CHAPTER I

INTRODUCTION

A. Background

The term of *financial inclusion* became a discussion after the 2008 crisis, mainly based on the impact of the crisis on groups *at the bottom of the pyramid* (low and irregular income, living in remote areas, disabled people, workers who do not have legal identity documents, and marginalized communities), which are generally *unbanked,* which is recorded to be very high outside developed countries. Therefore, at the G20 (*Group of Twenty*) Pittsburgh *Summit* 2009, G20 members agreed on the need to increase financial access for groups *at the bottom of the pyramid,* which was emphasized at the 2010 Toronto *Summit*, with the issuance of the 9 *Principles for Innovative Financial Inclusion* as a guide for inclusive financial development. These principles are *leadership, diversity*, *innovation*, *protection, empowerment*, *cooperation, knowledge, proportionality,* and *framework* Since many international forums have focused their activities on financial inclusion, such as the *Consultative Group to Assist the Poor* (CGAP), *World Bank*, APEC, *Asian Development Bank* (ADB), *Alliance for Financial Inclusion* (AFI), *standard bodies* such as the *Bank for International Settlements* (BIS) and the *Financial Action Task Force* (FATF).

Financial inclusion was then discussed again at the G20 Seoul *Summit* in 2010. At this G20 summit, financial inclusion, namely the use of formal financial services, has been recognized as one of the main pillars of the global economic development and poverty alleviation agenda (Zins & weill, 2016). Continuing at the G20 Saint Petersburg *Summit* in 2013, G20 leaders also agreed on the importance of financial inclusion in building resilience in economic growth and development (Kementrian Keuangan Republik Indonesia, 2013). In this regard, the G20 leaders welcome and continue to encourage the progress of several programs under the coordination of the *Global Partnership for Financial Inclusion* (GPFI), the World Bank, and other international financial institutions in helping member countries to optimally implement various financial inclusion programs such as in the education sector. Finance, consumer protection, empowerment of small communities, and increasing the role of SMEs.

Financial inclusion is one of the factors of the success of economic development in a country. Understanding the meaning of financial inclusion, financial inclusion is a timely and adequate process of accessing credit and providing financial services to low-income people. Financial inclusion is also defined as a process to ensure access to financial service products needed by all people can be obtained at a fair, affordable and transparent cost (Kamath, 2007). So that financial inclusion can *encourage unbankable people* so that they can have access to the formal financial system so that they have the opportunity to access financial services such as savings, payments, insurance financing, and various other financial services (Hanning & Jensen , 2010). According to World Bank, financial inclusion is the ability of an individual or group to easily access, obtain and use financial services as needed (Demirguc-kunt A. , 2012). Inclusive finance itself is characterized by when all levels of society can access the benefits of formal financial institutions to be used to encourage the quality of life of the community itself. Financial inclusion is essential because they provide deposit, credit, risk management, and other financing services that are undoubtedly beneficial for their users.

According to Beck *et al*. (2007) stated that the concept of access to financial services is different from users of financial services. Every economic actor may have good access to finance but do not want to use it. Socio-cultural factors cause this, or the costs incurred are too high to use financial services. It can be distinguished in terms of the reach of the financial sector itself, namely (1) the existence of access and the possibility of using these services. it can be measured by the number of branch offices and ATMs in the area. (2) actual use of financial services. It means that they use financial services. It can be measured by the number of credit and deposit accounts, and the average credit and deposit show the high use of financial services. (Beck , Demirguc-Kunt, & Levine, 2007)

Demirgüç-Kunt (2008) explained in detail the differences in access to users of financial services and access to financial services. Users of financial services are determined by supply and demand, and admission is addressed by collection only. Even if someone has a high income, not everyone will be interested in using these services. Likewise, individual or company-level customers do not necessarily want to borrow money even though they are offered a low-interest rate.

Various studies have shown that financial inclusion positively impacts multiple indicators of growth or development in a developing country. According to (Sarma, 2011), financial inclusion not only has a positive effect on economic growth, but financial inclusion is also able to increase growth inclusion and reduce inequality in each region (Hannig, 2010). Access to financial services also allows the poor to save and invest in productive economic activities, entrepreneurial activities, and education that enable people to get out of the *poverty trap* (Demirguc-Kunt, 2013), especially for poor women (Swamy, 2014). If we look at it from another macro perspective, financial inclusion has a positive effect on financial stability (Han, 2013).

In other studies, financial inclusion is considered to help increase the HDI (*Human Development Index*) or increase knowledge and life expectancy for the society (Sibarani, 2019). With the increase in HDI, it will reduce social inequality so that it will help solve the big problem in a country, namely poverty in society.

In recent years, financial inclusion has become an important strategic issue to discuss at the government and academic levels. For example, at the household level, financial inclusion can encourage individuals to increase their consumption ability, expand asset ownership and risk management. At the business level, financial inclusion can provide better financial services for business development. At the macro level, financial inclusion positively contributes to strengthening the economy, income distribution, and reducing poverty (Eton, 2018)

Although it has a positive impact, especially on economic growth and development, financial inclusion is still a big challenge for Indonesia. In recent years, government efforts in designing various microfinance programs, only about 6% of the world's population without access to financial services reside in Indonesia. This number is the third-largest number after China and India (Sastiono & Nuryakin, 2019). Suppose we try to compare it with the *Association of Southeast Asian Nations* (ASEAN) countries. In that case, Indonesia is the country with the lowest number of people without a bank account for a population over 15 years old (World Bank, 2014).

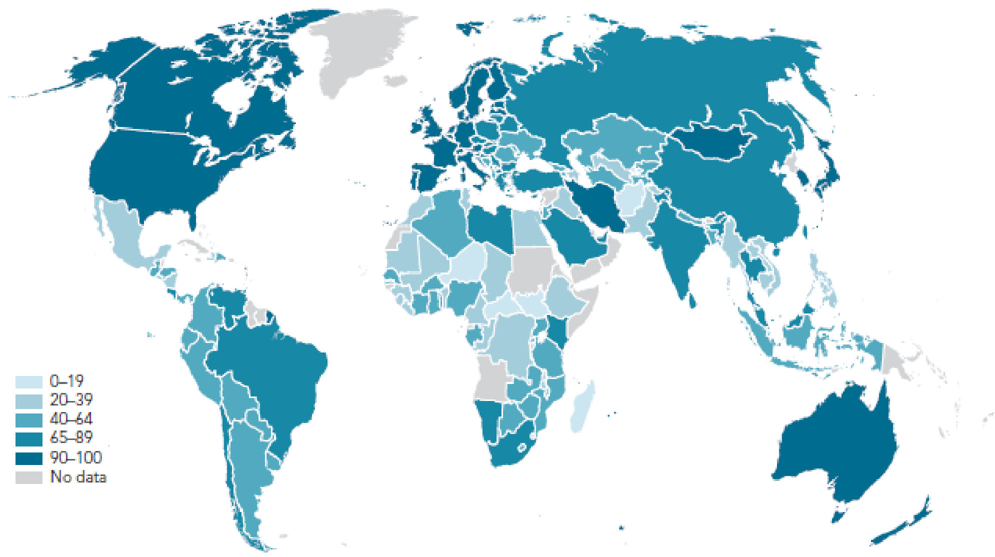
If we are Looking at the results of the FEUI Demographics Institute in 2012 that poverty in Indonesia is motivated by *financial exclusion*. Indonesia is one of the countries with a relatively high level of *financial exclusion,* around 35.51% of the Indonesian adult population who has an account with a formal financial institution. The survey is in line with the Bank Indonesia household survey results in 2011, which showed that only 48% of the Indonesian population had savings in the bank and non-bank financial institutions and non-formal financial institutions (Rodoni, Novia, & lili, 2016)

The financial system is said to be inclusive when financial services can be reached by all levels of society, benefiting people with high incomes and benefiting low-income people. Therefore, people with low incomes can allocate their funds to productive investments such as education, health, or entrepreneurship. It certainly has a positive effect on strengthening and socio-economic justice. To reduce poverty and improve the quality of financial services sustainably (Shrivastava, 2015). On the other hand, an exclusive financial system can hinder economic growth when financial institutions cannot access all levels of society due to needs: credit and financing. Difficult access to financial services is often a significant problem for MSME actors and the poor.

Poverty and inequality in income distribution have always been a problem for all countries, especially for developing countries. Financial inclusion is essential in economic development because it can encourage access to financial services for the community to be involved in investing for the future and be active in other productive economic activities. Understanding the relationship between financial inclusion, poverty, and inequality in income distribution on a national scale can help the government as a regulator to formulate and implement programs that can answer all problems to provide good financial services. To reduce poverty and inequality (Park and Mercado, 2015).

Global Findex research from 2011 to 2017 shows that as many as 1.2 billion adults worldwide open accounts through financial institutions or *mobile money providers*, including 515 million adults since 2014. it shows that every year there is an increase. About 69% of adults now have an account, up from 62% in 2014 and 51% in 2011.

In *high-income economies*, about 94% of adults already have *accounts* such as the United States, Australia, Canada, Macau, and other western European countries. In contrast to countries in sub-Saharan Africa, Southeast Asia, Central America, and the Middle East, 40-64% informal account ownership in 2017. In this case, it shows that there is an imbalance between high-income people and low-income people.



Source: World Bank The Global Findex 2017

FIGURE 1. 1

Formal Account Ownership Population Age > 15 years old

Based on research conducted by the World Bank Global Findex in 2014 that around 2 billion adults (aged more than 15 years) around the world still do not have an account, especially informal financial institutions and more than 2 million MSMEs in developing countries still have barriers, especially in access financial services. About 13 percent of the population who do not have a banking account say they distrust formal financial services. It impacts the community's decision not to have an account and choose to use non-formal instruments in meeting their daily needs, such as borrowing from family or moneylenders (Demirguc-kunt, 2014)

Furthermore, Account ownership has been explained that every year has increased. In 2017 it became 69%. In developed countries with high-income communities, around 94% of the adult population already has a banking account, meaning that financial inclusion is high. While in developing countries, only 63% of the adult population has a formal financial account. Meanwhile, in Indonesia, according to the Global Findex 2017, Indonesia's financial inclusion reached 49%. This figure is still far from the government's target of 75%.

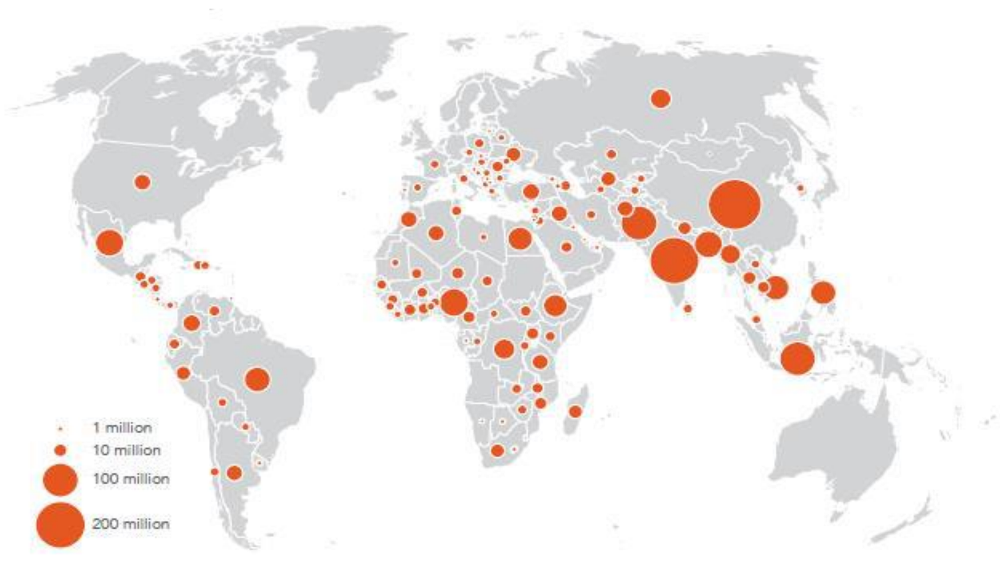
The level of a person's financial inclusion is certainly influenced by several factors: demographic factors. Based on research conducted by (Nasution, 2013) on the determinants of financial inclusion in North Sumatra, it is concluded that access to financial services is not only influenced by the level of financial literacy. Income level, distance from the bank, age, marital status, gender, household size, and education level significantly influence the decision to access financial services (financial inclusion). In addition to the researchers above, several previous studies have studied the demographic side of public financial inclusion including, (Clamara, 2014), (Krishnakumar, R & Vijayakumar, L., 2013), (Hutabarat, 2018), examined socio-demography in terms of gender, age, education, income, employment, and population.

The increasing number of account ownership from year to year, especially in developing countries, is followed by an increasing gender gap in formal account ownership. According to the World Bank, in 2012, only about 37% of women in developing countries gained access to financial services, while around 46% of men have earned it. According to (nooren & Ali khan, 2012), an average of 70% of the total poor in the world are women who do not have access to financial services, including credit services. This also occurs in the financial literacy gap between men and women. Men are significantly more aware of financial literacy than women, even beyond factors such as age, marital status, and cultural tolerance (Sanderson , Mutandwa, & Roux, 2018)

According to (Demirguc-kunt, 2012), developed countries (*high-income countries*) had a higher gender disparity in saving money. The gap is 7 percent or 62% of men and 55% of women in developed countries. Meanwhile, the inequality rate is slightly lower in developing countries at 4 percent (33% men and 29% women). It indicates that there is a large gap between men and women regarding participation informal financial institutions. In Sub-Saharan Africa, 27% of men and 22% of women have a banking account.

In some other cases, the decision-making of family partners is influenced by educational background. If both have the same educational experience, they have the same rights and responsibilities in family decision-making (Fonseca, 2010). Increasing women's participation in financial institutions will affect the quality of life, meaning that the influence of a woman's education regarding finance itself is very large. The fact is that women are always required to be wiser in daily expenses to meet the needs of their families.

The gap between the rich and the poor has also not decreased. About 60% of the wealthy community, only 74% have a formal account. At the same time, 40% of the poor, only 61% have an account. The gap that occurs is 13% between the poor and the rich around the world.



Source: world Bank The Global Findex 2017

FIGURE 1. 2

Distribution Map Majority Countries Have No Formal Account

In developing countries, the percentage of account ownership is relatively low. It occurs in young adults (aged 15-25 years), less educated people, and those not working or outside the labor force group (Demirgüç-kunt, A., 2017). Adults with low education are less likely to have account accounts. Individuals who are not active in the workforce are less likely to have bank accounts. In developing countries, 37% of the population is unemployed, and 47% do not have a bank account.

The Global Findex survey in 2017 compiled several reasons why adults don't have a bank account. The majority of the population (2/3 of the total respondents) answered that only a few assets could be saved informal financial institutions. It shows that there are still many people with low incomes who are unable to access banking services. The other respondents (1/4 of the sample) mentioned cost and distance as not having an account. In addition, distrust of the financial system, existing family members who have accounts, and religiosity (religion) are other reasons why the adult population does not have an account at a formal financial institution.

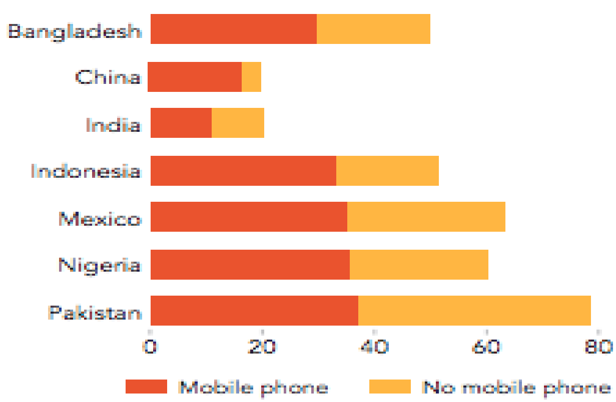
Every individual has the right to be able to access all quality financial services at affordable costs. One of the obstacles faced is the lack of public understanding of technology. The digital era requires us to adapt to the conditions of the times. The community and modern organizations have realized the importance of using mobile money services in the era of globalization. A person is expected to be able to be more competitive in their field. Fintech innovations enable access to financial services via mobile devices for people who do not have bank accounts. This will make it easier for users to access financial services easily and lead to financial inclusion itself.

High internet penetration in Indonesian society will increase financial inclusion through the use of increasingly developing financial technology services. This situation is in line with the Ministry of National Development Planning (BAPPENAS) statement in 2017, which stated that a fintech is a form of implementation of the National Strategy for Financial Inclusion. This strategy formulates that the government has achieved financial inclusion of the Indonesian people, 76.19% in 2019.

Globally, 1.7 billion adults remain unbanked, but 2/3 of them have a mobile phone that can help them access financial services. Digital technology can be utilized as existing cash transactions to bring people into the digital financial system. For example, paying government salaries, pensions, and social benefits directly into account can bring formal financial services to more than 100 million adults globally, including 95 million in developing countries. There are other opportunities to increase account ownership and use through digital payments. More than 200 million unbanked adults working in the private sector are paid in cash alone, as more than 200 million receive agricultural payments.

There has been a significant increase in mobile phones and the internet to conduct financial transactions. The years 2014 and 2017 have contributed to a rise in the share of account owners sending or receiving payments digitally from 67 percent to 76 percent globally and from 57 percent to 70 percent in developing countries.

In East Asia and the Pacific, digital financial transactions are growing even as account ownership has stagnated. About 71 percent of adults have accounts; little changed from 2014. In Indonesia, the percentage with accounts rise 13 percentage points to 49 percent due to digitization. Digital financial transactions have accelerated, especially in China, where the share of account owners using the internet to pay bills or buy goods has more than doubled to 57 percent. Digital technology can be utilized to increase the use to be able to access financial services.



Source: Global Findex database, Gallup world Poll 2017

FIGURE 1. 3

Cell Phone Ownership Among Those Who Do not Have a Bank Account

In Indonesia, 33 percent of the unbanked population cited distance as the main reason for not having an account, and 69 percent of this segment of the people have their cell phones. Among account holders in the local population, 71 percent make or receive digital payments, up from 62 percent in 2014.

Millions of unbanked Indonesian adults work in the private sector and are paid cash. As the nearly 20 million unbanked private wage earners in the country own a mobile phone, it is estimated that digitizing personal sector wage payments could reduce the national share of unbanked adults by up to 29 percent (Felsenthal & Hahn, 2018)

The role of financial inclusion and fintech dominated by business activities in payment transactions by 43% and loans 17%, the rest is shaped *by aggregators, crowdfunding, personal finance planning, landing,* etc. it shows that with the establishment of n finance through financial technology, it becomes interesting to discuss considering that the financial sector is the leading sector in economic stability.

The development of financial inclusion, which is supported by technology, has enormous power in market finance, especially for business activities. The revolution in the financial sector has an important role in improving financial services, which will affect the stability of the financial system, which can be seen through the performance of the banking sector such as credit and loans and improving public welfare through financial inclusion. However, financial inclusion through fintech integration has not been able to reach the wider Indonesian community, and the dominant contribution of financial inclusion has not been seen in influencing the stability of the financial system, especially in Indonesia.

The Financial Services Authority (OJK) noted that in 2021 the penetration rate of digital banking would only cover 39.2% of the Indonesian people. Hence, the room for digital banking improvement is still relatively large. Moreover, the potential direction of economic development and people's behavior is increasingly digitized. This digitalization phenomenon has snowballed over the last few years, especially during the pandemic. Economic growth, in this case, is expected to be dominated by digital transactions. An increase in national *e-commerce* performance is estimated to reach US$124 billion in 2025. it will be a sizeable market share for banks. Therefore, the development of digital banking still needs to be improved and its integration with other digital economy players (Caesario, 2021). In this study, researchers used the latest data released by Global Findex 2017, which contained individual characteristics due to research limitations.

The presence of fintech has also received serious attention from Muslim academics. They examine whether fintech and sharia are two complementary elements or contradict each other (Mohamed, & Hassnian, 2018). After conducting an in-depth study, it turns out that fintech is essentially able to provide convenience in transactions. While on the sharia side, Islam in principle also ensures welfare (wellbeing) for humans. (Laldin, 2018) states explicitly that a fintech is a form of applying the maslahah values listed in Islamic sharia. It proves that the presence of fintech is a form of muamalah that is driven by the spirit of progress. The substantial value brought by fintech, namely convenience *(al-yusr)*. It is as recorded in surah al- Baqarah verse 185

.....ۗ يُرِيدُ ٱللَّهُ بِكُمُ ٱلۡيُسۡرَ وَلَا يُرِيدُ بِكُمُ ٱلۡعُسۡرَ ....

“Allah intends (to provide) ease for you and does not intend (to create) hardship for you. All this is so that you may complete the number (of fasts as prescribed) and proclaim the Takbīr of Allah for having guided you, and (so) that you may be grateful.” (QS. Al-Baqarah [2]:185)

The financial inclusion policy has two main targets for the economic sector. According to (Sha’ban, 2017) First, to create an inclusive individual, the entire adult population (over 15 years of age) must be part of the formal financial institution system characterized by the ability to access banking services and other financial instruments. Second, inclusion for business people is defined as the ability of formal financial institutions to provide financial services that can encourage business development, for example, giving credit and facilitating business transactions.

Global Findex includes Indonesia as one of the survey countries where a survey conducted to 1,000 respondents in Indonesia in 2017 showed that the number of adults over 15 years old who have accounts at various financial institutions increased to Around 69% of adults now have accounts from 62% in 2014 and 51% in 2011. This figure is still far from the financial inclusion target of 75 %. However, a fundamental step must be taken to make it happen. One of them is by introducing the importance of knowledge about financial services and starting to take advantage of them from school.

In addition to the technological advances it faces, Indonesia will be faced with a Demographic Bonus. Demographic bonus is defined as a condition in which the majority of the population in a country is of a productive age which is expected to be enjoyed by Indonesia in the period 2020 to 2030. The abundance of this productive age population will spur economic growth to a higher level to improve the welfare of the community as a whole. Of course, this demographic bonus can be enjoyed by every Indonesian people. Financial inclusion, which is considered as a way for everyone to enjoy prosperity by accessing all available financial services, must start with fundamental steps. This can be done by introducing the importance of knowledge about financial assistance from adolescence among students (Ngasuko, 2015)

Technological developments have resulted in new thinking concepts for the economic cycle, especially in the financial sector, which has a significant role in the economy. In the context of accelerating financial growth and development aimed at the public through access and financial services, various efforts have been made, one of which is the integration of technology in financial inclusion. The existence of technological developments is expected to contribute to the acceleration of access and financial services and increase the number of accesses for the *poor*. Based on the background described, this study aims to measure the determinants of financial Technology (Fintech) in Indonesia by knowing the demographic factors of individual that will affect financial Technology (Fintech) for increasing financial inclussion and economics development.

B. Research Question

Based on the research background that has been described, several research questions are formulated as follows:

1. How does gender effect an individual's decision to use Fintech?
2. How does age effect an individual's decision to use Fintech?
3. How does education effect an individual's decision to use Fintech?
4. How does income level effect individual decisions to use Fintech?
5. How does Employment status effect individual decisions to use Fintech?

C. Resarch Objective

Based on the formulation of the problem that has been described, the objectives of this study include:

1. To analyze the effect of gender on individual decisions to use Fintech.
2. To analyze the effect of age on individual decisions to use Fintech.
3. To analyze the effect of education on individual decisions to use Fintech.
4. To d analyze the effect of level of income on individual decisions to use Fintech.
5. To analyze the effect of employment status on individual decisions to use Fintech.

D. Research Advetages

This research is expected to provide benefits for several parties, including:

1. For researchers

   For researchers themselves, by conducting research, it is hoped that they can increase their knowledge and experience, practice the theories obtained during lectures, and become an inspiration for researchers as youth drivers of civilization.

2. Benefits for society

   This research is expected to increase public knowledge about the benefits of financial inclusion for the fintech world itself. To motivate the community, especially youth driving civilization, to be enthusiastic about contributing to the nation's progress.

3. Benefits for academics

   This research is expected to contribute, recommend, and become a reference for future researchers, especially financial inclusion for the fintech world

4. Government

   This research hopes that it can be used as an evaluation material and reference for the government in establishing appropriate policies to increase financial inclusion, especially for the fintech world.