

Islamic Trade Financing and Poverty Mitigation: An Econometric Estimation Informing Islamic Development Bank Member Countries Considering Their Entrepreneurial Ecosystems

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ABSTRACT

This paper is an analysis of the empirical effect of entrepreneurial ecosystems on the relationship between Islamic Trade financing (TF) and poverty trends in the context of Islamic Development Bank (IsDB) member countries. The study is an empirical analysis seeking to find out whether there is a statistical effect of the entrepreneurial ecosystems, measured as Global Entrepreneurship Index (GEI) scores, on the relationship between the Islamic Trade Financing dollar amounts by the IsDB (TF) and the GNI Per Capita, PPP, of all Islamic Development Bank (IsDB) member countries for the years 2009 to 2019. The research is designed as a desk-top longitudinal, correlation, employing the linear dynamic panel data GMM model as an estimator of the empirical relationships between the key variables of the study. The study results show that there is a significant positive relationship between the TF dollar amounts from the IsDB and the GNI Per capita, PPP, and that the ascending entrepreneurial ecosystem positively affects this relationship in the IsDB member countries. Therefore, countries that receive higher Islamic Trade Financing dollar amounts from the IsDB (IF), generally have more GNI Per capita, PPP (less poverty) than their counterparts, but ascending entrepreneurial ecosystem levels raises this positive relationship. It is, therefore, recommendable for IsDB member countries and all other interested countries to formulate policies that facilitate Islamic Trade financing to mitigate poverty and improve their entrepreneurial ecosystems for economic progress. This paper develops policy conversations that guide political discourse on policy topics of poverty mitigation and their relation to financing trade following Islamic products and services, while improving the entrepreneurial environment, thus generating information on policy choices of an Islamic financing nature.

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1. Introduction

1.1. Background and Motivation of the Study

Poverty trends have been rising the world over as a result of various economic crises, including the great depression that took place between 1929 and 1939, the global financial crisis that happened between 2007 and 2010 (Calvo, 2010), and the 2019 COVID-19 debt crisis (Estevao, 2022), and this may be attributed to the high interest rates that depressed interest-sensitive spending, which in turn reduced production, consequently reducing incomes (Estevao, 2022; Romer, 2022). Eminent economists during the Great Depression tried to establish a banking system based on Islamic financing (zero nominal interest rate), referred to as the "Chicago Reform Plan". Because it was capable of preserving long-term financial stability (Kirchene & Mirakhor, 2009; Sergie, 2014; The Economist, 2013). Studies have been conducted to establish the relationship between Islamic financing and financial stability (Al-Jaberi et al., 2014; Hussain et al., 2015). However, the Islamic trade financing and poverty phenomenon has not yet been exhaustively explored, and while governance through entrepreneurial ecosystem enhancement is pertinent in Islamic financing due to the profit and loss sharing arrangements embedded in equity, participation, and ownership (Noraini Mohd Ariffin et al., 2007), there is still little research in this area. 127 low- and middle-income countries include 46 impoverished countries, according to the World Bank groupings of 195 countries globally (World Bank, n.d.). Today, several countries have received trade financing offered by the Islamic Development Bank (IsDB) since 1975 to alleviate poverty (Chachi, 2005; IsDB, 2004). Some of these countries, like Chad, Uganda, Cameroon, Senegal, and Sierra Leone, are still poor, as their Gross National Income per capita (PPP) ranges between US\$ 890 and US\$ 3780. While others, like Saudi Arabia, Turkey, Indonesia, Egypt, and Malaysia, are not poor, as their Gross National Income per capita (PPP) ranges between US\$ 5950 and 47790. This discrepancy may be attributed to the amount or value of Trade financing received and the magnitude of the quality of the entrepreneurship ecosystem in the countries involved (GEDI, 2019; IsDB, 2019).

Trade enables the exchange of goods and services at both the domestic and international levels. Enhancement of the exchange of goods and services increases economic activity, which raises income, thus reducing poverty. Since 1975, the Islamic Development Bank (IsDB) has, through Trade Financing approvals, contributed US\$ 98.5 billion as of 2021 to enhance trade activities in its member countries (IsDB, 2021; World Bank and Islamic Development Bank Group, 2017). A health entrepreneurship ecosystem leads to various social-economic benefits that include the generation of employment opportunities, economic growth, household incomes, products, and services, among other elements of a stable, civil, and prosperous society (GEDI, 2019). Islamic Trade financing is governed by the principles of equity (rationale for the prohibition of predetermined payments), participation, implying "reward (that is, profit) comes with risk taking," and ownership. The notion of "do not sell what you do not own", is based on the entrepreneurship ecosystem (Al-jaberi et al., 2014; Hussain et al., 2015).

The economic theory of Islamic financing is based on debates from the classical economists, Ricardian (theory of interest), Keynes (General Theory), Mill, and Tooke's explanation of the "Gibson Paradox", The argument is whether the rate of interest is determined by the rate of profit on productively employed capital or vice versa (Keynes, 1936; Saylor Foundation, 2020; Smith, 2006). These justified interest as an appropriate parameter for financing decisions. The rate of interest is simply the price of credit and is therefore governed by the supply of and demand for credit. The banking system, through its ability to give credit, can influence, and to

some extent does affect, the interest level (Keynes, 1937). This is a disagreement with the interest-free model.

According to Karl Marx's critical notes on the classical theory of interest, a purely monetary circulation of interest among capitalists, finally emancipates interest from real factors such as the rate of profit (Hein, 2006; Toporowski, 2018). Friedman (1969) and Samuelson (1958) justify apprehensions of zero nominal interest rate as a necessary condition for the optimal allocation of resources, thus agree with Shabbir et al. (2018) and Al-Jarhi's (2017) Islamic financing "zero nominal interest rate" models.

Shabbir et al. (2018) proposed a model with the Islamic modes of finance [Profit and loss sharing (PLS), Non PLS mark-up contracts, and Fee based products] approaches reduce the gap between haves and have nots through Islamic social finance, optimize circulation of wealth, restrict capital to generate capital, while allowing other factors of production and risk of loss to reduce poverty by raising incomes and reducing inequality. While Al-Jarhi (2017) proposed a model Islamic financing properly applied possesses distinct advantages of; Economizing on cash in transitions, optimum financial resource allocation, stability of PLS to debt contracts, low information asymmetry, efficiency in fund mobilization, PLS share risk while stocks and debt skew risk, debt sustainability implicit pre-markup. All these are assumed to reduce poverty.

The Global Entrepreneurship Index score is an important mediating variable in this study because entrepreneurship is considered pertinent to Islamic Trade financing (Al-jaberi et al., 2014; Hussain et al., 2015) and an important mechanism that promotes economic development through employment, innovation, and welfare. However, not all countries, particularly low-income economies, have supportive entrepreneurial environments. The Global Entrepreneurship Institute specifies that the quality of an entrepreneurial ecosystem is determined by how opportunity perception, start-up skills, risk acceptance, networking, cultural support, opportunity start-up, technology absorption, human capital, competition, product innovation, process innovation, high-growth businesses, internationalization, and risk capital shape and influence entrepreneurial attitudes, abilities, and aspirations in a country (GED, 2019; Kimmitt et al., 2020).

The study is for policy evaluation and testing theories and models; therefore, we cite the Public policy theory (policy evaluation stage), where we generate information with evidence from the study findings that facilitates public policy choices (Anonymous, 2019; Jones & Baumgartner, 2005; Mustafa et al., 2021). Through deduction from the theory of participation that explains how the outcomes of stakeholder and public engagement in environmental management are explained by context, process design, the management of power dynamics, and scalar fit (Reed et al., 2018), This theory highlights that when there is participation by all stakeholders, as is the case for PLS models and a strong entrepreneurial ecosystem, outcomes are enhanced as a result of optimum efficiency (El-Gack, 2007; Reed *et al.*, 2018).

Previous researchers before analysis of the data retrieved were bidirectional in measuring the relationship between Islamic financing amounts and incomes (poverty levels) (as elaborated in Section 2 in: Abba & Ngah, 2020; Abdu et al., 2018; Alsagoff & Ahmed, n.d.; Alsagoff & Surono, 2016; Boukhatem & B Moussa, 2018; Brekke, 2018; Elden et al., 2017; Hassan et al., 2017; Kitunzi, 2021; Lawal & Imam, 2016; Ledhem & Mekidiche, 2020; Ledhem & Moussaoui, 2021; Mihajat, 2011; Ouendi & Ounis, 2018; Parewangi & Dhankar, 2014; Tahiri Jouti, 2018; However, as in Section 2, all these have used different key study variables, geographical scopes, time scopes, and research methodologies in the current study. While the studies relating to establishing the effect of Global Entrepreneurship Index (GEI) scores on the

relationship between Trade financing and poverty have not come to the researcher's knowledge to date.

1.2. Research Problem and Justification

Several countries have been receiving Trade financing (amounting to US\$ 98.5 billion by 2021) from the Islamic Development Bank (IsDB) since 1975 with the aim of poverty alleviation as one of the objectives, through the Profit and Loss Sharing "zero nominal interest rate" model (Al-Jarhi, 2017; IsDB, 2021). However data from Islamic Development Bank reports, Global Entrepreneurship and Development Institute database and the World Bank Database indicates that some beneficiaries like; Chad, Uganda, Cameroon, Senegal, and Sierra Leone are still poor as their Gross National Income per capita (PPP) ranges between US\$ 890 and 3780. While others like; Saudi Arabia, Turkey, Indonesia, Egypt, and Malaysia are not poor with Gross National Income per capita (PPP) ranging between US\$ 5950 and 47790. This discrepancy may be attributed to the amount/value of Trade financing received and the magnitude of the quality of entrepreneurship ecosystem of the countries involved (GEDI, 2019; IsDB, 2019). Although a number of studies have related Islamic financing with the Poverty, literature reveals that studies addressing Trade financing, Entrepreneurship and Poverty are still very few. Therefore, there is a need to analyse the effect of the entrepreneurship ecosystem to the relationship between the amounts of Islamic Trade financing by IsDB and the Gross National Income Per capita Purchasing Power Parity.

This study is justified because for a long time, the Islamic Development Bank has been giving money (in form of trade financing contracts) to various countries amounting to US\$98.5 billion by 31st December 2021 (IsDB, 2021), without measuring the relationship of this money to the poverty trends of those countries and effect of their entrepreneurship ecosystem to this relationship. If this continues without knowing these facts and figures regarding the relationships, the bank which is the biggest offering these products in the world, may not be achieving the purpose for which it was established. Therefore, without this study, the bank will not know whether the purpose (of poverty alleviation) for which it was established is being achieved which is not good for the world, because this ignorance could escalate poverty while it could have been mitigated, while monitoring governance.

1.3. Aim, Objectives and Hypotheses of the Study

The study is aimed at establishing whether a variation in Trade financing will vary poverty while measuring the effect of the Entrepreneurial Ecosystem (measured as Global Entrepreneurship Index scores), on the relationship for the IsDB member countries between 2009 and 2019.

Study objectives are:

- a) To find out whether a variation in the value of Trade Financing by IsDB varies poverty for the Islamic Development Bank financing beneficiaries.
- b) To examine the effect of the Global Entrepreneurship Index scores on the relationship between value of Trade Financing by IsDB, and the poverty levels for the Islamic Development Bank financing beneficiaries.

The hypotheses for the study are;

While studies found positive relationships, some were bidirectional to the long-term and short-term dynamics of poverty. Hypotheses were made, as proposals about solutions to the problems ("intelligent" or an "educated" preliminary guesses for testing). Null hypotheses were stated

because literature revealed bidirectional relationships between variables being investigated and alternative hypotheses would have been directional. The objectives were addressed with the following null hypotheses:

- H₀₁ There is no statistical variation in poverty [Gross National income per capita (PPP)] resulting from variation in the value of Trade Financing by IsDB, for the Islamic Development Bank financing beneficiaries.
- H₀₂ There is no statistical effect of the Global Entrepreneurship Index scores on the relationship between value of Trade Financing by IsDB, and poverty [Gross National income per capita (PPP)] for the Islamic Development Bank financing beneficiaries.

1.4. Study Significance

The research results are a measurement of the performance of products and services offered by the Islamic Development Bank and beneficiaries, for the purpose of transforming countries out of poverty within its members.

The study utilizes the information processed from the findings to guide policymakers and regulators in developing policy papers to engage in mitigating poverty with Islamic Trade financing.

The findings will inform financial institutions and practitioners about the position of Islamic trade financing, entrepreneurship, and poverty.

The findings of the empirical study will be used by the development agencies (the United Nations, the International Monetary Fund, and the World Bank) to mitigate poverty with Islamic Trade financing amidst the varying entrepreneurship levels of countries.

The study will be used by academia and researchers for further research.

1.5. Definition of Core Terms

Cumulative Islamic Financing by the IsDB: accumulated financing approvals to beneficiary countries from the Islamic Development Bank since 1396 H (1976). These include financing by all IsDB subsidiaries (IsDB, 2021).

Entrepreneurship, as adopted from the Global Entrepreneurship Development Institute, is defined as the dynamic, institutionally embedded interaction between entrepreneurial attitudes, entrepreneurial abilities, and entrepreneurial aspirations by individuals, which drives the allocation of resources through the creation and operation of new ventures. (GEDI, 2019)

Entrepreneurial Ecosystem: This refers to the increasingly complex and interdependent factors that influence innovative, productive, and rapidly growing new ventures. The entrepreneurial ecosystem is not just the abundance or endowment of particular key factors of production or resources that shape economic performance; it is also the manner in which that economic activity is configured, or organized, within geographic space. They consist of multiple interactive elements, all of which need to be in sync in order for innovative and high-growth firms to prosper (GEDI, 2019). In brief, the entrepreneurial ecosystem refers to the environmental (macro-economic, social-cultural, political-legal, physiological, and technological) factors that influence the growth and prosperity of entrepreneurship in a country or region.

Global Entrepreneurship Index (GEI) Score: The GEI measures the quality and dynamics of entrepreneurial ecosystems at a national and regional level (GEDI, 2019). The GEI score is thus a measure of both the quality of entrepreneurship in a country and the extent and depth of

the supporting entrepreneurial ecosystem. The GEI defines country-level entrepreneurship as the national System of Entrepreneurship that constitutes the dynamic, institutionally embedded interaction between entrepreneurial attitudes, abilities, and aspirations by individuals, which drives the allocation of resources through the creation and operation of new ventures (GEDI, 2019). The GEI strives to measure only productive entrepreneurship that both creates wealth and is scalable. GEI proposes five levels of index building as it includes the GEI super-index measuring entrepreneurship at the country level, three sub-indexes (attitudes, abilities, and aspirations), 14 pillars, 28 variables, and 49 indicators. All pillars contain an individual and an institutional variable component. Therefore, the GEI score represents the performance of the involved countries in terms of the quality of their entrepreneurial ecosystem. In other words, the Global Entrepreneurship Index Score is an important tool to help countries accurately assess and evaluate their respective ecosystems (GEDI, 2019).

Gross National Income (GNI) in Purchasing Power Parity (PPP) per Capita: as adopted from the World Bank, GNI per capita is the average total domestic and foreign output claimed by residents of a country, consisting of Gross Domestic Product (GDP), plus factor incomes earned by foreign residents, minus income earned in the domestic economy by non-residents, divided by the midyear population. Purchasing power parity (PPP) measures how much a currency can buy in terms of an international benchmark (usually dollars), since the cost of goods and services differs between countries. GNI per capita is therefore a measure of income or poverty trends.

Islamic Financing is the financing in accordance with Shariah (Islamic law). It forbids interest with principles of equity, participation, and ownership (El-Gamal, 2006; Farooq, 2006; Hussain et al., 2015; Kammer et al., 2015; Khan, 2013; Malik & Hayat, 2014).

Poverty: we adopt the World Bank's definition of poverty as: "a condition, financial or non-financial, that exposes and/or subjects one to hunger, lack of shelter, being sick and not being able to see a doctor, not having access to school and not knowing how to read, not having a job, fear for the future, living one day at a time, losing a child to illness brought about by unclean water, powerlessness, and lack of representation and freedom (World Bank, 2020).

Public Policy: as adopted from Dye (1972) and Birkland (2019), is 'anything a government chooses to do or not to do'.

Trade Financing: as adopted from the IsDB 2004 annual report, the IsDB's trade financing programs foster cooperation by enhancing intra-trade among member countries and contributing to the economic development process by facilitating the importation of much-needed intermediate and capital goods.

1.6. Conceptual and Theoretical Framework

We derive the conceptual and theoretical framework of the paper from a diagnostic and comparative overview of the Islamic Trade Financing amounts and values received, the GNI Per capita and PPP from the World Bank development indicators, as a parameter for poverty levels, and the Global Entrepreneurship Index scores from the Global Entrepreneurship Development Institute for the year 2019. While the theoretical framework is also considerably substantiated by the previous studies and works on the relationship between poverty and entrepreneurship (See Section 2).

An overview of the Islamic Trade Financing amounts and values received by each of the 57 countries, the GNI Per Capita, the PPP, and the GEI scores ostensibly shows that, generally, countries with higher Islamic Trade Financing amounts develop high GEI scores, which results in higher GNI Per capita and PPP than their counterparts. Thus, the conceptual framework of

the study stems from the postulation that the amount of Islamic Trade Financing amounts or value received raises the state of the entrepreneurial ecosystem, as shown by GEI scores, resulting in a significant and positive explanatory (causal) relationship with the reduced levels of poverty, as indicated by GNI Per Capita, PPP, for any country. Apparently, this relationship has not been analyzed in the recent past based on the geographical scope, units of analysis, and key research variables that motivate this study. Thus, the conceptual framework of the study is as shown in Figure 1:

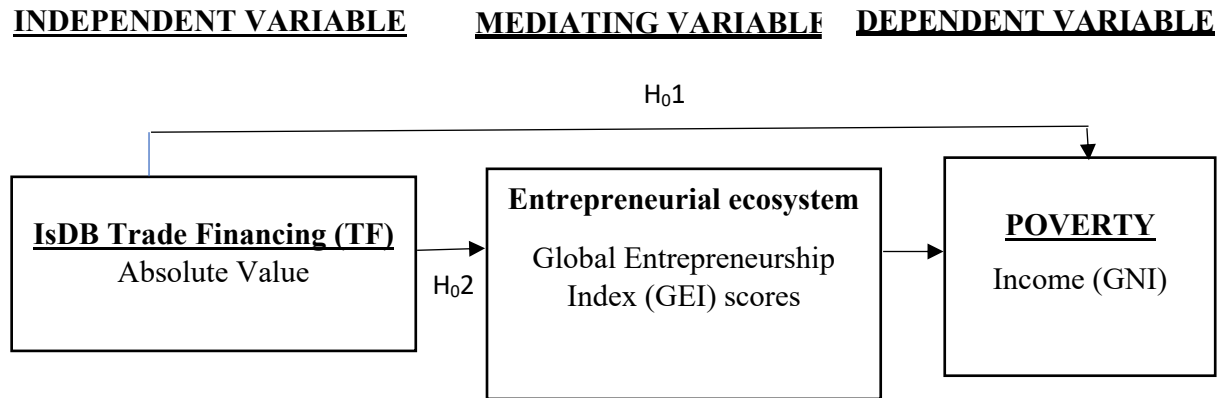


Figure 1. Summary of the empirical investigation
Source: Current study

2. Previous Related Empirical Studies Were Reviewed, and Gaps Were Identified

Studies related to Islamic financing, entrepreneurship, and poverty reviewed in detail in the course of the development and implementation of this study were:

Al-Jarhi (2017) took the qualitative approach while adopting an interpretivism paradigm by listing the contributions to economic analysis relevant to the required rationale in the theories of banking, finance, price, money, and macroeconomics to identify the main rationale for Islamic financing. He used the guided documentary review method. Findings revealed distinct macroeconomic advantages of Islamic financing, including efficiency in economizing on cash in transitions, efficiency in financial resource allocation, stability of PLS to debt contracts, low information asymmetry, operating as universal banks by combining all phases of finance, fund mobilization through avoidance of interest and ethical investment, Adjustments to policy shocks through real transactions with no cash balances leaking to nominal transactions, and systemic integrity where PLS share risk while stocks and debt skew risk. Debt sustainability as commodities are purchased and implicit markup is set at the beginning while interest is compounded and penalties apply (See Figure 1). The theoretical lens guiding this study is Al-Jarhi's economic theory of Islamic financing.

Shabbir et al. (2018) shared a conceptual overview of the role that Islamic modes of finance can play in the reduction of poverty. They used existing literature and textual analysis of the subject, along with a critical review of the strategies (models of poverty reduction) currently considered to eradicate poverty, to propose that Islamic modes of finance are a workable plan to reduce poverty and spread social justice in society. The Islamic modes of Trade finance, including profit and loss sharing, non-PLS mark-up contracts, and fee-based products, are applied to: reduce the gap between haves and have-nots; optimize the circulation of wealth; restrict capital to generate capital; and allow other factors of production with the risk of loss playing its role.

Tahiri Jouti's (2018) paper, which was aimed at defining a methodology to assess the impact of introducing Islamic finance on financial inclusion, was based on an Islamic Financial model. He took a qualitative approach to conduct a literature review to understand the link between Islamic finance and financial inclusion and developed a conceptual framework that assessed the impact of adopting Islamic finance on financial inclusion. Findings show that Islamic finance not only enhances financial inclusion but also creates financial migration (to Islamic financing).

Mihajat (2011) in a qualitative approach while developing an Islamic microfinance model using the "cooperative among the members" concept for Islamic banking in Indonesia for poverty alleviation, found that group-based lending programs are proven to be among the most effective tools to reduce transaction costs and lower exposure to numerous financial risks concerning providing credit to the rural poor. This encourages trade, which in turn reduces poverty.

Abba & Ngah (2020) conducted an exploratory study with secondary data, including journals, periodicals, conference proceedings, textbooks, internet searches, and other sources of published data, to relate Islamic banking to poverty. Their analysis found that the Interest-free service of Islamic banking is indeed a means of alleviating poverty in Abuja, Nigeria.

Musari (2017) conducted qualitative research with an explanation approach through library research, reviewing the available literature and the experiences of organizations related to nanofinance. This applied research study revealed that the Islamic Development Bank's financing and the smallest (Nano) level relate positively to poverty diminution.

Brekke's (2018) study was to find out the causal relationship between religious norms and financial exclusion of Muslims in the West, based on the Interest-free or Halaal money theory, through a pragmatic paradigm and data from Norway during 2015 and 2016. The data included a survey of just over 700 Muslims with a five-point Likert-scale questionnaire, 10 interviews, and three focus groups. The data was collected online and through self-administration by an assistant and the researcher. The analysis of the data was mixed between quantitative and qualitative. Findings were that the lack of an Islamic alternative is a real problem in Muslims lives. And there is a real possibility that religious norms against conventional banking cause financial exclusion.

Hassan et al. (2017) conducted a study to check on the positive relationship between Islamic microfinance and the socio-economic welfare of women benefiting from Islami Bank Bangladesh Limited, used the theory of "added worker effects" on women, triangulated qualitative and quantitative data collection and analysis approaches, and used open- and closed-ended survey questionnaires. Separated the sample of 700 equally into two groups (experimental and comparison) as adopted from Nader (2008) and also held interviews with five key microfinance specialists. Findings revealed that growth in women's revenues and resources played an important role in improving women's financial freedom and sense of self-possession.

Abdu et al. (2018) examined the effect of the introduction of Islamic banking and finance on financial inclusion using a methodology including the binary probit regression model, the Tobit regression model, and the Juhn-Murphy-Pierce decomposition technique with quantitative secondary data from the World Bank's Global Financial Inclusion Index (Global Findex) dataset of 2015. The study revealed that the Islamic banking and finance system enhanced financial inclusion in the Sub-Saharan Africa (SSA) region.

Alsagoff & Surono (2016) conducted case studies of four projects financed by the Bank of Khartoum (IRADA microfinance). The study indicated that, through sharing risks and profits

with the poor (in joint ventures), the Bank of Khartoum (IRADA microfinance) has helped thousands of vulnerable people in Sudan earn a better living by financing trade, leading to the generation of jobs and thus alleviating poverty. Beneficiaries received more income each by sharing the venture's profits while being co-owners (barring the risk involved) in the venture.

Elden et al. (2019) conducted a study in the form of an analysis to investigate the impact of the Abu-Halima project, funded by the Islamic Development Bank (IsDB) and executed by the Bank of Khartoum in Sudan as a local partner, relying on mixed-methods approaches and an analysis of research. Collected data from 125 borrowers and 5 managers of IsDB using personal structured interviews and semi-structured interviews, respectively. Findings revealed that the project enhanced the standard of living and increased the expenditure of the project beneficiaries.

Alsagoff & Ahmed's (n.d.) case study on a program of the Islamic Development Bank simultaneously providing both financial and non-financial services (Trade financing and Technical Assistance through capacity building) to the poor in the Deprived Families Economic Empowerment Program (DEEP) They used track records and successful intervention analyses. They found out that the program successfully reduced the poverty of the beneficiaries. DEEP even won the 2011 "Palestine International Award for Excellence and Creativity", as the innovation created 16,042 projects and 52,000 direct and indirect job opportunities.

Kitunzi's (2021) paper analyzes the empirical relationship between the entrepreneurial ecosystems, measured as Global Entrepreneurship Index (GEI) Scores, and poverty mitigation levels of 134 countries for the year 2019. Using Pearson product-moment correlation in a cross-sectional, desk-top study, the results reveal a significant positive relationship between the GEI scores and the GNI Per Capita, or PPP, of all the countries in the world.

Kimmit et al.'s (2020) paper revisited the entrepreneurship and poverty relationship from an eudaimonic perspective, bringing together conversion factors and future prosperity expectations. Based on an fsQCA of changes in the life circumstances of 166 farm households in rural Kenya, Results show that strong entrepreneurship-enabled future prosperity expectations result from family-frugal, individual-market, and family-inwards.

Boukhatem & B. Moussa (2018) while assessing the empirical effect that Islamic banking loans had on the economic growth of 13 countries in the Middle East and North Africa region through the years 2000 and 2014, used panel data from annual country-specific observations, conducted cross-section dependence (CD) tests, Panel unit root tests, Westerlund panel cointegration tests, and pooled fully modified OLS regressions (FMOLS). The study revealed that financial system development stimulated economic growth.

Lawal & Imam (2016) used Islamic banks' financing credited to the private sector as a proxy for Islamic finance, Foreign Direct Investment (FDI), and Trade as explanatory variables, while Real Gross Domestic Product (RGDP) was used as a measure of real economic growth as the dependent variables. Time series data from 2012 to 2015 was used quarterly. Data analysis was done by Ordinary Least Squares (OLS), the unit root test, the cointegration test, and the Granger Causality tests. Results of the study revealed that there is a strong positive association between Islamic banks' financing and economic growth in Nigeria.

Ledhem & Moussaoui's (2021) study was both a parametric analysis represented by vector autoregression (VAR) Granger causality and a non-parametric analysis represented by bootstrapped quantile regression. Findings were that Islamic finance (from a sample of all Islamic banks) was a vital contributor to economic growth through financing entrepreneurial

domains in Malaysia's small and medium-sized enterprises, covering a period from the 2014 first quarter until the 2019 third quarter.

Tabash and Dhankar's (2014) study used annual time-series data obtained from Islamic banks with Gross Domestic Product values of Qatar, Bahrain, and the United Arab Emirates. Data analysis comprised the unit root test, co-integration test, and Granger causality tests. Results reveal that in the long run, Islamic banks' financing is positive and significantly correlated with economic growth.

Ledhem and Mekidiche's (2020) study of the economic growth and financial performance of Islamic banks in Malaysia, Indonesia, Brunei, Turkey, and Saudi Arabia employed dynamic panel data models generalized method of moments with CAMELS parameters as the financial performance variables. Findings showed that the only significant factor in the financial performance of Islamic finance that affects endogenous economic growth is profitability through return on equity (ROE).

Parewangi & Iskandar (2020) adopted a positivism paradigm to analyze the variation of Islamic financing on poverty levels. They used annual frequency data of Islamic domestic credit or financing schemes in working capital and investment schemes for Micro, Small, and Medium Enterprises from the statistics office of Indonesia. Analysis of the short- and long-run asymmetrical relationship between Islamic financing and poverty by applying the autoregressive distributed lag model to the data between 2003 and 2017. This provided interesting results: first, Islamic financing significantly helps to reduce poverty in the short run, although in the long run it has a negative relationship. The bidirectional relationships were due to the structural break in 2006, which significantly affected the short-run dynamics of poverty, while the impact of the structural break in 2010 was mixed. There is evidence that Islamic financing responds to the poverty situation in Indonesia.

Sennanda et al.'s (2023) paper was an analysis of the relationship between Project financing by the Islamic Development Bank and poverty trends. The research adopted a positivism paradigm and was longitudinal, employing the linear dynamic panel data GMM model as an estimator of the empirical relationships between Project financing dollar amounts (PF) and the GNI Per Capita, PPP, for 20 years (2002 to 2021) in the 57 member countries. Findings reveal that countries that receive higher PF dollar amounts from the IsDB generally have more GNI Per Capita, or PPP (less poverty), than their counterparts. This paper develops policy discussions in relation to financing projects islamically and poverty mitigation.

2.1. Gaps Identified

Some studies, like Al-Jarhi (2017) and Shabbir et al. (2018), took qualitative approaches that required verification by this study with a quantitative approach. A number of studies were of cross-sectional time scope, with Parewangi & Iskandar (2020) and Boukhatem & B Moussa (2018) being longitudinal but with small geographical scope; Parewangi & Iskandar (2020) on Indonesia from 2003 to 2017, and Boukhatem & B Moussa (2018) on Middle East and North Africa countries from 2000 to 2014. A few studies were based on small content scopes, like Elden et al. (2019), Abu-Halima Project, Sudan. Alsagoff, S. H., & Surono, A. O. (2016), IRADA microfinance, Sudan. Alsagoff & Ahmaed (nd) Case study, Palestine Lawal, I. M., & Imam, U. B. (2016). Islamic banks are proxy banks (Commercial banks, while ISDB is a Universal bank). Kitunzi (2021) and Kimmitt et al. (2020) were based on entrepreneurship and poverty with no Islamic Trade financing.

All these studies create gaps to fill because the current study is different in approach, key study variables, scope (geographical and time), and research methodologies.

And to the researcher's knowledge, to date, no GEI, IsDB, IF, or GNI relationship analysis has been seen in one investigation.

3. Methodology

A positivism paradigm was adopted by the research in order for the investigator to be positioned in this school of thought that envisages that reality is available but just requires collecting from the field. Previous investigators adopted interpretivism paradigms with results that require verification. It is designed as a desk-top correlational longitudinal study (2002–2021), with hypothesis testing employing the econometric estimator generalized method of moments models. The units of analysis are countries that are financed by the Islamic Development Bank. The units of inquiry were the IsDB reports of 2002 to 2021, GEDI databases, and the World Bank open database on the World Bank website. All relevant ethical protocols were followed during the implementation of this study. Data on Trade Financing dollar amounts by IsDB (TF) was retrieved from IsDB's Data Resources and Statistics Division, and data on poverty (GNI Per Capita, PPP) was derived from the world Development Indicators that are presented by the World Bank. Predominantly secondary and quantitative data were used. 57 countries formed the sample size, purposively selected to benefit from IsDB financing. The main research variables are measured exactly according to their respective sources. The report was meticulously compiled with no manipulation in the knowledge of the researcher whatsoever. Sources of the data were: ISDB's Data Resources and Statistics Division, the Global Entrepreneurship and Development Institute, and the World Bank databases online. Excel spreadsheets and Stata 13 computer software were employed to analyze the data.

Arellano's (2009) linear dynamic panel data (LDPD) with two lagged dependents included as independent variables was used for the study. This is because of its dynamism in dealing with cross-sectional models in panels.

The general models used are:

$$y_{it} = \beta_0 + \delta Y_{i,t-2} + x1_{it}\beta_1 + \mu_i + \varepsilon_{it} \quad (1)$$

$$y_{it} = \beta_0 + \delta Y_{i,t-2} + x1_{it}\beta_1 + x2_{it}\beta_2 + \mu_i + \varepsilon_{it} \quad (2)$$

Specific models include:

$$\ln GNI_{it} = \beta_0 + \delta \ln GNI_{i,t-2} + \ln TF_{it}\beta_1 + \mu_i + \varepsilon_{it} \quad (3)$$

$$\ln GNI_{it} = \beta_0 + \ln GNI_{i,t-2} + \ln TF_{it}\beta_1 + GEI_{it}\beta_2 + \mu_i + \varepsilon_{it} \quad (4)$$

3.1. Justification of Arellano's LDPD GMM Model

Given the nature of our data sets, which include missing data on Trade financing, entrepreneurship, and poverty, an estimation problem was raised by the potential existence of unobserved individual effects, endogeneity, and the correlation between regressors and lagged variables, which make fixed or random effects unsuitable for the estimation. Such methods generate bias and inaccurate results (Baltagi and Kao, 2001). Arellano and Bond (1991) estimated the specific model for the first difference, which can remove the unobserved individual effect, in which the estimation uses all existing lagged values of the dependent variable and lagged values of the exogenous regressors as an instrument. Blundell and Bond (1998) indicated that when the dependent variable and the explanatory variables are determined across time, the lagged levels of these variables are weak instruments for the regression equation of differences. Later, they developed a new method called the GMM system estimator that included lagged stages and lagged differences as instruments. Roodman (2009) specified

GMM as a system estimation that can resolve the problems correlated to endogeneity, unseen heterogeneity, and autocorrelation. For this study, the system GMM estimator was applied to conduct the empirical investigation.

Arellano's (2009) optimal GMM estimator that can give a linear projection of y_i on x_i was used in models (3) and (4).

$$\hat{\beta}_{GMM} = [(\sum_i X_i^{*'} Z_i) A_N (\sum_i Z_i' X_i^*)]^{-1} (\sum_i X_i^{*'} Z_i) A_N (\sum_i Z_i' Y_i^*) \tag{5}$$

4. Analysis and Discussion

4.1. Data Transformation

Data was transformed to natural logarithms at base e ,in order to produce a reasonably symmetric distribution for further simplified statistical techniques (West, 2022).

4.2. Description of the Data

Table 1.

Summary of data from stata 13

```
. xtsum lnGNI lnGEI lnTF
```

Variable		Mean	Std. Dev.	Min	Max	Observations
lnGNI	overall	8.863956	1.20021	6.697034	11.79388	N = 602
	between		1.20018	6.954944	11.57856	n = 56
	within		.1417575	8.439999	9.428698	T-bar = 10.75
lnGEI	overall	3.187075	.4536597	2.171337	4.120662	N = 249
	between		.4421926	2.328605	4.05684	n = 42
	within		.1320315	2.938744	3.680437	T-bar = 5.92857
lnTF	overall	4.05116	1.636058	-2.302585	7.875879	N = 289
	between		1.47554	.4620981	6.9776	n = 52
	within		.9187371	-1.402808	6.285229	T-bar = 5.55769

4.3. Analysis

H₀₁ There is no statistical variation in poverty [Gross National income per capita (PPP)] resulting from variation in the value of Trade Financing by IsDB, for the Islamic Development Bank financing beneficiaries.

$$\ln GNI_{it} = \beta_0 + \delta \ln GNI_{i,t-2} + \ln TF_{it} \beta_1 + \mu_i + \varepsilon_{it} \tag{6}$$

Table 2.

```
. xtddp lnGNI lnTF, dgmiv(lnGNI, lagrange(2)) artests(2)

Dynamic panel-data estimation      Number of obs      =      282
Group variable: Country           Number of groups   =      51
Time variable: Year

Obs per group:   min =      1
                  avg =  5.529412
                  max =     11

Number of instruments =      46      Wald chi2(1)      =     10.69
Prob > chi2       =     0.0011
```

One-step results

lnGNI	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnTF	.0319478	.0097702	3.27	0.001	.0127986	.051097
_cons	8.752719	.0401082	218.23	0.000	8.674108	8.83133

Instruments for differenced equation

GMM-type: L(2/.)lnGNI

Instruments for level equation

Standard: _cons

Table 3.

Hypothesis	Coefficient lnTF on lnGNI	P value	Statistical Significance	lnTF /lnGNI Relationship	Findings/decision
H ₀₁	0.0319478	0.001	Significant	Positive	Reject H ₀

With a 95% confidence interval and a positive coefficient, reject the null hypothesis because Coef = 0.0319478 and P = 0.001. Trade financing by ISDB associates positively with poverty, and the estimate is statistically significant, with the p-value being less than 0.05. A unit increase in Islamic Trade financing increases the GNI per capita (PPP) by about 3.2% (Stata Tables 2 and 3).

H₀₂ There is no statistical effect of the Global Entrepreneurship Index scores on the relationship between the value of Trade Financing by the IsDB and poverty [Gross National income per capita (PPP)] for the Islamic Development Bank financing beneficiaries.

$$lnGNI_{it} = \beta_0 + lnGNI_{i,t-2} + lnTF_{it}\beta_1 + GEI_{it}\beta_2 + \mu_i + \varepsilon_{it} \tag{7}$$

Table 4.

```
Dynamic panel-data estimation      Number of obs      =      143
Group variable: Country           Number of groups   =      38
Time variable: Year

Obs per group:   min =      1
                 avg =   3.763158
                 max =      9

Number of instruments =      40      Wald chi2(2)      =      13.62
                                     Prob > chi2        =      0.0011
```

One-step results

lnGNI	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnTF	.0123125	.0080982	1.52	0.128	-.0035596	.0281846
lnGEI	-.1389643	.0423298	-3.28	0.001	-.2219293	-.0559994
_cons	9.381345	.1404688	66.79	0.000	9.106031	9.656659

```
Instruments for differenced equation
GMM-type: L(2/.)lnGNI
Instruments for level equation
Standard: _cons
```

Table 5.

Hypothesis	Coefficient lnGEI effect on lnTF & lnGNI	P value	Statistical Significance	lnTF /lnGNI Relationship	Findings/ decision
H ₀ 2	0.0123125	0.128	Not Significant	Positive	Reject H ₀

With a 95% confidence interval and positive coefficient, reject the null hypothesis because Coef = 0. 0123125 and P-value = 0.128. Trade financing by ISDB associates positively with poverty, although the estimate is not statistically significant with a p-value greater than 0.05. A unit increase in Islamic Trade financing increases the GNI per capita (PPP) by about 1.2% with the effect of the GEI, which is different without the GEI at 3.2% (Stata Tables 2 and 4).

4.4. Post Estimation Tests on the Models Used

```
. estat sargan
Sargan test of overidentifying restrictions
H0: overidentifying restrictions are valid

chi2(37)      = 94.61421
Prob > chi2   = 0.0000
```

Source: Stata notes

Prob > $\chi^2 = 0.000$ is that the p-value is significant, therefore no over-identifying restrictions, indicating the instruments are valid

```
. estat abond
```

Arellano-Bond test for zero autocorrelation in first-differenced errors

Order	z	Prob > z
1	1.0953	0.2734
2	1.5901	0.1118

H0: no autocorrelation

Source: Stata notes

From the estat abond test, results of both of the first order AR (1) ($Pr > Z 5 0.2734$) and second-order AR (2) ($Pr > Z 5 0.1118$), show that there is no serial correlation (no autocorrelation).

4.5. Discussion of Results

There is a statistical positive (Coeff = 0.0319478, $P = 0.001$) relationship of Trade Financing by IsDB, and the GNI per capita (PPP), and the reveals that Islamic Trade financing promotes poverty reduction. The GEI scores vary the relationship of Trade Financing by IsDB, and the GNI per capita (PPP) (Coeff = 0.0123125, $P = 0.128$). This is in disagreement with Parewangi and Iskandar's (2020) study findings that gave a negative relationship in the long run dynamics of poverty with Islamic financing in Indonesia, while qualifying the positive relationship as in most studies reviewed. The study findings introduce a new relationship which is the effect of the GEI scores on the relationship between value/amount of Trade Financing by IsDB, and the GNI per capita (PPP). This adds to Kitunzi's 2021 and Kimmitt et al.'s (2020) studies whose findings revealed; robust evidence that a good Entrepreneurial Ecosystem promotes economic growth, thus reducing poverty.

The study verifies the qualitative studies by; Al-Jarhi (2017), Shabbir et al. (2018), Tahiri Jouti (2018), Mihajat (2011), Abba & Ngah (2020), and Musari (2017) and ratifies these studies with a quantitative approach by this current study. The study also verified the studies of Brekke's (2018), Hassan et al. (2017), and Abdu et al. (2018) which adopted the pragmatic paradigms and ratified the studies with this study which was more superior than any of them that lacked the combination of a wide geographical scope, longitudinal time scope and wider content scope, while all these are qualities of the current study. The study verifies case studies conducted on programs financed by the IsDB of; Alsagoff & Suro (2016), Elden et al. (2019), and Alsagoff & Ahmed (n.d.) The study ratifies the positive relationships in these studies with variable wider in scope, which scope even including the programs, since sudan and Palestine were these programs were implemented are part of the beneficiaries of IsDB financing since 2002. The study compliments studies conducted by; Kitunzi (2021) and Kimmitt et al. (2020) with an introduction of the Islamic Tade financing variable in the equation as these two studies were investigating relationships between entrepreneurship and poverty without Islamic Trade financing. The study verified these longitudinal studies of; Boukhatem & B Moussa (2018), Lawal & Imam (2016), Ledhem & Moussaoui (2021), Tabash and Dhankar (2014), Ledhem and Mekidiche (2020), and Sennanda et al. (2023). Although all these studies were ratified as they revealed positive relationships between Islamic financing and poverty, they were based on small geographical scopes, those that had a wide geographical scope, were based on commercial banks while the current study is based on the Islamic Development Bank which is a universal bank the can engage in all dimensions of financing including trade finance, while commercial banks by law can never engage in direct trade, rendering them passive in Islamic Trade financing. The study also disqualified the Parewangi & Iskandar's (2020) negative findings of the relationship between the long run dynamics of poverty and Islamic financing in Indonesia, considering Indonesia being a beneficiary of IsDB Trade financing.

5. Conclusion

The findings presented in section 4.0 above show that:

Islamic trade finance is a relevant topic these days and will be in the future. This is in part due to the fact that governments in Islamic Development Bank member countries and development agencies like the World Bank are focusing attention on poverty alleviation through the Islamic financing alternative.

There are significant empirical positive relationships, correlation and association between the amount/value of Trade Financing by IsDB, and the poverty [Gross National income per capita (PPP)] for the Islamic Development Bank financing beneficiaries. Implying that an increase in the amount of Trade Financing by IsDB reduces the poverty of the recipient country,

There is an empirical effect of the entrepreneurial ecosystem on the relationship between the amount or value of Trade Financing by the IsDB and the poverty [Gross National income per capita (PPP)] of the Islamic Development Bank financing beneficiaries. Implying a variation in the entrepreneurial ecosystem's appropriateness, varies the relationship between the amount or value of Trade Financing by IsDB and the poverty of the recipient country varies.

6. Contribution of the Study

The paper contributes to the body of knowledge, through its findings on: Poverty, Islamic trade financing and entrepreneurial ecosystem.

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Ethical Considerations

All ethical protocols were taken care of in the course of planned and implementing this study

References

- Abba, R. A., & Ngah, B. Bin. (2020). The potentials of Islamic banking on poverty alleviation in Nigeria. *International Journal of Research and Innovation in Social Science*, IV(Viii), 438–443.
- Abdu, M., Jibir, A., Abdullahi, S., & Rabi'u, A. A. (2018). Can Islamic banking and finance spur financial inclusion? Evidence from sub-saharan Africa. *CBN Journal of Applied Statistics*, 9(1), 77–104.
- Al-jaberi, A., Badamasi, S., Omer, M., & Shaykh, A. (2014). *Concept and Applications of Cash Waqf Funds for Equity Financing*.
- Al-Jarhi, M. A. (2017). An economic theory of Islamic finance. *ISRA International Journal of Islamic Finance*, 9(2), 117–132. <https://doi.org/10.1108/IJIF-07-2017-0007>
- Alsagoff, S. H., & Ahmed, K. O. M. K. O. M. A. (n.d.). An innovative IsDB approach to improve the microfinance's impact in poverty alleviation. Case study 1, providing a Business partner a loan, capacity building and conduct trading through salam (Advance Purchas. In *Islamic Development Bank Economic empowerment: Accessed 13-11-2022*. (pp. 11–15).
- Alsagoff, S. H., & Surono, A. O. (2016). *Empowering the Poor through Islamic Microfinance : Experience of the Bank of Khartoum in Value Chain Project Financing in Sudan*. <http://www.irti.org/English/Research/Documents/WP/WP-1437-03.pdf>
- Anonymous. (2019). The policy process and policy theories. In *Defining U.S. Public Policymaking* (pp. 1–26). Sage. https://us.sagepub.com/sites/default/files/upm-binaries/93600_Chapter_2_Public_Policy_Processes.pdf
- Arellano, M. (2009). *Static Panel Data Models. Class Notes* (Issue October, pp. 23–34).

<http://www.cemfi.es/~arellano/static-panels-class-note.pdf>

- Arellano, M., & Bond, S. (1991). Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations. *Review of Economic Studies*, 58(58), 277–297. <https://doi.org/10.2307/2297968>
- Baltagi, B. H., & Kao, C. (2001). Nonstationary panels, cointegration in panels and dynamic panels: A survey. In R. Baltagi, B.H., Fomby, T.B. and Carter Hill (Ed.), *Advances in Econometrics* (15th ed.). Emerald Group Publishing Limited, Bingley, pp. 7-51. [https://doi.org/10.1016/S0731-9053\(2001\)15](https://doi.org/10.1016/S0731-9053(2001)15)
- Birkland, T. A. (2019). *An introduction to the policy process; Theories, concepts, and models of public policy making*. ((Armonk: M.E. Sharpe) (ed.); 5th ed.). Routledge Taylor and Francis Group. <https://doi.org/10.4324/9781351023948>
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115–143. [https://doi.org/10.1016/S0304-4076\(98\)00009-8](https://doi.org/10.1016/S0304-4076(98)00009-8)
- Boukhatem, J., & B Moussa, F. (2018). The effect of Islamic banks on GDP growth: Some evidence from selected MENA countries. *Borsa Istanbul Review*, 18(3), 231–247. <https://doi.org/10.1016/j.bir.2017.11.004>
- Brekke, T. (2018). Halal money: Financial inclusion and demand for islamic banking in Norway. *Research and Politics*, 5(1). <https://doi.org/10.1177/2053168018757624>
- Calvo, S. G. (2010). *The Global Financial Crisis of 2008-10 : A View from the Social Sectors* (Issue 18, pp. 1–70). Human Development Research Paper, UNDP.
- Chachi, A. (2005). Origin and development of commercial and Islamic banking operations. *King Abdul Aziz University-Islamic Economics*, 18(2), 3–25. <https://doi.org/10.4197/islec.18-2.1>
- Dye, T. R. (1972). *Understanding public policy*. Prentice-Hall.
- El-Gamal, M. A. (2006). *Islamic Finance : Law, Economics, and Practice(PDF)*. New York, NY: Cambridge. <https://doi.org/9780521864145>
- Elden, N. Z., Mohd Syaiful Rizal, B. A. H., Chew Boon Cheong, Al-Shami, S. S. A., Elzamy, A., & Mohamed Doheir. (2019). Implementation and impact of CSR practices in sustainable social projects of Islamic development bank the case study of Abu-Halima projects in Sudan. *Religación. Revista de Ciencias Sociales y Humanidades*, 4(17), 1–23.
- Estevao, M. (2022). *When the debt crises hit, don't simply blame the pandemic*. World Bank Blogs. <https://blogs.worldbank.org/voices/when-debt-crises-hit-dont-simply-blame-pandemic>
- Friedman, M. (1969). *The Optimum Quantity of Money and Other Essays*. Macmillan.
- GEDI. (2019). *The global entrepreneurship and development index. In Global Entrepreneurship and Development Index 2019*. Springer, Cham. (Z. J. Ács, L. Szerb, E. Lafuente, & Gábor Márkus (eds.); pp. 1–71).
- Hassan, F. A., Qamar, M. U. R., & Chachi, A. (2017). Role of Islamic microfinance scheme in poverty alleviation and well-being of women implemented by Islami Bank Bangladesh limited. *Islam Ekonomisi Ve Finans Dergisi*, 1, 1–32.
- Hein, E. (2006). Money, interest and capital accumulation in Karl Marx's economics: A

- monetary interpretation and some similarities to post-keynesian approaches. *European Journal of the History of Economic Thought*, 13(1), 113–140. <https://doi.org/10.1080/09672560500522868>
- Hussain, M., Shahmoradi, A., & Turk, R. (2015). *An Overview of Islamic Finance; IMF Working Paper*. <https://doi.org/10.5089/9781513590745.001>
- IsDB. (2004). *Islamic Development Bank annual report 1425H (2004-2005)* 30. <https://www.isdb.org>
- IsDB. (2019). *Islamic Development Bank Annual report 45: Shaping new frontiers for sustainable development*. <https://www.isdb.org>
- IsDB. (2021). *Islamic Development Bank annual report 47. Beyond recovery: resilience and sustainability*. <https://www.isdb.org>
- Jones, B. D., & Baumgartner, F. R. (2005). *A model of choice for public policy*. 15(3), 325–351. <https://doi.org/10.1093/jopart/mui018>
- Kammer, A., Norat, M., Pinon, M., Prasad, A., Towe, C., & Zeidane, Z. (2015). Islamic Finance: Opportunities, Challenges, and Policy Options. In *IMF Staff Discussion Notes (SDN/15/05; Vol. 15, Issue 5)*. <https://doi.org/10.5089/9781498325035.006>
- Keynes, J. M. (1936). *The General theory of employment , interest , and money*. International Relations and Security Network, Zurich.
- Keynes, J. M. (1937). Alternative theories of the rate of interest. *The Economic Journal*, 47(186), 241–252. <https://doi.org/10.2307/2225525>
- Kimmitt, J., Muñoz, P., & Newbery, R. (2020). Poverty and the varieties of entrepreneurship in the pursuit of prosperity. *Journal of Business Venturing*, 35(4), 105939. <https://doi.org/10.1016/j.jbusvent.2019.05.003>
- Kirchene, N., & Mirakhor, A. (2009). *Resilience and Stability of the Islamic Financial System – An Overview: on ‘Comparative Development of the Islamic Economic Model in context of current market conditions by KPMG, London*.
- Kitunzi, M. A. (2021). Entrepreneurship Milieus and Poverty mitigation: A Topical Universal Correlation Informing Poor Countries with Adverse Entrepreneurial Ecosystems. *International Journal of Arts and Social Science*, 4(4), 1–15.
- Lawal, I. M., & Imam, U. B. (2016). Islamic finance and economic growth: Empirical evidence from Nigeria. *Issn*, 7(16). www.iiste.org
- Ledhem, M. A., & Mekidiche, M. (2020). *Economic growth and financial performance of Islamic banks : A CAMELS approach*. 28(1), 47–62. <https://doi.org/10.1108/IES-05-2020-0016>
- Ledhem, M. A., & Moussaoui, W. (2021). Islamic finance for entrepreneurship activities and economic growth : a parametric and non-parametric analysis from Malaysia. *PSU Research Review EmeraldPublishingLimited* 2399-1747. <https://doi.org/10.1108/PRR-02-2021-0012>
- Malik, A., & Hayat, U. (2014). Islamic Finance: Ethics, Concepts, Practice. *The CFA Institute Research Foundation*, 9(3). https://doi.org/https://www.cfainstitute.org/en/research/foundation/2014/islamic-finance-ethics-concepts-practice?s_cid=ppc_RF_Google_Search_IslamicFinance2
- Mihajat, M. I. S. (2011). Developing an Islamic microfinance model using operasi concept for Islamic Bank in Indonesia for poverty alleviation. *2nd International Conference on*

Inclusive Islamic Financial Sector Development Enhancing Islamic Financial Services for Microenterprises 09th – 11th October 2011, Khartoum - Sudan, 328–350.

- Musari, K. (2017). Nanofinance , Addressing The Islamic microfinance gap through Global Islamic humanitarian institution. *Conference on Philanthropy for Humanitarian Aid (CONPHA), May*, 170–183.
- Mustafa, G., Yaseen, Z., & Arslan, M. (2021). Theoretical approaches to study the public policy: An analysis of the cyclic / stages heuristic model. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(10), 1307–1321.
- Noraini Mohd Ariffin, Archer, S., & Karim, R. A. A. (2007). Transparency and Market Discipline in Islamic Banks. In M. Iqbal, S. S. Ali, & D. Muljawan (Eds.), *Proceedings of 6th International Conference on Islamic Economics and Finance Edited* (Vol. 1, pp. 153–174).
- Parewangi, A. M. A., & Iskandar, A. (2020). The nexus of Islamic finance and poverty. *Hitotsubashi Journal of Economics*, 61(2), 111–139. <https://www.jstor.org/stable/26957517>
- Reed, M. S., Vella, S., Challies, E., de Vente, J., Frewer, L., Hohenwallner-Ries, D., Huber, T., Neumann, R. K., Oughton, E. A., Sidoli del Ceno, J., & van Delden, H. (2018). A theory of participation: what makes stakeholder and public engagement in environmental management work? *Restoration Ecology*, 26(August), S7–S17. <https://doi.org/10.1111/rec.12541>
- Romer, C. D. (2022). *Causes of the Great Depression of 1929 to 1939 Last Updated December 5, 2022*. Britannica.
- Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata Journal*, 9(1), 86–136. <https://doi.org/10.1177/1536867x0900900106>
- Samuelson, P. A. (1958). An exact consumption-loan model of interest with or without the social contrivance of money. *Journal of Political Economy*, 66(6), 467–482. <https://doi.org/10.1086/258100>
- Saylor Foundation. (2020). *Money and banking*. Saylor Foundation, original accessed 23-07-2020. <http://www.saylor.org/books>
- Sennanda, M., Kitunzi, A. M., Kasigwa, G., & Kintu, I. (2023). Project Financing and Poverty Trends in the Islamic Development Bank Member Countries. *International Journal for Multidisciplinary Research E-ISSN: 2582-2160*, 5(2), 1–14. <https://doi.org/10.36948/ijfmr.2023.v05i02.1911>
- Sergie, M. A. (2014). *The Rise of Islamic Finance*. Council on foreign relations. <https://doi.org/https://www.cfr.org/backgrounder/rise-islamic-finance>
- Shabbir, M. S., Kassim, N. M., Faisal, M., Abbas, M., & Sabti, Y. M. (2018). Poverty reduction through Islamic modes of finance; The way forward. *Journal of Social Sciences Research, Special Issue 4*, 58–65. <https://doi.org/10.32861/jssr.spi4.58.65>
- Smith, M. (2006). On interest and profit: Thomas Tooke's major legacy to economics. *Contributions to Political Economy*, 25(1), 1–34. <https://doi.org/10.1093/cpe/bzl003>
- Tabash, M. I., & Dhankar, R. S. (2014). The flow of Islamic finance and economic growth : An empirical evidence of Middle East. *Journal of Finance and Accounting*, 2(1), 11–19. <https://doi.org/10.11648/j.jfa.20140201.12>
- Tahiri Jouti, A. (2018). Islamic finance: financial inclusion or migration? In *ISRA International Journal of Islamic Finance* (Vol. 10, Issue 2, pp. 277–288). <https://doi.org/10.1108/IJIF-07->

[2018-0074](#)

- The Economist. (2013). *Banking on the ummah: Malaysia leads the charge in Islamic finance*. <https://doi.org/https://www.economist.com/finance-and-economics/2013/01/05/banking-on-the-ummah>
- Toporowski. (2018). Marx's critical notes on the classical theory of interest. In Dellheim J., Wolf F. (eds) *The Unfinished System of Karl Marx. Luxemburg International Studies in Political Economy*. (pp. 251–263). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-70347-3_8
- West, R. M. (2022). Best practice in statistics : The use of log transformation. *Annals of Clinical Biochemistry*, 59(3), 162–165. <https://doi.org/10.1177/00045632211050531>
- World Bank. (n.d.). *World development indicators*. World Bank Open Database. Retrieved November 20, 2022, from <https://data.worldbank.org/indicator>
- World Bank. (2020). *World Bank Group (IBRD, IDA, IFC, MIGA, ICSID)*: <https://databank.worldbank.org/databases>
- World Bank & Islamic Development Bank Group. (2017). Global report on Islamic finance : Islamic finance - A catalyst for Shared prosperity?. In *Website*.