make one's pursuit of wealth or profit morally justifiable. The prophet (pbuh) is credited with saying, "Profit comes with liability," which is interpreted as a legal dictum stating that Shariah distinguishes between permissible profit and all other forms of gain and that only when the right to profit is allowed is there a risk or danger of losing.

Islam has long promoted sharing risks as the optimal institutional framework for all economic activity, and its use extends well beyond what is possible within the confines of modern theory (Askari et al., 2012). Islamic law, but on the other side, risk-sharing with the poor, the impoverished, and the disabled is mandated. Interest-based contracts

are prohibited since they go against the religion's property ideals. Because risk sharing is the foundation of Islamic finance, any debt-based instruments whose structure is based on the payment of pull-out interest as a percentage of the principal borrowed for a set period of time without a complete transfer of the borrower's asset rights are banned from the financial system (Askari et al., 2012).

The borrower assumes the risk as a consequence of this sort of debt-based transaction. Instead, Islam encourages a mutual trade (al-bay) in which one set of property rights is traded for another, with each participant bearing the risks associated with the transaction (Mohieldin et al., 2011). One of the most important chapters of the Quran with regards to economic connections clearly emphasizes risk-sharing. The verse states that: “... They assert that an exchange transaction, or "bay," is comparable to an interest-based transaction, or "rib." However, Allah has made interest-based transactions unlawful while allowing exchange transactions” (Qur’an,2:275). Inclusion through redistribution mechanisms in Islam and full observance of Islamic law principles that encompass resource allocation, trade, production, and Economic expansion is ensured by equitable distribution of income and wealth, development, and economic fairness.

Islamic law ensures fairness in all stages of economic activity, from planning through the distribution of goods and services. Justice before production may be achieved by making sure everyone in a society has equal access to and use of resources. The Islamic framework for property rights sets the standards necessary to achieve this result (Iqbal & Mirakhor, 2011). People must be aware that there are people in society who are incapable of using the resources but still have rights to them, and that the fundamental Islamic principle about ownership of property offers a solid basis for the privileges of society to impose legislation. It is only fair that the gains acquired through its use by more capable members of society flow down to those who provide less in return. Profits and assets obtained as a result of exercising these rights must be reimbursed (Mohieldin et al., 2011). Various taxes are levied on output or revenues to make up for the privilege of people who lack the means to participate in the economy. Islam prioritizes the redistribution of income and legislates procedures like Zakat, Qard-al-Hassan, and Sadaqat to accomplish it. It is crucial to understand that these taxes should not be seen as alms or charity, as many laypeople and specialists assume the tools of redistribution (zakat, Sadaqat, and

Qard-al-Hassan) are meant to promote access to finance, enhance equality, as well as assist in eradicating poverty. (Mirakhor, 2004)

Despite the evident difficulties of implementing Islamic banking principles, it has the ability to significantly and profitably increase the total number of individuals that can use bank accounts. Extremely low-income households and individuals can be helped through Qard-al-Hassan, Zakat, Waqf, micro-finance, and micro-takaful; poverty can be alleviated through these same mechanisms; and low-income households and individuals can be supported through market-driven initiatives and SMEs with the help of Sadaqat, Waqf, Zakat, and collective risk sharing.

The Islamic banking industry, which dominates the financial landscape in the vast majority of OIC nations, may be crucial to the development of finance (Gheeraert, 2014). By adopting equity-based financing techniques while emphasizing technology and microfinance. In addition, Islamic financial instruments provide a variety of methods for financing projects and achieving a more equitable society in terms of wealth sharing and inclusive development without depending on interest rates, ghrar uncertainty, or gambling (Léon & Weill, 2018). Individuals who were previously unbanked owing to their aversion to traditional interest-based instruments may be brought into the financial system via income risk sharing. Unlike the interest-based system, it permits the sharing of enterprise risk without requiring collateral. In contradiction to conventional banking, the banking system in Islam promotes financial inclusion by severely restricting access to conventional loans (Mohieldin et al., 2011).

2.3. IBF and Poverty Alleviation

Since wealth has two components, material and spiritual, from an Islamic viewpoint, the issue of poverty is considered from both of these perspectives. In general, poverty is solely measured and analyzed in terms of its financial and monetary elements. However, as poverty is also an asocial issue, Islam has a highly complete notion of poverty with huge ramifications for the individual and society (Hassan, 2010). As said below in the hadith of Sahih Bukhari:

> "Oh Allah I seek refuge with You from sluggishness and advanced age, from all sins and debt, from the affliction of the fire and from its punishment, from the evil of the affliction of wealth, from the affliction of poverty, and from the affliction of Al-

> Mesiah Ad-Dajjal. Oh Allah Put a great distance between me and my sins, just as You separated East and West from one another, and wash away all of my sins with the water of snow and hail, purifying them from all in my heart as a white garment is purified from dirt." (Al-Bukhari, 1978)

According to (Gazalba, 1985) the word poor stems from the Arabic phrase Sakana, which denotes stillness and quietness; however, the term “masakin” is a plural variant of poor and derives from Sakana, which indicates motionless or immobilizing illness or a passive demeanor, and Qana'ah. According to Muslim scholar Ibnu Khaldun in his famous book “Muqaddimah”, poverty is the product of a society’s degeneration brought on by flawed policies carried out in the absence of democracy, which ultimately results in the emergence of numerous ills. Additionally, (Hassan, 2010) highlighted that Islam defines poverty as a loss of wealth, dignity, knowledge, and physical self.

According to Islamic belief, poverty stems not from a lack of resources but rather from excess on the side of the wealthy and the exploitation or underpayment of those who are financially weaker. An equal opportunity to earn an income is a vital human right. It is possible to earn a living with a good salary by working for others, being self-employed, or hiring others. The process of employing individuals is an entrepreneurial act. A religion with a positive perspective on work and wealth is more likely to encourage the establishment of productive firms and the development of an entrepreneurial environment. Islamic religion does not prohibit working for others but rather instills and encourages a more entrepreneurial attitude in order to produce a livelihood and aid those living in poverty (Hassan, 2015). If the government and financial institutions give robust support for this Islamic approach, it may have a substantial beneficial impact on poverty reduction.

Ibn Khaldun argues in (Chapra, 2001) that there are various aspects to poverty, including ethical, social, intellectual, demographic, and political; consequently, tackling poverty successfully needs a diverse strategy that emphasizes a range of sectors. Similarly, "all those who are powerless and weakened due to illness, old age, or war," regardless of whether they are able to work and provide for their own needs and those of their families, is the definition of poverty in Islamic economic language. Therefore, the poor are individuals who own material possessions yet are nevertheless reliant on others to meet

their necessities. Zakat can be given to the poor and the needy. In Islam, poverty is often seen as a cause of a nation's downfall and destruction.

Islamic teachings put a strong focus on poverty alleviation, decreasing inequality and relative poverty, excluding the poor, promoting economic expansion, social peace, and wealth distribution. By providing a range of Shariah-compliant financial products tailored to the requirements of their customers, especially the disadvantaged and impoverished, Islamic banking institutions contribute significantly to these goals (Zulkhibri & Ismail, 2017).

Both the Quran and the hadith make it clear that Islam rejects extreme inequality and poverty and places a high focus on decreasing poverty (Ahmed, 2004). Both Qur'anic verses (Qur’an 7:1 & Qur’an, 62:10) and the statements of the prophet underline the obligation of every person to work and provide for his or her own needs via the prudent use of the resources Allah has entrusted to humanity (Amanah). Other Quranic verses (Qur’an, 70:24-25) underline the importance of giving to those in need in order to bridge the wealth and poverty gap. Additionally, those whose money is acknowledged as being appropriate for the needy who begs and the person who is barred (from asking for any reason)” (Qur’an, 70:24-25).

Providing social security and responsibly lowering poverty, Islamic redistributive institutions like Zakat, Waqf, Qard-al-Hassan, and Sadaqat have been crucial in fostering greater social and financial inclusion for people in a responsible way. To optimize their efficacy, these tools must be institutionalized and revitalized. Through these redistribution methods, the wealthy risk-sharing by assisting the underprivileged individual, resulting in increased social justice in which everybody has equal chances and contributes to social and financial expansion.

(Obaidullah, 2008) outlines the whole idea of poverty: The Islamic strategy for reducing poverty is more comprehensive than the traditional one. The key context for long-term success in microfinance is the combination of wealth creation, compassion for the disadvantaged, mission-based, and market-based activities. Microfinance, especially shariah-compliant microcredit financing for small enterprises, has the potential to reduce poverty if it takes an equity- and cooperation-based strategy as opposed to one that produces and sustains the debt of the wealthy. According to (Chapra, 2008), microfinance

has shown a remarkable ability to promote employment and self-employment prospects in the contemporary global economy and should be a top priority in Muslim countries. As stated by (Obaidullah, 2008) and consistent with CGAP best practices, microfinance is a powerful tool for relieving poverty.

By striving to establish a society in which neither extreme wealth nor poverty exist, Islam seeks to make the distribution of resources equitable. In this ideal world, everyone would recognize that material prosperity is a gift from Allah and use it solely to help those less fortunate. Spending (Israf), lavishness and waste (Itl'f), showy affluence, and poverty are all banned in order to comply with Islamic law and prevent society from falling into a condition of extreme wealth or poverty (Mohieldin et al., 2011). It then requires that the net surplus be distributed to society members that lacking the ability to work for many different causes, as a result of which their potential utilization of available resources opportunities for those with higher skills to take advantage of their community's prosperity.

This is done after the minimal expenditures required to sustain a modest basic standard. The more skilled are viewed in Islam as guardians who use their wealth for the benefit of the less skilled. According to this viewpoint, property serves to both include and redeem the riches and privileges of the privileged rather than exclude individuals. The outcome would be a more equitable economy in which neither extreme riches nor poverty predominated. A network of required and optional levies is the practical mechanism for compensating the rights of the less competent in exchange for the wealth and income of the more capable. For that result, Islam promotes economic empowerment, this, among other things, entails giving the needy what they need, turning unused assets into income-generating properties, increasing capacity, and reporting on results (Obaidullah, 2008).

In conclusion, since the research is centered on analyzing the influence of Islamic Banking on financial inclusion and reducing poverty, this chapter introduces the reader to Islamic finance by tracing its historical evolution before proceeding to provide concrete examples of Islamic banking practices—including the prohibition of interest-bearing debt (riba), interest-bearing interest (misar), and interest-bearing interest (ghrar). Therefore, we introduced the Islamic banking industry, and the following section is a comparison of Islamic and Traditional Banking. several Islamic financial instruments are described in

this chapter that the Islamic banking industry may use, including Murabaha Mudarabah Ijarah and others. The research sought to highlight the incorporation of Islamic finance in financial services based on theocratic literature in that area, in addition to underlining how banking and the financial system in Islam may reduce poverty.

In the next chapter, we will discuss the empirical literature review by identifying the relation between financial inclusion and reducing poverty, Islamic banking and financial inclusion, and Islamic financial inclusion and alleviation of poverty. It will also highlight the research gap and research problem. Moreover, study data collection sources, variable definition, research strategy, chosen research empirical method, empirical results, and discussion.

CHAPTER 3: EMPIRICIAL ANALYSIS OF FINANCIAL INCLUSION ON POVERTY ALLEVIATION THROUGH ISLAMIC BANKS

3.1. Empirical Literature Review

3.1.1. Financial Inclusion and Poverty

The phrase "financial inclusion" has garnered a lot of interest since the late 1990s, when the problem of socially excluded individuals and research on their financial exclusion became a concern for policymakers. (Collard et al., 2001; Leyshon & Thrift, 1993, 1994, 1995). Later research (Kempson & Whyley, 1999) analyzed the demographics of Britain's unbanked and discovered that low-income people can greatly benefit from opening a checking account. However, measures to broaden access to financial services are laid out in the 2004 Pre-Budget Report (HMTreasury, 2004). This includes things like making it easier to get in touch with financial mediators, finding good credit options, and getting face-to-face help with debt issues (Collard, 2007). Research conducted since the late aughts has tended to zero in on the topic of financial inclusion measures and the link between financial inclusion and economic development, as opposed to earlier studies that focused on the basics of financial inclusion and the characteristics of financially excluded groups.

According to the Rangarajan (Committee's, 2008) definition of financial inclusion, it is the process of providing financial services to individuals in society who do not have access to them because of factors such as low income and high transaction costs. (Mohan, 2006) defined financial inclusion as the process by which a previously excluded population group is brought into the financial system through the provision of accessible, affordable, and equitable financial services and products from mainstream providers (Ajide, 2014). defines financial inclusion as "the extension of the nation's financial system to its citizens. Whereas it has been defined as the action of making formal financial services available, affordable, and easy (Sarma, 2012).

Financial inclusion was described by (Aduda & Kalunda, 2012) as the approach service providers employ to make different economic services accessible to everyone in the community at cheap prices and in a timely manner. As (Leeladhar, 2006) put it, "financial

inclusion is the practice of providing timely, cost-effective banking services to underserved and underprivileged populations," and this definition is broadly accepted across the literature. Creating, developing, and maintaining a secure, accessible, and affordable financial environment for the totality of society is a broader definition of financial inclusion (Carballo, 2017). That's why the word "financial inclusion" is so broad, multifaceted, and dynamic.

Most nations are recognizing the value of financial inclusion as a tool for fostering sustainable development (Al-Own & Bani-Khalid, 2021; Ozili, 2020; Oz-Yalaman, 2019; Sharma, 2016; Shihadeh et al., 2018). Financial inclusion is a top core strategy for a number of reasons (Demirguc-Kunt et al., 2017; Sahay et al., 2015), including its importance as a tool for achieving the United Nations' Sustainable Development Goals (SDGs). Thirdly, it equips policymakers and authorities to fight poverty (Chibba, 2009; Neaime & Gaysset, 2018), which is a direct result of financial inclusion improving social inclusion in many countries (Bold et al., 2012). (Andrianaivo & Kpodar, 2011; Cull et al., 2012; Ikram & Lohdi, 2015; Sarma & Pais, 2011), and others all point to further social and economic advantages resulting from this practice. It has been stated that for growth in the economy to be sustained, a sizable portion of the population needs to have easy access to formal financial services, and that a high level of financial access is frequently linked to a high level of investment, employment, high wages, and a low poverty rate (Umar, 2013). This is because an increase in effective demand drives investment, generates new jobs, and boosts income when people have access to formal financial services.

Empirical research in this area shows that an expansion of access to banking services globally possesses the potential for growth in household revenue in a number of ways, such as by raising the living standards of the poor, decreasing the prevalence of poverty, starting and growing businesses, and managing risk, all of which present a variety of potential for the financial industry (Bruhn & Love, 2014; Kim, 2016; Zhang & Posso, 2019). Due to their inability to access standard financial services, financially excluded households commonly rely on non-official institution, which may be more expensive and provide less consumer protection (Anderloni et al., 2008; Yun, 2017). In addition to that, it is believed that expanding access to financial services will help alleviate poverty and boost growth in its economy (World Bank, 2018).

Multiple countries aim to attain complete financial inclusion by 2025 (Smith et al., 2015). As a consequence of financial inclusion, a greater number of individuals now have easy accessibility to banking and other financial services, including banking services, lending, insurance, and secure savings accounts, which have increased in popularity in recent years. The increasing usage of the Banking System by businesses and people has boosted the country's economy. Several studies, like (Banerjee & Newman, 1993) have identified the availability of funding as a crucial aspect in helping people adjust their production and employment practices and overcome poverty. According to (Gheeraert, 2014), who concurs with them, greater financial services accessibility by the underprivileged would stimulate capital creation, which would in turn boost investment, employment, and income, leading to more inclusive development and growth. Fewer empirical studies have been conducted on the link between financial access and poverty reduction than on the link between financial sector growth and economic expansion. Furthermore, the findings of this kind of study are frequently inconclusive, making it challenging to make certain judgments regarding whether or not, to a greater or lesser, poverty can be alleviated when people have the opportunity to use financial services. in developing nations.

Many studies, including (Chibba, 2008b, 2008a, 2009; Setboonsarng & Ziyodullo, 2008; World Bank, 2018), indicate that FI may assist in reducing poverty by fostering pro-poor development and contributing to the achievement of the Millennium Development Goals. Better financial management, affortable access to credit, a safe place to put money, and the advantages of having more alternatives than those working in the informal sector are just a few of the ways in which FI may enhance the lives of low-income workers in developing nations. Entrepreneurs and small businesses could also gain from FI.

Additionally, studies by (Beck et al., 2007; Chandran & Manju, 2010; Sarma & Pais, 2011) have demonstrated that improving financial service accessibility benefits the economy as well as the less fortunate. They stated, among other things, that providing people with low incomes with access to basic financial services like savings, loans, and insurance would help them become financially stable and would boost the economy. They believed that if more people had access to banking services, economic growth, poverty reduction, and income disparity would all improve.

According to a study by (Jalan, 2009) it demonstrates that "inclusive growth" aims to include the poor in a nation's economic growth plan. Achieving poverty reduction, fostering equitable development, and meeting the Millennium Development Goals may all be aided by the progressive and well-rounded approaches provided by financial inclusion. (Chibba, 2009) investigated the impact of financial inclusion on poverty. Findings from the study suggest that present efforts to battle poverty and achieve the MDGs need to be supplemented with policies that promote financial inclusion as a means of combating poverty and inequality.

Financial inclusion, inclusive economic growth, and the decrease of poverty are all closely associated, as stated by (Beck et al., 2000; Demirguc-Kunt & Levine, 2008; Levine, 2005). More people having access to financial services improves the economic status of the most marginalized in society, as shown by several studies. The literature on this topic is extensive like studies by (Aportela, 1999; Ashraf et al., 2011; Dupas & Robinson, 2013). A more equitable economy is another benefit of broad financial inclusion. The financial sector has been more stable (Ahamed & Mallick, 2019; Ahmed & Salleh, 2016). Lack of access to financial resources, on the other hand, exacerbates the poverty trap by limiting people's ability to respond to unexpected expenses and put aside surplus funds. To wit: (Mohieldin et al., 2011). How financial inclusion influences poverty and income inequality was researched in 177 countries (Park & Mercado, 2016). The authors developed a composite index of financial inclusion based on five factors using the method described in the paper. (Sarma, 2008). Domestic credit as a share of GDP, commercial bank branches, automated teller machines, borrowers, and depositors as a share of the population are all metrics that may be tracked. With the help of cross-sectional data spanning from 2002 to 2012, they found that financial inclusion is associated with a lower poverty ratio for both the entire sample and the emerging Asia sample, but not with income inequality.

According to research conducted by (Chandran, 2011), the key aim of FI is to help low-income individuals acquire admission to fundamental services of finance, including deposits, loans, and insurance, thereby enhancing self-control over the financial expansion of the economy. Financial services are marketed as an indicator to alleviate poverty and lessen income disparity, in addition to promoting economic development. It has been shown by (Aigbokhan & Asemota, 2011) that having access to financial

resources significantly contributes to eradicating poverty. Furthermore, (Chithra & Selvam, 2013) claim that FI is essential for eradicating poverty since it allows the economically disadvantaged to improve their quality of life by launching businesses and investing in production.

In addition, the study reveals that increasing financial services accessibility has a positive influence on employment, investment, and overall community income. Using a fixed and random effect models (Park & Mercado, 2015) examine poverty, income disparity, and access to financial services in Asia's developing nations. The research concludes that variables including GDP per capita, the prevalence of the rule of law, and demography all play important roles in determining the nation's state of financial inclusion. The research further demonstrates that access to financial services reduces poverty and income disparity by giving the elderly and younger people retirement pensions, promoting greater legality, putting financial contracts into place, and monitoring financial regulatory activity that reduces poverty and eliminates wealth disparities by expanding access to financial services.

Moreover, (Coulibaly & Yogo, 2016) assess the effects of banking and related industries on the alleviation of poverty in developing economies. As shown by research findings, financial inclusion obstacles have a positive result on poverty; therefore, boosting low-income persons' having easier access to alternatives for banking assist in reducing poverty. Similarly, (Schmied & Marr, 2016) This research looks at the correlation between Peruvian citizens' access to financial services and three different dimensions of poverty: income intensity, income prevalence, and the disparity between rich and poor. The results demonstrate the importance of financial inclusion in fighting poverty.

(Lal, 2018) assessed the impact of cooperative bank financial inclusion on eradicating poverty in India. It was shown that if people had access to more financial resources, poverty could be reduced, especially if it was accomplished via cooperative banks throughout the nation. Poor individuals would be able to lift themselves out of poverty and lead more fulfilling lives if they had better access to financial services and basic necessities, according to the study's findingsIn addition, (Park & Mercado, 2018) looked at how a more equal distribution of financial services may affect economies worldwide.

The study found that poverty rates in both high- and middle-income countries would decrease if financial inclusion was greatly improved.

The positive effects of FI on people's living conditions in 31 countries are evaluated by (Sethi & Acharya, 2018). Results indicate that offering accessible financial services, such as low-cost loans, increases the income of poor and vulnerable populations by enabling people to get credit and develop their own local enterprises, enhancing production capacity and employment. (Ogbeide & Igbinigie, 2019) Examine the impact of FI on reducing poverty in Nigeria between 2002 and 2015 using a regression analysis with the ordinary least squares (OLS) approach. The results show that commercial bank branches significantly enhance per capita income, improve living standards, and lessen the prevalence of poverty. Using the vector autoregression model (VAR) and the panel vector autoregression model (PVAR), (Erlando et al., 2020) investigated the impact of financial inclusion on economic development and poverty reduction in Indonesia. It has been demonstrated that financial inclusion, poverty, and economic development are all interconnected. The potential role of financial inclusion in alleviating poverty has been investigated (Gutiérrez-Romero & Ahamed, 2021). A database of 79 countries' income levels has been compiled. The data show that expanding access to financial services is an effective way to fight poverty.

Again, (Bruhn & Love, 2009) analyzed the results of giving low-income Mexicans financial services so they could engage in entrepreneurship. The studies show that when low-income individuals gain access to financial services, economic activity increases, which in turn has a significant impact on economic growth, poverty alleviation, and other societal outcomes. In order to determine if FI is a viable technique for decreasing poverty and redistributing income in Nigeria, (Fadun, 2014) uses descriptive data to examine the situation. Financial inclusion has been found to be an effective tool in the fight against poverty and for greater economic parity in Nigeria

(Anwar et al., 2016) they investigate the influence of inclusive financing on the reduction of poverty using panel data from 31 Indonesian provinces between 2005 and 2013. Analysis revealed that FI increases economic growth and investment while decreasing poverty rates. Additionally, (Anwar & Amrullah, 2017) examined the effect of a Multiple regression investigation on the effect of financial inclusion on poverty in Indonesia.

According to estimates, FI affects the economy's overall development and indirectly reduces poverty, but it also increases income disparity because of things like location, gender, and age. (Gunarsih et al., 2018) Researchers in Indonesia looked at the correlation between financial inclusion and poverty reduction using descriptive data, and they found that expanding access to financial services was highly effective in doing so. Due to the higher concentration of banks and other financial institutions in major cities, the effects will be felt more strongly there than in more rural locations.

However, another result from previous literature contends that the availability of banking services may have a negative effect on poor households (Aghion & Bolton, 1997; Galor & Zeira, 1993). their counterargument is that widespread access to financial services promotes consumption borrowing (Awaworyi & Nuhu, 2016; Frank et al., 2014), as opposed to investing and saving for capital growth. Which means that financial inclusion may not always negatively impact poverty. Where, (Neaime & Gaysset, 2018) have found evidence that increasing access to financial services improves the region's financial stability but does not reduce poverty.

3.1.2. IBF and Financial Inclusion

Islamic finance is a system of banking and financial transactions based on shariah law. Its guiding principles are based on Maqasid- al-Shariah and aim to promote the welfare of the people and avoid damage and hardship in their lives. In addition, the Islamic financial sector's philosophical underpinnings, which extend beyond the mutual influence of production variables and economic activity, make it a robust mechanism for financing development. Islamic finance is founded on the principle of justice for everyone, i.e., social justice. Establishing a successful, equitable, and inclusive economic and social system that allows each member of society to completely achieve their potential, maintain and enhance their health, and contribute to the social order's economic development is a central pillar of Islam's economic doctrine. Islam specifically promotes monetary equality for all. Numerous Muslim and non-Muslim politicians, bank governors, and political celebrities have lately expressed a desire for Islamic finance to play a bigger role in global financial architecture due to its potential to enhance financial inclusion.

To grow deposits and credit offerings, Islamic banks must enhance their current methods of operation by modifying their instruments to satisfy market needs. The principles of

Islamic finance prohibit both debt financing and leverage, whereas risk-sharing and equity financing are encouraged instead. It stands to reason that if the necessary institutional frameworks are implemented, Islamic instruments like Zakat, Sadaqah, Waqf, and Qard-al-Hasan, which are designed to alleviate injustice, would play a significant part in achieving these goals of social and economic justice and eradicating poverty. Therefore, it is required to standardize Islamic redistributive strategies aimed at empowering economically disadvantaged members of society, build Shariah-compliant finance businesses such as Microfinancing and Takaful (a form of microinsurance), abolish interest rate restrictions for microcredit to companies of Small to Medium Size, and strengthen consumer protection regulations. Islamic banking, a fast-growing sector of the global financial landscape, has risen to the forefront of scholarly and policy discussion in recent years, notably in terms of its potential to replace the failing traditional system.

Financial resource mobilization is an area where the Islamic banking industry has grown and become more competitive with the traditional banking industry over time. This is true not just for Muslims and Muslim-majority nations, but also for non-Muslims and minority-Muslim countries (Tahiri Jouti, 2018). (Hassan & Aliyu, 2018), stated that the Shari'ah principles on which the Islamic banking system is based offer a safeguard against any unnecessary risk exposure. Many people believe that Islamic banking is more secure than conventional banking because of the way Islamic banks fared before, during, and after the global economic collapse of 2008 (Alexakis et al., 2019). Since its proponents contend that a paradigm change toward more sustainable financial activity is required, there is room for growth for the Islamic financial system, which is founded on ethics, fairness, and equality.

Sharia-compliant banking, often known as Islamic banking, first appeared in Egypt in 1963 (Iqbal, 2004). Despite this, Dubai Islamic Bank was the first fully operational Islamic financial institution, having been founded in the 1970s. In consideration of this humble start, the global competitive landscape has been transformed. There are now more than 300 operational institutions in existence in more than seventy-five countries. Islamic financial tools have the potential to expand financial inclusion more effectively than conventional financial instruments, owing to the context of Islamic economics unique capability of reducing barriers to accessing financial services (Léon & Weill, 2018).

By utilizing the two main types of Islamic financial instruments: profit and loss sharing (PLS) mechanisms and redistributive tools— Increasing people's access to financial services is possible. To begin, in comparison to the standard approach, the PLS mechanism serves as a financial inclusion vehicle that offers loan instruments in which the lending bank charges a particular interest rate, and the customer assumes all risk. The Islamic financial system includes profit and loss sharing mechanisms that encourage financial inclusion. Making use of various Mudarabah, Musharakah, Murabaha, and Ijarah contracts within the Islamic financial system, Islamic financial institutions may improve the availability of credit to individuals who cannot get formal financial loans in the traditional method, more than that, the risk of default is limited to the funding institution; as a result, the limits that borrowers encountered while seeking to get conventional loans are eliminated to a significant degree in Islamic banking. Moreover, (Mohieldin et al., 2011) suggested that, in contrast to the conventional financial system, where credibility is defined by wealth and the presence of security, in Islamic banking and financing, trustworthiness is evaluated based on ethics and the profitability of a suggested investment initiative. Therefore, banks will not need collateral when granting loans, which will promote taking risks.

Therefore, the Islamic banking system paves the path for financial inclusion better than the traditional setup does, due to the fact that enterprises of a size between those of the smallest and the largest will be able to obtain loans despite a collateral requirement. Second, Islamic redistribution mechanisms consist of Zakat, Sadaqah, Waqaf, and Qard al-Hassan. When these instruments for Islamic redistribution are formalized, the actual recipients will be required to open a financial institution account. This is an essential step in reaching the objective of financial inclusion. In addition, it has the capability to change the link between poor people's income and consumption, and it may serve as a significant resource for entrepreneurs seeking to start or expand their enterprises. As an example, Qard al-Hassan, an interest-free loan, may benefit competent entrepreneurs who are unable to get a standard loan owing to collateral issues or a borrower's lack of creditworthiness. This loan has a penalty for defaulting, which is part of its attractiveness.

Islamic banking's contributions to financial inclusion are supported by a number of different arguments mentioned by (Mohieldin et al., 2011). First, the variety of Islamic financial services and products offered by Islamic banks helps mobilize savings, which is

a key component of financial intermediation. It aims to help the financially excluded by giving them access to various savings vehicles. Because of this, people are more likely to start saving money, which will help the economy grow. By requiring the wealthy to contribute an obligatory proportion of their wealth as zakat in addition to the chariah, Islamic financial tools of redistribution guarantee justice in resource allocation, which emphasizes equal opportunities for all parts of the community; justice in the process of production, which focuses on resource utilization without waste; justice in circulation and the trade of services and products; and justice in income generation, which requires the wealthy to contribute a proportion of their wealth as zakat. Therefore, the Islamic financial sector not only promotes economic growth and development, but also guarantees economic fairness for all members of society. The third tenet of property rights is that the less competent members of society should be given a share of the profits made by the more able members of society from society's resources.

Islamic finance, as a commercial enterprise based on Shariah principles, is often seen as a promising industry that may assist in resolving issues of inclusion in the financial system. About six percent of the unbanked population in developing countries give religious reasons for not having a bank account, per the 2017 Global Findex Database (Demirguc-Kunt et al., 2018). Therefore, Islamic banking has the capacity to provide the general public with a variety of financial services while upholding a constant set of ethical principles (Dusuki et al., 2012).

By considering the fair distribution of wealth and the government's involvement through its equity-based financing systems, Islamic finance may have an influence on financial inclusion, which promotes social and economic justice (Ayub, 2007; Iqbal, 2014). In addition, research by (Barajas et al., 2015; Mustafa et al., 2018) Due to the distinctive qualities of its goods and services, which, among other things, respond to the religious demands of Muslims, Islamic finance is significant for financial inclusion. Nonetheless, studies such as (Beck et al., 2013; Demirguc-Kunt et al., 2018; Nawaz, 2018; Zulkhibri, 2016) prove the importance of financial inclusion is low in many Muslim-majority areas, even if Islamic finance is at a higher development stage. (Al-Jarhi, 2014; Al-jarhi, 2018) describes the Islamic finance theory on which shariah-compliant financial instruments are based. Due to their interest-free character and adherence to Islamic principles, these

instruments play a key role in re-engaging those who have been unwillingly or voluntarily not included in the economic system.

Along a supply dimension, Islamic banking's effect on broadening access to banking services in Organization of Islamic Cooperation (OIC) member nations is evaluated by (Barajas et al., 2015). Regression analysis of the findings suggests that Islamic banking has a statistically significant impact favorably affecting financial access in OIC member states with active Islamic banking operations. (Tahiri Jouti, 2018) studies how Islamic financing affects financial inclusion and determines whether it promotes financial inclusion or migration. The study results support the idea that customers who use conventional banks but loathe interest-based transactions would move to Islamic banking as soon as it became available. In addition, the availability of Islamic financial services will attract into the mainstream economy people who have voluntarily eschewed the conventional financial sector out of religious considerations. Therefore, the growth of Islamic banking will result in both a move away from traditional banking and an increase in financial inclusion.

According to (Mohseni-Cheraghlou, 2017), Financial inclusion is correlated with the availability of Islamic financial products in Muslim-majority nations. Similarly, (Nawaz, 2018) Islamic banking makes it easier for these economies growing the banking industry in developing countries is linked to expanding financial inclusion, so that more people may use banking services.

From 2013 to 2018, we used a dynamic system GMM and a second-generation cointegration and causality test (Kabiru & Wan Ibrahim, 2020), to analyze the impact of Islamic banking development on financial inclusion in OIC member nations. The findings suggest that expanding Islamic banking inside the OIC contributes to broader access to formal banking services. A unidirectional causal association between Islamic banking and financial inclusion is shown, corroborated by the GMM findings.

Similar to that, research by (Akhter et al., 2019) panel data from 14 middle-income and 14 low-income countries in Africa and Asia between 2005 and 2014 to estimate the influence of financial inclusion and Islamic banking. A random effects model's findings, validated by the Hausman test, indicate that the banking system has an important role in boosting financial inclusion, especially on the demand side. (Usman & Tasmin, 2016)

Using facts, they demonstrate that Islamic finance has greatly increased financial inclusion by empowering individuals, expanding financial services, and introducing new financial channels. In addition, (Ali, 2015) studies the influence of Islamic microfinance on widening financial service accessibility in the Muslim World, finding that it has enabled previously excluded individuals to get access to these services.

Another study examines the ways in which Islamic banking has contributed to economic growth and financial access in OIC nations (Barajas et al., 2015) proving the importance of Islamic banking to both individual and commercial financial inclusion. A similar study (Mohieldin et al., 2011) demonstrated that Islamic finance plays a crucial role in boosting financial inclusion, redistributing revenue, and constructing the economy in the majority of OIC nations. Employing Panel data, (Léon & Weill, 2018) examine Islamist banks' impact on increasing credit accessibility in emerging countries. Compared to conventional banks, Islamic banking, and finance have little to no contribution to the expansion of financial inclusion, according to the findings. However, Islamic banks have been proven to be beneficial whenever there is a scarcity of traditional financial institutions.

There is considerable potential for finance based on Islamic principles to alter the economic environment in some OIC nations and contribute to increasing financial inclusiveness (Gheeraert, 2014). The authors of a recent study (Abdu et al., 2018) evaluated the degree of financial inclusion in OIC member countries in sub-Saharan Africa (SSA) in relation to IBF. According to the findings, financial inclusion in Organization for Islamic Cooperation (OIC) member nations in countries located in African Sub-Saharan was increased through the implementation of IBF. Financial inclusion in OIC member nations was examined in relation to the expansion of Islamic banking by (Demirguc-Kunt et al., 2014). Comparatively, this region has a higher percentage of exclusion among individuals who identify religious convictions as an impediment to inclusion. In addition, the paper observes that while the availability of financial services has grown in OIC countries, their actual usage has not. (Sain et al., 2016) studied the financial services exclusion of minority Muslims in Australia. Due to restricted access to Islamic financial services and products, they stated that financial exclusion among Muslims remained a serious problem in Australia.

The Impact of Islamic Banking and finance on promoting FI has been indirectly studied in a number of researches. This is because the study examines how Islamic banking and finance influence financial inclusion-related aspects such as investment, portfolio diversity, vulnerability to financial crises, and the amount of uncertainty faced in comparison to conventional banking. Using a VAR model, (Arouri et al., 2013) demonstrated that Islamic finance is less impacted by financial crises than conventional ones; investment in Islamic goods yields high returns; and portfolios that incorporate Islamic goods compared to those that do not, are less dangerous. In place of the established financial system, Islamic finance thus supports financial inclusion. In addition, a cross-national comparison of conventional and Islamic banking undertaken by (Beck et al., 2013) revealed indirect evidence that the Islamic financial system might enhance financial inclusion. Various studies have examined the key factors of financial inclusion in general. Age, profit, gender, educational status, location from financial institutions, lack of documents, etc. These have been demonstrated to be the demand-side variables having the greatest impact on financial inclusion. (Abdu et al., 2015; Akudugu, 2013; Tuesta et al., 2015) On the supply side, researchers highlight the effects of bank offices, cash machines, scale of business, and expansion of the economy (Barajas et al., 2015; Tuesta et al., 2015)

3.1.3. Islamic Financial Inclusion and Poverty Alleviation

Reduced poverty and increased prosperity are two of the Sustainable Development Goals (SDGs) that need to be worked upon with diligence (United Nations, 2015). According to (Farah et al., 2012), Islamic civilizations have chosen a financial inclusion approach using methods of "social finance" for example, Zakat, Sadaqah, and Waqaf to accomplish the aforementioned goals of reducing poverty and advancing the economy.

Given the above, it is fair to believe that Investments that adhere to Shariah law might have a big influence on promoting financial inclusion among financially excluded individuals. Islamic banking and finance, with their use of risk-sharing agreements like Murabaha, Musharaka, and Mudaraba and wealth redistribution tools like Zakat, Sadaqa, and Qard-al-Hassan, can increase financial inclusion, increase shared prosperity, and reduce poverty and inequality. With the help of risk-sharing contracts that adhere to Shariah law, businesses of all sizes (MSMEs) may benefit from financial and insurance

services (takaful). In addition, the Islamic legal and ethical framework includes two types of almsgivings: one obligatory, known as Zakat, and one voluntary, known as Sadaqa, with Qard-al- Hassan positioned between them. Using data from nine Middle East and North African nations, (Mohieldin et al., 2011) conclude that, with effective management, amounts designated for zakat in each of these nations would be satisfactory to end severe poverty, which is characterized by a daily income of less than $1.25. Despite the fact that expanding access to Islamic financing is crucial for assisting small and medium enterprises, and people with low incomes, Islamic finance cannot function efficiently and effectively without the appropriate physical, financial, legal, administrative, and educational infrastructure. Murabaha and Qard-hassan are two examples of these Islamic community-based financial schemes. These programs are ideal for the poor and powerless who lack access to traditional financial institutions since they pose no threat to their capital. They raise the poor's odds of overcoming poverty by providing a financial cushion, teaching them money management skills, and introducing them to a new stream of income. There are several additional types of financial transactions that are permitted under Islamic Shari'ah besides Murabaha, Qard-al-hassan, Zakat, and Sadaqa.

Consequently, growth rates would be more steady, fair, inclusive, and sustainable if these financial instruments were made available to the Muslim community. This is because more religiously minded individuals and enterprises (particularly the poor and disadvantaged) would participate in the financial sector. While some North African and Middle east countries have some of the highest rates of religiously-motivated financial exclusion in the world, (Mohseni-Cheraghlou, 2015) highlights the potential significance of Islamic finance in enhancing financial inclusion and its numerous benefits for decreasing inequality and poverty among Muslim peoples worldwide.

According to (Ali et al., 2020), In OIC member states, Islamic finance has the potential to greatly expand access to banking services for the unbanked. By promoting risk-sharing contracts, which offer a viable alternative to conventional debt-based financing, and by employing specific tools for wealth redistribution, such as Islamic microfinance, which can aid microentrepreneurs and the poor, Islamic financial services may address the issue of financial inclusion. With regards to the allocation, the procedure through which wealthy, strong, or capable Muslims may freely or involuntarily levy a portion of their riches to help those in need within the Muslim community. In addition to encouraging

social fairness, this boosts the community's productive capacity by making resources available to the poor.

According to the findings of (Zulkhibri & Ismail, 2017), The impoverished in OIC nations have better lifestyles because of financial inclusion. Furthermore, it became apparent that banking systems, particularly in OIC states, need to improve the quality of their services and put more emphasis on the capabilities of the entire financial sector to reduce poverty, combat corruption, and guarantee governmental stability if financial inclusion is to increase. Therefore, the most efficient method to expand financial inclusion is through laws that make credit available to the poor. Furthermore, (Rahman, 2020) demonstrated that as the Islamic banking system in Bangladesh grows, more people will have access to financial services, thereby reducing poverty levels.

Despite these positive outcomes and several literature-based recommendations, (Brekke, 2018) discovered that Muslims are less likely to use the conventional banking system than their Western non-Muslim counterparts. Similarly, (Zulkhibri, 2016) said that a lot of Muslim individuals and organizations continue to be denied access to financial institutions despite the link between Islamic financial services and financial inclusion in the Islamic finance industry. On the other hand, (Ahmed, 2013) laments that the principles of Islamic finance are not fully established, especially regarding access to financing, the growth of economic and public policy, and the expansion of the availability of financial services.

Furthermore, (Hassan, 2015) identifies the possibility that the economic status of low-income Muslim people might be improved via the application of innovative financial inclusion techniques. On the basis of Islamic solidarity, the author endeavors to develop and provide Islamic micro-finance services that are suitable for the underprivileged. The poor will benefit from this service because they may pool their resources and eventually have enough cash to meet not just their own needs but also those of their families, communities, small enterprises, and individual customers.

3.2. Research Gap

Understanding how Islamic financial inclusion affects poverty in the OIC can help policymakers offer and expand access to financial services for the poor, which in turn

reduces poverty levels. Consequently, studying the effect of Islamic financial inclusion on poverty reduction has important practical consequences. Previous research has mostly focused on how one facet of FI impacts poverty in a certain nation or region. The impact of an IFI index on reducing poverty in OIC nations has not been studied. Thus, the theoretical gap in the existing literature demonstrates that Islamic banking and finance is the subject of studies examining the effects of financial exclusion. Financial inclusion and Islamic finance are linked, as evidenced by research (Adewusi, 2011; Ahmed, 2013; Barajas et al., 2015; Brekke, 2018; Demirguc-Kunt et al., 2014; El-Zoghbi & Tarazi, 2013; Iqbal & Mirakhor, 2013; Jouti, 2018; Warsame, 2009; Zulkhibri, 2016). A number of researchers have drawn parallels between their work on financial inclusion and the fields of poverty studies, microcredit, and microfinance. microcredit and microfinance are examples of areas where research has been conducted (Akhtar & Pearce, 2010; Alam Choudhury, 2002; Ali, 2015; Brown et al., 2016; El Ebrashi et al., 2018; J. Ghosh, 2013; Sukmana & Taqwa, 2015) While some studies have linked financial inclusion to lower poverty rates (Chibba, 2009; Koku, 2015; Mohseni-Cheraghlou, 2015, 2017), others have not.

Regardless of the extensive research that has been conducted in this field, research on Islamic financial inclusion and poverty alleviation is insufficient and restricted, especially in OIC nations. Given the preceding, it is crucial that this gap in the literature be filled. The result of this research provides policymakers, researchers, and academics at both the international and national levels with essential insights for designing and implementing programs that would increase access to Islamic financial goods and services, thereby reducing the prevalence of poverty in OIC countries.

3.3. Research Problem

Numerous countries, both developed and developing, are faced with the complicated and difficult issue of decreasing poverty. The eradication of all forms of poverty by 2030 is one of the United Nations' 17 Agenda 2030 Goals (Barbier & Burgess, 2019). The complexity of the issue of poverty incorporates the unavailability of fundamental human needs such as nourishment, sanitation, water, medical care, educational opportunities, housing, and information for the poor (Alkire et al., 2017). Access to capital has become a crucial strategy for alleviating destitution and fostering wealth creation. Under financial

inclusion, many individuals who do not have an account with a bank can gain access to a variety of low-cost, needs-based services, such as payments, deposits, loans, and insurance (Vo et al., 2021).

Governments and international institutions are increasingly interested in expanding access to capital. As well as enhancing the well-being of residents and providing them with more opportunities, alleviating poverty, and protecting them from unpredicted adverse situations, financial inclusion would also help to reduce corrupt practices, lower tax avoidance by decreasing the dimensions of the unorganized sector, and increase the intensity of financial transaction transparency. In addition, it ensures that domestic and foreign aid reaches those who have the most need for it, minimizes managerial expenses, and progresses the effectiveness of administration activities such as pension payments and collection of taxes. Lastly, it enhances national security since individuals would not need to carry as much currency (Lochy, 2020). A suitable and functioning financial system has the capacity to make better policies exist elsewhere and be successful. According to the (UN, 2006), having access to a stable banking system greatly improves individual standards of living, especially for the poor, allowing them to participate in their country's economy, provide for its development, and keep themselves safe from economic downturns.

Despite the efforts and strategies employed to reduce poverty, it remains one of the most persistent problems in the world. (Alkire et al., 2017) note that the issue of poverty involves not only a lack of income but also a lack of access to other essential services. Several studies indicate that financial inclusion has the potential to alleviate poverty in developing nations as well as urban and rural disadvantaged populations. (Burgess & Pande, 2005; Harley Williams et al., 2017; Honohan & Beck, 2007). Despite previous research on the relationship between financial inclusion and poverty, such as (Beck et al., 2007; Giné & Townsend, 2004), or the influence of Islamic banking and finance on financial inclusion, as described by (Ali, 2015; Ben Naceur et al., 2017; Demirguc-Kunt et al., 2014; El-Zoghbi & Tarazi, 2013; Z. Iqbal, 2014). Limited studies have examined how Islamic banking may alleviate destitution in OIC member states. The purpose of this study is to determine how financial inclusion through Islamic banking can aid impoverished OIC members. This study's findings will inform the decision-making

processes of financial institutions, policymakers, governments, non-governmental organizations (NGOs), and underprivileged individuals.

3.4. Methodology

This study wants to shed new light on the impact of financial inclusion on poverty reduction throughout the Islamic banking system; therefore, it is essential to establish and implement the most effective methodology for conducting the study. (Blaikie, 2010) defines a research methodology as a unified description and justification of the methodological options concerned in the preparation of a research proposal. A structure that researchers use to solve research problem and a thorough theoretical analysis that supports the research procedures, tactics, and strategies employed (Howell, 2013). This section makes a significant addition to the ever-expanding collection of literature in this field by investigating a method that, when fully implemented, will provide suitable solutions to the research problems described in this chapter's previous portions and showing the results of that approach. It includes research data collection sources, variable definition, research strategy, empirical technique used, empirical outcomes, and conclusion.

3.4.1. Data and Empirical Model

3.4.1.1. Variables

A quantitative analysis of unbalanced panel data employed in this study. All of the information utilized in this research came from secondary sources. Information on individual banks' operations may be compiled with BankScope. Data for the Financial Inclusion Index (FII) comes from the IMF and the Financial Access Survey (FAS), while that for the Human Development Index (HDI) comes from the United Nations Development Programme (UNDP) Human Development Report, the World Bank's World Development Indicators (WDI), the IMF for country-specific macroeconomic variables, and the World Governance Indicators (WGI) for the "regulatory quality" variable. Thirty-one countries that are members of the Organization of Islamic Cooperation and have Islamic banks in operation provided the sample. There are twenty Islamic institutions in Malaysia, making it the most prolific Islamic banking hub. We chose these schools because we had access to the necessary information. Afghanistan,

Bahrain, Brunei Darussalam, Egypt, Gambia, Guinea, Iran, Iraq, Jordan, Kazakhstan, Lebanon, Libya, Malaysia, Kuwait, Maldives, Niger, Nigeria, Oman, Qatar, Saudi Arabia, Senegal, Sudan, Syria, Indonesia, Tunisia, Turkey, Pakistan, United Arab Emirates, and Yemen are all represented.

Following the paper by (Akinlo & Dada, 2021; Asare & Hongli, 2020; Dwumfour et al., 2017; Gohou & Soumaré, 2012; Grant et al., 2019; Kelikume, 2021; Khan et al., 2022; Koyuncu & Ünal, 2020; B. Sharma & Gani, 2004; Musakwa et al., 2021; Uttama, 2015; Vitenu & Alhassan, 2019; Workneh, 2020). This study uses the human development index (HDI) as a dependent variable to investigate the connection between financial inclusion in Islamic banking services and poverty reduction. The lack of data on poverty headcount or other major types of poverty indicators necessitates the use of a welfare proxy (HDI) to assess the level to which poverty has been relieved in the sample nations. The human development index is a statistical tool employed to generally assess a nation's social and economic attainment in all its ramifications. The social and economic dimensions of a country are centered on the health of people, their educational accomplishments, and their standard of living (Omodero, 2019). HDI is one of the best tools to keep track of the level of development of a country, as it combines all major social and economic indicators that are accountable for the economic development of a nation (Omodero, 2019).

To assess quality of life, we look at the GDP per capita in purchasing power parity (PPP) US dollars; to evaluate education, we look at the adult literacy rate and the gross enrollment ratio in primary, secondary, and tertiary education; and to assess health, we look at life expectancy at birth (UNDP, 2010). Human Development Index scores can be between 0 and 1. According to the United Nations Development Program's 2018 report on human development, the HDI is broken down into four sub-indices: There are four tiers of human development index (HDI) scores: extremely high (HDI >= 0.8), high (HDI 0.70–0.799), medium (HDI 0.55–0.699), and low (HDI 0.55). The low quality of human development is closely linked to the high levels of poverty. The low indicators of education, health, and purchasing power of a country are a major causative factor in the high level of poverty in the country (UNDP, 2010).

The financial inclusion index (FII) described by (Sarma, 2012) uses principal component analysis to quantify three dimensions of inclusion (availability, access, and usage) in order to arrive at an overall score. To be more precise, several studies have used Sarma's multidimensional technique to build FII, including (Anwar & Amrullah, 2017; Huang & Zhang, 2020; Park & Mercado, 2015; Prastowo & Putriani, 2019; Sethi & Sethy, 2019; Sethy & Goyari, 2018, 2022; Yorulmaz, 2013). Bank penetration (accessibility), bank availability (including branch network), and bank use are determinants of financial inclusion (Arora, 2010; Goel & Sharma, 2017; Sarma, 2008) because the United Nations Development Programme employs a methodology very similar to this one to calculate key development indicators like the human development index (HDI), the poverty index (HPI), and the gender development index (GDI). The availability, accessibility, and consumption of Islamic banking services are some of the characteristics used for assessing Islamic financial inclusion, with evidence from research such as (Azwar & Saragih, 2018; Sanjaya & Nursechafia, 2016; Sarma, 2012; Sharma et al., 2014). You can approximate the percentage of the population that makes use of financial services by looking at indicators such as the number of commercial bank branches per 100,000 people and the number of automated teller machines per 100,000 people. Macro and micro measures alike shed fascinating and helpful light on the inner workings of a financial system. However, when used separately, they may only give partial and insufficient information about the diversity of the financial system. Estimates of a country's financial inclusion might be misleading if they are based on a single statistic.

The impact of FI on alleviating poverty has been studied using a wide range of FI indicators. (Beck et al., 2007) used the ratio of private credit to GDP as a proxy for FI. According to (Burgess & Pande, 2005), one of the most important factors in alleviating poverty in India is the expansion of bank branches. (Neaime & Gaysset, 2018) examine the effect of financial inclusion on alleviating poverty in eight MENA countries by using the accessibility of ATMs and bank branches as surrogates for FI. They analyze the relationship between each measure and poverty in descending order. Using the method of (Sarma, 2008), (Park & Mercado, 2015) built a FI index for a regional sample of Asian countries based on the following five variables: (i) the number of commercial bank borrowers per 1,000 people; (ii) the number of commercial bank branches per 100,000 people; (iii) the number of commercial bank depositors per 1,000 people; and (iv) the

ratio of domestic credit to GDP. (Agyemang-Badu et al., 2018) use an approach similar to that provided by (Park & Mercado, 2015). To examine the impact of FI on poverty in Africa, it is necessary to create a comprehensive FI index that takes into account both accessibility (as measured by the number of ATMs and bank branches per 100,000 adults) and utilization (as measured by the number of commercial bank borrowers per 1,000 adults and the number of commercial bank depositors per 1,000 adults). Thus, FI is assessed via several measurements, and each of them is measured through various indicators.

This research provides a number of control variables, such as capitalization, ROAA, credit risk, and inefficiency, that are specific to banks like (Gomez-Gonzalez et al., 2021; Saif-Alyousfi, 2020c, 2021b, 2022a). ROAA, or return on average assets, is calculated by dividing net income by the average value of total assets, whereas capitalization is determined by the percentage of equity to total assets. The ratio of bad loans to total loans is widely recognized as a measure of credit risk. The inefficiency of a bank may be measured by examining its cost-to-income ratio. Country-specific control variables include the gross domestic product growth rate, the real interest rate, and the inflation rate.

herein, in the study. Good governance is also seen as an integral part of the study. There are six indicators outlined by the (World Bank, 2018). The elements of good governance include participation and accountability, political stability, the rule of law, government efficiency, efficient regulation, and the prevention of corruption. Several factors contribute to extreme poverty, such as a lack of rule of law, accountability, transparency, political stability, a high level of corruption, and inadequate governance (Hyden, 2007). This study uses the quality of regulation as a single indication as a control variable in the estimation process. Variables, their descriptions, and their respective data sources are all listed in Table 1.

Table 1: Table of Variables

Variable	Descriptions of Variables	Source
HDI	Human Development Index is a statistical indicator that	United Nations Development Programme UNDP

	combines measures of education, health, and standard of living.	
ATM	Automated teller machines are telecommunications tools that use computer technology to provide customers of a financial institution access to financial transactions in a public setting.	International Monetary Fund IMF, Financial Access Survey. FAS
BANK BRANCH	bank branch is a retail facility of a local commercial bank or another local bank that functions as a commercial bank by providing financial services to clients but is not structured as a legally independent subsidiary.	International Monetary Fund, Financial Access Survey.
ROAA	Return on Average Assets is the operating net income divided by the total assets.	Bankscope
CAPITALIZATION	Common Equity / Total Assets	Bankscope
CREDIT RISK	Non-Performing Loans / Gross Loans (%)	Bankscope
INEFFICIECY	Cost to Income Ratio (%)	Bankscope

GDPG	Annual Percentage Growth of GDP is the total of the gross value contributed by each and every economic resident producer, including any taxes on goods and negative any government support not included in the product value.	National Accounts data files from the OECD and the World Bank
REAL INTEREST RATE	the interest rate on lending adjusted for inflation, as determined by the GDP deflator. Lending rates are not directly comparable between countries because of the varying conditions tied to them.	Using data from the World Bank, the International Monetary Fund, and international financial statistics.
INFLATION	Inflation is the average yearly percentage increase in the cost of a predetermined basket of goods and services for the typical consumer.	International Monetary Fund, International Financial Statistics and data files.
REGULATIO N QUALITY	Regulation Quality assesses the government's capacity to design and enforce solid rules and regulations that allow and support the development of the private sector.	World Governance Indicators (WGI), WB

Source: Created by the author

3.4.2. Empirical Model

This research examines the correlation between financial inclusion via Islamic banks and poverty reduction in 31 OIC member nations using a dynamic panel technique, more particularly the Generalized Method of Moments (GMM). (Arellano & Bond, 1991) introduced the Difference GMM, and later (Arellano & Bover, 1995; Blundell & Bond, 1998) generalized it into the system GMM. Both the level and lag values of the dependent variables are employed as instruments in the two-stage system GMM technique, making it more effective than the fixed-effect approach in dealing with endogeneity and serial correlation. We show the framework of our model for the system GMM method in action. As shown in Eq. (1).

$$y_{ijt}=\delta y_{ij,t-1}+\beta X_{ijt}+\gamma Z'_{ijt}+\lambda_i+\varepsilon_{ijt} \quad (1)$$

$$HDI_{ijt}=\beta_0+\beta_1 HDI_{ijt}+\sum_{j=1}^{J}\beta_2 FII_{jt}+\sum_{j=1}^{J}\beta_3 BANK_{ijt}+\sum_{j=1}^{J}\beta_4 MACRO_{jt}+\sum_{j=1}^{J}\beta_5 WGI_{jt}+\lambda_i+\varepsilon_{ijt} \quad (2)$$

Where;

y= dependent variable

y_{t-1} = Log dependent variable

X= independent variable

Z' = control variables

λ_i = time dummies

δ= unobserved country fixed effects

γ β= coefficients to be estimated.

FII= financial inclusion index

WGI= World Governance Indicators

ε_{ijt} = error term.

i= country, j= bank and t= time t = 1,2…T; i = 1, 2…N;

and the empirical specification of the system generalized method of moments model can be written as Equation (3):

$$HDI_{ijt} = \beta_0 + \beta_1 HDI_{ijt-1} + \beta_2 (FII)_{ijt} + \beta_3 (ROAA)_{ijt} + \beta_4 (CAPITALIZATION)_{ijt} + \beta_5 (CREDIT\ RISK\ )_{ijt} + \beta_6 (INEFFICIECY)_{ijt} + \beta_7 (GDPGROWTH)_{ijt} + \beta_8 (REAL\ INTEREST\ RATE)_{ijt} + \beta_9 (INFLATION)_{ijt} + \beta_{10} (REGULATION\ QUALITY)_{ij} + \lambda_i + \varepsilon_{ijt} \quad (3)$$

where HDI_{it} is the dependent variable and $(FII)_{ijt}$ is the independent variable of the composite financial inclusion index. According to the system GMM method's specification, the lag-dependent variable HDI_{ijt-1} is treated as an independent variable in its own right. The control variables that make up Z' include market capitalization, return on average assets, credit risk, inefficiency, GDP growth, the real interest rate, inflation, and the quality of regulations. The financial inclusion of Islamic banks is predicted to have a positive coefficient on the financial inclusion index, meaning that the HDI level will rise and poverty will decrease.

There are a number of compelling reasons why the GMM estimation approach is preferred, and these are carefully enumerated. The modeling strategy, which is dynamic, enables the control of persistence in human development levels since it has behavioral effects that persist. Persistence can be checked through the correlation between the HDI and its corresponding first lag. The number of years is lower than the number of countries, i.e., the value of the time period is lower than that of cross-sections. The method leaves room to account for any likely endogeneity problem by controlling for unobserved individual bank-specific and time-fixed effects. Variations across countries are controlled in the regressions, and, furthermore, (Blundell & Bond, 1998) postulate that the system GMM estimator corrects for biases associated with the difference estimator.

A number of recent studies have used the two-stage system GMM to estimate the effect of financial inclusion on macroeconomic variables like GDP growth, inflation, and unemployment (Akanbi et al., 2020; Andrianaivo & Kpodar, 2012; Burguillos &

Cassimon, 2021; S. Ghosh, 2011; Mehrotra & Yetman, 2014). (Roodman, 2006) suggests using time dummies because they enhance the premise that "In the autocorrelation test and the robust estimates of the coefficient standard errors, the idiosyncratic disturbances are presumptively independent of individual differences."

With a small T and a big N, the SGMM estimator may attain more accuracy than other methods, and this is particularly true when the dependent variable persists. Furthermore, the use of SGMM lessens the impact of small-sample bias. The approach is a suitable and preferable estimator over DGMM because it employs more instruments (Dimelis & Papaioannou, 2011). This research examines data from 1990 to 2020; therefore, the time period T = 30 and the total amount of sample nations having Islamic bank is 31 which mean N = 31, both of which are larger than T, provide the foundation for using GMM approaches. Consistent results are obtained even with a somewhat high N, similar to (Dimelis & Papaioannou, 2011). Instrument Validity Evaluation and the serial correlation test are two crucial GMM diagnostic procedures. Two sorts of tests are used to determine whether or not an instrument is valid: the (Hansen, 1982) test and the (Sargan, 1958) test for overstating constraints. Instruments are considered valid, and the model has accurately stated if neither test rejects the null hypothesis. Serial correlation tests, however, require that only the AR (1), or correlation of the first order, be significant, Nonetheless, AR (2), which is the second order serial correlation must be insignificant. If the null of AR (2) is not rejected, then the initial error term was serially uncorrelated, and the instruments were properly specified. According to (Bond, 2002), the optimal estimate of the lagged dependent regressor should lie between its OLS and Fixed Effect estimates. As a consequence, these estimates serve as a helpful robustness check on the findings.

Too many instruments may lead to biased GMM estimate results, as demonstrated by (Roodman, 2009). Although empirical research on the maximum number of instruments to use is limited, the minimum standard is to have smaller instruments than individuals (Roodman, 2009). When specifying the number of explanatory variables, (Arellano & Bover, 1995) advises using just the most current difference as a tool since using additional delayed first-differences would lead to duplicate moment conditions. Here, we restrict the analysis to a single lag, for the dependent variables.

3.5. Results

3.5.1. Descriptive Statistics

The study's summary statistics, including the mean, standard deviation, number of observations, minimum, maximum, skewness, and kurtosis, are displayed in Table 2. How closely a given variable's values cluster around the mean is what the standard deviation measures. The table shows that the Skewness test is a measure of the variables' asymmetric dispersion, and the table shows that the variables are both positively and negatively skewed, although the positively skewed variables outnumber the negative ones. Positive results from kurtosis testing indicate a leptokurtic, or high kurtosis distribution.

Table 2: Summary Statistics

Variables	N	Mean	Std. Dev.	Min	Max	Skew.	Kurt.
HDI	2311	.696	.136	.331	.92	-.613	2.125
ATM	1529	33.178	25.557	0	95.781	.154	1.692
Bank branch	1565	11.158	6.27	1.55	32.31	.849	3.905
ROAA	2084	1.489	3.986	-45.12	56.64	-.051	47.433
Capitalization	2327	19.763	24.706	-159.88	100	.832	10.855
Credit risk	1321	8.588	14.876	0	113.53	3.704	18.355
Inefficiency	2304	67.834	272.24	-5066.6	8900	15.056	604.95
GDPG	2273	3.823	4.881	-33.5	33.99	-1.14	14.85
Real interest rate	1505	5.183	9.548	-28.986	60.877	1.609	9.327
Inflation	2199	7.06	13.288	-10.067	150.32	6.049	51.449
Regulatory quality	2093	-.166	.783	-2.347	1.348	-.333	1.949

Source: Created by the author.

3.5.2. Variance Inflation Factor

To further ensure there is no multicollinearity issue, the study additionally conducted a variance inflation factor (VIF) analysis. The variance inflation factor (VIF) quantifies the degree to which the variance of a computed regression coefficient has been artificially inflated due to collinearity. Furthermore, it calculates the degree of association among the two predictors within a model. The greatest (smallest) VIF value found for all regressors is 4.63 (1.17), respectively. This indicates that all of the regressors' VIF values are below 10, enabling their use in a single regression model (Gujarati, 2004; Hair et al., 2013).

Table 3: Variance Inflation Factor (VIF)

	VIF	1/VIF
ATM	4.63	0.215783
Bank branch	1.71	0.585109
ROAA	1.42	0.705054
Capitalization	1.70	0.587433
Credit risk	1.89	0.527710
Inefficiency	1.17	0.851345
GDPG	1.17	0.855366
Real interest rate	1.23	0.812428
Inflation	1.89	0.528516
Regulation quality	3.79	0.263753
Mean VIF	2.06	

Source: Created by the author

3.5.3. Two Step SGMM Result

Table 4: Dynamic Two Step-System GMM Results

	Model (1) HDI	Model (2) HDI
L.HDI	0.922^{***}	0.818^{***}

	(0.000)	(0.000)
ATM	0.000	
	(0.068)	
Bank Branch		0.001
		(0.098)
ROAA	0.000	0.001*
	(0.319)	(0.021)
Capitalization	-0.000***	-0.000**
	(0.000)	(0.002)
Credit risk	-0.000	-0.000
	(0.849)	(0.316)
Inefficiency	0.000	-0.000
	(0.792)	(0.393)
GDPG	0.000**	0.000
	(0.001)	(0.724)
Real interest rate	-0.000	-0.000
	(0.106)	(0.203)
Inflation	-0.000	-0.001
	(0.240)	(0.219)
Regulation quality	0.002	0.020**
	(0.448)	(0.003)
_cons	0.050	0.128***
	(0.068)	(0.000)
Year dummies	Yes	Yes

No. of instruments	29	29
AR1 (p-value)	0.000	0.002
AR2 (p-value)	0.120	0.650
Hansen-J (p-value)	0.181	0.196

Note: p values in parenthesis are significant at * p<0.10, ** p<0.05, *** p<0.010

Source: Created by the author.

(Arellano & Bover, 1995; Blundell & Bond, 1998) Financial inclusion contributes to higher human development indexes (HDI) with the help of Islamic commercial banks in 31 OIC member states, and the coefficient and p value for this relationship have been estimated using a system generalized technique of moment (two-step) approach. The two-step system GMM was chosen because it outperforms other estimators, such as the traditional first-differences GMM model, in terms of efficiency and bias (Blundell et al., 2001; Hayakawa, 2007; Hayakawa & Qi, 2020; Soto, 2009). We run the model over a wide range of time intervals to assess how the underlying factors that determine HDI have evolved over time, including those that are bank-specific, macroeconomic, and world-governed.

Based on our findings, which are detailed in Table 4, Both models' estimated results demonstrated statistical significance at the 0.01 level for the lagged endogenous (HDI) component. As this coefficient shows, the human development rate or poverty alleviation rate of previous eras has a substantial effect on the current rate of poverty alleviation. At the 0.1 level of confidence, the total number of ATMs and the number of Islamic bank branches are positively connected with poverty alleviation (HDI), indicating that both measures of financial inclusion help to lessen the plight of the poor in the sample nations. It is important to account for the possibility of reverse causation when estimating the model with poverty (HDI) as the dependent variable and financial inclusion as the key regressor. Therefore, we employ system GMM to evaluate the technique's robustness and exclude the potential for reverse causality. In contrast, return on average assets has a positive significant influence on HDI at the 0.05 level in both models, while capitalization has a negative significant effect on HDI in both models. If the capitalization of Islamic

banks were to expand by one percent every year, the annual decrease in poverty would be.000000881 percent smaller.

Nonetheless, consistent macroeconomic considerations showed that GDP growth helped reduce poverty. To measure the extent to which Islamic commercial banks alleviate poverty, this study employed the quality of regulations as a control variable. The results provided convincing proof that the quality of regulations in the 31 OIC member nations is high enough to inspire Islamic commercial banks to make a positive impact. While year dummies are included and reported as yes/no, as suggested by (Roodman, 2009) and shown in Table 4.

Arellano-Bond autocorrelation tests (AR(1) and AR(2)) are used to examine the likelihood of serial correlation in the GMM method. It is found that the AR (1) term is statistically significant in both models (p0.000 and p0.002, respectively), but the AR (2) term is not (P=0.120 and P=0.650). To ensure the validity of the GMM conclusion, (Arellano & Bond, 1991) argue that a significant AR(1) test indicates first-order autocorrelation but not necessarily contradictory results by rejecting the null hypothesis. In both situations of AR(2) estimation, the necessary null hypothesis for the model's validity is accepted. No second-order serial correlation was found between the error terms, as required by the acceptor of the null hypothesis. For GMM estimations to be trustworthy, proper instruments are also required. The Hansen and Sargan tests, are used to ensure that the instrumental variables being utilized for estimation are reliable. Hansen J test statistics in the current investigation had p-values of 0.181 and 0.196, respectively, showing acceptance of the null hypothesis, thus, that the instruments used were valid.

3.6. Discussion

The purpose of this study is to provide an empirical analysis of the impact of Islamic banking on poverty alleviation in Organization of Islamic Cooperation (OIC) member nations. Using panel data from 1990 to 2020 for 158 banks in 31 OIC member nations, our study empirically investigated the impact of financial inclusion via Islamic banks on reducing poverty. To draw solid and statistical conclusions, this research used the two-step system GMM approach introduced by (Arellano & Bover, 1995; Blundell & Bond, 1998). The main findings of this estimation are Coefficients of lagged human development indices (HDI) that are statistically significant and demonstrate the dynamic

nature of the adaptable character of the model. The research indicated that HDI one year in the past had a positively significant impact on HDI in the current year. The positive significant coefficient of lag of the human development index (L.HDI) is near to one, which indicates higher persistence in poverty alleviation using the human development index as an outcome variable.

Moreover, taking the number of ATMs and bank branches as financial inclusion proxies in this research, the results indicated that financial inclusion is positively affected the poverty alleviation rate. This result is similar to previous research by (Allen et al., 2016; Beck et al., 2007; Bruhn & Love, 2014), that indicates access to financial services also leads to poverty reduction and affects other macro factors such as inequality, economic growth, and enhanced private investment. Also, studies by (Hassan, 2015; Mohseni-Cheraghlou, 2015, 2017; Zulkhibri & Ismail, 2017) explained how Islamic banking may help end financial exclusion from financial services, increase shared prosperity, and lessen both poverty and inequality.

CONCLUSION

A general overview of financial inclusion, poverty alleviation, and their conceptual framework has been discussed in the first chapter, and it is concluded with draw some conclusions about the connection between financial inclusion and poverty as interpreted by the theoretical literature. In this way, the first chapter clarifies the concepts of financial inclusion and poverty reduction, as well as their types, measurements, and importance.

In the second chapter, the Islamic perspective in terms of financial inclusion and poverty, as well as the history, principles, instruments, and significance of the Islamic banking system inclusion in decreasing poverty have been clearly presented. It also highlights the comparison between Islamic banking and traditional banking and the Islamic financial tools that the Islamic banking sector may adopt. At the end of the chapter, the reduction of poverty via Islamic banking and finance has been critically evaluated.

In chapter three, the empirical literature review through identifying the relationship between financial inclusion and poverty, Islamic banking and financial inclusion, and Islamic financial inclusion and poverty reduction have been discussed. It was also highlighted the gap and problem of the research. Moreover, the research design and the methodology of the study have been identified. For the analysis of this research, the dynamic panel approaches, specifically the Generalized Method of Moments (GMM) have been applied. This research is intended to empirically analyze the impact of financial inclusion on poverty through Islamic banks in OIC member countries. It is found that by Taking the number of ATMs and bank branches as financial inclusion variables, financial inclusion positively impacts poverty alleviation. And the poverty alleviation rate of the present year is affected by the past year's rate.

Despite the vast amount of research conducted on financial inclusion and alleviating poverty, research on Islamic financial inclusion and poverty alleviation is insufficient and restricted, especially in OIC nations. Given the above, this unexplored gap in the literature must be filled. This study aims to bridge the gap by empirically analyzing the link between the financial inclusion of Islamic banks and poverty, and providing policymakers, researchers, and academics at both the national and international levels with vital insights for designing and implementing programs that would increase access to Islamic financial services, thereby reducing the prevalence of poverty in OIC nations.

Recommendations

Empirical evidence demonstrates the critical role financial inclusion plays through Islamic commercial banks in alleviating poverty in host countries. Therefore, we need to focus on how to increase Islamic banks' financial inclusion, which helps alleviate poverty in the host nation. Therefore, this research suggests the following: If Islamic banks are serious about reaching out to the poor and helping them, they may first need to improve their current approach in order to draw in more customers and expand the types of financial services they offer. In order to increase financial inclusion and aid for the poor, Islamic microfinance may be enhanced to give more efficient tools. OIC nations have shown very little interest in the Islamic microfinance instrument; according to (Mohieldin et al., 2011), just three countries—Indonesia, Bangladesh, and Afghanistan—account for 80% of Islamic microfinance's global reach. Financial instruments based on profit-and-loss sharing (PLS) methods, such as Mudarabah and Musharakah, are favored by Islamic microfinance institutions over loans because they allow poor households and small-scale entrepreneurs to avoid the encroachment of oppressive high interest rates while increasing income and breaking out of the poverty trap.

Second, authorities should encourage financial education on Islamic finance and banking institutions to overcome the fundamental barriers to financial inclusion in Islamic banking, such as a lack of understanding. Faith and confidence in Islamic financial items are low because their qualities and contexts are poorly understood. This makes it more difficult for individuals to access Islamic financial services within the conventional economy. Financial education could provide excluded persons in OIC nations with essential information about Islamic financial goods and services, instilling confidence and promoting the active use of the products. In addition, when people learn more about the Islamic banking and finance industry, they are more likely to save money and better able to manage their finances. These factors lead to more savings and investment opportunities, higher living standards, and less poverty. Third, this study recommends that governments and regulators take the lead in establishing an enabling environment for Islamic banks to function and perform effectively so that these institutions can contribute to poverty alleviation by enacting policies that increase the availability, accessibility, and usability of financial products for those at the bottom of the income pyramid. For instance, governments might provide tax breaks to Islamic financial institutions, simplify laws and

legal frameworks, and increase public awareness and understanding of Islamic banking. According to a comprehensive study of financial regulators led by the Center for Global Development (CGAP) and the (World Bank, 2010), governments are more likely to reform if they include improving financial access as part of their overall development strategy. Authorities with a financial inclusion plan are more likely to have a broader scope of financial inclusion issues within their jurisdiction, as well as more resources and personnel dedicated to addressing these issues. the culmination It is important to note that this study contributes to the existing literature by examining the effect of financial inclusion through Islamic banking on poverty reduction in 31 OIC member states. The study is unique since no other research has focused on the connection between these two variables in OIC nations.

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