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Determinants of Financial Inclusion: A Review

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Abstract

Financial Inclusion (FI) is an evolving concept which has gained attention recently due to its role in enhancing economic growth. Numerous researches have been engaging in identifying factors affecting FI. These factors vary with countries and regions. Identifying these country-specific or region-specific determinants would pave the way to enhance FI in a country or a region at a greater level. The purpose of this paper is to review existing literature on the determinants of FI. By reviewing literatures on FI, and its determinants, the paper aims to clarify three important areas, i.e., investigate the most important determinants of FI, to find out whether such determinants vary from countries or the regions in relation to their development levels, and fill the literature gap regards to low level of finding out the FI determinants covering demand, supply, structural, and policy sides' factors. The finding of the research revealed that demand-side, supply-side, structural, and policy level factors determined the level of FI at the country level. Among those factors, financial literacy, income level, and the use of digital technologies for financial transactions are the most significant determinants that influence FI in individual country level. The findings of this study help to enhance the level of FI in an economy. If a country provides more avenues to a successful implementation of FI targets, the government and policy makers need to adopt policies targeting financial literacy improvements including digital finance and payments while strengthening the consumer protection policies considering demand and supply side factors as well as structural and policy level factors that will affect for FI improvements among the general public in a comprehensive manner.

Keywords: Demand-side Factors, Financial Access, Financial Inclusion, Financial Literacy, Supply-side Factors

1. INTRODUCTION

Financial Inclusion (FI) is an important economic factor for a country to achieve the growth and social objectives. Many countries in the world are promoting FI at present and do the investments for many activities while enhancing the existing strategies to fight against reducing unemployment, and inequality and eradicating poverty. In addition, FI expands the wealth of the people and finally achieves economic growth if a country maintains financial system in a comprehensive manner. Umar (2017) highlighted that the high rate of FI continuously influences towards high investment rate, employment creation, enhancing income level and reducing poverty. This study further highlighted that the economic growth can only be a realistic one if high number of people in a country has greater access to the formal financial system.

Maintaining financially inclusive population and effective utilization of financial products and services in a comprehensive manner are main crucial factors to be achieved by many countries in the world and hence many investigations and research are evolving at present. Therefore, attention of governments, central banks, formal financial institutions, international organisations, researchers and all policy makers together with willingness parties are required to make efforts to identify main factors influencing towards FI, while giving answers to FI constraints continuously (World Bank, 2015, 2017a., 2018). Lack of accessibility and affordability of the financial system creates social destructions, inequality, poverty and lower economic growth (Rama & Pal, 2012; Sarma & Pais, 2010; Hussain & Chakraborty, 2012). A country having a low level of financially inclusive population, can observe highest disparities among low income and high income earners. Due to lack of accounts maintained at the formal financial system at an individual level may deviate from the formal savings and therefore lack of accessibility to formal financial sector products and services such as credits and insurance which create social distortions and low level of social well-being. Lacks of involvement with the formal financial system by majority of the people in a country tend to find out alternative ways to fulfill their financial requirements mainly through the informal sectors. High involvement of informal sectors by people creates social, physical and mental distrust which is costly to the country and creates many issues in the society level.

FI improves the welfare of people while enhancing the activities of small and medium scale industries (SMEs), economic growth, creation of employment opportunities and also it helps to improve the social policies and development priorities in an effective manner (Abel et al., 2018). There are number of studies which have investigated and showed the results of determinants of FI in different aspects, some of those studies have focused on country level factors while some have considered regional level components, macro factors, demand-side factors and supply-side factors (Zins & Weill, 2016, Akudugu, 2013, Uddin et al, 2017). Cross-country analysis and supply-side information and data on FI have also been investigated in previous studies (Camara & Tuesta, 2014; Sarma & Pais, 2010). Only for taking supply-side factors, many decisions and investigations have been made and taking these decisions and establishments it is very crucial to take decisions by policy makers to convert financially excluded people into inclusive people (Beck et al, 2000; Tuest & Hidalgo, 2013).

Determinants of FI push a country to identify the areas to be considered in a country or the national level when taking initiatives to enhance the level of FI. There are two main sides of factors when determining FI i.e., demand-side and supply-side. Some scholars considered supply-side factors are the main important elements of improving FI in a country while some have argued that demand-side factors are the main factors that require for improving FI. The growth of FI and its initiatives from country to country is varied and those variations are depending on factors that can be considered as micro, macro or both (Abel et. al., 2018).

Hence, the paper attempts to provide in-depth analysis of definitions relating to FI and while investigating the factors that affect for FI or considered as determinants of FI, and the applicability of those determinants in country level. To achieve the purpose, the paper reviewed 150 published research works in journals, books, and websites. Using a thematic approach, it carried out a comprehensive discussion after reviewing the research work.

The remainder of this paper is structured as follows. Section 2 of the paper describes definition of FI, and Section 3 provides a comprehensive review of both theoretical and empirical literature. Section 4 provides a discussion on key findings, while Section 5 discusses the importance of FI, following a conclusion in Section 6.

2. DEFINITION FOR FI

There is no unique definition to clearly define the FI and has accepted globally. The definition for FI referred in literatures vary from country to country, and study to study. However, some similarities can be observed when taking those definitions for a one single pool. Accordingly, the paper summarized definition of FI extracted from literatures (Table 1, Appendix). Among those definitions, the key features of FI are given in Figure 1 (Appendix).

Many researchers have conducted their studies on FI and related topics in the past and still doing many researches on this topic as this is an evolving area around the world due to its importance and contributions toward achieving growth objectives of country level. In respect of FI determinants, many factors have been considered in the previous studies in different scale. Such common factors considered in various studies are level of income earn by individual, gross domestic product (GDP), population or density, level of deposit and credit, level of education, status of employment, branch network and Automated Teller Machines (ATMs) established/installed in numbers and as per density, mobile subscribers, usage of internet, gender, different age scales, status of religion, credit to deposit ratio, non-performing loan ratio (NPL), ratio of deposit to income, total assets of the bank which measures the size of a bank, area of residence, family size, distance to a formal financial institution (Sharma, 2016; Beck et al., 2017; Kumar, 2013; Kumar & Mohanty, 2011).

When discussing the FI and its initiatives together with determinant factors, it is important to investigate theories relating to FI. The next section described some interesting theories found through the literature survey and the empirical reviews regard to FI determinants.

3. LITERATURE REVIEW

3.1 Theories on Financial Inclusion

There are many literatures that have been discussed about FI and it's importunacy for a country, state, economy or the society. Some scholars have targeted monetary policy implications and growth perspectives while some have focused on financial system stability and growth implications (Beck et al., 2015). Theory of FI revealed about some principles and frameworks which can be explained or described FI, achievements of FI targets, benefits of FI etc. Theories of FI identified as many ways such as theories of FI funding, delivery and beneficiaries. These theories help to achieve the objectives and outcomes of FI. Further, objectives, process, outcomes, and targets are clearly explained by these theories.

Many theories directly linked with and discussed about FI in the past. Financial intermediation theory, social learning theory, life cycle theory, Harrod-Domar model, credit creation theory, Modigliani Miller theory are some of the theories that have explained the concept of FI, its usage and implications.

3.1.1 Theory of Social Learning

Social learning theory (Bandura, 1986) assumes that people learn from others in the society mainly through observing, imitating, following and modeling. As per cultural and social settings of the people in an area or a country, the social learning theory says that people tend to be learned by observing others, and people individually or collectively believe that those people are intelligent, knowledgeable and skillful, and observed people tend to follow those people gradually. This thinking is important when people transforming into a targeted thing mainly the FI aspect. Ramsden (1992) highlighted that as per the social learning theory, people attempt to change their behaviour, while understanding the social activities and solving the problems faced by them in their day today activities. FI is mainly targeting to cover the poor, under privilege and low income community who are excluded from the formal financial system, because that is the group to be transformed into formal financial system to take rational decisions and enhance their life style. This will help to achieve the growth objectives of a country while eradicating the poverty. Hence, this theory is important as people learn from the society about what are happening, what should be performed, pros and cons in the formal financial system, etc. This transformation mechanism may happen mainly through the financial literacy programmes, continuous awareness and skill development activities, knowledge transformations, sharing and other activities and initiatives related to FI (Stack, 2008). In this light, through the social community networks by utilizing financial literacy programmes, it can be argued that FI objectives may achieve positively. Low income communities acquire knowledge and skills regarding the formal financial system and related activities from the society, thereby taking good financial decisions in their day today life (Ramsden, 1992).

Hence, social learning theory is in an important and interesting theory regards to FI.

3.1.2 Harrod - Domar Growth Theory

This theory is mainly focusing on savings, investments, capital stock and economic growth which drive through the growth theories. According to the theory of growth, expansion of trade and production in an economy is directly correlated with savings. The model says more investments create more production and output in an economy which increase the scale of economic in those economies. In terms of the FI perspectives, formal financial system promotes savings and investments to be a financially inclusive country while giving access to formal financial system for all people in an equal manner. High level of FI in a country tend to be expanded access to formal financial system and provide more credit and savings that are easily accessible for people and expansion of savings and investments turn to high growth of the economy (Demirguc-Kunt & Klapper, 2013). Hence, this model directly linked with FI and its initiatives as both concepts are expected more savings and more investments.

3.1.3 Financial Intermediation Theory

Financial intermediation theory is also directly linked with the FI as this theory discuss the intermediary role played by the formal financial sector. As described in the Harrod-Domar growth theory, savings and investments deal with formal financial sector institution, which is the intermediatory part played in the financial system which explain in the intermediation theory and hence this theory plays a famous role with respect to FI (Gurley & Shaw, 1960). In this context, formal financial sector plays a critical role for collecting savings from the excess/surplus parties while doing lending activities to the needy/required sectors.

Financial intermediation theory grounded with the Agency model and relates to the information asymmetry. When consider the players of the financial sector and related industries, it discussed about lack of information, high transaction costs, complex documentation which hinders the engagement of formal financial system by low earning community. Asymmetric information discussed in the financial intermediation theory which should be understand when doing the financial transactions by all parties engaged into the financial transactions due to there are possibilities to discriminate the efficient market conditions. FI expects equal access to formal financial system for all people and do the transaction in a comprehensive and active manner and sharing all information by each other without any discrimination. Therefore, preventing from information asymmetry as explained in theories, financial intermediation theory is important to expand and enhance the FI in a country. Hence, financial intermediation theory eliminates the difficulties and barriers such as adverse selection, moral hazard which arise due to asymmetric information in between people and the market.

3.1.4 Theory of Life Cycle

Life cycle theory discussed about wealth of people, savings and income of individuals (Modigliani, 1970). According to this theory, it assumes that people continue their life cycle with a long term vision in relation to consumption and savings which depend on income level or the revenue of people. When consider the savings of individuals, low income community would not tend to save money as they need to fulfill their day-to-day requirements. Hence, for the majority of developing countries, this theory is somewhat questionable. The prime objective of FI is increasing savings by people in their accounts which are maintaining in the formal financial institution and transform people to do the financial transactions through their accounts in an active manner, thereby a country can achieve its growth objectives eliminating some barriers. Hence, this theory directly discussed one of the main components of FI even though this theory has not concerned about poor people’s savings. However, there are some theories relate with saving of poor people like precautionary savings model (Deaton, 1997).

3.1.5 Precautionary savings Theory

Precautionary savings model described income volatility and inability to borrow poor people or the low income community from the formal financial sectors and therefore, most of the time, these segments are penalizing. Majority of the modern savings theories support for the smooth expenditure patterns of the people in overall (Rutherfors, 2000), however, low income people can save their money accordingly and utilize these savings for their day to day requirements and also to achieve unexpected events that they face in their lives. Further, they can develop their businesses and efforts towards reaching the wealth. This theory argues that poor people are just like other people and also take good decisions, they create connections with formal financial institutions, open accounts, security, and then they save money (Rutherford, 2000). Hence, it should be investigated and identified the individual characteristics, constraints and policies influence on savings of every people. Thereby, saving is a compulsory matter for both rich and poor people due to individual ready for making payments that they have taken services from other parties (Ashraf et al., 2006).

As per FI agendas, savings of individuals play an important role while saving motivates investments, then borrowings and use of other financial services by the people. These services and products are provided by formal financial institutions. The life Cycle Theory and saving theories are also discussed the importance of savings by individuals and its relationship between individual savings and wealth. Hence, it can be observed that FI and these theories are correlated with each other as savings promote more investments, investments enhance the level of income or the earnings while expanding the level of wealth by individuals. Access to formal financial sector is a common factor for every people in a country which is the main target of FI initiatives. However, there are many factors associated with access to formal financial institution where access to finance discuss the FI in an overall manner. These factors have categorized into two main parts i.e., demand-side and supply-side factors. The next section described the factors, or the determinants associated with FI using empirical literatures.

3.2 Empirical Literature on Determinants of Financial Inclusion

As discussed in the previous section determinants of FI has divided into two main categories, i.e., demand-side and supply-side factors. Socio-economic characteristics are considered as demand-side factors which include income of individuals and household level, level of education, different age groups and gender (Beak et al. 2017).

The supply-side factors mainly relate with access side or the financial institutions' side while demand-side factors relate to usage of the formal financial system (Khan et al., 2022). Access to the financial institutions depends on branch network of the formal financial system, depth of the financial system, costs of the financial services, trust of the financial system and activities and applicable legal framework of the financial system. All other demographic and socio-economic factors are primarily linked with demand-side factors which support for active use of formal financial sector products and services by the population. Therefore, for an effective FI and to create inclusive economy and to maintain well established formal financial system, both demand-side and supply-side factors are playing an enormous role (Khan et al., 2022).

Uddin et al., (2017) explored the determinants of FI in Bangladesh covering the period from 2005-2014 using generalized method of moments and regression approach. The study considered some of the demand-side and few supply-side factors relating to FI. The investigation of this study revealed that both factors are positively and significantly correlated to FI in Bangladesh.

The study conducted by Zine & Weill (2016) taking the data from Global Findex data base covering 37 African countries showed that gender, age and level of education are the most influential factors of FI.

Soumaré et al., (2016) investigated how demand-side factors affect FI in Central and West Africa employing regression analysis extracting the data from Global Findex data base. The study observed that geographical factors such as gender, educational level, age, level of income, residence area, status of employment, marital status, size of a household are the main determinants of FI.

Chithra & Selvam (2013) conducted a study to see the inter-state variation in access to finance employing a composite FI index. The study observed that FI determined by socio-economic factors such as income, literacy, population, deposit and credit penetration.

Tuesta et al., (2015) done a research to find out the factors affecting FI in Argentina adopting three dimensions of FI where supply-side factors, individual factors and perception factors. The results indicate that the level of income and age of people are the main factors affecting FI.

A comprehensive study conducted by Akudugu (2013) in Ghana found that age, level of literacy, wealth classes, trust, level of documentation, distance to the financial institutions, level of poverty and social networks are the main factors that determine the level of FI in Ghana.

Abel at al., (2018) undertook a study on reviewing determinants of FI Zimbabwe using both probit and logit models for the data obtained from Fin Scope Consumer Survey, 2014. For this study, it has been used mainly the socio-economic and institutional factors such as age, educational level, documentation, trust, income, distance and internet connectivity. The paper concludes that FI is driven by age, level of education, level of financial literacy, income level, documentation and internet connections are positively influence on FI.

Financial literacy is an important factor when investigating the FI due to financial literacy helps inculcating and enhancing the level of financial literacy in an economy. There are two categories of people, i.e., financially included and financially excluded. Financially excluded category can be observed as voluntarily excluded and involuntary excluded. Through a better awareness and improving skills, knowledge, attitudes and behavior through financial literacy programmes, people enhance their financial literacy level. Khan et al., (2022) critically examined the role of financial literacy in achieving FI reviewing many literatures and concluded that through a comprehensive literacy modules and continuous training, illiterate and the excluded people in a society can be transformed into financially inclusive category.

4. KEY FINDINGS

Even though the two main categories determined the FI of a country i.e., demand-side and supply-side, when reviewing the literature, it could be observed that structural and policy related factors are also influenced to determine the FI.

4.1 Demand-side factors

Demand-side factors relating to FI mean the factors influencing people to choose financial sector products and services without any disturbance. Such factors help people to take effective decisions in an informed manner (Paramasivan & Ganeshkumar, 2013). Under demand side factors, personal characteristics such as education, level of financial literacy, income levels, number of family members, gender, age, expenditure level, trust are playing an important role. Geographical factors such as area of the residency which categorized as rural, estate, and urban, community size in an area, ownership of lands, and ownership of house have taken as factors affect for level of the FI.

4.2 Supply-side factors

The supply-side factors described the method, functions and activities relating to monetary system and also about designing of this system which directly facilitate for reducing financially excluded people in an economy (Kumar, 2013). For the supply-side factors, researchers have found that expansion of financial institutions are provided more access to finance for the people while providing expanded products and services that are available for utilization of the customers, expansion of digital financing, internet and mobile penetration, low distance to the closet financial institution or the bank, low or no documentation of the bank for access to financial services, low cost of financial services, positive and dedicated behavioral pattern of the bank staff are motivated for enhance the level of FI. Further, some studies revealed that several demand-side factors are also be considered as supply-side factors, for example age, level of educations, income, and occupation (Demirgüç-Kunt et al., 2015). The reason why these factors taken into supply-side is that when financial institutions ready for providing financial sector services to the people, always officers of the financial institutions motivated or more considered about individual's income level, job status, level of age, education etc., when delivering such services among individual.

4.3 Structural Factors

Except above two main categories of determinants relating to FI, there are some other factors identified as factors affect for determining FI. One of such factors is the structural factors. Structural factors directly linked with the supply-side factors which cover costs of financial services and strategies which influence to the FI conditions (Evans & Adeoye, 2016). Factors relating to structural category cover the market size of the financial market. Accordingly, size of the population and the density of such area/s, informality of the economy, and per capita income are considered as structural factors (Naceur et al., 2015). Considering these factors, it is required to make policies and necessary tools towards enhancing the FI.

4.4 Policy-side Factors

To create financially inclusive country, the economy should be politically stabilized due to all sectors run its activities locally as well as internationally with the recognition of such country perspectives. In this regard, political influence and its path/movements are important. Institutional framework and the level of macroeconomic stability considered as factors relating to the policy level. Costs and risk factors of the financial system are basically determined by the institutional framework.

Table 1 (Appendix) summarized the determinants of FI, captured from the literatures.

In view of the above, FI affect both demand-side and supply-side factors including geographical and socio economic conditions. Some of the studies have been investigated only for the supply factors while some studies on demand-side variables. However, there are lack of studies have been considered both demand and supply side factors in a comprehensive way (Demirguc-Kunt, & Levine, 2007; Beck et al., 2006).

5. IMPORTANCE OF FI

FI provides pre determinant factors to choose best financial product/service offered by formal financial system, and take financial decision in a rational way while utilizing money for proactive savings and investments activities by people. Inclusive financial system leads to achieve growth objectives of a country and to maintain financial system stability. Equal distribution of financial products and services, reduce income inequality, increase the access to finance, availability of such services, enhance the usage of financial products and services, facilitate entrepreneurship development among low income community, expansion of more benefits for rural people are some of the benefits that can be achieved when achieving the development goals together with FI objectives (Beck at al., 2007; Zhang & Naceur, 2019; Kim, 2016). Expectation of the FI is given in Figure 2 (Appendix).

Better financial system provides various financial sector services such as saving, borrowing, insurance, remittances, transfers, internet and mobile banking facilities, payments, and financial information (Zhang et al., 2018; Zhang and Posso, 2019). To achieve the goals of financially inclusive country, financial literacy plays an immense role. Financial literacy expands the awareness of people on the formal financial system, to take good financial decisions, importance of having and maintaining a saving account, borrowings and utilization of money mainly for an income generating activity, importance of repaying the borrowed money as per scheduled time plan, interest rate, inflation movements, importance of using digital finance and payments, book keeping and basic accounting, project financing etc. Levine (2005) stated that through structured financial literacy programmes can produce and understand good information, allocation of funds for productive purposes, monitoring the investments, mobilizing and pooling the savings, and controlling and managing the risks. For the long run economic growth, Popov (2018), indicated by reviewing the cross-country analysis, enhancement of the capital accumulation and productivity, financial depth plays a bigger role where greater depth leads better outcome of the society. Through better FI, increases the entrepreneurship and related activities, scale up the businesses and income generating activities which leads to increase in income level of the people. Increasing the aggregate income level of the people tend to reduce level of poverty while increasing income inequality (Demirgüç-Kunt et al., 2017). The basic requirement of FI concept and the basic measurement of FI is the opening of an account in a formal financial institution by an individual or the institution (Allen et al., 2012; Beck et al., 2010; Zin & Weise, 2016). Opening of an account in a financial institution or a bank encourages people to save their excess money for investment purposes, or utilisation of such saved money for future activities including for unexpected events they face in their lives. Further, extra savings or the excess savings by people are used by the financial institutions for lending purposes which enhance further access to finance by other required people or for the institutions.

For a better FI, it is required to fulfill more accessibility, availability and usage of formal financial services by people (Park & Mercado, 2018) which reduce income inequality thereby reduce poverty. Historically, people believe that branch penetration and spread of ATMs, Cash Deposit Machines (CDMs) play an immense role to improve the accessibility of financial services offered by the formal financial system. This aspect is important and valid for today as well. Further, digital mode of payments and mobile banking is a fast growing concept in all countries around the world and are also discussing more on this area in the FI topics. Through a better digital finance system, quick access to financial sector services by people avail while reducing transaction costs and saving time of the people. In globally, smart phone penetration showed more than 78 per cent in end 2020 (Statista, 2021) while South Asia accounted for nearly 33 per cent usage of smart phones (GSMA, 2019). Considering the increasing trends in smart phones and internet connections, Zhang at al., (2018) noted that FI through digital modes show a positive and large effect on household income such that major influence on rural household's sector. Therefore, digital transitions and payments relating to FI are importance phenomena at present.

6. CONCLUSION

The paper reviewed the previous literatures on the determinants of FI, definitions and its importance for an economy. As per the literature survey it was showed that FI is an important element for any economy to reach a sustainable economic growth while maintaining stable financial system, and FI supports for mainly eradicating poverty, inequality while distributing financial products and services in an equal manner. With better FI initiatives and more investments on it, the level of FI can be enhanced. FI depends mostly on demand side factors, supply side factors, whereas some of the structural factors and policy factors are also help to enhance the level of FI. To leverage more financially inclusive country, it is required to pay attention on FI targets in the mandate of all policy makers including the Central Bank and the Government agencies. Doing research on FI and determinant factors of FI is timely valuable as this tool is mainly helping for reducing disparities among people with an effective implementation.

Eliminating more people from the informal financial sector by providing formal financial sector products and services at least for majority of the people in a country, tend to achieve more financially inclusive country while reaching the growth objectives. Income, education, age, financial literacy, occupation, gender are the important determinants and most tested determinants by the researchers on the level of FI. Further, internet and mobile banking or the digital mode of transactions and usage of such products by individual are also play a tremendous role in achieving FI targets. Expansion of financial literacy among people in a country showed a bigger impact on FI because of through the financial inclusion literacy programmes people are transforming into usage of formal financial sector products and services. Open of an account with a formal financial institution i.e., in a bank, there by more savings, more investments, transactions in an active manner together with insurance and other services and products offered by banks and finally reach the high growth level of a country have been proved in many literatures.

APPENDIX

Table 1: Definition of Financial Inclusion

Source/Author	Definition
International Monetary Fund (IMF); (2015)	"Access to and use of formal financial services by households and firms"
Gwalani & Parkhi; (2014)	"FI is a process of allocating appropriate financial products and services that required for every segment of the population at an affordable cost"
World Bank; (2018)	"Individual and businesses have access to useful and affordable financial services and products that meet the individual needs such as transactions, payments, savings, credit and insurance that should be delivered in a responsible and sustainable way"
Njanike, K.; (2021)	"The distribution of appropriate formal financial products and facilities to all people of the society to meet their savings and requited needs and while doing investments and fulfilling credit requirements at their level of financial literacy in a responsible and suitable way"
Shivani (2013)	"Availability of banking services at an affordable cost to the low-income earners and disadvantaged people in a country"
United Nations, (2016)	"The sustainable provision of affordable financial services that bring the poorest and excluded population into the formal economy"
Beck et al., (2007), Bruhn & Love, (2014)	"The use of formal financial services by the poor"
Ozili, (2018)	"FI involves increasing the number of individuals, mostly poor adults that have access to formal financial services mainly through having formal bank accounts, which contributes to poverty

	reduction and economic growth”
Sarma, (2012)	“The share of individuals and firms that use financial services”
Hayton, et al, (2007)	“Access for individuals to appropriate financial products and services”
Triki & Faye, (2013)	“All the initiatives that make formal financial services available, accessible, and affordable to all segments of the population”
Kumari, D.A.T. & Ferdous, A.S.M. (2019)	“Access to an intermediation process and use the products and available transaction facilities from formal financial intermediaries”
Chhabra, 2015	“The delivery of financial services, including banking services and credit, at an affordable cost to the vast section of disadvantaged and low-income groups who tend to be excluding”
Treasury Committee, House of Commons, UK (2004)	“Ability of individuals to appropriate financial products and services”
Awad and Eid (2018)	“FI as a convenient and reasonable cost delivery process of financial services for low-income groups”
Atkinson and Messy, (2013)	“FI should enhance financial awareness and financial education, while adding value to economic and social inclusion”
Lenka and Bariq (2018)	“A process that involves financial access to financially excluded groups in terms of financial services such as savings, payments, credit and internet banking”
CGAP	“Households and businesses have access and can effectively use appropriate financial services. Such services must be provided responsibility and sustainability, in a well regulated environment”
OECD	“The process of promoting affordable, timely and adequate access to regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches, including financial awareness and education, with a view to promote financial wellbeing as well as economic and social inclusion”
Triki & Faye, (2012)	“All measures and strategies put in place to ensure the availability of the formal financial product at an affordable cost to all segment of the society”

Demirgüç-Kunt et al. (2015)	“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”
Diniz, E., Birochi, R. and Pozzebon, M. (2012)	“The accessibility of services at a reasonable price for everyone as it has been recognized as major policy contributor to economic development and poverty reduction”
Kanwal, N., Raju, V., Zreen, A., Farooq, M. & Shehzadi, S. (2019)	“Accessibility, availability and usage of financial services by all, especially the less privileged people of the society”
Cámara, N. & Tuesta, D.	“A process that aims to ensure that everyone who wants to use financial services has access to them at affordable prices, provided for customers in a convenient and responsible fashion”
N. Yoshino and P. Morgan (2016)	The access of households and firms (in particular low income and SMEs to financial services
Allen et al. (2013a); Kumar and Mishra (2011); Park and Mercado (2018)	“A process of ensuring easy access, availability and usage of formal financial services for all members of an economy, promotes inclusive growth, a better livelihood and poverty reduction”
Sahay et al., (2015)	“The access and use of formal financial services by households and businesses, such as opening a bank account with a registered financial institution”
Olaniyi & Adeoye (2016)	“A situation in which most of the financial services reach a sufficiently large proportion of individuals and families, granting them timely and adequate access to credit and other financial products at affordable prices”
Sarma and Pais (2008)	“FI implies the process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy”
Patel, A. (2016)	“The process of ensuring access to financial services and flow of timely and adequate credit to vulnerable groups [weaker sections and low income groups] at an affordable cost”
Varghese & Viswanathan, 2018	“Access to appropriate, low cost, fair and safe financial products and services from main-stream service providers”.
Gwalani and Parkhi (2014)	“The process of ensuring that timely and adequate credit financial services as needed by vulnerable groups (weaker sections and low income) are available at an affordable cost”

International Monetary Fund (IMF) (2015)	"The access to and use of formal financial services by households and firms"
Treasury Committee, House of Commons, UK (2004)	"Ability of individuals to access appropriate financial products and services"
United Nations (2006 b)	"A financial sector that provides access to credit for all bankable people and firms, to insurance for all insurable people and firms and to savings and payments services for everyone. Inclusive finance does not require that everyone who is eligible use each of the services, but they should be able to choose to use them if desired"
Ben Naceur, Barajas, & Massara (2015)	"The share of the population who use financial services"
Shahul (2014)	"Delivery of banking services of an affordable cost to the vast sections of disadvantaged and low income groups"
Nandru, P. & Rentala, S. (2019)	"Delivery of banking services at a reasonable cost to the huge sections of underprivileged and low-income groups"
Chibba, M. (2009)	"The ability to process financial information and make informed decisions about personal finance to achieve success of the life by involving in formal financial sector"

Source: Author's Findings

Table 2: Determinants of FI

Author	Area/s	Factors	Method	Main Finding/s
Paramasivan & Ganeshkumar, (2013)	Demand-side	Culture, properties, accessibility, income	Correlation analysis	Accessibility had highest correlation
Altunbas et al., (2010)	Borrower characteristics	Education, gender, borrower type, employment, location (urban/ rural)	Probit Model	Females and indigenous borrowers more likely to be financially excluded and they are willing to borrow from informal sector
Adewale (2011)	Macro perspective (demand and supply)	Gender, age, educational level, type of the business, eligibility, affordability, cultural	Structural equation	Voluntary exclusion evolves due to lack of use of financial

		capital, financial satisfaction, religion		products and services rather than lack of access
King (2011)	Both demand and supply	Documentation, income, financial literacy, education, use of mobile banking, gender; number of ATMs, GDP per capita, branch network and accessibility, trust	Probit estimation	High documentation is the main barrier for FI
Zins & Weiss (2016)	Individual characteristics	Education, gender, income, education, age	Probit estimation	All factors significantly influenced FI
Allen et al., (2012)	Individual and country level characteristics	Education, income, marital status, employment, age	Probit estimation	High income earners, more educated and older aged population are more financially inclusive
Bapat & Bhattacharyay (2016)	Socio-economic characteristics and banking behaviour of households	Income, age, occupation, gender, expense, housing type, type of the family, number of members of a family, savings	Multiple regression	Income, gender, age, demographic profile, account ratio per household, occupation, source of loan, savings influenced FI
Clamara et al., (2014)	Macroeconomic and individual characteristics	Geographical area, gender, income, expenditure, employment, age, education, per capita income, GDP	Probit and multiple regression	Age, gender, education, income level are main determinants of FI
Vaid et al., (2020)	Supply-side	Penetration, financial literacy, trust, technology, accessibility, perceived benefits, availability, outreach	Factor analysis	Financial literacy, technology and income shows significant and positive impact on FI

Omar & Inaba (2020)	Macroeconomic	Per capita real GDP, rule of low, inflation rate, Gini coefficient, schooling, interest rate	Panel regression and Fixed Effect	Per capita real GDP and interest rate positively influenced on FI
Soumare, Tchana & Kengne (2016)	Geographical and socio-economic	Gender, marital status, employment status, income, level of education, geographical area, age, family size	Correlation analyasis	Male, marital status and income level are positively correlated with FI
Johnson and Arnold (2012)	Socioeconomic, population features, terrestrial	Level of education, location, employment, age, gender	Correlation analyasis	Education is strongly correlated with bank savings

Source: Author's Findings

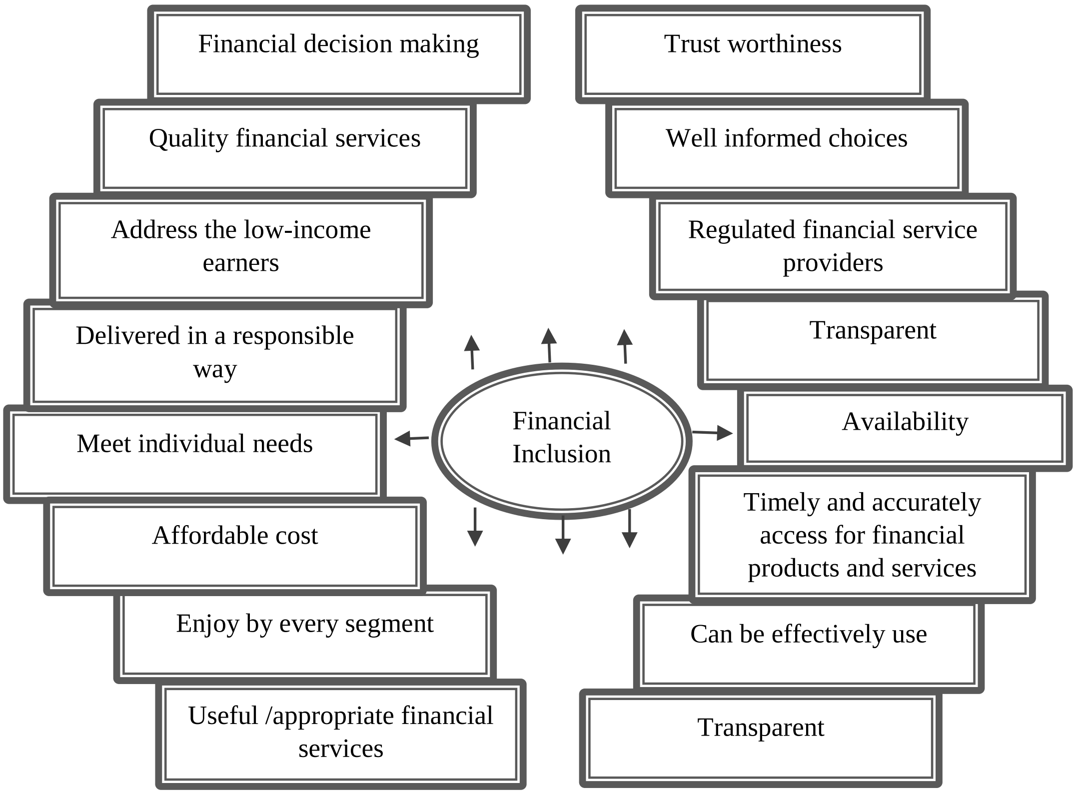

Figure 1: Features of the FI Definitions

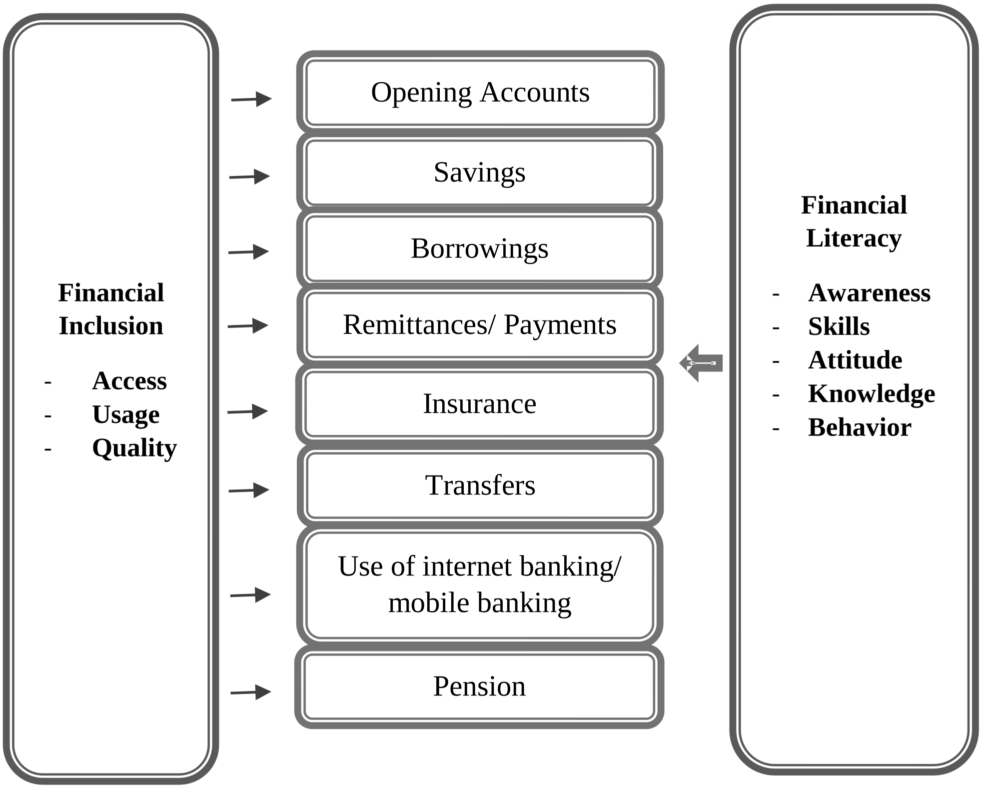

Figure 2: Expectation of FI

REFERENCES

Abel, S., Mutandwa, L. & Roux, P.L. (2018). A Review of Determinants of Financial Inclusion. International *Journal of Economics and Finance*, vol. 8(3), pp. 1-8.

Akudugu, M.A. (2013), The determinants of financial inclusion in Western Africa: Insights from Ghana. *Research Journal of Finance and Accounting*, vol. 4(8), pp. 1-10.

Allen, F., Demirquc-Kunt, A., Klapper, L. & Peria, M.S.M. (2012). The Foundations of financial Inclusion: Understanding Ownership and use of formal accounts. World Bank Policy. Research Working Paper 6290, pp. 1-30.

Ashraf, N., Karlan, D. & Yin, W. (2006). Household Decision Making and Savings Impacts: Further Evidence from a Commitment Savings Product in the Philippines. Economic Growth Center Yale University.

Asian Development Bank, (2000). Finance for the Poor: Micro-finance Development Strategy.

Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ: Prentice-Hall.

Bapat, D. & Bhattacharyay, B.N. (2016). Determinants of Financial Inclusion of Urban Poor in India: An Empirical Analysis. Cesifo Working Paper No. 6096. Category 13. pp. 1-31.

Beck, T., Kunt, A. D. & Peria, M. S. M. (2007). Reaching out: Access to and use of banking services across countries, *Journal of Financial Economics*, Vol.85, pp.234-266.

Cámara, N. & Tuesta, D. (2015), Factors that matter for financial inclusion: Evidence from Peru. *International Journal of Finance*, Vol.12, pp. 8-29, available at: https://www.researchgate.net/publication/275225104

Chibba, M. (2009). Financial Inclusion, poverty reduction and the millennium development goals. European association of development research and training institutes, *European Journal of Development Research*, Vol.21(2), pp. 213-230.

Clamara, N., Pena, X. & Tuesta, D. (2014). Factors that Matter for Financial Inclusion: Evidence from Peru. BBVA Research, 14/09 Working Paper, pp 1-26.

Dermirquc-Kunt, A. & Klapper, L. (2012). Measuring Financial Inclusion: The Global Findex Database. Policy Research Working Paper. The World Bank, No. WPS 6025.

Diniz, E., Birochi, R. and Pozzebon, M. (2012) ‘Triggers and barriers to financial inclusion: The use of ICT-based branchless banking in an Amazon county’, Electronic Commerce Research and Applications. Elsevier, Vol.11(5), pp. 484–494.

Government of India, (2008). Report of the Committee on Financial Inclusion in India. January, 2008.

Gurley, J.G. & Shaw, E.S. (1960). Money in a Theory of Finance. Washington: The Brookings Institution.

Hussain, F. & Chakraborty, D.K. (2012). Causal Between Financial Development and Economic Growth: Evidence from Indian State. *The Romanian Economic Journal*, pp. 27-47.

Dermirquc-Kunt, A. & Klapper, L. (2012). Measuring Financial Inclusion: The Global Findex Database. Policy Research Working Paper. The World Bank, No. WPS 6025.

Kanwal, N., Raju, V., Zreen, A., Farooq, M. & Shehzadi, S. (2019), Financial Inclusion, Financial Stability and Sustainable Economic Development in Pakistan. *Global Journal of Emerging Science*, Vol. 1(2), pp.174-182, available at: https://www.researchgate.net/publication/335870437

Kalita, B. K. (2013) ‘Role of financial inclusion for inclusive growth: An Indian scenario’, International Journal of Research in Commerce, IT and

Management, Vol.3(8), pp. 131–136.

Khan, F., Siddiqui, M.A. & Imtiaz, D. (2022), Role of financial literacy in achieving financial inclusion: A review, synthesis and research agenda. Cogent Business & Management (2022), 9: 2034236, Available at: https://doi.org/10.1080/23311975.2022.2034236.

Kim, J.-H. (2016). "A Study on the Effect of Financial Inclusion on the Relationship Between Income Inequality and Economic Growth." Emerging Markets Finance and Trade. Vol. 52 (2): pp.498–512.

Kumar, N. (2012). An Empirical Analysis of Financial Inclusion Across Population Groups in India, *The IUP Journal of Bank Management*, XI (1), 97-111.

Kumar, N. (2013). Financial inclusion and its determinants: evidence from India, *Journal of Financial Economic Policy*, 5 (1), 4-19.

Kumar, B. & Mohanty, B. (2011). Financial Inclusion and Inclusive Development in SAARC Countries with Special Reference to India, *Vilakshan, XIMB Journal of Management*; September, pp. 13-22.

Kumari, D.A.T. & Ferdous, A.S.M. (2019). The Mediating Effect of Financial Inclusion on Financial Literacy and Women's Economic Empowerment: A Study among Rural Poor Women in Sri Lanka. *International Journal of Scientific & technology Research*, Vol. 8 (12), pp.719-726

Martinez, C.H, Hidalgo, X.P., and Tuesta, D. (2013), Demand Factors that influence Financial Inclusion in Mexico: Analysis of the Barriers Based on the EBIF Survey, Working Paper

Modigliani, F. & Ando, A.K. (1957). Tests of the Life Cycle Hypothesis of Savings. Oxford Bulletin of Economics & Statistics, 19(2): 99–124.

Nandru, P. & Rentala, S. (2019). Demand-side analysis of measuring financial inclusion. *International Journal of Development Issue*, Vol.19(1), pp.1-24, available at: https://doi.org/10.1108/ijdi-06-2018-0088.

Olaniyi, E., & Adeoye, B. (2016). Determinants of financial inclusion in Africa: a dynamic panel data approach. Published in: *University of Mauritius Research Journal*, Vol.22(2016), pp.310–336

Ozili, P.K. (2020). Theories of Financial Inclusion. MPRA Paper 101810, University Library of Munich, Germany.

Park, C.-Y., and J.Mercado. (2018). "Financial Inclusion, Poverty, and Income Inequality." *The Singapore Economic Review*. Vol. 63 (1): pp.185–206.

Patel, A. (2016), Financial Inclusion Harnessing Poor Families' Potential for Development. Science and Technology, Vo.2(6)

| Print ISSN: 2395-6011 | Online ISSN: 2395-602X.

Rama, P. & Pal, R. (2012). Income related inequality in financial inclusion and role of banks: Evidence on financial exclusion in India. Indira Gandhi Institute of Development Research, Mumbai Working Papers 2012-013.

Ramji, M. (2009). Financial inclusion in Gulbarga: funding usage in access. Center for Micro Finance Working Paper, 26.

Ramsden, P. (1992). Learning to teach in higher education. London: Routledge.

Rutherford, S. (2000). The poor and their money. New Delhi: Oxford University Press.

Sahay, R., Čihák, M., N'Diaye, P. M. B. P., Barajas, A., Mitra, S., Kyobe, A., & Yousef, S. R. (2015). Financial inclusion: can it meet multiple macroeconomic goals?.

Sarma, M. & Pais, J. (2010). Financial Inclusion and Development: A Cross Country Analysis. [Online]. Available from www.icrier.org [Accessed on 10/03/2014].

Sharma, D. (2016). Nexus between financial inclusion and economic growth, *Journal of Financial Economic Policy*, Vol. 8 (1), pp.13-36.

Shivani, M. (2013). A study on banking penetration in financial inclusion "with special reference to Tamilnadou". volume -5, issue-1, Vol 6, 37-44. DOI.

Sinclair, Stephen, P., (2001). Financial Exclusion: An Introductory Survey. Centre for Research into Socially Inclusive Services (CRSIS) Edinburgh College of Art, Heriot Watt University.

Siddik, N.A., Sun, G., Shanmugan, J., Yanjuan, C. (2016), Impacts of e-banking on performance of banks in a developing economy: Empirical evidence from Bangladesh. *Journal of Business Economics and Management*, Vol.17(6), pp.1066-1080.

Soumaré, I., Tchana, F.T., Kengne, T.M. (2016), Analysis of the determinants of financial inclusion in Central and West Africa. *Journal of Transnational Corporations Review*, Vol. 8(4), pp.231-249.

Shahul, K. (2014). Financial Inclusion-Issue in measuement and Analysis. *International Journal of Current Research and Academic Review* , Vol. 4, pp.116-124. DOI.

Stack, K. (2008). Adult learning principles and curriculum design for financial education. Washington DC: Microfinance Opportunities.

Thorat, Usha., (2006b). Financial Inclusion for Sustainable Development: Role of IT and Intermediaries. RBI Bulletin, December.

Tuesta, D., Sorensen, G., Haring, A., Cámara, N. (2015), Financial Inclusion and its Determinants: The Case of Argentina BBVA

Research Working Paper No.15/03.

Uddin, A.A., Chowdhury, M.A.F., Islam, N. (2017), Determinants of financial inclusion in Bangladesh: Dynamic GMM and quantile regression approach. *Journal of Developing Areas*, Vol. 51(2), pp.221-237.

Umar, S. (2017). Financial inclusion, economic growth, and poverty alleviation: Nagoya: Nagoya University.

Vaid, Y.K., Singh, V., and Sethi, M. (2020), Determinants of Successful Financial Inclusion in Low Income Rural Population. *The Indian Economic Journal*, Vol 68(1), pp.82-100.

Varghese, G., & Viswanathan, L. (2018). Normative perspectives on financial inclusion: Facts beyond statistics. *Journal of Public Affairs*, Vo. 18, pp.1-5.

World Bank. (2015). Financial Inclusion. [Online]. Available from http://www.worldbank.org/en/topic/financiainclusion [Accessed on 15/06/15].

World Bank. (2017a). Financial Inclusion. The World Bank Group. Available from http://www.worldbank.org/en/topic/financialinclusion [Accessed on 20/06/2017].

World Bank. (2018). Financial Inclusion Overview. [Online]. Available from https://www.worldbank.org/en/topic/financialinclusion/overview [Accessed on 13/06/2020].

World Bank, (2008). Finance for All – Policy and Pitfalls in Expanding Access. The World Bank, Washington, D.C.

Zins, A., Weill, L. (2016), The determinants of financial inclusion in Africa. *Review of Development Finance*, Vol.6(1), pp.46-57.

Zhang, R., and S. B. Naceur. (2019). “Financial Development, Inequality, and Poverty: Some International Evidence.” *International Review of Economics & Finance*. Vol. 61: pp.1–16.

Zhang, Q., and A. Posso. (2019). “Thinking Inside the Box: A Closer Look at Financial Inclusion and Household Income.” *The Journal of Development Studies*. Vol.55 (7): pp.1-16.