What are the Effects of Financial Inclusion to the Business Environment in Azerbaijan?

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# Abstract

This work is aimed to study the effects of financial inclusion on business environment in Azerbaijan. The paper will include review of literature that covers main issues regarding the topic and will try to figure out international practice that is used currently. The literature will cover relation between current financial accessibility of population and businesses in Azerbaijan and what measures are taken in this sphere globally. Afterwards, there will be discussed which research methodology was used and what possible contributions can this research make to the current issue. Furthermore, there will be made analysis of findings which will give broader idea about topic. Finally, there will be made discussion and analysis of all covered data and come up with specific conclusions about the work done. At the end there will be discussed the limitations of research that was faced and what are the effects of these limits for the research.

# **Table of Contents**

Acknow	vledgments	2
Abstrac	et	3
1.	Introduction	6
1.1	Rational of the study	6
1.2	Problem statement.	8
1.3	Research questions and objectives	10
1.4	Outline of the document	
2.	Literature Review1	13
2.1	Introduction1	
2.2	Background of financial inclusion	
2.3	Types of financial service exclusions	
2.4	Role of non-bank financial intermediaries	
2.5	Financial inclusion development practices	
2.6	Current situation of economy and financial markets of Azerbaijan	
2.7	Experience of different countries	
2.7.1	India	
2.7.2	Russia	
2.7.2	Turkey	
2.1.5	1 urkcy	.0
3.	Methodology	>0
3.1	Introduction	
3.2	Research strategy and design	
3.3	Data sources	
3.3.1	Primary data	
3.3.2	Secondary data	
3.4	Data collection	
3.4 3.4.1	Qualitative data collection	
3.4.1 3.4.2	-	
3.5 3.5	Quantitative data collection	
3.6	Data analysis	
3.6.1	Qualitative data analysis	
3.6.2	Quantitative data analysis	
3.7	Validity and Reliability	
3.7.1	Validity	
3.7.2	Reliability	
3.8	Challenges encountered in the study	38
4.	Findings4	
4.1	Introduction	
4.2	Findings from qualitative data	
4.2.1	Financial inclusion	
4.2.2	Role of financial intermediaries	
4.2.3	Findings and analysis based on international experience	
4.3	Financial literacy	
4.4	Agency banking 4	
4.5	Banking integrity4	
4.6	Financial inclusion indicators4	18

4.7	Results of quantitative analysis	49
4.7.1	Results of simple linear regression	
4.7.2	Results of multiple linear regression	
4.7.3	Multicollinearity	
4.7.4	Summary of results	
4.8	Summary of findings	
5.	Discussion and Conclusions	56
5.1	Introduction	56
5.2	Discussion of findings and Conclusion	56
5.3	Implications for theory and practice	59
5.4	Future research	60
Refere	nces	61
Appen	dix №1: Interview questions	68
Appen	dix №2: Quantitative data used for analysis	69
Appen	dix №3: Results of simple linear regression	70
Appen	dix №4: Contacts of interviewees	72

# 1. INTRODUCTION

#### **1.1 Rationale of the study**

Financial markets and its products play important role in maintaining economy's effective and dynamic growth. Actually, financial markets started to grow in 1980s and as a result of development many people and businesses began to benefit from its features (Kempson & Whyley, 1999). In order to obtain "normal social life" people currently should have easy access to financial tools or services (Gloukoviezoff, 2007). Each person or company make different money transactions in their daily life or operations, and non-existence or inaccessibility of financial services stops them from acting. In fact, financial services can be ensured by banks, microfinance organisations, credit unions, mobile operators, payment systems and postal operators. Considering the fact that almost all spheres are currently digitalised (Stolterman & Croon, 2004), there occurs immense need to digitalise and make financial tools more accessible to people. However, there are many countries where banks or other financial intermediaries still cannot provide efficient financial tools or services to people or companies (Wyman, 2012). According to current indicators in the field of financial accessibility, around 2 billion people in the world has no access to bank accounts (World Bank, 2018). In addition, according to the statistics of the World Bank, over 200 million micro, small and medium businesses have no access to significant financial resources and services (World Bank, 2018). The problem of inaccessibility of financial services has been witnessed even in developed regions of the world such as, the United States of America and European countries (Zhijun, 2007). Whilst, 50% of women and 59% of men have access to bank accounts in developed countries, which shows the huge limitations to financial accessibility and knowledge among population of the world (World Bank, 2018). In other words, above mentioned issues can also be identified as problems of financial inclusion in the countries.

In fact, financial inclusion refers to the provision of financially secure and low-income vulnerable groups, including businesses, with financial products and services that meet their needs at an affordable price (Grand & Kagan, 2019). There are three main parameters of measurement of financial inclusion which explains the process of financial transactions. These are: access to financial services and resources, usage of financial services and resources, and quality of financial services and resources (Imanzade, Zeynalov and Hasanov, 2017). In order to establish well-structured financial inclusion in the economy, each country has to have effective financial infrastructure and be able to provide above mentioned parameters. Actually, development of financial inclusion, elimination of existing deficiencies and restrictions in this

area, and more effective formulation of access to financial services of the population and businesses are among the main directions of activities of international financial institutions, including the World Bank, Financial Inclusion Alliance, International Bank of Reconciliation, G20 Global Compact for Financial Inclusion and others (Cull & Holle, 2014). The World Bank emphasizes the role of financial inclusion in reducing poverty and increasing overall welfare (World Bank, 2018). Therefore, the World Bank develop and implement a national financial inclusion strategy at the national level to develop financial inclusion, modernize government payments and retail payment systems, modernize national payment system infrastructure, including remittances, diversify financial services to individuals, implement various projects aimed at expanding the application of technologies required for inclusion and access to financial services, further strengthening competition, consumer protection, financial literacy and the formation of a database on financial inclusion (World Bank, 2018). Also, many other researches show that financial inclusion is considered as a very important tool that leads to further development of economies and businesses. Considering the importance of financial tools and active use of financial services by people in current world, there occurs significant need for continuous development of this field.

Azerbaijan is one of the fast-growing developing countries that is highly interested in development of financial inclusion in the economy (Aliyev, 2019). Financial system of the country has expanded hugely in the last decade, due to benefits gained from oil and gas sector. According to the data of the Central Bank of the Republic of Azerbaijan only 18% of population and businesses do not have access to financial services which are located in rural areas of the country (President Administration, 2016). In order to ensure active business environment in the country and boost economic growth, Azerbaijani government is focused on improvement of financial inclusion and try to ensure decent business atmosphere for entrepreneurs (CAERC, 2018). The Centre for Analysis of Economic Reforms and Communication of Azerbaijan, the Central Bank of the Republic of Azerbaijan, the Small and Medium Business Development Agency of the Republic of Azerbaijan and other government institutions currently work on improving the business and investment climate in the country and try to lead for further improvements in the country's status in international rankings (CAERC, 2018). The works mostly cover the process of preparing proposals to improve the legislation and administration, and take other necessary measures to create a business environment that will ensure optimal profitability of entrepreneurship and be based on competitive principles, increase the country's investment attractiveness, further improve Azerbaijan's position in international rankings (CAERC, 2018). In addition, small and medium

businesses are considered as successful institutions to promote a healthy balance of entrepreneurial activity (Babangida, 2018). These enterprises ensure employment and hugely shape GDP of the country (Aliyev, 2019). Economies of different countries may suffer in case of accumulation of economic power in one hand (McKenzie & Lee, 2008). Therefore, the government of Azerbaijan started to implement different reforms in order to help small and medium enterprises by supporting financial inclusion in the country. As a result of systemic reforms, much has been done in recent years to increase the financial sustainability of small and medium enterprises, expand access to low-interest loans, provide soft loans, and strengthen the legislative framework for small and medium business development (CAERC, 2018). Therefore, the establishment of well-designed financial system in the country and increase of financial knowledge of population would increase the economic growth and multiple macroeconomic gains of the country.

While talking about feasibility of the research, it is important to take into consideration that there are intentions of the government officials in development of financial inclusion. Actually, this may be verified by the fact that the President of the Republic of Azerbaijan has signed a decree for growth of financial inclusion in Azerbaijan (CAERC, 2017). Thus, there was created a working group in Financial Markets Supervisory Authority, further passed to the Central Bank of the Republic of Azerbaijan, in order to implement this idea and decrease the level of inadequacy in this field.

However, many researches show that there are different problems in financial sector of Azerbaijan and there is still need for development of this sphere. Thus, the main purpose of the research is to find out main problems in financial sector of Azerbaijan, to discuss different aspects of mentioned sphere by analysing financial systems of different countries and to examine the effects of financial inclusion to the business environment in the country. Also, thesis will try to find out ways to increase the financial literacy among population and businesses which may lead to better financial access of participants of the market. Finally, the research will show effects of increasing financial inclusion in the country and how it will boost the businesses and economy overall.

# **1.2 Problem statement**

Despite the fact that many financial intermediaries are provided with all necessary infrastructure, there are still people who are excluded from their services. As it was mentioned before, there are more than 2 billion people in the world who has no access to bank accounts (World Bank, 2018). Also, researches show that the highest proportion of these people live in

developing and less developed countries (Mujeri, 2015). Actually, the lack of accessibility to financial tools slow down economic activities in the country (Mahendra, 2006). Therefore, financial markets or economies should have well-established financial systems in the country in order to operate and provide people or businesses with its services.

According to the article of International Monetary Fund on Azerbaijan (2019), there are several factors that influence negatively financial inclusion of the country, which are: financial illiteracy, improper geographic distribution of financial intermediaries, high cost of services, mistrust among people and financial intermediaries, and limitations in legislation.

First of all, as it was mentioned before, there are many people are who not familiar with financial terms and services, both in Azerbaijan and other developing countries. The whole process can be named as financial literacy which means the ability to know basic financial terms that needed in daily life (Rose & Morrison, 2007). Most of the citizens and firms are not familiar with financial concepts and they cannot deal with difficulties in practice (Rose et. al. 2007). According to the World Bank Group Financial Capability Survey, financial literacy is one of the key problems of Azerbaijani society. The survey conducted by WBG in 2015 showed that Azerbaijani adults answered properly only 3.9 out of 7 finance related questions (World Bank Group, 2016). According to the analysis of WBG, financial literacy of people in Azerbaijan can be ranked in a normal level, however, improvements are needed because financial literacy level is high only among small proportion of people (World Bank Group, 2016). In addition, it is important to mention that the Central Bank of the Republic of Azerbaijan created a platform called "Financial Literacy Platform", which aims to increase level of financial knowledge among population. However, WBG claims that there is need for further tools used in order to get people knowledgeable on financial services. Thus, as a result of above mentioned factor, businesses face difficulties on acquiring financial services, people or companies are being deceived by credit organizations and this results in further negative economic consequences.

Secondly, financial institutions and services have to be accessible for all people in all the corners of the country, however, geographic distance issues create barriers in order to cover financial needs of people living in rural areas. In other words, this problem can be also called as geographic exclusion. It is important to mention that, according to the data of the World Bank 44% (4.4 billion people) of Azerbaijani population live in rural areas (World Bank, 2020b). Therefore, as almost half of the population of the country lives in rural areas, it is important to meet their financial needs. Thus, government should work on establishment and improvement of accessibility of financial products in rural regions.

In addition, geographic exclusion lead to other psychological effects on people who live in socially distance places. According to the research made by Kempson and Whyley (1999), even though geographic exclusion may not result in financial exclusion directly, this can make people living in rural areas feel avoided from these services and think that these services "are not for them". This research showed that people who live in rural areas are facing psychological barriers, on the other hand, this problem also created no interest among financial intermediaries in order to deliver their services to these people (Kempson, Whyley, Caskey & Collar, 2000). Thus, these factors led to creation of mistrust issues among people and financial intermediaries. Therefore, it is important to develop financial system of the country in a way that, people living in rural areas will trust financial intermediaries and these entities will start to provide their services in these areas.

Moreover, there are other important factors which create significant barriers in creation of interest in financial tools, which are; high service fees, high cost of borrowing and low profitability. According to the survey of World Bank Group (2016), 73% of low-income population and 68% of unemployed adults do not have basic bank accounts in Azerbaijan. This proves the fact that, low income level of the population is limited by opening bank accounts, conducting operations on these accounts, because of high service fees for account servicing and other services. In addition, according to the article of IMF on Azerbaijan (2019), high cost of borrowing, high collateral requirements and lack of trust create barriers in accessing financial tools.

Thus, the main problems that thesis is going to arise are regarding financial illiteracy of people or companies, inadequacy of financial infrastructure or problems rising due to geographic issues, mistrust among financial intermediaries and people, and high costs of services. Improvement of these factors is considered important in development of financial inclusion in Azerbaijan.

#### 1.3 Research questions and objectives

In order to make research obvious and to have direct ideas, there were chosen proper research questions that should be answered in order to describe the issue well. The research questions ask:

1. What are the effects of financial inclusion to the business environment in Azerbaijan?

2. What problems rise due to the unavailability of financial services?

3. Why and how enterprises or people get influenced from the lack of accessibility of financial services?

4. What are the main indicators that influence financial inclusion in the country?

In addition, in order to have obvious vision and have valuable research there were developed four objectives:

1. To increase financial inclusion among population and businesses;

2. To understand the main policies and procedures that should be developed in order to increase financial inclusion in Azerbaijan;

3. To be aware of the problems and limitations that may government face during planning and implementation of policies;

4. To conclude the research with useful solutions and offerings that would increase financial inclusion and will boost businesses in country.

### 1.4 Outline of the document

This thesis is organised in following five Chapters:

The first Chapter includes introductory parts where discussed the rationale for the study, the problem statement, the research questions and research objectives.

The second Chapter covers theoretical background to the topic and discusses the literature review on the following issues: financial inclusion, types of financial services, financial literacy, the barriers that occur due to limitation in this sphere, effects of financial inclusion to GDP growth and the role of other non-bank financial intermediaries. Further, this chapter will cover financial inclusion issues in Azerbaijan and there will be covered the overview of the country, current situation of financial markets and the role of financial inclusion in the country. Finally, there will be discussion of international practice, which will cover practice of India, Russia and Turkey and India on improvement of financial inclusion.

The third Chapter examines the methodology used in order to analyse reviewed literature in previous chapter during study. First of all, there will be identified the research strategy and will be confirmed the reasons why qualitative and quantitative data analysis method was used. Secondly, this chapter will describe the data which was used during the study, which were primary and secondary. Thirdly, there will be discussion of data collection, data processing and data analysis process. Fourthly, this chapter will include short discussion about the reliability and validity. Finally, there will be discussed main challenges that were faced and the chapter will be concluded.

The fourth Chapter includes the discussion of findings from the research. This chapter covers findings that were observed based on collected data and discussions about the results of analysis. Firstly, this chapter includes analysis of data based on qualitative method. It will cover

description and discussion of main concepts that were delivered in literature review part and from interviews. Further, this part includes analysis of quantitative data and interpretation of results. Thus, this paper is divided into two main parts, which explain qualitative and quantitative data separately. First part includes discussions on concepts from literature review. Secondly, there will be discussed financial inclusion indicators that were observed based on primary and secondary data. Second part includes results of quantitative analysis. It covers simple and multiple linear regression analysis based on dependent and independent variables. Further, second part will cover the summary of results and discussion based on findings. Finally, the chapter will end with summary and concluding remarks.

The fifth Chapter is the Conclusion of the thesis and will summarise the main findings and discussions. It will also cover main implications for theory and for practice. Finally, there will be discussed possibilities that this thesis creates for further researches.

#### 2. LITERATURE REVIEW

#### **2.1 Introduction**

In order to have broad understanding about stated problem and find out main concepts regarding financial inclusion, this section will review literature on the topic. First of all, this part will include main understanding about financial literacy, the barriers that occur due to limitation in this sphere, effects of financial inclusion to GDP growth and main concepts that drive due to financial inclusion. Moreover, this part will cover experience of different countries about the works done on support of financial inclusion. This will help to understand mentioned problems based on the practice of particular countries and as a result it will give more opportunities for analysis and decision making process. In addition, this part will include review of literature regarding business environment in Azerbaijan. As the topic tries to find out effects of financial inclusion on business environment in the country.

The main concepts which are explored are the following:

What is financial inclusion and what effects does the concept have? What is the relationship between financial inclusion and GDP growth? What is financial literacy? What types of financial services are excluded? What is the role of other non-bank financial institutions in the financial inclusion development? What is current situation in financial market of Azerbaijan? What does world countries do in order to stimulate financial inclusion?

Finally, the literature review will be concluded with a summary of all above mentioned issues and try to answer main research questions of the thesis.

#### 2.2 Background of financial inclusion

Financial inclusion refers to the provision of financially secure and low-income vulnerable groups, including businesses, with financial products and services that meet their needs at an affordable price (Grand & Kagan, 2019). In order to understand the issue, there is need for research in global context. As it is obvious, one of the main missions of The World Bank is to reduce poverty and improve prosperity for all people. According to the World Bank, financial inclusion plays a key role in this issue (The World Bank, 1 Oct 2018). Therefore, The World Bank is working on national financial inclusion strategy. It aims to develop and implement financial inclusion by several modernization tools. These tools are modernization of government payments and retail payment systems, money transfers, diversification of financial services provided to people and businesses, making easy access to financial services

around the world, protecting the rights of people who use financial services, technological improvement, increasing financial literacy, enhance competition and agent banking and forms a database of financial inclusion (World Bank, 2 Oct 2018).

The topic of financial inclusion and its relation to the growth of Gross Domestic Product of the country should be taken seriously. The increase in the number of financial activities lead to development of economy and this boosts the business environment for development (Levine, 2005). According to the AT&SG Report (2010), there is link between financial inclusion, financial sector development and economic growth. The linkage claims that growth in financial sphere lead to economic growth.

In addition, as it was mentioned the development of financial sphere in the country is considered as a key feature for economic development (Levine, 2005). There are many factors that influenced positively by development of this sphere, and one of this main features is poverty. Banerjee and Newman (1993) claim that a country where financial services are available for all people will lead to reduction of poverty. Additionally, a concept developed by Onaolapo (2015) shows that there is constant relationship among financial inclusion, poverty, bank intermediation and economic growth. Onaolapo's arguments show that the development of financial inclusion result positively in economic growth and it diminishes the poverty level in the country. Also, according to the research of Honohan (2005) in order to achieve high level of financialisation of population it is important to create trust among population, which can be achieved by minimum risks in financial sector where consumers will not face unexpected shocks. Thus, countries have to establish trusted and stable, accessible and affordable financial systems in order to boost economy and reach highest level of development.

Furthermore, the need for development of financial sector is not witnessed only in developed countries, also, developing and less developed countries are highly interested in its development (Anderloni & Carluccio, 2007). The main reason for its improvement is mainly because of the role of financial activities in today's businesses' and people lives. In fact, considerable number of people currently benefit from financial services, however, there is still minority groups who are lack of basic financial products (Kempson & Whyley, 1999). As an example of basic financial products can be understood as current account or insurance. In addition, different researchers claim that the problems of financial inclusion are same in every country and there is no need to differentiate between developed or emerging economies (Carbo, Gardener, Molyneux, 2007). They consider that limitation in each country are the same and discussion of the topic has not been concerned about different indicators. On the other hand, according to another research increasing financial inclusion is not only the case for developing

countries. According to the research paper of Celerier and Matray (2018) developed countries should also take into consideration the financial inclusion. Because it does not verify that all the people are financially literal and have access to banking services in developed countries. According to researchers, the financial condition of most low-income population and small businesses had been improved because of increase in financial inclusion in United States (Celerier and Matray, 2018). People became more aware of their financial condition and the accessibility to finance made them wealthier.

In addition, according to the review of financial inclusion in the late of 20<sup>th</sup> century Leyshon and Thrift (1993) were concerned about the accessibility of banking services during that period. They related the problem of limited access to banking services to bank branch closure. Also, the problem of exclusion of people from financial services was examined by the European Commission, which outlined main financial services that should be delivered to all the people. According to the European Commission, these are banking, saving, credit and insurance exclusion (European Commission, 2008).

As it was mentioned before, financial inclusion covers all the parts of the financial services. Therefore, it is not only about credits or providing easy money to people, it also covers the services such payments and savings. There has to be accessible and safe payment system for the financial system. This would also boost businesses in the economy and will increase the financial inclusion in the economy. Moreover, digital payments are one of the features of payment system. Implementation of secure and highly accessible digital payment systems will make the businesses' transactions easy and it will boost the transactions among companies (Eran Feinstein, 12 Jun 2018). The research of Muralidharan and Sukhtankar showed that effective digital payment system decreased corruption and boosted businesses in India (Muralidharan and Sukhtankar 2016). Also, the researches show that Indian business environment has boosted significantly by avoiding registration and information barriers to digital payments.

Additionally, microfinance is considered the most elastic sphere that affects from financial disturbances. Micro lending is considered as the main source of money for small and medium businesses (World Bank, 2020a). Taking into consideration that small and medium enterprises take a significant part in the economy, the negative influence of microfinance credit organisations slows down their work (Pitt and Khandker, 1998). There are several reasons confirming this issue. According to the analysis of Banerjee et al. (2018), it says that microfinance is significant for the businesses, however, it does not affect the ones that had business before the intervention. However, he affirms that microfinance is the most important

source of money for the SMEs and disturbance in it would slow down their job. Moreover, there was an analysis of the business world by Agarwal et al. (2018a) that is influenced by the financial inclusion in India. They researched the influence of financial inclusion on business world and offered new ideas to government officials insisting on positive influence of financial inclusion on businesses. As a result of their research and offerings there were created 255 million new bank accounts and there was boost in businesses around the India. The government has created a program based on their research and started to implement in all the corners of the India. People and businesses were easily accessing financial services and as a result of it people were investing on different spheres (Agarwal, et. al. 2018). As a result of changes in mentioned sphere economy of India was influenced very positively and people started to actively participate in economic activities of the country. Moreover, the program included increasing of financial literacy among people, where people could learn basics of finance and its services. This was also preventing people from being deceived by credit organisations and making them to know their rights.

### 2.3 Types of financial service exclusions

The problem of exclusion of people from financial services was examined by the European Commission, which outlined main financial services that should be delivered to all the people. According to the European Commission, these are banking, saving, credit and insurance exclusion which people face currently (European Commission, 2008).

First of all, banking exclusion was a concern for many years by different researches. According to the research of Kempson and Whyley people are financially excluded from basic accounts to receive or make payments (Kempson & Whyley, 1999). As the example of the United Kingdom, they analysed survey of UK's Family Resource Survey (FRS) which claimed that 23% of citizens of UK still do not have current account (Kempson & Whyley, 1999). While looking at these limitations, there were conducted other researches of Kempson and Atkinson (2004) and Corr (2006) who classified people and businesses into three degrees of exclusion, which are called: unbanked, marginally banked and fully banked. According to them, unbanked are considered people without any bank accounts, marginally banked are people who has deposit account, however, do not have electronic payment facilities. Finally, fully banked people are referred to ones who fully benefit from financial services and tools.

Secondly, saving exclusion is another concern of today's financial markets. In fact, savings are the amount of money that people have after subtracted from his or her income and spending (Kagan, 2019). However, different researches show that worldwide one third of

people do not have savings in bank accounts (FSA, 2000). Also, according to the statistics of Family Resources Survey, approximately 37% of people do not have savings (Rowlingson, Whyley & Warren, 1999). The reasons behind not having savings were examined by the European Commission. They claimed that people either lack of money or unwilling to deal with banks because individuals do not have trust or have undesirable experience before (European Commission, 2008).

Thirdly, as it was mentioned before, lending plays immense role in the funding of businesses, therefore, credit exclusion is viewed as main problem in order to provide with funds of small and medium enterprises. According to Kempson and Whyley (1999) loans provide businesses and people with funds when they need to purchase needed items. However, existence of credit exclusion makes mentioned transactions difficult and slows down activities of both people and businesses. Credit exclusion was main problem in Australia and it became topic of discussion for many years. The government officials and analysts mostly were concerned on three problematic issues, which are: credit card exclusion, inaccessibility to credit cards and exclusion from loans (Chant Link and Associates, 2004).

Finally, another main problem of exclusion is regarding the insurance. As a financial market participant and the influencer of the business environment it is important to mention about the position of insurance companies and services that they provide. According to the survey of Asian Development Bank on financial inclusion, it became obvious that 58 percent of customers do not use insurance services, whereas, half of them are not even familiar with these services (Peter and Victor, 2014). Insurance is the most important aspect for the businesses in developed economies. None of the business holders take the risk of being not insured. However, because of low financial inclusion the business environment in Asian countries are at risk of bankruptcy.

# 2.4 Role of non-bank financial intermediaries

As it was mentioned before, there are different financial intermediaries which provide financial services to people and businesses currently. One of the most important spheres that businesses today use is leasing credits. According to the latest report of White Clark Group on leasing market, leasing has a volume of 16.6% of newly emerging businesses in the world (White Clarke Group, 2019). This shows the importance of leasing sector for the newly emerging businesses. In case of low financial inclusion of developing countries, people are not aware of leasing or they do not have access to it. Therefore, this shows how financial inclusion slows down economy and businesses in it. Another important financial intermediary which became as important as banks and insurance companies is postal operators. Postal operator started to provide financial services from  $19^{th}$  century, after the signage of Universal Postal Union (UPU) multilateral treaty (Alcantara, Dembinski, and Pilley, 2014). It enabled to save money in post offices where did not exist banks or other intermediaries. Moreover, postal operators were considered as very cheap source of financial intermediary, therefore, people were interested in their services (Gozalov, 2020). Also, in late  $19^{th}$  century Austrian Postal Savings Bank established system called "giro", which enabled to debit of one account and the credit to another (Alcantara et al. 2014). In addition, postal operators take significant proportion of financial market currently and financial services started to grow in their operations. According to the statistics of UPU following proportion of revenues of postal revenues are generated from financial services: Arab countries – 72%, Europe – 52%, Africa – 52%, Asia – 39% and 17.7% of revenues came from postal financial services (UPU, 2012).

### 2.5 Financial inclusion development practices

Many researchers and analysis show that there are three main improvement tools that are implemented by many countries in order to develop financial inclusion. These tools are: improvement of financial literacy, implementation of agency banking and integration of banking services in lives of people.

First of all, as it was mentioned before many people around the world are not familiar with financial terms and services. The ability to know basic financial terms that needed in daily life can be named as financial literacy (Rose & Morrison, 2007). Most of the citizens and firms are not familiar with financial concepts and they cannot deal with difficulties in practice (Rose et. al. 2007). Although governments of different countries create platforms and provide people with relevant courses and information, there is need for further tools used in order to get people knowledgeable on financial services. Thus, businesses face difficulties on acquiring financial services, people or companies are being deceived by credit organizations and as a result countries' economies slow down.

Secondly, agency banking is successful tool that enables third parties to participate as authorised bank agent in the economy and provide services of banks to customers (Banker, 2011) (Youtap, 2019). In fact, the agent bank participates as authorised representative of particular bank and provides services according to the standards of the bank. Actually, agent banks may provide following services: cash withdrawal, bills payment, cash deposits, funds transfer, balance enquiry, collection of debit or credit cards and mobile banking services

(Equity bank group, 2017). All mentioned services can be considered enough for major activities of people or businesses in order to operate and satisfy their needs. According to the researches, agent baking diminishes costs of establishing new bank branches, makes easy to reach people from different parts of the country and motivates different enterprises to operate easily because of easy access to financial services (Youtap, 2019).

Finally, banking integrity shows the integration level of banks to the social lives of people. In fact, integrity includes basic bank services that people needs which offered on free basis. The introduction of the "basic banking services" package has a leading position in attracting people who do not have access to or have a low level of access to financial services, as well as those who do not use access to financial services due to their unattractiveness. "Basic bank account" service is already used in many countries to provide the population with access to financial services with bank accounts. Basic bank accounts with more preferential service fees provide access to bank accounts covered by certain packages of services.

# 2.6 Current situation of economy and financial markets of Azerbaijan

Azerbaijan is a developing country that is rich with oil and gas reserves. Gaining its independence in 1991 and starting formulation of a country from very beginning made it to depend on one industry. Obviously, the country had only choice to depend on oil and gas industry which prolonged for over 20 years. However, the decrease of oil and gas prices in 2015 lead to devaluation of the currency and made the economy and businesses to slow down (Ismayilov, 2016). Because of devaluation of the currency and slowing down of the economy, 13 banks went bankruptcy starting from 2015. This had an inevitable effect on financial inclusion in the economy which created antitrust for people to create a business in the country. According to the Central Bank of the Republic of Azerbaijan there were operating 43 banks, 27 insurance companies, 48 non-bank credit organizations, 109 credit unions and 5 investment companies in the country by the end of 2015 (President Administration, 2016). However, after the economical disturbance of 2015, there were operating 30 banks, 45 non-bank credit organisations, 21 insurance companies and 52 credit unions by the end of January 2019 (FIMSA, 2019). Currently, the number of banks are 26, because 4 banks went bankruptcy and the Central Bank of the Republic of Azerbaijan took away their license in April of 2020.

In fact, financial markets in Azerbaijan were growing since the independence of the country. The obvious increase in main indicators of financial markets confirm the growth of the economy due to support of the government. Banks, non-bank credit institutions, credit unions, postal operator and insurance companies play significant role in financial markets of

the country. However, banks are considered as the main fundament of financial sector in the country with 98% of share in all transactions (CBAR, 2019). According to the statistics of the Central Bank of the Republic of Azerbaijan, loans of banks to both individuals and businesses cover 97% of overall economy (see Figure 1).

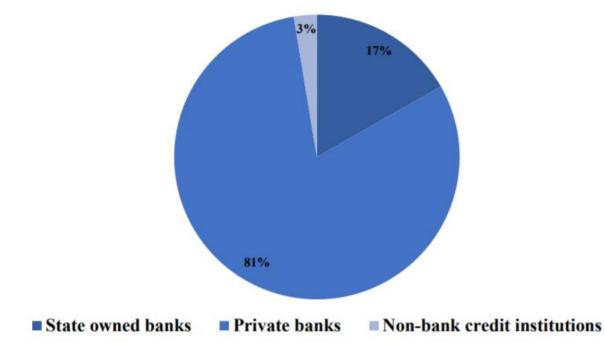


Figure 1. The structure of loans by the type of credit organisations (31.12.2019). in %

Source: Central Bank of the Republic of Azerbaijan, 31.12.2019

In order to understand the business environment in the country, Gross Domestic Product (GDP) indicator is the most suitable gauge for it. GDP of Azerbaijan is growing fast and businesses operate actively for the improvement of the economy. In fact, businesses are the main indicators of GDP, therefore, considering the GDP of Azerbaijan is important in this thesis. According to the data of the Central Bank of the Republic of Azerbaijan, GDP of the country was growing very fast for last 15 years. However, due to devaluation of the currency in 2015, there were faced disruption in this growth. GDP of Azerbaijan for years 2009-2019 is in the following table (See Table 1).

V	Gross Domestic Product					
Year, month	Total, mln. manat	Growth rate, %				
2005	12522,5	126,4				
2006	18746,2	134,5				
2007	28360,5	125,0				
2008	40137,2	110,8				
2009	35601,5	109,3				
2010	42465,0	105,0				
2011	52082,0	100,1				
2012	53995,0	102,2				
2013	57708,2	105,8				
2014	58997,8	102,8				
2015	54380,0	101,1				
2016	60425,2	96,9				
2017	70135,1	100,1				
2018	79797,3	101,4				
2019	81681,0	102,2				

 Table 1. Gross Domestic Product of Azerbaijan

Source: Central Bank of the Republic of Azerbaijan, 31.12.2019

In addition, there were operating 30 banks in the country to 31<sup>st</sup> of December 2019 (CBAR, 2020). Statistics of the Central Bank of the Republic of Azerbaijan show that number of bank branches, divisions, ATMs and employees are increasing for years, which confirm the development of mentioned sphere (see Table 2).

Table 2. General Information on Financial Market Participants - Banks

	12/31/2018	3/31/2019	6/30/2019	9/30/2019	11/30/2019	12/31/2019	1/31/2020
Number of banks' branches	508	512	513	515	509	509	508
Number of banks' divisions*	130	129	129	129	133	133	132
Number of ATMs	2502	2535	2571	2592	2627	2647	2659
Number of employees	17415	17749	18288	18911	19241	19460	19572

Source: Central Bank of the Republic of Azerbaijan, 31.01.2020

# 2.7 Experience of different countries

World countries currently are highly interested in the development of financial markets, because these developments lead to huge economic growth. In order to use the practice of different countries it is important to consider several factors such as: use of best practice evaluated by international organisations, similarities in attitudes of people, approaches of financial supervisory institutions to the problem and other economic similarity indicators (AFI, 2018). First of all, according to the report of Alliance for Financial Inclusion (2018), India is considered as one of the "global best practice" in terms of development of financial inclusion. India could gain this value because the country could cover all aspects of financial inclusion independently from its diverse economy, population and distance problems (AFI, 2018). Secondly, neighbouring countries Turkey and Russia are the closest allies of Azerbaijan and there are many meetings of officials from both sides based on different economic and other issues annually. In addition, there is high similarities between population of these countries, therefore, it makes easy to implement strategies used in Russia and Turkey in the financial system of Azerbaijan.

Thus, considering all above mentioned issues India, Russia and Turkey were chosen as most relevant countries in order to conduct research based on their experience.

# 2.7.1 India

The country's policy on financial inclusion is implemented by the Financial Services Department of the Ministry of Finance. The new national program on financial inclusion, announced and launched in August 2014, is called Pradhan Mantri Jean-Dhan Yojana (Press Information Bureau, 2014). The overall goal of this program is to provide access to various financial services, including opening and expanding the use of bank accounts by providing basic bank account services, increasing financial literacy, making financial services such as credit, insurance, pension accessible to every citizen (Ministry of Finance, 2015). During the implementation of the program, it is planned to provide Rupee debit payment cards and launch the Direct Benefits Transfer service to transfer government payments directly to the recipient's bank account. In fact, The Pradhan Mantri Jean-Dhan Yojana program is implemented in two stages:

1) The first stage - 15.08.2014-14.08.2015

At this stage, universal access to banking services has been provided, and the opportunity to open a basic bank account for a number of banking services (money transfers, obtaining a Rupee debit payment card, depositing funds, etc.) has been created. Also, projects have been launched under the financial literacy program. Both activities are important for effective implementation of financial inclusion program internationally (Mahendra, 2006).

2) The second stage - 14.08.2015-15.08.2018

The measures envisaged within this stage include opening a new credit line (overdraft) of up to 5,000 rupees to the bank account of each citizen who has a reliable credit or deposit trachea in the banking system for the last six months, formation of the Credit Guarantee Fund, creation of micro-insurance products, the pension scheme for those working in the formal sector, as well as the expansion of financial services to more remote regions (Ministry of Finance, 2015). In fact, credit guarantee funds are considered as very effective way in order to create belief in front of population who desire to fund their money (Nowakowski, 1997).

The program is implemented in the following 5 areas:

1. Universal access to banking services

As it was mentioned before, access to banking services is the main problem in most of the countries. In order to provide universal access to all banking services, it is planned to form a total of 130,000 Sub Service Areas in 600,000 villages in the country (CCFS, 2013). Based on this distribution, bank branches will be established in the regions, as well as banking services will be provided through third parties. Each bank branch will provide services to 1000-1500 households (Ministry of Finance, 2015). Bank Mitr, which acts as the bank's representative when providing banking services through a third party, will provide services such as opening bank accounts, depositing funds, transferring funds for payment transactions, studying the current balance and obtaining a bank account statement. These networks will be provided with the necessary equipment (computer, micro ATM, biometric scanner, etc.) and internet access. This service can be provided by the unemployed, pensioners (including government employees, bankers, teachers), gas stations, post offices and others. At the same time, the activities of banks will be coordinated by the Chief Regional Managers in large cities to cover households. As a result, access to financial services for the entire population of the country, with the exception of a very small area, will not exceed 5 km.

2. Opening a basic bank account

According to before mentioned statistics, around 2 billion people in the world has no access to bank accounts (World Bank, 2018). In the second phase of this program, it is planned to provide all adults, starting with households, with bank accounts. It is planned to cover in total 15 million households with basic bank accounts. Also, it is planned to open a credit line in the form of an overdraft (worth \$ 75) after the formation of a certain date on the base bank accounts (for the last 6 months), as well as to provide a free Rupees debit payment card (Ministry of Finance, 2015). It is not required to keep a minimum amount of funds in the balance on the base bank account. In order to effectively organize the procedure of opening a basic bank account, banks should establish special points for each region. Upon completion of

opening a basic bank account in each district, the district administration will provide a certificate confirming 100% access to the bank account.

3. Financial Literacy Program

Most of the citizens and firms are not familiar with financial concepts and they cannot deal with difficulties in practice (Rose et. al. 2007). Within the framework of this project, it is planned to expand the activities of 718 Financial Literacy Centres established in previous years to remote regions of the country (Ministry of Finance, 2018). Financial Literacy Centres provide financial literacy and credit product awareness services free of charge. The project envisages the organization of video conferences using the advantages of technology, the compilation of financial literacy literature in a standard form by the Banking Association of India.

4. Establishment of Credit Guarantee Fund

This fund is created for the overdraft credit line, which will be provided to citizens on a basic bank account. The Fund's activities will be funded by the Financial Inclusion Fund. In addition, according to many researches credit guarantee funds are considered as very effective tool in order to create belief in eyes of population who desire to fund their money (Nowakowski, 1997).

5. Creation of micro-insurance products

In order to develop businesses and to ensure safe business environment it is important to create micro-insurance products (Bhatia & Chatterjee, 2010). The Indian Insurance Regulation and Development Authority has created a special microinsurance product for the economically vulnerable (Consumer Education, 2020). This line of insurance is provided as general or life insurance in the amount of 50 thousand rupees and less. Micro insurance services can be provided by non-governmental organizations, microfinance institutions and volunteer groups for mutual assistance. The provision of micro-insurance services through the Bank Mitr network will further increase the effectiveness of this service.

# 2.7.2 Russia

In order to strengthen financial inclusion in the country, the Central Bank of Russia has adopted the "Strategy for Improving Access to Financial Services in the Russian Federation in 2018-2020" (Bank of Russia, 2018). In the Russian Federation, which covers a large geographical area, 79.5% of the population aged 18 and over hold bank accounts (Bank of Russia, 2018). Compared to 2011, the total number of people with bank accounts in the country increased by 30%. There are 30.14 bank branches and departments per 100,000 people in the

country (Bank of Russia, 2018). The legislative framework allows the formation of a network of bank payment agents in the country, even in remote regions. According to a survey conducted by the Central Bank of Russia in 2017, 28.9% of the adult population used credit products in the last 12 months, but 15.6% placed deposits in banks or non-bank credit institutions when taking loans (Bank of Russia, 2018). The use of individual investment accounts used to access financial markets, as well as insurance services, is not high. Thus, in 2017, 0.24% of the adult population used personal investment accounts, while 59 out of every 1,000 people were covered by life insurance (Bank of Russia, 2018). The strategy defined by the Central Bank is implemented in two directions:

1. Improving the availability and quality of financial services for consumers in remote areas and villages, sparsely populated areas, small and medium enterprises, people with limited access to financial services (low-income population, the disabled, the elderly and other segments of the population);

2. Improving the speed and quality of access to financial services for the population with access to the Internet.

It is planned to develop financial infrastructure in these regions, improve the legal framework in this area, and use innovative technologies and mechanisms. For this purpose, it is planned to stimulate banks to expand the financial infrastructure in these areas, to provide recommendations on the minimum representation of financial institutions in these areas. It is also planned to create a single geographical map of all access points to financial services (Bank of Russia, 2018). It is planned to create a favourable legal framework for the representation of other financial institutions by financial institutions represented in such areas. In order to provide effective access to financial services, it is planned to use the capabilities of the unified identification and authentication system established by the Central Bank.

1. Financing of small and medium business entities

First of all, providing more detailed information on small and medium enterprises by ensuring mutual integration between the different bases in the country, will provide an effective assessment of the activities of these organizations in the financing, as well as lending. In order to attract small and medium-sized businesses to the financial markets, it is planned to liberalize the legislation, as well as remove restrictions on information. With the implementation of relevant reforms in the legislative framework, it is planned to create new products for financing small and medium-sized businesses, including leasing, factoring, crowdfunding. Along with these and other measures, relevant reforms will be carried out to increase the financial literacy of small and medium enterprises.

#### 2. Identify population with limited access to financial services

First of all, the needs of citizens in remote regions, sparsely populated areas and areas with limited access to financial services, as well as the population with limited access to financial services in the country should be identified. As a result of the analysis, appropriate financial products should be developed for these groups. The removal of existing legal restrictions will also be taken into account when creating new products. The event will also expand the activities of bank payment agents and provide risk management on a proportional basis. One of the important factors in further expanding access to financial services in accordance with the established strategy is the removal of existing restrictions in the regulatory framework. It is important to further strengthen the rights of consumers in the framework of reforms in the legislative framework, to reconsider the requirements for small entities that provide financial services.

One of the important directions of this strategy is to increase financial literacy. To this end, the Central Bank of Russia will continue to work to train professionals in financial literacy, to further improve the financial literacy of teachers in all educational institutions. Within the framework of financial literacy, it is planned to cover various segments of society, including the older generation, small and medium enterprises, low-income families, etc (Bank of Russia, 2018). In order to expand the availability of financial services, the application of digital financial services will be in the focus of attention. Innovative products will be applied in the field of digital financial services and products, digital channels and digital business models. In order to expand innovative products and services in the field of financial markets, the Central Bank of Russia plans to introduce a "sandbox" as a special regulatory norm.

In general, the implementation of this strategy is aimed at achieving a number of goals. These targets are making accessibility of financial services to 87% of the population with bank accounts aged 18 and over in 2020, 60% of the adult population who actively use bank accounts, and voluntary insurance (Bank of Russia, 2018). Also, the goal is to increase the number of people with individual investment accounts in professional securities market participants.

# **2.7.3 Turkey**

There are three main aspects to increase access to financial services, including access to financial products and services, financial education and consumer protection of financial services. Access to financial products and services includes the availability of appropriate conditions for households and organizations to use financial products and services, such as credit, deposit, insurance and payment transactions (World Bank, 2018). Financial education includes informing consumers and investors about financial products, concepts and risks and increasing their capacity in this area (OECD, 2017). The protection of the rights of consumers of financial services implies the creation of an honest environment for the exchange of financial products and services (Lumpkin, 2010). Taking into account the interrelationship of these aspects, the Financial Stability Committee has developed an Action Plan for Financial Education and an Action Plan for the Protection of Financial Consumers of the Republic of Turkey (Official Gazette, 2014). In fact, the main goal of the strategy is to expand financial products and services in all segments by increasing the level of education in society, as well as to improve the quality and use of existing products and services (Rustamov, 2020). In addition, the strategy aims to take effective action by leading institutions to protect financial consumers. The Financial Stability Committee has developed an Action Plan for Financial Education and Financial Stability Committee has developed an Action Plan for Financial consumers.

# 1. Financial Education Action Plan

The Financial Education Action Plan aims to improve the economic well-being of individuals in the short term, expand the investor base, provide qualified personnel for the financial sector, and ensure the growth and more efficient operation of financial markets (OECD, 2013). In the medium and long term, this plan envisages further stabilization of the national economy and improvement of social welfare. The Financial Education Action Plan covers all groups of the population, especially families and women, primary and secondary education, universities and academies, public and private sector workers, the financial sector, the disabled, the elderly, unemployed youth and others (Official Gazette, 2014). Main principles of the financial education action plan are inclusiveness, neutrality, awareness raising, continuity, measurement and review, efficiency and result-oriented approach, responsiveness to needs, plain language and practical explanation, and training for trainers (Official Gazette, 2014). The Action Plan on Financial Education of the Republic of Turkey for 2014-2017 identifies a total of 36 measures aimed at financial education. These measures include conducting research to evaluate the level of financial literacy and evaluating existing research, advocacy and awareness-raising activities on financial consumer protection mechanisms, strengthening core financial subjects and broad curricula in primary and secondary education, developing a glossary of financial markets, and inculcates the necessary financial education for entrepreneurs, trainings for media representatives in the field of finance, as well as promoting

the establishment of educational and research centres for financial services and linking existing centres with financial education activities and other relevant measures (Official Gazette, 2014).

2. Action Plan for Consumer Protection of Financial Services

The concept of consumer protection of financial services provides for the provision of infrastructure that ensures fair trade between financial institutions and financial consumers (Lumpkin, 2010). Thus, the protection of consumers' rights to financial services includes the protection of consumers by balancing the information asymmetry between unorganized financial consumers with limited capacity to manage financial risks and financial institutions providing larger, specialized organized financial services (Official Gazette, 2014). One of the most crucial steps in the process of protecting the rights of consumers of financial services is the collection of complaints by financial institutions and their effective resolution. In addition, the formation of an effective and independent alternative mechanism for resolving disputes between consumers and financial institutions is necessary to protect the rights of consumers to financial services.

In general, the Action Plan for the Protection of Financial Consumers of the Republic of Turkey for 2014-2017 identifies 19 measures aimed at consumer protection. This includes strengthening cooperation and exchange of information on financial consumer protection between relevant organizations, expanding international cooperation in the field of financial consumer protection, ensuring regular and complete information on transactions in financial consumer accounts, ensuring effective systems for managing consumer complaints in financial institutions, and other measures (Official Gazette, 2014).

# **3. METHODOLOGY**

#### **3.1 Introduction**

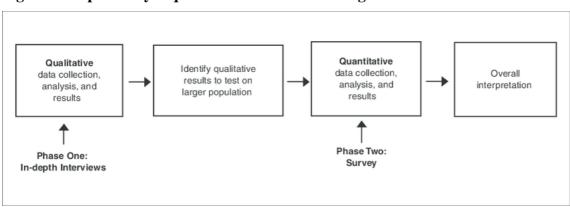
This chapter will examine the methodology used in order to analyse reviewed literature in previous chapter during this study. First of all, there will be identified the research strategy and will be confirmed the reasons why qualitative and quantitative data analysis method was used. Secondly, this chapter will describe the data which was used during the study, which were primary and secondary. Thirdly, there will be discussion of data collection, data processing and data analysis process. Fourthly, this chapter will include short discussion about the reliability and validity. Finally, there will be discussed main challenges that were faced and the chapter will be concluded.

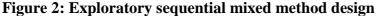
# 3.2 Research strategy and design

Before starting a research, it is important to have a strategy and design of a research in order to be able to meet wished expectations. The well-established strategy and design will help to identify main focus of the research and methods that are going to be used (Johannesson & Perjons, 2014). According to the Blumberg, Cooper and Schindler (2011) research design depends on the research question and it determines the methods that will be used in the research. Therefore, before starting a research it is important to find out the aim of it. As it is obvious, the aim of the research is to find out the effects of financial inclusion on business environment in Azerbaijan and what suggestions can be made to arising problem based on analysed data. Actually, in order to have crystal clear idea about the issue, the research will be analysed based on mixed method design. Mixed method is a method used by combining both qualitative and quantitative methods of data analysis (Aramo-Immonen, 2013). This method will help to answer research questions in a rigorous way. As it was mentioned above, the main purpose of this research is to analyse and understand what are the effects of increase in financial inclusion to the business environment in Azerbaijan. Therefore, in order to conduct fruitful research on this topic, it is important to get quantitative data and analyse the situation based on numeric variables. On the other hand, qualitative data will give broader understanding of the topic on basis of interviews, annual reports, research papers, journals and statistics. As a result, the results will cover both practical and theoretical issues about the problem.

Moreover, there will be used exploratory sequential mixed method design for this thesis (see Figure 1). In fact, this design is considered as successful proposal for combining both qualitative and quantitative data analysis (Creswell & Plano Clark, 2018). As it was mentioned

before, this thesis is going to analyse both qualitative and quantitative data, therefore, there should be implemented well-structured design which in this case is exploratory sequential mixed method design. This method is aimed on beginning the study with qualitative data with exploratory phase and further moving to quantitative phase where main analysis will be done (Creswell & Plano Clark, 2018). As the thesis covers literature about the practice of different countries and interviews, it gives broad idea about the issue. Afterwards, main variables were found out from the analysis of qualitative data and moved to quantitative method analysis.





#### 3.3 Data sources

It is important to choose proper data in order to conduct an appropriate research on particular topic. Most of the researches are based on primary and secondary data (Salkind, 2010). First of all, primary data is the information collected from primary sources such as interviews or surveys (University of Minnesota, 2020). As it was mentioned before, this thesis will cover practical information that was gained through interviews. Therefore, there will be used primary data as information to do analysis based on knowledge of experts from particular fields.

In addition, there were used secondary data sources in the thesis. In fact, secondary data includes information from pre-existing sources (University of Minnesota, 2020). These sources are journals, publications, financial records, books and so on. As it is obvious from the literature review chapter, secondary data play huge role in this thesis and this information gave broad overview about the topic. The secondary data that were used in this thesis are mainly reports, newspapers, financial records, publications, agendas and different papers received from interviewees.

Finally, it is important to mention that, use of both primary and secondary data in the thesis increases the validity of the research (Blumberg, Cooper, Schindler, 2011).

# 3.3.1 Primary data

Interviews are considered as a primary data in research methods. In order to obtain broad ideas and information about the topic, there were conducted interviews with different experts and analysts in their fields. It is important to choose proper people while interviewing, because any mislead during information collection process would create disturbance for the research. Therefore, interviewees were chosen very carefully by looking at their previous experience and recommendations from others. Conducted interviews helped to get information from real life cases and informed about the issue from the officials' perspectives. In order to get a comprehensible knowledge on this topic, there were created interview questionnaire for the officials. There were used semi-structured interview method which is common for social sciences. Semi-structured interview method is open and allows for new ideas to be brought up during the interview as a result of what the interviewee says (Edwards, 2013). This kind of interview structure bring some new ideas for the research which convey different solutions, opportunities and offers for further development in this sphere. It allows interviewee freedom to answer, explain the situation on his or her way and draw obvious picture (Edwards, 2013). In addition, semi-structured interview method enables person to make comments and creates dialogue kind of conversation during the interview. Thus, it does not limit interviewee with answers and interviewer gets more flexible and relevant data from the respondent. Therefore, in order to get more ideas and information about the topic, semi-structured interview method was chosen.

As it was mentioned before, it is important to properly choose the person whom to interview. Because any mislead during information collection process would create disturbance for the research. Therefore, interviewees were selected according to particular criteria. First of all, the person should have relevance to the topic. Secondly, interviewee should be from either government organisation or has relevance to it. Because data that was collected during the studies should be reliable and relevant.

The interviews were done with official faces who are closely related to the topic. Main parts of interviews were conducted face to face in order to increase the possibility of coming up with new ideas. However, because of current pandemic situation that arose by the Coronavirus (COVID-19) some of the interviews were conducted online. However, these interviews were video calls, which enabled to face to face communication with experts. The first respondent was Vusal Hasanov, leading analytic of Credit Institutions Supervision Department of the Central Bank of the Republic of Azerbaijan. Mr. Hasanov is working in supervision field for more than 4 years, has 5 years of experience in banking sector and was member of working group created by the Decree of President of the Republic of Azerbaijan on improvement of financial inclusion in the country. The second respondent was Tamerlan Rustamov, the director of payments system department in Bank of Baku, former director of payments system unit in Financial Market Supervisory Authority of the Republic of Azerbaijan and the member of working group created by the Decree of President of the Republic of Azerbaijan on improvement of financial inclusion in the country. He had broad information and experience about payments system in the country and was closely related to financial inclusion topics. Third respondent was Jalal Aliyev, Chairman of Executive Board of Azerbaijan Microfinance Association and Chief Executive Officer at NBCO "Finance for Development LLC". Mr. Aliyev has 20 years of experience in micro lending and is considered as one of the best experts in the field of microfinance in the country. Fourth respondent was Gunduz Gozalov, head of treasury department of national postal operator - Azerpost LLC. As the agency banking program is planned to deliver through Azerpost LLC, it is important to interview official from this organisation. He has more than 10 years of experience in financial issues of Azerpost. Fifth respondent was Kanan Ismayilov, analyst at the Central Bank of the Republic of Azerbaijan and former operations unit director. Mr. Ismayilov has more than 10 years of work experience in digitalisation of products of Azerpost LLC and has done many job based on mentioned topic in the Central Bank. Finally, sixth respondent requested for anonymity, therefore, interviewee's name will not be included in this part. However, interviewee is coded as AA01. AA01 is the Chief Executive Officer in one of the banks of the country. AA01 has more than 15 years of experience in banking sphere. In order to see contact information of interviewees, see the Appendix Nº4.

In fact, it was planned to conduct three more interviews, however, due to already mentioned pandemic situation it was not possible to make interviews. However, it is also important to mention that interviews with 6 experts in their fields gave broad information about the topic. The interviews gave direct opportunity to understand the policies that are implemented and planned to implement, real cases that nowadays firms and people face due to lack of financial literacy and the role of agency banking in future of the accessibility of banking services. Moreover, the interviews gave chance to learn about personal expectations of the officials, their opinions and depending on their experience how to develop the financial accessibility of population. Also, interviews were not focused on number of interviewees,

rather it looked at the quality of the answers. And results show that number of interviews and high quality answers are quite satisfactory for the research.

# 3.3.2 Secondary data

As it was mentioned before, there were used secondary data on this research as well. The secondary data that were used in this thesis are mainly reports, newspapers, financial records, publications, agendas and different papers received from interviewees. The data from documents gave broad knowledge about the topic, therefore, it was considered significant to use this information in the thesis. Also, the reliability of the sources is important factor. Because data collected should meet international standards and should be based on official sources. Therefore, documentary sources were carefully consulted. The most important data was based on reports of government organisations, therefore, these data can be considered quite reliable.

# 3.4 Data collection

Data collection process took place between February and June of 2020. Also, there were used data collected previously during the Research Methods class. Because this thesis is the continuation of the research proposal that was written by author during mentioned course. Also, it is important to mention about the different techniques used during data collection process. Because this thesis will examine both qualitative and quantitative methods of analysis.

#### 3.4.1 Qualitative data collection

As it was mentioned before, qualitative data was mostly based on interviews and secondary data from official sources. Interviews were conducted on face-to-face and online basis. The date and place of interviews were decided beforehand with regard to the schedule of interviewee. Moreover, due to current pandemic situation that arose because of Coronavirus (COVID-19) two of the interviews were conducted online. In addition, all interviewees were based on Baku, therefore, there were no any problems while reaching respondents. Also, as it was mentioned before, respondents were chosen very carefully in order to have high quality and reliable data. Interviewees had broad knowledge on the topic and were experts on their field of operations.

Furthermore, interviews were based on semi-structured method which enabled interviewee to be free while impressing his or her ideas. Despite the fact that two interviews were conducted online, there were not faced any technical or miscommunication issues during the interview. In fact, the interview questions consisted of 1 personal and 6 main open-ended questions. First question's aim was to find out the effects of financial inclusion to the business environment both in the world and in Azerbaijan. Second question trying to find answer for the major risks that people and businesses face due to lack of financial inclusion in the country. Third question included the discussion about policies and measures that were implemented to increase financial inclusion since the independence of the Republic of Azerbaijan. Fourth question covered three main factors (financial literacy, agency banking and banking integrity) that are considered in the study of financial inclusion important. Fifth question tried to find out the risks and difficulties that government officials may face while implementing these policies and how they can be dealt with. Finally, the aim of the last question was to find out personal opinions and potential implementation tools that experts think for possible outcomes. In order to consult the questions, see the Appendix №1.

During the interview respondents were highly interested in research topic and became enthusiastic while answering. All of the interviewees provided different data that were not observed during review of literature which gave more idea about the topic. Therefore, the researcher started to look at the issue from additional and different aspects.

In addition, the qualitative data was acquired from different books, reports, newspapers, financial records, publications, agendas and different papers received from interviewees. These data provided main idea about the topic and helped to understand main aspects of the issue. Moreover, these data enabled researcher to identify variables while analysing quantitative data.

#### **3.4.2 Quantitative data collection**

In order to have crystal clear idea about the issue, the research will be analysed based on mixed method design. Therefore, it is important to mention about the collected data for quantitative method analysis. In fact, all of the data variables were decided after analysing qualitative data, therefore, exploratory sequential mixed method design is implemented. All data was collected from monthly and annual reports of the Central Bank of the Republic of Azerbaijan. In fact, numeric or quantitative data needs transparency and reliability. Because any error terms or misinformation in the data would decrease the chance of getting clear analysis. Therefore, all the data were chosen based on the information provided by the government official, which is the Central Bank of the Republic of Azerbaijan.

### 3.5 Data processing

There were done 2 different data processing methods during the studies. Firstly, the notes taken from the interviews were used in analysis. Notes mainly covered relevant data and information that was delivered from the respondents. Because each interview took place approximately an hour and not all answers were relevant to the topic. Thus, notes and ideas that were generated from interview were classified on relevance level.

Secondly, the processing of quantitative data was based on the sources of the Central Bank of the Republic of Azerbaijan. The sources consider information about the Gross Domestic Product (GDP) of Azerbaijan, number of payment transactions, total loans in the economy, total deposits, number of payment cards, number of POS-terminals and number of ATMs. Data was acquired in the form of Excel, in order to be able to do regression analysis of data.

#### **3.6 Data analysis**

Data analysis section describes the ways how the acquired qualitative and quantitative data was analysed. In fact, analysis involved content analysis of primary and secondary sources. In general, there will be discussion of methods used during analysis of qualitative and quantitative data.

#### **3.6.1 Qualitative data analysis**

Qualitative data analysis refers to analysis of non-numeric information obtained from interviews, notes and documents (Dudovskiy, 2019). It is important to follow particular steps while conducting qualitative data analysis. Firstly, there were identified themes, patterns and relationships. It is important to identify mentioned features in order to identify common relationship between issues and be able to interpret acquired data. Secondly, as the last stage it is important to summarise the data. There should be created a link between findings and hypothesis or research aims (Dudovskiy, 2019).

In fact, the collected data were analysed on thematic analysis method. This method is commonly used during researches and provides deep understanding of the interview answers (Bryman, 2012). On the other hand, in order to get the reliable data and use this data properly, papers, reports and interviewed experts are chosen after long research on the topic. According to research methods experts Braun and Clarke, in order to have proper vision and results the data has to be checked twice (Braun and Clarke, 2013). Thus, while analysing data, the

information obtained were reviewed twice and the results were included in the research paper afterwards.

#### 3.6.2 Quantitative data analysis

The analysis of quantitative data plays huge role in this thesis. Because all the information gained through qualitative data analysis method will be examined in quantitative method. In fact, the main goal of this thesis is to find effects of financial inclusion to the business environment in Azerbaijan. Therefore, it is important to find out dependent and independent variables that are going to be used in the study. In order to conduct a fruitful research Gross Domestic Product (GDP) of Azerbaijan was chosen as dependent variable and indicator of business environment in the country. Because, GDP is the monetary measure of the market value of all final goods and services provided (Callen, 2020). Therefore, choosing GDP as main indicator of business environment in the country and as dependent variable will give more reliable results. Secondly, there were identified main independent variables according to primary and secondary sources from either interviews or literature. According to analysis, independent variables are: number of payment transactions (coded as TransNumb), total loans in the economy (Loans), total deposits (Deposits), number of ATMs (ATM), number of payment cards (PCards) and number of POS-terminals (POS). Thus, the quantitative analysis will try to find out relationship between dependent and independent variables. The relationship should tell the effects of financial inclusion indicators to the business environment, which is in thesis is GDP.

Moreover, analysis will be done based on multiple linear regression analysis method. Multiple linear regression model is a proper tool to predict the value of dependent variable according to independent variables (Kenton, 2019). As the goal of the thesis is to find effects of financial inclusion to the business environment in Azerbaijan, multiple linear regression model will enable research to find out the relationship between dependent and independent variables. In addition, in order to conduct multiple linear regression analysis there were planned to use STATA software. STATA is a very good software which enables analyst to do data manipulation and visualisation and provides services such as statistics and automated reports (STATA, 2020). In fact, description, summary and multicollinearity of data was found out with the help of STATA. However, due to the fact that STATA in computer was older version, regressions were done in Microsoft Excel. There were occurring errors while trying to do 'regress' command due to the version of the software. However, both tools are quite popular and reliable for regression analysis. While conducting quantitative analysis, the research will mostly focus on both simple and multiple linear regression analysis, which means that each of the variables will be analysed and all the needed measures will be taken into account individually. The main goal of doing it, is to prove that these independent variables are related to dependent variable and prove that the relationship is positive. In addition, the main goal of this regression analysis is to show increased linear relationship between dependent and independent variables. It means that the null hypothesis (H<sub>1</sub>) is indicating that financial inclusion indicators do not affect GDP. On the other hand, alternative hypothesis is saying that there is a relationship between GDP and financial inclusion indicators, and this relationship is positive. Thus, initial formula will look following:

$$GDP = \mu 0 + \mu 1 TransNumb + \mu 2 Loans + \mu 3 Deposit + \mu 4 P Cards + \mu 5 POS + \mu 6 ATM + U$$

In addition, it is important to mention that, even though some independent variables may be significant and have positive relation with dependent variable, there might be some high correlation issues which will need on changes on formula. The changes will be based on the results of initial analysis.

#### 3.7 Validity and reliability

#### 3.7.1 Validity

While conducting a research it is important to consider validity of methods and measurements. According to the words of Middleton (2019): "Validity tells you how accurately a method measures something. If a method measures what it claims to measure, and the results closely correspond to real-world values, then it can be considered valid." While conducting analysis of data it is important to construct validity and look at internal and external validity.

As data analysis was based on exploratory sequential mixed method design, it was difficult to determine final results based on qualitative data. Therefore, while analysing data, all concepts and theoretical background were checked with interviewees in order to ensure validity of indicators. Also, as it was mentioned before, all the indicators were chosen based on both primary and secondary data. The relationship between this information were created and the logical sequence was ensured by the researcher.

In addition, it is important to establish causal relationship between variables and how well the study was structured, which defined by internal validity (Cuncic, 2020). As the research is trying to find out effects of financial inclusion on business environment in Azerbaijan and multiple linear regression model is used, there has to be causal relationship between variables. Therefore, each indicator was chosen based on implications of international organisations and interviews. As a result, internal validity was achieved.

Finally, the outcome of the study has to be expected to apply in real life cases, which is determined by external validity (Cuncic, 2020). In fact, this thesis can be considered as a good tool for further analysis of the mentioned sphere. Because all information reviewed and analysed in the paper are based on real life cases. Therefore, the outcome of this study can be applied and generalised to the real world.

#### 3.7.2 Reliability

Reliability shows how consistently a method measures something (Middleton, 2020). The measures should be reliable in order to have correct analysis. Because in case of having not reliable data, results and analysis can produce many errors.

In fact, the main source of data was acquired from the World Bank, Central Bank of the Republic of Azerbaijan and other official institutions. Taking into consideration that transparency is the most important feature in current world, these organisations provided reliable source of information for this research. These reports and papers from organisations mostly consisted of the financial (GDP, revenue, expenditure, investment) pointers and physical (number of ATMs, branches and so on) indicators of the credit organisations. Since these organisations are obliged to share these reports annually, the reports are checked by internationally certified audit companies and therefore they are reliable source of information. Also, as it was mentioned before, according to research methods experts Braun and Clarke, in order to have proper vision and results the data has to be checked twice (Braun and Clarke, 2013). Thus, while analysing data, the information obtained were reviewed twice and the results were included in the research paper afterwards.

## 3.8 Challenges encountered in the study

During the study, there were not faced many challenges. Nevertheless, the research of this field is very sophisticated and there is need for more time to do researches and observations. Therefore, in case of having time for research, there will be interview of more officials and experts from above-mentioned government organisations and different banks. However, the knowledge of the mentioned officials was quite enough for research and doing interview with other expert may bring just new ideas to the research. Thus, the main reason of looking at annual reports and research papers and interviewing official experts from different

spheres is to gather consistent data and conduct reliable research. Secondly, as it was mentioned before, current pandemic situation appeared due to Coronavirus (COVID-19) disabled to conduct more interviews. Also, the virus had several personal psychological effects which lowered down the time of writing the thesis. Finally, in order to conduct fruitful research there were planned to analysis of the effect of number of bank branches and number of bank accounts to the business environment in the country. However, the data was only available from 2009, while the analysis is on 15 years' basis, it was not able to include this variable to the research.

Overall, the research was conducted in 4 months, including all the procedures (interview procedure, data collection, evaluation and implementation in theory).

## 4. FINDINGS

#### **4.1 Introduction**

This chapter covers findings that were observed based on collected data and discussions about the results of analysis. As it is obvious, the design used for research of this paper is exploratory sequential mixed method. Therefore, firstly this chapter includes analysis of data based on qualitative method. It will cover description and discussion of main concepts that were delivered in literature review part. Further, this part includes analysis of quantitative data and interpretation of results. Thus, this paper is divided into two main parts, which explain qualitative and quantitative data separately.

First part includes discussions on concepts from literature review. Secondly, there will be discussed financial inclusion indicators that were observed based on primary and secondary data. Second part includes results of quantitative analysis. It covers mainly multiple linear regression analysis based on dependent and independent variables observed in first part. The main goal of this part is to prove hypothesis that was thought. Further, second part will cover the summary of results and discussion based on findings.

#### 4.2 Findings from qualitative data

Financial inclusion is very broad understanding. There are many problems in mentioned sphere currently. Azerbaijan is one of the countries that is highly interested in development of accessibility of financial tools to population, in making people more aware of financial terms and products, and as a result of improvements in mentioned spheres reach the highest level of economic welfare. Therefore, there were discussed different concepts of financial inclusion in literature review part and there is need for discussion of main components of it.

## 4.2.1 Financial inclusion

As it was discussed before, financial inclusion refers to the provision of financially secure and low-income vulnerable groups, including businesses, with financial products and services that meet their needs at an affordable price (Grand & Kagan, 2019). According to Hasanov and Aliyev, people need at least basic financial services in order to operate and be productive in their lives. AA01 claims that businesses and banks has to be in close relations. Because enterprises may benefit from services or products provided by banks which may result either in increase of their funds or reach to other sources of finance. In fact, there are three main parameters of measurement of financial inclusion which explains the process of financial

transactions. These are: access to financial services and resources, usage of financial services and resources, and quality of financial services and resources (Imanzade et. al, 2017). These parameters are main for each financial intermediary in order to satisfy needs of customers (Aliyev). In order to establish well-structured financial inclusion in the economy, each country has to have effective financial infrastructure and be able to provide above mentioned parameters (Aliyev).

Although many financial intermediaries are provided with all necessary technological infrastructure, there are still people who are excluded from their services (Aliyev, Rustamov, Hasanov, AA01). Also, this exclusion affects the businesses of small and medium enterprises, which has significant share in country's economy (AA01). According to all interviewees, the lack of accessibility to financial tools slow down economic activities in the country. Financial intermediaries play significant role in maintenance of businesses and further effect the economic condition of the country. The problem of financial literacy and financial exclusion are main problems of financial inclusion (Hasanov, Rustamov). In fact, these problems can be solved by looking at experience of different countries and by making different analysis of the sector (Hasanov, Rustamov).

Moreover, the development of the financial sector and the increase in financial literacy over the past few years have resulted in improved financial inclusion indicators in Azerbaijan, but these indicators are significantly lower than in many comparative countries (World Bank, 2016). According to the survey of the World Bank, Azerbaijan is behind the average of upper middle income countries in terms of financial access (World Bank, 2016). Numbers show that only 36.4% of adults have bank accounts in Azerbaijan (World Bank, 2016). This number is very low in comparison with neighbouring and similar countries. For instance, this number is 40% in Georgia, 54% in Kazakhstan and 57% in Turkey. Therefore, Azerbaijani government was motivated by the World Bank, and the President of the Republic of Azerbaijan signed decree for Strategic Road Map on 20 years' development which included development of financial inclusion in the country. Financial inclusion was included to the Strategic Roadmap on Development of Financial Services approved by Decree of President of the Republic of Azerbaijan of 6 December 2016 (President Administartion, 2016). On the other hand, there is created a working group in the Financial Markets Supervisory Authority, further passed to the Central Bank of the Republic of Azerbaijan, in order to implement this idea and decrease the level of inadequacy in this field (www.banker.az, 2018). Thus, the government is intended to boost businesses in the economy and tries to attract people to invest in country and do businesses. In addition, the report of the World Bank indicated that Azerbaijan has the lowest

banking sector branch network in comparison with neighbouring and European countries. According to the words (World Bank, 2016) of Senior Financial Sector Specialist of the World Bank, Angela Prigozhina: "With 1,600 branches around the country and partnership with banks and other financial institutions, Azerpost (national postal operator) can contribute significantly to raising financial inclusion and access in the country". As it was mentioned before, agency banking is a tool that is planned to be used in the country in order to ensure sufficient supply of financial tools and services to society. Consequently, Azerpost LLC can participate in the form of agent bank in delivering of bank services (Gozalov, personal interview, 2020).

#### 4.2.2 Role of financial intermediaries

Banks, non-bank credit organisations, credit unions, national postal operator and insurance companies are main participants of financial markets. People and companies use their services in order to ensure their daily financial needs. These needs can be understood as getting loans, funding projects, making different money transactions, making online or cash payments, having insurance services and many other services (Hasanov).

According to Hasanov, financial intermediaries are a bridge between who needs funds and who lends funds. In fact, funders and borrowers may meet, however, their needs may not be relevant to each other because of size of amount (Hasanov). However, banks and other financial intermediaries give opportunity for borrowers to obtain any amount of money (Hasanov). The establishment of well-structured financial sector in the country will help investors and borrowers to meet (Hasanov). As a result, businesses or individuals will be able to acquire funds via these intermediaries. Hasanov considers the role of financial intermediaries, especially the role of banks, non-bank credit organisations and national postal operator significant in order to ensure effective financial inclusion in the country. Analysis of data provided in literature review and interviews showed that banks are main participants of the financial market in Azerbaijan and their role in establishment of successful financial atmosphere is immense (AA01, Hasanov).

Moreover, national postal operator is the most suitable organisation in order to implement agency banking in the country (Gozalov, Ismayilov). In fact, postal operators are considered as very cheap source of financial intermediary (Gozalov). Because they have other sources of funds in comparison with banks, which circulates money came from deposits (Ismayilov). Banks ensure their profitability and allocate their spending based on money invested to bank. However, postal operator generates money from other postal services. Therefore, establishment of Azerpost as agent bank is most suitable decision (Gozalov). In fact, as it was stated, opening basic account or making basic bank transactions are easy (Ismayilov). Azerpost is capable of providing people with mentioned basic services, and it may strengthen financial inclusion of the country (Gozalov).

In addition, it is important to mention about the importance of non-bank credit organisations in the development of the country. Although their share in overall financial sector is 0.3%, they may contribute to development of financial tools in regions of the country (Hasanov). According to Aliyev, NBCIs are the most convenient and appropriate financial institutions to work with micro and small businesses that banks are not interested in or cannot consider very risky.

Thus, according to findings it became obvious that, financial intermediaries, especially banks, non-bank credit institutions and national postal operator play significant role in strengthening financial inclusion of the country. Therefore, their services can be used for further development and legislation should be developed in order to create path for them in development of mentioned sphere.

#### 4.2.3 Findings and analysis based on international experience

In general, the analysis of the experience of international financial institutions and leading countries in strengthening financial inclusion allows to say that the goal can be reached if the issue becomes a priority, there is established a unified strategy with the participation of relevant government agencies and its implementation is monitored (Rustamov).

First of all, as a result of the analysis, it was found that the application of basic bank account service may strengthen financial inclusion. Providing a basic bank account is one of the important steps for the low-income population to benefit from financial services. According to Rustamov, in some cases, the basic bank account forms a package of basic banking services, covered by discounted services (one or more payment transactions without service fee, issuance of a payment card without service fee).

Secondly, improvement of financial literacy of population can be considered as another tool for strengthening of financial inclusion. Hasanov believes that one of the priority goals of strengthening financial inclusion is to increase the level of financial literacy in society. This event should cover all age groups and provide information on a different topic. Awarenessraising in this area should begin at an early age, and students should be taught this knowledge in schools and incorporated into teaching materials. Seminars on different topics should also be organized for citizens working in different fields. Thirdly, the establishment of agency banking network can strengthen the financial inclusion of the country (Gozalov, Rustamov, Hasanov, Aliyev, AA01). Agency banking is important tool in covering financial services in remote areas, reducing the financial costs of banks, plays huge role in more effective interaction with citizens on financial services and increasing efficiency in these areas (Gozalov, Hasanov). In some cases, entities providing agency banking services may also provide other financial services such as micro insurance services (Gozalov). These agent banks can also ensure the receipt of citizens' inquiries and appeals and the initiation of appropriate procedures. As it was discussed before, national postal operator is the best option for participating in banking activities as agent bank (Gozalov). Because Azerpost has more postal branches in different parts of the country than banks and it reaches to people where banks do not have any branches or representatives (Gozalov, Hasanov).

Fourthly, discussions and analysis of different countries also offered the establishment of non-bank payment service providers and formation of a network of payment agents as a successful tool for strengthening financial inclusion in the country. In order to further increase the competitive environment in the field of payment services with the application of international experience, it is important to accelerate the introduction of innovative payment solutions, create a payment organization and e-money organization with new non-bank payment service providers in order to organize cashless payments in a more accessible and convenient form (Rustamov). These organizations expand their access to financial inclusion by shaping their activities mainly in an electronic environment (Rustamov). At the same time, the formation of a network of payment agents by these organizations increases the level of access to financial services, even in remote regions (Aliyev, Rustamov).

Fifth, creation of microfinance products is found out as successful tool for increase of financial inclusion in India. The formation of microfinance products focused on different segments of the population has a significant impact on the involvement of the population in the field of financial services, the establishment of small businesses (Rustamov, Aliyev). It also makes a positive contribution to meeting consumer spending and developing habits of using financial services (Hasanov).

Finally, it was found out that it is important to define the "remote bank account opening procedures" in the legislation. The introduction of "remote bank account opening procedures" expands access to financial services by facilitating their use (Rustamov). Ensuring customer convenience and the absence of additional financial costs make opening bank accounts remotely more attractive (Rustamov, AA01).

#### **4.3 Financial literacy**

Financial literacy means the ability to know basic financial terms that needed in daily life (Rose & Morrison, 2007). The survey conducted by World Bank Group in 2015 showed that Azerbaijani adults answered properly only 3.9 out of 7 finance related questions (World Bank Group, 2016). Also, according to the analysis of WBG, financial literacy of people in Azerbaijan can be ranked in a normal level, however, improvements are needed because financial literacy level is high only among small proportion of people (World Bank Group, 2016). In fact, each person has to have understanding of basic financial terms in order not to be deceived or be able to satisfy his or her needs (Hasanov, Aliyev). According to interviews it became obvious that, most of the Azerbaijani population are familiar with basic financial terms (Aliyev, Hasanov). However, if the case becomes complicated many people cannot understand both legislative and financial side of the problem (AA01). In addition, almost all people in the country has once had contact with bank and its services. Main services that were used are: opening accounts, money transfers and getting loans (AA01, Aliyev). Statistical numbers show that the number of bank users increase on yearly basis. Therefore, as the number of people increase the acknowledgement with bank services increases too. According to Hasanov, one of the priority goals of strengthening financial inclusion is to increase the level of financial literacy in society (Hasanov). This event should cover all age groups and provide information on a different topics (Hasanov). Awareness-raising in this area should begin at an early age, and students should be taught this knowledge in schools and incorporated into teaching materials (Hasanov, Rustamov). Seminars on different topics should also be organized for citizens working in different fields. This will boost businesses, because it will cover people from different fields. As people are innovative, they will come up with new ideas based on their field of operations.

Finally, it is important to mention that the Central Bank of the Republic of Azerbaijan created a platform called "Financial Literacy Platform", which aims to increase level of financial knowledge among population. Although government of Azerbaijan create platforms and provide people with relevant courses and information, there is need for further tools used in order to get people knowledgeable on financial services (Hasanov). Thus, businesses face difficulties on acquiring financial services, people or companies are being deceived by credit organizations and as a result countries' economies slow down.

As a result of increase of financial literacy in the country, people become more aware of financial services provided by banks. Actually, money plays essential role in establishment of businesses (AA01). Therefore, having knowledge in basic banking services results in new

ideas. People think of different business investments and as they have proper information about the funding or other transactions they can implement these ideas in the practice. Thus, banks and other financial intermediaries play huge role (AA01). And financial literacy of people has to be increased in order to achieve planned level of economic growth (Hasanov, Rustamov)

#### 4.4 Agency banking

Agency banking is successful tool that enables third parties to participate as authorised bank agent in the economy and provide services of banks to customers (Banker, 2011) (Youtap, 2019) (Hasanov, Rustamov, Ismayilov). In fact, the agent bank participates as authorised representative of particular bank and provides services according to the standards of the bank (Rustamov, Hasanov). Agent banks may provide following services: cash withdrawal, bills payment, cash deposits, funds transfer, balance enquiry, collection of debit or credit cards and mobile banking services (Equity bank group, 2017) (Hasanov, Rustamov, Ismayilov, AA01). All mentioned services can be considered enough for major activities of people or businesses in order to operate and satisfy their needs (Rustamov).

The establishment of agency banking network can strengthen the financial inclusion of the country (Gozalov, Rustamov, Hasanov, Aliyev, AA01). Agency banking is important tool in covering financial services in remote areas, reducing the financial costs of banks, plays huge role in more effective interaction with citizens on financial services and increasing efficiency in these areas (Gozalov, Hasanov). In some cases, entities providing agency banking services may also provide other financial services such as micro insurance services (Gozalov). These agent banks can also ensure the receipt of citizens' inquiries and appeals and the initiation of appropriate procedures. As it was discussed before, national postal operator is the best option for participating in banking activities as agent bank (Gozalov). Because Azerpost has more postal branches in different parts of the country than banks and it reaches to people where banks do not have any branches or representatives (Gozalov, Hasanov). According to the researches, agency baking diminishes costs of establishing new bank branches, makes easy to reach people from different parts of the country and motivates different enterprises to operate easily because of easy access to financial services (Youtap, 2019) (Rustamov, Hasanov, Ismayilov, Aliyev).

Findings show that businesses that operate in rural areas face difficulties in reaching financial services (Aliyev, Hasanov). There are such villages in Azerbaijan, where in order to reach centre of the region people or small enterprise owners has to overcome more than 2 hours' way (Aliyev, AA01). As a result of difficulties people's desire to open businesses goes

away. Therefore, the inaccessibility to financial services in rural areas led to disappear of business ideas (Hasanov).

Thus, analysis of findings show that the accessibility of financial services plays huge role in formulation of well-structured and profitable business environment in the country. People start to get close relations with financial intermediaries via agent banks. Therefore, people obtain easy money and they use this money in order to generate profit.

### **4.5 Banking integrity**

Banking integrity shows the integration level of banks to the social lives of people. In fact, integrity includes basic bank services that people needs which offered on free basis. The introduction of the "basic banking services" package has a leading position in attracting people who do not have access to or have a low level of access to financial services, as well as those who do not use access to financial services due to their unattractiveness (Hasanov). "Basic bank account" service is already used in many countries to provide the population with access to financial services with bank accounts. Basic bank accounts with more preferential service fees provide access to bank accounts covered by certain packages of services (Hasanov, 2020). The analysis of interview of members of the working group on increase of financial inclusion in the country shows that the concept of "basic banking services" is one of the priority projects implemented to strengthen financial inclusion (Rustamov, Hasanov). In terms of strengthening financial inclusion in the country, attracting additional funds to the financial system, as well as increasing the role of banks in financial intermediation, the implementation of the "basic banking services concept" can be encouraged with a number of requirements. According to Hasanov, services offered are following: 1) cash inflows and outflows to the bank account, 2) providing a debit payment card related to a bank account, 3) cash withdrawal of bank funds and all ATMs installed in the country with a payment card in the amount of a maximum of 200 manats without the application fee for 5 transactions, 4) execution of maximum 5 operations without application of service fee when applying service fee for transfers between internal bank accounts, and 5) execution of 3 interbank payment operations without service fee. In fact, the list of mentioned services can be expanded independently by banks (Rustamov, Hasanov). In addition, the bank account must be opened without applying the service fee (Rustamov, Hasanov). In case of execution of a number of payment operations higher than the abovementioned indicators, the service fee must be the same or lower than the service fees applied by the bank on other bank accounts (Hasanov). Also, the service fee for using e-banking services should not be applied (Hasanov, Rustamov).

Thus, analysis show that when providing basic services, banks must set tariffs for services provided to non-individuals at a level lower than the service fees (Hasanov). Basic banking services for a special segment of the population (living in remote areas, pensioners, etc.) should be set at lower rates than for other individuals (Rustamov, Hasanov). In general, banks should apply basic service fees if they incur real costs.

As a result of analysis it can be concluded that, integration of banks into social lives of people is significant in order to achieve above mentioned economic milestones. Provision of basic banking services and making them more accessible and affordable for people will increase the interest of people on funds (Hasanov). As the funds of people will increase they will start to invest in different businesses.

### 4.6 Financial inclusion indicators

As it was mentioned before, it is important to identify main indicators of financial inclusion that were chosen based on analysis of qualitative data. Researches and analysis show that there is significant correlation between business environment and financial inclusion indicators (Hasanov). As people become more aware of financial tools they start to think about different ideas which may generate profit. This can be either in form of getting loans or using other forms of services for their businesses. In addition, establishment of agency banking system via other financial intermediaries, especially via national postal operator, makes the accessibility to financial tools easier. People do not need to overcome long distances and spend more time in order to get financial services (Rustamov, Hasanov, Ismayilov, Gozalov). As a result, businesses start to emerge or grow. Finally, integration of banks to the social lives of people are also important in order to establish well-structured financial inclusion in the country. Because, banks cover 97% of country's financial sector, therefore, people and businesses should be integrated with banks. This integration will allow people to meet their even basic financial needs.

As a result of analysis, in order to understand the business environment in the country, Gross Domestic Product (GDP) indicator is chosen as the most suitable gauge for it. As it was discussed before, GDP is the monetary measure of the market value of all final goods and services provided (Callen, 2020). Therefore, there were chosen GDP as dependent variable and main indicator of business environment in the country. On the other hand, analysis of qualitative data shows that number of number of payment transactions, total loans in the economy, total deposits, number of payment cards, number of POS-terminals and number of ATMs can be considered as important measures of financial inclusion in the country. Because

the increase in each of these variables positively influence financial inclusion index of the country. Thus, it may be concluded that, in order to conduct quantitative analysis, GDP is chosen as dependent variable and number of number of payment transactions, total loans in the economy, total deposits, number of payment cards, number of POS-terminals and number of ATMs as independent variables. Hypothesis of analysis says that the relationship between GDP (dependent variable) and financial inclusion indicators are positive and significant.

#### 4.7 Results of quantitative analysis

The design of this research is exploratory sequential mixed method design; therefore, it is important to analyse quantitative data that was acquired during data collection process. First of all, there were chosen 1 dependent and 6 independent variables in order to conduct this analysis (in order to consult the data, see Appendix No2). Dependent variable is GDP which represents business environment in Azerbaijan. Independent variables are number of payment transactions, total loans in the economy, total deposits, number of payment cards, number of POS-terminals and number of ATMs, which are main indicators of financial inclusion and considered as the most relevant ones for this study.

The main goal of this regression analysis is to show increased linear relationship between dependent and independent variables. It means that the null hypothesis (H<sub>1</sub>) is indicating that financial inclusion indicators do not affect GDP. On the other hand, alternative hypothesis is saying that there is a relationship between GDP and financial inclusion indicators, and this relationship is positive. In order to consult the data, see the Appendix No2.

First of all, it is important to get basic and important information before starting analysis. Commands 'describe', 'sum', 'codebook' and 'tabulation' in STATA provides with simple and important data on the variables. Table 6 shows the summary of quantitative data.

Table 3. Summary of quantitative data

. sum

Variable	Obs	Mean	Std. Dev.	Min	Max
year	15	2012	4.472136	2005	2019
gdp	15	49800.93	20346.17	12523	81681
transnumb	15	21520.13	17141.86	1071	56615
loans	15	11177.2	5845.45	1441	21730
deposit	15	12595.67	8170.338	1369	24746
pcards	15	4588.533	1793.882	872	7266
pos	15	36036.87	31101.22	987	80301
atm	15	2034.733	602.5153	873	2694

Table 6 shows variables that were used in study, number of observations, mean, standard deviation, the range of values which is minimum and maximum. According to the table it becomes obvious that the analysis was made on 15 years basis, from 2005 to 2019. There are 15 observations in each variable and there are no missing values. Also, there are no any string values in the data. In addition, GDP, total deposits and total loans are showed in million manats, number of payment transactions and payment cards are in thousands of units, and number of ATMs and POS-terminals in units. After having broad information about the variables, it is important to move to regression analysis. The formula and hypothesis were mentioned in part 3.6.2. At the end of the research, via 'corr' command there will be checked multicollinearity in order to find whether there is relationship between independent variables.

#### **4.7.1 Results of simple linear regression**

In order to prove the positive relationship and significance of each independent variable, there were conducted simple liner regression of each variable (see Appendix  $N_{23}$ )

The first regression analysis has been conducted between GDP and number transactions. It is assumed that, increase in the number of transactions has positive relationship with the GDP of the country. By looking at the table, or exactly at p-value, it becomes obvious that the relationship between GDP and TransNumb is statistically significant at any level. Moreover, the coefficient of TransNumb is 1.11, which means that independent variable positively affects GDP by 1.11 times. In addition, there is need to look at R-squared. R-squared in the table is 0.88 (or 88%), which means that independent variable is able to explain 88% of

variation in the dependent variable. Thus, results show that increase in numbers of transactions significantly affects business environment in Azerbaijan in a positive way.

Second regression analysis has been conducted between GDP and total loans. By looking at p-value, it becomes obvious that the relationship between GDP and Loans is statistically significant at any level. Moreover, the coefficient of Loans is 2.66, which means that independent variable positively affects GDP by 2.66 times. R-squared in the table is 0.58 (or 58%), which means that independent variable is able to explain 58% of variation in the dependent variable. Thus, results show that increase in total loans significantly affects business environment in Azerbaijan in a positive way, however, this variable does not explain GDP enough.

Third regression analysis has been conducted between GDP and total deposits. By looking at p-value, it becomes obvious that the relationship between GDP and Deposit is statistically significant at any level. The coefficient of Deposit is 2.24, which means that independent variable positively affects GDP by 2.24 times. R-squared in the table is 0.81 (or 81%). Thus, results show that increase in total deposits significantly affects business environment in Azerbaijan in a positive way.

Fourth regression analysis has been conducted between GDP and number of payment cards. By looking at p-value, it becomes obvious that the relationship between GDP and PCards is statistically significant at any level. The coefficient of PCards is 11, which means that independent variable positively affects GDP by 11 times. R-squared in the table is 0.94 (or 94%). Thus, results show that increase in number of payment cards significantly affects business environment in Azerbaijan in a positive way.

Fifth regression analysis has been conducted between GDP and number of POSterminals. By looking at p-value, it becomes obvious that the relationship between GDP and POS is statistically significant at any level. The coefficient of POS is 0.5, which means that independent variable positively affects GDP by 0.5 times. R-squared in the table is 0.66 (or 66%). Thus, results show that increase in number of POS-terminals significantly affects business environment in Azerbaijan in a positive way, however, this variable does not explain GDP enough.

Finally, last regression analysis has been conducted between GDP and number of ATMs. By looking at p-value, it becomes obvious that the relationship between GDP and ATM is statistically significant at any level. The coefficient of ATM is 31, which means that independent variable positively affects GDP by 31 times. R-squared in the table is 0.84 (or

84%). Thus, results show that increase in number of ATMs significantly affects business environment in Azerbaijan in a positive way.

#### 4.7.2 Results of multiple linear regression

Multiple linear regression is the main data analysis tool for this research. In order to find out relationship between financial inclusion indicators and business environment (or GDP), there was conducted 2 multiple linear regression analysis. The results are following:

#### Table 4: Regression analysis #1

SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.995138184				
R Square	0.990300006				
Adjusted R Square	0.98302501				
Standard Error	2650.877971				
Observations	15				

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	df	SS	MS	F	Significance F			
Regression	6	5739377111	956562851.8	136.123792	1.30741E-07			
Residual	8	56217232.13	7027154.017					
Total	14	5795594343						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-7908.739697	6851.031431	-1.154386719	0.28165823	-23707.24651	7889.767114	-23707.24651	7889.767114
TransNumb	0.012496618	0.163165431	0.076588635	0.940831568	-0.36376354	0.388756776	-0.36376354	0.388756776
Loans	-2.213689345	0.558391701	-3.9644023	0.004151348	-3.501342918	-0.926035773	-3.501342918	-0.926035773
Deposit	0.539793479	0.395648995	1.364324153	0.209606285	-0.372574738	1.452161697	-0.372574738	1.452161697
PCards	8.578614754	2.007791516	4.27266212	0.002714363	3.948639217	13.20859029	3.948639217	13.20859029
POS	0.073102945	0.093780512	0.779511051	0.458116538	-0.143155303	0.289361193	-0.143155303	0.289361193
ATM	16.40822092	8.885339465	1.846662244	0.101997713	-4.081408631	36.89785047	-4.081408631	36.89785047

The coefficients show that TransNumb, Deposit, PCards, POS and ATM have positive relationship with the GDP of the country. However, while looking at p-values it becomes obvious that Loans and PCards are only statistically significant variables. On the other hand, R-squared in the table is 0.99 (or 99%), which means that independent variables explain 99% of variation in the dependent variable. However, this number of R square and the values of t Stat show that there is overlap in variables and there have to be eliminated several independent variables. These variables are TransNumb and POS. Thus, the second analysis formula and results will be following.

 $GDP = \mu 0 + \mu 1Deposit + \mu 2PCards + \mu 3ATM + \mu 4PLoans + U$ 

## Table 5: Regression analysis #2

-2.124667073

SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.99471649				
R Square	0.989460896				
Adjusted R Square	0.985245255				
Standard Error	2471.444296				
Observations	15				

#### ANOVA

Loans

	df	SS	MS	F	Significance F			
Regression	4	5734513974	1433628494	234.7118256	7.73283E-10			
Residual	10	61080369.09	6108036.909					
Total	14	5795594343						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	Coefficients -9135.670584	Standard Error 5363.398362	t Stat -1.7033362		Lower 95% -21086.06685	Upper 95% 2814.725686		Upper 95.0% 2814.725686
Intercept Deposit			-1.7033362					- FF
	-9135.670584	5363.398362	-1.7033362	0.119328268 0.001688619	-21086.06685	2814.725686	-21086.06685	2814.725686

After eliminating mentioned variables, the coefficients show that Deposit, PCards, and ATM have positive, while Loans have negative relationship with the GDP of the country. Also, while looking at p-values it becomes obvious that all independent variables are statistically significant. In addition, R-squared in the table is 0.98 (or 98%), which means that independent variables explain 98% of variation in the dependent variable and this number went down slightly after removal of variables.

0.408656862 -5.199146944 0.000401792 -3.035211304 -1.214122843 -3.035211304 -1.214122843

#### 4.7.3 Multicollinearity

In order to check the relationship between independent variables there is need to find multicollinearity via 'corr' command in STATA. According to the results (see Table 12), it can be concluded that there is high correlation between independent variables.

#### **Table 6: Multicollinearity**

#### . corr (obs=15)

	gdp	transn~b	loans	deposit	pcards	pos	atm
gdp	1.0000						
transnumb	0.9418	1.0000					
loans	0.7657	0.7683	1.0000				
deposit	0.9011	0.9334	0.8492	1.0000			
pcards	0.9704	0.9087	0.8636	0.8872	1.0000		
pos	0.8172	0.8754	0.8789	0.9505	0.8232	1.0000	
atm	0.9195	0.8901	0.9429	0.9000	0.9661	0.8778	1.0000

#### 4.7.4 Summary of results

Results of quantitative analysis showed that due to the overlap in variables, initial analysis had to be changed and 2 independent variables were eliminated. On the other hand, second analysis showed that the main hypothesis of this work is correct. The main hypothesis was saying that increase in the indicators of financial inclusion has positive effect on GDP of the country. Thus, results show that increase in Deposit, PCards, and ATM has significant and positive relationship with GDP. However, other independent variable Loans have significant and negative relationship with GDP. Overall, the results of regression analysis show that, independent variables are able to explain 98% (R-squared 0.98) of variation in dependent variables.

Thus, summary of results can be concluded that, 3 of the main indicators of financial inclusion have positive relationship with business environment in the country.

#### 4.8 Summary of findings

This thesis was done based on mixed method design, which included implementation and analysis of both qualitative and quantitative data. Moreover, the design of this research was build based on exploratory sequential mixed method. Therefore, firstly there were analysis of qualitative data, afterwards, the ideas that occurred were analysed based on quantitative data analysis.

On one hand, qualitative data analysis showed that there is significant correlation between business environment and financial inclusion indicators. Firstly, as people become more aware of financial tools they start to think about different ideas which may generate profit. As the money plays essential role in establishment of businesses, having knowledge in basic banking services results in new ideas. People think of different business investments and as they have proper information about the funding or other transactions they can implement these ideas in the practice. This can be either in form of getting loans or using other forms of services for their businesses. In addition, establishment of agency banking system via other financial intermediaries, especially via national postal operator, makes the accessibility to financial tools easier. In fact, agency banking is important tool in covering financial services in remote areas, reducing the financial costs of banks, plays huge role in more effective interaction with citizens on financial services and increasing efficiency in these areas. People do not need to overcome long distances and spend more time in order to get financial services. As a result, businesses start to emerge or grow. Finally, integration of banks in social lives of people has a leading position in attracting people who do not have access to or have a low level of access to financial services, as well as those who do not use access to financial services due to their unattractiveness integration of banks to the social lives of people make people socially inclusive and more open to financial services.

On the other hand, the obtained data brought fruitful ideas for quantitative analysis. Analysis showed that the main hypothesis of this work is correct. The main hypothesis was saying that increase in the indicators of financial inclusion has positive effect on GDP of the country. Results of analysis showed that increase in Deposit, PCards, and ATM has significant and positive relationship with GDP. These analyses proved that the indicators that were chosen as main indicators of financial inclusion in the country are reliable. In addition, it is also important to mention that in order to achieve further development of these indicators of financial inclusion, government and financial intermediaries has to work in corporate. This will result in increase of the number of indicators which will make economy to grow.

## 5. DISCUSSION AND CONCLUSIONS

#### **5.1 Introduction**

This chapter will conclude the thesis with discussion of findings. In addition, another goal of this chapter is to answer research questions that were set in the introductory chapter. In addition, the research questions were:

1. What are the effects of financial inclusion to the business environment in Azerbaijan?

2. What problems rise due to the unavailability of financial services?

3. Why and how enterprises or people get influenced from the lack of accessibility of financial services?

4. What are the main indicators that influence financial inclusion in the country?

Finally, there will be discussion of implications for theory and practice and recommendations for future research.

### 5.2 Discussion of findings and Conclusion

The main findings from the research can be summarised and concluded as in the following:

- 1. Although many financial intermediaries are provided with all necessary technological infrastructure, there are still people who are excluded from their services. This exclusion affects the businesses of small and medium enterprises, which has significant share in country's economy. According to all interviewees, the lack of accessibility to financial tools slow down economic activities in the country. Financial intermediaries play significant role in maintenance of businesses and further effect the economic condition of the country. The problem of financial literacy and financial exclusion are main problems of financial inclusion. In fact, these problems can be solved by application of basic bank account services, improvement of financial literacy of population, establishment of agency banking network, establishment of non-bank payment service providers and formation of a network of payment agents, creation of microfinance products and introduction of "remote bank account opening procedures".
- 2. According to findings it became obvious that, financial intermediaries, especially banks, non-bank credit institutions and national postal operator play significant role in strengthening financial inclusion of the country. These institutions provide main financial needs of population. Therefore, their services can be used for further

development and legislation of the country should be developed in order to create path for them in development of mentioned sphere.

- 3. Each person has to have understanding of basic financial terms in order not to be deceived by financial institutions or be able to satisfy his or her financial needs. According to findings it became obvious that, most of the Azerbaijani population are familiar with basic financial terms. However, if the case becomes complicated many people cannot understand both legislative and financial side of the problem. One of the priority goals of strengthening financial inclusion is to increase the level of financial literacy in society. Awareness-raising in this area should begin at an early age, and students should be taught this knowledge in schools and incorporated into teaching. Seminars on different topics should also be organized for citizens working in different fields. This will boost businesses, because it will cover people from different fields. As people are innovative, they will come up with new ideas based on their field of operations. As a result of increase of financial literacy in the country, people become more aware of financial services provided by banks.
- 4. In agency banking practice, the agent bank participates as authorised representative of particular bank and provides services according to the standards of the bank. The establishment of agency banking network can strengthen the financial inclusion of the country. Agency banking is important tool in covering financial services in remote areas, reducing the financial costs of banks, plays huge role in more effective interaction with citizens on financial services and increasing efficiency in these areas. These agent banks can also ensure the receipt of citizens' inquiries and appeals and the initiation of appropriate procedures. According to the researches, agency baking diminishes costs of establishing new bank branches, makes easy to reach people from different parts of the country and motivates different enterprises to operate easily because of easy access to financial services. National postal operator is the most suitable entity in order to participate as agent bank. Thus, analysis of findings show that the accessibility of financial services plays huge role in formulation of well-structured and profitable business environment in the country. People start to get close relations with financial intermediaries via agent banks. Therefore, people obtain easy money and they use this money in order to generate profit.
- 5. Banking integrity shows the integration level of banks to the social lives of people. In fact, integrity includes basic bank services that people need which offered on free basis. The introduction of the "basic banking services" package has a leading position in

attracting people who do not have access to or have a low level of access to financial services, as well as those who do not use access to financial services due to their unattractiveness. The concept of "basic banking services" is one of the priority projects implemented to strengthen financial inclusion. In terms of strengthening financial inclusion in the country, attracting additional funds to the financial system, as well as increasing the role of banks in financial intermediation, the implementation of the "basic banking services concept" can be encouraged with following requirements: 1) cash inflows and outflows to the bank account, 2) providing a debit payment card related to a bank account, 3) cash withdrawal of bank funds and all ATMs installed in the country with a payment card in the amount of a maximum of 200 manats without the application fee for 5 transactions, 4) execution of maximum 5 operations without application of service fee when applying service fee for transfers between internal bank accounts, and 5) execution of 3 interbank payment operations without service fee. In fact, the list of mentioned services can be expanded independently by banks. As a result of analysis, it can be concluded that, integration of banks into social lives of people is significant in order to achieve above mentioned economic milestones. Provision of basic banking services and making them more accessible and affordable for people will increase the interest of people on funds. As the funds of people will increase, they will start to invest in different businesses. Thus, this will result in the new economic activities which will positively influence on business environment.

6. Gross Domestic Product (GDP) indicator was chosen as the most suitable in order to understand the business environment in the country. Therefore, GDP was chosen as dependent variable in quantitative study. On the other hand, based on analysis of qualitative data, total deposits, number of payment cards, number of ATMs and total loans in the economy were chosen as independent variables. The multiple regression analysis showed that there is significant and positive relationship between financial inclusion indicators, except total loans. These indicators were chosen based on reviewed data and interviews. Also, independent variables were able to describe 98% of dependent variable. In other words, hypothesis of analysis says that the relationship between GDP or business environment and financial inclusion indicators (Deposit, PCards, ATM) were chosen correctly in the study and results of analysis showed that financial inclusion boosts economic development.

#### **5.3 Implications for theory and practice**

This research proposal is conducted in purpose to increase the financial inclusion in Azerbaijan. If the Central Bank of the Republic of Azerbaijan will consider this paper as valid and decide as a useful tool for future research, this would be the best contribution to theory and practice. Because there were few researches of this sphere in the country. This paper includes all the problems that arise from lack of financial inclusion, therefore, there are discussed difficulties that people and businesses face, the possible solutions for this issue and what kind of problems government officials may face while implementing these tools.

Practically, the Central Bank of the Republic of Azerbaijan may get answers of interviews and analysis of all research done. This will give a chance to work corporately and implement new tools that will help businesses develop while avoiding all the problems that may arose during the implementation process. The research will be able to help to decrease the risk of using tools mentioned above and will make them sure to implement these tools. It would be the best research for increase in financial inclusion in Azerbaijan and this will boost the position of the country in Doing Business ranking. Also, not only in numbers but also in practice, all the people and businesses will enjoy the opportunities created for them because of developed financial inclusion in the country.

In addition, this research may be shared with other countries and above-mentioned methods would be beneficial for the countries like Azerbaijan. As it is obvious, there are lots of developing countries that face problems on financial inclusion issues. Thus, this research may not only increase financial accessibility of population and businesses in Azerbaijan, and also in other developing countries.

On the other hand, there were mentioned only positive aspects of financial inclusion, whereas, it is important to note that there exist dark sides of it too. It does not mean that finance is good in all cases. It is important to remember the Global Crisis that world faced. According to the research of Jackson Hole (2018), there is terms such as 'too much' or 'too fast' which shows the possibility crisis due to over-financing people. He mentions about the microcredit crisis that India faced in 2010. The government boosted microfinance credit organisations, which resulted in over-borrowing of people and businesses. However, while coming back to paying back these debts, most of the people and businesses had not managed their budget and could not pay their debts back. As a result, economy of India started to suffer and most of the businesses just wasted the money that came from easy source without underwriting the company. Popular economists Breza and Kinnan stated that this over-borrowing led to negative effect both on labour market and consumption in the country (Breza and Kinnan 2018). There

were increased a trade-off between financial inclusion and stability. Thus, in order to avoid such kind of situations, experts on this fields should take into consideration all the economic factors and try to avoid trade-offs between financial inclusion and stability.

Finally, there has to be done further research on different issues too. There is need for some further research in order to get more practically in topic. One of them is about technological improvement. It is important to take into consideration the possibility of financial market participants to provide above mentioned services to population and businesses. It is also necessary to calculate the cost and benefit of technological improvement and whether financial market participants will agree with these conditions. Moreover, there will be need for new literature and new officials to interview in order to obtain more reliable information about above mentioned cases.

## 5.4 Future research

The purpose of this study was to find out effects of financial inclusion on the business environment in Azerbaijan. The data collection and analysis were done based on mixed method design, where both qualitative and quantitative data was acquired. However, as there were used exploratory sequential mixed method design, data on quantitative analysis was build based on qualitative information. In addition, there were face different challenges which are described in methodology chapter. However, there are several recommendations for future research in order not to have similar and other kind of challenges.

First of all, it is recommended to interview people between 10-15 in order to have crystal idea about the topic. Because topic covers many dimensions and there are a lot of and different participants of financial markets. Therefore, interviewing people from different financial intermediaries that are closely related to financial inclusion will give more precise idea about the topic.

Secondly, the analysis of financial inclusion and its effects on business environment needs more quantitative research. It would be better to determine Financial Inclusion Index (FII) in further researches and by using this index to come up for more hypothesis.

Finally, it is suggested to devote more time for the research of this topic. As it was mentioned before, this issue has very broad understanding and analysing the issue from different perspectives for longer time will give better results.

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## **Appendix №1: Interview questions**

1. Could you please briefly introduce yourself?

a. Name, gender, age.

b. Company, position, area of expertise, job description and experience in years.

2. What are the effects of financial inclusion to the business environment in Azerbaijan?

3. What are the major risks that people and organisations (businesses) face due to the lack of financial inclusion in Azerbaijan?

3. What policies and measures were implemented to increase financial inclusion since the independence of the Republic of Azerbaijan?

4. As you know there are 3 factors that financial inclusion depends on. These factors are financial literacy, agency banking and banking integrity. What do you think about these factors and what other aspects you may add to the issue?

5. What are the risks and difficulties that government officials may face while implementing these policies and how they can be dealt with?

6. What are your personal opinions and what potential implementation tools you may offer?

Year	GDP	TransNumb	Loans	Deposit	PCards	POS	ATM
2005	12523	1071	1441	1369	872	987	873
2006	18746	1212	2363	2162	1542	2070	1080
2007	28360	1473	4681	4127	2787	5309	1317
2008	40137	2400	7191	6460	3626	8124	1515
2009	35602	6695	8408	6379	3974	8657	1694
2010	42465	10148	9163	7626	4231	7872	1892
2011	52082	19561	9850	9447	4580	13220	2132
2012	53995	26126	12244	10699	5008	36860	2260
2013	57708	27257	15423	12476	5673	33285	2422
2014	58978	28785	18543	15453	5965	73013	2608
2015	54380	30347	21730	23431	5659	80301	2694
2016	60425	33202	16545	22091	5334	71806	2454
2017	70135	37975	11758	20599	5800	65471	2431
2018	79797	39935	13020	21870	6511	66110	2502
2019	81681	56615	15298	24746	7266	67468	2647

# Appendix №2: Quantitative data used for analysis

# Appendix №3: Results of simple linear regression

SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.941817654				
R Square	0.887020494				
Adjusted R Square	0.878329762				
Standard Error	7097.038318				
Observations	15				

#### ANOVA

	df	SS	MS	F	Significance F
Regression	1	5140810956	5140810956	102.065116	1.59784E-07
Residual	13	654783387.5	50367952.88		
Total	14	5795594343			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	25744.15403	3004.671999	8.568041383	1.047E-06	19252.95482	32235.35324	19252.95482	32235.35324
TransNumb	1.117874538	0.110650759	10.10272815	1.59784E-07	0.878828107	1.35692097	0.878828107	1.35692097

#### SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.765742898				
R Square	0.586362185				
Adjusted R Square	0.554543892				
Standard Error	13579.61419				
Observations	15				

#### ANOVA

Regression         1         3398317364         3398317364         18.42846117           Residual         13         2397276979         184405921.5	df SS MS	F Significance	e F
Residual 13 2397276979 184405921.5	ssion 1 3398317364 3398317364 18	.42846117 0.0008748	806
	ual 13 2397276979 184405921.5		
Total 14 5795594343	14 5795594343		

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	20010.33613	7775.07739	2.573651055	0.023133249	3213.302632	36807.36962	3213.302632	36807.36962
Loans	2.665310079	0.620873617	4.292838358	0.000874806	1.323994177	4.006625981	1.323994177	4.006625981

#### SUMMARY OUTPUT

Regression S	tatistics
Multiple R	0.901064949
R Square	0.811918043
Adjusted R Square	0.7974502
Standard Error	9156.95081
Observations	15

#### ANOVA

	df	SS	MS	F	Significance F
Regression	1	4705547617	4705547617	56.11880443	4.55647E-06
Residual	13	1090046726	83849748.14		
Total	14	5795594343			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	21537.70364	4452.443386	4.837277373	0.000324446	11918.78451	31156.62278	11918.78451	31156.62278
Deposit	2.243867359	0.299531827	7.491248523	4.55647E-06	1.596768188	2.890966531	1.596768188	2.890966531

#### SUMMARY OUTPUT

Regression Statistics						
Multiple R	0.97039749					
R Square	0.941671289					
Adjusted R Square	0.937184465					
Standard Error	5099.393221					
Observations	15					

#### ANOVA

	df	SS	MS	F	Significance F
Regression	1	5457544797	5457544797	209.8748045	2.11901E-09
Residual	13	338049545.9	26003811.22		
Total	14	5795594343			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-701.8575179	3726.422193	-0.188346216	0.853513579	-8752.303225	7348.588189	-8752.303225	7348.588189
PCards	11.0061982	0.759726328	14.48705645	2.11901E-09	9.364909253	12.64748715	9.364909253	12.64748715

#### SUMMARY OUTPUT

Regression S	tatistics
Multiple R	0.817205198
R Square	0.667824336
Adjusted R Square	0.642272362
Standard Error	12169.17733
Observations	15

#### ANOVA

	df	SS	MS	F	Significance F
Regression	1	3870438944	3870438944	26.13591935	0.000199387
Residual	13	1925155400	148088876.9		
Total	14	5795594343			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	30535.19481	4906.533368	6.223374533	3.10077E-05	19935.27391	41135.11571	19935.27391	41135.11571
POS	0.534611921	0.104573044	5.11233013	0.000199387	0.308695596	0.760528247	0.308695596	0.760528247

#### SUMMARY OUTPUT

df 1 13 14 Coefficients	55 4900060952 895533391 5795594343 Standard Error	MS 4900060952 68887183.92 t Stat	F 71.13167752 P-value	Significance F 1.24827E-06	Upper 95%	Lower
1 13	4900060952 895533391	4900060952	F 71.13167752	5 /		
1	4900060952 895533391	4900060952	F 71.13167752	5 /		
-			F 71.13167752	5 /		
df	SS	MS	F	Significance F		
15						
8299.830355						
0.833594189						
0.845480319						
0.919500037						
atistics						
	0.919500037 0.845480319 0.833594189 8299.830355	0.919500037 0.845480319 0.833594189 8299.830355	0.919500037 0.845480319 0.833594189 8299.830355	0.919500037 0.845480319 0.833594189 8299.830355	0.919500037 0.845480319 0.833594189 8299.830355	0.919500037 0.845480319 0.833594189 8299.830355

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-13378.56492	7791.586057	-1.717052833	0.10968296	-30211.26322	3454.133386	-30211.26322	3454.133386
ATM	31.05050535	3.681604628	8.433959777	1.24827E-06	23.0968821	39.00412859	23.0968821	39.00412859

# **Appendix №4: Contacts of interviewees**

- 1. Vusal Hasanov: +994 55 294 00 05
- 2. Tamerlan Rustamov: +994 55 207 74 60
- 3. Jalal Aliyev: +994 50 222 72 49
- 4. Gunduz Gozalov: +994 55 335 65 22
- 5. Kanan Ismayilov: +994 50 273 35 45