



## **The Promise of Financial Inclusion for Developing Economies**

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**Abstract:** Financial inclusion is considered to be a tool to tackle poverty, promote equality, and support economic growth. Sustainable development goals can be achieved through financial inclusion as it implies access to and availability of financial services to disadvantaged groups, especially in developing economies. Despite the fact that financial inclusion is included in the political agenda of many countries, the studies are still scarce in particular from different perspectives and contexts. This paper outlines the characteristics of financial inclusion and aspects shaping financial inclusion. Moreover, implications of Financial Inclusion for developing and emerging economies are investigated and digital technologies in FinTech for financial inclusion are explored. Finally, the recommendations are suggested to eliminate poverty and ensure equality through the financial inclusion agenda.

**Keywords:** Financial inclusion, Inequality, Income gap, Poverty, Digitalization, FinTech, Developing countries

### **1. Introduction**

Recently, Financial Inclusion (FI) has increasingly gained attention as a tool to tackle poverty, promote equality, and support economic growth (Asuming et al. 2019; Mahalika et al., 2021). The concept has emerged as a part of the agenda of sustainable development goals and consequently, attracted the interest of academics and policy-makers around the world to expand financial products and services in a way that provides access to all members of society for poverty reduction and economic development (Van et al., 2021). The relationship between financial inclusion and poverty has been studied lately in different country contexts.

Since Financial inclusion can facilitate economic growth, improve living standards and eliminate poverty (Mahilka et al., 2021), the concept is of significant importance globally in order to enhance the access of disadvantaged groups of the population to finances (Matsebula and Yu, 2020). According to the World Economic Forum, 2 billion people worldwide are ignored by financial institutions (World Economic Forum, 2018), causing socioeconomic challenges.

Financial inclusion not only contribute to social and economic development, but also creates new markets and employment opportunities (Khelifa, 2021). Therefore, it should be taken into consideration by governments when carrying out policies (Ajefu et al., 2020). Moreover, Technological changes affected also the financial sector enabling digital financial services, which in return influenced financial inclusion.

Despite the augmented efforts to create inclusive financial systems in developed and emerging economies, the research in this field is still scarce taking into consideration the difficulty of the empirical measurement (Sha'ban et al., 2020). More empirical studies are needed also in emerging countries (Van et al., 2021). Thus, both theoretical and empirical studies will generate knowledge and understanding in this area as well as the practical implementation of financial inclusion in various countries.

This study addresses a key question: What is the relationship between FI, poverty reduction, economic growth, and inequality, especially in developing countries? The aim is to investigate the determinants and indicators of FI, the importance of access and use of financial services, and obstacles preventing people to benefit from the formal financial system. The paper also analyzes the role of digitalization in achieving financial inclusion.

The findings offer implications for policymakers in developing countries, scholars, and practitioners in terms of improving financial inclusion that leads to poverty elimination and economic growth.

The paper is organized as follows. After the introduction, the definitions and importance of financial inclusion are reviewed, and factors determining FI are outlined. Next, Financial Exclusion is explored, and previous empirical studies are discussed followed by the impact of digitalization on financial inclusion. Finally, conclusions with recommendations and future research directions are presented.

## **2. The Importance of Financial Inclusion and Definition of the Concept**

Economic inequality expressed by unequal distribution of wealth and income attracts the attention of scholars. Income inequality has been increasing since the 1990s in developed countries and is especially challenging in emerging and developing economies presenting a threat to democratic values (Fouejieu et al., 2020). Therefore, Sustainable Development Goals aim to eliminate inequality and poverty worldwide. Financial inclusion is recognized as a tool to achieve the UN's Sustainable Development Goals (Demirguc-Kunt et al., 2017; Immurana et al., 2021; Puime et al., 2022) as it ensures social equality (Bold et al., 2012), decreases poverty (Neaime and Gaysset, 2018) and triggers socio-economic welfare (Kpodar and Andrianaivo, 2011; Sarma and Pais, 2011; Feghali et al., 2021). Accordingly, governments make efforts to enhance financial inclusion while diminishing financial exclusion in their countries (Ozili, 2021). To ensure financial inclusion, G20 leaders agreed on the Financial Inclusion Action Plan that was further developed in the Global Partnership for Financial Inclusion (GPFI), and in the 2020 Universal Financial Access (Yoshino and Morgan, 2018). These initiatives must eliminate financial exclusion, especially in ASEAN countries (Association of Southeast Asian Nations) and include low-income families and small enterprises in financial services (Van et al., 2021). There is an ongoing discussion about the meaning of financial inclusion considering its diverse forms in different contexts; some scholars refer to the concept in terms of access to financial services whereas others concentrate on the usage of the financial services, and still others stress the terms on which these services are provided (Kirwan, 2021). The concept is becoming prevalent as studies confirm its significant role to alleviate poverty (Demirgüç-Kunt et al., 2018), enabling equal opportunity (Sha'ban et al., 2020), and positively impact on economic growth (Van et al., 2021; Vasile et al., 2021).

Financial inclusion is defined as the extent to which “individuals, households and firms have access to formal financial services” and to which citizens are integrated (Aduda and Kalunda, 2012). Allen et al. (2012) consider FI as ensuring the financial systems to be available, affordable, and accessible for all members of society. Particularly, poor people need to have access to the formal financial services (Allen et al., 2016; Ozili, 2018; Pham et al., 2019; Sarma, 2008). Consequently, through financial inclusion individuals and commercial entities can satisfy their need by accessible financial products and services (Hlophe, 2018).

The World Bank (2022) defines Financial Inclusion as the economic state in which “individuals and businesses have access to useful and affordable financial products and services that meet their needs - transactions, payments, savings, credit and insurance -delivered in a responsible and sustainable way”.

Moreover, financial inclusion is defined as a range of financial services that are used by individuals or companies; it is not just the accessibility to financial services (Cihak et al., 2016), as the ability to access those services does not reflect the actual utilization of them (Van et al., 2021).

Financial inclusion minimizes poverty while increasing the income of poor households (Chibba 2009; Zhang and Posso, 2017). It also increases access to insurance, not only bank accounts or borrowing and saving facilities, which provides vulnerable groups with strategies to overcome income shocks (Zhang and Posso, 2017; Churchill and Marisetty, 2020) or health-related issues leading to getting into difficulties. In this respect, financial inclusion ensures their resilience to both avoid and fight poverty.

In addition, financial inclusion can facilitate the improvement of economic conditions and living standards (Lutfi et al., 2021) as financial services stimulate investments and savings (Junior et al., 2021; Song et al., 2021). Although financial inclusion is important to reduce poverty, millions of people in the world still live on the poverty line in developing countries (Cyn-Young, 2015; Gigauri, 2022), which is the main challenge of the current generation. Therefore, various policies are implemented in order to enhance financial inclusion, especially in developing countries (Arun and Kamath,

2015) to improve financial accessibility for low-income citizens. It is noteworthy, that financial inclusion initiatives do not always lead to improvement of the economic development factors (Bateman, 2019). Economic growth can reduce poverty only if the wealth is evenly distributed between the rich and poor, otherwise, it would deepen the poverty (Churchill and Marisetty, 2020; Apostu et al., 2022).

Financial inclusion influences labor market in several ways. Available financial services stimulate investments, and is particularly helpful for small businesses to create jobs (IMF, 2019). Financial inclusion also allows financing education that strengthens human capital and hence, increases wages and employment (Fouejieu et al., 2020). Employee financial wellness programs are a practice aiming to help low-income employees access financial services when they suffer from financial exclusion (Despard et al., 2020).

Thus, the definitions highlight that financial inclusion incorporates various dimensions including “accessibility, availability and the usage of the financial system” (Pham et al., 2019). Accessibility means that financial services are accessible by customers, and availability defines the degree to which financial services are available to individuals, while the usage explains if those available and accessible services are actually used (Sarma, 2008).

## **2.1. Factors and Determinants of Financial Inclusion**

Accessibility to finances encourages savings (Allen et al., 2013), reduces income inequality, alleviates poverty (Burgess and Pande, 2005), and ensures inclusive growth (Cyn-Yung and Mecardo, 2015). The financial system provides services, such as payments, savings, loans to customers, which are necessary for their living, as well as benefits small businesses (Mahalika et al., 2021). Without reliable financial systems, the inequality deepens and economic development is impeded (Demirguc-Kunt and Levine, 2009).

Financial services enable citizens to have their bank accounts, access to loans, credit, and bank cards, as well as to make payments and savings (Mahalika et al., 2021). Such accessibility can be provided with fewer barriers such as removing imposed costs for using the financial system, required documentation, and appropriate legislation protecting the rights of vulnerable people (Arun and Kamath, 2015). As a result, poverty can be combated. In this regard, financial literacy can help financial inclusion in terms to use and manage finances or benefit from financial services, but structural obstacles hindering access to the financial system still must be targeted (Ozili, 2021). For this reason, financial infrastructure should involve individuals in the financial system and offer them services, but also education, and prohibit discrimination (Kear, 2013). Therefore, policy-makers must implement policies aiming at financial inclusion, providing alternative interventions in this regard in order to tackle poverty (Mader, 2018).

Harker (2021) emphasizes the various objects of financial inclusion, such as individuals, companies, unbanked groups, and the economy, as well as differentiates (i) the supply side - the state and private sector, and (ii) the demand side - consumers, and unbanked people. To study financial inclusion, both individual and country level characteristics need to be determined (Sha'ban et al., 2020). Country-level determinants play a significant role in the financial system of a country and hence, in financial inclusion (Allen et al. 2016). In this regard, competition can stimulate innovation and increase financial services through decreasing costs and enhancing financial inclusion (Love and Martínez Pería 2015; Owen and Pereira 2018).

There are five factors of financial inclusion at the country level: macroeconomic factors, socioeconomic factors, technological factors, institutional environment, and banking system conditions (Sha'ban et al., 2020). Human development as an important socioeconomic factor captures health, education, and standard of living dimensions, which are positively connected to financial inclusion (Kabakova and Plaksenkov 2018). The education aspect is associated with the financial literacy of consumers, which is essential to making financial decisions (Klapper, Lusardi, and Panos 2013). Technological factors include the share of the population using the internet and are linked to financial inclusion (Honohan 2008; Park and Mercado 2021).

Camara and Tuesta (2014) suggested financial inclusion in three dimensions: (1) usage - holding a financial product, possessing a savings account, taking a loan from a formal financial organization; (2) barriers - that hinder people to access financial services, and (3) access - affordability, documentation, trust, and distance (Camara and Tuesta, 2014). The study results analyzed financial inclusion through those dimensions and confirmed the positive correlation between financial inclusion and economic growth (Van et al., 2021). Moreover, Van et al. (2021) argued that this relationship is

stronger in poor countries with a low level of financial inclusion. Therefore, the realization of policies and strategies triggering financial inclusion is essential to promote economic development in emerging countries (Van et al., 2021). Thus, financial inclusion encompasses accessible financial services that minimize financial exclusion by taking into account the factors preventing poor people from using the formal financial system, for example, distance, costs, and needed documentation.

## **2.2. Financial Exclusion**

According to Demirgüç-Kunt et al. (2017), financial inclusion means that individuals have access to proper financial services and they can use those services. In addition, geographical, and historical contexts as well as power relations, are shaping financial inclusion (Prabhakar 2021). These factors can cause financial exclusion meaning that certain groups are prevented to obtain access to the formal financial system (Prabhakar 2019). Financial exclusion forces the poor to pay more for services and goods due to their lower purchasing power and because they are excluded from financial services (Donovan and Park, 2019). Furthermore, excluded individuals and enterprises from formal financial services tend to engage in risky or illegal activities resulting in social and economic exclusion (Sha'ban et al., 2020).

Although financial institutions are a central part in the distribution of capital resources, they cannot ensure that nobody is excluded from the formal financial system, when market imperfections and asymmetric information have their influence inequality (Chinoda and Mashamba (2021). Financial exclusion can be voluntary or involuntary (World Bank, 2014). Voluntary exclusion takes place when individuals decide against the usage of financial services despite their ability, for instance, they may have no need for those services, or even have cultural or religious reasons not to use financial services (Mahalika et al., 2021; World Bank, 2014). On the other hand, involuntary exclusion prevents people from accessing the financial system despite their desire for it, for example, they can have insufficient income, lack of information or documentation, risk and trust issues, unaffordable or unsuitable for their needs financial products (Mahalika et al., 2021; World Bank, 2014).

It is noteworthy that financial inclusion can also cause some problems. The first one is related to inactive users. When individuals are included in the formal financial sector but they choose not to use financial services and rather stay inactive - meaning that they refuse to hold credit or debit cards, do not possess savings, do not send money or initiate transactions, and hence, their bank accounts are inactive, this inactivity creates a problem for the financial system as it reduces financial transactions causing revenue decrease for financial organizations and tax revenue decrease for the government (Ozili, 2021). Such inactive financial inclusion ultimately negatively affects economic growth.

Another problem is caused by the extreme financial inclusion that grants access to everyone. Criminals or hackers can get access to financial services through extreme financial inclusion if all barriers are removed (Ozili, 2021). Therefore, it is undesirable to eradicate all requirements such as verification or identification process of individuals in order to detect risks and for example, prevent individuals to obtain a loan who do not intend to repay it (Ozili, 2021).

## **3. Empirical Studies about Financial Inclusion**

Prior studies demonstrated that financial inclusion is important to achieve well-being and development as it lowers inequality, and decreases poverty (Aslan et al. 2017; Gertler, et al., 2009). The empirical research conducted by Mahalika et al. (2021) found that unemployed, economically inactive, unmarried individuals and those without tertiary education suffer more from poverty and financial exclusion. Thus, FI is correlated with poverty reduction. However, financial education and information play a crucial role in using financial services. Koomson et al. (2020) investigated the influence of financial literacy on financial inclusion and found financial literacy training increases the likelihood to open an account and own savings.

Analyzing 2011-2016 FinScope data, Mahalika et al. (2021) studied four dimensions of financial inclusion: access, usage, quality, and welfare in the African countries, which are included in the Financial Inclusion Index and separate financially included and excluded individuals. The empirical results show that financially excluded people were living in rural areas, were less educated, and suffered from poverty (Mahalika et al., 2021). However, the number of financially excluded and poor people reduced by 4% from 2011 to 2016 confirming that financial systems support economic growth and poverty elimination (Mahalika et al., 2021).

Sha'ban et al. (2020) used the IMF's Financial Access Survey data for a sample of 95 countries from the years 2004-2015 in their research, and built a multidimensional financial inclusion index based on the data (including the use, access, and depth dimensions of financial services); they confirmed the advancement in financial inclusion in terms of the use and access factors. According to their results, FI positively correlated with GDP per capita, employment, human development, and internet usage (Sha'ban et al., 2020). Study results of Sha'ban et al. (2020) emphasized that not barely possessing a bank account, but the actual usage of financial services is associated with financial inclusion.

Financial inclusion contributes to economic development by accessing financial services, which ultimately stimulates the entrepreneurial activities of disadvantaged groups and reduces inequality (Asuming et al. 2019). Loan et al. (2021) found that financial inclusion and economic development are strongly related in low-income countries suggesting the further promotion of financial inclusion in order to stimulate economic growth in emerging markets. Ozili (2021) found that financial inclusion is dependent on financial innovation, the poverty level in a country, financial system stability, legal and economic environments, and financial education of the population, which varies from country to country, and which eventually influence the state of financial inclusion. Ezzahid and Elouaourt (2021) examined financial inclusion in terms of investment and economic growth using data from thirty-three African countries between 2004-2009 years with a panel data regression technique and confirmed that FI positively impacts both investment and economic growth. Asuming et al. (2019) analyzed data from the Global Findex to study financial inclusion in 31 Sub-Saharan African countries and found that financial inclusion has improved since 2011 and the following factors influence FI: age, education, gender, income as well as GDP, financial institutions, and business environment. Park and Mercado (2016) explored the impact of FI on poverty elimination and income gap in 177 countries and found that financial inclusion can decrease poverty levels. Furthermore, they analyzed the data from 151 countries and confirmed that increased financial inclusion enhances economic development (Park and Mercado, 2018).

The research results of Emara and Mohieldin (2020) suggested that Financial inclusion diminishes extreme poverty in 34 countries they have analyzed. The research conducted by Koomson et al. (2020) found that there is a correlation between FI and poverty in Ghana as the results show that FI decreases the impact of poverty by 27%. Dogan et al. (2021) analyzed the Turkish Household Budget and Consumption Expenditure Survey data with 11,595 answers in order to explore the impact of financial inclusion on poverty presented by the multidimensional index including three indicators of poverty: the lowest-income poverty line, a lower-middle-income line, and an upper-middle-income line. The researchers came to the conclusion that increased FI decreases poverty (Dogan et al., 2021). They also indicated the importance of bank branches in distant areas to expand financial products and services to all populations, leading to reducing the risks of poverty (Dogan et al., 2021). Churchill and Marisetty (2020) investigated the impact of FI on poverty using survey data from 45 thousand Indian households and applied "the household Poverty Probability Index (PPI), household deprivation scores, and poverty line" to measure this relationship. As a result, the researchers confirmed that financial inclusion significantly reduces poverty (Churchill and Marisetty, 2020). The inclusive financial systems ensure efficient use of economic resources, restrict informal financial channels, and improves access to finances (Sarma, 2008). Pham et al. (2019) explored the impact of bank competition on financial inclusion through the System Generalized Method of Moments using the panel data of 93 countries, and found that "bank competition promotes financial inclusion" (Pham et al., 2019)

Scholars argue that current literature on financial inclusion contain controversial results regarding the effects of financial inclusion on financial stability, and highlight the lack of empirical results (Atellu and Muriu, 2021). Thus, Atellu and Muriu (2021) examined this impact in Kenya and discovered that financial inclusion improves financial stability. As a result, they propose promoting policies and strategies that can advance financial inclusion in order to improve financial stability (Atellu and Muriu, 2021). It should be noted that financial stability has become a global issue considering the previous financial crises (in 2007-2009), the Covid-19 pandemic, and accelerating technological innovations (Atellu and Muriu, 2021; Su et al., 2022).

Research results by Khelifa (2021) confirm the important correlation of institutional quality and social factors to financial inclusion. The findings show that age as a social factor plays a role in accessing financial services, in particular, the elderly keeps informal savings without using the formal financial system, and naturally, do not utilize digital payments (Khelifa, 2021). The findings also demonstrated that institutional quality in terms of corruption control influences financial inclusion, and hence, government performance and effectiveness can expand the formal financial system (Khelifa, 2021).

The study conducted by Immurana et al. (2021) revealed that financial inclusion affects population health. They used data from 33 African countries between 2004 and 2018 years, and 4 indicators of financial inclusion: quantities of ATMs, commercial bank branches, borrowers, and deposits, based on which they created an index of financial inclusion using the Principal Component Analysis. As a result, Immurana et al. (2021) found that financial inclusion improves population health.

Studies demonstrate that FI reduces poverty and the income gap in developing economies (Chinoda and Mashamba, 2021). Fouejieu et al. (2020) demonstrated the positive effect of financial inclusion on income inequality and the gender gap as financial exclusion disproportionately affects women. The same opinion is expressed by Ozili (2021) emphasizing the role of financial inclusion in the economic empowerment of women and poor people.

Finally, it should be noted that some scholars did not find a significant impact of FI on the poverty ratio (Neaime and Gaysset, 2018). Scholars argue that the relationship between financial inclusion, inequality, and economic growth will be better understood by the availability of data on the effect of financial inclusion on income inequality, economic development, and other macroeconomic variables (Demirguc-Kunt and Klapper, 2012). Since human development and global progress are impeded by poverty (Chen et al., 2021), policymakers have to combat it through financial inclusion. FI ensures health, education, employment, and entrepreneurial opportunities, which ultimately leads to poverty decrease.

## **4. Digitalization and Financial Inclusion**

Recent progress in information and communication technology has offered a stimulating environment for financial technologies to be introduced in the financial sector (Kanga et al., 2021). The study conducted by Kanga et al. (2021) on the relationship of financial technology (FinTech) with financial inclusion and living standards i.e. GDP per capita, discovered that FinTech diffusion and financial inclusion influence GDP per capita in the long-term period. They analyzed data from 137 countries between 1991 and 2015 years to estimate the correlation between fintech diffusion, financial inclusion and GDP per capita, and confirmed the importance of fintech innovations such as ATMs and digital networks as well as smartphones and payment systems that enable fintech diffusion (Kanga et al., 2021). ATMs and mobile phones together with payment systems shape fintech product diffusion but those factors also contribute to financial inclusion (Batiz-Lazo, 2018; Graff, 2005; Kanga et al., 2021)

Digitalization of financial services can increase the efficiency and effectiveness of the financial sector (Scott et al., 2017). FinTech is considered by scholars and policy-makers as an enabler of financial inclusion in developing regions (Ertürk et al., 2021). Financial innovation and novel technologies can improve financial inclusion by reaching the poor (Al-Mudimigh and Anshari, 2020; Chinoda and Kwenda, 2019; Beck et al., 2015). Financial innovation can increase the usage of financial services by developing financial tools, products, and services (Ozili, 2021). It has an important effect on the accessibility to borrowing and savings facilities positively influencing the increase of the use of risk-reducing technologies for households (Hallegatte et al., 2016). For example, mobile phone innovation has increased financial inclusion in forty-nine countries (Chinoda and Kwenda, 2019). In addition, previous studies highlight that mobile money contributed to financial inclusion as it allowed financial transactions without a formal account in the bank (Senyo and Osabutey, 2020). Financial inclusion decreases transaction costs, makes easier access to financial products and services, and simplifies borrowing and savings, which as a result ameliorates consumption power (Shi et al., 2021).

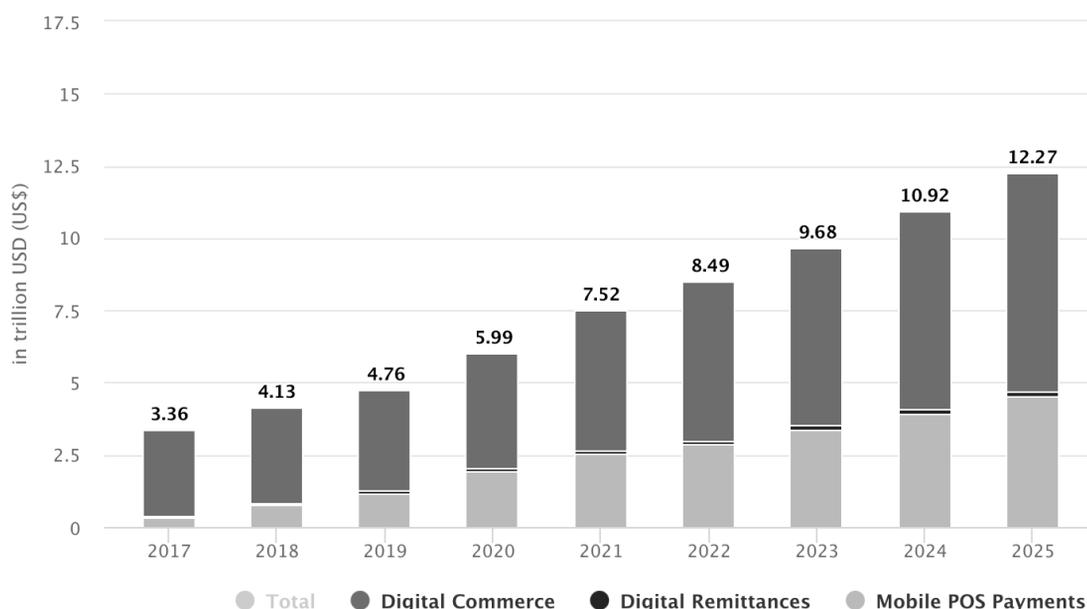
Rapid technological advancements have induced the excessive use of smartphones, which presents an opportunity for adopting mobile payment tools as an instrument for achieving financial inclusion (Lutfi et al., 2021). Smartphones associated with mobile payments have transformed banking and financial services and products worldwide (Kanga et al., 2021). Moreover, mobile payments have become prevalent globally and are especially convenient during travel while providing grounds for financial inclusion (WTTC, 2019). Shi et al. (2021) investigated the impact of financial inclusion on tourism development in 24 developed and 21 emerging countries with the data between 1995-2016 years and asserted that financial inclusion significantly influences tourism development throughout the panel countries but has a particularly positive effect on developing economies. This finding is important for many emerging countries dependent on tourism given the evidence that tourism development is positively related to financial inclusion (Shi et al., 2021).

Lutfi et al. (2021) examined factors that impact the usage of digital financial services, in particular, the acceptance of mobile payment in Jordan with the data consisting of 304 Jordanian citizens. The results demonstrated that behavioral intention to employ the mobile payment system is positively affected by perceived usefulness and perceived financial

cost suggesting the increase in mobile payment if the citizens recognize that the system is useful and less costly (Lutfi et al., 2021). Thus, digitalization has given rise to new financial products, new financial companies entered into markets, reduced operation expenses, and improved consumer involvement even in remote locations (Ahmad et al., 2021).

Access to the Internet is essential for Financial Inclusion in both developed and developing economies in order to expand access to debit and credit facilities, financial transfers, etc. (Sha'ban et al., 2020) empowering unbanked groups to take part in the formal financial system (Kpodar and Andrianaivo 2011). Moreover, access to the internet, computers, or smartphones needed for using digital financial products can improve financial inclusion, especially in rural areas in developing countries (Mahalika et al., 2021). The literature maintains that internet use and mobile phones positively correlate to financial inclusion, meaning that the greater usage of the Internet and mobile phones, the greater financial inclusion (Evans, 2018; Lenka and Barik, 2018). Thus, improved internet facilities enable citizens to have access to financial service, which is considered as a potential for financial inclusion and hence, facilitate economic development in remote areas (Mahalika et al., 2021).

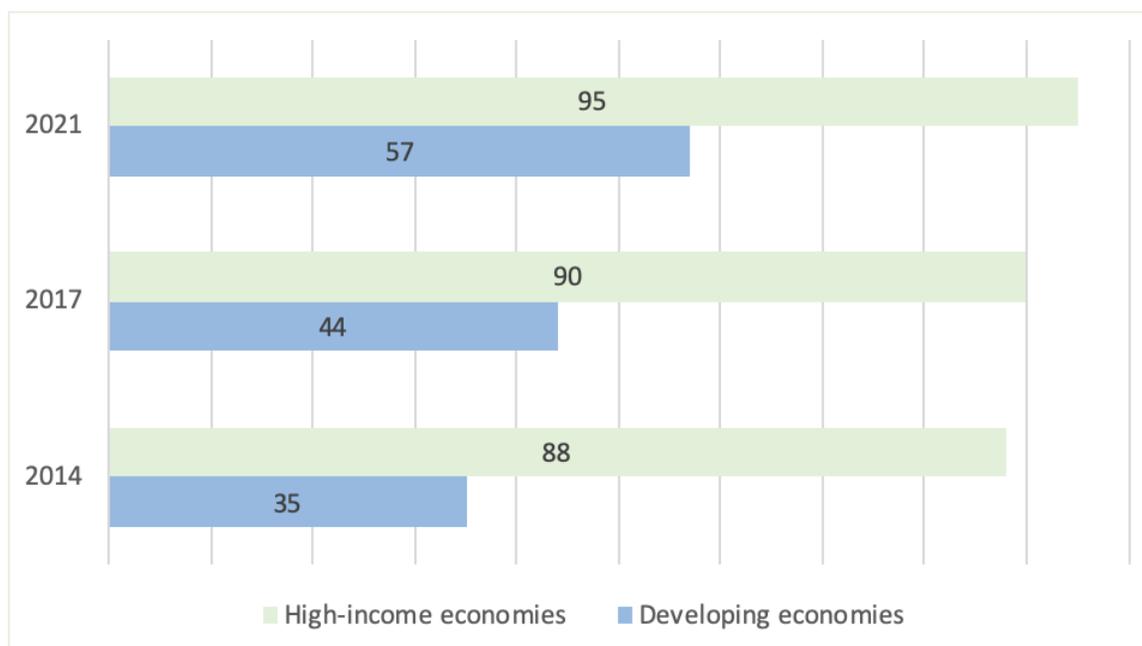
People around the world have started using more digital services since the pandemic Covid-19 as the shift to a low-touch and digital economy accelerated (Gigauri, 2021). 42% of Americans have utilized FinTech platforms, while financial software download increased by 26%, and investments in FinTech increased by 144% (Finextra, 2022). Digital Payments reached US\$8.49tn in 2022 suggesting a further increase in the next years (Statista, 2022). In particular, digital commerce and mobile payments show growth (Fig.1).



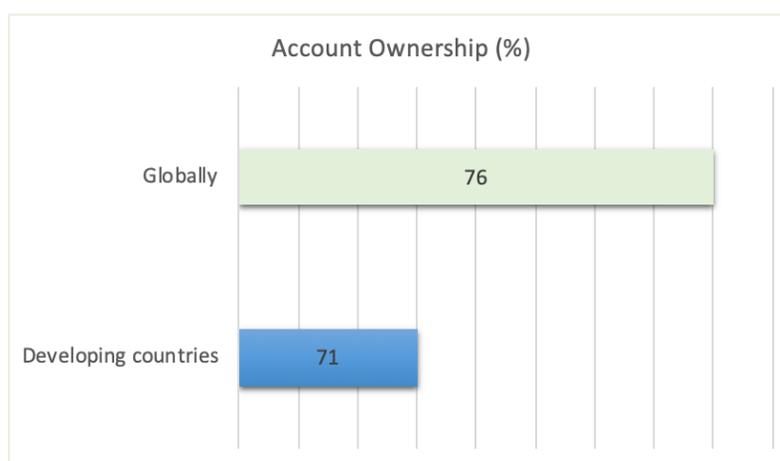
**Figure 1:** Worldwide transaction value of digital payment by segment

**Source:** Statista, 2022

Global progress on financial inclusion illustrates the achievements concerning financial inclusion. In developing countries, account owners who used digital payments have increased in the recent years (Fig. 2). In general, 71% of adults own accounts in developing countries (Fig. 3).



**Figure 2:** Account owners (%) using digital payments, 2014-2021  
**Source:** Global Findex Database, 2022



**Figure 3:** Account ownership in developing countries  
**Source:** Global Findex Database, 2022

Digital financial inclusion is attracting more attention and recognition in international development (Duvendack and Mader 2020) from both the public and business sectors (Gabor and Brooks 2017; Lai et al., 2020). Ahmad et al., (2021) revealed the positive relationship between digital financial inclusion and human capital to China’s provincial economic growth, and consequently, they suggested investing in human capital development and advancing digital financial inclusion in order to reach economic development. Furthermore, Zhang et al. (2020) indicated that digital financial inclusion helps decline income inequality between cities and rural areas (Zhang et al., 2020). It also provides financial provisions to small enterprises as alleviates financial barriers (Yang and Zhang, 2020).

Digital Financial Inclusion is defined as an enabler for affordable digital financial services to everyone irrespective of their income, expenses, or location (Lutfi et al., 2021). It refers to offering digital access to financial services at a low price to encourage vulnerable groups to participate (Zhang et al., 2020), including businesses to use digital ways of investment or savings (Ozili, 2018). Digital financial inclusion can contribute to economic growth, and can reduce the cost of financial services (Ahmad et al., 2021). Consequently, when unserved people refrain from using financial services due to their high costs, they have alternatives in terms of digital financial facilities. If financial service companies do not keep written records of their daily operations, which is possible through digitalization, their efficiency will grow resulting in cost decrease and revenue increase (Schneider, 2018).

FinTech firms provide digital financial services unlike traditional banking services (Senyo et al. 2021) and offer improved and accessible financial services while using advanced technologies (Gomber et al., 2018). The Fintech ecosystem is comprised of FinTech firms, technology developers, government actors, financial customers, and traditional financial institutions (Lee and Shin, 2018). Senyo et al. (2021) found that Fintech contains the following factors that enable financial inclusion: “(1) innovative and collaborative practices, (2) protectionist and equitable practices, and (3) legitimizing and sustaining practices”.

Chinoda and Mashamba (2021) analyzing panel data of 25 African countries in the years 2011, 2014, and 2017, indicated that financial inclusion has mediating effects on FinTech-income inequality, suggesting the important role of FinTech in reducing income gap and enhancing financial inclusion. Hendriks (2019) emphasizes the role of financial inclusion for women’s economic empowerment in order to improve their lives and achieve gender equality. In this regard, financial inclusion has a main role to play in the efforts dedicated to women’s equal income, controlling their economic resources, and taking responsibility for their lives (Hendriks, 2019). Moreover, women’s economic empowerment can cause poverty reduction and inclusive economic development (Hendriks, 2019). However, scholars argue that mobile banking should be tailored to meet women’s needs, and financial and digital training are required to enhance financial inclusion and make available financial resources for women (Kemal, 2019). Therefore, women need access to the digital financial system to make decisions about their finances through, for example, mobile banking or digital payment, and to be involved in economic activities in order to achieve economic empowerment (Hendriks, 2019).

Digital technology enables grant access to the Internet to consumers living in remote areas and hence, improves their financial inclusion (Lenka and Barik, 2018). However, the usage of the Internet does not predict financial inclusion but in combination with financial literacy and financial product usage, which act as mediating factors (Shen et al., 2020). For example, China with the widespread usage of the Internet still is behind in financial inclusion (Shen et al., 2020). The research carried out by Shen et al. (2020) indicated that financial inclusion is not directly influenced by Internet usage but by financial literacy and using digital financial products. Accordingly, the financial literacy of consumers and stimulating the usage of digital financial products can improve financial inclusion. The usage of the Internet is still positively correlated with the usage of digital financial products, and the usage of digital financial products together with financial literacy enhances financial inclusion (Shen et al., 2020).

After the unsuccessful efforts to eliminate poverty through microcredits, the new concept of Financial inclusion is emerged offering the potential to ensure access to financial services for excluded populations (Settle, 2020). However, a vast amount of people is still excluded (G20, 2018). Therefore, global policy-makers are focusing on digitalization to enable access to affordable financial services and products for the poor in order to advance financial inclusion and hence, eradicate poverty (Settle, 2020). Thus, digitalization and technological advancements have augmented the opportunities for financial services which is paving the way for further advancement in financial inclusion.

## **5. Conclusions**

The paper discussed the prevalent concept of financial inclusion that gained more attention in recent years. The concept is considered to ensure equal access to financial products and services especially, for the unbanked population and consequently, achieve economic growth and poverty elimination.

For this purpose, policy-makers in developing countries should devote targeted programs for disadvantaged groups to increase their financial literacy but also technological skills, which potentially will increase the usage of financial services. Moreover, governments should ensure access to digital technologies to facilitate financial inclusion in all regions of their countries, as digital financial inclusion covers remote areas as well. Therefore, they can effectively offer opportunities to vulnerable people to be included in the financial system and move away from poverty. For this reason, governments can provide grants and aid for targeted entrepreneurs and develop a supporting business environment. Thus, financial inclusion presents a way to eliminate poverty, improve wellbeing, and promote economic and social development.

Ozili (2021) expresses concern regarding the literature on financial inclusion as most studies have been conducted by researchers associated with pro-development organizations such as “the World Bank, the International Monetary Fund, Asian Development Bank, African Development Bank, Alliance for Financial Inclusion, Central banks and the CGAP”, and therefore, presenting conflicted interests. Thus, more independent research needs to be carried out to examine the concepts and practices of financial inclusion and exclusion through different lenses and across various countries.

Therefore, future research should explore the different economic, social, and cultural variables of financial inclusion in different countries, as well as strategy and policies influencing financial inclusion. Future studies should take into account that financial inclusion is also influenced by socio-cultural values.

## References

- Aduda, J & Kalunda, E. (2012). Financial inclusion and financial sector stability with reference to Kenya: A review of literature. *Journal of Applied Finance and Banking*, 2(6), 95–120.
- Ahmad, M., Majeed, A., Khan, M. A., Sohaib, M., & Shehzad, K. (2021). Digital financial inclusion and economic growth: Provincial data analysis of China. *China Economic Journal*, 14(3), 291-310. <https://doi.org/10.1080/17538963.2021.1882064>
- Ajefu, J. B., Demir, A., & Haghpanahan, H. (2020). The impact of financial inclusion on mental health. *SSM - Population Health*, 11, 100630. <https://doi.org/10.1016/j.ssmph.2020.100630>.
- Al-Mudimigh, A., & Anshari, M. (2020). Financial technology and innovative financial inclusion. In M. Anshari, N. Almunawar, & M. Masri (Eds.), *Financial technology and disruptive innovation in ASEAN*. IGI Global. <https://doi.org/10.4018/978-1-5225-9183-2>.
- Allen, F., Demirguc-Kunt, A., Klapper, L., & Martinez Peria, M. S. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation*, 27, 1–30. <https://doi.org/10.1016/j.jfi.2015.12.003>
- Allen, F.E., Carletti, R., Cull, J., Qian, L., Senbet, S. & Valenzuela, P. (2013). Resolving the African financial development gap: Cross-country comparisons and a within-country study of Kenya. World Bank Policy Working Paper No. 6592. World Bank, Washington, DC.
- Apostu, S. A., Mukli, L., Panait, M., Gigauri, I., & Hysa, E. (2022). Economic Growth through the Lenses of Education, Entrepreneurship, and Innovation. *Administrative Sciences*, 12(3), 74. <https://doi.org/10.3390/admsci12030074>.
- Ardic, O. P., Heimann, M., & Mylenko, N., (2011), Access to financial services and the financial inclusion agenda around the world: A cross-country analysis with a new data set, Working Paper. The World Bank. 5537.
- Arun, T., & Kamath, R. (2015). Financial inclusion: Policies and practices. *IIMB Management Review*, 27(4), 267-287. <https://doi.org/10.1016/j.iimb.2015.09.004>
- Aslan, G., Deléchat, C., Newiak, M. M., & Yang, M. F. (2017). Inequality in financial inclusion and income inequality. *International Monetary Fund*.
- Asuming, P. O., Osei-Agyei, L. G., & Mohammed, J. I. (2019). Financial Inclusion in Sub-Saharan Africa: Recent Trends and Determinants. *Journal of African Business*, 20(1), 112-134. <https://doi.org/10.1080/15228916.2018.1484209>
- Atellu, A. R., & Muriu, P. W. (2021). Does financial inclusion enhance financial stability? Evidence from a developing economy. *Transnational Corporations Review*, 1-15. <https://doi.org/10.1080/19186444.2021.2019555>
- Bateman, M. (2019). South Africa's post-apartheid microcredit experiment: Moving from state-enforced to market-enforced exploitation. *Forum for Social Economics*, 48(1), 69-97. <https://doi.org/10.1080/07360932.2015.1056202>
- Batiz-Lazo, B. (2018). *Cash and Dash: How ATMs and Computers Changed Banking*. Oxford: Oxford University Press.
- Beck, T., Senbet, L., & Simbanegavi, W. (2015). Financial inclusion and innovation in Africa: An overview. *Journal of African Economies*, 24, i3–i11. <https://doi.org/10.1093/jae/eju031>.
- Bold, C., Porteous, D., & Rotman, S. (2012). Social cash transfers and financial inclusion: Evidence from four countries. *Consultative Group to Assist the Poor*, No. 77), Washington, DC: CGAP.
- Burgess, R. & Pande, R. (2005). Do rural banks matter? Evidence from the Indian social banking experiment. *American Economic Review*, 95(3), 780–95. <https://www.aeaweb.org/articles?id=10.1257/0002828054201242>
- Camara, N., & D. Tuesta, D. (2014). Measuring financial inclusion: A multidimensional index. *SSRN Electronic Journal*. <https://dx.doi.org/10.2139/ssrn.2634616>
- Chen, J., Rong, S., & Song, M. (2021). Poverty Vulnerability and Poverty Causes in Rural China. *Social Indicators Research*, 153(1), 65-91. <https://doi.org/10.1007/s11205-020-02481-x>

- Chibba, M. (2009). Financial Inclusion, Poverty Reduction and the Millennium Development Goals. *The European Journal of Development Research*, 21(2), 213-230. <https://doi.org/10.1057/ejdr.2008.17>
- Chinoda, T., & Kwenda, F. (2019). Do mobile phones, economic growth, bank competition and stability matter for financial inclusion in Africa? *Cogent Economics & Finance*, 7(1), 1622180. <https://doi.org/10.1080/23322039.2019.1622180>
- Chinoda, T., & Mashamba, T. (2021). Fintech, financial inclusion and income inequality nexus in Africa. *Cogent Economics & Finance*, 9(1). <https://doi.org/10.1080/23322039.2021.1986926>
- Churchill, S. A., & Marisetty, V. B. (2019). Financial inclusion and poverty: A tale of forty-five thousand households. *Applied Economics*, 52(16), 1777-1788. <https://doi.org/10.1080/00036846.2019.1678732>
- Cihak, M., Mare, D. S. & Melecky, M. (2016). The nexus of financial inclusion and financial stability a study of trade-offs and synergies. Policy Research Working Paper, 7722, World Bank.
- Cyn-Yung, P., & Mecardo, R.J.R., (2015). Financial inclusion, poverty, and income inequality in developing Asia. ADB Economics Working Paper Series No. 426. Manila: Asian Development Bank.
- Demirguc-Kunt, A., & L. Klapper. (2012). Measuring financial inclusion: The global finindex database. Policy Research Working Paper, 6025, World Bank.
- Demirguc-Kunt, A., & Levine, R., (2009). Finance and inequality: Theory and evidence. *Annual Review of Financial Economics*, 1(1), 287–318.
- Demirguc-Kunt, A., Klapper, L., & Singer, D. (2017). Financial inclusion and inclusive growth: A review of recent empirical evidence. Policy Research Working Paper, No. 8040, Washington, DC: The World Bank.
- Despard, M. R., Frank-Miller, E., Fox-Dichter, S., Germain, G., & Conan, M. (2020). Employee financial wellness programs: Opportunities to promote financial inclusion? *Journal of Community Practice*, 28(3), 219-233. <https://doi.org/10.1080/10705422.2020.1796878>
- Dogan, E., Madaleno, M., & Taskin, D. (2021). Financial inclusion and poverty: Evidence from Turkish household survey data. *Applied Economics*, 54(19), 2135-2147. <https://doi.org/10.1080/00036846.2021.1985076>
- Donovan, K., & Park, E. (2019). Perpetual Debt in the Silicon Savannah. *Boston Review*. <http://bostonreview.net/class-inequality-global-justice/kevin-p-donovan-emma-park-perpetual-debt-silicon-savannah>.
- Duvendack, M., & Mader, P. (2020). Impact of financial inclusion in low - and middle - income countries: A systematic review of reviews. *Journal of Economic Surveys*, 34(3), 594-629. <https://doi.org/10.1111/joes.12367>
- Emara, N., & Mohieldin, M. (2020). Financial Inclusion and Extreme Poverty in the MENA Region: A Gap Analysis Approach. *Review of Economics and Political Science* 5 (3): 207–230. <https://doi.org/10.1108/REPS-03-2020-0041>
- Ertürk, I., Ghosh, I., & Shah, K. (2021). Financial untouchability: A polysemic narrative of digital financial inclusion in Modi's India. *Journal of Cultural Economy*, 15(1), 30-51. <https://doi.org/10.1080/17530350.2021.1927147>
- Evans, O. (2018). Connecting the poor: The internet, mobile phones and financial inclusion in Africa. *Digital Policy, Regulation and Governance*, 20(6), 568–81. <https://doi.org/10.1108/DPRG-04-2018-0018>
- Ezzahid, E., & Elouaourti, Z. (2021). Financial Inclusion, Financial Frictions, and Economic Growth: Evidence from Africa. *Journal of African Business*, 23(3), 731-756. <https://doi.org/10.1080/15228916.2021.1926856>
- Feghali, K., Mora, N., & Nassif, P. (2021). Financial inclusion, bank market structure, and financial stability: International evidence. *The Quarterly Review of Economics and Finance*, 80, 236-257. <https://doi.org/10.1016/j.qref.2021.01.007>
- Fintextra (2022). Ten FinTech Trends to Follow in 2022. <https://www.finextra.com/blogposting/22232/ten-fintech-trends-to-follow-in-2022>
- Fouejieu, A., Sahay, R., Cihak, M., & Chen, S. (2020). Financial inclusion and inequality: A cross-country analysis. *The Journal of International Trade & Economic Development*, 29(8), 1018-1048. <https://doi.org/10.1080/09638199.2020.1785532>
- G20. (2018). Digitisation and informality: Harnessing digital financial inclusion for individuals and MSMEs in the informal economy.

- Gabor, D., & Brooks, S. (2016). The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy*, 22(4), 423-436. <https://doi.org/10.1080/13563467.2017.1259298>
- Gertler, P., Levine, D. I., & Moretti, E. (2009). Do microfinance programs help families insure consumption against illness? *Health Economics*, 18(3), 257-273. <https://doi.org/10.1002/hec.1372>
- Gigauri, I. (2021). New economic concepts shaping business models in post-pandemic era. *International Journal of Innovative Technologies in Economy*, (1). [https://doi.org/10.31435/rsglobal\\_ijite/30032021/7393](https://doi.org/10.31435/rsglobal_ijite/30032021/7393).
- Gigauri, I. (2022). The Landscape of Social Entrepreneurship Opportunities in Georgia. *International Journal of Sustainable Entrepreneurship and Corporate Social Responsibility (IJSECSR)*, 7(1), 1-17. <http://doi.org/10.4018/IJSECSR.304897>.
- Global Findex Database (2022). <https://www.worldbank.org/en/publication/globalfindex>
- Gomber, P., Kau man, R. J., Parker, C., & Weber, B. W. (2018). On the FinTech revolution: Interpreting the forces of innovation, disruption, and transformation in nancial services. *Journal of Management Information Systems*, 35(1), 220–265. <https://doi.org/10.1080/07421222.2018.1440766>.
- Graff, M. (2005). Socio-Economic Factors and the Finance-Growth Nexus. *The European Journal of Finance*, 11 (3): 183–205. <https://doi.org/10.1080/13518470410001674332>
- Hallegatte, S., Vogt-Schilb, A., Bangalore, M., & Rozenberg, J. (2016). *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. World Bank Publications, Washington.
- Harker, C. (2021). The promise of financial inclusion: finance as future in Palestine. *Geografiska Annaler: Series B, Human Geography*, 103:4, 320-336, <https://doi.org/10.1080/04353684.2021.1931398>
- Hendriks, S. (2019). The role of financial inclusion in driving women’s economic empowerment. *Development in Practice*, 29(8), 1029-1038. <https://doi.org/10.1080/09614524.2019.1660308>
- Hlophe, N. (2018). Does Financial Development Mean Financial Inclusion? A Causal Analysis for Eswatini. *African Review of Economics and Finance*, 10 (2): 120–133.
- Honohan, P. (2008). Cross-country variation in household access to financial services. *Journal of Banking & Finance*, 32(11), 2493-2500. <https://doi.org/10.1016/j.jbankfin.2008.05.004>
- IMF (2019). *Financial Inclusion of Small and Medium-Sized Enterprises in the Middle East and Central Asia*. Departmental paper No 19/02, International Monetary Fund.
- Immurana, M., Iddrisu, A.-A., Boachie, M. K., & Dalaba, M. A. (2021). Financial inclusion and population health in Africa. *Journal of Sustainable Finance & Investment*, 1-16. <https://doi.org/10.1080/20430795.2021.1953929>
- Junior, A. M., Andoh, E., Gatsi, J. G., & Kawor, S. (2021). Financial development and economic growth nexus in SSA economies: The moderating role of telecom- munication development. *Cogent Economics & Finance*, 9(1), 1862395. <https://doi.org/10.1080/23322039.2020.1862395>
- Kabakova, O., & Plaksenkov, E. (2018). Analysis of factors affecting financial inclusion: Ecosystem view. *Journal of Business Research*, 89, 198-205. <https://doi.org/10.1016/j.jbusres.2018.01.066>
- Kanga, D., Oughton, C., Harris, L., & Murinde, V. (2021). The diffusion of fintech, financial inclusion and income per capita. *The European Journal of Finance*, 28(1), 108-136. <https://doi.org/10.1080/1351847x.2021.1945646>
- Kear, M. (2013). *Governing Homo Subprimicus: Beyond Financial Citizenship, Exclusion, and Rights*. *Antipode*, 45 (4), 946–926. <https://doi.org/10.1111/j.1467-8330.2012.01045.x>
- Kemal, A. A. (2019). Mobile banking in the government-to-person payment sector for financial inclusion in Pakistan. *Information Technology for Development*, 25(3), 475-502. <https://doi.org/10.1080/02681102.2017.1422105>
- Khelifa, S. B. (2021). Governance quality, social and macro-economic conditions: Implications for financial inclusion. *Journal of Sustainable Finance & Investment*, 1-14. <https://doi.org/10.1080/20430795.2021.1962661>
- Kirwan, S. (2021). *Financial Inclusion*. Agenda Publishing.
- Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *Journal of Banking & Finance*, 37(10), 3904-3923. <https://doi.org/10.1016/j.jbankfin.2013.07.014>
- Koomson, I., Villano, R. A., & Hadley, D. (2020). Effect of financial inclusion on poverty and vulnerability to poverty: Evidence using a multidimensional measure of financial inclusion. *Social Indicators Research*, 149(2), 613-639. <https://doi.org/10.1007/s11205-019-02263-0>

- Kpodar, K., & M. Andrianaivo. (2011). ICT, Financial Inclusion, and Growth: Evidence from African Countries. International Monetary Fund working paper No. 11-73.
- Lai, J. T., Yan, I. K. M., Yi, X., & Zhang, H. (2020). Digital Financial Inclusion and Consumption Smoothing in China. *China & World Economy*, 28(1), 64-93. <https://doi.org/10.1111/cwe.12312>
- Lee, I., & Shin, Y. J. (2018). FinTech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35–46. <https://doi.org/10.1016/j.bushor.2017.09.003>
- Lenka, S. K., & Barik, R. (2018). Has expansion of mobile phone and internet use spurred financial inclusion in the SAARC countries? *Financial Innovation*, 4(1). <https://doi.org/10.1186/s40854-018-0089-x>
- Love, I., & M. S. Martínez Pería. (2015). How Bank Competition Affects Firms' Access to Finance. *The World Bank Economic Review*, 29 (3): 413–448.
- Lutfi, A., Al-Okaily, M., Alshirah, M. H., Alshira'h, A. F., Abutaber, T. A., & Almarashdah, M. A. (2021). Digital Financial Inclusion Sustainability in Jordanian Context. *Sustainability*, 13(11), 6312. <https://doi.org/10.3390/su13116312>.
- Mader, P. (2017). Contesting Financial Inclusion. *Development and Change*, 49(2), 461-483. <https://doi.org/10.1111/dech.12368>
- Mahalika, R., Matsebula, V., & Yu, D. (2021). Investigating the relationship between financial inclusion and poverty in South Africa. *Development Southern Africa*, 1-24. <https://doi.org/10.1080/0376835x.2021.1978933>
- Matsebula, V., & Yu, D. (2020). An analysis of financial inclusion in South Africa. *African Review of Economics and Finance*, 12(1), 171–202.
- Neaime, S., & Gaysset, I. (2018). Financial inclusion and stability in MENA: Evidence from poverty and inequality. *Finance Research Letters*, 24, 230-237. <https://doi.org/10.1016/j.frl.2017.09.007>
- Owen, A. L., & Pereira, J. M. (2018). Bank concentration, competition, and financial inclusion. *Review of Development Finance*, 8(1), 1-17. <https://doi.org/10.1016/j.rdf.2018.05.001>
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329-340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Ozili, P. K. (2021). Financial inclusion research around the world: A review. *Forum for Social Economics*, 50(4), 457-479. <https://doi.org/10.1080/07360932.2020.1715238>
- Park, C. Y., & Mercado, R. V. (2021). Financial inclusion: New measurement and cross-country impact assessment. In T. Cavoli, and R. Shrestha (Eds). *Financial Inclusion in Asia and Beyond*. Routledge.
- Park, C.-Y., & Mercado, R. V. (2018). Financial Inclusion, Poverty, and Income Inequality in Developing Asia. *Singapore Economic Review*, 63 (1): 185–206.
- Park, C.-Y., & Mercado, R.V. (2016). Does Financial Inclusion Reduce Poverty and Income Inequality in Developing Asia? In S. Gopalan and T. Kikuchi (Eds.) *Financial Inclusion in Asia: Issues and Policy Concerns*, London: Palgrave Macmillan.
- Pham, T. T. T., Nguyen, T. V. H., & Nguyen, K. (2018). Does bank competition promote financial inclusion? A cross-country evidence. *Applied Economics Letters*, 26(13), 1133-1137. <https://doi.org/10.1080/13504851.2018.1540833>
- Prabhakar, R. (2019). Financial Inclusion: A Tale of Two Literatures. *Social Policy and Society*, 18 (1), 37-50. <http://doi.org/10.1017/S1474746418000039>
- Prabhakar, R. (2021). *Financial Inclusion: Critique and Alternatives*. Bristol University Press, Policy Press. <https://doi.org/10.2307/j.ctv1c9hmj5>
- Puime, F., Panait, M., Andrei, J. V., and Gigauri, I. (2022). Non-financial Performance of Energy Companies Listed on the Bucharest Stock Exchange and Relevance for Stakeholders, In *Digitalization and Big Data for Resilience and Economic Intelligence* (Cham: Springer), 183–201.
- Sarma, M. (2008). Index of Financial Inclusion. ICRIER Working Paper No 215.
- Sarma, M., & Pais, J. (2011). Financial Inclusion and Development. *Journal of International Development*, 23(5), 613-628. <https://doi.org/10.1002/jid.1698>
- Schneider, M. (2018). Digitalization of Production, Human Capital, and Organizational Capital. In: Harteis, C. (eds) *The Impact of Digitalization in the Workplace. Professional and Practice-based Learning*, vol 21. Springer, Cham. [https://doi.org/10.1007/978-3-319-63257-5\\_4](https://doi.org/10.1007/978-3-319-63257-5_4)
- Scott, S. V., Van Reenen, J., & Zachariadis, M. (2017). The long-term effect of digital innovation on bank performance: An empirical study of SWIFT adoption in financial services. *Research Policy*, 46(5), 984-1004. <https://doi.org/10.1016/j.respol.2017.03.010>

- Senyo, P. K., Karanasios, S., Gozman, D., & Baba, M. (2021). FinTech ecosystem practices shaping financial inclusion: The case of mobile money in Ghana. *European Journal of Information Systems*, 31(1), 112-127. <https://doi.org/10.1080/0960085x.2021.1978342>
- Senyo, P., & Osabutey, E. L. (2020). Unearthing antecedents to financial inclusion through FinTech innovations. *Technovation*, 98, 102155. <https://doi.org/10.1016/j.technovation.2020.102155>
- Settle, A. (2020): The financial inclusion agenda: for poverty alleviation or monetary control?, *Review of International Political Economy*, <https://doi.org/10.1080/09692290.2020.1844780>
- Sha'ban, M., Girardone, C., & Sarkisyan, A. (2020). Cross-country variation in financial inclusion: A global perspective. *The European Journal of Finance*, 26(4), 319-340. <https://doi.org/10.1080/1351847x.2019.1686709>
- Shen, Y., Hueng, C. J., & Hu, W. (2020). Using digital technology to improve financial inclusion in China. *Applied Economics Letters*, 27(1), 30-34. <https://doi.org/10.1080/13504851.2019.1606401>
- Shi, Y., Swamy, V., & Paramati, S. R. (2021). Does financial inclusion promote tourism development in advanced and emerging economies? *Applied Economics Letters*, 28(6), 451-458. <https://doi.org/10.1080/13504851.2020.1761521>
- Song, C.-Q., Chang, C.-P., & Gong, Q. (2021). Economic growth, corruption, and financial development: Global evidence. *Economic Modelling*, 94, 822-830. <https://doi.org/10.1016/j.econmod.2020.02.022>
- Statista (2022). Digital Payments. <https://www.statista.com/outlook/dmo/fintech/digital-payments/worldwide>
- Su, R., Obrenovic, B., Du, J., Godinic, D., & Khudaykulov, A. (2022). COVID-19 Pandemic Implications for Corporate Sustainability and Society: A Literature Review. *International Journal of Environmental Research and Public Health*, 19(3), 1592. <https://doi.org/10.3390/ijerph19031592>
- Van, L. T.-H., Vo, A. T., Nguyen, N. T., & Vo, D. H. (2021). Financial Inclusion and Economic GROWTH: An International Evidence. *Emerging Markets Finance and Trade*, 57(1), 239-263. <https://doi.org/10.1080/1540496x.2019.1697672>
- Vasile, V., Panait, M., & Apostu, S.-A. (2021). Financial Inclusion Paradigm Shift in the Postpandemic Period. Digital-Divide and Gender Gap. *International Journal of Environmental Research and Public Health*, 18(20), 10938. <https://doi.org/10.3390/ijerph182010938>
- Vives, X. (2019). Digital Disruption in Banking. *Annual Review of Financial Economics*, 11(1), 243-272. <https://doi.org/10.1146/annurev-financial-100719-120854>
- World Bank (2014). Global financial development report 2014: Financial inclusion. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/16238>
- World Bank (2022). Financial Inclusion: Overview. <https://www.worldbank.org/en/topic/financialinclusion/overview>
- World Economic Forum. (2018). Advancing Financial Inclusion Metrics: Shifting from access to economic empowerment. White Paper, [http://www3.weforum.org/docs/WEF\\_White\\_Paper\\_Advancing\\_Financial\\_Inclusion\\_Metrics.pdf](http://www3.weforum.org/docs/WEF_White_Paper_Advancing_Financial_Inclusion_Metrics.pdf).
- WTTC. (2019). Mobile Payments in Travel & Tourism: Unlocking the Potential. World Travel & Tourism Council. <https://www.wttc.org/publications/2019/mobile-payments-in-travel-tourism/>
- Yang, L., & Zhang, Y. (2020). Digital Financial Inclusion and Sustainable Growth of Small and Micro Enterprises - Evidence Based on China's New Third Board Market Listed Companies. *Sustainability*, 12(9), 3733. <https://doi.org/10.3390/su12093733>
- Yoshino, N., & Morgan, P. J. (2018). Financial inclusion, financial stability and income inequality: Introduction. *The Singapore Economic Review*, 63(1), 1-7. <https://doi.org/10.1142/s0217590818020022018>.
- Zhang, Q., & Posso, A. (2017). Thinking Inside the Box: A Closer Look at Financial Inclusion and Household Income. *The Journal of Development Studies*, 55(7), 1616-1631. <https://doi.org/10.1080/00220388.2017.1380798>
- Zhang, X., Zhang, J., Wan, G., & Luo, Z. (2020). Fintech, growth and inequality: Evidence from china's household survey data. *The Singapore Economic Review*, 65, 75-93. <https://doi.org/10.1142/s0217590819440028>